The

RENEW Program[®]Workbook

Responding to stress more effectively Enhancing the effects of relaxation Nourishing your immune system Energizing your body Welcoming others as support

Plus the maintenance program, ways to stay motivated.



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Published by Re Engineerng

Healthcare, Inc.

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RENEW - A Complete Training Program©Alisa Eisenberg 2011

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Acknowledgments

hank you to everyone on the Re-Engineering Healthcare team for your dedicated work on our ground breaking clinical trial. Thank you for the valuable input and continual inspiriation by contributor Harvey Eisenberg, M.D., F.S.I.R., my father and Lead Investigator. Special thank you to contributor Jolie Cecere R.N., our tireless Study Coordinator. Special thank you to Dr. Nathan Wong Ph.D., F.A.C.C., Director of UCI Preventive Cardiology, our Study Statistician and Advisor, for your encouragement and valuable input. Thank you to Lewis Wexler, M.D., F.S.I.R., F.A.C.C. Professor Emeritus of Radiology, Stanford University School of Medicine, our Medical Monitor. Thank you to Gail Frank Registered Dietician, Pam Dorner, MS, PT, OCS, editor Nora Isaacs, book designer Terri Eisenberg for a beautiful layout. Finally, thank you to the interns for their important research contributions: Chris Pateo, Wenjun Fan, M.D., Melinda Naliboff, Derrick Lee, Rochelle Sino, Michelle Huynh, Nathan Hadinata and Dwayne Yee. A heartfelt thank you to the study participants for giving this program life. Your enthusiasm showed us all that this program works! My gratitude to Shelli, Kurtis, George, Beth and Alex, my dream team.

No book can replace the diagnostic expertise and medical advice of a trusted physician. Please be certain to consult with your doctor before making any decisions that affect your health, particularly if you suffer from any medical condition or have any symptom that may require treatment.

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C R B Т н E R E Ν Ε W W 0 Κ 0 0 Ρ REF Δ Ε

Technology is advancing at breakneck speed but unless people know what to do with increasing amounts of information, how can they fully benefit from it? Can patients be active participants in their own healthcare? And why do people still have so much trouble making the changes their doctor prescribes? Dr. Harvey Eisenberg and Re-Engineering Healthcare, the original developers of the body scan, have answers. After scanning thousands of patients, Eisenberg and his team show that empowering behavioral change is an integral part of creating positive health outcomes.

Over the past few decades, doctors and researchers have conducted landmark studies illuminating what is possible through comprehensive lifestyle changes. Dr. Dean Ornish showed that heart disease can be reversible in some patients. The Diabetes Prevention Program study taught participants how to successfully avoid diabetes, despite pre-diabetic conditions.

Other studies indicate that emotional stress increases blood pressure and blood levels of cholesterol, independent of diet. In the 1970s, Dr. Herbert Benson's landmark study at Harvard University showed that you can lower blood pressure through meditation. His research ultimately uncovered the Relaxation Response, a key building block in managing stress. A more recent study by Benson concluded that after making lifestyle changes including meditation, group support, diet and exercise, a patient's blood pressure remained significantly reduced for three to five years.

A major theme is emerging through current studies in preventative medicine: By treating the underlying causes of illness and empowering the patient to discover practical solutions, he or she will take a more active role in their health. Spending more time feeling good and making that feeling a part of your value system keeps you inspired to integrate those changes. Additional benefits are emerging from current research on behavioral changes, such as improving sexual function, slowing the effects of aging by affecting our DNA, reducing depression and improving immune system functioning, which can help prevent a host of illnesses, including cancer.

The RENEW Program[©] adds to this research, and shows that behavioral changes can be sustained. It has been reviewed by leading professionals in cardiology, nutrition, exercise physiology, psychology and stress management. Funded through a grant by the US Department of Defense, published results show that comprehensive lifestyle changes, in combination with a bodyscan, can positively affect future

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health outcomes. The two-year study, including both men and women, achieved clinically significant results in the following areas: slowed rate of growth of coronary calcium with reversal in some cases, reversed metabolic syndrome including fatty liver, decreased visceral fat, lowered cholesterol, lowered blood pressure, decreased type A behavior traits, increased global health habits, increased exercise habits, decreased depression and anxiety, improved perception of stress, decreased negative appraisal (pessimism), and increased social support. Surveys show participants sleeping better and feeling happier. They describe daily life as much more manageable. Years later, they continue to enjoy peaace of mind from the increased confidence of knowing how to get back on track more easily duriing life's difficult moments.

Knowing that you can potentially reduce or eliminate the need for expensive medications, avoid invasive and painful surgeries and reduce missed time at work can lay the groundwork for longlasting and positive changes. By learning a new way to think about your future you can retrain yourself into new health-sustaining habits.

The program will guide you to self-discovery in six modules, including a maintenence program. Each module contains online video introductions, one-on-one meetings with lifestyle coaches, workbook exercises and state-of-the-art biofeedback units. These modules will help you assess your lifestyle and evaluate how to effectively make small, manageable changes. Collaborative conversations with your coach will help match your personality, lifestlye and motivation levels with habits you can sustain.

Our goal is helping you reduce the risk of future disease through the combination of a full body scan, patient education and a motivational individualized training program designed to integrate lifestyle changes into your already busy life.

Welcome to The RENEW Program[©]! Together we'll navigate the road to supporting your optimal health and well-being by:

Responding to stress more effectively Enhancing the effects of relaxation Nourishing your immune system Energizing your body, Welcoming others as support, plus the maintenance program, Ways to stay motivated.

INTRODUCTION

HOW THE 5 STEPS WORK TOGETHER

To know a person's experience from the past, examine their body now. To know a person's body in the future, examine their experiences now. ~ ancient Ayurvedic saying

Long before the growth of modern medicine, there were beliefs about healing. Emotions, spirituality and social support were all thought to have a profound impact on our health. This kind of intuitive knowing has guided discoveries since the beginning of time. It led cave dwellers to dig for medicinal plants, the Chinese to create a smallpox vaccine a thousand years before the Europeans and to the discovery that all living beings are infused with a vital energy that courses through the body. As scientific study becomes more sophisticated, the inherent wisdom of the body is once again being validated. Today, it's an accepted idea that we are more than just machines.

You are the sum of your thoughts, beliefs, and physical reactions. Every idea and every experience we have is transformed into chemistry and electricity in our bodies. With every thought, sensation and feeling, our nervous system goes into action and changes our physiology, generating chemical messengers that regulate our body. These biochemical experiences continuously mold the molecules of our internal organs, tissues, and cells.

We now know you can influence your health and well-being through the choices you make. By having a greater awareness of what will keep you healthy, you raise your level of consciousness and create the possibility for positive changes. Your mind and body are so interwoven that changes in one instantly affect the other. The field of integrative medicine builds on the premise that mind and body influence each other. We can change our perceptions, interpretations and expectations and thereby have the ability to transform the present and the future. By examining and changing our perceptions and doing things differently, we can literally create a different physical body and create a new reality.

The Amazing Immune System

Our physical health starts with the strength of our immune system. The immune system is based on the body's ability to fight off whatever it determines to be an invader such as bacteria or infection. Normally, inflammation occurs in response to injury and attack by germs. It creates local heat, redness, swelling, and pain, and is the body's way of getting more nourishment and more immune activity to an area that needs them.

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But inflammation isn't always helpful. It also has destructive potential. We see this when the immune system mistakenly attacks normal tissues in such autoimmune diseases as Type 1 diabetes, rheumatoid arthritis and lupus. We also know that inflammation plays a causative role in heart disease, Alzheimer's and Parkinson's diseases, as well as other age-related disorders and cancers. Modern life is also overwhelming the immune system through the stress of dealing with our complicated lives. The hardwiring of our brains and bodies is the same hardwiring of our ancestors, before cell phones, computers, carpools and the acute awareness of the global economy. Today's stress levels are contributing to increasingly high statistics of disease. We no longer get the nutrients we need to sustain ourselves from the foods we eat. And the more studies that are done, the more information we have on how the massive amounts of additives and chemical toxins in our food and our environment is also taking its toll on our immune system. This affects our sleep patterns and disrupts our endocrine systems. Constant stress affects our ability to relax and to heal each day.

The Impact of Stress

The study of brain chemistry reveals that our thoughts, feelings, and interpretation of events trigger chemical and hormonal releases in our bodies. Ineffective responses to stress keep us in a negative loop of emotion. When we get stuck in these negative feelings, our bodies are flooded with chemicals and hormones that affect our physiologic ability to relax, slow down and heal. And if you are continually stressed, you become unable to sleep, relax or enjoy life. This affects your ability to digest food and take in the nutrition you need to survive and fight off disease. You use up the body's resources in order just to function. When the body is depleted, the last thing you want to do is exercise. The mind is depressed. Physiologically, the brain shuts down and it becomes harder to think clearly and to focus. This same chemical release can make you want to isolate, to keep yourself away from the people you love. It is a vicious but predictable cycle.

Studies show that deep relaxation or feeling joyful can actually heal the body at a cellular level. When the body is healthy, you are strong mentally and physically. You have the energy to move better, quicker and fight off disease. Positive thoughts and a healthy body enable you to think clearly, remember better, be open to great ideas and manage more easily when change occurs.

Choose Health

Relaxation, support and love trigger the brain to release positive-feeling hormones and chemicals. This not only keeps you feeling well but supports your day-to-day good health and ability to fight off disease. Learning how to respond to stress more effectively, how to enhance the effects of relaxation, knowing which foods nourish your immune system, what energizes your body and how to welcome others as support can retrain longstanding patterns of behavior that may have been blocking your good health.

Partnering this information with a bodyscan allows us to individually tailor a program to fit your specific needs and health goals. By strengthening loving, intimate connections you create an environment conducive to healing. You can reverse disease and retrain your habits to create optimal health and vitality. Through understanding a little bit about how your body's physiology works and what it may be telling you, you can stop a problem before it becomes a health crisis. Paying attention to your bodies signals increases your personal awareness and empowers you by knowing when you're on or off track.

Learning is an ongoing process. In order to motivate lasting change, it's important to understand the cyclical nature of behavior. It isn't easy to change a lifetime of habits. But knowledge adds up over time and the effort will be worth it. Knowing what to do and how to do it can retrain you into new habits that support your overall good health. The RENEW Program© is a step-by-step guide to well-being that gives you the tools to be happy and healthy more days than not. The key ingredients to successfully maintain change are identiied and explored in depth. By the end of this program you'll feel inspired to sustain whatever changes you need to make. Discovering your preferences through our PLM Index,[®] you'll develop your own unique plan to fit your personality, lifestyle and motivation level that can evolve and adapt to work with you for the rest of your life.



Recognizing Your Personal Stress Signals

The deeply ingrained human attitude that we need to be free from problems is really one of our greatest problems. ~Ezra Bayda

Stress is both a physiologic and a psychological response to events. We all have stressors and our bodies are hardwired to protect ourselves. Short-term stress even boosts the immune system. And although so much has changed, we respond to stress the same way our ancestors did: their central nervous systems went into action to stimulate a mobilization response to either fight or flee. If they fought, their bodies returned to normal functioning when that threat ended.

Today we don't face the same degree of threat that our ancestors did. There is no saber-toothed tiger chasing us but we do have multiple stressors to deal with at once. Stressful situations are more likely to be cumulative or chronic, longstanding events. Our brain and subsequently our central nervous system do not distinguish an overdemanding boss or multiple responsibilities from the danger of a tiger attack. And when the stress of multitasking doesn't end, the hormones and chemicals triggered by the brain for short-term survival aren't signaled to shut off. They keep stimulating the same hormones and chemicals needed for the fight-or-flight response, ultimately depleting the body's natural resources, weakening your immune system, and diminishing your ability to fight off illness. The first step to managing this stress is to recognize the early warning signs of continuous stress. These are your personal stress signals.

The Stress Response

What is a stressor? Anything that triggers a stress response is a stressor. Stressors can range from small aggravations to fear of someone that poses a threat to your well-being. Have you ever crossed the street and a car makes a sudden turn in your direction? Your brain senses the danger and almost immediately you become aware of the thought, "Move! NOW!" In a split second, your brain triggers the release of hormones that moves you into action as you run to safety. You feel the adrenaline course through your body along with epinephrine and cortisol. Your heart rate elevates, your breathing becomes heavy and after about 15 minutes you start to feel back to normal. You have just experienced a physiologic stress response. Once your hormones stop surging, your body regains balance.

Stressors add up, and the more life changes or daily hassles you're dealing with, the more intense the symptoms of stress. When there are too many stressors in a short period of time or any one stressor

goes on too long, then the body's ability to regain balance is compromised. Has your computer ever suddenly frozen and you lose your temper? Do you want to regain your composure but it suddenly feels impossible? Most likely you are feeling the effects of the rush of cortisol and adrenaline, but the more chronic your stress, the less able the body is to turn off the stress response quickly. Unless practiced, the body can eventually lose its natural ability to relax.

Here are a few common stressors

Major life events such as: divorce a child leaving home, loss of a spouse or a parent, a move, a career change or a medical diagnosis.

Environmental stressors: noise pollution, multitasking, texting, driving in traffic, the fear of living in an unsafe neighborhood, toxins in our food.

Work stressors: job dissatisfaction, overwork, disagreements at work, low pay, relationship stressors.
Social stressors: a fight with a friend, problems with partners or children, preoccupation with money.
Spiritual stressors: emotional or spiritual crisis, feeling a loss of control, loss of meaning or purpose in your life, going over the same stressful events in your mind over and over again.

The good news is that your symptoms of stress can serve as an early warning system. Symptoms alert you that you are off balance. Simply by paying attention to what your body is signaling, you can retrain your responses and repair any physiologic damage almost immediately. If you don't pay attention to your personal signals of stress, the signal gets stronger until you do. The earlier you take action, the sooner you can make repairs before a small signal becomes a life-threatening illness.



STRESS: Recognizing Your Personal Stress Signals

Worksheet #1

Before you can begin dealing with your stress, you must recognize its warning signs. These lists are not all inclusive. Add to the list by writing your personal stress signals below.

CIRCLE YOUR PERSONAL SIGNS OF STRESS

EMOTIONAL SIGNALS	INTELLECTUAL SIGNALS
What You Are Feeling:	How Your Mind is Functioning:
What You Are Feeling: Less interest in hobbies, familiar fun activities Upset by the unexpected Sudden shifts in mood Frequent and/or recurring nightmares Feelings of being swamped, overwhelmed Feelings of anger, resentment Intolerance, irritability with others More easily frustrated Increased fear of failure Feelings of inadequacy, powerlessness, Hopelessness Changed interest in sex, either more or less Apathy, general dissatisfaction Desire to cry Reduced confidence Fear that everyone excent you is doing fine	 How Your Mind is Functioning: Having difficulty remembering recent information or details of recent situations Less able to make decisions Difficulty concentrating Attention span shortens Feeling confused, especially with familiar tasks Repetitive thoughts Continually thinking particular thoughts Misunderstanding what others tell you Increasingly poor judgment Thoughts of escaping, running away Racing thoughts Unable to slow down thought process Loss of objectivity
Worry that you are asking for too much help or	
too much time from others	
MY EMOTIONAL SIGNS OF STRESS	MY INTELLECTUAL SIGNS OF STRESS

PHYSICAL SIGNALS	BEHAVIORAL SIGNALS
How Your Body is Functioning:	What You Are Doing:
Tension or migraine headaches Upset stomach, problems retaining food Change in appetite Tightness in chest, back, shoulders Aching jaw, tight forehead Shortness of breath, dizziness Excessive sweating Sweaty palms Tingling sensation in fingers or toes Nervous tension all over; heart palpitations Diarrhea or constipation Constant low grade fever Cold, or sore throat Rashes, hives, skin irritation Increased blood pressure Always tired Menstrual problems, missed menstrual periods	Change in eating habits Eating more/less Sleep problems Too much, too little Difficulty talking to, holding loved ones Isolating self from others Staying at home or staying at work Complaining more Increased use of alcohol, drugs, coffee, tobacco Change in general activity level Change in sexual activity, either more or less Pacing Increased nervous habit, such as nail biting or hair twisting Loss of temper: yelling, throwing and kicking Increased recklessness, risk-taking Bossiness or inflexibility with others Grinding teeth Stuttering Sudden outbursts of crying
	Uncontrollable laughing or anger
MY PHYSICAL SIGNS OF STRESS	MY BEHAVIORAL SIGNS OF STRESS

Understanding the Link Between Your Thoughts, Feelings, Mood and Behavior

The primary cause of unhappiness is never the situation but your thoughts about it. ~ Eckhart Tolle

Worksheet #2

 Your perception of events unconsciously determines the thoughts you think.
 Your thoughts trigger a physiologic response that determines how you feel emotionally and physically.
 This response affects your mood, which guides your behavior.

Since we experience multiple stressors, many reactions seem out of proportion to the event that triggered them. If you have too much stress in your environment or not enough skills to cope with them, your brain learns to default to crisis mode even when there isn't a crisis.

A landmark study led by Dr. Suzanne Kobasa (now Suzanne Ouellette) and Dr. Salvatore Maddi led to the description of a stress-hardy personality. Stress-hardy individuals are more aware of their perceptions and deal with stress more effectively. They get sick less, recover more quickly, engage deeply in their lives, have more control of their emotions and respond to change with flexibility. For stress-hardy people, change is seen as an incentive to grow rather than a threat to security.

People who rated low in hardiness are more likely to feel helpless. They back away from stress and get stuck in their own repetitive emotional reactions. Because they feel powerless to effect change, they feel threatened when anything changes around them. They are more likely to get ill when stressful events arise.

Becoming more aware of how your perception affects your thoughts, behavior, and emotional as well as physical reactions will help you identify areas where you can improve.

Understanding the Link Between your Thoughts, Feelings, Mood and Behavior

Describe any recent changes or long-term problems and write about how this may affect the way you feel physically, your mood, your behavior and what you think about it.

My Life situation or change in the last 3-5 years:

My Physical Reaction:

My Mood:

My Behavior:

Below is an example of worksheet #2 that has been completed. Notice how the events in this person's life affect every other area as well.

EXAMPLE:

Describe any recent changes or long-term problem below. Then describe how you feel physically, how it affects your mood, behavior and what you think about it.

My life situation or changes within 3-5 years:

Divorced four years ago, dog died last year, job change this year, moved, driving kids back and forth, new boss, recently profits are down in company.

My Physical Reactions:

Have trouble getting up in the morning, occasional diarrhea, tired, poor sleep.

My Mood:

On edge, feel worried, sometimes angry.

My Behaviors:

I don't work out as much as I used to, I don't feel like talking to my friends very often, occasionally yell at the kids and then feel badly about it.

My Thoughts:

When I wake up my first thought is, I wonder what crisis is going to happen today? I hope my boss is out of the office today. I need more money. I also think about how my father used to yell at me as a kid and feel like a loser every time I yell at them.

The responses to these questions show that no matter what contributes to your problems, whether it's recent changes or events from long ago, once you feel depressed or anxious or experience some strong mood, everything you experience becomes fuel for that predominant feeling. All aspects of your life are affected. Add to that daily stressors and you can start to see how you may have stronger reactions than situations warrant. Examining and understanding your level of stress will greatly help improve your responses.

Do you see a connection between mood, behavior, and thoughts in your own life? How you perceive an issue is the most important part of creating positive changes in all areas. For example, one person may be liberated by a divorce, while another person feels totally defeated by it. It becomes critically important to question your perceptions first when examining your behavior.

When you aren't aware of why you are reacting a certain way, your mind defaults to thinking additional thoughts that support and strengthen your existing mood. If you are feeling angry, you may think about all the things you're angry about, which only fuels that emotional fire. If you are depressed, you may think about how life has treated you cruelly and sink even lower. If fear or anxiety is your default emotion, you see fear or betrayal everywhere. And the stronger your mood, the more extreme your thinking will become.

Your mood is a signal to stop and take notice. Use your mood as a way of questioning your thoughts. Remember, you are in charge of your thinking and therefore how you feel at every moment. Begin to notice what emotion you default to most of the time. The first step to creating improved emotional and behavioral responses to a stressful event is through awareness.

Understanding Negative Appraisal and Pivoting your Emotional Response

We do not have to improve ourselves; we just have to let go of what blocks our heart. ~Jack Kornfield

Worksheet #3

Every time you have a thought, the brain releases chemicals. An electronic transmission goes across your brain and then you become aware of what you're thinking. Your body reacts to every thought you have. This is why lie detectors exist, to measure the body's reactions to stress. When someone thinks negative thoughts or feels badly (ie: guilty, angry etc), the body has a stress response: hands get colder, heart beats faster, blood pressure goes up, breathing accelerates, muscles tighten, hands sweat etc. The opposite is also true. If you think positive, good, happy thoughts you trigger the relaxation response: hands warm, heart rate slows, blood pressure goes down, breathing becomes slower and deeper, muscles relax.

Responding to stress more effectively requires this basic understanding: the things you tell yourself about any event will result in a physiologic response. If you perceive a situation as negative, your body will prepare for the fight or flight by triggering chemical and hormonal reactions. If you perceive a situation as pleasant or relaxing, other chemical responses are triggered, leaving your body feeling relaxed and calm. When you have an automatic negative emotion, this is a signal to stop and take notice.

Most people act on impulse and believe whatever they're feeling to be justified. They can even come up with reasons why they feel this way instead of first questioning their emotions or their thoughts. How can we respond differently? Learn to stop and then shift your perspective. Create the space to find an alternate perspective; for instance, maybe the person you're dealing with is just having a really bad day. Retrain yourself to ask questions. When you do, you may notice things differently and avoid the negative effects of stress instead of unconsciously or automatically reacting.

One of the most effective coping styles in responding to stress is positive appraisal. Positive appraisal emphasizes the positive side of stressful situations through self-talk, minimizing the importance of the stressor. Seeing the glass as half full. On the contrary, negative appraisal focuses on the negative side of the issue, thinking or making self-deprecating statements and/or engaging in catastrophic thinking. (Please refer to the physical, behavioral, emotional, and intellectual symptoms of stress on worksheet #1 to review the consequences of negative thinking.)

Stress Response

When you perceive a situation as stressful, you induce a stress response. The capillaries to your brain shrink to provide more energy for your body to run. You can't physically think clearly. When you're angry and in a stress response mode, you can't problem solve effectively because you can't think clearly. When you say negative things, or catastrophize an event, you physically can't come up with reasonable solutions. A host of other real physical symptoms is triggered. There are more details on the physiologic responses to stress on the RENEW© CD.

Finding a Solution

When you feel a negative emotion, stop and say to yourself:

1. Something is important here otherwise I wouldn't be feeling this negative emotion.

2. Ask yourself, what do I want? And then turn your attention to what you *do* want. Try to keep your thoughts from what you don't want. You may think, "I want to be treated well. I want to feel good." You may even think of someone who *does* treat you well and think, "I *do* feel good."

3. In the moment you turn your attention to what you want, or what you already have, you allow the negative thinking to stop. When the negative thinking stops, you create space for the positive thinking to begin and problem solving to occur.

The moment your negative thinking stops, you will stop the release of stress hormones. And if you can trigger a relaxation response, research shows it only takes six to ten seconds to chemically feel the effects, and you will begin to actually feel better. This is the important process of pivoting your emotions. By changing your emotional state you will physiologically be able to think more clearly. Try first shifting your emotion and then dealing with a problem. If you can't make the shift it may be due to the effects of stress hormones, which should eventually subside. In the meantime, try to adopt a neutral attitude until you can make a shift. This tool will allow you to physiologically become a better problem solver and a better communicator.

Here are a few examples of negative appraisal taking over your inner dialogue:

- You feel offended.
- You feel the need to win.
- You need to be right or you feel you are right and need to be acknowledged.
- You feel superior.

Try telling yourself these things instead:

- The behavior of others isn't a good reason to allow yourself to feel badly.
- The need to win leads to feeling like a loser when you don't.
- Ask yourself, do I want to be right, or happy? Choose happy.
- * Feelings of superiority attract feelings of resentment and hostility.

You are at a group meeting. You have concerns about an issue that is important to you. As you are about to raise your hand to ask a question you think, *What if my coworkers think my question is stupid? Maybe I shouldn't ask this question in front of the whole group? What if someone disagrees and it leads to an argument? I could be humiliated.*

Which of the following emotions are you likely to feel?

- 1. Anxious or nervous
- 2. Sad
- 3. Нарру
- 4. Excited with enthusiasm

Based on your thoughts, how do you think you might behave?

- 1 Speak confidently and voice your opinion
- 2. Remain silent
- 3. Openly disagree with what someone else might say

Based on your thoughts, which of the following physical reactions might you experience?

- 1. Rapid heart rate
- 2. Sweaty palms
- 3. Breathing changes
- 4. Dizziness

By thinking these thoughts and negatively appraising the situation, a person would likely feel anxious, worried, experience a rapid heart rate, sweaty palms and breathing changes. They could begin to feel lightheaded or dizzy and have "inexplicable" chest pains. Even if they walked in the room wanting to open an honest dialogue, the situation could easily deteriorate when this negative pattern of thoughts and emotions is triggered. Thoughts have a real impact on how you feel physically, how you behave and on your interactions with others.



Making a Shift

The moment one definitely commits oneself, then Providence moves too. All sorts of things occur to help one that would never otherwise have occurred... unforeseen incidents, meetings, and material assistance, which no man could have dreamed would have come his way. ~Johann Wolfgang von Goethe

Worksheet #4

Some people benefit from using a journal to keep track of their thoughts, progress, and note any red flags that might arise. We encourage everyone to experiment with this technique. Try writing down your thoughts and feelings each day, noticing how you're feeling or what you're thinking about during the day. Go ahead, give it a try. It can be a great outlet for self-expression and you may notice repetitive patterns in the way you think about things. Additionally, a study that relates how 15 minutes of self-expression lowers rates of depression.

Expressing yourself can relieve stress. Chronic or long-term stress weakens the immune system and leads to disease over time. As we've learned, it isn't the event itself that causes you stress, it's your ideas about the event that subsequently trigger your feelings. Potentially, the problem then continues as you choose unhealthy ways to deal with emotional and physiological stress. You may lose your temper and alienate yourself, or choose drugs or alcohol to soothe you temporarily, or reach for foods that give you momentary comfort. Choosing these unhealthy alternatives ultimately causes you to feel unwell physically, which in turn reinforces a negative mental state.

Suppose you wanted to go to a specific location in Boston. You consult a map of the area but there's a problem. You picked up the wrong map! It's actually a map of Miami. No matter how hard you tried, this map wouldn't get you where you wanted to go. Even if you focus harder, think more positively, or change your attitude, you'd still be lost because you have the wrong map.

We all have maps in our heads. They can include maps for long-term behaviors, thought patterns, or ways to create an escape from feeling a certain way. As you begin to question the accuracy of what you're thinking or what you're seeing, you begin to develop new ways of perceiving. When you see with new eyes, new possibilities, new solutions, and new routes, the possibility for new behaviors emerge.

We all have an internal system in place that helps us gauge our feelings. Where is yours set most of the time? What percentage of each day is spent feeling happy, joyous, or content? What percentage of each day is spent feeling anxious, worried, angry, or disappointed? The first step to finding new

and more effective ways to manage your stress levels is to notice how you feel most of the time. Next, question what you see and how you perceive any given situation. Do you want to keep feeling this way over and over again? If not, then set your emotional guidance system to happy. Step away from anything that is causing you momentary grief and take the time to change how you feel. You'll begin to develop new road maps and new ways of living your life that can guide your decisions and your interactions and lead to better health outcomes and more happiness in the process.

Practice Positive Appraisal

Imagine that you walk into a post office. The man behind the counter is looking down and writing on some papers. You approach the counter, wanting to send a package. There is a woman standing beside him, and he doesn't seem to notice you.

YOU COULD THINK:

"He's busy finishing something for the woman standing beside him. I'm the next in line."

SO YOU MAY FEEL (circle one) Irritated Sad Anxious Calm

And you would take action by_____

YOU *COULD* THINK:

"He's rude. He's insulting me by ignoring me."

SO YOU MAY FEEL (circle one) Irritated Sad Anxious Calm

And you would take action by_____

YOU **COULD** THINK:

"No one ever notices me. I'm so boring."

SO YOU MAY FEEL (circle one) Irritated Sad Anxious Calm

And you would take action by_____

By thinking positively about the situation first and not taking things personally, you won't react negatively or emotionally. Instead, you'll be thinking clearly and behaving proactively. This is how to keep your environment less stressful for yourself — and for those around you.

Person A

Thinks positive thoughts-» Says positive things to self -» Feels happy -»Behaves with kindness (over time leads to) --»Good Health

Person B

Thinks negative thoughts -»Says negative things to self -» Feels badly--»Behaves badly (over time leads to)—»Poor Health

Would you choose to be Person A or Person B? Who will have the most friends in this scenario? What kind of friends will be attracted to Person A? Person B? How much time do you actually spend as Person A or Person B?

Is it really this simple? Yes! Ultimately, good health is a likely outcome because Person A is more likely to have a strong immune system. Person A spends more time triggering the release of endorphins and oxytocin that heal the body, while Person B spends more time triggering the release of adrenaline or cortisol, which break down the body.

Something to Think About

In *Power vs Force: The Hidden Determinants of Human Behavior*, Dr. David Hawkins writes: "In this interconnected universe, every improvement we make in our private world improves the world at large for everyone. Any increment we add comes back to us." Hawkins, a distinguished former co-writer with Dr. Linus Pauling, has spent 29 years of hard research backing his discovery that, because we are energetic beings, our emotional states cause a measurable vibration. Different emotions cause us to vibrate at higher or lower frequencies, which can be measured scientifically using behavioral kinesiology.

This energy resonates with others. We affect each other with both positive and negative energy. When Roger Bannister broke the four-minute mile, for example, he initiated a shift in our belief system of what was humanly possible. Suddenly many runners were now able to run four-minute miles. Thinking positively keeps your energy levels high. Negative thinking, on the other hand, lowers it and causes you to feel badly both mentally and physically. Hawkins' research shows that as we become more aware and can influence our emotional states, we expand our own consciousness, and we evolve. We raise our ability to heal, to influence others, and to attract what sustains our good health.



Positive Appraisal and Humor Can Minimize Stress

All that we are is a result of what we have thought. ~Buddha

Worksheet #5

When you think positive thoughts you feel good. But it isn't just a feeling. Science confirms the physical changes that happen when you feel happy: The brain releases endorphins and other "feel good" hormones into the body, the body relaxes, blood vessels dilate and you receive more oxygen to the brain. When this happens, your brain becomes more alert, so you can literally think more clearly. Blood pressure normalizes, breathing slows, and your immune function improves.

Write down or name out loud something you are happy about in your life right now.

What about that makes you happy?

Sit with those good feelings for a moment. Feeling good can help give you perspective that is hard to reach when you're feeling emotionally reactive to a challenge or a problem that presents itself. Keeping a broad perspective will help to minimize the threat of a current situation.

To help gain perspective ask yourself if your problem will still be a problem in five years, or at the end of your life?

Take the time to do this work. Keeping yourself committed to improving long-term health outcomes starts with thinking about things differently than you've done in the past. In the beginning it takes some effort, but over time it becomes a new habit. Trying new ways of dealing with old problems feels strange. It may even make you feel self-conscious, especially if you are used to feeling badly as a default and you are trying to feel good more of the time. But as you begin to recognize stress and deal more effectively with unavoidable stressors, you'll feel better, be more enjoyable to be around and feel more comfortable with your new patterns of thinking.

Using humor can also be a good way to minimize the threat of a stressful situation. Often, taking a step back and finding the humor in a situation will stop the stress response in its tracks. Laughter heals because it moves the observer away from feeling victimized simply by changing the context. It raises your energy level and helps change the way you look at a situation by once again, changing your perspective. Because positive emotions keep the sympathetic and parasympathetic nervous systems in balance, being in a positive state more often than a negative state will help the body heal.

Researchers have discovered these physiological effects of laughter:

Laughter decreases levels of epinephrine, one of the stress hormones.

Laughter activates the immune system.

Belly laughs relax the muscles. They make the muscles in the belly contract, then release, resulting in feeling relaxed.

Laughter increases the pain threshold. During laughter and for a short while afterward, pain is minimized.

Laughter triggers the release of endorphins, the body's natural painkiller. Eating chocolate, smiling, touching, meditating, singing, listening to good music, and even orgasm all trigger the brain's release of endorphins.

Laughter exercises the heart because it increases the heart's activity and stimulates circulation. Laughter appears to cause the tissue that forms the inner lining of blood vessels to expand in order to increase blood flow.

Laughter exercises the respiratory system. A few belly laughs make deep breathing easier, more effective.



A Brighter Outlook

Optimistic people generate positive emotions. By definition, they uniformly believe they have a measure of responsibility for good things that have happened to them and that more good things are headed their way. A positive attitude in action means waiting until you have all the facts before jumping to a negative conclusion. For example, if your boss leaves a note on your desk that says, "Come see me," instead of immediately concluding that you're in trouble, you believe there are a variety of possibilities for discussion. The boss may just be checking on a project in progress or may want to discuss an exciting future project. Staying positive as you walk into his or her office allows you to feel good and project positive feelings instead of walking in with a negative attitude and a fearful posture. The bottom line is, you have no idea why you are being summoned so you might as well feel good and walk into the office with confidence. The invisible world of thought and attitude becomes visible as a consequence of your habitual response. You'll be treated better if you exude happiness. If you consider the millions of thoughts that go through the mind constantly, it isn't surprising that the body's condition reflects prevailing thought patterns. It shouldn't surprise you that you can effect a change on the body's condition by changing your thinking process.

Practice optimism this week and write about the experience. Be specific. How did it go?

Pay more attention to what's funny around you. Make it a goal to laugh out loud every day this week. Really try it and see if it helps your perspective.

Brain Exercises- How to Start Automatic Positive Thinking

We are what we repeatedly do. Excellence, then, is not an act, but a habit. ~Aristotle

Worksheet #6

The gravitational pull of some of your habits may be keeping you from where you want to go. However, you can free yourself by creating new and more effective habits. The key to liberating yourself is becoming aware of your unconscious behaviors and then shifting them into conscious actions.

Not wanting to face destructive patterns will keep you stuck. Recognizing what isn't working for your optimal health is part of our first step. The key is to look ahead and focus on what you do want in your future. Keep your eye on the prize. Train yourself to focus on whatever you can imagine for yourself, feeling better, great health or more fulfilling relationships. This may not come naturally to you. But as you move through the steps, keep your attention on the positive. As you feel better more of the time you'll look for things to support feeling good. You can start by recognizing old patterns of thought and then begin to change any negative thoughts into their positive opposites. Even if you don't believe it at first, it will change your biochemistry. When you feel better, you raise your expectations for what's possible.

What are automatic thoughts?

These are the thoughts, perceptions, or beliefs that happen automatically and that we assume are correct. We unconsciously move forward according to how they make us feel without questioning them. However, they are NOT always correct — and they need to be challenged. Sometimes they are wrong, based on past events, or based on fear of something that might happen. To identify automatic thoughts, notice what goes through your mind when you have a strong feeling or a strong reaction to something.



How to Interpret Automatic Thoughts

Ask yourself the following questions until you have identified the thoughts that help you understand your emotional reactions.

- 1. What was going through my mind just before I started to feel this way?
- 2. What am I afraid might happen?
- 3. What's the worst thing that could happen if this is true?
- 4. What images or memories are coming up for me in this situation?

Some people prefer to use a chart to help identify and understand their automatic thoughts and all the components tied to a particular mood or strong reaction. Try filling out the chart below.

Mood	Automatic Thoughts or Images
Describe each mood in one	Answer some or all of the
word.	following questions:
Rate intensity of mood	1.What was going through my
(0-100%).	mind just before I started to feel
	this way?
	2.What am I afraid might
	happen?
	3.What is the worst thing that
	could happen if this is true?
	4.What images or memories do
	I have in the same situation?
	Mood Describe each mood in one word. Rate intensity of mood (0-100%).

Charting Automatic Negative Thoughts

Adapted from Mind Over Mood, by Dennis Greenberger, PhD and Christine Padesky PhD, 1995 The Guilford Press, NY.

How to challenge your thoughts:

First of all, any time you are feeling badly, STOP! Let this be your signal to start asking yourself the following questions.

1. Is this an "all or nothing," or "black or white" perception? If your thought starts with, "I/you always, I'm/ you're the worst, There's nothing that can be done..." **STOP!** You're on the wrong track.

2. Am I focusing on the negative in this situation? **STOP!** Look for the good in the same situation and change how you feel. Remember, feeling good will help you to physiologically think more clearly and look for solutions.

3. Am I predicting the worst possible outcome? **STOP!** Think of a better outcome and then you can find the way to get there. It may even present itself to you with no effort needed.

4. Do I really know what the other person is thinking? Have I asked them or am I assuming I know? **STOP!** You aren't a mind reader and need to communicate. Remember, starting with positive outcomes in mind will definitely help in this situation. Ask yourself: do I want to be right or do I want to be happy?

5. Am I thinking with my feelings? This happens when you believe your negative feelings and act automatically without questioning them. For example, "I feel like a failure," "I feel like you don't love me, "I feel I can't trust you." **STOP!** Ask your self honestly: Do I have real reasons to feel this way right now or am I thinking about something from the past?

More examples:		Challenge it with evidence on the positive side		
Automatic negative thought	STOP!	and Change it to an automatic positive thought		
I never have any money.		I pay my rent every month. I find a way to make		
		ends meet. I have enough money.		
		Challenge it.		
Automatic negative thought	STOP!	Change it to a positive thought		
My husband is always fighting with	me.	We are loving, too. We find ways to make our		
		relationship better. I envision a happy life		
		for the two of us. I feel loving towards him.		
		Challenge it.		
Automatic negative thought	STOP!	Change it to a positive thought		
I'm always disappointed.		I got all green lights on the drive home from work		
		yesterday! I love my dog! You get the picture		

		Challenge it!
Automatic negative thought	STOP!	Change it to a positive thought
I'm always sick.		I strengthen my immune system every day.
		I'm learning what I need to do and becoming more
		aware. I see myself in perfect health!

Write some examples of your habitual negative thinking. What are some things you say to yourself or you know you react to with negativity? (Hint: money, in-laws, childrearing, work situation...)

When you notice this happening in real time tell yourself to STOP! Say it out loud if you have to.

Practice finding a more positive view of the situation and write about it here. Look for the evidence to support it. Allow yourself to find a solution that feels good. This is your goal.

If this feels too difficult, note it and try to feel more easy about it, trusting that a solution is coming.

Something to Think About

Sometimes these automatic negative thoughts come from our parents, religion, culture, friends or teachers. While it isn't necessary to know where these negative patterns were created, it can be helpful for some people. Take a moment to think about where these negative thoughts may have originated. Most likely they come from someone other than yourself. Sometimes images or memories may coincide with painful or strong emotions, and this can be a clue. Whether or not you know where these ideas originated, it's important to recognize when it's happening and have the tools to make a shift in real time. These conscious shifts won't only create new patterns of thought, but they'll create new neural pathways in the brain, changing the way you're wired. The end goal is to spend more time feeling good and finding positive solutions that can create new positive outcomes in all aspects of your life.



Training For a Resilient Mental Attitude

Whether you think you can or think you can't, either way you are right. ~Henry Ford

Worksheet #7

The body is designed for survival. Resilience is the ability to recover from or adjust to change. Our bodies will always provide various signals of a change in conditions that are either supportive of life or aren't. This is seen in the small changes in the body's immune function, hormonal fluctuations, and the daily quest to fight off the smallest of invaders. By taking responsibility for correcting your perceptions, you transform yourself from the role of victim of circumstance to having greater understanding that nothing has power over you. It isn't life events, but how you react to them that determines whether events have a positive or negative effect on your life.

If positive thinking supports our optimal functioning and boosts our immune system, and repetitive negative thinking causes actual physical illness and slows healing, what does that tell you about our natural state? We are meant to be happy to support optimal health and healing. Peace is achieved when whatever is preventing this peace is removed. Just as a move of one pawn on a chessboard completely alters the outcome of the game, one shift of consciousness changes everything. It may take years of inner preparations to make a shift of attitude even though this shift may seem to occur in a split second. But it's these shifts that allow the body to move from illness into health. These tiny changes make up a lifetime of learning.

The biochemistry of emotional shifts

Cortisol is the hormone of fear and oxytocin is the hormone of love. We produce oxytocin when we feel and express love, including the feelings of gratefulness or forgiveness. Cortisol breaks down muscles, bones and joints. Oxytocin repairs and restores them. Cortisol raises blood pressure and oxytocin lowers it. Cortisol triggers feelings of aggression, anxiety and hyperactivity. Oxytocin brings positive feelings such as calmness and connection. Intimate relationships foster its production, as does saying nice things to yourself and feeling the results. Just as we can create conditions in the body with our thoughts for illness to take hold, we have the power to heal ourselves with our thoughts. We have a whole biochemical medicine chest at our disposal 24 hours a day, seven days a week. Here are some ways to access it.
Identify your strengths. Note the positive feelings you're creating.

What I do best:

What I've accomplished:

What I've developed as one of my best character traits:

Why I'm proud of myself:

What I'm committed to in my life:

Thinking of things you're grateful for every day will help keep your immune system strong. Feeling grateful can help set the tone for the day and train you to make a healthy biochemical shift in your body. Making positive statements not only makes you feel good, it makes you healthy by creating conditions that build your immune system. Positive thoughts trigger the release of hormones and chemicals by the brain that strengthen the body's immune response.

Name five things you appreciate every day this week. Think them, say them aloud or write them in your journal. This is a great way to either start or end the day. Try it each morning and let yourself feel the benefits before you even get out of bed. Falling asleep in a positive mood will help your body rest deeply and you will wake up feeling restored. Choose either one of these sentiments or both and do this exercise.

Five things I appreciate in my life right now:

1.		
2.		
3.		
4.		
5.		

Five things I'm grateful for:

1.		
2.		
3.		
4.		
5.		

Again, take note of the biochemical shift you're creating as you begin to feel good while you're thnking and writing.

If any thoughts or negative emotions come up for you while you're reading or answering any questions, please notice. These negative "tugs" at your feelings are resistance. They may lead to negative thoughts and can be blocks to your progress. One way to begin to shift these underlying negative feelings or beliefs is by recognizing them. Write about them in your journal to stay connected with yourself and to track your progress as you bravely examine old ways of thinking. You can also discuss them with your lifestyle coach.

Some people find that turning negative thoughts into affirmations is a helpful exercise to shift old patterns of thought.

Here are some examples:

- 1. I am confident in my ability to successfully handle everything that comes up today!
- 2. I am healing my body and my mind every day!
- 3. I am happy, successful and healthy!

The second part of this exercise is thinking about the positive statement as if it's already true until it triggers a good-feeling chemical release. Try it here. Take one repetitive negative thought you have and turn it around to make a positive statement in the present tense, as if it is here already and true:

Example:

Negative thought: I have too much work to do.

Positive statement: My work flows effortlessly and I have plenty of time to get it done.

Remember, the release of positive chemicals into the body creates an environment where you think clearer, breath deeper and feel peaceful. Why wouldn't feeing this way help you work more efficiently?

Please experiment with all suggestions, exercises and pay attention to ideas that come to you. This way you can stay open, practice flexibility and find ways that you may not have realized will work for you. You have a unique personality and some ideas will resonate, others will not. Remember that everything you do that leads to feeling good will ultimately benefit your good health! Putting your emotional guidance system into action is the groundwork for developing a resilient mental attitude.

RENEW© MODULE ONE- Responding to Stress More Effectively

Having A Measure of Control

Our deepest fears are like dragons guarding our deepest treasure. ~ Rainier Maria Rilke

Worksheet #8

Psychological stress is the result of resistance to something that's happening. Loud music may raise the blood pressure of one person and be the source of joy to another. Once again, your ideas about what's happening causes you to feel the effects of stress. You can take medication to control your blood pressure. Or you can choose to sharpen your skills so that you stop feeling angry or learn to shift your emotions more quickly to reduce your blood pressure naturally. This is the difference between treating a symptom and healing an illness. Your choice of attitude determines whether you're flooded with endorphins or adrenaline and cortisol. You have a measure of control over this.

Nothing has the power to create stress except your own resistance to what's happening. When my son was small, he loved playing with a particular friend of his. Leaving was a stressful event for him because he didn't want to go. When I used the strategy of giving him a 30 minute warning, followed by three reminders every ten minutes, it gave him the psychological time to adjust to the impending change. Eventually, all I needed to do was give him the notice and he did the rest of the work internally. We are all like children in this regard. When circumstances shift suddenly, we don't feel ready. We don't want it to happen. We're in resistance to the change. The quicker we develop the skills to allow our minds to catch up with what's happening around us, the better we'll adjust to change and the less we'll react with a stress response.

The Role of Heredity and Childhood

Our heredity and early childhood experiences influence our reactions. Both of these factors play a role in our relationship with stress. In fact, genetic predisposition and early developmental events influence the ways we respond to stress throughout our lives. Understanding these influences can also help us change the outcomes. In a study led by Dr. Charles Nemeroff, a psychiatrist at Emory University, women who were sexually or physically abused as children secreted more stress hormones when faced with even mild forms of stress compared with women who never experienced childhood abuse.

In an animal study published by Dr. Michael Meaney, PhD, in the departments of psychiatry and neurology at McGill University, rat babies were removed from their mothers for ten-minute intervals. The mothers, so happy to see the babies returned, showered them with attention above and beyond what

they might have in normal circumstances. The findings showed that as the babies became older, they were more confident and secreted lower levels of stress hormones in stressful situations than rats that lacked this kind of attention. Even more interesting is that this effect lasted for the animal's lifetime.

Your childhood experiences may help you understand your physiologic reactions and why you may be wired a certain way. This doesn't mean you can't rewire your reactions. The good news is that you can physiologically reprogram your responses. And as an adult, you always have a choice to change your situation. Even if you don't like the choices available at the moment, even if the only change you can make is your attitude, you always have choices. Studies show this internal feeling of control affects the strength of your immune system, as well as your ability to sustain behavioral changes.

Briefly write about a situation that causes you stress:

Brainstorm a list of all possible courses of action including changing your attitude or focusing on some positive aspect of the current situation. Write things down without evaluating them or editing them here. Continue writing on the next page and add blank pages for more space if needed.

When you have your list, evaluate each one and decide on the best course of action for you at this time. You may end up with the same answer as before the brainstorming session, but this exercise can open your eyes to the number of choices available in a given situation. With time, training yourself to see new possibilities will become more of a habit.

Now that you've evaluated the situation, does your level of stress feel any different?

RENEW© MODULE ONE- Responding to Stress More Effectively

Flexibility, Optimism and a Well Rounded Life

When I let go of what I am, I become what I might be. ~Lao Tzu

Worksheet #9

Stress hardy people are flexible. They adapt easily to change, seeing it as an opportunity to grow rather than a threat to their security. They are successful at solving problems, coping with stress without losing control and are generally optimistic individuals. Many studies show that an optimistic outlook also has a positive effect on recovering from disease, including cancer and heart disease. It's also one of several characteristics of centarians, people who live to be 100 and above.

You can learn to be optimistic. Dr. Martin Seligman PhD, currently Zellerbach family professor of psychology and director of the Positive Psychology Center at the University of Pennsylvania, showed this as far back as 1964. He identified that the happiest people don't focus on what's wrong and needs fixing, but focus on what's right — and try to make it even better. In many studies, this concept has been shown to have a positive effect on both mental and physical health outcomes and longevity. One of the underpinnings of optimism is flexibility, the ability to adapt to the environment and stay positive. Flexibility also contributes to your ability to stop, change your perception and change your reaction. Focusing on the positive, you can cultivate happier moments and create better physical health.

Keeping balance in your life helps keep balance in your body. Staying balanced in all areas adds to your ability to think of alternative solutions for stressful situations and respond to the unexpected with a heightened sense of autonomy and possibility. When your life is well rounded you are less likely to experience burn out. One of the physical symptoms of excessive stress is depletion. If your life is depleted your immune system is soon to follow. In order to stay adaptable to your environment you must be able to think clearly and invent creative options. Making sure you have a well-rounded life helps your creative cup stay full.

The words below indicate different areas of your life. Put a number next to each one (lowest 1-10 highest), indicating the degree to which you are fulfilled in that area.

_____ Spirituality _____ Exercise _____ Work _____ Friends _____ Romance Fun/Adventure Mark those numbers on this graph and connect the dots. This will show you where you're off balance. Notice where you don't spend enough time.

10						
0						
9						
8						
7						
6						
Ē						
Э						
4						
3						
0						
2						
1						
Δ						
U	Spirituality	Exercise	Work	Friends	Romance	Fun/Adventure
	Adapted from The Artists V	Vay by Julia Cameron.				

Brainstorm by writing three ways you could spend time doing an activity in each part of your life.

Choose one of these activities and make it a goal for this week. Write below what you've chosen to do first.

Giving yourself the time to have fun and play is essential to your good health!

Something to Think About

Do you ever wonder why you get ideas in the shower, while you're driving, at the gym or while you're doing repetitive activities? While engaging the right side of your brain, the creative left brain can wander freely and offer creative ideas. Pay attention to what activities allow you to have access to your creative side. Who knows, you may come up with the perfect solution for something while you play. People frequently do!

RENEW© MODULE ONE- Responding to Stress More Effectively

Problem Solving

When the winds of change blow, some people build walls and others build windmills. ~Chinese proverb

Worksheet #10

The first step to your new approach to problem solving is to develop perspective and understanding. Try to put the stressful situation in a broader perspective by asking questions. Is this an ongoing issue or a short-term issue? What can you tell yourself so it doesn't seem overwhelming or terrible? Can you identify a goal to help solve the problem? By staying calm and managing your emotions, the brain can remain alert and attentive. By practicing creative thinking you stay flexible. Maintaining an optimistic attitude can lead you right to potential solutions. Perspective will help you feel better even before you take any action.

Write down one problem you would like to work on and label whether it is ongoing or short term.

The second step is to develop a specific plan. Actions that will help you reach your goal, as well as a timeline. Sometimes finding a role model can help you learn by example.

Write your goal. Next, list three simple things you can do immediately. Put a date next to each step. If you have a role model in mind or someone to consult, name them and list a date.

Goal:	
1.	
2.	
3.	

The third step is to take action. Go back to the previous box and circle the first action to take.

Remember, we're working together to eliminate blocks to your happiness. If you come up with multiple reasons why you can't take action, examine them here.

As you continue to free yourself from the habits blocking your happiness, your confidence grows and so does your ability to get things done.

Notice how it feels after you've done one thing on your list. What words describe this feeling?

Something to Think About

Pay attention to all ideas and be aware that not all solutions can have a timeline. Sometimes dates are necessary to move yourself into action. But intuition, listening to your inner guidance and acting when you feel compelled to pick up the phone, for example, is also valuable.

It is widely recognized by Nobel laureates that intuition is an essential component of creative thinking that leads to innovation. Nobel Prize winner Max Planck, the German physicist who is regarded as the founder of the quantum theory asserted that the pioneer scientist working at the frontier of "science must have a vivid intuitive imagination, for new ideas that aren't generated by deduction, but by an artistically creative imagination." Be willing to take chances and step out of your comfort zone when faced by challenges. You just may surprise yourself!

Introduction

Whatever attitudes we habitually use toward ourselves, we will use on others, and whatever attitudes we habitually use toward others, we will use on ourselves. We must examine carefully what we are dishing out. ~Bhante Henepola Gunaratana

As we're learning, physical well-being is inseparable from emotional well-being. When our stress levels are consistently high or we have too much on our plate, these processes can wreak havoc with our immune system and our ability to cope. Luckily for us, the antidote is another natural process. The simple act of changing our thought patterns and feeling safe, triggers physiologic changes called the Relaxation Response. These physiologic and biochemical changes trigger the parasympathetic nervous system, creating changes that bring the body back into balance by deepening breathing, reducing stress hormones, slowing down heart rate and blood pressure, and relaxing the muscles.

In addition to its calming physical effects, research shows that the hormones and chemicals released to elicit the Relaxation Response also increase energy and focus, boost the immune system, relieve aches and pains, heighten problem-solving abilities, and increase motivation and productivity through the release of oxytocin, endorphins, creating increased blood flow and oxygen to the brain.

Fight-Flight Response	Relaxation Response	
Sympathetic Nervous System	Parasympathetic Nervous System	
Prepares body for fight-flight	Prepares body for rest	
Blood pressure increases	Blood pressure decreases	
Muscle tension increases	Muscle tension decreases	
Pupils widen	Pupils get smaller	
Air passages widen	Air passages narrow	
Blood flow to muscles increases	Blood flow to muscles decreases	
Bladder sphincter constricts	Bladder sphincter relaxes	
Perspiration increases	Perspiration decreases	
Pulse rate increases	Pulse rate decreases	
Salivary glands decrease saliva	Increased saliva flow	
Blood clotting increases	Blood clotting normalizes	
Gastrointestinal activity decreases	Gastrointestinal activity increases	
Brain highly alert	Brain relaxed	
Metabolic rate increases	Metabolic rate decreases	
Breathing rate increases	Breathing rate decreases	
Blood glucose and fats increase	Blood glucose & fats normalize	
Lactic acid levels increase	Lactic acid levels decrease	
Anxiety levels increase	Anxiety levels decrease	

Here is a comparison of the stress induced fight or flight response and the Relaxation Response

A deep state of relaxation promotes healing at a cellular level and can help target many illnesses, including cancer. Important research has been conducted in this area, including many discoveries into how these methods of relaxation can be used for healing. This module will explore various ways to induce the Relaxation Response and train you how to consciously use relaxation to heal your own body. Use this workbook to explore different blocks that might stand in your way, helping to lay the groundwork to mindfully choose healthier responses to stress. This training program continues with weekly assignments designed to examine and enhance your ability to use relaxation as an integrative tool for health and well-being.

Some History

In the 1970s, Dr. Herbert Benson, a Harvard cardiologist, noticed that many of his cardiac patients had two risk factors in common, high blood pressure and stress. At the time, a group of Transcendental Meditation practitioners approached him, claiming that they could lower their blood pressure with meditation. Dr. Benson agreed to test this hypothesis. By measuring the metabolism, heart rate, blood pressure, brain waves and breathing rate during two separate sittings, once when the subjects just sat quietly and another when the subjects meditated (induced a state of deep relaxation) for 20 minutes, Dr. Benson and his researchers proved that meditation decreased metabolism, breathing rate and heart rate in the subjects. In addition, they had slower brain waves, less oxygen consumption and reduced muscular tension. These physiologic changes were in direct opposition to the stress response. Hence, the "Relaxation Response" was discovered.

Many methods can induce the Relaxation Response and cause the physiologic changes that stimulate healing. This is different from sleeping, laying on the couch or watching television. When you're asleep, your mind is still at work, digesting all the material of your unconscious and actively working it out. Have you ever awoken from a deep sleep and felt exhausted from a particularly disturbing dream? Whether you're dreaming of falling off a cliff or falling off a cliff in real life, the same physiologic changes are triggered. Exposing yourself to any outside stimuli can trigger different internal reactions: Music can either soothe you or stimulate you. Background noises can stimulate muscle tension. Watching a violent movie will elicit a different physical response than watching a documentary about the ocean. With this awareness, you can learn to monitor your environment.

Emotion and Immune Function

In a study published in the Journal of Advancement in Medicine in 1995, researchers asked healthy individuals to focus on two different emotions, anger and compassion, while a key immune antibody was measured, immunoglobulin A (IgA). This antibody is the first line of defense in the immune system, acting as a protective coating for the cells against invading bacteria or viruses. Stress decreases

IgA levels, making us more vulnerable to respiratory problems such as colds or flu. The results were astounding: The study found that simply recalling an angry experience caused a six hour suppression of the immune system. Conversely, feelings of compassion or caring boosted IgA levels.

These findings are just more evidence of how our emotions are inextricably linked to our immune system functioning. When we feel healthy, positive or uplifting emotions such as appreciation, gratitude, compassion, joy, the signals sent through the nervous system are very different from the signals sent when we feel negative or upset. Counteracting our negative thinking and in turn our negative biochemical physical responses helps the body balance itself.

Much research has been conducted on the pathological effects on negative emotions. More recently the effects of positive emotions on cognitive processing and perception, behavior, health and well-being have been documented. Studies show that positive emotions enhance faculties such as creativity and intuition. Experiencing frequent positive emotions has been shown to predict resilience and longevity. Furthermore, teaching people practical techniques to self induce and sustain positive emotions and attitudes for long periods has been shown to produce positive health outcomes, including reduced blood pressure, improved hormonal balance, and lower lipid levels. When the body is in harmony, the heart rhythms become smooth and even, thinking becomes clearer, and making better decisions becomes easier. The bottom line is that training yourself to create positive emotions by thinking positive and encouraging thoughts has been shown to heal the body and balance the nervous system.

Coherence and The Emwave Unit

Positive thoughts and emotions in combination with the Relaxation Response create another state called coherence. During coherence, heart rhythm patterns are organized as a stable pattern. The heart rhythm patterns of an individual who is frustrated, angry, worried or anxious are unstable, highly variable, erratic or incoherent. In the following pages, you will be trained not only to elicit a Relaxation Response but to move yourself into a state of coherence, using a tool called the emwave unit.

Increased heart-brain synchronization has been observed during coherence. Specifically, the brain's alpha rhythms show increased synchronization with the heartbeat in this mode and with other body systems that affect immune system function, nervous system function and balance, DHEA/cortisol ratio, significant reduction in depression, anxiety, anger, burnout, and fatigue. With coherence, research has also documented increases associated with psychological benefits such as contentment, ability to access gratitude, peacefulness, mental focus and vitality measured across diverse populations.

Enhancing Relaxation

The body is an amazing machine. By understanding the interrelationship of the body's systems, you'll develop a deeper awareness of how many health problems can be controlled — and even solved — from within. We can induce the Relaxation Response in many ways: through diaphragmatic (deep) breathing, progressive muscle relaxation, various forms of meditation, visualization, yoga, tai chi and more. Deep relaxation in combination with specific visualization images is most effective in healing diseases where the immune system is compromised.

To help you learn how to deepen relaxation and achieve coherence, The RENEW Program© offers a training tool from Heartmath, called the emwave unit. You'll learn more about the emwave unit in the next section.

Coherence Coach

To begin this training tool we ask that you use the Coherence Coach found on your Emwave software located under the balloon icon. This will give you voice guided instruction how to achieve coherence, a measureable, deep level of relaxation. Please try using the coherence coach as your first assignment.



Relaxation Training

We wonder how people can't see the most obvious things about themselves, yet we forget those people are us. ~Ezra Bayda

Worksheet #11

It's easy to recognize when your body is out of sync. Typical negative emotions like anger, frustration, anxiety, and worry are a clear signal. This state of mind leads to disorder in the heart's rhythms and in the nervous system. By contrast, positive emotions like joy, appreciation, care and kindness create balance in the heart's rhythms and in the nervous system. Other bodily systems sync up to this rhythm, creating a state called coherence. Coherence leads to more mental clarity, creativity, better problemsolving abilities and increased immune system functioning. This is a state of well-being. When your body's rhythms are in sync you can make better choices and wiser decisions. Even in the middle of a high-pressure or challenging situation, if you can ease yourself into this state, you can access more creative ideas and handle things in a more positive and productive way.

In order to train you how to achieve deep relaxation and coherence, The RENEW Program[©] has partnered with Heartmath to bring you the emwave unit. Heartmath's research has shown that when you intentionally shift into a positive emotion, heart rhythms immediately change. This shift creates a cascade of neural, hormonal, and biochemical events that benefit the entire body. These effects are immediate and longlasting.

Quick Coherence Technique

We'll provide you with an emwave unit. Begin by practicing with this tool one to two times a day for five to ten minutes. You can also use this tool before or during stressful events or situations that provide emotional challenges. You can practice anytime; and we want you to experiment with it. Particularly good times are in the morning and before bed, or anytime you want an energy boost. It's a simple, easy way to interrupt the stress response and quickly bring your system into balance.

Once you train yourself how to feel truly relaxed and balanced, you'll be able to recognize when you're not. You'll find yourself wanting to quickly get back to this relaxed state after a stressful situation. The lights on the unit and gentle chime alert you to when you are in the zone to guide you and help you recognize when you're in it. Have fun with this relaxation tool. Try it when you play with your pet or greet a loved one and see how easy it is to achieve coherence. As you become more aware of feeling

good during the day, you'll recognize when to give yourself an adjustment and you'll know how to do it. Learning to take charge of your emotions gives you confidence, balances your nervous system and builds resilience. When one person manages his or her emotions more skillfully, everyone benefits.

7 Easy Steps to Begin

1. Turn on by clicking the bottom of the red sensor button.

2. Gently connect the ear sensor.

3. Watch for the bottom light to blink, indicating a good connection.

4. Once the blue lights start moving in the middle display, use it to guide your breathing. Breathe in as it rises and breath out as it falls.

5. Think about something you appreciate or someone you love to activate a positive-feeling state while breathing to the rising and falling blue lights.

6. Observe the top light on the emwave unit as it changes from red (baseline) to blue (improved) to green (optimal). Your stress reduces as your coherence increases.

7. When you've finished turn the unit off by pressing the bottom of the red sensor button for about two seconds.

Here are three steps to achieve coherence, once you know how to work the unit.

The Heartmath Coherence Technique

Step one- Heart Focus

Focus your attention to the area around your heart

Step two- Heart Breathing

Maintain your heart focus and while breathing, imagine that your breath is flowing in and out through the heart area. Breathe casually, easily, just a little deeper than normal.

Step three- Heart Feeling

Recall a positive feeling and make a sincere attempt to relive that feeling. You can recall a time when you felt appreciation or love or care for someone or something to re-experience it.

Once you have found this positive feeling, sustain it by continuing with the steps to coherence: heart focus, heart breathing and heart feeling.

Experiment with your thoughts and practice with this tool. To begin, aim for 5-10 minutes a day. Try different times of the day and plan it into your schedule. What time of the day will you use the emwave unit? Write it into your daily schedule.

If you need further assistance, visit www.Heartmath.com or call in for a group training session at (712) 775-7100. Use the pin code 107309 every Tuesday at noon PST.

Relaxation Training: Finding Your Rhythm

Transformation is a profound process that doesn't happen by accident. We need genuine training in order to let go of our old habits of mind and to find and sustain a new way of seeing. ~Jack Kornfield

Worksheet #12

Continue to practice using the emwave unit. Please write about your experience. Is it easy or difficult getting yourself into the blue or green zone?

Are you able to feel the effects of using the unit?

Is it easiest to use at night, morning or throughout the day?

Do you find it better to use more often during the day for shorter periods of time or less often for longer stretches of time?

Did you feel you benefited from it? How?

Have you handled anything differently this week as a result of using this tool?

Creating Balance

Fall seven times. Stand up eight. ~Japanese Proverb

Worksheet #13

Last week, you put a number indicating your satisfaction next to six areas of your life. Let's revisit that exercise. As the weeks move along and you discover ways to recognize stress in various forms, you'll begin to recover and take charge of your life. You'll also be more aware of what to do each day to help yourself monitor your own stress levels. Don't wait until you are depleted or sick to discover meaning in your life or begin to learn to experience joy on a daily basis. Now is the time to examine, explore, and renew your commitment to live with enthusiasm and purpose. Now is the time to train yourself to positively manage your emotions, your body, your health and your lifelong well-being.

A Word About Spirituality:

Our working definition of spirituality is anything that can uplift, inspire, or allow you to connect to a larger perspective. For some it is deeply associated with religion. For others it can be felt on a hiking trail, experienced by hearing a great piece of music or seeing a powerful work of art. Whatever it is for you, it's reducing your blood pressure, stimulating a strong immune reponse and supporting your well-being.

Here is last week's exercise:

Researchers believe this combination of activities increases personal satisfaction. Put a number next to each one (lowest 0-10 highest) indicating the degree to which you are fulfilled in that area.



Spirituality		
Exercise		

- Work
- _____ Friends
- _____ Romance
- _____ Fun/Adventure

Creating Balance

Please enter this information into the graph below and notice where it dips. This will clearly illustrate where you're off balance.



Last week you chose to do something from your brainstorm list. This week, choose a different activity. Be aware of how you are feeling while you're doing this activity. Are you feeling relaxed, inspired or joyful? Is it uncomfortable to take time for yourself? Pay attention to whatever comes up and make some notes in your journal or in the space below. This is how you uncover blocks to your own happiness. Being responsible for your own happiness, allows you more energy to fulfill all of your roles in life which gives you more to share with others.

Can you do one thing every week just for your own fun or fulfillment in order to get back in touch with yourself, keep you in balance and boost your immune system? We recommend doing this activity by yourself. Time spent alone is important time to reconnect with your inner voice and get back in touch with the essence of your self. In addition to adding some fun to your routine, you might discover solutions to old problems or learn something new about yourself!



Brainstorm list:

What I did from my list this week:

I noticed:

I felt:

What is Mindfulness - And What Does It Have To Do With Me?

Too often we are consumed with anxiety and cravings, regrets about the past and anticipation for the future, completely missing the crisp simplicity of the moment. ~B. Alan Wallace

Worksheet #14

Mindfulness is described as a calm awareness of one's body functions, feelings, moment- to-moment thoughts or consciousness itself. Practicing leads to self-knowledge and many studies now bear out its effectiveness in moderating behavior. The information gained from being mindful has been so successful for thousands of years that the field of psychology has incorporated it to treat many psychological conditions including depression, anxiety and various addictions, such as overeating.

One way to assess mindfulness is to look at what it's not. The "Mindful Attention Awareness Scale" (Brown & Ryan, 2003) below, is frequently used in mindfulness research. The more you recognize these traits and experiences, the more you tend to go through life without awareness or "mindlessly". Take a look at the list below and check what applies to you.

- ____I could be experiencing some emotion and not be conscious of it until some time later.
- ____I break or spill things because of carelessness, not paying attention, or thinking of something else.
- ____I find it difficult to stay focused on what's happening in the present.
- ____I tend to walk quickly to where I'm going without paying attention along the way.
- ____I tend not to notice feelings of physical tension or discomfort until they really grab my attention.
- ____I forget a person's name almost as soon as I've been told it for the first time.
- ____It seems I'm "running on automatic" without much awareness of what I'm doing.
- ____I rush through activities without being really attentive to them.
- ___I get so focused on the goal I want to achieve that I've lost touch with what I am doing right now to get there.
- ____I do tasks or jobs automatically, without being aware of what I'm doing.
- ____I find myself listening to someone with one ear, doing something else at the same time.
- ____I drive places on "automatic pilot" and then wonder why I went there.
- ____I find myself preoccupied with the future or the past.
 - ___I find myself doing things without paying attention.
- ____I snack without being aware that I am eating.

About Intention

In addition to being a useful assessment tool, this list is a great guide on how to be more conscious of your actions. Each of the "mindlessness" statements can be reversed to guide you towards being more present and aware of your daily choices. Intention indicates what we want, our desire regarding the outcome of our actions. Intention can be conscious or unconscious. Mindful intention is being consciously aware of directing and focusing our actions to accomplish our goals. Many successful individuals use this technique.

For example, the statement "I snack without being aware that I am eating," could easily become the basis of a mindful intention: "I am fully aware of what I eat. I taste each bite and feel the food fill my stomach."

What are some mindful intentions you could create from the list on the previous page?

Waking up

If you want to experience the joyous ecstasy that life has to offer, there is one commitment that is absolutely fundamental: the commitment to live in the moment. ~Amrit Desai

Worksheet #15

Mindfulness focuses on waking up. Most people are going about their daily routine without paying attention to what they're doing. We can wake up from this state of unconsciousness by training ourselves to be attentive, present and aware of our inner life as well as our surroundings. In his book, *Wherever You Go There You Are*, Jon Kabat-Zinn, a great teacher of meditation and mindfulness, writes, "Mindfulness means paying attention in a particular way, with purpose." This kind of attention leads to greater awareness because it is partnered with appreciation, non-judgment and acceptance of what is happening in each moment.

Nisargadatta Maharaj writes a beautiful description of being present in the moment in "I Am That." Be with yourself, by watching yourself in your daily life with alert interest, with the intention to understand rather than to judge, in full acceptance of whatever may emerge, because it is there, you encourage the deep to come to the surface and enrich your life and consciousness with its captive energies. This is the great work of awareness; it removes obstacles and releases energies by understanding the nature of life and mind. Intelligence is the door to freedom and alert attention is the mother of intelligence.

A lack of awareness of your body's signals leads to unconscious behaviors. These unconscious behaviors can lead to problems that build over time and leave us feeling stuck, out of touch and in poor health. Once you are stuck in this loop, you can lose confidence in your ability to be effective and to direct your energy in ways that would lead to greater happiness. Your immune system suffers from these feelings. Conversely, resilience is cultivated by training yourself to be more aware and present. Awareness of your connection to others and to the world around you leads to more moments of joy, peacefulness and happiness. Mindful awareness combined with other stress management tools and relaxation training is empowering.

The mind is busy thinking all of the time. Most of the time this incessant stream of thoughts flows through our minds without an awareness of what we're thinking. Train yourself to listen to your thoughts, to learn from them and then to use this awareness to take action. Here is a tool to help you do this:

Stop thinking. Stop at some point during the day and simply notice. Don't try to change anything at all. Be a reporter. Do not judge it. Just observe. What is happening? What do you feel? What do you see? What do you hear? Slowing down time by distancing yourself is one ingredient in a new recipe for managing stress and enhancing the effects of relaxation.

How was this experience? Write about it below.

How Do You Get To Carnegie Hall?

If you develop an ear for sounds that are musical it is like developing an ego. You begin to refuse sounds that are not musical and that way cut yourself off from a good deal of experience. ~John Cage

Worksheet #16

Science validates that relaxation along with joy will keep your body healthy and your mind young. By learning to open your mind to new possibilities and taking charge of your emotions, you can start the process of renewing your emotional buoyancy and reenergizing your nervous system.

Take 10-20 minutes today to train with your emWave unit. Continue this practice daily.

Notes:

Examining Your Responses to A Stressful Event

Everything has its own place and function.

That applies to people, although many don't seem to realize it, stuck as they are in the wrong job, the wrong marriage, or the wrong house. When you know and respect your Inner Nature, you know where you belong. You also know where you don't belong. ~ Benjamin Hoff

Worksheet #17

Your strong reactions are a sign to stop and question what you're feeling. This week, if you experience a strong reaction such as anger, frustration or sadness, ask yourself the following questions and write them in the chart below. This process may help you become more aware of what's causing your stress responses. Learning to question your feelings helps you become more present so that you can examine them, and determine whether they're valid in order to react more thoughtfully and stay relaxed more of the time.

What was the event that caused you stress?	What thoughts were triggered by this event?	What feelings accompanied this event? What was your mood?	How did your body feel, in detail, during the experience?	What helped or hindered your ability to stay present during this experience?
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				

Adapted from Mind Over Mood: Change How You Feel by Changing the Way You Think by Dennis Greenberger, PhD and Christine A. Padesky, PhD.

Problem Solving in the Zone

It was emphasized in the psychological literature (on studying the thought processes of Nobel Prize winners), that certain individuals have an intuitive feeling as they begin their intellectual activity, about what their final product will be like. ~Larisa V. Shavinin

Worksheet #18

Since it's physiologically difficult to find solutions when we're emotionally reactive and upset, don't try to problem solve in the moment of worry, anger or fear. Actively work to help those feelings subside before doing any problem solving. Once again, when you're calm and relaxed, your thought processes are the most effective. And it's essential to be relaxed and calm in order to be more receptive to original ideas.

If you allow yourself to try new ways of handling old issues, or to experiment with new ideas in moments of calm, you allow yourself to become someone you've never been before. Learn to listen to your inner guidance; you'll find new ways of handling previously problematic situations.

In a study of scientific breakthroughs by Marton et al. (1994), Nobel laureates stated that "intuition feels different from logical reasoning and cannot be explained in logical terms." These scientists, including James Watson and Sir Francis Crick, who were awarded the Nobel Prize on the discovery of DNA's structure, consider scientific intuition as "as alternative to normal step-by-step logical reasoning" and credit their discoveries to this process. Crick stated that it was his "intuition" and his ability to work with a minimum number of assumptions while approaching a problem that led to his contribution.

Here are some general guidelines for listening to your intuition when looking for solutions to problems:

If the answer isn't obvious when you're calm and relaxed, leave it alone. Allow yourself time and space to let answers come to you.

Sometimes when you concentrate on a problem you can't find a solution. But often when you aren't paying attention, finding a solution that's the obvious answer appears.

Learn how to truly relax, take time to have fun or spend time with yourself or friends. This may give you the space you need for the solution to emerge.

Pay attention to all ideas especially when you're not looking for them.

Physiologically speaking, positive emotions stimulate creative areas of the brain. So get yourself in a positive emotional state. When you're in the habit of thinking positive thoughts and feeling good, you'll be more receptive to listening to your creative ideas.

Problem Solving Technique

Step One: Using your emWave monitor, get yourself into the blue and the green zones by completing this sentence: "I love the feeling of..." In time you will be able to do this without the unit. For now, list as many things as you can think of that generate positive feelings to get you in "in the zone."

Step Two: While in this state, think of an issue or problem that is troubling you. Notice how the monitor will bounce you right out of the green zone.

Step Three: Now, try to bounce your emotions back into the blue or green by thinking of something positive about this person or situation. You can also take a neutral stance and concentrate on simply feeling good.

Step Four: Think about finding a solution to this problem and see if an answer pops into your awareness. If it doesn't or if you keep going back into the red zone, relax your thinking and softly concentrate on feeling good to practice comin back to neutral and achieving emotional distance between your feelings and the problem. Repeat from step one and see if your response changes.



Letting Go of Judgments and Other Common Things That Block Our Health And Wellness

Always forgive your enemies- nothing annoys them so much. ~Oscar Wilde

Worksheet #19

Take a deep centering breath. Now look around the room. Do you notice anything that is red in your environment? Take a few seconds and pick out all the red objects wherever you are at the moment. Now switch to green. Look around and find everything that is green. Take a few moments to make this shift. Now pick another color, such as blue.

Notice how changing your focus influences what you see. This is how our judgments, preconceived notions, and old hurts color our perceptions and block us from seeing what's around us in every moment. If we're focusing on judgment, hurt or blame, that's what we see and gather evidence to support. Shifting your focus allows you to have new experiences, to see new things in the same old room.

How often have you assumed or judged another person's behavior to be unacceptable, only to later learn they were in great pain? Find the strength to ask questions and try to be curious before reacting. It's also important to give yourself the same courtesy. Forgiving yourself for momentary lapses in judgment are an important part of good emotional health.

What Keeps You Stuck?

Go through your home, your closet, or your office and throw something out that you've been holding on to. Experience what it feels like to physically let go of something you've been holding on to that's cluttering up your life. After you've completed this, answer the questions on the following page.

If you could let go of one thought, problem, idea, issue, what would it be?

What keeps you stuck?

You can't go back and live your life over again. It's not physically possible. And so now, knowing all that you know from where you stand today, what do you want? Letting go of ideas, emotions and associations that block your awareness allows you to experience more of the good things around you. Make joy your new priority every day!



Getting A Good Night's Sleep

A well-spent day brings happy sleep. ~Leonardo da Vinci

Worksheet #20

When you're resting or meditating, the body repairs itself. Studies show that sleep is an essential part of the process of enhancing your learning and memory as well as regulating your mood. It has been shown conclusively that not only do we dream every night, but we must dream in order to maintain a healthy psychological equilibrium.

Various sleep stages are involved in the consolidation of separate types of memories. Being sleep deprived reduces a person's ability to learn. Too little sleep also causes depression, a weakening of the immune system, an increase in perception of pain and early aging. When we don't sleep well or sleep enough, we don't function well. A sad fact is that fatigue is responsible for an estimated 100,000 motor vehicle accidents and 1,500 deaths each year, according to the National Highway Traffic Safety Administration.

The Science of Sleep

Sleep involves our circadian rhythms, a roughly 24-hour cycle in the biochemical, physiological and behavioral processes of all living entities, including plants. Circadian rhythm is also present in the sleeping and feeding patterns of animals. Our circadian rhythm is linked to the light–dark cycle of the sun and the moon. Researchers believe that slow-wave sleep, the deep, dreamless sleep that you ideally sink into about three to four times a night, regulates your metabolism. During stage four slow wave sleep, which begins an hour after we fall asleep, we release our greatest amounts of growth hormone that repair cellular damage and prompt the body to burn stored fat.

Appetite-related hormones are affected by too little sleep. Leptin, which controls appetite, appears to fall when we have too little sleep. Ghrelin, which stimulates the appetite, rises when we are sleep deprived. If you wake up and go to the refrigerator in the middle of the night, this may be why. Studies link weight gain and difficulty losing weight with lack of sleep. Prolonged sleeplessness also causes the body to release cortisol into the bloodstream, which directs fat to store in the belly. Sleeplessness also puts you at risk of developing Type 2 diabetes over time due to excessive cortisol and its impact on blood sugar glucose regulation. During sleep we experience important biological activities involving core body temperature, brain wave activity, hormone production and cell regeneration.

How Much Sleep Do We Need?

Infants require about 16 hours of sleep a day, most teenagers need about nine hours on average, and adults need seven to eight hours a night for the best amount of sleep, although that number varies widely. Women in the first three months of pregnancy often need several more hours of sleep than usual. Experts say that if you feel drowsy during the day you haven't had enough sleep.

This week pay attention to the quality of your sleep and your sleeping patterns.

How many hours do you sleep a night? Do you feel it's enough?

Is your bedroom dark enough? Ambient light disrupts the melatonin cycle that is crucial for deep rest, so it's essential to keep your sleep area as dark as possible. What changes could you make in your bedroom this week to accommodate better sleep?

Is it quiet enough when you go to sleep? Some people need 'white noise' to block other ambient sounds in their sleep area. If you've thought about getting something like this, make a note below and do it this week.

Many people do well with a sleep schedule based on daylight hours, waking at 7am and sleeping at 11pm. Set a routine this week that works with your schedule. Make sleep a priority this week and see what happens.

Suggestions for a Good Night's Sleep

Some people find that having a nightime ritual of reading, meditating, writing in a journal, listening to relaxing music, or stretching the body helps them tune out the day and fall asleep easier.

Take a warm bath to relax your mind and your body. Try using essential oils such as lavendar, chamomile, marjoram, hops or valerian to help you relax.

Do not drink more than 1-2 cups of coffee or caffeine drinks a day — and be sure to avoid caffeine after dinner.

Eat dinner before 7pm or three hours before sleep, so your body can digest your food and begin to relax.

Don't exercise within two hours of going to sleep.

Don't bring work home. If this isn't possible, don't work in the bedroom or in bed. Remember, thinking about work can cause stress, which triggers the release of the stress hormone cortisol. If you are feeling the effects of stress, falling asleep becomes difficult.

Don't stay out late too many nights in a row. Allowing yourself to get sleep deprived lowers your immune functioning. Think about how much sleep you're getting in a week and do your best to plan getting enough sleep.

Be comfortable. Falling asleep is easier when your body temperature is low. Make sure your bed and your pillows are comfortable, and that you aren't wearing too many layers or the room isn't overheated.

Some people find that watching TV in bed makes it harder to fall asleep because they're too stimulated by stressful programs or the news. It's also difficult if you fall asleep with the TV on because it might wake you up during the night.

Develop a relaxing routine before sleeping. Generating positive feelings will help you both relax, dream well and wake well. You'll find you awaken to whatever was on your mind when you went to sleep. Once again, training yourself to lean towards positive thoughts and feelings will not only help you live better, and improve the quality of your relationships, but you'll sleep better.

Keep a sleep log this week:

Keep track of what you did to relax before bed, what time you went to sleep and when you woke up.

Relax Monday	Bed Time	Wake Time
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

Did you make any new discoveries this week? Did you identify anything you'd like to do differently?
RENEW© MODULE TWO- Enhancing the Effects of Relaxation

Additional Information: Enhancing the Effects of Relaxation with Massage

Besides increasing relaxation and decreasing anxiety, massage lowers your blood pressure, increases circulation, improves recovery from injury, helps you to sleep better, increases concentration, and stimulates the relaxation response.

Massage:

Increases circulation, allowing the body to pump more oxygen and nutrients into tissues and vital organs.

Stimulates the flow of lymph, the body's natural defense system, against toxic invaders. For example, in breast cancer patients, massage has been shown to increase the cells that fight cancer.

Increases circulation of blood and lymph systems which improves the condition of the skin.

Relaxes and softens injured and overused muscles.

Reduces spasms and cramping.

Increases joint flexibility.

Reduces recovery time, helps prepare for strenuous workouts and eliminates subsequent pains of the athlete at any level.

Releases endorphins (the body's natural painkiller) and is being used in chronic illness, injury and recovery from surgery to control and relieve pain.

Reduces post-surgery adhesions and can be used to reduce and realign scar tissue after healing has occurred.

Improves range-of-motion and decreases discomfort for patients with low back pain.

Relieves pain for migraine sufferers and decreases the need for medication.

Provides exercise and stretching for atrophied muscles and reduces shortening of the muscles for those with restricted range of motion.

The Need for Touch

Tactile stimulation and the emotional assurance of caring touch bring about a sense of well-being and security for people of all ages.

If you have never gotten a massage, you can start by giving yourself a shoulder massage, a foot massage, a jawline massage (by gently rubbing the area around the jaw hinge) or even massaging your own hands. Or try putting two tennis balls into a sock and use this to massage the area surrounding your spine, which can relieve pressure and feels great!

Massage works. Trade massages with a friend, hire an experienced masseuse, or treat yourself to a couple's massage. You will feel the effects immediately, and be glad you did.

Other Body Therapies

Alexander Technique - A movement re-education therapy that was created by a mid-nineteenth century actor who tried to understand his own movement dysfunctions on stage. The emphasis is on observing and modifying improper movement patterns, thereby reducing physical stress on the body.

Craniosacral Therapy - A gentle method of manipulating the body's craniosacral system (consisting of thin membranes and cerebrospinal fluid which surrounds and protects the brain and spinal cord) in an attempt to improve the function of the central nervous system, dissipate the negative effects of stress and enhance health and resistance to disease.

Reiki - A therapy based on universal life energy that serves to align chakras and bring healing energy to organs and glands. Utilizes visualization as practitioner acts as a channel for the life energy.

Rolfing - Used to reorder the major body segments, this technique utilizes physical manipulation and movement awareness to bring the body into vertical alignment.

Shiatsu - A deep, finger-pressure technique using the traditional acupuncture points of Asian healing. Works to unblock energy flows and restore balance to meridians and organs.

Prologue

You might notice that this module is presented differently than the others. It's organized into multiple sections. First, it presents an overview of how your body uses food as fuel. Then, it will guide you toward making food choices that will both satisfy your taste buds and improve your health outcomes.

Food can heal the body and hurt the body. We'll present you with the information you need to make positive choices — well before we present the food choices available to you in this program. We'll take you on a journey of self-discovery to examine what you currently eat and when you eat it. We'll look at how you feel when you reach for certain foods and why these foods may comfort you but cause you problems in the long run.

We'll also explore other avenues that directly or indirectly affect your metabolism and your food choices, such as how you respond to stress, the effects of relaxation, physical activity and social support. Then we'll look at the ways in which your emotions affect your endocrine system, along with learning about certain toxins in the environment may interrupt this balance.

Finally, we'll present a health-promoting way of eating based on current studies. These food choices are divided into four groups and presented as your Road Map to Success. We'll provide food charts, menus and lists of food choices to help guide you towards your individual health goals. We'll also give you additional information on how to prevent or reverse heart disease, avoid diabetes, lower your cholesterol and blood pressure and lose weight.

So let's get started!

To begin, we'll start with what happens when you put food into your mouth.

RENEW© MODULE THREE- Nourishing Your Immune System Introduction

Let your food be your medicine and let your medicine be your food. ~ Hippocrates

By learning a little something about your biochemistry you can learn how to choose foods that not Only heal your body, but boost your immune system as well. The human body needs food in order to sustain itself. But sometimes, it can be hard to enjoy food because we fear eating the wrong things, or we feel guilty. If you concentrate on the joy of eating it's much easier to make changes in the way you eat. Food can and should be a joyful experience! Remember, as human beings we're wired to prefer feeling good. So any changes based on feeling good are much easier to sustain.

When we receive a diagnosis, we may be shocked into awareness and fear that motivates us to act differently. But when that fear passes we can slip back into habitual behaviors and into denial. Studies show it's easier to maintain behavioral change if the changes align with your intrinsic value system. Nurturing this internal motivation, we can develop new habits based on feeling GOOD, looking good, being strong, and on the JOY of eating health sustaining food. But sometimes we block the road to this natural state.

Understanding our perception of stressful events is critical to changing our response to food. Our perception of why we eat and what we eat is critical. Eating to vitalize your body is quite different from eating to comfort your emotional states. Knowing that smaller, more frequent meals boosts your immune functioning, according to a 2003 study led by Mark Mattson, Duan Wenzhen and Zhihong Guo for example, may help you make different decisions when you are starting to come down with a cold.

Chronological aging is unavoidable. But biological aging is the result of the way we choose to live our lives. We fight deadly diseases daily, without being conscious of it, and it's the strength of our immune system and the inherent wisdom of our cells to self-correct that keeps us healthy. Everything we put into our body affects our immune system.

Food and Digestion

Digestion begins with the first bite: enzymes in saliva work to break down starch molecules in the mouth. Next, the food passes into the first part of the small intestine, where the pancreas pours powerful enzymes to digest sugars, fats and proteins. Here's where the quality and the amount of food you eat begin to directly affect your body.

Sugar

Sugar digestion is influenced by the secretion of insulin from the pancreas. Although there's always a low level of insulin secreted by the pancreas, the amount secreted into the blood increases as the amount of sugar in the blood (blood glucose level) rises. Glucose is a simple sugar that provides energy to all of the cells in your body. The cells take in glucose from the blood and break it down for energy (some cells, like brain cells and red blood cells, rely solely on glucose for fuel). High levels of blood glucose trigger insulin release, while low levels slow the release. Maintaining low levels of insulin allows your body to use stored fat for fuel more easily. Exercise helps your muscle cells become more sensitive to insulin and more efficient at using glucose for fuel. To maintain a constant blood-glucose level, your body relies on two hormones produced in the pancreas that have opposite actions: insulin and glucagon.

When you eat too many refined carbohydrates (desserts, white bread, pasta etc.), a negative cycle develops. Each time you eat these foods your blood sugar increases dramatically and your pancreas delivers increasing amounts of insulin until in some people it finally wears out. The cells become resistant to the insulin and the glucose can't get absorbed into the cells. "Insulin resistance" is a precursor to diabetes. It is not fully understood why cells become resistant some of the common factors include: increased abdominal fat, sedentary lifestyle, obesity, fructose intake and specific genetic phenotypes.

Fast Food

When our food is overloaded with fats like in fast food a different problem can occur. Digested molecules of food are eventually transported to the liver where detoxification occurs, as well as fat metabolism. Approximately 50% of the bodies fat metabolism occurs in the liver. The liver takes out the toxins and the bad fats and secretes them in the bile. The purified blood gets passed forward up to the heart. When too much fat starts to accumulate in the liver, it will perform sluggishly, a condition called fatty liver. Detoxification and lipid metabolism are impaired making this a potentially life threatening problem. In additional to high fat intake, environmental factors, excessive alcohol, genetic predisposition and insulin resistance all contribute to a fatty liver.

Foods with trans fats, saturated fats and chemicals will also increase inflammation in your body. A 2006 article in the *European Health Journal* by Katherine Esposito discusses the relationship between inflammation and elevated blood sugar, obesity and chronic diseases finding that markers of inflammation are seen in heart, Alzheimers and Parkinson's diseases as well as autoimmune illnesses and cancer.

Another 2006 article in the American Journal of Clinical Nutrition reported impaired fat metabolism and

inflammation that's associated with both improper fat metabolism and elevated blood sugars negatively affect the development of heart plaque. Plaque in the heart developes when these bad fat particles accumulate on the arterial walls and then oxidize into free radicals. Once these toxic particles oxidize the immune system attacks them and deposits them under the lining of the blood vessels. This process begins plaque formation. Digestion isn't just about the chemical breakdown of food, it's about what food actually does to your body.

The truth is there is no one right way to eat. But there is a right way to eat based on our accumulating knowledge. As a general rule, if you eat less rather than more, stick to fresh foods and eat more plants than meat, varying the colors of your foods, you're on the right track. Eating should nourish you, give you pleasure and not cause you stress. This program is designed to educate you about making choices to fit your likes and dislikes, your lifestyle and your particular health needs. It focuses you on feeling great and on the joy that healing your body with food can bring.

Your Owner's Manual

Here are a few basic facts about food:

Fats, Carbohydrates & Proteins

The food we eat is made up of macronutrients and micronutrients.

Macronutrients provide energy. Micronutrients are vitamins and minerals that are vitally important to our bodily functions and are found in very small amounts in our food.

Macronutrients can be divided into four categories: protein, carbohydrates, fat, and dietary fiber, which includes soluble and insoluble fiber. More details below in section called "Fiber."

Protein and carbohydrates provide about 4 calories per gram (114 calories per ounce).

Fat provides about 9 calories per gram (256 calories per ounce).

Proteins are made up of small compounds called amino acids, of which there are 20 different kinds.
11 of these cannot be produced in the body, so they must be provided in the food we eat. These are called "the essential amino acids." If we don't get them, our bodily functions will deteriorate.

There are two types of proteins: animal and plant. Animal protein is found in: milk/dairy products, eggs, meat, poultry, fish and shellfish. Plant protein is found in: nuts, legumes (beans, lentils, chickpeas) and to a lesser extent in vegetables, and soybean products (tofu, soy milk, tempeh, miso

and fermented black beans. More lists will be included later. (For more information on soy products see page 156-157). If you do decide to eliminate all animal protein you may want to add B12 vitamin supplements. Many vegetarians and vegans do not get enough of this vitamin in their diet.

How much protein should you eat?

One portion of protein should be as big and as thick as the palm of your hand. You need around 0.83 grams of pure protein per 2.2 pounds of body weight. An average woman needs 46 grams of pure protein per day, while an average man needs 56 grams. You need more protein if you are pregnant or breastfeeding. Most Americans have too much protein with each meal.

Too much protein will be converted slowly to blood sugar or fat.

Too little protein leads to loss of lean body mass or muscle. Muscles, large or small, are important for movement and because they protect our vital organs. Muscles burn the most energy, so less muscle mass means a slower metabolism.

Many protein foods are also a source of important vitamins and minerals. Low intake of certain amino acids may result in a lack of antioxidants produced by the body, which are part of our immune system's defense against premature aging and illness.

Eating a small amount of protein with every meal and snack will enhance your body's ability to burn fat.

Protein is a key element for an efficient metabolism. It affects a number of hormones including one that indicates our sense of fullness after a meal and promotes the burning of body fat to provide energy.

Whether you eat protein from eating a steak or rice and beans, you are eating protein. However when you're eating steak, you're also eating saturated fat and cholesterol.

Fruits and vegetables also provide protein to the body. They have the added benefit of containing vitamins, minerals and antioxidants, which help protect the cells from damage by harmful molecules.

Carbohydrates are nutrients and divided into two groups: sugars (simple carbohydrates) and starches (complex carbohydrates).

Complex carbohydrates such as grains, beans, vegetables and fruit are very filling and can be low in calories.

Simple carbohydrates, including honey and sugar are "empty" calories with very little nutritional value. It's easy to eat a lot of calories without being aware of it.

Essential carbohydrates do not exist. The body is capable of producing all the carbohydrates it needs from protein and fat. Carbohydrates are the preferred source of energy for the body and the brain.

After they have been digested, carbohydrates end up in the blood as glucose (which is referred to as blood sugar).

A normal blood sugar represents less than one teaspoon of sugar dissolved in the blood, which is used by our organs to supply the energy needed each day. The surplus is stored in the liver and muscle tissue.

Our brain is dependent on a steady supply of blood sugar, and it uses 75% of all the glucose that circulates in our blood.

By eating carbohydrates such as lentils, beans, vegetables, fruits, in combination with the certain proteins and fats contained nuts, seeds, and yogurt, we can keep our blood sugar level steady, reducing or eliminating cravings and mood swings.

Sugar & Fatty Foods

The human body does not need additional sugar. In order for the body to digest and use it for energy, it 'steals' from our body's reserves, weakening us and making our immune system more vulnerable. The same is true of white flour and salt.

Refined sugar are sugars that undergo a process known as sugar refining. During this process, the raw sugars are refined, or enhanced. The sucrose is extracted while other unwanted materials are discarded. Although refined sugars are basic table sugar, there are a number of different types including: granulated sugar, sanding sugar (adds texture, used decoratively in baking, it is coarse), super-refined sugars which are used in commercial food products like sodas and sugary beverages, powdered sugar or confectioner's sugar, commonly used in icings and desserts.

Eating refined sugar causes your blood sugar level to rise rapidly. In response, your pancreas must create more insulin, sometimes causing your blood sugar level to fall rapidly. This is called a 'sugar high' and followed by a 'sugar low' or exhaustion. This pattern over time can contributes to developing insulin resistance and eventually diabetes. Fat contains more energy per gram than any other macronutrient and is an important source of vitamins A, D, E and K. Fat is composed of glycerol and fatty acids. We need fat.

In food, fat is found in the form of triglycerides. When you eat fat, these triglycerides are split into glycerol and three fatty acids. Triglycerides are important for a well functioning metabolism.

Triglycerides are measured in the blood because they are an indicator of heart disease and diabetes. Normal triglyceride levels vary by age and sex. A high triglyceride level combined with low HDL cholesterol or high LDL cholesterol seems to speed up the buildup of fatty deposits in artery walls. What you eat, being overweight, physical inactivity, cigarette smoking, excess alcohol consumption and/or a diet very high in carbohydrates (60 percent or more of calories) adversely affects your triglyceride levels. Eating too much sugar and too little fat will also cause your triglycerides to raise. Conversely, losing weight, eating well and physical activity causes your triglycerides to lower.

The Omega fatty acids are important building blocks for our immune functioning and have a positive influence on inflammatory reactions. In combination with antioxidants, fatty acids help the immune system defend against cancer, diabetes, and heart disease.

All fatty foods contain both saturated and unsaturated fatty acids, and are described according to their proportions. For example, butter is considered a saturated fat because it is around 65% saturated and 35% unsaturated fat. Coconut oil is 92% saturated fat.

Within the unsaturated category are two types of fats: monounsaturated and polyunsaturated. The body is able to produce saturated and monounsaturated fatty acids but not some forms of polyunsaturated fatty acids. Some of these are essential for good health and are the building blocks of our cells. These are called essential fatty acids, and include omega-3 and omega-6, which can only be obtained through food.

The brain and the nervous system are dependent on the essential fatty acids. Too little intake of omega-3 fatty acids has been linked to depression and multiple sclerosis, inflammation, heart disease, Alzheimers, Parkinson's diseases as well as autoimmune illnesses and cancer.

American diets are generally too high in omega-6 and too low in omega-3. This imbalance promotes chronic inflammation, which contributes to many life threatening conditions.

You need mostly unsaturated fat, both monounsaturated and polyunsaturated.

Stay away from saturated fat. These are generally fats that are solid at room temperature. They contribute to plaque formation in heart disease.

Do not eat industrially produced trans fats. These are packaged foods which contain hydrogenated or partially hydrogenated vegetable oils and fats. By law trans fats are allowed to be labeled as hydrogenated or partially hydrogenated vegetable oils and fats and fats and if a serving contains less than 0.5 grams, it will be labeled as "0 g."

Read labels. Trans fats (hydrogenated and partially hydrogenated fats) are found in many food products including margarines, vegetable shortenings, pancake mixes and ready made foods. Highly processed foods with trans fats are chemically altered, have little nutritive value and are a toxin to the body. Your pantry may be full of them.

Fiber

Almost all the fiber we get comes from vegetables, fruits, nuts, legumes, and grains.

There are two types of fiber: soluble and insoluble. Soluble fiber ensures proper digestion of nutrients and means the bowels absorb carbohydrates more slowly, thus blood sugar rises steadily over a longer period of time.

Both soluble and insoluble fiber are undigested. They're not absorbed into the bloodstream. Instead of being used for energy, fiber is excreted from our bodies. Soluble fiber forms a gel when mixed with liquid, while insoluble fiber doesn't. Insoluble fiber passes through our intestines largely intact and its bulk promotes regular bowel movements and helps control the correct balance of acidity in the intestines.

Soluble fiber lowers cholesterol and also supports good intestinal health. It is found in beans, lentils, oats, vegetables and fruits, oat bran, carrots, and psyllium. Soluble fibers slow the absorption of carbohydrates, so blood sugar levels remain more constant.

Insoluble dietary fiber, which is found in whole grains and wheat bran, increases the volume of food and aids bowel function. Because food passes through your body more quickly, your colon is exposed to carcinogens for a shorter period of time. The risk of colon cancer is lower on a high fiber diet.

A varied and well-balanced way of eating should ensure you get all the vitamins and minerals you need to maintain your weight and good health. Refined carbohydrates, packaged foods, fast foods, additives, and chemically engineered foods (GMO's) can challenge and even deplete your vitamin and mineral stores and negatively affect your metabolism.

When the body has to work to detoxify from the food you eat and this food contains little or no nutritive value, your body has to "steal" from its reserves. This affects the strength of your immune system.

The Bottom Line

Pay attention to how you feel when you eat and also after you have eaten. This is your lifelong guide to know what foods best nourish your body. When your starting goal is better health, start by making feeling good your first priority. Notice this at all times, especially when you're choosing what to eat. This will guide you to make delicious and conscious choices that promote joyful, healthful eating!



Eat to Feel Great!

Always remember that you are absolutely unique. Just like everyone else. ~Margaret Mead

Worksheet #21

In order to create a road map of eating delicious food to arrive at optimal health, take stock of where you are now and find your starting point. This program allows for making the changes you feel ready to make.

To assist with this task, use the chart below and keep a daily record of food intake for the next three to four days. Include everything, including all spices and salt intake. Don't modify anything in the way you prepare meals. Don't feel guilty. Eat as you usually do. It's important to know what you normally eat.

DATE:			
BREAKFAST	LUNCH	DINNER	SNACKS
DATE:			
BREAKFAST	LUNCH	DINNER	SNACKS
DATE:			
BREAKFAST	LUNCH	DINNER	SNACKS
DATE:	-		
BREAKFAST	LUNCH	DINNER	SNACKS

Your Grocery List

Everything is changing all of the time.

Because of that truth, when we make a mistake we can begin again. ~Sharon Salzberg

Worksheet #22

We all tend to get in a 'food routine' — eating the same foods, cooking the same meals, and putting them on rotation. Write down your typical grocery list that includes all the foods you eat on a regular basis. By comparing your list with the "Road Map to Success food choices" on the following pages you can see where you may need to make a detour.

GROCERY LIST

Redefining Your Preferences

There is more wisdom in your body than in your deepest philosophies. ~ Friedrich Nietzche

Worksheet #23

Making Changes

In order to design a program that is both delicious and based on your health goals, you will assess where you are currently, decide where you would like to be and have plenty of information to get you there. As you make changes, you'll begin to notice you feel better, which will help support your choices and motivate you to stick with it.

Whether or not you make any changes is up to you. There is no "cheating," only choices made on a daily basis. If one day you choose a food you know does not support your health, decide to choose more nutritious foods the next day. No one is perfect, but we all want to feel good. Studies show it's your overall way of eating that's important. As long as you choose health-supporting 'delicious' foods most of the time, you're on the right track. Studies also show that the people who eat the most healthful overall are those who allow themselves some indulgences.

What tastes good isn't always the best choice to put into your body. Your taste preferences are shaped by the foods you eat and often began in childhood. As you choose to make changes, your sense of what tastes good will change too. The freshness of the ingredients, whether it is organic or processed with chemicals becomes noticeable in measuring what is truly 'delicious' food.

Take a look at the RENEW© Road Map to Success starting on the next page and circle those foods you currently eat.

Compare it to your grocery list, worksheet #22.

Next, put a check mark next to those foods you would be willing to try.

	Road to Riches	Fast Lane	Middle of the Road	Road kill
Fruits	Choose pesticide	Frozen and	Canned fruit packed	Fruit juice with
	free, locally grown	canned fruit	in syrup	added sugar
	fresh fruit when	(packed in water	Dried fruit with	Dried fruit with
	available:	or its own juice, no	added sugar	sulfites
	Apples	added sugar)	Fruit juice (not	
	Apricots		diluted)	
	Avocados (watch			
	portion size)			
	Bananas			
	Berries			
	Blackberries			
	Cantaloupe			
	Cherries			
	Cranberries			
	Currants			
	Dates			
	Figs			
	Gooseberries			
	Grapefruit			
	Grapes			
	Guava			
	Kiwi			
	Lemon			
	Lime			
	Litchi nuts			
	Mango			
	Melon			
	Nectarine			
	Olives (watch			
	portion size)			
	Oranges			
	Papaya			

ROAD MAP TO SUCCESS

Road to Riches	Fast Lane	Middle of the Road	Road kill
Peach			
Pear			
Persimmons			
Pineapple			
Plantains			
Plum			
Pomegranates			
Prunes			
Quinces			
Raspberries			
Rhubarb			
Star fruit			
Strawberries			
Tangerines			
Watermelon			
Winter melons			
Zapote			
Dried fruit; without			
added sugar or			
sulfate:			
Cherries			
Cranberries			
Dates			
Mango			
Papaya			
Raisins			
5 oz. 100% fruit			
juice diluted with 3			
oz. water			
Fresh or frozen;	Canned	Canned	
choose organic,	vegetables, low	vegetables, regular	
locally grown fresh	sodium	sodium	
vegetables when	Edamame (soy		
available	beans)		
Artichokes			
Arugula			
	Road to RichesPeachPearPersimmonsPineapplePlantainsPlumPomegranatesQuincesRaspberriesRhubarbStar fruitStrawberriesTangerinesWatermelonZapoteDried fruit; withoutadded sugar orsulfate:CherriesCansberriesJatesJoatesMangoPapayaFresh or frozen;iuice diluted with 3oz. waterFresh or frozen;choose organic,locally grown freshavailableArtichokesArugula	Road to RichesFast LanePeachPearPersimmonsPineapplePlantainsPlumPomegranatesPrunesQuincesRaspberriesRhubarbStar fruitStrawberriesTangerinesWatermelonWinter melonsZapoteDried fruit; withoutadded sugar orsulfate:CherriesDatesMangoPapayaRaisins5 oz. 100% fruitjuice diluted with 3oz. waterFresh or frozen;Cannedchoose organic,vegetables, lowlocally grown freshsodiumvegetables whenEdamame (soyavailablebeans)ArtichokesArugula	Road to RichesFast LaneMiddle of the RoadPeachPearPersimmonsPineapplePlantainsPlumPomegranatesPrunesQuincesRaspberriesRhubarbStar fruitStrawberriesTangerinesWatermelonWinter melonsZapoteDried fruit; withoutadded sugar orsulfate:CranberriesDatesMangoPapayaRaisins5 oz. 100% fruitjuice diluted with 3oz. waterFresh or frozen;Canned-choose organic,yegetables, low-vegetables whenEdarmame (soy-availablebeans)-ArtichokesArugula

	Road to Riches	Fast Lane	Middle of the Road	Road kill
Vegetables	Asparagus			
	Bamboo shoots			
	Bean sprout			
	Beets			
	Bell peppers; red,			
	green, yellow, or			
	orange			
	Bok choy			
	Broccoli			
	Cabbage			
	Carrots			
	Cauliflower			
	Celery			
	Chard			
	Chicory			
	Chilies			
	Chinese celery			
	Corn			
	Cucumber			
	Dandelion greens			
	Dark green leafy			
	vegetables			
	Eggplant			
	Escarole			
	Fennel			
	Garlic			
	Grape leaves			
	Green beans			
	Green leafy			
	vegetables			
	Jicama			
	Kale			
	Leeks			
	Lettuce			
	Mushrooms			
	Mustard greens			

	Road to Riches	Fast Lane	Middle of the Road	Road kill
Vegetables	Napa or Chinese			
	cabbage			
	Nori			
	Okra			
	Onions			
	Parsnips			
	Pea pods			
	Peppers			
	Pickles			
	Potatoes			
	Pumpkins			
	Radicchio			
	Rhubarb			
	Rutabaga			
	Scallions			
	Seaweed			
	Shallots			
	Spinach			
	Squash, summer			
	and winter			
	Sugar snaps			
	Sundried			
	tomatoes, not in			
	oil			
	Swiss chard			
	Taro root			
	Tomato paste			
	Tomato sauce			
	Tomatoes			
	Turnips			
	Water chestnuts			
	Watercress			
	Yams			
	Zucchini			

	Road to Riches	Fast Lane	Middle of the Road	Road kill
Whole grains	100% whole-grain	Whole-wheat	Fat-free biscuit mix	Biscuits
	bread, bagels,	bread	Regular-fat flour	Cakes
	English muffins,	Pita	tortillas	Cookies
	pita bread	Angel food cake	Rice crackers,	Croissants
		Tortilla"s	white rice	Doughnuts
	100% whole-grain		White bread,	Fried breads
	low-fat crackers		bagels, pita bread,	Fried desserts
			English muffins	Fried noodles
	Amaranth		White pasta	Fried rice
	Barley		White flour	Fried tortillas
	Brown rice			Pastries
	Buckwheat			Pies
	Bulgur			
	Corn meal			
	Corn tortillas (not			
	fried, check label			
	for trans fat)			
	Couscous, whole			
	wheat			
	Faro			
	Flaxseed			
	High-fiber whole			
	grain cereals			
	(containing at least			
	4 grams fiber per			
	100 calories and			
	less than 5 grams			
	sugar)			
	Hominy grits made			
	without fat, butter,			
	or bacon			
	Kasha			
	Millet			
	Oatmeal			
	Oats			
	Pasta made from			
	whole grain			

	Road to Riches	Fast Lane	Middle of the Road	Road kill
Whole grains	Polenta	Tortillas, fat-free		
	Polvillo	(check label first for		
	Quinoa	trans fat)		
	Rice, whole grain			
	Rye			
	Soba noodles			
	Spelt			
	Sweet potatoes			
	Tabouli salad			
	made without oil			
	Udon noodles			
	Wheat			
	Wheat berries			
	Wheat tortilla,			
	whole grain, fat			
	free (check label			
	first for trans fat,			
	hydrogenated			
	or partially			
	hydrogenated fats)			
	Wild rice			
Legumes	Fresh, dried,	Regular-sodium		Pork and beans
	frozen, canned (no	canned jarred or		Canned baked
	added salt), jarred	vacuum-sealed		beans
	(no added salt),	beans and lentils		
	vacuum-sealed (no	Homemade baked		
	added salt)	beans		
	Black beans			
	Black-eyed peas			
	Capers			
	Cannellini or butter			
	beans			
	Chickpeas			
	(garbanzo beans)			
	Fava beans			
	Flageolets			

	Road to Riches	Fast Lane	Middle of the Road	Road kill
Legumes	Road to Riches Great northern beans Italian white beans Lentils Lima beans Mung beans Navy beans Peas Pink beans Pink beans Pinto beans Red beans (kidney beans) Split peas Sprouted beans Wax (yellow)	Fast Lane	Middle of the Road	Road kill
Poultry	beans Eggs or liquid egg substitute Organic poultry Free range turkey, chicken		Non orgranic Poultry: chicken, turkey Chicken lunch meats	Lunch meats (see protein list)
Meat	Lamb Veal Lean pork Lean, grass-fed beef (hormone free, antibiotic free) Bison Elk Venison			Lunch meats (see protein list) Beef Ham

	Road to Riches	Fast Lane	Middle of the Road	Road kill
Fish and	Anchovy	Butterfish	Albacore tuna	
Seafood	(European, canned	Catfish	Anchovies in oil	
	in oil)	Caviar	Cod	
	Atlantic herring	Clams	Halibut	
	Atlantic mackerel	Crab	Ocean perch	
	Bluefin tuna	Crawfish	Oysters	
	Bluefish	Flounder	Tuna (light,	
	Haddock	Herring	canned in water)	
	Flounder	Mahi-mahi	White albacore	
	Pacific and jack	Mussels	tuna (canned in	
	mackerel	Orange roughy	water)	
	Pacific sardine	Pacific flounder	Yellowfin tuna	
	Rainbow trout	Pacific sole	Lobster	
	Sablefish	Pollock		
	sardines	Sand dabs		
	Whitefish	Sardines, not		
	Wild salmon	packed in oil		
		Scallops		
		Sea bass		
		Shrimp		
		Snapper		
		Squid (calamari)		
		Striped bass		
		Sturgeon		
		Tilapia		
		Trout		
	1		1	

	Road to Riches	Fast Lane	Middle of the Road	Road kill
Additional	Hummus made	Soy and soy		Products made
Protein	without oil or tahini	alternatives:		from light chicken,
	Tempeh	Soy fat-free		such as poultry-
	Veggie burgers	sausage		based luncheon
	Natto	Soy hot dogs		meats, poultry-
		Tofu		based sausage,
		In limited		poultry-based hot
		quantities if at all.		dogs
		See "Additional		Bacon
		information: Is Soy		Bacon bits
		Safe to Eat?" on		Beef
		page 156		Bologna
				Deli sliced ham,
				pastrami, roast
				beef
				Deli sliced turkey
				Fried chicken
				Fried fish or
				Ham
				Head cheese
				Hot dogs made
				from pork or beef
				Lamb
				Organ meats
				Pork
				Sausage made
				from pork or beef
Nuts	Almonds (unsalted)			
(see chart for	Sunflower seeds			
fat content)	(unsalleu) Walnuts			
	Chestnuts			
	Cashews			
	Pecans			
	Pistachios			
	Sesame seeds			
	Macadamia			
	Hazelnut			

	Road to Riches	Fast Lane	Middle of the Road	Road kill
Dairy and	Almond milk	Fat-free frozen	Reduced-fat (2%)	All other full-fat
substitutes	Coconut water	yogurt	canned evaporated	cheeses
	Enriched oat milk	Fat-free puddings	milk	Butter
	Enriched rice milk	and sweets (up to	Enriched soy milk	Canned evaporated
	Fat-free buttermilk	two servings daily)		milk
	Fat-free cottage	Low-fat (1%) dairy		Coconut milk
	cheese	products		Deviled eggs
	Fat-free cream	Lowfat 2% milk and		Egg salad
	cheese	milk powder		sandwich
	Fat-free milk (skim)	Parmesan cheese as		Egg yolks
	Fat-free or skim	a flavor enhancer		Fat-free dry milk
	milk	Sweetened nonfat		powder
	Fat-free sour cream	and 1% yogurt		Full-fat dairy
	Fat-free yogurt			products (4%)
				Full-fat goat milk
				Half-and-half
				Heavy cream
				Light coconut milk
				Nondairy creamer
				Nondairy whipped
				cream
Chaosa		All low fat chooses		
Cheese	Gruyoro	Blue choose		
	Mozzarolla (popfat)	Brio		
	Parmesan	Camembert		
	Provolone	Cheddar		
	Rice cheeses	Colby		
	Bicotta	Edam		
	Bomano	Mozzarella (low		
	Swiss cheese	fat)		
		All sov cheeses		

	Road to Riches	Fast Lane	Middle of the Road	Road kill
Fats/oils	Canola oil	Mayonnaise	Soybean oil	Trans fats
	Fish oil (omega-3	substitute	Butter	Tropical oils:
	fatty acids)	"Nayonaise"	Cashews, unsalted	Palm kernel oil
	Flaxseed oil		Corn oil	Palm oil
	Olive oil		Fat-free margarine	Hydrogenated oil
	Safflower oil		spreads	Partially
	Make your own		Fat-free nondairy	hydrogenated oil
	salad dressing		salad dressings	
	using above oil,		Low-fat	
	balsamic vinegar		mayonnaise	
	and spices		Margarine, regular	
	Grapeseed oil,		or reduced fat	
	comes in non-stick		Mayonnaise,	
	cooking spray		Nonstick cooking	
			spray	
Herbs,	Bonito flakes	Bouillon cubes/	Bouillon cubes/	Beef broth
spices, and	Brewer's yeast	granules,	granules,	
additives	Homemade	vegetable (low	vegetable (regular-	
	broth, vegetable,	sodium)	sodium)	
	mushroom	Low-sodium	Table salt	
	Capers	canned chicken	Barbeque sauce	
	Chili flakes	broth	Chicken broth	
	Chutneys	Rice wine vinegar,		
	Dark chocolate	regular-sodium		
	(small amounts)	Sesame seeds		
	Fennel seeds	Soy sauce (low		
	Flaxseeds	sodium)		
	Fresh or dried			
	herbs and spices			
	such as allspice,			
	basil, cinnamon,			
	coriander, cumin,			
	curry powder,			
	oregano, parsley,			
	etc.			

	Road to Riches	Fast Lane	Middle of the Road	Road kill
Herbs,	Garlic			
spices, and other flavor	Ginger			
additives	Green chilies,			
	canned			
	Hoisin sauce and			
	plum sauce			
	Malt powder			
	Miso			
	Mustard			
	Natural vanilla			
	Pepper			
	Poppy seeds			
	Rice wine vinegar,			
	low sodium			
	Rosewater			
	Vinegars, plain			
	and flavored			
	Wheat germ			
	Yeast			
Sweeteners	Organic raw sugar	Agave	Bleached sugar	Corn syrup
	Honey		Splenda	High-fructose corn
	Pure maple syrup		Stevia	syrup
	Molasses		Sweetened jam,	
	Unsweetened		jelly, or preservers	
	jam, jelly, or		White, brown, or	
	preserves		raw sugar or syrup	
Beverages	#1 Good quality	Water, bottled in	Undiluted juice	Unfiltered tap water
	water, filtered or	plastic	Stevia or Splenda	Regular colas and
	bottled in glass	Coffee (1-2 cups a		soda
	Caffeine-free	day)		Sugar-free colas
	herbal teas, iced	Black tea		and other sodas
	or hot	Catterne-tree,		
	5 oz. 100% fruit	Decatteinated		
	juice ailuted with 3			
	oz. water	Decatteinated tea		
	Green tea, iced or			
	hot			

	Road to Riches	Fast Lane	Middle of the Road	Road kill
Alcoholic Beverages (with meals only)		Beer (12 oz.)		
		Wine (4 oz. for		
		women, 8 oz. for		
		men)		
		Hard alcohol (1.5		
		oz.)		

Something to Think About

Check the supermarkets in your area. There are many places to buy organic products and items that are free of hydrogenated or partially hydrogenated fats or excess sugar.

They include: Trader Joes, Henry's, Mothers Markets, Fresh & Easy, Whole Foods.

You can also find more resources, locations and products online at:

www.localharvest.org

www.yesorganic market.com

www.momsorganicmarket.com

www.organickitchen.com (this website includes organic markets and restaurants in your area).

Responding to Stress Without Gaining Weight in the Process

The greatest weapon against stress is our ability to choose one thought over another. ~ William James

Worksheet #24

Studies show that how you feel influences how much you weigh to the same degree that your eating and exercise habits do. The reasons we reach for foods can be important to understand. Sometimes an emotional trigger will take over and a biochemical reaction to stress will cause a food craving. Chronic emotional stress causes weight gain in two important ways. Many people overeat to cope with feeling stress, and often they eat foods that are high in fat, salt and sugar due to the release of hormones that trigger these particular cravings. The brain triggers the release of cortisol, which has been linked to the formation of belly fat, or visceral fat. This type of fat slows metabolism, lowers growth hormone, raises cortisol, creates insulin resistance and increases your risk of all kinds of diseases. In one important study, the amount of time people spent practicing stress-management techniques was directly related to how much weight they lost.

Your Relationship with Stress and Eating What kinds of foods do you crave when you feel stressed?

Is there one area of your life that seems to trigger food cravings more than another?

What time of day are you more likely to snack?

Is there any place you find yourself driving to when you're stressed? Any particular locations where there's food you may be seeking out?

Do any thoughts wake you up in the middle of the night? How do you get yourself back to sleep?

Relaxation and Digestion

Intention is the core of all conscious life. ~ Master Hsing Yun

Worksheet #25

Relaxation and enjoyment have a profound effect on the body's functions, including digestion. By triggering the relaxation response, you are inducing the release of certain hormones and positive chemicals into the body, which aid digestion and facilitate all bodily functions.

The digestive process begins in the mouth and moves to the stomach, where acid secretions and digestive enzymes break down the food into tiny particles. These particles then move into the small intestine, where digestive enzymes and probiotic flora are waiting. The digestive enzymes continue to break down the food until they release into the bloodstream through the intestinal walls. The bloodstream carries the food as products of digestion to cells throughout the body. When you are stressed, the body diverts energy away from digestion in order to prepare the fight or flight mechanisms. During chronic stress, the body either over secretes or under secretes stomach acid.

The Results of Stress

Both of these things cause problems. Acid reflux, H.pylori, peptic ulcers and stomach cancer can result from an overproduction of acid. Underproduction of acid means you can't digest your food properly, which can result in gas and bloating, diarrhea or constipation. It also inhibits the absorbtion of micronutrients, which may influence lower energy levels, irritable bowel, increased inflammation seen as food allergies, skin rashes and diminished immune system functioning.

Chronic stress affects your metabolism because your body thinks it needs extra energy for survival and the brain signals you to excrete an excess of magnesium (which keeps us calm) through your kidneys, your vitamin B levels plummet (crucial for healthy cell development), and levels of serotonin and oxytocin also fall (which calm us and keep us feeling happy and well). Lower levels of serotonin also cause carbohydrate cravings in some people. Overeating pasta can make you feel sedate because it boosts serotonin levels.

Chronic stress is defined as the stress that throws our bodies out of balance. The body has a natural ability to adjust to changes. But when multiple stressors lead to elevated stress hormones that continue over a long period of time, or when you can't seem to adapt to a repetitive stressor, or when your body

turns on the stress hormones and doesn't turn them off after the stressor is gone, the body is out of balance and the symptoms of stress become evident.

You can moderate your stress levels, food cravings and help your digestion by practicing daily relaxation. Continue practicing with the Emwave unit, 10-20 minutes each day. Consistency is more important than duration so if time is an issue, five minutes of concentrated relaxation will give you more benefit than doing nothing.

Enjoy the Experience of Eating

Here is a mindfulness exercise to practice with food: Keep your full attention on the sensory experience of eating, whether it's one bite or an entire meal. Focus fully on the taste, smell and texture of the food and involve as many of the senses as possible. Don't let your mind wander to anticipate the next bite. Stay focused on what is happening and really let yourself enjoy.

Mindful eating is a good way to train yourself to eat slower. It takes the stomach 20 minutes to signal it is full, so this gives you time to eat and truly enjoy it while eating less food. Try it!



Your Metabolism

Do you know how to digest your food? Do you know how to fill your lungs with air? Do you know how to direct the metabolism of your body? No, you don't know how consciously, but there is a wisdom within you that does know how. ~Donald Curtis

Worksheet #26

Your body works best when you feel good. Every thought you think and every food you eat affects how it functions. When you make feeling good a priority, this influences your overall choices. However, most adults tune this information out in favor of what's fastest or easiest. By re-learning to pay attention to your body, you can help your metabolism create the balance needed for energy, vitality and optimal health.

Your metabolism is your biochemistry. It tells your body when you are hungry, when you are full and what to do with the food you eat. Your biochemistry is made up of messengers in the form of hormones that carry information from your brain to your body and vice versa. Some hormones signal hunger and others signal what to do with food, whether to store it or burn it as fuel. When you exercise, your hormones tell the body how to consume energy stores, to boost or shut down different parts of the body. Hormones control almost every aspect of how we metabolize food.

Your Endocrine System

If you eat foods that the body finds toxic or live with environmental toxins, eat nutritionally deficient foods or are continually stressed, this may disrupt your endocrine system. Endocrine disruptors cause hormone imbalances, decreased immune function and lead to obesity and disease. Understanding what can disrupt your endocrine system can help you make better choices to support your immune system, choose nutrient rich foods on purpose and make a conscious effort to feel happy each day in order to release hormones that will create balance and keep your metabolism strong.

The main goal of your endocrine system is to maintain homeostasis so that the body has a balanced amount of insulin, cortisol, thyroid etc. The problem occurs when we have too much or too little of certain hormones in the body. When your endocrine system receives confusing hormone-like signals from toxins in food or from the environment, it mistakenly releases the wrong hormones in response. In chronic stress, some glands get over stimulated and overproduce, which begins a cascade of events that involve multiple systems and can eventually burn out and fail entirely. When you give your body

the foods it was built to use, you support your hormones to do what they're meant to do. See Additional Information section for a list of suspected endocrine disruptors on page 154-155.

What to know about your Metabolic Hormones Insulin

Insulin is produced in the islets of Langerhans in the pancreas. It regulates carbohydrate and fat metabolism in the body. It triggers cells in the liver, muscle, and fat tissue to take up glucose from the blood, storing it as glycogen in the liver and muscle.

It's job is to remove excess glucose from the blood, which otherwise would be toxic. When blood glucose levels fall below a certain level the body begins to use fat as energy. When your blood sugar increases dramatically, your pancreas delivers an increasing amount of insulin. Insulin stops the use of fat as an energy source by inhibiting the release of glucagon. Rather than use the glucose for energy it's turned into fat.

Insulin resistance occurs when the body produces insulin but doesn't use it properly. Excess weight and lack of physical activity contribute to this condition. When the body's overweight there's more tissue to nourish. The pancreas doesn't increase in size so it is taxed when excess weight produces an increased insulin demand. This need for increased insulin can lead to full blown diabetes that occurs when control of insulin levels fail.

Insulin also influences other body functions. It enhances learning and memory in the brain. Fat metabolism also influences high cholesterol, abdominal fat, fatty liver, forces arterial walls to constrict causing reduced blood flow, contributes to high blood pressure, elevated potassium levels in the blood and inhibits the secretion of stomach acid needed for proper digestion.

Things that affect insulin are: certain food additives, pesticides, plastics, prescription drugs, eating too much sugar or carbohydrates, infections, liver or kidney dysfunction, not eating breakfast, obesity, pregnancy, skipping meals, smoking, chronic use of steroids, stress, too few calories or too many calories.

Thyroid

Thyroid hormones have many functions. They help control the amount of oxygen each cell uses, the rate at which your body burns calories, your heart rate, overall growth, body temperature, fertility, digestion, and your memory and mood.

Your pituitary gland creates TSH (thyroid stimulating hormone), to signal the thyroid. This begins a chain of events that is influenced by what is going on in your body. If you are sick, stressed, eating well or poorly, pregnant, on medication, aging, or absorbing environmental toxins, your thyroid production is affected. For example, if you are not eating enough calories, the chain of events results in a slower metabolism.

When thyroid hormones become unbalanced, this affects chemical reactions all over the body. An underactive thyroid (hypothyroid) can lower your energy and cause you to gain weight. An overactive thyroid (most commonly seen as Graves disease) can cause your heart to race, intolerance to warmer temperatures, weight loss or fatigue.

Things that interfere with thyroid production are: certain foods, especially excess iodine, environmental toxins, extreme dieting, genetics, medications such as lithium, menopause, pregnancy, stress and vitamin deficiencies.

Estrogen and Progesterone

Both men and women produce estrogen. Estrogen performs many roles, especially in a woman's body. It not only directs a woman's entire development from child into adult, it has a major impact on blood fats, digestive enzymes, water and salt balance, bone density, heart function and memory, among other functions.

* Estrogen and progesterone are steroidal hormones, meaning they are created from cholesterol.

Xenoestrogens are man-made estrogens that have an enormous effect on the body. They are found in HRT (hormone replacement therapy), birth control pills, environmental toxins, plastics, pesticides and food additives. For females, they are thought to influence early puberty and soaring breast cancer rates along with other factors. In men, they are thought to lead to decreased sperm counts and increased prostate cancer rates.

According to physicians Dr Christiane Northrup and Dr. Roberta Lee, other factors can also increase unhealthy levels of estrogen such as: extreme stress, a lack of quality fats or protein, too many refined grains, sugars and processed food. These excess estrogens put both men and women at risk of cancer, infertility, diabetes, and other serious conditions.

* Phytoestrogens are plant sources of estrogen (soy, flaxseed) and have a milder effect on the body.

Progesterone helps balance estrogen. The balance of estrogen and progesterone has a lot to do with how well you burn fat in both men and women.

Men and women over 50 (and sometimes in late 30's or early 40's) experience fluctuating

hormonal levels due to age. Women experience a sudden rapid loss of estrogen and progesterone at menopause, usually around age 51. Men experience andropause which is a very gradual testosterone decline and an increase in sex-binding hormone globulin (SHBG) that occurs around age 35. Both men and women can find more information about these natural declines and possible treatment options in "Ageless" by Suzanne Somers. "The Wisdom of Menopause" by Dr. Christina Northrup is a good source for women.

Testosterone and DHEA

Testosterone and DHEA are androgens that boost libido, keep energy high, protect bone and preserve mental function in later years in both men and women.

In their most of their testosterone in their reproductive glands. Women produce most of their testosterone in their adrenal glands, which is also their source of DHEA. DHEA may help prevent breast cancer, cardiovascular disease, impaired memory and brain function as well as osteoporosis. It may even help us live longer.

In both men and women, testosterone helps increase lean muscle mass and strength, boosts libido and improves energy.

As we age, these hormones decline. In most men it is a slow and steady decline and is different from women's rapid loss of estrogen and progesterone at menopause. For men testosterone declines 10% every decade after age 30. As we lose these androgens, both men and women gain abdominal fat and our bones weaken. Motivation to exercise also decreases, yet it is exercise that helps boost testosterone and builds bone mass.

In with very low testosterone levels are three times as likely to be depressed than men with high testosterone. Symptoms of andropause can include loss of libido and impotence, nervousness, depression, impaired memory, the inability to concentrate, fatigue, and insomnia.

Make sure you: watch your stress levels, exercise, have plenty of good quality fats and protein, as well as vitamins and minerals like B vitamins and zinc to build these critical steroids. You may also want to talk to your doctor about bio-identical hormones, which can benefit both men and women.

Norepinephrine, Epinephrine and Cortisol

These are our fight or flight hormones. The effects of epinephrine and norepinephrene include temporary increased heart rate. The effects of cortisol cause us to store abdominal fat and are dangerous to our health in the long term.

These hormones are produced in the adrenal glands and are influenced by the way we think:

If you perceive a challenge that you think you can handle, your adrenals release more norepinephrine. (And after you win, you release more testosterone, which gives that surge of feeling victorious.) If you face a challenge that you perceive as dangerous, difficult or something you're not sure you can accomplish, you release more epinephrine, the "anxiety hormone." Epinephrine (adrenaline) also suppresses appetite. When you perceive yourself to be defeated, and feel overwhelmed and discouraged, your body releases cortisol.

Epinephrine relaxes the muscles of the stomach and the intestines and decreases blood flow to these organs to save energy for the fight. This causes an increase in blood sugar and stomach symptoms associated with stress.

Once the stressor has passed, cortisol signals the body to resume digestion. But cortisol continues to have an impact on your blood sugar and on how your body uses fuel. If you haven't released the excess cortisol in your blood by fighting or running away, cortisol will increase your cravings for high fat, high carbohydrate foods. It also stimulates your appetite. When stress levels continue and cortisol levels remain high, the body resists weight loss. (The body thinks it needs fat for continued energy use.)

Cortisol signals visceral fat to store in the belly. Visceral fat increases inflammation and insulin resistance. This belly fat has higher concentrations of a certain enzyme that converts inactive cortisol to active cortisol, so the more belly fat you have, the more it will continue to create belly fat. (Note: This cycle can be broken.)

Depending on genes and early childhood experiences, studies show that some people are more easygoing in times of stress while others have extreme adrenal reactions to stressful situations. Some people overreact to minor threats because the hormonal loop became stronger and stronger with each negative experience in their past. By the time they are adults, their bodies have developed a hair trigger stress-response system which affects their biochemistry. Learning to respond to stress more effectively can help you reprogram these neural pathways in the brain.

You can help cortisol levels balance with: better nutrition, high quality protein, lifestyle strategies such as responding to stress more effectively, and according to a 2006 study at the National Institutes of Health, by limiting caffeine intake to about 200 milligrams a day and avoiding simple carbohydrates, processed foods and refined grains. For more information on things that disrupt cortisol levels and signs that you have too much cortisol, see the chart on page 158.
HGH/ Growth Hormone

HGH builds muscle, burns fat, helps you resist heart disease, protects your bones, increases your overall health and helps you live longer. It is produced in the pituitary gland and is key in enhancing the immune system.

HGH helps the body absorb amino acids, synthesizing them into muscle and then prevents the muscle from breaking down. It taps into fat cells. All these actions raise your resting metabolic rate and give you more energy for exercise.

It helps maintain and protect the pancreatic islets that produce insulin and helps the liver synthesize glucose.

HGH starts to decline after the 30's in general, but there are also things that disrupt it prematurely. Good quality sleep is at the top of the list. Growth hormone is release in adults an average of five pulses a day. The largest of these pulses happens during our deepest, stage four sleep, about one hour after we fall asleep. A University of Chicago study found that when people are deprived of this stage of sleep (with minor disturbances that didn't quite wake them but interfered with the quality of their sleep), their daily growth hormone levels fell 23%.

Growth hormone levels are also suppressed by stress, eating too many low quality carbohydrates, and keeping your blood sugar and insulin levels high. Protein can help release higher levels of growth hormone.

New evidence is starting to emerge that hormones from pesticides and other toxins in our environment and diet can have an impact on growth hormone levels.

Intense exercise stimulates growth hormone to use fat as fuel rather than glucose. This not only burns fat and flushes toxins from the body, but helps stabilize blood glucose levels so you have energy to keep exercising. When you don't exercise and your muscles become insulin resistant, you increase your level of circulating insulin and further suppress HGH.

Leptin

Leptin signals the brain to tell the stomach to stop eating. Leptin is a protein, made by fat cells, that works with other hormones (thyroid, cortisol and insulin) to help regulate your appetite, determine how fast your body will burn off the food you eat or store it as fat.

This hormone is most active in your brain. After you've eaten, the fat cells throughout your body release this hormone to signal you to stop feeling hungry and start burning calories. The body also releases a surge of leptin while you sleep at night.

The more fat you have, the more leptin you produce. Leptin resistance and insulin resistance frequently are linked.

But unlike insulin resistance, if you lose body fat your body adapts your hunger level and becomes more receptive to leptin. As you lose weight and focus on more mindful eating you will notice that you feel less hungry.

Ghrelin

Shrelin signals hunger in conjunction with neuropeptide Y. This hormone is synchronized to your body's internal clock and signals hunger on a schedule. It will stay high until the body signals it has taken in enough food. It takes time for it to all work, so eating slowly and with awareness will help you feel full with less food.

It also signals the pituitary to release growth hormone. Your body requires ghrelin to enable you to move effectively through all the necessary stages of sleep. Without the proper progression, you won't get to stage 4 sleep where you get that large pulse of growth hormone. Eating late at night interrupts this process and many experts recommend not eating late for this reason.

The things that interfere with ghrelin are: constant calorie restriction, binge eating, eating too much fat, less than eght hours of sleep, low thyroid levels, not eating enough protein or carbohydrates, skipping meals and stress.

How can you improve your metabolism? List five things about your current lifestyle habits or food habits that could change?

Building Your Road Map to Success!

Make everything as simple as possible, but not simpler. ~Albert Einstein

Worksheet #27

We'd like to share with you a way of eating that's sustainable for a lifetime. It's not a diet. It doesn't make certain foods good or bad, and it doesn't make you good or bad for how you choose to eat. It's based on foods that are statistically proven to nourish your body, reverse disease and strengthen your immune system.

Current research supports the Mediterranean style of eating. We combine this with personal preference established through our PLM Index and tailor a program to your individual health goals. The Mediterranean style of eating is based on more plant-based protein and a combination of foods. Food has life sustaining capabilities. Its vitality is meant to be absorbed to enhance our bodies. Why not deliberately choose these foods?

A Mediterranean pattern of eating has two additional distinct aspects that differ from average patterns of eating in the United States:

- a high intake of monounsaturated fats and
- a high intake of fruits and vegetables.
- a healthy ratio of omega 3 to omega 6 fatty acids

The "Roadmap to Success" is a guide to good health. The Mediterranean style of eating is associated with lower risks of cardiovascular disease, cancer, neurological disorders, and age related bone loss. In recent large European studies, Mediterranean patterns of eating have been shown to decrease mortality and increase longevity. There is a remarkably low incidence of coronary artery disease specifically on the Greek Isle of Crete as well as low breast cancer rates.

The groundbreaking book *The China Study* by Dr. T. Colin Campbell and Thomas M. Campbell II cited the provocative results of four decades of biomedical research and laboratory programs. Their research concluded that people who ate the most animal-based foods got the most chronic disease and even a relatively small consumption of animal protein was associated with negative health effects. They further concluded that a strictly vegan diet in which no animal protein is eaten defines "good nutrition." Our presentation of the "Roadmap to Success" allows for these kinds of large changes while considering the low intake of animal protein in the Mediterranean style of eating an important part of its positive health results. We present these validated studies and their alternatives to give you more information with which to design your personal Road Map.

Clinical studies show that the combined effect of the polyphenols found in olive oil, in conjunction with omega-3 fatty acids from fish, resveratrol from red wine (also found in grape juice), beta-sitosterols found in plant-based foods and other constituent compounds result in all the benefits. So the food combinations are just as important as the foods. Red wine is mentioned, as a complement to meals only. It is optional and meant to be consumed with food, not recreationally. Portion sizes of wine are eight ounces for men, four ounces for women if you so choose.

The food lists in the next section are organized as a road map to good health. They are divided into four categories. The first group contains the most health supporting choices, foods that are the most natural, organic and life sustaining. If you are healthy and desire to stay that way, you may not need to make very many changes at all. If you are trying to reverse heart disease or prevent or reverse diabetes, you may want to make larger changes. Whether you want to lose weight or lower your cholesterol, you'll find the information you need to create your own road map. Please note that you can turn a healthy food into an unhealthy one just by eating too much of it, so portion sizes are clearly defined.

Drizzling a little olive oil is a delicious choice based on the Mediterranean style of eating but pouring it over your food turns it into a less healthy choice due to excessive calories, saturated fat and omega-6 fatty acids, which can increase inflammation in the body. Cold pressed, extra virgin olive oil is the best quality when used. Eating a little dark chocolate every day may lower your blood pressure and make you happy, but eating more than one-two squares will give you a large amount of sugar, calories and saturated fat. A small slice of butter may be a healthier choice than a large scoop of margarine based not on calories but on trans fats or chemical additives, which are dangerous to your health. Creating your own road map will help you redefine your preferences to RENEW© your good health.

A note about fish: Fish containing omega-3 fatty acids is a critical component to good health. But due to the high levels of mercury in our fish supply, it is important not to choose one problem for another. See the list on the following pages for more information on fish, omega-3 and omega-6 fatty acids.

The foods listed in all four categories are your Road Map. Where they will take you is determined by your overall choices. Foods are divided into monthly amounts, weekly amounts and daily amounts.

PLM Index: Personality, Lifestyle, Motivation Personality

We are defined by the sum of the stories we tell about ourselves to ourselves and others. Have you ever noticed how the way you tell a story emphasizes things differently sometimes and the same event can seem like an entirely different story each time? Some aspects of our personalities are fixed and some are fluid. Preferences can change, decisions can be made and we're always learning and

growing. One time you may have reached for an apple when you wanted a cookie. And to your surprise you were satisfied, happy even.

When you're thinking about developing new habits that fit with your personality, try to think of the times you've been successful in the past. You're not redefining your entire self. You are emphasizing that part of your personality that has been there all along. Experiment with these ideas as you reach for foods differently. As you allow yourself to expand the repertoire of who you are, try to remember when this aspect of you has made former appearances. What are the strengths you already possess? What are the successes you've already made? Whatever changes you make in this program must fit with your definition of who you are. If you need to highlight what you see differently, or pan for gold through your past habits, do it. Redefine how you tell the story of who you are.

Lifestyle

We all want to feel free and in control. And you are. When you free yourself from the emotional ties to habits that have made you sick there is an exhilaration that occurs. Sometimes people mistake this feeling for fear, as they aren't sure how to fill that space. The RENEW Program[©] will guide you to create space for new habits as you develop them. You are free to do as much or as little as you want. As you feel the results, you may want to do more. We're in the process of assessing your current lifestyle and presenting the choices available to help you make whatever adjustments you want to make. Some people will make large adjustments and change their health and their life path. Others will make small adjustments and they too will change their health and their life path. If small changes won't lead you to the health outcomes you desire, you'll know how to make a larger change to get yourself where you want to be.

Motivation

Using assessment tools is one way to measure your motivation level. How you feel is another. As you feel the results of your work, you'll be increasingly motivated. There's no reason why you can't self motivate as you experiment with how effective changes make you feel. Empowerment is contagious. Great health brings great vitality which means you bring increasing amounts of energy to whatever you're doing! That is true self motivation and is motivating to others as well. The RENEW© team is here to help support you and to give you the tools you need to build your own support system as a lifelong guide to success.

Foods to be eaten on a daily basis

Foods in the daily section are whole grains in the form of whole grain breads (read food labels), pasta, cereals etc. and should be eaten the most, aiming for eight servings daily. How much you eat in total depends on your health goals. Organic fruits and vegetables provide the best quality because

pesticides are not used on the food or in the soil. We also provide information on what to buy organic vs. what can be peeled, skinned or washed to defer cost. Aim for three daily servings of plant based foods. Two or more servings of fruit may be eaten daily, with an additional cup of legumes, and one ounce or more of nuts and seeds. All of these foods contain fiber, phytochemicals, vitamins and minerals. For daily intake of calcium and protein, without excess saturated fat, we suggest organic nonfat or low fat dairy foods or low fat, calcium fortified soy milk or soy milk products. Some of the foods have been separated in different columns in the food choice section due to being low fat or high fat as in the case of certain cheeses. Basically, this is a vegetable and legume based way of eating with meat served as a side dish. Protein is found in legumes primarily, followed by dairy or soy milk products, then nuts and seeds. We've added dark chocolate in the form of 70% cocoa solids and above. In small amounts, one square, is considered to be heart healthy and may be eaten daily. Herbs and spices are to be used liberally and often. Their phytochemical benefits are also outlined in the workbook.

Foods to be eaten on a weekly basis

Animal meats can be considered as weekly meal enhancers. This is not only healthier for the body, but it's a wiser choice for the planet. It frees up more arable land to grow food and harms fewer animals. When eating any kind of meat, organic, grass fed, hormone and antibiotic free is the highest quality. Furthermore, meat is categorized according to general saturated fat content. Fish, which contains the least saturated fats, can be eaten most often, up to 6 or 8 cooked ounces per week. Fish will be listed according to their amounts of omega-3 fatty acids and low mercury content. Lean meats are preferred: skinless poultry (antibiotic free, free range is the best quality), veal, lean pork, and lamb. It is not recommended to eat all the choices per week, but to limit them. If you want to eliminate meat from the menu, that's wonderful, just be sure to include plenty of plant protein sources. Fats and oils are also separated. Olive oil is the main source of fat followed by canola oil. They are both high in monounsaturated fat and heart healthy although canola oil is high in omega-3 fatty acids and olive oil isn't.

Foods to be eaten monthly

Butter (high in saturated fat), and other vegetable oils can be used on a monthly basis only. High fat red meat (regular ground beef, prime rib) should only be eaten once a month, if at all. Highly processed desserts, candy, pastries, refined sugary treats and any thing with large amounts of saturated fats and calories lacks nutrients and does damage to the body over time. If you must have them, limit this to a monthly intake only. As you eat more fresh fruits and vegetables, limit the amount of saturated fats and sugars, you will find your taste buds acclimate to the change. You will begin to prefer how you feel after you eat. In the meantime, natural sweeteners such as: raw sugar, honey etc. (not recommended for children) can be enjoyed in small amounts. In the Mediterranean, fruit is the basis of most desserts. We

encourage you to experiment with new tastes as you expand your list of food choices and menus on your road to success.

Omega-3 fatty acids are found in coldwater fatty fish, canola, soybean, flaxseed and walnuts or walnut oils. They are also found in small amounts in dark green leafy vegetables such as kale and collard greens. They may reduce triglycerides, lower blood pressure, decrease inflammation, prevent excessive blood clots from forming, which may decrease the risk of heart attack and stroke. They also may help prevent irregular heartbeats and reduce the risk of sudden cardiac death. Some studies suggest that they improve immune function and reduce the risk of prostate cancer, breast cancer and colon cancer. They may also decrease depression, help reduce the risk of Alzheimer's disease and dementia. Omega-3 comprises 8% of the average human brain, which is why fish is called "brain food."

Selected Fish and Their Omega-3 Fatty Acid Content					
(2 grams and above per serving)					
Fish High in Omega-3 Fatty acids, low in mercury content					
Anchovy, European, canned in oil					
Wild salmon					

Wild Sainton	
Pacific, North Atlantic and jack mackerel	
Whitefish	
Pacific sardines	
Atlantic herring	
Freshwater, (not ocean) Rainbow trout	

The calculations for mercury content are based on EPA and FDA data (updated January 2006) and can be found at *www.gotmercury.org* to type in your weight and amount of fish in order to calculate specific contamination amount guidelines.

Some people take fish oil supplements (3 grams per day) to gain the benefits of omega-3 fatty acids while avoiding the mercury, dioxins, and PCB's found in the fish supply. Grass fed animals provide more omega-3, and grain fed animals have more omega-6 fatty acids. If you have congestive heart failure, chronic recurring angina or evidence that your heart is receiving compromised blood flow, talk to your doctor. You may need to avoid eating foods that contain omega-3.

The omega-6 fatty acids are also important. But the problem is that most Americans have an imbalance in these essential fatty acids. We have too many omega-6 and not enough omega-3. Omega-3 fatty acids reduce inflammation. Omega-6 fatty acids increase inflammation if you consume too many of them. Inflammation increases the risk of coronary artery disease and other chronic illnesses. The ideal ratio is 1 to 1 or no more than 2 to 1, according to Dr. Dean Ornish, who says that the

average American diet provides a ratio of between 10 to 1 or 30 to 1, with far too many omega-6. He recommends concentrating on eating more omega-3 fatty acids to balance this ratio and less omega-6.

Oils

Much of the excessive amounts of omega 6 come from the oil we use to cook with. Olive oil has 13 times the amount of omega 6 to omega 3. Corn oil has a 46 to 1 ratio. Canola oil is more balanced, with a 2 to 1 ratio. Flaxseed oil has more omega 3, with a ratio of one to three omega 6 to omega 3. To improve the ratio, eat more canola oil or fish oil and less olive oil. You can drizzle olive oil but not pour it over foods.

Beverages

Good quality water is the drink of choice. Bottled in glass, or filtered through carbon, this eliminates the toxins commonly found in our drinking water. For more information on safe drinking water go to www.epa.gov/safewater/fag/fag.html. Total water intake is gotten from drinking water, water in beverages and water in food. The amounts we need vary due to climate, foods eaten, and physical activity as well as metabolism and other factors. Day to day hydration is generally maintained with varying amounts of food and water. A recommended daily water intake varies from 15 cups for men and 11 cups for women who are moderately active. Another way to tally water intake is to take your body weight and divide it by two, giving you the minimum requirement amount of water in ounce-per day. In order to gage if you are dehydrated you can look at your urine. If it looks like lemonade, you are most likely hydrated. If it looks more like brown tea, you are dehydrated. Some symptoms of dehydration include migraines, fatigue, and joint pain (joint lubrication depends on adequate hydration.) Adequate water intake prevents memory loss as we age, improves attention span, keeps the brain functioning well by efficiently manufacturing neurotransmitters, including serotonin (balance mood) and melatonin (needed for sleep), reduces the effects of aging on our skin, will help muscles recover after exercise, help alleviate joint and back pain, helps the body efficiently metabolize food by carrying nutrients to cells throughout your body, flushes toxins out of vital organs and helps with elimination. It is vital to keeping our body and our immune system functioning well.

You may want to make copies of the following pages to hang on your refrigerator for easy access to them. You'll need multiple copies of the daily food tracker (worksheet #27) to help you keep track weekly.

Road Map to Success To use throughout the month Olive or canola oil: (drizzled, not poured), about a teaspoon or two each use. Other vegetable seed oils (grape seed, flaxseed etc): 1 tablespoon per serving. High saturated fat meats, pastries, candy or butter in limited amounts only, depending on health needs. Have fruit for dessert most of the time. See chart for amounts. Weekly menu items Fish: 6-8 ounces cooked, total for the week. Refer to list regarding mercury content of fish. Total 8 ounces weekly- 2 servings (4 ounces each) Lean meats weekly (choose from the next four options): total of 2 servings each week (3 ounces each) Skinless poultry: 1-3 ounces cooked. Antibiotic free, free range is the best quality. Veal: 1-3 ounces cooked Lean pork: 1-3 ounces cooked Other lean red meats: such as lamb, 1-3 ounce cooked serving. When eating any kind of meat, organic, grass fed, hormone and antibiotic free is the highest quality. Eggs: 4 or less, depending on health needs. Cageless, hormone free, organic fed for the best quality. Natural sweeteners: (raw sugar, honey and pure maple syrup and molasses) in 2 tablespoon servinas. Low fat cheeses: 2-3 ounces per week. Daily menu items Nuts and seeds: 1 ounce or more (approx. 1/3 cup of nuts) Dairy: Nonfat or low fat calcium-fortified milk and soy milk products (choose organic to avoid hormones and antibiotics) including 2 or more servings of 8 ounces skim milk, 6 ounces nonfat or low fat yogurt, or 1 ounce low fat cheese. Legumes: (beans, peas etc): 2 or more cup servings. Fruit: 2 or more servings (whole fruit, preferably, instead of processed juice) Organic fruits and vegetables provide the best quality because pesticides are not used on the food or in the soil. Please refer to chart on page 130 regarding what to buy organic vs. what can be peeled, skinned or washed to defer cost. **Vegetables:** 3 or more servings (1/2 cup cooked or 1 cup raw leafy green vegetables). Whole grains: 8 or more servings. One serving equals one slice of whole grain bread containing 70 calories (a slice of bread containing 110 calories would be 1 and ½ servings), 1 ounce cereal, ½ cup cooked grains (including whole grain rice, pasta or cooked cereal).

Dark chocolate: 1-2 square inches with at least 70% cocao solids may be eaten on a daily basis depending on your health restrictions.

Road Map to Success

Date:

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Daily							
Cook with canola oil, flaxseed oil, drizzle olive oil							
Water: 6-8 glasses of good quality							
Nuts/seeds: 1 oz or 1/3 cup							
2 or more servings of:							
Low fat or nonfat dairy (8 oz.) or							
Soy/soy products (i.e.: tofu, soy milk), or							
Low fat or nonfat Yogurt (6 oz.) or							
Lower fat Cheese (1 oz.)							
Legumes: 2 or more servings (1/2 cup each							
serving)							
Whole Fruit or ½ cup berries: 2 or more servings							
Vegetables: 3 servings or more							
(each serving is ½ cup cooked or 1 cup raw/leafy)							
Whole grains: 8 or more servings. Serving sizes							
are: 1 slice of whole grain bread = 70 calories or 1							
oz cereal or ½ cup cooked grains/pasta							
Other Foods:							
Optional-Dark chocolate (70% cocoa): 1-2 square							
inches or 1 ounce							
Weekly							
Fish (4 oz. servings): 2 servings per week							
Lean meats (3 oz): no more than 2 servings per							
week							
Poultry							
Veal							
Lean pork							
Lamb							
4 eggs or less							
Cheese (2 oz)							

Road Map to Success

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Monthly (optional)							
High saturated fat meats (Beef)							
High fat desserts							
Butter/oils (1 tbsp)							
Other foods							

Detoxify Your Mind, Body and Home

If you eliminate what blocks your health, your good health will soar! ~The RENEW Program©

Worksheet #28

Our bodies are resilient and work hard to eliminate toxins to keep our system in balance. Studies now show how pesticides and chemicals (including food additives and hormones) tax the strength of our immune system, which puts us at risk of disease.

Anything that disrupts the body's natural balance, biochemistry and cellular health is a toxin. Some of these toxins include: refined sugars, artificial sweeteners, chemical additives in foods, prescription medication, air and water pollution, cosmetics, petrochemical and industrial wastes and heavy metals. Some chemical disruptions in the body are self-induced by overwork, stress, overeating and lack of sleep.

The body is designed to thrive. Your cells know how to achieve balance. So the more you get out of your own way, the quicker your body will respond. Like a cork held under water, if you remove the block it leaps to the surface.

Here are some of the things that get in your way of thriving - and what to do about it.

Eat foods your body understands.

Buy organic fruits and vegetables whenever possible. Locally grown organic is better, as fruit traveling across the country in trucks tend to absorb diesel exhaust. Know what to buy organic and what to skip to help defray the cost. Know how to detoxify non-organic produce in your home to help defray the cost. See additional information on "The What, Why and How of Eating Organic" on page 134-137.

Under USDA standards, a food labeled "organic" is generally free of synthetic substances, contains no antibiotics and hormones, has not been irradiated or fertilized with sewage sludge, was raised without the use of most conventional pesticides and contains no genetically modified (GM) ingredients. A 100% organic label means the food contains only organically produced ingredients and processing aids (excluding water and salt). The label must state "certified by" and the certifying agency. Such products may display the USDA Organic seal. Processed foods labeled Made with Organic Ingredients must include at least 70% organic ingredients.

Reduce amounts of meat, poultry and dairy products in order to reduce your exposure to fat soluble toxins.

And when you do eat these sources of protein, eat organically fed, hormone free, cage free, antibioticfree animals to reduce your exposure to chemicals. Pesticides and toxins find their way into the grass, soil and water. The animals absorb them. You absorb the animal. Lean proteins have less fat and less toxins. The leading sources of chlorinated pesticides are found in non-organic beef and non-organic dairy products.

Know what fish to eat.

There are two main issues when it comes to eating fish as a source of protein: mercury and Polychlorinated Biphenyls (PCB), a pesticide. Farm-raised salmon and catfish are also a leading source of chlorinated pesticides in fish. See Additional Information on farmed salmon in "The What, Why and How of Eating Organic." on page 135-136.

PCB's affect memory, IQ levels, motor function and ADHD. Farm-raised salmon have seven times the levels of PCB's as wild salmon, and high concentration of toxins. These fish are administered antibiotics at higher levels than any other livestock and have less omega 3's due to lack of wild diet.

Wild salmon is a better alternative. It is high in omega-3 fish oils and has relatively low levels of mercury toxicity. See Additional Information on "What Fish to Eat. What Fish to Avoid" on page 144-145.

Make your home safer.

Some commonly found plastics contain phthalates, which can be found in shower curtains and plastic wraps that mimic estrogen in the body. According to the Environmental Working Group **(EWG.org)** these chemicals interfere with the endocrine system. For a list of safe to use plastics, see Additional Information on "Safe Plastics" and the "Excerpt from EWG Action Fund's Healthy Home Checklist" on page 147-149.

The following is a list of unsafe plastic:

#3 Polyvinyl chloride (V or VC)

These plastics contain hormone disruptors like phthalates and cancer causing agents like dioxin that leach out when they come into contact with heat, food and water. They're found in cooking-oil bottles, cling wrap, clear wrap around meat, cheese, deli meats, plumbing pipes and some plastic toys.

Replace with: Glad wrap, Saran premium wrap and Saran Cling Plus wrap or glass containers. Try to buy cooking oil in glass bottles and never microwave food in plastic.

#6 Polystyrene (PS; extuded type is known as Styrofoam)

These plastics contain endocrine disruptors and carcinogens like benzene, butadiene and styrene. When they get hot they can leach these chemicals into food. They're found in disposable coffee cups, takeout containers, foam egg containers, meat trays and foam insulation. The nonextruded type is found in disposable cutlery and transparent takeout containers.

Replace with: Cardboard containers for eggs, transfer your food into glass or ceramic containers as soon as you can, ask for paper-based take-out containers and corn or sugar-based disposable cutlery and cups.

#7 (PC) Polycarbonate

This plastic contains bisphenol A (BPA) and has been linked in numerous studies to harmful endocrinedisrupting effects like abnormal breast tissue and lower sperm counts. It's been found in baby bottles, microwave ovenware, eating utensils, plastic liners of food and soft-drink cans, old Nalgene or other hard plastic drinking bottles, five-gallon water jugs and building materials.

Replace with: Glass baby bottles, stainless steel or ceramic-lined drinking bottles, rinse your canned food thoroughly before you eat it.

Eat these foods. They repair toxin damage.

Berries.

Choose fresh or frozen berries, which contain the highest levels of polyphenols, powerful antioxidants. Blackberries have the best antioxidant capacity and blueberries follow them. Most of the changes associated with aging, like wrinkled skin, are a result of oxidative damage to the cells. The sun, smoking and alcohol consumption also cause oxidative damage to the cells.

Broccoli, cauliflower, brussel sprouts, cabbage, kale, beets, and the spices turmeric, ginger and rosemary. They help the liver properly process chemicals in the blood to detoxify. Broccoli boosts enzymes that help move caffeine and some airborne pollutants out of out blood. It is also an estrogen balancer, and helps to metabolize estrogens.

Chinese cabbage, broccoli, green onion, cabbage, celery, kale, green lettuce, sweet peppers, and organic spinach are good foods to remove toxins from the body.

Green Tea. The caffeine in this tea can help boost metabolism, it's a strong antioxidant and it supports the liver to clear toxins from the blood while helping to release fat soluble toxins with your stool.

What larger changes can you see yourself making?



The Link Between Emotions and Food

Food has replaced sex in my life. Now I can't even get into my own pants! ~Unknown author

Worksheet #29

Studies have been done on how people eat when they're unhappy. The researchers found that unhappy people eat larger amounts of foods they consider tasty but unhealthy than happy people. In the study, test subjects were asked to watch the movie *Love Story*, a sad 1970's romance in which the heroine dies at the end. They ate almost 125 grams of buttered, salty popcorn (medium sized bag), about 28% more than those watching *Sweet Home Alabama*, a 2002 romantic comedy. Both movies are the same length.

Another study documented that college students reading a tragedy ate more than four times as many M&M's as raisins from nearby bowls of snacks. In contrast, students reading about four friends having an evening together after a chance reunion ate more raisins than M&M's.

What situations make you want to reach for food as a source of comfort?

What emotions make you want to eat?

What foods do you choose?

Looking Deeper

When you're willing to address the emotion behind the craving then you can begin to unravel the mystery of why you eat what you eat. Why do you reach for food when you're not hungry? Every time you're confronted with a choice about food, take the time to focus inward and allow yourself to think about it. For example, a friend says they'll pick you up and they're late. You're waiting on the corner next to a convenience store and you go in. There's an apple for sale, but you reach for the candy bar instead. "I want it," you casually tell yourself, but you know you're feeling agitated. "I give up," is what you really may be saying.

Foods you know to be bad for you may signal feelings of hopelessness or despair or anger or even betrayal. You're feeling angry that your friend is late and you want the candy bar to comfort you. That's no mystery, but it may also be triggering a deeper feeling of hopelessness because underneath it all you can't seem to count on people with any consistency. You're feeling hopeless about this issue and that's what's leading you to reach for that candy bar.

If you examine the feeling behind the food you're craving it may lead you to uncover these deeper feelings and beliefs. Food may be the placeholder for where your fear lies, where your faith falters, or where your emotional wounds have come to rest. Paying closer attention allows you to visit these places and put a more conscious plan into action.

Having the courage to take a real look at your food choices is empowering. If you repair what's causing you to feel hopeless or change your attitude about it, you're rebuilding not only your life but redesigning your ultimate health outcomes. Consciously reaching for foods you know to be health-sustaining can help repair not only your health but your psyche.

Something to Think About

Gently ask yourself, "What am I feeling?" as you reach for something to eat when you aren't hungry. Please notice the kinds of food you reach for in these moments. They say a lot about how you feel on a deeper level and can guide you towards emotional growth.

Look beyond the obvious or the first thought that comes into your mind. Ask yourself if this first thought may signal an emotional pattern? For example, when you frequently tell yourself "I'm always left out," this signals a repetitive emotional pattern. Food may be temporary relief but when you change your underlying beliefs or perceptions, these patterns and the foods you habitually reach for change too. The way you eat may be more out of a lack of understanding than a lack of willpower. Be curious about what's hidden in your feelings or your thought patterns in your relationship with food.

What inspired you to do this in the past?

What would you have to believe about yourself in order to continue this in the future?

What could you tell yourself to help change your perception of a current event that's triggering an old wound? (For example, reminding yourself that your thoughts and emotions are coming from another place and time can help orient you to the present. Reminding yourself that you are an adult now or that the situation is in the past and you now have the power to walk away or change your perception is also important.)

What kinds of foods do you think you could reach for to be a satisfying replacement? (For example, a half cup of nonfat frozen yogurt with fresh berries, one or two rice cakes with one teaspoon of honey drizzled on top, one cup of nonfat organic milk with one tablespoon of chocolate syrup, five dark chocolate covered almond etc.) Continue your list on the following page.

Notes:

Meditate to Relax

Relaxation means releasing all concern and tension and letting the natural order of life flow through one's being. ~Donald Curtis

Worksheet #30

Meditation strengthens the prefrontal cortex, the part of your brain that regulates emotion. When that part of the brain gets stronger, research shows that people tend to be happier and bounce back faster from negative events.

Try a sitting meditation for five to twenty minutes. If that feels too long, try three minutes and do it three times this week. Wear loose clothing and sit in a comfortable position. Set a timer for yourself so you don't have to think about the amount of time passing.

- 1. Breathe in and out
- 2. Focus on your breathing

3 Notice your thoughts as they happen and label them "thinking" instead of listening to them 4. Allow these thoughts to float away like a breeze through the leaves on a tree branch and empty your mind

5. Relax and repeat steps one through five

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Additional Information: Why These Foods Put You on the Road to Riches

Fruits:	
Apples	The pectin in apples may lower your cholesterol levels and help stabilize your blood
	sugar. They help prevent lung disease, especially in smokers.
Bananas	Bananas are one of the best sources of potassium, an essential mineral for
	maintaining normal blood pressure and heart function. A banana a day may help
	prevent high blood pressure and protect against atherosclerosis.
Blueberries	Blueberries contain phytochemicals called anthocyanins that may make you
	smarter and may improve your memory. And like cranberries, they may help reduce
	the frequency of urinary tract infections.
Cranberries &	Cranberries may reduce the risk of urinary tract infections
cranberry juice	
Grapes	Grapes (whether fresh, dried as raisins, or fermented in wine, consumed in
	moderation) contain antioxidants called polyphenols that help prevent coronary
	heart disease.
Mangoes	Mangos are among the best sources of cancer-fighting carotenoids. They are also
	rich in the antioxidants vitamins C and E. Mango contains 7 grams of fiber, and
	much of this is soluble fiber, which helps lower your cholesterol level.
Oranges	Oranges are an excellent source of vitamin C, which disarms free radicals and
	prevents damage inside and outside cells. This is why a good intake of vitamin C is
	associated with a reduced risk of cancer.
Pomegranates	Pomegranates and pomegranate juice are loaded with phytochemicals that may
& pomegranate	help prevent and even reverse the progression of coronary heart disease. They
juice	may also help prevent prostate cancer by reducing DNA damage.
Strawberries	Strawberries are filled with phytochemicals that reduce the risk of diabetes and
	circulatory problems. They also may contain phenols that may lower your risk of
	cancer and heart disease.
Tomatoes	Tomatoes are rich in lycopene, a powerful oxidant, which may help reduce your
(including tomato	risk of coronary heart disease, breast cancer, lung cancer, and prostate cancer.
sauce and tomato	Cooking tomatoes helps activate lycopene. They also contain A,C,E and potassium.
juice)	
Watermelon	Watermelon contains even more lycopene than tomatoes do. Lycopene is powerful
	oxidant, which may help reduce your risk of coronary heart disease, breast cancer,
	lung cancer and prostate cancer.

Vegetables:	
Artichokes	Artichokes contain silymarin, an antioxidant that helps prevent skin cancer, plus
	fiber to help control cholesterol.
Bell peppers	Bell peppers, especially red bell peppers, may help boost your immune system.
	They are excellent sources of vitamin C (they provide three times as much as
	oranges) and beta-carotene.
Bok choy	Bok choy (Chinese cabbage) contains brassinin (which may help prevent breast
Dok choy	tumors), plus indoles and isothiocyanotes (which lower levels of estrogen, which
	helps reduce the risk of breast cancer).
Broccoli	Broccoli is high in beta-carotene, fiber and phytochemicals that may detoxify
	cancer-causing substances before they have a chance to cause harm, reducing
	the risk of breast, colon, and stomach cancers. One cup of broccoli contains more
	vitamin C than an orange.
Carrots	Carrots are an excellent source of antioxidant compounds and are the richest
	vegetable source of the pro-vitamin A carotenes. Their antioxidant compounds help
	protect against cardio-vascular disease and cancer, and also promote good vision,
	especially night vision.
Chili peppers	Chili peppers are rich in capsaicin, which is what makes them taste hot. They may
	help you lose weight by suppressing appetite so you can eat less and also by
	increasing your metabolism, so you burn more calories. They contain antioxidants
	such as vitamins A and C. Chili peppers may also block tumor formation.
Kale	Kale contains lutein, an antioxidant that protects against macular degeneration,
	a leading cause of blindness. Kale is also rich in beta-carotene, vitamin C, and
	vitamin E, as well as folate (which helps prevent heart disease and birth defects),
	calcium and magnesium, two minerals important for strong bones. Kale also
	contains some omega-3 fatty acids.
Onions	Onions are rich in quercetin, which is one of the most powerful flavanoids (natural
	plant antioxidants) and may help protect against cancer.
Spinach	Spinach is loaded with iron, folate, and two phytochemicals that help prevent
	macular degeneration. One cup of spinach contains just 41 calories and no fat.
Swiss chard	Swiss chard contains the phytochemical lutein, which lowers the risk of age-related
	vision loss from macular degeneration and cataracts. A one-cup serving of cooked
	Swiss chard supplies 47% of your RDA (150 milligrams) of magnesium, which
	helps keep nerve and muscle cells healthy.
Legumes:	
Kidney beans,	Beans and lentils (including kidney beans, peas, and bleak beans) are high
black beans,	in both soluble fiber and folic acid, which help lower cholesterol and decrease
peas, & lentils	homocysteine levels, reducing the risk of heart disease.

Nuts:	
Walnuts,	Nuts are a good source of vitamin E, antioxidants, and protein. The fat supplied in
almonds, and	nuts is monosaturated, which carried a lower risk of cardiovascular disease. Nuts
hazelnuts	are also an excellent source of magnesium, fiber, B vitamins, and vitamin E. They
	are high in fat and calories (150 calories per ounce), so watch the portion size.
	Nuts are a good afternoon snack.
Foods rich in	
Omega-3 Fatty	
Acids:	
Cold-water seafood	Daily consumption of omega-3 fatty acids may dramatically reduce the incidence
*mackerel, herring,	of sudden cardiac death, reduce triglycerides, lower blood pressure, and decrease
*bluefish, trout,	inflammation, helping arthritis and lupus. When given to pregnant women and
tuna; dark green	lactating mothers, omega-3 fatty acids may increase a baby's IQ by six points
leafy vegetables	or more and may also reduce the incidence of allergic disease in the offspring.
collard greens; and	Caution: Ingesting high levels of mercury during pregnancy is a known cause of
canola, soy bean,	birth defects and low IQ levels. Omega-3 fatty acids may also reduce depression,
oils	the risk of prostate and breast cancer and help prevent dementia. Avoid omega-3
*Fish high in Mercury content	fatty acids if you have congestive heart failure.
Dairy	
Products:	
_	Eggs are a good source of protein. The egg white provides all of the protein,
Eggs	whereas egg yolks have all the cholesterol. If you have heart disease or high
	cholesterol, focus on consuming egg whites. Two egg whites can substitute for one
	egg in most recipes. Some eggs are fortified with omega-3 fatty acids.
	Nonfat milk provides a significant source of calcium, vitamin B12, and protein. The
Nonfat milk	protein helps keep you feeling full and satisfied until your next meal.
	Some yogurt contains live active cultures, which help prevent common
Yogurt	gastrointestinal tract problems such as constipation and diarrhea, the calcium
	present in yogurt also helps maintain weight and bone health. Greek Yogurt also
	has health promoting qualitites and may contain less sugar. Be careful to look for
	organic dairy products to avoid added hormones.
Soy	Soy foods are rich in phytoestrogens, which help prevent breast cancer and
Products:	prostate cancer. They also reduce the risk of coronary heart disease. They are
Including tofu,	rich in protein, niacin, folate, calcium, copper, iron, magnesium, manganese,
edamame	potassium, zinc and low in saturated fat. See page 156-157 on the soy controversy.
Grains:	
Oatmeal	Oatmeal contains soluble fiber that may help lower your cholesterol levels as well
	as your blood pressure. It fills you up before you consume too many calories,

Oatmeal, cont.	helping you lose weight. Buy old-fashioned steel-cut oatmeal rather than instant, if
	possible.
Whole-grain	Whole grain breads, cereals, and crackers are "good carbs" because the fiber
breads,	slows their absorption and keeps your blood sugar level more even. Also, the fiber
cereals, and	fills you up before you consume too many calories. The soluble fiber in cereal may
crackers	reduce your cholesterol level, and the insoluble fiber keeps you regular and may
	decrease your risk of colon cancer. Caution: some whole wheat breads do not
	contain the whole wheat grain and this bread may contain both white flour, sugar
	and significantly less fiber. Look for 'Whole Grain' bread and check fiber content.
Other foods:	
Chocolate	Chocolate is rich in flavonols and catechins, which may reduce the risk of heart
	disease, improve blood flow, and lower blood pressure. Chocolate can be loaded
	with fat and sugar, but dark chocolate is better than milk chocolate because it's
	lower in sugar and higher in flavonols.
Ginger	Ginger contains a compound called gingerol that may lower blood pressure and
	increase circulation. Gingerol may also help reduce pain and improve function
	in many people with osteoarthritis or rheumatoid arthritis. Ginger may also help
	relieve motion sickness, morning sickness, and the nausea caused by anesthesia.
	Other compounds in ginger may help ward off migraines and arthritis pain by
	blocking inflammation causing prostaglandins.
Tea: black and	Tea contains polyphenols, which are powerful antioxidants; they are found even
green	more in green tea than black tea. The catechins in tea may help prevent cancer
	throughout your GI tract by helping prevent DNA damage from carcinogens and
	inhibiting the growth of new blood vessels that would feed tumors. Tea may also
	help prevent tooth decay. Both green tea and black tea are high in flavanoids
	which have many health benefits. Green tea has more than black tea. Drinking
	tea has been shown to reduce the incident of coronary heart disease and many
	gastrointestinal cancers to enhance immune function.
Spices:	
Mustard seeds	Mustard seeds contain lots of protective substances called phytonutrients, which
	may inhibit the growth of existing cancer cells as well as helping prevent normal
	cells from turning into cancer cells.
Turmeric	Turmeric is an Indian spice that provides the yellow color in curries. It has powerful
	anti-inflammatory and antioxidant properties. Turmeric reduces the actions of
	several genes that promote inflammation, which is linked to heart disease, colon
	cancer, and Alzheimer's disease. The rate of Alzheimer's disease is much lower
	in India than in the United States. Turmeric also enhances immune function, may
	reduce your risk of a heart attack, and improves digestion.

Sage, oregano, thyme, caraway, anise, cumin, fennel, tarragon and caraway	These spices have some cancer-preventing activity. They also contain substances called terpenoids that may help slow or even prevent tumor growth, as well as help reduce blood cholesterol levels.
Coriander	Coriander has some cancer-preventing activity; and is particularly useful in
	combating carcinogens. Corlander is rich in protective phytonutrients, as well as a
	good source of Iron, magnesium, manganese and fiber. It contains nine different
	antibiotics that help prevent the spread of food-borne illnesses such as salmonella.
	It has some cancer-preventing activity.
Sage and	These spices may inhibit bacterial growth and help keep cooked food from spoiling.
Clove	Clove also has antibacterial effects.
Paprika and	These spices may help boost your immune system.
saffron	
Nutmeg	Nutmeg has antibacterial effects.
Rosemary	Rosemary contains substances that are useful for stimulating the immune
	system, increasing circulation, and improving digestion. Rosemary contains
	anti-inflammatory compounds that may make it useful for reducing the severity
	of asthma attacks. Rosemary increases the blood flow to the head and brain,
	improving concentration. It also has some cancer-preventing activity.
Cinnamon	Just a half teaspoon daily is known to lower cholesterol.
Garlic	May inhibit bacterial growth and help keep cooked food from spoiling. In sufficient
	quantities, garlic can lower cholesterol and slow plaque formation in Heart Disease.

Adapted from "The Spectrum" by Dr. Dean Ornish, 2008, Ballantine Books, New York.

Additional Information: The What, Why and How of Eating Organic

What to Eat Organic

Eating fresh produce is the best way to obtain daily nutrients. By choosing organic foods, you can have the health benefits of fruits and vegetables — without exposing yourself to potentially harmful chemicals.

Make sure you **buy organic** varieties of the produce listed below. According to the Environmental Working Group (EWG), common growing practices make these crops the most likely to contain pesticide residues:

Peaches	Lettuce
Apples	Grapes (Imported)
Bell Peppers	Carrots
Celery	Pears
Nectarines	Berries
Strawberries	Potatoes
Cherries	Spinach
Kale	

This list of produce is **least likely to contain pesticides**. They have a thicker skin, an outer shell or are otherwise safer from pesticide contamination.

Asparagus	Pineapples
Avocados	Sweet Corn
Eggplant	Sweet Peas
Kiwis	Watermelon
Cabbage	Cantaloupe
Mangoes	Grapefruit
Nuts	Sweet Potato
Onions	Honeydew melon
Papayas	

Detoxing Non-Organic Produce

For a lower-cost alternatives you can detoxify non organic produce.

Use a vegetable peeler to remove the skin from commercial varieties of apples,

pears, nectarines, and potatoes. For bell peppers, apples, and celery, use the vinegar wash below.

1. Fill a large bowl or a plastic food storage container with water

2. Add a cup of distilled vinegar

3. Let produce rest in the tub for 10 to 25 minutes, and then use a vegetable scrub brush to scrub each piece for about 30 seconds

4. For grapes and cherries, soak them for about an hour

Buy these products organic to avoid exposure to harmful antibiotics and hormones:

Beef

Chicken

Eggs

Milk

Ice Cream

Butter

Common Toxins Found in Farmed Salmon and Other Non-Organic Meats and Fish

PCBs

This substance was banned in the U.S. in 1976 and slated for global phase-out under a United Nations Convention signed by the U.S. However, it has remained in the environment and made its way up the food chain to humans.

Health Risks:

- & Classified as probable human carcinogens
- * Has a known reproductive, neurological and developmental effect in humans and animals
- Suppresses the immune system
- Causes disruption of thyroid and endocrine systems

Linked to lower IQ, hyperactivity, shortened attention span, and delayed acquisition of reading skills

Exposure:

PCBs can persist in soil and in marine sediments for years. They can also travel thousands of miles in the atmosphere, resulting in contamination of pristine areas such as the Arctic and the oceans. PCBs tend to accumulate in the fatty tissues of living organisms, and their levels increase up the food chain until they reach levels thousands of times higher than their original concentration in water (a process called biomagnification).

As a result, people can be exposed to PCBs through consumption of fish, meat and dairy products. Individuals typically eliminate half of their body's burden of PCBs after a period of 7 to 10 years.

Dioxins

These are by-products of high-temperature industrial and waste treatment and disposal processes, especially the burning of chemicals that contain chlorine and incineration. They persist in the environment for decades. They can cause cancer and are toxic to the fetal endocrine system.

Health Risks:

- Cancer Reproductive and developmental effects
- Altered immune function
- Disruption of the endocrine system

Exposure:

Dioxin-like compounds persist in the environment by attaching to soil particles and sediment in water. Once attached to such particles, they enter the food chain by accumulating in the fatty tissues of animals and humans where they can remain for long periods. This leads to consumption of dioxin-contaminated meat, fish, and dairy products.

Toxaphene

It is a banned pesticide that persists in the environment. It can contaminate fish and drinking water and is associated with a variety of possible health effects and considered a probable carcinogen.

Health Risks:

- Can damage the lungs, nervous system, and kidneys
- Can cause death

Effects on the development of newborn animals when their mothers are exposed during pregnancy

Can cause cancer of the thyroid gland when the animals were exposed to high levels over their lifetimes

May reasonably be anticipated to be a carcinogen as determined by the U.S. Department of Health and Human Services Exposure:

Widely used in the mid-1970s as a replacement for the banned pesticide DDT

- Used as an agricultural insecticide on cotton, cereal grains, fruits, nuts, and vegetables
- Times Used to control ticks and mites in livestock and to kill unwanted fish species in lakes
- Humans are most commonly exposed through eating contaminated fish or breathing air near a hazardous waste site containing toxaphene

Once consumed by humans, it remains stored in body fat for long periods of time

Dieldrin

Dieldrin is a banned pesticide that is highly persistent in the environment. It can contaminate fish, meat, and dairy products, and is considered a probable human carcinogen as determined by the U.S. EPA.

Health Risks:

- & Can cause liver cancer in mice. Is a probable human carcinogen, as determined by EPA
- Affects the liver and reduced immune system function in animals
- May cause nervous system effects
- & Can affect reproduction in male animals and humans

Exposure:

Dieldrin is a pesticide and is also formed as the breakdown product of another pesticide,
Aldrin

Was originally used on cotton, corn, and citrus crops to control diseases carried by insects such as mosquitoes and tsetse flies.

Was used as a wood preservative to control termites. Dieldrin peak production occurred from the 1950s to the early 1970s. Some people are exposed from living in homes that were once treated with aldrin or dieldrin to control termites.

It was banned in the U.S. in 1974 for nearly all uses

Dieldrin binds tightly to soil and slowly evaporates in the air. Plants take in and store dieldrin from the soil. It can then be stored in the fat of animals and fish, leaving the body very slowly. Most common exposures are from eating food like fish or shellfish from lakes or streams contaminated with dieldrin, contaminated root crops, dairy products, and meats.

Additional Information: How to Prevent or Reverse Heart Disease, Diabetes, Lower Cholesterol, Lower Blood Pressure or Lose Weight

Reversing Heart Disease on Your Road to Success

Research confirms that heart disease is both preventable and reversible. Family history plays a role since there is genetic variability in how efficiently people metabolize dietary fat and cholesterol. But lifestyle habits such as the foods you choose, the thoughts you think, stress levels, attitude, exercise, daily relaxation and loving social connections also can help reverse this disease. Studies show that the more you change what you eat and how you live, the more you improve. The more changes you make, the less medication you are likely to need.

If you have heart disease and a build up of plaque in your arteries, emotional stress causes your arteries to constrict and your blood to clot faster. This puts you in danger of heart attack. Chronic anger and hostility are two predictor factors in heart disease. Elevated blood pressure associated with anger and poor responses to stress may cause chronic damage to the lining of your arteries as the blood hits the arterial walls too forcefully. The body's immune response is to repair this damage with plaque, which builds up over time.

The body makes all the cholesterol it needs to function well from the saturated fat in the food you eat. Dietary cholesterol isn't a threat to the health of most people, but excessive amounts of cholesterol and saturated fat in the diet can lead to coronary artery disease. Pre-diabetes and diabetes significantly increases your risk of heart disease. Lowering your blood sugar lowers your risk of developing these conditions, and will also reverse disease progression.

Road Map to Reversing Heart Disease Lower your blood pressure.

Achieve and maintain ideal body weight. Get regular physical activity.

Reduce your salt intake. By making small changes, you'll give your taste buds time to adapt.

Eat more fruit, fiber and vegetables. Studies show that vegetarians have lower blood pressure. The potassium in fruit and vegetables is higher than in meat or animal products, and minerals play an important part in lowering blood pressure including potassium, magnesium and calcium.

Lower your cholesterol.

Limit your weekly consumption to two eggs and limit or severely restrict the intake of saturated fat found in animal products, red meat, butter, cream and tropical oils. If meats are chosen, lean meats without the marbling or visible fat are preferred and skin should be removed from poultry. Your liver uses saturated fats to produce LDL cholesterol (the bad cholesterol). Add soluble fiber to your diet. This binds cholesterol in the intestinal tract and increases its elimination from the body, reducing your LDL cholesterol. Food sources are oat bran, flaxseed, barley, psyllium husk, citrus fruits such as oranges and apples, and vegetables such as carrots, beans and peas.

Reduce inflammation.

Maintaining ideal body weight and getting regular physical activity are helpful to reduce and prevent inflammation. Take in monounsaturated fat from olive oil, canola oil, walnuts, flaxseed and fatty fish two times per week. Two to three grams per day of omega 3 fatty acids may significantly lower your triglycerides and reduce inflammation. Chronic inflammation is a common problem resulting from a combination of chemical exposure, poor eating choices (including ratios of omega 3s and omega 6 fatty acids) and constant stress. Inflammation (measured as C-reactive protein levels) increases your risk of heart disease and many other illnesses.

Reduce or eliminate trans-fatty acids.

These can be found in fried and processed food, cakes, cookies, and snack foods. They contribute to chronic inflammation and lead to many illnesses. READ LABELS. If it says "hydrogenated" or "partially hydrogenated" avoid it. There are many products out there, including whole grain pancake mixes, that don't have partially hydrogenated oil in them. Current law permits food labels they have 0 grams or no hydrogenated fats, even if they contain up to 0.5 grams.

Eat fewer or eliminate simple carbohydrates.

Avoid sugar, white flour, white rice and high fructose corn syrup, which can markedly increases your triglycerides.

Eat more unrefined, complex carbohydrates.

Eat organic fruits, vegetables, whole grains, legumes and fermented organic soy products. They aid digestion, balance your glycemic load and provide you with needed fiber, vitamins, additional healthy digestive bacteria (pro-biotics) and minerals. There is current controversy about eating soy products. Examining the studies done about soy to date, the documented risks of consuming soy seem to outweigh its possible benefits. However, the fermenting process decreases its toxic qualities and provides beneficial properties, such as natural probiotics that become available to your digestive system. Properly fermented products include: natto, tempeh, miso and soy sauce. See more about the controversy in "Additional Information: Is Soy Safe to Eat?" on page 156-157.

Lose weight.

Being overweight increases your risk of developing coronary heart disease, insulin resistance, fatty liver as well as other illnesses. This program is designed to help lower these risks and help you get yourself on track to a healthy lifestyle. Choosing foods that lower your cholesterol level and your blood sugar level will put you on the road to riches.

Stop smoking.

The body is designed to heal itself; within a month of quitting, lungs begin to regenerate. In as little as three years after stopping smoking, your risk of heart attack is almost as low as if you had never smoked before. People who smoke a pack a day have more than two times the risk of heart attack than non smokers. Women who smoke and take birth control pills increase their risk even further.

Eat dark chocolate.

Chocolate that is 70% cacao and above may reduce oxidative modification of LDL cholesterol, keeping it from your arteries. Small amounts of dark chocolate (1-2 squares) boost your serotonin levels, lower your cholesterol, reduce inflammation and can be a healthy treat daily or a couple of times a week. Large amounts, however, may increase your cholesterol levels.

Optional Supplementation to Reverse Heart Disease, Diabetes, Lower Cholesterol or Lower Blood Pressure

Ask your doctor about taking 3 grams per day of fish oil, which provides omega 3 fatty acids (brands without mercury, PCBs, dioxin etc). A fish oil supplement of 2-3 grams per day is needed as well as Vitamin D supplementation.

The dosage of vitamin D will be determined after a blood level of vitamin D is determined by your doctor.

If your cholesterol levels are found to be elevated following this diet, it might be necessary to take statins as prescribed by your doctor; other possibly effective products are Chinese red yeast rice or Benecol, a plant sterol containing margarine shown to promote modest cholesterol-lowering.

In people with elevated homocysteine, the treatment is B6, B9 and B12 found in whole grains and legumes, although such supplements have not been shown to prevent or reverse heart disease.

Curcumin is the active ingredient found in turmeric, the Indian curry spice. This may reduce cholesterol, it also has powerful antioxidant and anti-inflammatory properties that may help prevent the oxidation of LDL cholesterol into plaque. If you find that your triglycerides start to elevate when you change your eating habits, it may mean that you're eating too many refined carbohydrates or starch. If so, further reduce your intake of sugar, white flour, white rice, alcohol, high fructose corn syrup and other refined carbohydrates. Exercise also lowers triglycerides, as does fish oil or other sources of omega-3 fatty acids.

Preventing and Reversing Pre-Diabetes and Diabetes

Pre-diabetes and diabetes are the result of unstable insulin levels. This instability is what leads to diabetes. Some people respond to stressful events by overeating or eating what the body starts to crave when too much cortisol is released (carbohydrates, sugar and alcohol), which can lead to diabetes. Good lifestyle habits include achieving an ideal weight and responding to stress more effectively.

Road Map

Schoose whole grains like whole wheat, oats, barley, whole corn, brown rice and whole-wheat pasta

Avoid added sugar in all forms (high fructose corn syrup, etc)

Teat vegetables and fruits in their whole form, rather than in processed juices and sauces

Eat a bit of protein and/or a monounsaturated fat along with your carbohydratesFor example: eat a handful of nuts with whole grain crackers for an afternoon snack

Exercise daily

If you have already been diagnosed with diabetes and are on medication and a special diet prescribed by your physician, continue with that type of meal planning. This may be based on food exchanges. A suggested cookbook to provide more recipe's is *The Mediterranean Diabetes Cookbook* by Amy Riolo.

Losing Weight

When your metabolism functions well, you can easily maintain your body weight. Normally people fluctuate between two to three pounds. A five pound weight gain can be a good signal to STOP and make some changes to maintain your weight. You can eat delicious meals and not feel guilty while navigating your Road to Success Food Map. Sometimes it becomes necessary to retrain your palate to support your optimal health but it doesn't mean you have to suffer.

This way of eating is not about counting calories unless you find it helpful to count calories as you learn how to balance your food intake. Eat until you are full, but not stuffed, experiment, learn to feel the difference between the two and enjoy the feeling of the former. Eat well most of the time. Don't beat yourself up, ever. Consult the Road Map for food lists to learn what foods are most health supporting. You may be learning how to eat for the first time in your life or remembering how to eat in order to feel your best. You can begin by making small changes or by making big changes. It's up to you.

Calories- You can be mindful of general calorie intake without being focused on it. This general chart is meant to be a suggestion. Calorie amounts and needs vary depending on physical activity levels.

If you want to count calories	Aim for this many calories
An average sized woman who wants to lose weight	1,200-1.400
A petite woman at her desired body weight	1,200-1,400
An average-sized sedentary woman at her desired body weight	1,200-1,400
A larger woman who wants to lose weight	1,400-1,600
A larger, sedentary woman at desired body weight	1,400-1,600
A moderate-to-large, fairly active woman at her desired body weight	1,600-1,900
An older man at your desired body weight	1,600-1,900
A small-to-moderate-sized man who wants to lose weight	1,600-1,900
A larger, active woman at her desired body weight	1,900-2,300
A small-to-moderate sized man at her desired body weight	1,900-2,300
A moderate-to-large active man at her desired body weight	2,300-2,800

To create your Road Map

Use worksheet 27 as your guide. Eat more from "Road to Riches" and "Fast Lane" and less from "Middle of the Road" and "Road Kill." Keep track of what you're eating. You can begin by making small changes or big changes — see which works better to achieve your goals. It's up to you.

When to Eat

Studies show that your metabolism works best when you eat breakfast. Eating every four hours is also helpful so you don't get too hungry. Try to avoid eating two to three hours before bed time as a general rule. Eating carbohydrates late in the evening interferes with the human growth hormone release affecting deep levels of sleep. You'll feel better immediately when you stop eating late-night carbohydrates and get a better nights rest.

Don't Do This

When you drastically reduce your calorie levels for just four days, you can reduce the blood levels of

leptin. The lower your leptin levels go, the more hungry you feel. This can lead to binge eating and yoyo dieting.

Do This Instead

Eating nutrient dense, high fiber, delicious foods will fill you up faster with fewer calories and keep you satisfied longer. The body 'recognizes' these natural foods that are grown in the earth. It understands what to do with them and absorbs the nutrients critical to optimal hormone production and you gain control. Chemical additives and processed foods are not natural foods that the body recognizes, so your immune system treats them like an invader and goes to work to protect you. Eliminate these unnatural foods from your diet to keep your immune system strong enough to fight real everyday invaders, like bacteria and disease. Be careful with foods that interfere with hormone balance like soy products, and try to eat only organic dairy products to avoid added growth hormones. Read food labels. Know what you're putting into your body.

Watch your portions. See "How to approximate portion sizes" in the next section. Train yourself to eat smaller portions if you need to. Eating large meals makes it difficult to recognize feeling full and trigger your satiety hormones. Your stomach will shrink by eating four smaller meals a day and you will fill up faster, with less food. It will also boost your immune functioning. Mindful eating will train you to focus on your food and enjoy it more. Mindlessly eating in front of the TV distracts you from the pleasure of your food.

Numerous studies show that people who closely adhere to the Mediterranean style eating mostly vegetables cooked with olive oil and approximately 30% of calories from primarily monounsaturated fat have the longest lives, can successfully lose weight and then maintain a healthy, balanced way of eating. Approximate % of calories indicates how it balances out along the way: one day 30%, another day 20%, remember, you want to tip the balance time towards more spent thinking positive thoughts, eating well, managing your stress and moving your body.

Some people want more guidance on weight loss. For additional tools see "Your Weight Loss Tools For Success" on page 159-160.

Additional Information: What Fish to Eat. What Fish to Avoid

Mercury is one of the most toxic metals, even more so than lead. It can be found in our soil, water and food supply, as well as in sewage sludge, fungicides, and pesticides. Some grains and seeds are treated with methyl mercury chlorine bleaches, which seep into the food supply. Because methyl mercury contaminates our waters, large amounts are found in fish, particularly the larger ones found further up the food chain. Mercury is also present in a wide variety of everyday products, including cosmetics, dental fillings, fabric softeners, inks used by printers and tattooists, latex, some medications, some paints, plastics, polishes solvents and wood preservatives.

Mercury is a cumulative poison. There is no barrier that prohibits mercury from reaching the brain cells. It is retained in the pain center of the brain and in the central nervous system. Its presence there can prevent both normal entries to nutrients into the cells and the removal of wastes from the cells. It can bind to immune cells, distorting them and interfering with normal immune responses. It takes 70 days for mercury levels found in a can of tuna to drop 50%. Since mercury is so toxic and stays around for so long, it is important to avoid excessive exposure or intake.

Fish have been contaminated with mercury through the water supplies. For more information, go to **www.gotmercury.org.** Pregnant woman should not eat fish containing mercury.


FDA's Top Twenty Best and Worst Mercury (Hg) Containing Fish

Most Hg Toxic	Least Hg Toxic
Tilefish (Gulf Of Mexico)	Mackerel Atlantic (N.Atlantic)
Shark	Scallop
Swordfish	Catfish
Mackerel King	Mullet
Tuna (Big eye)	Flatfish 2
Orange Roughy	Herring
Marlin	Anchovies
Grouper (All Species)	Pollock
Mackerel Spanish (Gulf Of Mexico)	Crawfish
Tuna (Fresh/Frozen, Species Unknown)	Haddock (Atlantic)
Bass Chilean	Sardine
Tuna(Fresh/Frozen, All)	Hake
Tuna (Albacore)	Wild Salmon (Fresh/Frozen)
Tuna (Albacore)	Oyster
Bluefish	Tilapia
Tuna (Yellow fin)	Clam
Lobster (Northern/American)	Perch Ocean
Croaker White (Pacific)	Salmon (canned)
Scorpion fish	Shrimp
Weakfish (Sea Trout)	Whiting
Halibut	Stream Trout
Bass (Saltwater, black, Striped)	Sole
Tuna (Skipjack)	Flounder
Buffalo fish	Red Snapper
Snapper	Mahi Mahi
Monkfish	Whitefish

Additional Information: How to Approximate Portion Sizes

Portion	Looks like
3-5 ounces of meat	The palm of your hand: for an average woman, palm is
	considered 3 oz. For an average man, palm is considered
	5 oz.
1 cup of cereal	Your fist
½ cup of pasta or grain	Your fist
1 teaspoon butter	The tip of your finger
1 teaspoon oil	The tip of your finger
1 cup of veggies	Two fists
1 medium fruit	Your fist
1 ounce of cheese	A finger

Something to Think About

You can also use measuring utensils with your favorite bowl or cup. Once you have a "visual" reference, you can approximate your portion sizes this way as well.



Additional Information: Excerpt from EWG Action Fund's Healthy Home Checklist

Kitchen

Do you cook with non-stick cookware? Replace with cast-iron, stainless steel, or glass when possible. Stuck with it? Take care not to overheat it, which releases toxic fumes.

Do you use plastic food containers? We recommend glass over plastic. Never microwave food in plastic containers. For baby, use glass or BPA-free plastic bottles.

Do you filter your tap water? Check EWG's online tap water quality database for local contaminants and a filter that removes them, if needed.

Do you drink bottled water? Use glass instead. For water on-the-go, get a reusable water bottle, like stainless steel (not plastic or aluminum lined with plastic).

Any canned food in the pantry? Cook with fresh or frozen whenever possible; most food cans (including liquid infant formula) are lined with bisphenol-A (BPA), a toxic chemical that leaches into the food.

Do you eat conventionally grown produce? Check EWG's Shoppers Guide to Pesticides at *www.foodnews.org* to be sure you buy organic.

Do you use iodized salt? lodine is necessary to maintain healthy thyroid function.

Do you eat high-mercury fish? See the Additonal Information: What Fish to Eat. What Fish to Avoid on page 144-145.

Bathroom

Do you use air fresheners? Most contain a number of toxic chemicals that contaminate the air you breathe and are known endocrine disruptors.

Is there fragrance in your personal care products? We don't know what chemicals are in "fragrance," so it's safer to choose all fragrance-free personal care products. Always check ingredient lists to be sure. A major loophole in FDA's federal law lets manufacturers of products like shampoo, lotion, and body wash include nearly any ingredient in their products under the name "fragrance"

without actually listing the chemical. Beware labels that say "unscented." It may only mean that the manufacturer has added yet another fragrance to mask the original odor.

What kind of toothpaste do you use? Choose fluoride-free for kids younger than 2 and teach older kids to rinse and spit; fluoride is toxic if swallowed. Also, pick a paste without triclosan -- you'll see it on the ingredient list.

Do you use liquid hand soap? Avoid anti-bacterials -- the American Medical Association recommends against using them at home.

What material is your shower curtain? Avoid vinyl shower curtains. If you get a new curtain (whatever the material), leave it outside for several days before using.

Do you have extra products? Less is more. Skipping cosmetics like hair spray and detangler, body sprays and powder is less toxic -- and cheaper!

Laundry and Cleaning

Are your cleaners green? It's hard to know without a full ingredient list, which most products don't have. Find out the ingredients by calling the manufacturer, avoid the toxic ones and choose green-certified products whenever possible.

Do your product labels list all ingredients? Most don't, but they should. Support companies that disclose all ingredients by buying their products -- you have a right to know. Do you need all those products? Skip laundry products you don't need, like dryer sheets, fabric softener, and chlorine bleach. Use a HEPA vacuum, micro fiber mops and cloths.

Around the House

Do you use pesticides or insecticides? Try non-toxic alternatives first; pesticides are a last resort. If you choose to use them, store them out of reach of children. Organic gardening is healthier for kids and pets, since they live closer to the ground.

Do you have a wood deck, picnic table or playground set? Those made before 2005 likely contain arsenic. Test to confirm and either replace with safer wood or reduce your exposure by sealing it, replacing high-use areas and washing hands after touching, especially before eating.

What materials are your kids' toys made from? Top contaminants to avoid are: lead paint, play make-up, cadmium and lead in play jewelry, and phthalates in soft plastics (like teethers and rubber duckies). Choosing non-toxic toys for young kids is especially important because so many end up in their mouths.

Kitchen Safety 101

AVOID: chlorinated white paper towels

The EPA found that dioxins, byproducts of chlorine, are carcinogenic; they're also very estrogenic

USE: Chlorine-Free paper products

Use products - toilet paper included - that say they are processed chlorine-free, or PCF.

AVOID: Bleached coffee filters

Bleached coffee filters leach chlorine into your coffee and release dioxins with every drip

USE: Unbleached or oxygen-bleached filers

These use chlorine dioxide, a type of bleach that doesn't create dioxin residues

AVOID: "Antibacterial" dish soap (or anything)

In addition to helping create antibiotic resistance, when triclosan combines with chlorinated tap water, it creates the carcinogenic gas chloroform and chlroiated dioxins, a highly toxic form of dioxin.

USE: Natural soaps

Choose dish soaps without chlorine or phosphates. Good brands include Seventh Generation, Ecover, and Mrs. Meyer's.

AVOID: Teflon pans

A chemical in Teflon likely damages the liver and thyroid and impairs the immune system.

USE: Iron, porcelain-coated, stainless steel, or glass pans

Get added iron as you avoid endocrine and immune-system damage.

AVOID: Opening the dishwasher door while its running. Keep the dishwasher closed.

That "whoosh" of steam releases toxic volatized chlorine from the combination of detergent and tap water.

Additional Information: Snack Suggestions

The goal is to give your body the balanced energy it needs during the day to keep your body running efficiently. Combining any grains and legumes or adding some nonfat yogurt or nonfat milk to the mix will provide you with a complete protein snack and keep your blood glucose levels stable. If you're avoiding meat, dairy products can also provide you with the vitamins B12 and D you may need. Nuts are proteins that are high in fiber and unsaturated fat.

Complete proteins

Rice and beans Tempeh and brown rice Oatmeal and nonfat milk Yogurt and cereal or unsweetened granola. You can also add fruit Nuts, especially walnuts to help balance blood sugar levels

Other suggestions

Avocado drizzled with balsamic vinegar: high-fiber and healthy-fat content -- has a steadying effect on blood sugar Fruit combined with nuts Whole grain crackers or rice cakes and almond or low-fat peanut butter (read labels for no sugar added.) Hummus and any vegetable to dip Lentil tapenade Baked sweet potato fries: Sweet potatoes may help stabilize blood sugar and lower insulin resistance Apples or pears Crudité Salsa with whole grain chips

Air popped popcorn, no butter. Sprinkle with Parmasan cheese insead

Notes:

Additional Information- Safer to Use Plastic

Biodegradable plastic naturally breaks down from exposure to sunlight and heat. Studies confirm that many hazardous chemicals found in plastic affect the immune and endocrine systems. As a bottle breaks down it releases chemicals into whatever material is stored inside. According to the Environment California Research & Policy Center you should never reuse plastic bottles. The plastics listed below are safer to use in comparison but should never be heated, put in the microwave or used with hot food to avoid this kind of chemical breakdown.

The number or code is found on the bottom of the plastic container. You may want to look through your storage containers at home and replace plastic with glass containers to avoid these chemical toxins. If you do choose to keep plastic containers, you may want to avoid washing them in the dishwasher to keep them from breaking down in the heat cycle. Once they get cloudy or smell, don't use them. Don't drink liquids from any container that smells like plastic. The list below represents "safer to use" plastics.

#7 Polylactide (PLA)-- The only good kind.

This plastic is made from corn, potatoes, sugar or other plant-based starch. It's compostable. Avoid #7 PC which contains many toxins including BPA.

#1 Polyethylene terephthalate (PET or PETE)

Used in bottles for: Cough syrup Ketchup Salad dressing Soft drinks Sports drinks Water

Pickle jars Jelly jars Jam jars Mustard jars Mayonnaise jars Peanut butter jars



#2 High-density polyethylene (HDPE)

Used in:

Some plastic toysLaundry detergent bottlesShampoo bottlesComposite lumberMilk jugsTyvek building materialYogurt containersSome Tupperware productsMargarine tubsSanitary productsRecyclable grocery bagsOriginal Hula-HoopsTrash bagsSome shrink wrap

#4 Low Density Polyethylene (LDPE)

Used in:	
Grocery bags	Power cables
Bowls	Liners
Lids	Some cling wrap
Toys	Sandwich bags
Six-pack rings	Food-coloring
Trays	Squeezable bottles
	Bottle caps

#5 Polypropylene (PP)

Used in:	
Plastic utensils	Diapers
Plastic cup	Safe baby bottles
Thermal underwear (such as Under Armour brand)	Stoneyfield Farm yogurt containers
Clear bags	Condiment bottle



RENEW© MODULE THREE- Nourishing Your Immune System Additional Information: Endocrine Disruptors

Chemical	Other	Uses	You can find them in Potential or Proven Healt	
	names			Effects
Polychlorinated biphenyls	PCBs	Originally used for coolants, electrical equipment, in inks, dyes and carbonless copy paper; might still be found in old fluorescent light fixtures	Farm raised salmon, freshwater fish. (PCB's were banned in 1977 but still linger in the environment.)	Affects memory, IQ levels, ADHD, discoloring of the nails and skin, numbness in the arms and/or legs, weakness, muscle spasms, chronic bronchitis, nervous system problems, increased incidence of cancer, particularly liver and kidney
Phthalates	DEHP, DINP	Added to plastics to make them flexible	Medical tubing, teething rings, pacifiers, shower curtains, plastic wrap, plastic food containers: also used to lengthen the life of fragrances	Reduced sperm counts and decreased fertility in animals
Dioxins		Byproduct of incineration and industrial processes	Eating nonorganic animal products, farmed salmon (dioxin builds up in fatty tissues)	Lower rate of male births in humans; reduction in sperm counts, production of testosterone and male genital size in rats; reproductive cancer; developmental disorders; skin rashes, liver damage, excess body hair
Bisphenol A	BPA	Added to plastics to make them more durable	Baby bottles, polycarbonate drinking bottles (old Nalgene), interior liners of food and beverage cans	Increased risk of breast and prostate cancer, infertility, PCOS, insulin resistance, and diabetes
Volatile organic compounds	VOCs	N/A (VOCs are byproducts with no practical use)	Off-gassing from paints, vinyls, plastics, cleaning products, solvents, air fresheners, fabric softener, dryer sheers, wall-to-wall carpeting, deodorant, dry-cleaned clothing, cosmetics	Nausea, headache, drowsiness, sore throat, dizziness, and memory impairment. Long-term exposure can cause cancer. Many products with VOCs also contain phthalates

Chemical	Other	Uses	You can ind them in	Potential or Proven Health
	names			Effects
Chlorine	Bleach	Disinfectant;	Drinking water,	Respiratory problems (wheezing,
		industrial	industrial waste,	coughing, constricting airways),
		manufacturing	household cleaners,	lung pain or collapse, eye and
		ingredient	chlorine pools,	skin irritation, sore throat. Heated
			bleached paper (paper	chlorine creates dioxin
			towels, coffee filters),	
			nylon, cattle, poultry,	
			some fish	
Nonylphenol	NPEs	"Surfactants,"	Household laundry	The Sierra Club reports these
ethoxylates		chemical	detergents and other	chemicals "cause organisms to
		dirt-lifting	cleaning agents	develop both male and female
		agents		sex organs; increase mortality
				and damage to the liver and
				kidneys; and disrupt normal male-
				to-female sex-ratios, metabolism,
				development, growth, and
				reproduction." These effects also
				intensify as NPEs break down in
				the environment

Adapted from "Clean, Green & Mean" by Dr. Walter Crinnion, 2010, J. Wiley & Sons, New Jersey

Additional Information: Is Soy Safe to Eat?

Many Americans are convinced that soy is a healthy type of food to fight everything from cancer to heart disease to hot flashes. But you may not want to reach for the tofu so fast. From the analysis of the studies done about soy to date, the documented risks of consuming soy seem to outweigh its possible benefits.

Even though the soybeans undergo various processes to remove the toxins that are naturally present in soybeans, without the fermentation these aren't completely removed. In addition, toxic residues may be created by the process that turns soy into foods like tofu and soy hot dogs. Over 50% of the soy crops in the US are genetically modified and had one of the highest percentages of contamination by pesticides of any of our foods, which carries its own set of health concerns. The content of soy itself — which is one of the top eight allergens —raises a red flag. Soy products contain:

Phytoestrogens (isoflavones) which mimic and sometimes block the hormone estrogen

Phytates, which block your body's uptake of vitamins and minerals including calcium, vitamin D, zinc and iron

Enzyme inhibitors called protease inhibitors that interfere with the digestion of protein leading to gastric distress and an overworked pancreas

Hemagglutinin, which causes red blood cells to clump together and inhibits oxygen take-up and growth and may cause immune system reactions

High amounts of omega-6 fat which is pro-inflammatory

Goitrogens that damage the thyroid

Oligosaccharides that are pesky sugars that cause bloating and flatulence Saponins bind with bile which may lower cholesterol and also may damage the intestinal lining

Many scientists and nutrition experts correlate the above chemicals to thyroid disease, premature puberty, cancer, brain damage, reproductive disorders, and kidney stones. In addition, the frequently marketed benefits are disputed by current research. For example, soy in fact isn't a solution for high cholesterol, postmenopausal symptom relief or avoiding osteoporosis. Again, the fermentation process

decreases the toxic qualities and gives beneficial properties, such as natural probiotics that become available to your digestive system. Properly fermented products include: natto, tempeh, miso and soy sauce.

Reported levels of soy consumption vary from study to study. The reputable China-Cornell-Oxford Study, which surveyed the dietary habits of 6,500 adults in 130 rural villages, showed an average legume consumption of 12 grams per day, only one-third of which was soy-- revealing that Asian populations do not eat a great deal of soy foods. Furthermore the types of soy foods eaten in Asia are very different from the soy foods that Americans consume. Even if you avoid eating soymilk, tofu cheesecake and other soy snacks, you're still consuming soy if you eat processed foods. They most likely contain soybean oil and lecithin. Soy is hidden under many names including words like boullion, natural flavor and textured plant protein. More reason to read your food labels. Our emphasis on whole foods and self-preparation is a great way to avoid this hidden yet ubiquitous ingredient. We suggest you limit your consumption of soy products that are not organic or properly fermented.



Things that disrupt cortisol levels	Signs that you have too much cortisol
Aggression	Belly fat
Anger	Depression
Conflict	Diabetes
Depression	Easily bruised skin
Diabetes	Frequent infection or colds
Dieting	High blood pressure
Excessive caffeine	High blood sugar
Excessive sugar	High cholesterol and triglycerides
Fear	Insomnia
Infrequent meals	Insulin resistance
Lack of sleep	Irregular periods
Over-the-counter "adrenal support" supplements	Obesity
Prolonged stress	Reduced libido
Skipping breakfast	Weight gain
Dieting Excessive caffeine Excessive sugar Fear Infrequent meals Lack of sleep Over-the-counter "adrenal support" supplements Prolonged stress Skipping breakfast	High blood pressure High blood sugar High cholesterol and triglycerides Insomnia Insulin resistance Irregular periods Obesity Reduced libido Weight gain

Additional Information: Cortisol Levels



Additional Information- Weight Loss Tools for Success

I have successfully found 10,000 ways how not to make a lightbulb. ~Thomas Edison

When you appreciate the feeling of wellness and strive to feel good for most of the time, you are on the right track to managing your emotions and your biochemistry. When you feel vital and healthy, your eating choices will follow. Healthy, vital foods will make you feel good after you eat them. When you concentrate on feeling good, this can guide all your choices in life, from who you spend time with to what you eat.

Responding to Stress More Effectively, encourages being present and mindful. If you can tap into this kind of consciousness in your everyday life, you can also do it with food. Before eating, ask yourself, "Am I hungry?" If the answer is no, dig deeper and ask yourself what you're feeling. This way you can uncover what needs attention instead of anesthetizing with food and make a plan to address the areas you need to deal with. By living each day this way, you will never diet again.

Many people like to keep a food log, or diary while they are in the process of losing weight. We encourage you to do this. Keep asking yourself questions and put it all in your log. Becoming aware and more conscious is a process. Writing about it will help shine a light on parts you may not see in the moment. It's all progress! Remember, your biochemistry is tied inextricably to your thoughts. Think good thoughts and you support good feelings that lead to good food choices that support feeling good. So praise rather than criticize, compliment rather than complain and see if your food cravings begin to change.

Try starting a daily log today and keep notes as you go, whenever you need to. You can discuss issues that come up with your Lifestyle coach for additional support!

Your Weight Loss Tools for Success include: How to Change Repetitive Negative Thought Patterns Keeping Track: this chart can be used for calories, emotions or both Tracking Your Results Worksheet Meal Planner Tracking Your Results Nutritional Analysis of the Foods You Eat

You're on your way!

Additional Information- Weight Loss Tools for Success

The Link Between Emotions and Food: How to Change Repetitive Negative Thought Patterns

You can refer back to worksheet 29 to review the link between what foods you commonly reach for and your emotional reactions. When you discover what your predominant negative thought patterns are saying, you can begin to talk back to them. For example, if you notice that hopelessness is your go-to negative emotion, take the time to think about or write about the history of this feeling. It may originate in childhood or be the result of feelings cultivated later in life. Remind yourself that you are an adult, capable of changing both your surroundings and your feelings about yourself. There is no reason to feel hopeless if you can think of one time that things worked out for you, no matter how small. There are steps you can take to combat negative thoughts patterns.

First identify the pattern by noticing what you're feeling when a negative emotions surfaces and what you're saying to yourself.

Second give yourself a reality check. Is this really true? Is this true 100% of the time? If not, then what else could be true that will make you feel better?

Third give yourself as many instances as you can think to support this new perception. You are actually changing the wiring in your brain to adjust your repetitive patterns.

This takes time and this takes effort but each time you practice changing your thought patterns you establish newer healthier patterns. Each time you reach for food ask yourself what you're feeling?

You can start a food log to track your feelings each time you eat to help recognize if any emotional patterns exist. Use the "Weight Loss Tools for Success: Keeping Track" chart on for tracking your emotions, to list foods eaten, or calores consumed. Whatever will be most helpful for you.

RENEW© MODULE THREE- Nourishing Your Immune System Weight Loss Tools for Success: Keeping Track

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
							Breakfast
							Lunch
							Snack
							Dinner
							Other
							Cups of Water :
							Daily Calorie Total:

How was I feeling at mealtimes?

Remember to get yourself to a good feeling place whenever you eat!

RENEW© MODULE THREE- Nourishing Your Immune System Weight Loss Tools for Success: Meal Planner

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Breakfast							
Lunch							
Snack							
Dinner							

Notes:

Additional Information- Weight Loss Tools for Success

TRACKING YOUR RESULTS WORKSHEET

Use the following worksheet to keep track of your progress over the next 6 months. Write down your initial measurements.

Initial Measurements:

Date:____/___/

Weight	Waist	Bicep	
BMI	Hips	Other	
Chest	Thigh		

Monthly Measurements: Write in the date below. You may want to keep track monthly or every two months. This is your choice.

Date			
Weight			
BMI			
Chest			
Waist			
Hips			
Thigh			
Bicep			
Other			

Additional Information- Weight Loss Tools for Success

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Almond: dried, shelled, slivered (not packed)	1 tbsp	7	43	1.4	1.3	3.9	0.3	2.7	0.7	0	tr
Anchovy: 1-4" flat	1 whole	4	5	0	0.8	0.3	0.1	0.1	0.1	5	32
Apple: raw withskin	1 whole	150	80	20.0	0.3	0.8	0	0	0.8	0	1
Apple: raw, pared, ¼" slices or diced pieces	1 cup	110	59	15.5	0.2	0.3	0	0	0.3	0	1
Apple Butter	1 tbsp	18	33	8.2	0.1	0.1	0	0	0.1	0	tr
Apple juice: canned or bottled	1 cup	248	117	29.5	0.2	0	0	0	0	0	2
Apple sauce canned, sweetened	1 cup	255	232	60.7	0.5	0.3	0	0	0.3	0	5
Apricots: raw	3 whole	114	55	13.7	1.1	0.2	0	0	0.2	0	1
Apricot nectar: canned or bottled	1 cup	251	143	36.6	0.8	0.3	0	0	0.3	0	Tr
Artichoke: frozen, cooked, bud or globe	1 whole	300	52	11.9	3.4	0.2	0	0	0.2	0	36
Asparagus: canned, spears, ½" diameter	4 spears	80	17	2.7	1.9	0.3	0	0	0.3	0	189
Asparagus: canned, cut spears, low sodium	1 cup	235	47	7.3	6.1	0.7	0	0	0.7	0	7

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Avocado: California, raw, 3 1/2" diameter (unpeeled)	1 whole	284	369	12.9	4.7	36.7	7.3	16.5	4.8	0	9
Avocado: California, raw, pureed, mashed, or sieved	1 tbsp	14	25	0.9	0.3	2.4	0.5	1	0.3	0	1
Bacon: Canadian, cooked, 3 3/8 x 3/16"	1 oz.	28	78	0.1	7.7	5.0	1.7	1.9	0.4	25	726
Bacon: cooked (approx 20 slices/lb raw)	2 slices	15	86	0.5	3.8	7.8	2.7	3.4	0.8	11	153
Bacon bits: with coconut oil	1 tsp	3	15	0.9	1.3	0.6	0.6	0	0	0	115
Bacon bits: with soy oil	1 tsp	З	14	0.9	1.4	0.6	0.1	0.2	0.2	0	115
Bagel: water	1 whole	73	212	41.1	7.9	1.3	0.2	0.2	0.3	0	120
Baking powder: double acting	1 tsp	3	3	0.7	0	0	0	0	0	0	290
Baking powder: low sodium	1 tsp	4	7	1.8	0	0	0	0	0	0	Tr
Baking soda	1⁄4 tsp	4	0	0	0	0	0	0	0	0	345
Banana, raw, medium	1 whole	175	101	26.4	1.3	0.2	0	0	0.2	0	1
Barbecue sauce: commercial (corn oil)	1 tbsp	16	14	1.3	0.2	1.1	0.1	0.3	0.6	0	127

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Beans: garbanzos or chick-peas	1 cup	185	248	42.1	14.1	3.3	1.0	0.3	0.6	0	18
Beans: Pork and beans in tomato sauce, canned	1 cup	255	311	48.5	15.6	6.6	2.4	2.8	0.6	6	1,181
Beans: Kidney	1 cup	185	218	39.6	14.4	0.9	0.3	0.1	0.6	0	6
Beans: Lentils	1 cup	200	212	38.6	15.6	0	0	0	0	0	4
Beans: lima, frozen, cooked	1 cup	170	168	32.5	10.2	0.2	0	0	0.1	0	172
Beans: lima, canned	1 cup	170	163	31.1	9.2	0.5	0.2	0	0.3	0	401
Beans: lima, canned, low sodium	1 cup	170	162	30.1	9.9	0.5	0.1	0	0.2	0	7
Beans: pinto, calico, red Mexican	1 cup	185	218	39.6	14.4	0.9	0.3	0.1	0.6	0	6
Beans: mung, sprouts, cooked and drained	1 cup	125	35	6.5	4.0	0.3	0	0	0.3	0	5
Beans: mung, sprouts, uncooked	105	37	6.9	4.0	0.2	0	0	0	0	0	5
Beans: green, snap, fresh, frozen, cooked	1 cup	130	34	7.8	2.1	0.1	0	0	0.1	0	3
Beans: green, snap, canned	1 cup	135	32	7.0	1.9	0.3	0	0	0	0	319
Beans: green,snap, canned, low sodium	1 cup	135	30	6.5	2.0	0.1	0	0	0.1	0	3

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Beans: white, Great Northern, navy, cooked	1 cup	180	212	38.2	14.0	1.1	0.3	0.1	0.7	0	13
Beans: yellow or wax, frozen, cooked	1 cup	125	28	5.8	1.8	0.3	0	0	0.3	0	4
Beans: yellow, or wax, canned	1 cup	135	32	7.0	1.9	0.4	0	0	0.4	0	319
Beans: yellow or wax, canned, low sodium	1 cup	135	28	6.3	1.6	0.1	0	0	0.1	0	3
Beef: dried, chipped, uncooked	1 oz	28	58	0	9.7	1.8	0.8	0.8	0	26	1,219
Beef: <6% fat, flank, round (lean only)	1 oz	28	53	0	8.9	1.7	0.9	0.8	0.1	26	19
Beef: 10% fat; chuck, filet mignon, New York strip, porterhouse, T-bone, tenderloin, ground round, choice grade (lean only)	1 oz	28	61	0	8.5	2.7	1.3	1.1	0.1	26	19
Beef: 15% fat; club, rib eye roast (leanonly)	1 oz	28	74	0	8.1	4.4	2.2	2.0	0.2	27	18
Beef: 20% fat; ground chuck	1 oz	28	82	0	7.7	5.5	2.9	2.6	0.2	27	16
Beef: 24% fat; ground beef (hamburger), chuck, steak pot roast (lean and fat)	1 oz	29	93	0	7.4	6.8	3.4	3.1	0.3	27	16

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Beef: >30% fat; brisket, rib eye steak, standing rib roast, spareribs (lean and fat)	1 oz	28	110	0	6.5	9.1	4.8	4.4	0.3	27	15
Beef: corned	1 oz	28	110	0	6.5	9.1	4.8	4.4	0.3	27	264
Beef tongue: medium- fat, cooked, 3x2x1/8"	1 slice	20	49	0.1	4.3	3.3	1.8	2.0	0.1	18	12
Beef: kidney, cooked, 1/2x½x¼"	1 oz	140	353	1.1	46.2	6.8	6.6	2.5	2.7	1,126	354
Beef:liver	1 oz	28	40	1.5	5.7	1.1	0.4	0.2	0.2	86	39
Beef tallow: suet	1 tbsp	14	120	0	0.2	13.2	6.8	5.9	0.6	11	0
Beer: regular	12 oz	360	151	13.7	1.1	0	0	0	0	0	25
Beets: red, canned, diced, sliced, or whole	1 cup	170	63	15.0	1.7	0.2	0	0	0.2	0	401
Beets: red, canned, diced, sliced, or whole, low sodium	1 cup	170	63	14.8	1.5	0.2	0	0	0.2	0	78
Biscuit: made with shortening	1 whole	28	103	12.8	2.1	4.8					175
Blackberries: raw (also boysen- berries, dewberries	1 cup	144	84	18.6	1.7	1.3	0.3	0.3	0.7	0	1
Bologna: 1 slice	1 oz	28	86	0.3	3.4	8.3	3.4	4.0	0.3	52	287

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Bouillon cube: all kinds (1 tsp instant bouillon)	1 cube	4	5	0.2	0.8	0.1	0.1	0	0	0	960
Braunschweiger (liver sausage)	1 oz	28	90	0.7	4.2	9.2	3.1	4.4	1.2		287
Bread: cracked wheat	1 slice	25	66	13.0	2.2	0.6	0.1	0.2	0.2	0	132
Bread: English muffin	1 whole	57	133	25.5	4.4	1.4	0.4	0.6	0.4	0	263
Bread: French, enriched, 2 ½x2x½"	1 slice	15	44	8.3	1.4	0.5	0.1	0.2	0.1	0	87
Bread: pita, pocket	1 large	52	145	30.0	5.0	1.0	0.3	0.4	0.2	0	86
Bread: pumpernickel (dark rye)	1 slice	32	79	17.0	2.9	0.4	0.1	0.2	0.1	0	182
Bread: raisin	1 slice	25	66	13.4	1.7	0.7	0.1	0.3	0.2	0	91
Bread: rye (light)	1 slice	25	61	13.0	2.3	0.3	0.1	0.2	0.1	0	139
Bread: white, enriched	1 slice	25	68	12.6	2.2	0.8	0.2	0.4	0.2	0	127
Bread: whole wheat, firm crumb	1 slice	25	61	11.9	2.6	0.8	0.1	0.3	0.2	0	132
Bread: white, low sodium	1 slice	28	76	14.1	2.4	0.9	0.2	0.4	0.2	0	3
Broccoli: medium stalk, fresh, cooked, and drained	1 stalk	180	47	8.1	5.6	0.5	0	0	0.5	0	18
Brussels sprouts: frozen, cooked, and drained	1 cup	155	51	10.1	5.0	0.3	0	0	0.3	0	22

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Butter: 1 pat	1 tsp	5	36	0	0	4.1	2.5	1.2	0.2	12	49
Buttermilk: made from skim milk	1 cup	245	88	12.5	8.8	0.2	0.1	0.1	0	2	319
Buttermilk: made from low-fat milk	1 cup	245	99	11.7	8.1	2.2	1.3	0.6	0.1	9	257
Cabbage: common or Chinese; shredded, cooked, and drained	1 cup	145	29	6.2	1.6	0.3	0	0	0.3	0	20
Cabbage: common or Chinese varieties, raw, shredded	1 cup	90	22	4.9	1.2	0.2	0	0	0.2	0	18
Carrot: raw, approx 1 1/8x7½"	1 whole	81	20	7.0	0.8	0.1	0	0	0.1	0	34
Carrots: fresh, cooked, sliced	1 cup	155	48	11.0	1.4	0.3	0	0	0.3	0	51
Carrots: canned solids, sliced	1 cup	155	47	10.4	1.2	0.5	0	0	0.5	0	366
Carrots: canned solids, sliced, low sodium	1 cup	155	39	8.7	1.2	0.2	0	0	0.2	0	60
Cashew: roasted in oil, unsalted (14 large, 18 medium, or 26 small)	1 oz	28	159	8.3	4.9	12.8	2.6	7.3	2.1	0	4
Catfish: freshwater, raw	1 oz	28	29	0	5.0	1.0	0.2	0.3	0.3		17
Cauliflower: frozen, cooked, approx 7 florets	1 cup	180	32	5.9	3.4	0.4	0	0	0.4	0	18

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Caviar: sturgeon, granular	1 tbsp	16	42	0.5	4.3	2.4	0.6	0.7	1.0	48	352
Celery: green, raw, 8 x 1 ½ " stalk	1 stalk	40	7	1.6	0.4	0	0	0	0	0	50
Cereal: bran, unprocessed, 1.17 cup	1 oz	28	91	12.3	3.9	0.4	0.2	0.2	0.7	0	2
Cereal: bran buds	1 cup	60	144	44.6	7.6	1.8	0.3	0.3	1.1	0	493
Cereal: 40% bran flakes	1 cup	35	106	28.2	3.6	0.6	0.1	0.1	0.3	0	207
Cereal: Cheerios or puffed oats	1 cup	25	99	18.8	3.0	1.4	0.3	0.5	0.6	0	317
Cereal: corn flakes	1 cup	25	97	21.3	2.0	0.1	0	0	0.1	0	251
Cereal: corn grits, enriched, cooked without salt	1 cup	245	125	27.0	2.9	0.2	0	0	0.1	0	2
Cereal: cream of rice, cooked without salt	1 cup	245	123	27.4	2.0	0	0	0	0	0	2
Cereal: cream of wheat, cooked without salt	1 cup	240	180	40.6	5.3	1.0	0.2	0.1	0.5	0	2
Cereal: farina, enriched, regular, cooked without salt	1 cup	245	103	21.3	3.2	0.5	0.1	0	0.2	0	4
Cereal: farina, enriched, quick- cooking, cooked with salt	1 cup	245	105	21.8	3.2	0.5	0.1	0	0.2	0	466

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Cereal: farina, enriched, instant- cooking, cooked without salt	1 cup	245	135	27.9	4.2	0.5	0.1	0	0.2	0	13
Cereal: granola, without coconut or other saturated fat	¼ cup	28	139	16.9	2.9	6.7	5.1	0	0.6	0	30
Cereal: granola, cooked (1/4 cup dry = ½ cup cooked)	½ cup	120	100	21.0	3.0	1.0	0.2	0.4	0.4	0	30
Cereal: Grape-Nuts	1 cup	110	430	92.8	11.0	0.7	0	0	0.7	0	814
Cereal: oatmeal, cooked without salt	1 cup	240	132	23.3	4.8	2.4	0.4	0.8	1.0	0	2
Cereal: puffed rice	1 cup	15	60	13.4	0.9	0.1	0	0	0.1	0	0
Cereal: puffed wheat	1 cup	15	54	11.8	2.3	0.2	0	0	0.2	0	1
Cereal: raisin bran	1 cup	50	144	39.7	4.2	0.7	0.1	0.1	0.4	0	212
Cereal: Rice Krispies	1 cup	30	117	26.3	1.8	0.1	0	0	0.1	0	283
Cereal: Spoon Size Shredded Wheat, approx 50 biscuits per cup	1 cup	50	180	40.0	5.0	1.3	0.2	0.2	0.7	0	2
Cereal: Shredded Wheat biscuit, 3 3'4x2 ¼ x1"	1 whole	25	90	20.0	2.5	0.6	0.1	0.1	0.3	0	1
Cereal: sugar-coated corn flakes	1 cup I	40	154	36.5	1.8	0.1	0	0	0.1	0	267

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Cereal: Wheat Chex	1/3 cup	28	110	23.0	2.0	1.0	0.9	0.1	0	0	198
Cereal: wheat germ	1 tbsp	6	23	3.0	1.8	0.7	0.1	0.1	0.4	0	1
Cheese: American	1 oz	28	106	0.5	6.3	8.9	5.6	2.5	0.3	27	406
Cheese: Blue	1 oz	28	100	0.7	6.1	8.2	5.3	2.2	0.2	21	396
Cheese: brick	1 oz	28	105	0.8	6.6	8.4	5.3	2.4	0.2	27	159
Cheese: brie	1 oz	28	95	0.1	5.9	7.9				28	178
Cheese: camembert	1 oz	28	85	0.1	5.6	6.9	4.3	2.0	0.2	20	239
Cheese: cheddar	1 oz	28	114	0.4	7.1	9.4	6.0	2.7	0.3	30	176
Cheese: Colby	1 oz	28	112	0.4	6.7	9.1	5.7	2.6	0.3	27	171
Cheese: cottage, creamed (4%fat)	¼ cup	53	54	1.4	6.6	2.4	1.5	0.7	0.1	8	212
Cheese: cottage, low-fat (2%fat)	¼ cup	57	51	2.1	7.8	1.1	0.7	0.3	0	5	230
Cheese: cottage, dry curd	¼ cup	36	31	0.7	6.3	0.2	0.1	0	0	3	5
Cheese: cream	1 oz	28	99	0.8	2.1	9.9	6.2	2.8	0.4	31	84
cheese, 2											
Cheese: edam	1 oz	28	101	0.4	7.1	7.9	5.0	2.3	0.2	25	274
Cheese: feta	1 oz	28	75	1.2	4.0	6.0	4.2	1.3	0.2	25	316
Cheese: gouda	1 oz	28	101	0.6	7.1	7.8	5.0	2.2	0.2	32	232

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Cheese: gruyere	1 oz	28	117	0.1	8.5	9.2	5.4	2.9	0.5	31	95
Cheese: Monterey	1 oz	28	106	0.2	6.9	8.6					152
Cheese: mozzarella, part-skim, low- moisture	1 oz	28	79	0.9	7.8	4.9	3.1	1.4	0.1	15	150
Cheese: mozzarella, whole milk	1 oz	28	80	0.6	5.5	6.1	3.7	1.9	0.2	22	106
Cheese: muenster	1 oz	28	104	0.3	6.6	8.5	5.4	2.5	0.2	27	178
Cheese: Neufchatel	1 oz	28	74	0.8	2.8	6.6	4.2	1.9	0.2	22	113
Cheese: parmesan, grated	1 tbsp	5	23	0.2	2.1	1.5	1.0	0.4	0	4	93
Cheese: provolone	1 oz	28	100	0.6	7.3	7.6	4.8	2.1	0.2	20	248
Cheese: ricotta, whole milk (13%fat)	¼ cup	62	108	1.9	7.0	8.1	5.2	2.3	0.2	32	52
Cheese: ricotta, part skim milk (8%fat)	¼ cup	62	86	3.2	7.1	4.9	3.1	1.4	0.2	19	77
Cheese: romano	1 oz	28	110	1.0	9.0	7.6				29	340
Cheese: Roquefort	1 oz	28	105	0.6	6.1	8.7	5.5	2.4	0.4	26	513
Cheese: swiss	1 oz	28	95	0.6	7.0	7.1	4.6	2.0	0.2	24	388
Cheese: Velveeta (cheese spread)	1 oz	28	82	2.5	4.7	6.0	3.8	1.8	0.2	16	381
Cheese: 1% butterfat (Countdown)	1 oz	28	40	3.6	6.6	0.3	0.2	0.1	0	1	409

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Cheese: 4 – 8% butterfat, processed (Breeze, Chef's Delight, Country Club, Mellow Age, Tasty, Lite-line, low-fat diet)	1 oz	28	50	2.8	5.8	1.7	1.1	0.5	0	10	428
Cheese: 5% butterfat, natural (St. Otho)	1 oz	28	49	3.1	9.1	1.1	0.8	0.3	0	10	
Cheese: 19-32% polyunsaturated fat(Golden Image, Cheez-ola, Dorman, Nutrend, Scandic, Unique)	1 oz	28	98	1.1	6.2	7.5	1.5	1.4	4.1	4	330
Cheese: 23% polyunsaturated fat, low sodium (Cheezola)	1 oz	28	90	0.6	6.8	6.3	0.8	1.5	3.6	1	156
Cherries: raw, sweet, unputted	10 whole	75	47	11.7	0.9	0.2	0	0	0.2	0	1
Cherries: canned, sweet, syrup- packed, pitted	1 cup	257	208	52.7	2.3	0.5	0	0	0.5	0	3
Chicken: gizzard, all classes, cooked, chopped	1 cup	145	215	1.0	39.2	4.8	1.4	1.8	1.2	283	83
Chicken: light meat, no skin	1 oz	28	51	0	9.2	1.4	0.4	0.7	0.3	22	18
Chicken: dark meat, no skin	1 oz	28	52	0	8.3	1.8	0.5	0.6	0.4	26	24

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Chicken: dark and light meat, with skin	1 oz	28	70	0	7.7	4.2	1.2	1.4	1.0	25	
Chicken fat	1 tbsp	14	126	0	0	14.0	4.6	6.4	2.5	9	0
Chicken liver: cooked. Whole, 2x2x5/8"	1 liver	25	41	0.2	6.6	1.1	0.4	0.3	0.2	158	13
Chocolate: bitter or baking	1 oz	28	143	8.2	3.0	15.0	8.4	5.6	0.3	0	1
Chocolate syrup (or topping): fudge type	2 tbsp	38	124	203	1.9	5.1	2.6	1.9	0.2	0	33
Clams: canned solids (chopped or minced)	1 cup	160	143	3.0	25.3	2.4	0.7	0.4	0.9	101	192
Cocoa: dry powder, medium fat, plain	1 tbsp	5	14	2.8	0.9	1.0	0.6	0.4	0	0	Tr
Cocoa mix: 1 oz package	1 pkg	28	102	20.1	5.3	0.8	0.6	0.3	0	2	149
Coconut: shredded, fresh, meat only	1 cup	80	277	7.5	2.8	28.2	25.0	1.7	0.5	0	18
Cordial: apricot brandy, Benedictine, anisette, crème de menthe, or curaçao	4 tsp	20	66	6.3	0	0	0	0	0	0	0
Corn: canned, whole kerne	1 cup	165	139	32.7	4.3	1.3	0.4	0.1	0.7	0	389
Corn: canned, whole kernel, low sodium	1 cup	165	152	29.7	4.1	1.2	0.4	0.1	0.7	0	3

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Corn: canned, whole kernel, low sodium	1 cup	165	152	29.7	4.1	1.2	0.4	0.1	0.7	0	3
Corn chips: 1 ½ oz package – 1 1.4 cups or 60 chips	1 ¼ cup	43	239	22.7	2.9	15.8	3.8	7.9	3.8	0	240
Corn meal: white and yellow, enriched, degermed	1 cup	138	502	108.2	10.9	1.7	0.5	0.2	1.0	0	1
Cornstarch: not packed	1tbsp	8	29	7.0	0	0	0	0	0	0	Tr
Crab: fresh, cooked, not packed	1 cup	125	106	0.6	21.6	1.3	0.2	0.2	0.4	125	263
Crab: canned solids, packed	1 cup	160	149	1.8	27.8	2.6	0.4	0.5	0.9	162	1,600
Crackers: animal	10 whole	26	112	20.8	1.7	2.4	0.6	1.2	0.5	16	79
Cracker: graham, chocolate- coated, 2 ½ x 2 x ¼	1 whole	13	62	8.8	0.7	3.1	0.9	1.9	0.2	7	53
Crackers: graham, sugar honey, 2 squares, 2 ½ " each	2 whole	14	58	10.8	1.0	1.6	0.4	0.8	0.4	1	72
Cracker: matzo	1 whole	30	118	26.1	3.2	0.3	0	0	0.1	0	10
Crackers: melba toast	3 whole	12	60	9.0	2.0	2.0	0.8	0.9	0.2	0.6	2
Crackers: melba toast, low sodium	3 whole	12	60	9.0	2.0	2.0	0.8	0.9	0.2	0.6	1

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Crackers: saltines, single crackers	4 whole	11	48	8.0	1.0	1.3	0.3	3.6	0.3	1	123
Crackers: sandwich, cheese and peanut butter (1 oz pack)	4 whole	28	139	15.9	4.3	6.8	1.8	3.1	1.6	6	281
Crackers: Triscuit	1 whole	4	21	3.0	0.4	0.8	0.4	0.4	0.1	0	20
Cranberries: raw, chopped	1 cup	110	51	11.9	0.4	0.8	0	0	0.8	0	2
Cranberry juice: cocktail, sweetened	1 cup	253	164	41.7	0.3	0.3	0	0	0.3	0	3
Cranberry sauce: sweetened, canned	1 cup	277	404	103.9	0.3	0.6	0	0	0.6	0	3
Cream: fluid, half and half (11.7% fat)	1 tbsp	15	20	0.7	0.5	1.7	1.1	0.5	0.1	6	6
Cream: fluid, light (20.6%)	1 tbsp	15	29	0.6	0.4	2.9	1.8	0.8	0.1	10	6
Cream: fluid, light, whipping (31.3% fat), approx 2 cups whipped	1 cup	239	699	7.1	5.2	73.9	46.2	21.7	2.1	265	82
Cream: fluid, heavy or whipping (37.6% fat), approx 2 cups whipped	1 cup	2338	821	6.6	4.9	88.1	54.8	25.4	3.3	326	89
Cream: sour	1 tbsp	14	31	0.6	0.5	3.0	1.9	0.9	0.1	6	8

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Cream: sour imitation (IMO, Wonder)	1 tbsp	15	26	0.7	05	2.4	2.0	0.3	0.1	1	7
Creamer: nondairy, powder, containing saturated fat (Creamora and Coffee- Mate)	1 tbsp	6	33	3.3	0.3	2.1	2.1	0	0	0	12
Creamer: nondairy, liquid, containing poly- unsaturated fat (Poly Perx and Mocha Mix)	1 tbsp	15	20	1.8	0.1	1.5	0.2	0.7	0.6	0	1
Cucumbers: raw, pared, whole 2 1/8x8¼"	1 whole	280	39	9.0	1.7	0.3	0	0	0.3	0	17
Dates: hydrated, without pits	10 whole	80	219	58.3	1.8	0.4	0	0	0.4	0	1
Dessert topping: frozen, semisolid (Cool Whip)	1 tbsp	4	13	0.9	0.1	1.0	0.9	0.1	0	0	1
Dessert topping: nondairy, pressurized	1 tbsp	4	11	0.6	0	0.9	0.8	0.1	0	0	2
Doughnut: cake type, plain, 1½x¾"	1 whole	14	55	7.2	0.6	2.6	0.7	1.3	0.5	7	70
Doughnut: yeast leavened, plain, 3 ¾ x 1 ¼"	1 whole	42	176	16.0	2.7	11.3	2.8	5.6	2.5	12	99
Duck: flesh only, raw, domesticated	1 oz	28	47	0	6.1	2.3	0.5	1.1	0.3		21

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Duck: flesh and skin, raw, domesticated	1 oz	28	92	0	4.5	8.1	1.9	4.1	0.9		21
Egg: chicken, fresh, medium	1 whole	50	79	0.6	6.1	5.6	1.7	2.2	0.7	274	69
Egg: chicken, white, fresh	1 white	33	16	0.4	3.4	Tr	0	0	0	0	50
Egg: chicken, yolk, fresh	1 yolk	17	63	0	2.8	5.6	1.7	2.2	0.7	272	8
Eggnog: commercial	1 cup	254	342	34.4	9.7	19.0	11.3	5.7	0.9	149	138
Egg substitute: Egg Beaters 1 egg equivalent	¼ cup ,	60	40	3.0	7.0	0	0	0	0	0	130
Egg substitute: Second Nature, 1 egg equivalent	3 tbsp	47	35	0.5	4.7	1.6	0.3	0.6	0.8	0	79
Egg substitute: Lucern, 1 egg equivalent	¼ cup	60	50	2.0	6.0	2.0				Tr	
Eggplant: cooked, diced	1 cup	200	38	8.2	2.0	0.4	0	0	0.4	0	2
Fig: raw, whole, 1 ½ " diameter	1 small	40	32	8.1	0.5	0.1	0	0	0.1	0	1
Fish sticks: breaded, cooked, frozen, 4x1x1⁄2"	1 oz	28	50	1.0	4.7	2.5	0.7	1.0	0.7	17	20
Flounder: raw	1 oz	28	22	0	4.7	0.2	0	0	0.1	14	22
Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
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Flour: white. All purpose, enriched unsifted	1 cup	125	455	95.1	13.1	1.3	0.3	0.1	0.8	0	3
Flour: white, self-rising, enriched, unsifted	1 cup	125	440	92.8	11.6	1.3	0.4	0.1	0.8	0	1,349
Flour: whole wheat	1 cup	120	400	85.2	16.0	2.4	0.7	0.2	1.4	0	4
Frankfurter: 5 x ³ 4"	1 whole	45	139	0.8	5.6	12.4	4.7	5.9	0.8	27	495
Frosting mix: prepared	1 tbsp	15	61	13.2	0.3	1.5	0.4	0.8	0.1	0	9
Frosting: ready to spread (with animal or vegetable shortening)	1 tbsp	15	55	10.8	0.1	1.6	0.5	0.9	0.2	0	9
Fruit cocktail: canned, solids and liquid, water- packed	1 cup	245	91	23.8	1.0	0.2	0	0	0.2	0	12
Gelatin: dry, unflavored, 1 envelope	1 pkg	7	23	0	6.0	0	0	0	0	0	0
Gelatin: sweetened dessert powder (JELL-O)	½ cup	120	71	16.9	1.8	0	0	0	0	0	61
Gelatin: low calorie, prepared with water	½ cup	120	8	0	2.0	0	0	0	0	0	8
Gizzard: chicken, all classes, cooked, chopped	¼ cup	36	54	0.3	9.8	1.2	0.4	0.5	0.3	71	21
Goose: flesh only, raw	1 oz	50	34	8.7	0.3	0.2	0	0	0.2	0	2

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Grapes: raw seedless (Thompson)	10 grapes	50	34	8.7	0.3	0.2	0	0	0.2	0	2
Grape juice: frozen concentrate, sweetened, diluted	1 cup	250	133	33.3	0.5	0	0	0	0	0	3
Grapefruit: all varieties	1 whole	400	80	20.8	1.0	0.2	0	0	0.2	0	2
Grapefruit juice: unsweetened frozen concentrate, diluted	1 cup	247	101	24.2	1.2	0.2	0	0	0.2	0	2
Greens, collard: frozen, cooked	1 cup	170	51	9.5	4.9	0.7	0	0	0.7	0	27
Haddock: raw	1 oz	28	29	0	6.6	0.1	0	0	0.1	17	17
Halibut: Atlantic or Pacific, broiled	1 oz	28	28	0	5.9	0.3	0.1	0	0.1	14	15
Herring: canned, solids and liquid, plain	1 oz	28	59	0	5.6	3.1	0.7	1.6	0.5	24	
Honey: strained	1 tbsp	21	64	17.3	0.1	0	0	0	0	0	1
Honeydew: 7 x 2" wedge, 1/10 of melon	1 slice	226	49	11.5	1.2	0.4	0	0	0.4	0	18
Horseradish prepared	1 tbsp	15	6	1.4	0.2	0	0	0	0	0	14
Instant breakfast: dry powder, all flavors except eggnog	1 ¼ oz	36	130	23.4	7.2	0.9	0.5	0.3	0.1	4	Tr
Jelly: sweetened	1 tbsp	18	49	12.7	0	0	0	0	0	0	3

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Knockwurst link: 4 x 1 1/8"	1 link	68	165	1.5	9.6	18.5	6.8	8.8	1.8	42	748
Ladyfingers	1 whole	11	40	7.1	0.9	0.9	0.3	0.4	0.1	39	8
Lamb: <7% fat, chop, leg, roast, sirloin chop (lean only)	1 oz	28	53	0	8.2	2.0	0.9	0.8	0.1	28	15
Lamb: 10% fat, shank, shoulder (lean only)	1 oz	28	58	0	7.6	2.8	1.4	1.2	0.2	28	14
Lamb: 20% fat, leg, roast, sirloin chop (lean and fat)	1 oz	28	79	0	7.2	5.4	2.8	2.4	0.4	28	14
Lamb: 30% fat, breast, chop, rib (lean and fat)	1 oz	28	96	0	6.2	7.7	3.6	3.1	0.4	28	14
Lard	1 tbsp	13	117	0	0	12.8	5.1	5.7	1.5	12	0
Lemon: raw, 1 wedge (1/8 of 2 1/8" lemon)	1 slice	18	3	1.0	0.1	0	0	0	0	0	0
Lemon juice: canned, unsweetened	1 tbsp	13	117	0	0	12.8	5.1	5.7	1.5	12	0
Lemonade: concentrate, frozen, diluted	1 cup	248	88	22.9	0.2	0	0	0	0	0	0
Lettuce: raw, crisp head varieties, chopped or shredded	1 cup	55	7	1.6	0.5	0.1	0	0	0.1	0	5
Liquor: gin, rum, vodka, whiskey	1 oz	28	70	0	0	0	0	0	0	0	0
Lobster: northern, cooked, ½" cubes	1 cup	145	138	0.4	27.1	1.5	0.2	0.2	0.5	123	305

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Macadamia nuts: 15 whole nuts	1 oz	28	198	4.5	2.2	20.3	3.1	16.3	0.6	0	
Macaroni: enriched, cooked, hot	1 cup	140	155	32.2	4.8	0.6	0	0.3	0.3	0	1
Mackerel: canned, solids and liquids	¼ cup	35	64	0	7.5	3.5	0.9	1.3	0.8	33	148
Mango: raw	1 whole	300	152	38.8	1.6	0.9	0	0	0.9	0	16
Milk: skim (less than 1% fat)	1 cup	245	86	11.9	8.4	0.4	0.3	0.1	0	4	126
Milk: low fat (1% to 2% fat)	1 cup	244	102	11.7	8.0	2.6	1.6	0.8	0.1	10	123
Milk: whole (3.3% fat)	1 cup	244	150	11.4	8.0	8.2	5.1	2.4	0.3	33	120
Molasses: light	1 tbsp	21	52	13.3	0	0	0	0	0	0	3
Mushrooms: raw, sliced, chopped, or diced	1 cup	70	20	3.1	1.9	0.2	0	0	0.2	0	11
Mustard: prepared, yellow	1 tsp	5	4	0.3	0.2	0.2	0	0	0.2	0	63
Nectarine: raw, 2 ½" diameter	1 whole	150	88	23.6	0.8	0	0	0	0	0	8
Noodles: egg, enriched, cooked	1 cup	160	200	37.3	6.6	2.4	0.8	1.1	0.2	50	3
Noodles: chow mein, canned	1 cup	45	220	26.1	5.9	10.6	2.8	4.3	2.9	5	
Oil: coconut	1 tbsp	14	120	0	0	13.6	11.7	0.8	0.2	0	0
Oil: cod liver	1 tbsp	14	120	0	0	13.6	2.4	7.0	3.5		0
Oil:corn	1 tbsp	14	120	0	0	13.6	1.7	3.4	7.9	0	0

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Oil: cottonseed	1 tbsp	14	120	0	0	13.6	3.6	2.6	6.9	0	0
Oil: olive	1 tbsp	14	119	0	0	13.5	1.9	9.8	1.2	0	0
Oil: palm kernel	1 tbsp	14	120	0	0	13.6	11.1	1.6	0.2	0	0
Oil: peanut	1 tbsp	14	119	0	0	13.5	2.6	6.2	4.1	0	0
Oil: safflower	1 tbsp	14	120	0	0	13.6	1.3	1.7	10.0	0	0
Oil: soybean	1 tbsp	14	120	0	0	13.6	2.0	3.1	7.8	0	0
Oil: soybean- cottonseed blend	1 tbsp	14	120	0	0	13.6	2.2	3.1	7.7	0	0
Oil: sunflower	1 tbsp	14	120	0	0	13.6	1.4	2.8	8.7	0	0
Okra: frozen, cooked, cut	1 cup	185	70	16.3	41	0.2	0	0	0.2	0	4
Olives: ripe, whole, extra large	10 whole	55	61	1.2	0.5	6.5	0.7	5.0	0.5	0	385
Olives: green, whole, large	10 whole	46	45	0.5	0.5	4.9	0.5	3.7	0.3	0	926
Onions: green, raw, 4 1/8 x 5/8"	2 med	30	14	3.2	0.3	0.1	0	0	0.1	0	2
Onions: mature, raw, chopped	1 cup	170	65	14.8	2.6	0.2	0	0	0.2	0	17
Onions: mature, cooked, whole or sliced	1 cup	210	61	1.7	2.5	0.2	0	0	0.2	0	15
Orange: Florida, medium, 2 11/16" diameter	1 whole	204	71	18.1	1.1	0.3	0	0	0.3	0	2
Orange juice: concentrate, frozen, unsweetened, diluted	1 cup	249	122	28.9	1.7	0.2	0	0	0.2	0	2

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Oysters: canned, 18 to 27 medium or 27 to 44 small	12 oz	340	224	11.6	28.6	6.1	1.8	0.7	2.0	170	248
Oysters: raw, 13 to 19 medium or 19 to 31 small	1 cup	240	158	8.2	20.2	4.3	1.2	0.5	1.4	120	175
Peach: raw, pared, 2 ¾" diameter, approx 2 ½ per lb	1 whole	185	51	12.9	0.8	0.1	0	0	0.1	0	1
Peaches: canned, syrup packed, halves, slices, or chunks	1 cup	256	200	51.5	1.0	0.3	0	0	0.3	0	5
Peanut butter	1 cup	258	1,520	48.5	65.0	130.5	27.1	60.7	39.0	0	1,561
Peanuts: roasted, salted, 10 Virginia, 20 Spanish, or 1 tbsp chopped	10 nuts	9	53	1.7	2.3	4.5	0.8	2.1	1.3	0	38
Pear: raw, Bartlett, 2 /2 x 3 ½"	1 (whole	180	100	25.1	1.1	0.7	0	0	0.7	0	3
Pear: canned, syrup- packed, with 1 2/3 tbsp liquid	1 half	76	58	14.9	0.2	0.2	0	0	0.2	0	1
Pear nectar: canned	1 cup	250	130	33.0	0.8	0.5	0	0	0.5	0	3
Peas: cow or black- eyed, canned, cooked	1 cup	255	179	31.6	12.8	0.8	0.2	0	0.3	0	602

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Peas: green immature, canned solids	1 cup	170	150	28.6	8.0	0.7	0	0.4	0.7	0	401
Peas: green immature, canned solids, low sodium	1 cup	170	122	22.1	7.5	0.7	0	0.4	0.7	0	5
Pecans: chopped or pieces	1 tbsp	7	51	1.1	0.7	5.2	0.5	3.1	1.3	0	Tr
Pepper: immature, green, raw, 3 ¾ x 3"	1 whole	200	36	7.9	2.0	0.3	0	0	0.3	0	21
Pepper: jalapeno, canned	1 whole	18	5	1.1	0.2	0	0	0	0	0	72
Pepper: jalapeno, fresh	1 whole	18	7	1.6	0.2	0	0	0	0	0	5
Pheasant: flesh only, raw	1 oz	28	46	0	6.7	1.9	0.5	0.8	0.2		
Pickle: dill or sour, large, 4x1 ¾"	1 whole	135	15	3.0	0.9	0.3	0	0	0.3	0	1,928
Pickle: dill or sour, 3 ³ ⁄4 x 1 ¹ ⁄4", low sodium	1 whole	65	7	1.4	0.5	0.1	0	0	0.1	0	4
Pickles: fresh, sweetened (bread and butter), 1 ½ and ¼"	2 slices	15	11	2.7	0.1	0	0	0	0	0	101
Pickle: sweet, gherkins, large 3 x 1"	1 whole	35	51	12.8	0.2	0.1	0	0	0.1	0	500
Pickle relish: finely chopped, sweet	1 tbsp	15	21	5.1	0.1	0.1	0	0	0.1	0	107

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Pie: frozen, baked, apple, 8" diameter	1 pie	550	1,386	219.0	10.6	54.8	13.6	27.3	12.2	0	1,168
Pie: frozen, baked, cherry, 8" diameter	1 pie	580	1,690	257.4	12.5	70.0	17.4	34.8	15.6	0	1,333
Pie: mix, baked, coconut custard (eggs and milk), 8" diameter	1 pie	797	1,618	231.9	34.3	63.0	27.1	31.1	8.0	837	1,873
Pineapple: raw, diced pieces	1 cup	155	81	21.2	0.6	0.3	0	0	0.3	0	2
Pineapple: canned, syrup- packed, chunk, tidbit or crushed	1 cup	255	189	49.5	0.8	0.3	0	0	0.3	0	3
Pineapple: canned, water- packed, tidbits	1 cup	246	95	52.1	0.7	0.2	0	0	0.2	0	2
Pineapple: in its own juice (no sugar added), 4 slices with juice or 1 cup with juice	1 cup	227	140	35.0	1.0	1.0	0	0	1.0	0	2
Pineapple juice: canned, unsweetened	1 cup	250	138	33.8	1.0	0.3	0	0	0.3	0	3
Plum: hybrid, fresh, 2 1/8" diameter	Whole	70	32	8.1	0.3	0.1	0	0	0.1	0	1
Plums: canned, served with 2 ¾ tbsp syrup	3 whole	140	110	28.7	0.5	0.1	0	0	0.1	0	1

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Popcorn: no salt or fat added to popped corn	1 cup	6	23	4.6	0.8	0.3	0	0.1	0.2	0	Tr
Pork: fresh, 10% fat, ham or picnic ham (lean only)	1 oz	28	61	0	8.4	2.8	0.9	1.2	0.3	25	18
Pork: fresh, 13-20% fat, Boston butt roast, chop, loin, shoulder (lean only)	1 oz	28	71	0	8.0	3.9	1.6	2.1	0.5	25	20
Pork: fresh, 23-30% fat, Boston butt, ground pork, ham, loin picnic, shoulder (lean and fat)	1 oz	28	103	0	6.6	8.3	2.9	3.8	0.9	25	16
Pork: spareribs, 37% fat (lean and fat)	1 oz	28	125	0	5.9	11.0	3.8	5.1	1.2	25	10
Pork: cured, 7-10% fat, ham or picnic ham (lean only)	1 oz	28	56	0	7.6	2.7	0.9	1.1	0.2	25	273
Pork: cured, 13-20% fat, Boston butt, shoulder (lean only)	1 oz	28	75	0	6.9	5.1	1.8	2.4	0.6	25	247
Pork: cured. 23-30% fat, ham, picnic, shoulder (lean and fat)	1 oz	28	93	0	6.4	7.2	2.5	3.4	0.8	25	230
Pork: deviled ham, canned	¼ cup	56	198	0	7.8	18.2	6.4	8.5	2.0	36	703

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Potato chips	10 chips	120	114	10.0	1.1	8.0	2.0	1.7	4.0	0	200
Potatoes: fresh, boiled, diced, or sliced	1 cup	155	101	22.5	2.9	0.2	0	0	0.2	0	3
Potato: fresh, baked in skin, 2 1/3x4¾"	1 whole	202	145	32.8	4.0	0.2	0	0	0.2	0	6
Potato: frozen, French fried, 4" strips (oven heated)	10 strips	78	172	26.3	2.8	6.6	1.6	1.4	3.3	0	3
Potato, sweet: fresh, baked 5 x 2"	1 whole	146	161	37.0	2.4	0.6	0	0	0.6	0	114
Potatoes, sweet: pieces, canned in syrup	1 cup	200	216	49.8	4.0	0.4	0	0	0.4	0	96
Pretzels: extruded type, rods, 7 ½ x ½"	1 whole	14	55	0.6	1.4	0.6	0.2	0.4	0.1	0	235
Pretzels: twisted type, rings (3), 17/8x1 ³ / ₄ x ¹ / ₄ "	10 whole	30	117	22.8	2.9	1.4	0.3	0.8	0.2	0	504
Prunes: dried, uncooked, without pits	10 whole	102	260	68.7	2.1	0.6	0	0	0.6	0	8
Prunes: dried, cooked, no added sugar	1 cup	250	253	66.7	2.1	0.6	0	0	0.6	0	9
Prune juice: canned or bottled	1 cup	256	197	48.6	1.0	0.3	0	0	0.3	0	335
Pudding mix: chocolate, made with whole milk	1 cup	260	322	59.3	8.8	7.8	4.3	2.6	0.2	36	335

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Pudding mix: chocolate, instant, prepared with whole milk	1 cup	260	325	63.4	7.8	6.5	3.6	2.2	0.3	36	322
Pudding mix: low calorie, dry form, 1 package (all kinds)	4 oz	128	100	24.0	0	0	0	0	0	0	280
Pumpkin: canned	1 cup	245	81	19.4	2.5	0.7	0	0	0.7	0	5
Quail: fresh and skin, raw	1 oz	28	48	0	7.2	2.0	0.5	0.9	0.5		1
Raisins: natural, seedless, uncooked, whole, not packed	1 tbsp	9	26	7.0	0.2	tr	0	0	tr	0	2
Raspberries: raw, red	1 cup	123	70	16.7	1.5	0.6	0	0	0.6	0	1
Rhubarb: frozen, sweetened	1 cup	270	381	97.2	1.4	0.3	0	0	0.3	0	5
Rice: brown, cooked without salt	1 cup	195	232	49.7	4.9	1.2	0.3	0.3	0.6	0	5
Rice: white, enriched, cooked without salt	1 cup	205	221	49.6	4.1	0.4	0.1	0.1	0.1	0	5
Roll: hard, enriched	1 roll	25	78	14.9	2.5	0.8	0.2	0.4	0.2	0	157
Roll: soft, enriched, brown and serve, or Parker House	1 roll	28	83	14.8	2.3	1.6	0.4	0.7	0.4	0	142

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Roll: enriched, hotdog (6 x 2") or hamburger (3 ½ x 1 ½")	1 whole	40	119	21.2	3.3	2.2	0.5	1.1	0.5	0	202
Salami: cooked, 4 ½" diameter slice	1 oz	28	73	0	5.0	5.8	2.1	2.7	0.6	15	297
Salmon: fresh, broiled or baked, no added fat	1 oz	28	48	0	7.7	1.6	0.5	0.8	0.1	10	33
Salmon: canned, drained, pink	1 oz	28	49	0	5.7	1.9	0.2	0.3	1.0	10	135
Salmon: smoked (Lox)	1 oz	28	50	0	6.1	2.6	0.5	0.8	0.1	10	135
Salt:table	1 tsp	6	0	0	0	0	0	0	0	0	2,196
Salt:pork	1 oz	28	219	0	1.1	24	8.5	11.3	2.7	20	340
Sandwich spread: with chopped pickle	1 tbsp	15	58	2.4	0.1	5.5	1.1	1.4	3.1	8	96
Sandwich spread: low calorie	1 tbsp	15	17	1.2	0.2	1.4	0.3	0.3	0.8	0	94
Sardine: canned in oil, 3 x 1 x ½"	1 whole	12	24	0	2.9	1.3	0.4	0.4	0.4	17	99
Sauerkraut: canned, solids and liquid	1 cup	235	42	9.4	2.4	0.5	0	0	0.5	0	1,755
Sausage, Polish: 55/8 x 1"	1 link	76	231	0.9	11.9	19.6	6.9	9.1	1.7	47	836
Sausage, pork: 4 x 7/8" (uncooked)	1 link	13	49	0	2.4	4.2	1.5	2.0	0.5	8	125

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Sausage, Vienna: canned, 2 x 7/8" diameter	1 whole	16	56	0	2.2	5.2	1.8	2.5	0.6	10	157
Scallops: fresh, cooked, steamed	1 oz	28	32		6.6	0.3	0	0	0.1	15	75
Sesame seeds: dry, hulled	1 tbsp	8	47	1.4	1.5	4.4	0.6	1.6	1.8	0	
Sherbet: orange	1 cup	193	270	58.7	2.2	3.8	2.4	1.1	0.1	14	88
Shortening: animal	1 tbsp	13	111	0	0	12.5	6.3	5.5	0.8	10	0
Shortening: animal- vegetable	1 tbsp	13	111	0	0	12.5	5.6	5.5	1.1	6	0
Shortening: vegetable	1 tbsp	13	111	0	0	12.5	3.3	5.8	3.5	0	0
Shrimp: 4 ½ oz can drained	1 cup	128	148	0.8	31.0	1.5	0.2	0.2	0.6	192	
Shrimp: canned, approx 2" long (small)	10 whole	17	20	0.1	4.1	0.2	0	0	0.1	26	
Shrimp: fresh, cooked, 8 shrimp, each 3 ¼" long	2 oz	58	67	0.4	14.0	0.7	0.1	0.1	0.3	87	81
Snapper: rec or gray, raw	1 oz	28	26	0	5.6	0.3	0.1	0.1	0.1		19
Sole: raw	1 oz	28	22	0	4.7	0.2	0	0	0.1		22
Soup: canned, bean with pork, prepared with equal volume of water	1 cup	250	170	21.8	8.0	3.0	1.5	2.2	1.8	4	1,008

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Soup: canned, beef broth, prepared with equal volume of water	1 cup	240	31	2.6	5.0	0	0	0	0	0	782
Soup: canned, cream of celery, prepared with equal volume of water	1 cup	240	86	8.9	1.7	5.5	1.4	1.2	2.4	7	955
Soup: canned, cream of chicken, prepared with equal volume of water	1 cup	240	94	7.9	2.9	5.8	2.0	3.2	1.4	8	970
Soup: canned, cream of mushroom, prepared with equal volume of water	1 cup	240	132	10.1	2.4	9.4	2.5	1.8	4.4	6	955
Soup: canned, chicken noodle, prepared with equal volume of water	1 cup	240	67	7.9	3.4	2.4	0.6	1.0	0.5	6	979
Soup: canned, clam chowder, Manhattan style, prepared with equal volume of water	1 cup	245	78	12.3	2.2	2.2	0.4	0.4	1.3	6	938
Soup: canned, minestrone, made with equal vol of water	1 cup	245	105	14.2	4.9	2.7	0.6	0.7	1.2	2	995

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Soup: canned, onion, prepared with equal volume of water	1 cup	240	65	5.3	5.3	2.4	0.8	1.0	0.6	6	1,051
Soup: canned, split pea, prepared with equal volume of water	1 cup	245	145	20.6	8.6	3.2	1.0	1.5	0.3	6	941
Soup: canned, tomato, prepared with equal volume of water	1 cup	245	89	9.6	5.3	3.4	0.8	0.9	1.6	6	1,046
Soup: canned, vegetable beef, prepared with equal volume of water	1 cup	245	89	9.6	5.3	3.4	0.8	0.9	1.6	6	1,046
Soup: canned, vegetarian vegetable, prepared with equal volume of water	1 cup	245	80	13.2	2.2	2.2	0.5	0.6	0.9	2	838
Soup: dehydrated, onion, 1 package	1 ½ oz	43	150	23.2	6.0	4.6	1.0	2.0	1.0	0	2,871
Soy sauce	1 tbsp	18	12	1.7	1.0	0.2	0	0	0.2	0	1,319
Soybeans: mature seeds, cooked	1 cup	180	234	19.4	19.8	0.3	1.5	2.1	5.3	0	4
Soybean curd (tofu): 2½x2¾x1"	1 piece	120	86	2.9	9.4	5.0	0.8	1.0	2.6	0	8

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Soybean seeds: sprouted, cooked	1 cup	125	48	4.6	6.6	1.8	0.5	0.2	1.1	0	
Soybean seeds: sprouted, raw	1 cup	105	48	5.6	6.5	1.5	0.5	0.1	0.9	0	
Spaghetti: enriched, cooked without salt	1 cup	140	155	32.2	4.8	0.6	0	0	0.6	0	1
Spaghetti with meat balls and tomato sauce: canned rings	1 cup	250	258	28.5	12.3	10.3	2.2	3.3	3.9	39	1,220
Spinach: frozen, cooked	1 cup	205	47	7.6	6.2	0.6	0	0	0.6	0	107
Spinach: canned, low sodium	1 cup	205	53	8.2	6.6	1.0	0.3	0.1	0.6	0	66
Squash, summer: fresh, cooked, sliced	1 cup	180	25	5.6	1.6	0.2	0	0	0.2	0	2
Squash, winter: frozen, cooked	1 cup	240	91	22.1	2.9	0.7	0	0	0.7	0	2
Stew: beef and vegetable, canned	1 cup	245	194	17.4	14.2	7.6	3.2	3.1	0.2	36	1,007
Strawberries: fresh, whole	1 cup	149	55	12.5	1.0	0.7	0	0	0.7	0	1
Sugar: brown, packed	1 cup	220	821	212.1	0	0	0	0	0	0	66
Sugar: granulated	1 tbsp	12	46	11.9	0	0	0	0	0	0	Tr

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Sugar: powdered confectioners' unsifted	1 tbsp	8	31	8.0	0	0	0	0	0	0	Tr
Sunflower seed kernels: dry, hulled	1 tbsp	9	51	1.8	2.2	4.3	0.5	0.9	2.7	0	3
Sweet roll: Danish pastry, without nuts or fruit, 4 ½"	1 whole	65	274	29.6 4.8	15.3	4.5	7.1	2.8	17	238	
Sweetbreads (thymus), beef	1 oz	28	90	0	7.3	6.6				132	99
Syrup: cane and maple	1 tbsp	20	50	12.8	0	0	0	0	0	0	Tr
Taco shell: fried tortilla	1 whole	30	146	19.7	2.6	5.6	1.5	2.3	1.5	0	Tr
Tangerine: large, 2 ½" diameter	1 whole	136	46	11.7	0.8	0.2	0	0	0.2	0	2
Tapioca: dry	1 tbsp	10	33	8.2	0.1	Tr	0	0	Tr	0	Tr
Tartar sauce	1 tbsp	14	76	0.6	0.2	8.3	1.0	2.1	4.1	7	102
Tomatoes: canned, solids and liquid	1 cup	241	51	10.4	2.4	0.5	0	0	0.5	0	313
Tomatoes: fresh, raw, 3 x 2 1/8" high (tomato = 6 slices)	1 whole	200	40	8.6	2.0	0.4	0	0	0.4	0	5
Tomatoes: fresh, cooked	1 cup	241	63	13.3	3.1	0.5	0	0	0.5	0	10
Tomatoes: canned, solids and liquid, low sodium	1 cup	241	48	10.1	2.4	0.5	0	0	0.5	0	7

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Tomato catsup: canned or bottled	1 cup	273	289	69.3	5.5	1.1	0	0	1.1	0	2,845
Tomato chili sauce: bottled	1 cup	273	284	67.7	6.8	0.8	0	0	0.8	0	3,653
Tomato juice: canned or bottled	1 cup	243	46	10.4	2.2	0.2	0	0	0.2	0	486
Tomato juice: canned or bottled, low sodium	1 cup	242	46	10.4	1.9	0.2	0	0	0.2	0	7
Tomato paste: canned	1 cup	262	215	48.7	8.9	1.0	0.3	0.1	0.6	0	100
Tomato paste: low sodium	1 cup	262	215	48.7	8.9	1.0	0.3	0.1	0.6	0	40
Tomato sauce	1 cup	240	80	18.0	3.0	0	0	0	0	0	882
Tomato sauce: low sodium	1 cup	240	80	18.0	3.0	0	0	0	0	0	13
Tortilla: corn, 6" diameter	1 whole	30	70	13.4	1.6	0.6	0	0	0	0	Tr
Tortilla: flour	1 whole	30	108	22.4	2.9	1.2	0.6	0.8	0.3	0	120
Tuna: water packed, canned, chunk style, solids and liquid, low sodium	6 ½ oz	2184	234	0	51.5	1.5	0.4	0.3	0.4	115	75
Tuna: oil- packed, canned (drained), 1 cup	4 ½ cup	127	295	0	46.1	10.9	3.6	2.8	2.9	104	1,280
Turkey: light meat, without skin	1 oz	28	45	0	9.3	0.7	0.2	0.2	0.2	22	23

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Turkey: dark meat, without skin	1 oz	28	48	0	8.5	1.5	0.4	0.4	0.4	29	28
Turkey: light and dark with skin	1 oz	28	63	0	9.0	2.9	0.8	1.0	0.8	30	
Turkey bologna or franks	1 oz	28	71	2.1	3.5	5.4	2.4	2.1	0.9	37	336
Turkey ham	1 oz	28	40	0.5	5.5	1.5	0.4	0.4	0.4	28	280
Turkey pastrami	1 oz	28	34	0.8	5.2	1.6	0.4	0.4	0.4	29	525
Turkey salami: with skin	1 oz	28	50	0.5	4.6	3.6	0.8	1.0	0.8	26	454
Turnip greens: frozen, chopped, cooked	1 cup	165	38	6.4	4.1	0.5	0	0	0.5	0	28
Turnips: fresh, cooked, cubes	1 cup	155	36	7.6	1.2	0.3	0	0	0.3	0	53
Veal: <6% fat, breast, riblet, cutlet, leg, loin, rump, shank, shoulder steak (lean only)	1 oz	28	40	0	5.7	1.7	0.9	0.8	0.1	28	16
Veal: 10% fat, cutlet, leg, rump, shank, shoulder, steak (lean and fat)	1 oz	28	61	0	8.2	3.0	1.4	1.3	0.2	28	13
Veal: 15% fat, loin (lean and fat)	1 oz	28	67	0	7.5	3.8	1.8	1.6	0.2	29	13
Veal: 25% fat, breast riblet (lean and fat)	1 oz	28	86	0	7.4	6.0	3.2	2.9	0.3	29	14

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Vinegar: cider	1 cup	240	34	14.2	0	0	0	0	0	0	2
Waffle: made from mix, 7 x 5/8"	1 waffle	75	206	27.2	6.6	8.0					515
Walnuts: English, chopped pieces	1 tbsp	8	49	1.2	1.1	4.8	0.5	0.7	3.1	0	Tr
Water chestnuts	4 nuts	25	20	4.8	0.4	0.1	0	0	0.1	0	5
Watermelon: diced pieces	1 cup	160	42	10.2	0.8	0.3	0	0	0.3	0	2
Watermelon: 10 x 1" wedge, or 4" arc x 8" radius	1 slice	926	111	27.3	2.1	0.9	0	0	0.9	0	4
Weiner: 5 x ¾"	1 whole	45	139	0.8	5.6	12.4	4.7	5.9	0.8	27	495
Wine: dessert (port, Madeira, sweet sherry)	1 oz	30	41	2.3	0	0	0	0	0	0	1
Wine: table (burgundy, rosé, white, dry sherry)	1 oz	29	25	1.2	0	0	0	0	0	0	1
Worcestershire Sauce	1 tbsp	15	6	1.4	0.1	0	0	0	0	0	267
Yeast: bakers, dry package, scant tbsp	¼ OZ	7	20	2.7	2.6	0.1	0	0	0.1	0	4
Yogurt: skim, home recipe	1 cup	227	127	17.4	13.0	0.4	0.3	0.1	0	4	174
Yogurt: plain, low fat	1 cup	227	144	16.0	11.9	3.5	2.3	1.0	0.1	14	159

Food	Unit	Weight (g)	Calories	Carbohydrate (g)	Protein (g)	Fat	Saturated Fat (g)	Mono Fat (g)	Poly Fat (g)	Cholesterol (mg)	Sodium (mg)
Yogurt: whole milk	1 cup	227	139	10.6	7.9	7.4	4.8	2.0	0.2	29	105
Yogurt: with fruit (1-2%)	1 cup	227	225	42.3	9.0	2.6	1.7	0.7	0.1	10	121
Yogurt: frozen (2% fat)	1 cup	227	244	48.0	6.0	3.0	1.9	0.7	0.1	10	121
Yogurt: greek	2/3 cup	150	130	5	11	5	5			20	70

From "Reversing Heart Disease" by Dr Dean Ornish.



RENEW© Module Four- Energizing Your Body

Do what's fun! Do it often!

At a time when people are so conscious of maintaining their physical health by controlling their diets, exercising and so forth, it makes sense to try to cultivate the corresponding positive mental attitudes too. ~His Holiness the Dalai Lama

Worksheet #31

W hy not make choices in your life to support your vitality, clear your head, heal your body and invigorate your immune system? Each of the five steps of The RENEW Program© works with the next to keep you functioning at your optimal level of health. This next module is about moving your body. As technology has increased, one of the fallouts is that we move less. Since movement is not part of our lives, we now need to schedule it into our day. If you do not truly understand the important benefits of moving your body, you might tend to put it on the back burner, or become a "weekend warrior." This is a realistic program designed for busy people, who lead busy lives. With a little knowledge and a little planning, making a few small changes can lead to beneficial health outcomes and increased longevity.

Did you know that a 15-minute walk increases your blood circulation (which delivers oxygen and glucose to your brain), so you'll think more clearly? Regular walking can improve your ability to concentrate and your working memory, even if you don't start exercising until your 70's. Walking strengthens your blood vessels, boosts your immune system and improves your mood. So taking one 15-minute walk mid day will actually help you finish your day more productively. Even the busiest people among us can find time for that.

Change Your Biochemistry

During exercise your biochemistry is affected. The body produces and releases optiate-like chemicals called endorphins, which are the body's way of reducing the pain that can come with a hard workout. Endorphins, produced in moderate levels, make you feel happy; you might have heard them referred to as "a runner's high."

The body also releases neurotransmitters such as dopamine, norepinephrine and seratonin. Low levels of these neurotransmitters can result in anxiety and depression, which is why exercising can help you feel less depressed or anxious. When you feel anxious, sad or stressed at work, or feel tempted to pop a Tylenol for a headache, go for a short walk. It will most likely help. Exercise helps to reduce cortisol as

well as other stress hormones, breaking them down so they can be eliminated from the body. Exercise also affects your hormonal balance, releasing fat-burning growth hormones and boosting testosterone. It increases DHEA, which affects your adrenal system, gives you energy and strengthens your libido.

A Myriad Benefits

There are many choices in how much to exercise. 30 minutes of moderate daily activity, like walking, will benefit your health. However, by putting a little more effort into it, you will reap more benefits. For instance, in just three weeks of going to the gym for 4-5 hours and doing a combination of cardiovascular exercise and strength training, you can start to reverse insulin resistance. Women who lift moderate to heavy weights produce more active and sustained growth hormone after their workouts than women who do other forms of exercise. The greater your muscle mass, the higher your metabolism, and the more sensitive to insulin your muscles become. Both men and women have much better hormone balance when they have more muscle.

New research shows that exercise positively affects your genes, helps reverse the aging process at a cellular level and gives you more energy. One of the reasons that many people feel less energy as they get older is that their mitochondria work less efficiently with age. Mitochondria are the cell's energy generators of the body. A recent study showed that after six months of strength training, the genetic code of the older men and women participants changed more than that of younger people. They reported feeling more energetic and able to pick up grandchildren, whereas before they had difficulty. If only six months of exercise can affect older people so dramatically by changing their genetic markers, increasing their energy level and strength, what's stopping you from establishing your own routine at every stage of your life?

Another study found that by walking for three hours per week for only three months caused so many new neurons to grow that the size of people's brains actually increased. The region of the brain that grew the most was the hippocampus, the area most involved with memory and cognition. After only three months, those who exercised had brain volumes typical of people three years younger. Researchers concluded that cardiovascular fitness is associated with the sparing of brain tissue in aging humans. The results suggest a strong biological basis for the role of aerobic fitness in maintaining and enhancing central nervous system health and cognitive functioning in aging adults, slowing down the aging process and in some cases reversing it.

Regular, moderate exercise also reduces inflammation throughout the body, including the brain, and reduces the incidence of tiny strokes that can impair your ability to think clearly.

Avoid Disease

Exercise lengthens your life and helps determine your guality of life, healing you into a healthy body and mind. If you exercise moderately for only 30 minutes a day you will live years longer than someone who is sedentary. Science is continuing to validate more ways that exercise heals the body. Exercise helps reverse heart disease and maintains that reversal, as it does with prostate cancer, Type 2 diabetes, and hypertension. Exercise raises your metabolic rate so you burn more calories while resting, lose body fat, lower blood sugar, blood pressure, lower total cholesterol, lower LDL "bad" cholesterol, lower triglycerides, increases HDL "good" cholesterol, reduce the risk of heart attack and of developing blood clots that trigger heart attack thereby reducing the risk of stroke (most strokes are caused by blood clots in the brain).

Exercise increases your strength, flexibility, stamina and heart function (more blood is pumped per beat, carrying more oxygen to all cells). It improves muscle efficiency so your muscles work better, increases lean muscle tissue and muscle mass, increases bone density so there's less risk of osteoporosis and fractures. Exercise improves balance, which can decline with age, keeps the joints healthier allowing you to move more easily and without pain. Studies show it helps people feel more mentally resilient, better able to cope with life stress, gives self confidence, increases self esteem and fuels a general sense of well being. It also improves your sleep.

Even people who are not physically fit, overweight, sedentary, and have borderline high blood pressure receive benefits from regular, moderate exercise like walking 15 to 30 minutes daily. Studies also show that you can break the time up into 10-minute segments throughout the day and still benefit. If you are sedentary or just beginning to move your body, this is a good way to begin. This section of the program is devoted to finding fun, creative options to inspire you into daily movement that specifically support your health goals. You do not need to spend hours a day to create wellness. If it's fun, you'll do it. If you know why you'e doing it, you will make it happen and keep doing it. With all of these compelling reasons to exercise, what are you waiting for?

For now, list 10 reasons why you want to benefit from exercising 30 minute	es a day.
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

.. . . .

RENEW© Module Four- Energizing Your Body

Exercise for Wellness, Fitness or Sports Performance

What you resist, persists. ~Carl Jung

Worksheet #32

There are two levels of exercise goals presented: overall wellness and fitness.

Overall Wellness

The most current U.S. Department of Health and Human Services Physical Activity and Fitness Objective recommends;

- Every person engage in regular, moderate physical activity for at least 30 minutes per day, five days per week (150 minutes)
- Or vigorous levels on three days per week (75 minutes)

The recommendation also emphasizes the benefits of moderate physical activity that can be accumulated in bouts of 10 minutes of exercise. This recommendation is not intended to represent the optimal amount of physical activity for health but instead a minimum standard or base on which to build.

As a general rule, a person doing moderate intensity aerobic activity can talk, but not sing, during the activity. A person doing vigorous intensity activity cannot say more than a few words without pausing for a breath.

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Examples of moderate intensity cariovascular activity:

- Walking briskly (three miles per hour or faster-but not race walking)
- Water aerobics
- Bicycling slower than 10 mi per hour
- Tennis (doubles)
- General gardening
- Washing windows and floors
- Washing and waxing a car
- Raking leaves
- Walk up stairs instead of escalator

Examples of vigorous intensity cariovascular activity:

- Racewalking, jogging or running
- Swimming laps
- Tennis (singles)
- Aerobic dancing
- Bicycling 10 mi per hour or faster
- Jumping rope
- # Heavy gardening (continuous digging or hoeing, with heart rate increases)
- Hiking uphill or with a heavy backpack
- Skating
- Soccer 🏶
- Basketball
- Volleyball
- Spinning
- Kick boxing
- Fast dancing
- Trampoline bouncing
- Stair walking

Make exercise fun to do, build it into your routine, and you will do it! If you want to do 10-minute increments, focus on that 10 minutes and be purposeful. Engaging your core muscles will help make the most of your workouts. See the Additional nformation: How to Engage Your Core Muscles starting on page 258.

Older adults (age 65 and above): When an older adult is unable to exercise because of chronic conditions, they should understand how their condition affects them so they can be as physically active as their abilities and conditions allow. Older adults should also do exercises that maintain or improve balance, since balance tends to be affected as people age. Exercise will benefit you no matter what your chronological age is. Again, keep it fun and you will do it often!

Inactive adults who do not yet do 150 minutes of activity a week should work gradually towards this goal. The initial amount of activity should be light or moderate for short periods of time, with the sessions spread throughout the week. It is important to increase the amount of physical activity gradually over a period of weeks to months. For example, an inactive person could start with a walking program consisting of five minutes of slow walking several times each day, five-six days a week, gradually increasing to 10 minutes per session, three times a day at a slightly faster speed.

Muscle strengthening activities should also be gradually increased over time, especially for inactive

adults. To begin muscle strengthening activities, start at a light or moderate level of effort once week. Over time, increase the number of days a week to two, and then possibly more. Each week, the level of effort or intensity can be increased slightly until it becomes moderate to high.

Orthopedic injuries can occur from overuse, improper use or from direct injury. If you do get hurt, decrease inflammation immediately. If you suspect any serious injury, consult your doctor right away.

Remember RICE:

Rest,

Ice 20 minutes at a time each hour of the first day, then twice a day for the next two days. (If you have peripheral circulatory problems, do not use ice.)

Compression can be achieved by using an elastic bandage to hold the ice pack on the injured area. *Elevate* the injured area to a level above the heart.

Warning Signs

If you experience any of the following during or after exercise, stop and see your doctor promptly: dizziness, recurrent and excessive fatigue, unusually heavy sweating, rapid or irregular heartbeats, unusual shortness of breath, poor recovery, new or increased chest, jaw, back or arm pain, or chest pain, or chest discomfort/pressure/weight.

Fitness

For additional and more extensive health benefits:

- Either increase your aerobic physical activity to five hours a week (300 minutes) of moderate intensity
- The second secon
- The second secon
- Add to that moderate or high intensity muscle strengthening exercises that involve all major muscle groups for two or more days per week

Increased activity will improve cardiovascular fitness, muscle endurance, muscle strength, flexibility and body composition.

Some Definitions

Cardiovascular fitness or aerobic capacity: The ability of the body to perform high-intensity activity for a prolonged period without any undue physical stress or fatigue. (See list of vigorous intensity activities on the precious page for examples). This increases the amount of oxygen delivered to your

muscles to allow them to work longer. Higher levels of cardiovascular fitness can be achieved by increasing the frequency, duration, or intensity beyond the minimum recommendation of 20 minutes per activity, three times per week. See Additional Information: Target Heart Rate pg 256.

Muscular strength and endurance: The ability of skeletal muscles to perform hard or prolonged work without physical stress or fatigue when performing tasks of daily living such as home maintenance and household activities, sweeping, raking or gardening. Weight training maintains essential muscle strength and endurance throughout the life cycle. Resistance exercise, such as weight and resistance band training and Pilates, strengthens and builds muscles to work harder and longer before becoming exhausted.

Flexibility: The range of motion in a joint or sequence of joints. Joint movement throughout the full range of motion helps improve and maintain flexibility. People with greater total body flexibility may have a lower risk of back injury. Swimming is a great way to achieve joint mobility. Regular stretching like yoga and Pilates, and a variety of activities that require bending, crouching and reaching will also help maintain joint mobility. Stretching lengthens the muscles to counteract the shortening that can happen through inactivity, or the natural aging process. In combination, stretching and moderate to vigorous activity will improve muscle tone, body shape, and can help alleviate any structural aches and pains.

Bone health

Our bones grow in size during childhood, gaining mass and strength. If you are between 35 and 50 years of age, you may have begun to lose some bone mass. Getting 1,000 mg of calcium daily and doing weight bearing exercise are crucial to keeping bone loss to a minimum. Weight bearing exercise is accomplished by adding extra weight while you workout. This added weight forces your bone to adapt to the impact of the weight and pull of muscle by building more cells and becoming stronger. If you are over 50, taking calcium and weight bearing exercise are important, as is getting appropriate amounts of vitamin D. Walking, jogging, or doing weight-bearing exercise three times a week for at least 20 minutes is recommended. (Jogging and jumping rope are considered weight -bearing exercise because your feet and legs must carry your body weight as you do them.)

Examples of weight bearing exercise are:

- Jogging or jumping rope
- Walking
- Climbing stairs
- Hiking
- Dancing
- Cross country skiing

- Team sports (soccer, baseball, basketball)
- Weight training
- Bowling
- Skating
- 🏶 Karate

If musculoskeletal conditions prevent weight bearing exercise, then swimming and cycling are good alternatives, since they do have some bone building capacity.

Sex

Sexual activity can promote good cardiovascular health. One study found that men reduced their risk of heart attack or stroke by half by having sex three times a week. You can burn 200 calories from sex —the same benefit from running 15 minutes on a treadmill. Pulse rate rises from about 70 bpm to 150, the same as an athlete with maximum effort. Muscular contractions work the pelvis, buttocks, thighs, arms, neck and chest. Sex boosts the production of hormones in both men and women that leads to stronger bones and muscles; and boosts the immune system. People who have sex even once a week test with 30% higher levels of the antibody immunoglobulin, which is an important component of the immune system. Sexual arousal releases hormones that alleviate pain from headache to arthritis. In women, production of estrogen can reduce the pain of PMS.

Weight Loss

Excess body weight happens when too few calories are expended and too many are consumed for individual metabolic requirements. The ratio of fat to lean body weight is another component of health-related fitness. Physical activity burns calories, increases the proportion of lean to fat body mass and raises the metabolic rate. *The Dietary Guidelines for Americans* recommends moderate intensity physical activity for 60-90 minutes per day to sustain weight loss. The frequency, duration and intensity of exercise are the main determinants of how much weight you lose and how quickly.

If you have not been exercising, work your way up to two-and-a-half hours of moderate aerobic and resistance training exercise per week. Gradually increase the amount of time you spend exercising to 30-60 minutes a day of combined moderate aerobic and resistance training exercise per week. This level of exercise appears to be the most successful in helping to lose weight. A healthy pace of losing weight is about two pounds per week. However, we recommend changing your lifestyle and not thinking about the rate of weight changes. Concentrate on feeling good. Work on all the steps of The RENEW Program[©]. Get your food choices from the Road Map to Success, eat in moderate amounts and exercise 30 minutes daily in order to lose weight. If you are not losing weight you may need to make bigger lifestyle changes.

	needs this many calories
An average sized woman who wants to lose weight	1,200-1.400
A petite woman at your desired body weight	1,200-1,400
An average-sized sedentary woman at desired body weight	1,200-1,400
A larger woman who wants to lose weight	1,400-1,600
A larger, sedentary woman at desired body weight	1,400-1,600
A moderate-to-large, somewhat active woman at your desired body weigh	ht 1,600-1,900
An older man at your desired body weight	1,600-1,900
A small-to-moderate-sized man who wants to lose weight	1,600-1,900
A larger, active woman at your desired body weight	1,900-2,300
A small-to-moderate sized man at your desired body weight	1,900-2,300
A moderate-to-large active man at your desired body weight	2,300-2,800

The Additional Information on page 259 from the American College of Sports Medicine estimates how long you need to exercise to burn 300 calories. Remember don't focus on the calorie amounts, notice what you can do to have fun and expend calories!

The Additional Information on page 260-261 has more choices of fun activities with caloric expenditure and intensity of exercise indicated. Again, don't focus on the calorie amounts, notice what you can do to have fun and expend even more calories!

The Additional Information on page 159-201 has tools to help you lose weight.

Remember, in addition to nourishing your body and moving every day is important and responding to stress more effectively is also an integral part of weight loss. Many people overeat to deal with emotional stress, and because of the release of hormones including cortisol they crave fatty, salty or sugary foods. These hormones can cause you to gain weight around your belly, where it's most harmful. Belly fat, also called visceral fat, is signaled by cortisol and is associated with high incidences of disease and inflammation in the body. Physicians measure waist circumference to identify patients at increased risk for heart disease and diabetes. Studies also show that stress management techniques like the ones presented in this program are directly correlated with the amount of weight people can lose. How much time you spend on stress management or on relaxation techniques is up to you, but the more time you spend, the more weight you will lose, and the more likely you are to keep it off! Focus on the positive and have a good attitude. Enjoy your food and the feeling of success. If you feel great, success will follow!

Sports Performance

In addition to our suggestions in the Wellness and Fitness sections, we also recommend a coach or fitness trainer to guide you if your goal is sports performance. We recommend a coach or fitness trainer if your goal is sports performance.



RENEW© Module Four- Energizing Your Body

Exercise Goals and Preferences

Worksheet #33

Why do you want to improve your level of activity now?

Rate your current fitness level on a scale of 1-10 (1=Worst 10=best).

Check the boxes next to the goals that are most important to you.

Improve cardiovascular fitness or endurance	Reduce the risk of age related injury
Improve eating habits	Reduce cholesterol
Improve flexibility	Reduce blood pressure
Improve overall health	Reduce risk of disease
Improve strength	Reduce stress
Improve muscle tone & shape	Gain weight
Increase energy	Other:
Lose weight	Other:

Do you prefer to exercise alone, with a partner or in a group?

What types of physical activity do you enjoy?

└ Aerobics	Hiking	Skating
□ Active gardening	Hockey	Stair/bench stepping
Backpacking	Jogging/running	Stretching
Baseball/softball	Jump roping	Swimming
Climbing	Martial arts	Tennis
Cross country skiing	Pilates	Volleyball
Dancing	Racquetball/handball	Walking
Downhill skiing	Roller blading	Weight training
Eootball	Rowing	🗌 Yoga
Golfing	Soccer	Martial arts

What other types of physical activity do you like?

How many times a week do yo	u want to work out?	
1-2 days	3-4 days	
2-3 days	5+ days	
How long will each session be	?	
10-20 minutes	30-40 minutes	
20-30 minutes	50+ minutes	
What days of the week are you available for exercising?		
Monday	Friday	
Tuesday	Saturday	
Wednesday	Sunday	
Thursday		
How will you measure your pro	ogress?	
(examples: body weight, measure	ements, minutes spent before fatigue, miles walked, time spent,	
energy levels etc). For beginners and all others, time spent is recommended.		

RENEW© Module Four- Energizing Your Body Overcoming Obstacles

Worksheet #34 What keeps you from being more active?

Instructions: Listed here are reasons why people say they do not get enough physical activity.					
Please read each statement and indicate how likely you are to say each of them:					
How likely are you to say?	Very likely	Somewhat likely	Somewhat unlikely	Very unlikely	
1. My day is so busy that I just do	3	2	1	0	
not think I can make the time to	0	<u>_</u>		0	
include physical activity in my regular					
schedule.					
2. None of my family members or friends	_				
like to do anything active, so I do not	3	2	1	0	
have a chance to exercise.					
3. I am just too tired after work to get	3	2	1	0	
any exercise.					
4. I have been thinking about getting	_	_	_	_	
more exercise, but I just cannot seem to	3	2	1	0	
get started.					
5. I am getting older, so exercise can be	3	2	1	0	
risky.		_		-	
6. I do not get enough exercise because					
I have never learned the skills for any	3	2	1	0	
sport.					
7. I do not have access to jogging trails,	3	2	1	0	
swimming pools, bike paths, and so	0	-	•	0	
forth.					
8. Physical activity takes too much time	3	2	1	0	
away from other commitments – work,					
family and so on.					
9. I am embarrassed about how I will	3	2	1	0	
look when I exercise with others.	Ŭ	-	•	<u> </u>	
10. I do not get enough sleep as it is. I	3	2	1	0	
just could not get up early or stay up late					
to get some exercise.					
11. It is easier for me to find excuses	3	2	1	0	
not to exercise than to go out to do	5	2		0	
something.					
12. I know of too many people who	3	2	1	0	
have hurt themselves overdoing it with					
exercise.					
13. I really cannot see learning a new	3	2	1	0	
sport at my age.	Г У	<u>_</u>	-	Ŭ	
14. It is just too expensive. You have	3	2	1	0	
to take a class or join a club or buy the					
right equipment.					

How likely are you to say?	Very likely	Somewhat likely	Somewhat unlikely	Very unlikely
15. My free times during the day are too short to include exercise.	3	2	1	0
16. My usual social activities with my family or friends do not include physical activity.	3	2	1	0
17. I am too tired during the week and I need the weekend to catch up on my rest.	3	2	1	0
18. I want to get more exercise, but I just cannot seem to make myself stick to anything.	3	2	1	0
19. I am afraid I might injure myself or have a heart attack.	3	2	1	0
20. I am not good enough at any physical activity to make it fun.	3	2	1	0
21. If we had exercise facilities and showers at work, then I would be more inclined to exercise.	3	2	1	0

To identify what blocks your path to improved health follow these instructions to tally your score:

The space set of the space provided, putting the number for statement 1 in space

1, statement 2 in space 2, and so on.

Add the three sources on each line. Your obstacles to physical activity fall into one or more of seven categories: lack of time, social influences, lack of energy, lack of willpower, fear of injury, lack of skill, and lack of resources.

The highest score shows where you need to focus and turn it around.

1 =	8 =	15 =	Row sum =	Lack of time
2 =	9 =	16 =	Row sum =	Social influence
3 =	10 =	17 =	Row sum =	Lack of energy
4 =	11 =	18 =	Row sum =	Lack of willpower
5 =	12 =	19 =	Row sum =	Fear of injury
6 =	13 =	20 =	Row sum =	Lack of skill
7 =	14 =	21 =	Row sum =	Lack of resources

From the Center For Disease Control and Prevention.

If lack of time is your stumbling block, you could:

Make a schedule for your activities and workouts. Be sure to plan a specific time frame for each day of the week.

Park farther away from your office and walk 5 minutes to and from the car, walk the dog after work briskly, or do situps while you watch tv, for example. Use lunch breaks to go swimming, use coffee breaks to walk around the block.

Choose activities that you can do in short segments of time like climbing stairs or jogging for 15 minutes.

Subset a DVD to exercise to in your home.

If social influence is the issue:

Let family and friends know about your desire to be more active and see if anyone would like to join you.

Plan social activities that involve exercise like hiking or taking a walk in a scenic location.

Soin a group like the Sierra Club which has hiking groups, or the YMCA and you'll meet people you can be more active with.

If lack of energy stops you:

Schedule your physical activity for a time in the day when you usually feel energetic, such as first thing in the morning.

Physical activity will increase your energy level quickly. Try it for one week and see for yourself.

If you have a lack of willpower:

* Make a commitment to yourself or to someone else to show up and do a fun, time-limited activity.

Don't think too much so you can talk yourself out of it. Make a manageable plan you feel good about and do it.

Have a friend make the same schedule and do it together.

Join a class or an exercise group that you feel comfortable going to.
If you're afraid of injury:

Learn how to warm up and cool down.

Learn what to do and what not to do with your physical limitations.

Choose activities and work for you.

If you feel your lack of skill holds you back:

Try activities requiring no skills, like walking or climbing stairs.

Surround yourself with people who are at the same skill level as you. Join a beginning group or walk with a friend who is also just beginning to get back into exercise.

Take a class where you can learn new skills, or have a friend teach you.

If you have a lack of resources:

Choose activities that don't require equipment.

Find inexpensive resources in your community like a park and recreation program or a park with workout stations.



No More Blocks

List the obstacles you discovered and turn them around by finding the positive side or the fun or a realistic solution that will motivate you.

Obstacles	Solutions
I cannot exercise because I am too	I will do something fun for 10 minutes and see if I am still
tired	tired.
I cannot exercise because the gym is	I will go for a walk or do a fitness DVD I enjoy.
too far away.	
I cannot exercise because I am too	I will focus on feeling good by stretching to alleviate
sore.	soreness.
I cannot exercise because I am	The more I move my body, the better I will feel and the
embarrassed about my body.	more confidence I will have.
I cannot exercise because	I will
I cannot exercise because	I will
I cannot exercise because	I will
I cannot exercise because	I will
I cannot exercise because	I will

Nourishing After Activity

It may be when we no longer know what to do, we have come to our real work, and when we no longer know which way to go, we have begun our real journey. ~Wendell Berry

Worksheet #35

Many people are not aware that exercise can create nutritional deficits. Here's how: Your body prefers to use carbohydrates as fuel. The hour after intense exercise, the body can use up to 80% of the nutrients needed for recovery for the next 24 hours. Exercise lowers insulin levels, which is good for fat burning. Carbohydrates will be used to replenish and raise insulin levels to normal at this time.

Drink plenty of good quality water during exercise and afterwards. Avoid sports drinks, since they're loaded with sugar and carbohydrates. For maximum benefits, eat good quality carbohydrates, legumes and whole grains. Limit carbohydrate consumption before or during exercise, because your body will use them as fuel instead of utilizing body fat.

Exercise is beneficial for anyone diagnosed with diabetes, yet people with this condition have to take special precautions. If you have Type I diabetes, please remember to monitor your blood sugar carefully, especially when beginning an exercise program. During and immediately following exercise, be aware of hypoglycemic symptoms like dizziness, hunger or weakness. Consult with a physician before beginning any exercise program.

List any insights below.

Your Starting Point

The secret of my abundant health is that whenever the impulse to exercise comes over me, I lie down until it passes away. ~JP McEvoy

Worksheet #36

Your body's physical strength shows the condition of your muscles and their ability to function at maximum output. Strength is the amount of force a muscle can produce. By measuring the strength of muscles, you can get a sense of your starting point. This measurement can help you create an activity plan and measure your future successes.

Push-ups

This exercise focuses on the strength and endurance of muscles in your upper body. Gently stretch and warm up your arm, chest, and shoulder muscles. Avoid overexertion for the most accurate results while you are measuring your current level of fitness. Assume the traditional push-up position, with only the hands and tips of the toes touching the ground. If you need to, you can assume the bent knee positions, with knees and hands touching the ground. Keep the head, back and neck aligned. Start by bending your arms and lowering your chest until it is four inches from the ground, keeping your back and legs straight. Then straighten your arms and push your body back into the starting position. Be sure not to lock your elbows. The back and legs should remain straight and the head and neck in line at all times.

Repeat this as many times as you can while maintaining proper form. Count the number of repetitions before fatigue forces you to stop.

Record the number of push-ups in the Personal Health Profile Results Worksheet 36A on page 224.

The following table will help you estimate your condition based on your age, gender, and the number of push-ups you can do.

Push-up Fitness for Men

Men's Age						
	13-19	20's	30's	40's	50's	60's
Excellent	45+	40+	35+	29+	25+	23+
Good	31-41	26-35	22-29	18-25	15-22	14-20
Average	26-29	22-25	18-21	15-17	12-14	10-13
Fair	14-24	12-21	9-17	7-14	5-11	3-9
Poor	Below 14	Below 12	Below 9	Below 7	Below 5Below	v 3

Push-up Fitness for Women

Women's Age						
	13-19	20's	30's	40's	50's	60's
Excellent	32+	30+	28+	24+	20+	18+
Good	21-28	19-26	18-26	15-22	12-18	11-16
Average	17-20	16-18	14-17	12-14	10-12	8-10
Fair	9-16	8-15	5-13	4-11	3-9	2-7
Poor	Below 9	Below 8	Below 5	Below 4	Below 3	Below 2

All charts from the Easy Workout Journal, by Alex A. Lluch

Sit-Ups

The sit-up test assesses your abdominal muscles' fitness and stamina. Lie on the floor, facing up with knees bent and place your feet shoulder-width apart. Press your lower back into the ground and place your arms across your chest. Lift your head, neck and shoulders off the floor and bring your body to a 45 degree angle by engaging the stomach muscles. Then slowly roll back down into the starting position while keeping the abdominal muscles tight. Set a timer for one minute, and record the number of repetitions in your Personal Health Profile.

Record results in the Personal Health Profile Results Worksheet 36A and compare your number with the following chart on page 224.

	e Sit-Op	lest for men					
Men's Age							
		18-25	26-35	36-45	46-55	56-65	65+
Excellent	#	49+	46+	42+	36+	32+	29+
Good		41-48	26-35	22-29	18-25	15-22	14-20
Average	Sit-Ups	34-40	31-38	25-33	21-26	16-22	14-19
Fair	- • •	30-33	29-30	22-24	18-20	14-15	11-13
Poor		Below 30	Below 29	Below 22	Below 18	Below 14	Below 11

One Minute Sit-Up Test for Men

•								
Women's A	\ge							
		18-25	26-35	36-45	46-55	56-65	65+	
Excellent	#	43+	39+	33+	27+	24+	23+	
Good	- π - - of -	35-42	31-38	25-32	20-26	16-23	15-22	
Average	Sit-Uns	28-34	24-30	18-24	13-19	9-15	10-14	
Fair	- 011 043 -	23-27	19-23	14-17	9-12	6-8	4-9	
Poor		Below 23	Below 19	Below 14	Below 9	Below 6	Below 4	

One Minute Sit-Up Test for Women

Squats

The Squat Test focuses on the strength of the lower body. Stand up straight with your feet shoulderwidth apart. Just as if you sitting back into a chair, bring your hips back and bend your knees until you upper legs are parallel to the floor. Keep your knees and heels aligned at all times. With your head and chest lifted, return to a standing position. A chair may be placed underneath as a guide, but do not use it to rest in between squats. Count how many squats are completed before you tire and must stop.

Record results in the Personal Health Profile Results Worksheet 36A and compare your number with the following chart on page 224.

Squals Filless Determined by Age							
Age							
		18-25	26-35	36-45	46-55	56-65	65+
Excellent	#	49+	45+	41+	35+	31+	28+
Good	 0f	40-48	36-44	31-40	26-34	23-30	20-27
Average	Squats	35-39	31-35	27-30	22-25	17-21	15-19
Fair	1	29-34	27-30	21-26	16-21	12-16	10-14
Poor		Below 29	Below 27	Below 21	Below 16	Below 12	Below 10

Squats Fitness Determined by Age

Flexibility

Flexibility is the range of motion in the joints. It is the result of muscles, tendons and ligaments all working together. As muscle strength increases, the body exerts more force on the tendons and ligaments. It is very important to increase you flexibility to avoid injury to tendons and ligaments. You can become more flexible by incorporating stretching into your exercise routine. With increased flexibility and by keeping the tendons and ligaments strong, you will increase muscle strength and endurance and allow the tendons to grow with the muscles, decreasing the chance of injury.

Sit and Reach Test

The sit and reach test measures the flexibility of your hamstrings and lower back. Before you begin, make sure you warm up. Then place a ruler or tape measure on the floor with the numbers increasing away from you. Sit on the floor with your legs straight so that your heels line up with the 23-inch mark. The numbers should get higher past your heels. While seated, straighten your arms and place your hands on top of each other and stretch forward toward your toes without bouncing. Slowly reach three times. On the fourth reach, record your measurement. (If you can, have someone stand over you as you reach so they can read the stretch correctly for you.) The numbers listed in the table below offer median measurements, but keep in mind that age and arm length contribute to scoring differences.

Record results in the Personal Health Profile Results Worksheet 36A and compare your number with the following chart.

Sit & Reach Flexibility

	Superior	Excellent	Good	Average	Poor
Men	27"+	25-27"	23-25"	21-23"	Less than 20"
Women	30"+	28-30"	26-28"	24-26"	Less than 23"



Your Starting Point: Personal Health Profile Results

Worksheet #36A

Use the following worksheet to record results. These numbers will measure your progress.

Date: ____/___/____

Test	INITIAL	3 MONTHS	6 MONTHS	12 MONTHS	20 MONTHS
Heart Rate (Resting)					
Blood Pressure					
Minutes of Exercise					
per Week					
Body Mass Index					
Push-Up					
Sit-Up					
Squat					
Sit and Reach					

We will measure your resting heart rate, blood pressure and body mass index at the beginning and at the end of the program. List the results from these tests and add in your results from the fitness tests you completed from the previous pages. You may want to re-check these during the program to measure your progress along the way.

Identify Your Goals

Do, or do not. There is no try. ~George Lucas (Jedi Master Yoda)

Worksheet #37

Levels of exercise goals

For Wellness- Accumulate at least 30 minutes of movement daily. You can use a pedometer to count your steps. Set goals for yourself to increase the amount of steps you are taking per day. If you have been inactive, work your way up to 30 minutes of daily activity.

To maintain a healthy back pay attention to:

- Posture
- 🏶 Balance
- Office mechanics and stretches
- Core strengthening stretches
- Weight bearing exercise for bone mass
- Maintaining or Losing Weight

For Fitness- Accumulate at least 30 minutes of movement daily and add cardiovascular, strength, and flexibility exercises as follows:

Begin with 30 minutes of moderate intensity aerobic exercise 3-5 days per week

Working up to approximately five hours a week (300 minutes) of moderate intensity

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Do two or more days per week resistance training (muscular strength and endurance), including weight bearing exercise (to maintain and build bone mass) 1-2 sets/10-15 repetitions, all muscle groups.

Daily stretching, 10-30 seconds

Please refer to all lists of suggested activities found throughout this module including Additional Information: How many minutes to burn 300 calories on page 259 as well as Additional Information: Fun Physical Activities found on page 260-261. You can also be creative when anwering these quesions. Remember, we want to take into account your personality, current lifestyle and motivation level to help you tailor a program that you will want to do.

PLM Index

What would you like to do to accumulate 30 minutes of either movement for wellness, or moderate intensity daily activity for fitness? What fits with your **P**ersonality? Consider what you might like to do?

Examples: park further away from destination and walk briskly, take stairs instead of elevator, daily brisk walk twice daily for 15 minutes each, record steps using pedometer, dance to music.

What fits with your Lifestyle? What's near where you live, and how accessible is it?

Examples: swimming pool at the YMCA is a mile away, hiking trails in the hills behind my house, pilates class 15 minute drive.

How Motivated are you to do this activity (activities) on a 0-10 scale?

Example: swim 5, hike 8, pilates 7, park furher away and walk to destination 10.

Do you notice how this information identifies your preferences? Identifying your preferences will help you set goals and follow through!

PLM Index What types of cardiovascular exercises (aerobic) are fun for you? What would you like to try? What fits with your **P**ersonality?

What fits with your Lifestyle? What's near where you live and how accessibile is it?

How Motivated are you to do this activity (activities) on a 0-10 scale?

PLM Index What type of strength training do you enjoy? What would you like to try? What fits with your **P**ersonality?

What fits with your Lifestyle? What's near where you live and how accessibile is it?

How Motivated are you to do this activity (activities) on a 0-10 scale?



PLM Index How do you practice flexibility currently? What would you like to learn? What fits with your **P**ersonality?

What fits with your Lifestyle? What's near where you live and how accessibile is it?

How Motivated are you to do this activity (activities) on a 0-10 scale?

Making Your Plan

I don't deserve this award, but I have arthritis and I don't deserve that either. ~Jack Benny

Worksheet #38

Please consider your PLM Index preferences when making your plan! Include:

Warm-up

5-10 minutes of low intensity/low impact exercise such as walking, slow jogging, knee lifts, arm circles or trunk rotations.

Strength Training

Aim for at least two 30 minute sessions per week that may include free weights, weight machines, resistance equipment, muscular endurance training, and toning activities such as yoga or pilates. Be sure to include activities that work each of the major muscle groups.

Cardiovascular/Aerobic Training

Aim for a 30 minute session 3-5 times per week. Make sure the activity is continuous and vigorous enough to require increased oxygen consumption. You should breathe hard, but not be so short of breath that you cannot carry on a conversation. Typical activities include jogging, running, elliptical training, bicycling or spinning class, and cardio classes such as step aerobics, kickboxing and aerobic dance.

Flexibility Training

Do 10-15 minutes of stretching per day. To incorporate this into your training, stretch after your warm up and during your cool down.

Cool Down

Take 5-10 minutes to cool down after exercise. Your cool down can include slow walking, or low intensity or low impact exercises with you stretching. Allow your heart rate, breathing and body temperature to gradually drop to normal levels. Use this time to relax and recover from your workout.

Days of the	Daily Minutes	Cardio	Strength	Flexibility
Week	or Steps	Training	Training	Training
Monday				
Warm up				
Cool Down				
Tuesday				
Warm up				
Cool Down				
Wednesday				
Warm up				
Cool Down				
Thursday				
Warm up				
Cool Down				
Friday				
Warm up				
Cool Down				
Saturday				
Warm up				
Cool Down				
Sunday				
Warm up				
Cool Down				

YOUR WORKOUT SCHEDULE - What would be fun to do

Nourishing Your Immune System

What is now proven was once only imagined. ~William Blake

Worksheet #39

A moderate exercise program enhances the immune system. Eating four to five smaller meals per day further gives your immune system a boost. Studies show that small meals can extend lifespan and increase disease resistance. In a study at the Laboratory of Neurosciences, National Institute on Aging, meal size and frequency has been shown to stimulate the production of new neurons from stem cells and may increase the ability of the brain to resist aging and restore function following injury. Information can help inspire you to make small changes that will ultimately lead to better health.

Is keeping track of what you are eating helpful to you? How? If not, why?

Have you tried any new recipes that you can incorporate into a new routine?

Are there any new foods on the list that you would like to try this week?

Enhancing the Effects of Relaxation

We all agree that your theory is crazy, but is it crazy enough? ~Niels Bohr (Nobel Laureate, physics)

Worksheet #40

The ancient practices of yoga, t'ai chi and qigong are rooted in cultural traditions that included exercises as a way of maintaining physical, mental and spritual wellbeing and balance. These practices are suitable for people of all ages and are very attractive for older adults because they can be pursued on a gentle basis and help with balance. These practices, which come from India and China, all place particular emphasis on your core muscles: the abdominals, lower back and spinal muscles, while working on your balance, coordination, and concentration.

What is yoga?

Yoga includes physical postures, meditation, breathing, and relaxation techniques.

Why do yoga?

Like many forms of exercise, yoga asanas (poses) effectively stretch and strengthen your body. The greatest benefits of yoga asanas, however, come from their profound effects on the internal systems of the body. By bending, stretching, twisting, and flexing in the various postures, you bathe your internal organs with oxygenated blood and prana, also known as life force energy or chi. Yoga asanas soothe and tone your nerves and regulate the endocrine system, which is responsible for the production of hormones—one of the keys to both physical and mental health. They also improve digestion and elimination, strengthen the respiratory system, and tone the reproductive organs. Yoga techniques like asanas, breathing, induce the relaxation response and have been known to inspire a sense of inner peace.

What is Pilates?

Derived from yoga, the Pilates exercise system was formulated by Joseph Pilates over 80 years ago. Pilates focuses mainly on cultivating core strength in the body and lengthening the spine. Practiced for decades by dancers, Pilates has become popular in recent years for its largely aesthetic body sculpting effect. Pilates can be a valuable tool for enhancing strength, definition and good posture.

Pilates mat work can be hard on joints, so be aware if you have joint issues. Tell the teacher, who can adjust exercises for you. Pilates reformer work can be easier on joints.

Guidelines for Yoga and Pilates practice:

Yoga postures, especially inversions and those that compress the abdomen, should not be done on a full stomach. Listen to your body—if you practice too soon after eating or drinking, certain poses will feel uncomfortable.

Practice yoga positions barefoot, using a yoga mat or nonslip surface for standing poses. A mat, rug or folded yoga blanket will provide firm padding for other asanas.

Wear comfortable clothing, something that allows you to move freely.

If you feel too weak or shaky in a pose, come out of it. Gradually, you will build up your strength and be able to hold the pose longer.

Do not go beyond your personal limitations, but extend your boundaries gently. Doing the asanas correctly means doing them to the best of your ability without straining.

Throughout the workout, focus on your breath, inhaling and exhaling fully and completely through your nose. Breathing with awareness not only feels good, but also balances and regulates energy flow within the body, strengthening your internal organs and boosting your resistance to disease.

T'ai Chi and Qigong

In Chinese tradition, there are thousands of methods and practices for self healing generally called qigong (Ch'i Kung). t'ai chi is one category of qigong forms. Most forms of t'ai chi have created a short form, between 20 and 40 movements, that allows for beginners to learn more quickly.

The practice triggers health and healing benefits from both the Asian paradigm of energy and the Western paradigm of physiology. The balance and flow of one's internal self healing energies is enhanced by the slow, meditative movements of t'ai chi. At the same time, the delivery of oxygen and nutrition from the blood to the tissues is improved. The lymph system's ability to eliminate metabolic by-products and transport immune cells is increased. The biochemical profile of the brain and nervous system is shifted toward recovery and healing. In China, literally millions of citizens practice t'ai chi every day; some singularly, some in groups numbering into the hundreds, some with swords, some with large red fans.

The word qigong breaks into qi and gong: qi = vitality, energy, life force, gong = practice, cultivate, refine; qigong = to cultivate and refine through practice one's vitality or life force. The Chinese believe that the primary mechanism that is triggered by the practice of qigong is a spontaneous balancing and enhancing of the natural healing resources in the human system. Over thousands of years millions of

people have benefited from these practices believing that improving the function of the qi maintains health and heals disease.

In the paradigm of mechanistic Western science, the practice of qigong triggers a wide array of physiological mechanisms which have profound healing benefits. It increases the delivery of oxygen to the tissues; enhances the elimination of waste products and the transportation of immune cells through the lymph system; and shifts the chemistry of the brain and the nervous system.

T'ai chi and quigong are both good choices for either older adults or people who've had a more sedentary lifestyle because it's easier on joints and good for joint mobility.

Here's how to get started:

Find a local class and try either one of these wonderful forms of exercise and wellness this week. Think about the PLM Index: Ask yourself if you could incorporate this into your exercise routine? Try it. Does it fit with your personality preferences, lifestyle choices, motivation level? You can have both the benefits of exercise and of the relaxation response!

Classes I would like to try:

Additional Information: Core, Posture and Balance

Regardless of your age and fitness level, improving your posture will benefit you. Not only will it make you look taller, appear slimmer, and feel better, but you will also have fewer daily aches and pains. It is important to musculoskeletal health and injury prevention. With good posture, older adults can dramatically reduce the odds of falling. For good posture, align the ears, shoulders, hips, knees, and ankles. If you exercise with good posture, you'll train your muscles to hold themselves correctly in everyday life.

Engage the Core

To make everyday activities more productive, engage your core muscles as often as you can. The "core" refers to the anatomical center of the body: Stabilizer muscles hold your joints together properly to improve movement efficiency, prevent injury, and promote stability. This will help you with low back issues and overall endurance. The muscles that stabilize the hips and low back provide the strength and power of the legs, and hips through the trunk. (Think of a great tennis player and how they use their core muscles to add power to their game.) Taking a broader view of the core includes the muscles that support the spine, shoulders and hips. These muscle groups all work together to create good posture and provide balance and control. Core exercises also will tone your pelvic floor and your deep abdominals, regain mobility of your spine and improve your sex life.

Activities that support the core muscles are: pilates, yoga, weight lifting, t'ai chi and walking. Because core stabilization exercises challenge the whole body to work together, form is critically important. These exercises will show you how to use your postural muscles as you sit, drive or stand.

Exercises that Work Your Core

Use these exercises as part of your strength training or flexibility routine. The best way to activate your deep abdominals and pelvic floor muscles is by exhaling actively as you lift your muscles up and in. Exaggerate your exhalation as you do your core exercises to make sure that you are using these muscles.

Plank

The plank is a basic core stabilization exercise that works your abs, back, glutes and shoulder stabilizer muscles.

Lie face down, with your knees bent. Place your elbows under your shoulders, make fists with your hands, and bring your forearms to the floor with your hands together in front of you. Slide your

shoulders down your back and lengthen the back of your neck so your ears are in line with your shoulders. (See below.) Gently pull your abdominals inward.

As you exhale, curl your toes under and push up onto the balls of your feet. Avoid arching your upper and lower back. Stop if you have any shoulder pain. Hold for 10 seconds then gently lower your body back down. Repeat three times.





Keep your abdominals pulled in so you feel more tension in your core and so you don't overarch your lower back. Keep your shoulders down and your neck lengthened. Avoid hunching your shoulders. Avoid lifting your buttocks in the air and rest your weight on your legs, instead, keep your body in a straight line and press firmly into the ground with your forearms and hands.

Other options

Plank on knees (easier): Lift up with your knees on the floor, keeping your abs and glutes tight and your spine lengthened. Supporting a shorter length is easier for the core stabilizers.

One-legged plank (harder): Come into plank, keeping your torso parallel to the ground. While in plank, lift one leg. Hold for 10 seconds. Bring the leg down, and switch sides. Work up to a 30-second hold. To make it even more difficult, pick up and extend the opposite arm as you also hold up one leg.

Side plank

The side plank conditions core stabilizers, especially the muscles that support the shoulder, girdle and lower back. Use caution if you are prone to shoulder discomfort. This exercise can be hard on the spine and shoulder joints so be aware if you have discomfort.

Recline on your left side, left hand palm down under your shoulder. Place your top right hand in front of your body. Keep your torso perpendicular to the ground, relax your shoulders, and pull in your abdominals. See illustration below. Beginners: Hold for 10 seconds. Work up to a 30-second hold.

Keep your shoulders down and neck lengthened. Do not hunch or collapse into your shoulder. Continue to breath normally as you hold the position, and try not to hold your breath. Do not collapse your chest forward or lean backward, and keep your torso perpendicular to the floor.

More difficult: Push into your left hand and lift your hips up into a more advanced side plank position. Work up to a 30-second hold.







Other options

Modified side plank (easier): Start with your right elbow under your shoulder and with your lower leg bent at a right angle at the knee. Keep the top leg long and straight.

Side plank lifts: Instead of holding the sideplank position for 30 seconds, elevate your ribcage only and lift the top leg 10 times, engaging your core muscles. Work up to 30 lifts.

One-legged side plank (harder): When you reach the elevated position, pick your top leg off the floor and hold it straight at hip height.

All fours spinal stabilization

All fours spinal stabilization is an excellent exercise for strength and balance, conditioning postural muscles and preventing lower back pain. If you have wrist pain when you put your palms on the ground, try doing the exercise on your closed fists.

Kneel on all fours in a tabletop position, with your hands under your shoulders and knees under your hips. See the following page. Slide your shoulders down. Pull your abdominals in.

Lift and extend your right arm in front of you and your left leg behind you. Keep your chest and hips parallel to the ground. Lower your arm and leg back to start. Repeat to the other side. Concentrate on keeping your torso parallel to the ground, and avoid hunching your shoulders or arching your back.

Other options

Spinal stabilization arms only or legs only (easier): Instead of simultaneously lifting the opposite arm and leg, only lift alternating arms. Repeat 10 times.

Spinal stabilization same side arm and leg (harder): Instead of lifting the opposite arm and leg, lift the arm and leg on the same side.



For those who feel these exercises are beyond their current ability, don't feel frusrated. As you increase your level of activity, you'll improve your overall conditioning and may find you can do them after some period of time. There may be some exercises, like the "All fours spinal stabilization" that are easier for you to do. If you have a specific injury, a physical therapist can prescribe exercises to strengthen those areas.

The slide

The slide is a good abdominal exercise for people prone to lower back or neck pain. Performing the slide is a good way to get your abs ready for more challenging abdominal exercises.

Lie on your back with your knees bent comfortably, feet hip-width apart, toes up, and heels pushing into the floor. Rest your arms at your sides. Pull your abdominals in and gently push – but do not force – your back into the floor so you flatten out the natural curve of the small of your back. See below. Slowly slide your heels forward as you gradually straighten your legs; do not allow your abs to push upward or your back to lift off the floor. Continue straightening your legs until you cannot keep your abs tight, your back in contact with the floor, or until your legs fully extend. Then slowly slide your heels back to the starting position, again taking care not to relax your middle muscles. Engage your core muscles and hold for a count of 10.

As you get stronger, you will be able to straighten your legs all the way while keeping your abs pulled in and your back flat. Keep your head, neck, and shoulders relaxed. Move slowly and take the time to feel your abs working.





Additional Information: Office Mechanics: Best Stretches for the Office

Sitting in front of a desk every day can cause unnecessary pain and discomfort to the neck and low back. If you sit everyday, pay careful attention to your posture and your office mechanics. Check your chair height. You should sit with your thighs parallel to the floor. Your keyboard should not be a reach, but just in front of you. Keep your arms parallel to the floor at a 90 degree angle, and your monitor at a height so that you are not straining to see it or reaching your head forwards, up or down to view the screen. Hunching the shoulders and slumping in your seat can cause back pain, headaches, tension and tightness in your back, neck and shoulders. Keep your mouse right in front of you so you do not have to reach for it, which causes more strain for the shoulder.

The following stretches target the muscles of the back, neck and shoulders as well as the hips and glutes. Taking time to do some of these stretches throughout the day can help increase flexibility and reduce tension and stress. Use them as part of your flexibility or strengthening routine.

Chest Stretch



Stretching the chest may be one of the best exercises you can do for your body, especially if you spend any time hunched forward. This example shows a chest stretch using a resistance band, which you can find at most sporting goods stores. You can do this even if you don't have a band — try using a long sock or an old tie, or without anything at all. Start by "thinking tall", as if you're showing off a new necklace. Sit up tall and reach your arms out to the side, feeling that stretch across your shoulders.

With or without a band, in a seated or standing position, take the arms back just a bit as you lower them down, stretching the chest. If you don't have a band, and don't want to bring your arms over your head in your office, start by "thinking tall". Bring your hands up, palms forward, with elbows at your side. On an exhale bring your pinky fingers back to stretch your chest. Mke sure you dont extend your head. Hold for 10-30 seconds. Avoid this move if you have shoulder problems.

Shoulder Shrugs



The shoulders and neck hold a lot of stress and tension from typing and poor posture. Shoulder shrugs are a great way to relax the shoulders and get your circulation going.

Lift the shoulders up towards the ears, squeezing them gently. Hold for 1-2 seconds and roll them back as you relax down. Repeat this 8-10 times. Add shoulder rolls to this exercise for additional benefits, doing 10 gentle rolls forwards and backwards.

Upper Back Stretch



The upper back can also become tense and tight from hunched shoulders from sitting at the computer or holding the phone up against your shoulder.

Seated or standing, stretch the arms straight out and rotate the hands so that the palms face away from each other. Cross the arms so that the palms are pressed together, contract the abs and round the back, reaching away as you relax the head. Engage your abdominal muscles. Imagine you are curving up and over an imaginary ball. Hold the stretch for 10-30 seconds. If twisting the arms does not feel good, simply lace the fingers together.

As you sit back up, restack the spine by straightening your back one vertebrae at a time.





Sitting for prolonged periods of time can affect the lower back. This stretch will help gently work out some of that tension. In a seated position with the feet flat on the floor, contract the abs and gently twist the torso towards the right, using your hands to help deepen the stretch. Only twist as far as you comfortably can and keep the back straight while keeping the hips square. Hold for 10-30 seconds and repeat on the other side.

Torso Stretch



If you find yourself sinking into a hunched position, your body will signal you with an aching back. This simple move will stretch all the muscles in your back, sides and arms. Seated or standing, lace the

fingers together and stretch them up towards the ceiling. Take a deep breath as you stretch up as high as you can, then exhale and open the arms, sweeping them back down. Repeat 8-10 times.

Forearm Stretch



Your forearms can get tight from typing. This move helps stretch the muscles in the forearms and wrists. Seated or standing, stretch the right arm out and turn the hand down so that the fingers point towards the floor. Use the left hand to gently pull the fingers towards you, feeling a stretch in the forearm. Hold for 10-30 seconds and repeat on the other hand.



Neck Stretches



Holding tension in the neck can lead to headaches and upper back tension. Looking down when working on the computer puts extra stress on the neck muscles. This stretch will help your neck and shoulders. Sitting in your chair, reach down and hold of the right side of the chair with the right hand. Bring the left hand to the top of the head, and gently pull while tilting your head to the left, feeling a stretch down the right side of the neck and shoulder. Hold for 5-10 seconds and repeat on the other side. Do this often during the day. You can also gently pull your head forward and towards your chest. Do not stretch to the point of pain. Always use gentle movements when stretching tight muscles. You can also do this exercise without using your hands to gently pull your head. This is preferred if you have neck problems.



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Hip Flexor Stretch



The lower body gets tight from sitting too much, especially the front of the hips. When you sit, the glutes stretch while the hip flexors get tighter. Stretching this area several times a day can help reduce that tightness. While standing, take the right leg back as though you are going to do a lunge. Squeeze the glutes as you bend the knees, lowering down until you feel a stretch in the front of the right hip. Hold for 10-30 seconds and repeat on the other side.



Seated Hip Stretch



This helps open up the hips and stretch the complex series of muscles in the hips and glutes. While seated, cross the right ankle over the left knee and sit up nice and tall. Gently lean forward, keeping the back straight and reaching out with the torso until you feel a stretch in the right hip. You can also gently press down on the right knee to deepen the stretch. Hold for 10-30 seconds and repeat on the other side.

Inner Thigh Stretch



This stretch, for the inner thighs, hips and groin, is another hip-opening move that may help get rid of tension and stress in the lower body. While seated, take the legs wide, toes out and lean forward with the elbows on the thighs. Keep the back straight and the abdominals contracted. Gently press forward while using the elbows to push the thighs out until you feel a stretch in the inner thighs. Hold for 10-30 seconds.

Additional Information: Low Back Care and Degenerative Disc Disease (DDD)

Degenerative disc disease is fundamentally a mechanical problem that begins early in life. It's the most common cause of low back and neck pain. Several factors can contribute to making this a problem as we age. They include: being overweight, improper weight lifting or jolting forms of exercising like jogging. When the core muscles that surround the spine aren't strong they're not able to counter forces like these and properly support the spine. The resulting instability can eventually lead to collapsing and bulging discs or changes in the spinal joints, which could eventually lead to spinal stenosis. This serious condition progresses from pain to numbness, weakness to difficulty walking. It can develop slowly throughout life but may produce disabling symptoms at a late stage resulting in the need for walkers and electric wheel chairs. In the United States the most common surgery in the elderly is back surgery to treat these problems.

While to some extent we naturally lose disc flexibility with aging, it's largely a preventable disability if you learn to practice proper spine mechanics and strengthen the core muscles surrounding the spine. Stabilizing and strengthening the lower back is a primary goal to reduce degeneration. Depending on the degree of degeneration, your doctor or physical therapist can prescribe the correct exercises for your particular condition. In addition, aerobic exercise like walking or swimming can benefit you, and don't adversely affect the lower back area. Regular low impact exercise can improve blood flow and oxygenation to all tissues in the body, including those in the back.

Exercises that stretch and strengthen the muscles of your abdomen and spine can help prevent back problems. If your back and abdominal muscles are strong, it will help you to maintain good posture and keep your spine in its correct position. Warm up your muscles with light activity like walking before doing any strengthening or stretching. Wear loose clothing to make it easier to do the exercises. Stop doing any exercise that causes pain.

Hamstring stretching is useful in treating sciatica, a painful condition sometimes associated with DDD. Sciatica is the result of nerves in the lower spine being compressed or irritated and producing pain that radiates down into the leg and foot. Hamstrings are muscles in the back of the thigh that produce excess stress on the lower back when they are tight. This tightness can aggravate DDD, and even lead to some of the symptoms of sciatica. Stretch your hamstrings by lying on your back with your legs bent slightly and lift each leg into the air as high you can and hold it for 10 to 20 seconds. The same exercise can be done sitting down in a chair and raising your leg as high as possible with your heel pointed to the floor. Doing these stretches once a day takes only a few minutes and can greatly reduce the frequency and severity of sciatica symptoms.

Please be sure to check with your doctor or physical therapist before doing any exercises if you are diagnosed with DDD or have a herniated disc. If you have significant pain, discontinue exercise and check with your doctor.





Cat Stretch: From a kneeling position, place your hands under the shoulders and the knees under your hips. Let your head drop down while at the same time tucking your hips under and raising the middle of your back as high as you can. Try to create a gradual curve of your back towards the ceiling. Hold the position for five seconds and repeat 10 times. Be careful not to overextend your neck.

Camel Stretch: In a hands and knee position, place your hands under the shoulders and the knees under your hips. Raise your head up while at the same time raise your hips up and allow your stomach to fall to the floor. Hold the position for five seconds and repeat 10 times. Be careful not to overextend your neck.




Pelvic tilt: Lie on your back with your knees bent and your feet flat on the floor. Tighten your abdominal muscles and push your lower back into the floor. Hold this position for five seconds, and then relax. Do two sets of 10.



Partial curl: Lie on your back with your knees bent and your feet flat on the floor. Engage your stomach muscles and flatten your back against the floor. Tuck your chin to your chest. With your hands stretched out in front of you, curl your upper body forward until your shoulders clear the floor. Breathe out as you come up. Hold this position for three seconds. Relax. Repeat 10 times. Build to three sets of 10.





So you don't strain your neck, do not lift your head as pictured above. Rest your forehead on a towel roll instead.

Prone hip extension: Lie on your stomach with your legs straight out behind you. Bring your palms to the floor underneath your shoulders. Tighten up your buttocks muscles first and then lift one leg off the floor about 4-8 inches. Keep your leg straight. Hold for five seconds. Then lower your leg and relax. Repeat with the opposite leg. Do three sets of 10.

Exercises to avoid because they strain the lower back:

- Lying on your stomach with legs extended and lifting together
- Sit-ups with legs straight
- Hip twists (if you have disc problems)
- Hurdlers stretch, sitting on the ground with one leg extended behind your back with the knee bent at a 90 degree angle, bad for the knees as well.
- Any stretching that requires quick and bouncy movements.

Physical activities such as walking or swimming can help strengthen your back also. It is always best to check with your doctor before you start any rigorous exercise program. Remember to begin slowly, and avoid contact sports.

Good activities for people with back problems include:

- Walking
- Bicycling, sitting tall ie:stationary bike
- Swimming
- Strength training on machines
- Aerobic exercise on machines

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Additional Information: Target Heart Rate

AHA Recommendation

Always see a doctor before beginning a physical activity program.

Pacing yourself is especially important if you have been inactive. Target heart rates let you measure your initial fitness level and monitor your progress. This approach requires measuring your pulse periodically as you exercise and staying within 50 to 85 percent of your maximum heart rate. This range is called your target heart rate.

How do I find my resting heart rate?

Find your pulse by placing two fingers on the inside of the opposite wrist. Use a watch with a second hand and count the pulses that occur for six seconds. Add a zero to that number and you have an approximate resting heart rate. While you are exercising, periodically take your pulse and calculate your heart rate, or use a heart rate monitor.

What is an alternative to target heart rates? Some people cannot measure their pulse or do not want to take their pulse when exercising. If this is true for you, try using a "conversational pace" to monitor your efforts during moderate activities like walking. If you can talk and walk at the same time, you are not working too hard. If you can sing and maintain your level of effort, you are probably not working hard enough. If you get out of breath quickly, you are probably working too hard — especially if you have to stop and catch your breath.

When should I use the target heart rate? If you participate in vigorous activities like brisk walking and jogging, the "conversational pace" approach may not work. Then try using the target heart rate. It works for many people, and it is a good way to monitor your progress.



The table below shows estimated target heart rates for different ages. Look for the age category closest to yours, then read across to find your target heart rate.

		Average Maximum
Age	Target HR Zone	Heart Rate
	50–85 %	100 %
35 years	93–157 beats per minute	185 beats per minute
40 years	90–153 beats per minute	180 beats per minute
45 years	88–149 beats per minute	175 beats per minute
50 years	85–145 beats per minute	170 beats per minute
55 years	83–140 beats per minute	165 beats per minute
60 years	80–136 beats per minute	160 beats per minute
65 years	78–132 beats per minute	155 beats per minute
70 years	75–128 beats per minute	150 beats per minute

Chart from American Heart.org

How do I know what heart rate to aim for? Your maximum heart rate is 220 minus your age. The figures above are averages, so use them as general guidelines. Exercising at 65% to 75% of your heart rate capacity burns fat. Exercising at 85% of your heart rate builds cardiovascular fitness. This is the zone to stay in.

How do I do the math?

For example: If you are 47 years old,

220 minus 47= 173

173 is your maximum heart rate.

If you take your pulse for six seconds, and count seven pulses during that time, add a zero to that number and your resting heart rate (RHR) is approximately 70.

173-70= 103

The resulting number (103) shows your heart rate reserve.

Note: A few high blood pressure medications lower the maximum heart rate and thus the target zone rate. If you are taking such medicine, ask your physician if you need to use a lower target heart rate.

To calculate 65% of your target heart rate:

Take your heart rate reserve, multiply by 65% and add your RHR, for example. 103 x 65% + 70= approx. 137 While you are exercising, take your pulse and if you count 13 pulses you are on target. If it is higher, slow down. If it is lower, work harder.

To calculate 75% of your target heart rate:

103 x 75% + 70= approx. 147

While you are exercising, take your pulse and if you count 14 pulses you are on target. If it is higher, slow down. If it is lower, work harder.

To calculate 85% of your target heart rate:

103 x 85% + 70 = approx. 157

While you're exercising, take your pulse and if you count 15 pulses you are on target. If it's higher, slow down. If it's lower, work harder.

How should I pace myself? When starting an exercise program, aim at the lowest part of your target zone (50 percent) during the first few weeks. Gradually build up to the higher part of your target zone (75 percent). After six months or more of regular exercise, you may be able to exercise comfortably at up to 85 percent of your maximum heart rate. Remember, for basic wellness you do not have to exercise that hard to stay in shape. These general guidelines are for fat burning and for cardiovascular fitness.



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Additional Information: How to Engage Your Core Muscles

The following techniques are methods by which you can 'engage' your core muscles. This may need some work at first as it is not something many people do consciously. Find what works for you. Classes in pilates, yoga and tai chi will help teach you how to engage your core and give you direct feedback. Try a class to make sure you have correct technique.

Step 1: Feel them working

In order to know whether you're contracting the correct muscles you can feel them working. Place your hands on the bony parts at the front of your hips. Move your hands in an inch towards your belly button and down an inch towards your toes. As the core muscles contract, you should be able to feel them with your hands from this position. When you contract your core correctly you should feel a gentle tightening under your fingers when they are in the above position.

All the following movements should be done lying on a firm surface. Bend your knees and hips so that you are lying comfortably on your back with your knees up and feet shoulder width apart. Make sure your shoulders are relaxed and concentrate on breathing into the sides of your ribcage to take emphasis off the diaphragm - try not to breath into your abdomen and not into your upper chest. Remember to breath normally throughout all the exercises- it is common for beginners to hold their breath as they focus on contracting the core.

Core Contraction Technique 1:

Lying in the above position, imagine that a belt is tied around your abdomen. Take a deep breath in and on exhalation visualize that the belt is being fastened up a notch. Using your hands, feel for tightening (not bulging) under your fingers. If the muscles are bulging, you are contracting too much. You can visualize leaving the belt off several notches to release the contraction.

Core Contraction Technique 2:

In the same position as above take a deep breath and as you breath out lower your belly button down towards the floor. Feel with your hands for the contraction and ease of the contraction off about 30% of its max for the correct positioning.

Core Contraction Technique 3:

This technique focuses on contracting the pelvic floor. In the same position as above take a deep breath. As you are breathing out imagine that you wish to stop yourself going to the toilet however make sure you do not over use the other abdominal muscles- this would result in a 'bulge' rather than a tightening under you fingers.

Additional Information: How many minutes to burn 300 calories? Find your weight at the top of the chart and see how many continuous minutes it will take to burn 300 calories while doing these activities. To lose one pound of fat you need to expend 3,500 calories. While we don't encourage you to count calories either when you eat or while you exercise, this chart can give you an idea of how fun activities, spread over a week, can make a difference in losing or maintaining body weight.

	120	130	140	150	160	170	180	190	200	210	220	230	240	250
Conditioning Exercises														
Cycling														
Stationary	66	61	57	53	50	47	44	42	40	38	36	35	33	32
Outdoor (leisure)	83	76	71	66	62	58	55	52	50	47	45	43	41	40
Walking (level)														
2.5 mph	110	102	94	88	83	78	73	70	66	63	60	58	55	53
3.0 mph	94	87	81	76	71	67	63	60	57	54	52	49	47	45
3.5 mph	83	76	71	66	62	58	55	52	50	47	45	43	41	40
Water aerobics	83	76	71	66	62	58	55	52	50	47	45	43	41	40
Lap swimming	41	38	35	33	31	29	28	26	25	24	23	22	21	20
Yoga	83	76	71	66	62	58	55	52	50	47	45	43	41	40
Resistance exercise	55	51	47	44	41	39	37	35	33	31	30	29	28	26
Dancing														
Aerobic dance	55	51	47	44	41	39	37	35	33	31	30	29	28	26
Low-impact aerobic dance	66	61	57	53	50	47	44	42	40	38	36	35	33	32
Ballroom dance (fast)	60	56	52	48	45	42	40	38	36	34	33	31	30	29
Ballroom dance (slow)	110	102	94	88	83	78	73	70	66	63	60	58	55	53
Lifestyle activities														
Golf (walking)	73	68	63	59	55	52	49	46	44	42	40	38	37	35
Raking the lawn	83	76	71	66	62	58	55	52	50	47	45	43	41	40
Lawn mowing														
Walking power mower	73	68	63	59	55	52	49	46	44	42	40	38	37	35
Riding mower	132	122	113	106	99	93	88	84	79	76	72	69	66	63
Vacuuming/ sweeping	132	122	113	106	99	93	88	84	79	76	72	69	66	63

From "ACSM Position Stand on the Appropriate Intervention Strategies for Weight Loss and Prevention of Weight Regain for Adults," Medicine and Science in Sports and Exercise.

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Additional Information: Fun Physical Activities

Light Activities:	Calories/Hour		
Billiards	140		
Lying down/sleeping	60		
Office work	140		
Sitting	80		
Standing	100		
Moderate Activities:			
Aerobic dancing	340		
Ballroom dancing	210		
Bicycling (5 mph)	170		
Bowling	160		
Canoeing (2.5 mph)	170		
Dancing (social)	210		
Gardening (moderate)	270		
Golf (with cart)	180		
Golf (without cart)	320		
Grocery shopping	180		
Horseback riding (sitting trot)	250		
Light housework/cleaning, etc.	250		
Ping-pong	270		
Swimming (20 yards/min)	290		
Tennis (recreational doubles)	310		
Vacuuming	220		
Volleyball (recreational)	260		
Walking (2 mph)	200		
Walking (3 mph)	240		
Walking (4 mph)	300		
Vigorous Activities:			
Aerobics (step)	440		
Backpacking (10 lb load)	540		
Badminton	450		
Basketball (competitive)	660		
Basketball (leisure)	390		
Bicycling (10 mph)	375		

Vigorous Activities:	Calories/Hour
Bicycling (13 mph)	600
Cross country skiing (leisurely)	460
Cross country skiing (moerate)	660
Hiking	460
Ice skating (9 mph)	384
Jogging (5 mph)	550
Jogging (6 mph)	390
Racquetball	620
Rollerblading	384
Rowing machine	540
Running (8 mph)	900
Scuba diving	570
Shoveling snow	580
Soccer	580
Spinning	650
Stair climber machine	480
Swimming (50 yards/min.)	680
Water aerobics	400
Water skiing	480
Weight training (30 sec. between sets)	760
Weight training (60 sec. between sets)	570

Chart from the Easy Workout Journal, by Alex A. Lluch



Introduction

Perhaps the most important thing we ever give each other is our attention... A loving silence often has far more power to heal and to connect than the most well-intentioned words. ~Rachel Naomi Remen

We begin life as infants, totally dependent on others. Little by little, we become more independent until we are self-reliant. As we continue to grow and to learn, we become more inner-directed, aware of ourselves and of our surroundings. As adults, we may understand that all relationships and societies are interdependent. This interdependence is also reflected in nature. Even the smallest of insect has its role. The ecosystem heavily relies on insects for decomposition, nutrient and energy recycling, soil aeration, and pollination. Without the active help of insects thousands of plant varieties would become extinct. And without plant life, so would we. Human beings also need each other to grow and to survive.

Maturity can be defined as moving beyond dependence to independence and then to interdependence. Each person must understand who they are independently of one another in order to be self reliant and hear the call of our unique talents or strengths. Ultimately by developing and then combining these talents and abilities, we give back to others or create something greater together than we could alone.

In a relationship, true interdependence requires that two people share in a meaningful way with others, both giving and receiving. Welcoming others as support will guide you to evaluate your support structure, your coping strategies, the quality of your relationships and like the pieces on a chessboard, recognize what might be missing. It will help you to think about how your piece of the puzzle fits into the whole.

It can guide you to strengthen your support system, understand your own strengths and weaknesses, and to welcome others in order to ultimately strengthen your immune system, engage more fully and deepen your commitment to the people in your life.

The Quality of Your Relationships

You have not grown old, and it is not too late to dive into your increasing depths where life calmly gives out its own secret. ~Rilke, translated by Robert Bly

Worksheet #41

When a baby is born, he or she is full of energy. As that baby grows and becomes a toddler, that child is filled with more energy than he or she knows what to do with. Adults watch young children in awe of their seemingly endless supply of energy and excitement at every thing they come across. This is how most of us started off.

We are meant to live our whole lives as happy, vibrant individuals. And when we connect with other happy, vibrant individuals we heal faster, experience less depression and live longer. Science confirms what we already know: that surrounding yourself with supportive family, friends and co-workers can have a positive effect on your mental wellbeing. What you may not know is that loneliness is linked with heart disease, cancer, high blood pressure and depression. Connection is essential to our good health.

The Science of Connection

Have you ever felt your blood pressure rise when you're talking with a close friend who's angry? Have you noticed that laughing can cause others to laugh, even when they don't know why you're laughing? Neuroscience has discovered "mirror neurons" in the brain. These parts of the brain fire when performing an action or observing an action performed by another person. In the study, when a monkey performed a certain task, neurons become activated in a specific part of the brain. If another monkey watched this activity, neurons in the same part of the brain also fired in the monkey who was watching. It's possible that this mechanism is the reason why we resonate so closely with one another, why being in a mindful or peaceful state calms those around you. Loving feelings have been known to lower your partner's blood pressure as well as your own. We are hardwired to rely on each other and to affect each other at a most basic physiologic level.

Kinds of Support

We need different kinds of support at different times. Like the pieces on a chessboard, having a strong support network that covers all bases helps you strategize and respond to stressful events more effectively. It also helps you interpret stressful events as less stressful as it reduces our biochemical stress response.

Material support is important in some crises: If your car breaks down, you'll have less stress if you have a mechanic to call.

When we want to further our development in our career or learn more about our business, we develop mentor friendships.

A friend provides emotional support based on understanding, love and empathy, appreciates, respects, and supports your life's struggles.

We get support from people in our lives who we share activities with sports, interests and events.

Friends, family, teachers, coworkers or employers make up a team to support your school, work, spiritual, personal or family goals.

Evaluate the ways in which you give and receive support. You may be missing some pieces to your social support network. Putting these pieces in place could help reduce your stress and stop challenging your immune system. A strong support network also keeps you feeling engaged, motivated and connected, essential elements of a stress hardy personality. Chronic dissatisfaction with your social experience can lead to poor performance, substance abuse, lack of motivation, illness, weight gain or loss, depression and unhappiness or apathy about life.

Take a moment to write down a list of the people in your larger social support network.

Who do you call for material needs? This might include doctors, car mechanics, hairdressers, babysitters, or anyone who provides a service you need.

Who is missing from your list?

Is there an area in work or your personal life where you would like to have a mentor?

Who are some of the people you do things with? (Sports, movies, shopping, lunch etc.)

Would you like to have more people in this category? What would you like to do with them?

How much emotional support do you get?

List the people who you feel closest to	Reliable	Uplifter	Cared For	Confidant
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Next to their names, put a number between 1 and 5 where 1=not at all and 5=extremely and answer these questions below.

- How reliable is this person?
- How much does this person boost your spirits when you feel low?
- How much does this person make you feel he or she cares about you?
- How much do you feel you can confide in this person?

Add together all of the ratings you gave to each of the people. A total score between 12 and 15 suggests that you can get a reasonably good level of emotional support when you need it. But this list may also highlight some areas of the relationship you may want to strengthen.

Friends, Family and Food

At a time when people are becoming conscious of maintaining their physical health by controlling their diets, exercising and so forth, it makes sense to try to cultivate the corresponding positive mental attitude too. ~His Holiness the Dalai Lama

Worksheet #42

One of the things that can help make lifestyle changes like losing weight or exercising more successful is having supportive friends and family to motivate, support and encourage you.

Maintaining a positive attitude inspires others to do the same. Studies have shown that close support among women makes them less likely to overeat, more likely to eat well and to exercise. Making a contract with yourself can help with commitment. Making a contract with a friend or partner can help both of you stay accountable and focused. Reminding each other to stay positive by keeping your eye on the end result and fostering excitement along the way is extremely beneficial.

Who in your life is supportive of the positive changes you are making?

Who can be a mentor in your life for some of these changes? (You may or may not know this person. This could include finding a support group.)

What are some of the positive things you would say to a friend if they were having trouble staying motivated?

What do you say to yourself?

Who will you call for support when it's needed?

If you crave something sweet, what will you eat? (For example, a cup of nonfat hot cocoa can satisfy this desire.)

If you crave something salty, what will you eat? (For example, a handful of salted nuts can satisfy this taste.)

If you feel driven to self soothe in a negative way and you recognize there is an emotional issue involved, will you:

- Call a friend
- Write in your journal
- Go for a walk
- * Do something fun from your list to distract yourself into feeling better until the moment passes

Circle the choice or choices that will be helpful.

Write a brief description of how you see your ultimate health and wellbeing. In this positive future state, how do you see yourself? (For example, this may include how it feels when you are exercising? Who you spend time with? What enjoyable things you're doing for your self?)

Take this future vision from above and write multiple sentences as affirmations. For example: *I am vibrant with good health! I spend time with people I love every day! I enjoy eating and taste every bite of food! I pay attention to what feels good for me!* Feel excited as you write, as if it's already true.

Energy and Connection

Being around people with whom you feel a connection, on many levels, not just a professional one, is very relaxing. Your ears are more open to someone who is not a cantankerous bastard. ~Jacqueline Bisset

Worksheet #43

Different people can have a vastly different affect on us. Around one person, you might feel alive, inspired, and clear. Yet another person might leave you feeling drained, tired, a little depressed or like leaving the room before they even speak.

People can give off welcoming positive energy that invigorates, or oppressive negative energy that repels. This is important because the unseen energy that people exude can profoundly influence your health and your mood. Energetically speaking, strong emotions like anger, hatred, fear, or self-loathing are not calibrated at the same frequency as joy, according to Dr. David Hawkins in his book *Power vs Force*. These emotions resonate at lower frequencies and do not match up to functional wellbeing and happiness. Kindness, compassion, love and caring keep our vibrational frequency higher, our heart rhythms coherent, our stress low, our immune system strong — and make us the type of people others want to be around.

People with positive energy:

- Exude a sense of compassion and joy
- Make you intuitively feel safe, relaxed, and that you want to get closer
- Emanate a peaceful glow
- Make you feel better when you're around them
- Increase your own energy and optimism

People with negative energy:

- 🏶 Drain you
- & Give off a sense of being demeaned, constricted, or attacked
- Make you feel intuitively unsafe, tense, or on guard
- Give off angry vibes

Take a look at the list of the ten people you feel closest to from the exercise on worksheet #41. You have established a baseline number for each person in your life. You'll quickly know who nurtures you. If a loved one is in a difficult phase, this may be a moment that you are a supportor, motivator, advisor and friend. We all go through difficult periods, but notice who consistently drags you down. By understanding energy, you can take better care of yourself by either eliminating that relationship or working to transform it. Also be aware that your own feelings may cause you discomfort around another person. You might have real history between you that are causing your feelings. In this case, challenge your own negative feelings. Ask yourself if it's time to move forward, to let go of old hurts? You are the one who will reap the benefit.

Treat yourself and everyone else with love and compassion. Your immune system will reflect it. Meaningful emotional work involves examining your perceptions, challenging yourself to grow and working to accept others for who they are. It's a constant process of doing the work to feel good, inspired, happy, and calm. You can find people who support your spirit, your goals and your dreams simply by being yourself. Pay attention to people's words, actions and trust your gut-centered decisions to guide you. This way you won't end up in a relationship that looks right but feels wrong.

Mindfulness can help. It's a tool that brings your attention to interactions, large and small, that helps you modulate your energy and support your wellbeing. Studies are validating the direct experience of this unseen interconnectedness in life. On one level we are separate but on another level we are all part of something much larger.

Go do something this week with a person on your list with whom you feel particularly connected. Enjoy yourself and really feel that sense of connection. Write about it in your journal.



Energizing Your Body

The most beautiful experience we can have is the mysterious. ~Albert Einstein

Worksheet #44

Your first support system is your self. The ability to be alone but not feel lonely is linked with good health and a strong immune system.

People with a spiritual connection, a belief in something bigger than themselves or the ability to effectively self soothe hold the key to resilience. Loneliness is closely related to perception, a feeling of being isolated even though people may literally surround you. Lonely people tend to perceive stressful situations as threatening rather than challenging. People who carry the perception that they are alone tend to not ask for help from others, but withdraw. If you recognize that this may be how you cope, it's important for you to understand that your immune system may be affected.

Withdrawing and feeling isolated is markedly different from being alone and feeling self-sufficient. This means knowing you have a strong network you could tap into when you need it. If you find yourself feeling lonely, now is the time to make the effort to expand your social network and your inner connection to self.

How to be a good friend

Here's a list that make up a good supportive friendship:

- Empathy. You let each other know you understand their struggles.
- Acceptance. You let each other know that you care, no matter what happens.
- Encouragement. You let each other know you believe in the others ability to cope with life's ups and downs.
- & Flexibility. You give time and space to each other when they need it, without judgment.
- Assistance. You do more of the work at times in the friendship, when the other person is busy coping with stressful situations.
- Support. Act as a sounding board for each other.

Other ways to connect

A workout routine is a great way to reconnect to body and soul. Some people find that exercising alone is a great time to let their mind go and they naturally connect to something deeper. For some, exercising in a group is most beneficial to staying motivated. Pay attention to how and when you enjoy working out. It may be helpful to vary not only your workouts but also exercising alone or with a buddy. This can strengthen not only your relationships but your commitment to your workout regime.

Which friends can you exercise with?

What are some exercise groups you would like to get involved with?

What are some of your exercise goals that would be easier to do in a group?

Try an exercise class this week and see how it feels! Is it motivating? Is this something you can see yourself participating in? Write about your experience.

Growth requires reaching past your comfort zone and trying something new. Whether you're strengthening your connection to yourself or with others, make it authentic and mindful. Be present and be happy. You'll strengthen not only your connections but your immune system!

Relationships 101

Problems cannot be solved at the same level of awareness that created them. ~Albert Einstein

Worksheet #45

If you want your relationships to grow, you need to maintain attitudes and thoughts about them that serve their health and longevity much like you nurture a plant with water and minerals. A relationship nurtured through thoughts, feelings and behaviors will help it grow in a meaningful way.

Mutually respectful social interactions respect the needs, values, goals, feelings, and interests of those who make up the relationship. Mutual respect guides you to find constructive and satisfying social conflict solutions, which allow both parties to feel heard, appreciated and valued. Empathy, generosity and kindness, along with a genuine sense of responsibility towards each other guides all action, especially in times of conflict. Learning emotional honesty takes courage, and working through conflicts in relationships will deepen you as a person. Strengthening the connection between people in this way is true emotional intimacy.

How confident do you feel in your ability to express your observations, thoughts, needs and feelings to the people in your life? After you answer this for youself, ask them for honest feedback.

How do you handle conflict in your relationships? Ask someone in your life for honest feedback.

Are you better at providing certain parts of social support more than others? (Material needs, emotional support, activity buddy, team member).

Are you more comfortable receiving some types of support more than others? (See above).

Managing Conflict

Managing conflict is challenging for most people. The more we care about another person, the more difficult it can be when deep feelings are involved. But there are some ways of managing interpersonal conflict that are ineffective and cause more stress for both parties, ultimately damaging the relationship. They are:

Getting so emotionally upset that it disorganizes your thoughts and ability to reflect, resulting in acting out impulsively.

- Lacking the necessary skills to effectively communicate and work through the conflict.
- Responding maladaptively to conflict because of your attitude about conflict itself or about the specific problem.

Five Ineffective Conflict Management Styles

1. Hoping it goes away by withdrawing from conflict, pretending it didn't happen or that you don't care.

Withdrawing from conflict prevents both parties from learning better coping skills, leads to the harboring of unexpressed feelings, and stops people from working to improve or deepen the relationship.

2. Believing that each person must giveup the same amount, no matter what the disagreement is about.

This ineffective method doesn't consider people's views, needs or feelings, nor does it take into account legitimacy, insisting instead that each person must concede equal ground. It doesn't teach personal responsibility or taking another's needs into account. This way of dealing with conflict is about control through the arithmetics of concession. It stunts intimacy. It's also a misinterpretation of a winwin solution. We only really win when we learn how to address others' concerns without manipulating situations for false empowerment.

3. Emotional bullying.

Disrespecting the other person's needs or position because you are afraid of losing advantage. Behind this method is often a person who's afraid of being taken advantage of or looked down upon. To self protect, they believe the best defense is a good offense. They haven't yet learned the coping skills for constructive resolution and aren't aware that conflict can be growth promoting. Protecting oneself leaves no time to consider another person's needs.

4. Hiding behind social roles.

The titles of boss, employee, parent, doctor, patient, or teacher can prevent true human relatedness. Conflict resolution from behind a title most often frustrates and demeans the other party and deprives both parties of honest communication. For instance, assuming the role of "boss" may bring out authoritarian behavior that does not recognize others needs for respect, making them feel inferior, undermined or hopeless. This unproductively exploits power differentials and stops people in less socially powerful roles from making contributions.

5. Finding the quickest, easiest way out of the problem, which trivializes the situation.

A quick fix is a way to avoid conflict and show vulnerability, and shows a lack of effective problem solving skills. In the process, the person minimizes the problem rather than take it seriously. Glossing over a problem usually makes it worse because it remains unsolved. It deprives both parties a chance to learn better coping skills and deepen the relationship. It also decreases self-esteem, because somewhere you know the problem hasn't been solved because you weren't brave enough or didn't possess the skills to confront it openly.

See if you can identify the ineffective styles in the following statements:

- In a social conflict I keep my feelings inside and don't say what is bothering me.
- I surprise people with sudden outbursts of anger.
- When something bothers me about a person, I stay away from them.
- When people get upset with me, I tell them to lighten up!
- In a conflict, I give away power when I don't negotiate.

I do not like being told I'm wrong by someone who clearly has less education and experience than I do.

In a conflict, I will not say I'm sorry unless the other person says it too.

In social conflicts I often raise my voice.

Staying with the content in a conflicted interaction is more important than dealing with underlying feelings.

Clear Communication

Clear communication has purpose, taking other people's thoughts, feelings, and experience into account and fostering respect. It's important for verbal and nonverbal communication to be in sync. Remember, we can sense others emotions, even when they aren't stated. Our emotions translate into energy. These emotional vibrations may be unseen but can be perceived and have a profound affect on another person. This is especially important when we're communicating complex issues. Skillful communication distinguishes observations from thoughts, needs from feelings and gets a clear message across. It involves two directions, speaking and listening. Active listening involves saying back to the speaker what you have just heard to clarify the exchange.

See if you can identify these effective styles of communication in the statements below and how they differ from the statements above:

- This feels awful. Can we start again and really listen to each other?
- I don't need you to see this exactly as I do. But I do need you to hear where I am coming from.
- I think I'm supposed to know how to do this, but honestly, I have no idea.
- I can see that I've missed the point. Please give me another chance.
- I don't feel heard.
- When you treat me this way it feels like you don't respect me. Is that true?
- I'm sorry.
- I love you and I can't stand seeing you so unhappy.
- We need a new perspective. Let's take a break and each get clearer about what really matters here, okay?

It would mean a lot if you could say "I'm sorry" or do or say something that shows me that you care about what happened.

Four Keys to Healthy Communication:

1. Keep in mind that the person sitting across from you is not you.

2. Negativity stimulates the release of hormones and chemicals into the body that shuts down effective communication.

3. Stay positive. Trusting that you can work through any situation that arises leads to good results.

4. Seek first to understand, then to be understood. When each person comes from a compassionate framework, you both win.

Try this out during the week and see if you can transform any situations at home or work. Pay attention if any relationships come to mind while you read the communication skills described in this section and make notes to yourself below.

Social Networks 101

The art of being wise is the art of knowing what to overlook. ~William James

Worksheet #46

As Americans live longer, researchers are investigating how happiness levels are related to social support, social networks and health. Happiness seems to contribute to longevity, and higher expectations of happiness in older adults are linked with better adaptation to change. The less stress one experiences with changes in life, the better they adapt and seem to have higher levels of overall happiness at all ages. Diminishment of social networks is tied to loneliness and related to high blood pressure, elevated hormone levels and less restorative sleep (sleep that is less effective in restoring alertness and in improving mood and performance). An active social network of family and friends can promote healthy aging through a variety of mechanisms, including emotional support. People with more restricted networks are most likely to feel depressed at any age.

Learn Resilience

When you focus on the best possible outcomes, you allow yourself to stay open to seeing the possibilities. Let the bumps in the road or your negative feelings be the signal that you're off course with your thoughts and bring them back to what makes you feel positive and hopeful. The more time you spend doing this, the more you can retrain your thinking patterns and create new neural pathways in the brain that will be strengthened every time you practice positive feeling thought patterns.

Cultivate Support

Stay in touch. Answering phone calls, returning e-mails and reciprocating invitations lets people know you're interested.

Be proactive. Don't wait for someone else to make the first move. If you meet someone you think could be a good friend, invite him or her for coffee and then be first to strike up a conversation.

Choose friends wisely. Spend time with people who are fun to be around and add to your overall feeling of wellbeing.

Be a good friend. Some people can subtly put other people down in order to themselves feel better. Stay aware of your ego. Don't rush in to take care of other people's problems. When you do this, you create dependent relationships and the other person feels weakened. Don't compete. Sometimes advice can be given in a way that makes another person feel inferior while you feel superior. Questions like "Why do these things always happen to you?" comes from a competitive position. If hearing about someone elses success takes away from your own self worth, work on this issue. You'll be a better friend and have more to offer when you feel good about yourself. Challenge yourself. Keep looking for ways to improve. Show compassion for yourself and others. Spend less time focusing on what isn't working and more time acknowledging what is working in your life. Volunteer to help others.

Appreciate your friends and family. Take time to say thank you, to spend time with them and express how important they are to you.

Adding to Your Social Support Network

Look for friends when you're out. Bring your dog, your kids or your running shoes to the park, and you'll have something to talk about.

Volunteer. Pick a cause that's important to you, and you'll meet others who share a similar value system.

Ask a friend. Next time you meet a friend for lunch, ask him or her to bring along someone else. Go back to school. A local college or community education course puts you in contact with others who share similar hobbies or pursuits.

Look online. Many good sites exist for people going through stressful times, or for groups to join. Look for local groups you can attend in person in your community.

When looking for groups to join or people to meet from an online source, remember to use caution and good sense. Meet up at a public place. Try to join groups that meet outside your home so you get out in the community.

Finding Groups

Meetup.com is a great site to find groups that meet in your area with people who share similar interests at *http://www.meetup.com*

Facebook also has many groups and is a highly popular social networking site found at *http://www.facebook.com.* Find groups who meet in the community and not just online.

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There are many types of groups with varied interests such as:

Pole Dance Fitness: (there's a forum on the website) http://www.verticaldance.com/

Jogging Photography http://www.meetup.com/Jogtography/?page_start=1264270297233

Tango Dance Forums http://www.dance-forums.com/forumdisplay.php?f=9

Special K Group http://www.facebook.com/specialkus?v=wall

Athlinks: A social networking website that gives race results for Running, Swimming, Cycling, Mountain Biking, Triathlon, and Adventure Racing at *http://www.athlinks.com/*

CafeMom: For mothers, offering member-generated content such as profiles, journals, groups, photos, and polls. http://www.cafemom.com/

DailyStrength: Users provide one another with emotional support by discussing their struggles and successes. http://www.dailystrength.org/

KiwiBox: A general social networking site http://www.kiwibox.com/community/

Ravelry: For knitters and crocheters https://www.ravelry.com/account/login

deviantArt: online community showcasing various forms of user-made artwork at *http://www.deviantart.com/*

Health-related support groups: Heart Disease Support

Mayo Clinic's List of Heart Disease Support Groups (http://www.mayoclinic.org/support-groups/heartgroups.html) Mended Hearts Inc (http://www.mendedhearts.org/frame-events.htm)

Cleveland Clinic's List (http://my.clevelandclinic.org/heart/education/supportgroups.aspx

Diabetes Support

TuDiabetes.com

Defeat Diabetes Foundation (http://www.defeatdiabetes.org/self_management/text.asp?id=Diabetes_

Support_Gro)

American Diabetes Association (http://www.diabetes.org/living-with-diabetes/connect-with-others/) supplies a list of community activities, message boards and different support groups.

Cancer Support

I Can Cope (cancer.org)

The Cancer Hope Network (cancerhopenetwork.org)

Gilda's Club (gildasclug.org)

Cancer Care (cancercare.org)

The Cancer Survivors Network (acscn.org)

Oncochat (oncochat.org)

Investigate some possibilities of groups to expand your social network or invite a friend for coffee and nurture a relationship you already have. Do it today!

Healthy Connections

The best thing you could do for anyone that you love, is be happy! And the very worst thing that you could do for anyone that you love, is be unhappy, and then ask them to to try to change it. ~Abraham-Hicks

Worksheet #47

Think of yourself as a cork, buoyant and full of potential energy. This is your resilient self. Anything that causes negative emotions is like holding this cork under water. Resentments, jealousies, anger, judgment and self-criticism all keep you from achieving your full potential. By releasing these things you can be like that cork, shooting to the surface, energetic, resilient and full of wellbeing. Releasing these negative barriers to your happiness, you also stop the damaging flow of chemicals like adrenaline, noradrenalin and cortisol that make up the stress response and contribute to illness. Healing can skyrocket as you remove the barriers to healing.

How often do you focus more on staying busy, on goal oriented tasks than on taking care of yourself? Positive self-talk boosts confidence and speeds healing. How often are you in touch with that voice inside, listening to your hopes and dreams, recognizing your emotions and your strengths and able to self soothe effectively? Studies validate that perceiving potentially stressful situations as challenging but not defeating, allows you to perform to your best capability. Taking some amount of time to nurture your connection to self every day is fundamentally important in checking your perceptions.

A Spiritual Perspective

Research shows that people who consider themselves religious or spiritual cope better with stress and heal faster from illness than people who feel they are alone in the world. Healthy connections make up an effective support system. Spirituality can provide the sense that we are part of a greater whole. It isn't only found in the traditional arenas of religious affiliation, but also in daily activities, in connections with others, in nature and moments when we appreciate music or art.

Find the ways that work for you to build a healthy connection with your inner self. You will know them as you find them because you'll feel energized, and good in your own skin.

Exercise your self awareness:

At 100 years old looking back on your life, what would you like to see?

If you had five other lives to lead, what would you do in each of them?

Answer this question. If all my material needs were met and I could do anything, I would...

How can you develop some of these interests you listed above? (Take a class? Start singing lessons? Join a group?)

Some Benefits of Journaling

Presumably you've been writing in your journal for some weeks now. Do you recognize any patterns in your writing? Are you complaining about the same things over and over again? Is there any part of your life where you can take some new action? Any solutions taking shape in your ramblings? Sometimes the best ideas or creative solutions just show up on the page. Any activities presenting themselves that will help inspire you? Any secret interests or dreams revealing themselves to you? Take a risk. Be brave. Now is the time to begin, continue or revive old passions. It's never too late.

Some Benefits of Talk Therapy

Researchers have found that by talking or writing about traumatic or very emotional experiences during 15 to 30 minute blocks of time has beneficial effects that last for months. Writing and talking reduce stress, negative feelings and improve health outcomes. Shifting perspective through recognizing and describing the benefits gained from difficult experiences, as well as recognizing the strengths you possess that got you through them, reflects positively in immune responses and overall health. Talk therapy provides both social support and the opportunity to disclose negative experiences. It can teach the skills necessary to learn how to shift perspective. Consumer Reports magazine conducted a survey about the effectiveness of psychotherapy in which 4,000 of the magazine's subscribers participated. Nearly 9 out of 10 respondents who had sought mental health care said their condition had improved significantly following treatment. Almost all said life had become more manageable. If you've enjoyed the experience of meeting with your Lifestyle Coach during The RENEW Program©, chances are you'll benefit from continuing in the future. Ask for some referrals in the community.

It's never too late to find that inner voice, to reconnect with your sense of self or to heal old wounds. As your outlook on life improves so will your health.



When Food Becomes Your Social Support Network

Forget love, I'd rather fall in chocolate. ~Unknown

Worksheet #48

Not everyone gets the social support they need. People who don't help others or who don't reach out when they need help are not likely to have a large network. Some people are not assertive enough to ask for help or feel that they should be independent and not burden others. Some feel uncomfortable confiding in others, trusting, or don't know who to ask for help.

Some evidence suggests there are gender differences at play. Women receive less support from their spouses than men do. Women seem to rely more heavily on woman friends for emotional support. These gender differences may result from the greater intimacy that seems to exist in the friendships of females. It may reflect main differences in the value males and females place on emotional support or seek out and give. Understanding these gender differences may help both genders pay attention to the way they support each other.

Studies show that people's physiologic strain (blood pressure, heart rate) is lower when they have a supportive person (or even animal!) present during a stressful activity, whether it's giving a speech, or performing math a math problem in their head. The most helpful was a friend, followed by a supportive stranger and lastly, the family pet — having this support present resulted in less reactivity than if that person performed alone.

Avoid Overeating

So what happens when your support network isn't what it should be? This can lead to negative behaviors, including overeating. Compulsive eating can be an attempt to fill that void, to avoid feeling the absence of love or to comfort oneself. It's a response to not knowing what to do or how to feel in a particular situation. Some people turn to food for connection. If this sounds familiar, you are not alone. Connection is the source of many things, including self-confidence, resilience, and both giving and receiving support.

Allowing for time to relax, to breath and to listen to the voice inside is your lifelong connection to good health. But some people don't know how to listen — or don't like what they hear when they do. These negative thoughts are truly in the way of our wellbeing. Understanding where they come from is less important than changing your reaction to them.
Recognizing when your body or your mind is signaling a disconnect with your good health through negative emotions is the first step. Next, by making small changes described in this program, you can change your eating patterns and subsequently your health outcomes. Studies of the immune system confirm that regulating your emotions affects your biochemistry, creates new neural pathways in the brain and changes lifelong habits and behaviors.

Recognize Happiness

Recognizing when you feel happy and appreciating how your body feels when you are happy will lead you to a sense of wellbeing. Everything you do and think can be aimed at supporting this feeling of overall wellbeing. This is not to say that you should sweep negative feelings under the carpet and never look at them again. Instead of resisting unwanted thoughts and feelings, allow yourself to recognize them. Look for the desire beneath the feeling. This is what you want. You don't want to feel shame for eating food, for example, you want to feel great about the choices you're making, confident as you eat. Acknowledge this desire. Connect to this desire. To begin, act as if you are already there. Train your thoughts towards achieving it.

Embracing Change

If you are feeling lonely, for example, and want more support in your life, this is important information. Unless you live on a deserted island with no telephone or internet access or animals, you can fix the situation. Life is about change. It changes every moment. Concentrating on happiness over misery will help you aim for a solution that makes you happy, rather than spending your time in endless disappointment. It may be true that your best friend lives in another state, that your lover left you, or that your kids live far away. You can roll around in the sadness of the facts for years. Or you can point yourself towards thinking better thoughts, by concentrating on what makes you happy. You will have more energy for traveling, joining in somewhere, doing something fun that supports you feeling happier. It is a discipline. Thoughts lead to action. These are the training tools to help you move from defeat to resilience, through sadness and grief towards an abundant new life with better health outcomes.

Finding Expression

When you notice and appreciate when you feel great, you will choose foods that support this feeling of wellbeing. You can gravitate towards foods that make you feel good, healthy. Eating to stuff emotions or fill voids makes you feel sick afterwards. Eating to avoid feelings or to punish yourself or because you feel badly keeps you feeling badly. Concentrate on feeling good. Every action you take, every thought you think should support this feeling more often than not. You can express these bad feelings by talking

with a counselor or supportive friend or writing in your journal. And then stop. When you feel badly, use this feeling as a signal to do something from your lists that makes you feel happy, silly, content. Go have some fun. As you move your expectation into the feeling good realm, your food choices will change naturally. Your thinking patterns will change. No diet necessary.

Here are some tips:

- Be present.
- Listen to what your body wants.
- Eat when you feel good!
- Eat when you are hungry.
- Take the time to sit down to eat.
- Stop eating when you are satisfied. Know that there will be more food available later when you are hungry again.
- Enjoy every bite!
- & Concentrate on having fun every day!

This week keep track of the things that make you feel good every day. Write about it below.

Pay attention to the wind rustling in the trees, the sounds of a child's laughter, the taste of a fresh strawberry, the feeling of a warm bath or a hot shower. Before you eat a meal, recall some nice moments and then savor your food. Sit down. Take time to enjoy each bite. Allow these good feelings to guide which foods you reach for. Eat a little less. Stop eating while you still feel good!

RENEW© MODULE FIVE- Welcoming Others as Support

Resilience

The basic paradox: everything is a mess yet all is well. ~Ezra Bayda

Worksheet #49

Finding meaning in our lives, in situations, in moments, in our connections with others help us thrive and makes us resilient. A study on altruism and health found that performing an act of kindness gives people a rush of euphoria caused by a release of hormones and chemicals, which is followed by a long period of tranquility and wellbeing. During this stress-reduced period, immune system responses improved.

Resilient individuals share several characteristics. One is a belief that they can make a positive impact on whatever they are doing by getting deeply involved. They are not likely to be passive or to pull back or to avoid challenges. They value personal growth through knowledge, wisdom or experience. They are not likely to feel entitled. They are empathetic individuals, able to give and to get assistance and encouragement from others. They have good self esteem and believe they are capable of accomplishing whatever needs doing.

We've broken down resilient characteristics further in the next chart. Rate yourself and two other people you know. Pick a person you believe to be very resilient and someone you consider to have low resilience. Write their names or initials in the space indicated.

Assign a number from 0-5 in each area and then compare your findings.

- 0- None 3- Somewhat good
- 1- Poor

4- Very good

2- Somewhat poor 5- Excellent

Rating Resilience

	Self	Low resilience	High resilience
Physical			
Sood health			
Easygoing temperment			
Social			
Basic trust			
Make and keep good friends			
Empathetic			
Consciousness			
High ability to express and interpret			
emotions			
Capacity to plan and problem solve			
Appreciation of diverse points of view			
🏶 Takes initiative			
Flexible			
Emotional			
Able to delay gratification			
Realistically high self-esteem			
& Creative			
Sense of humor			
Able to recognize emotions and make a			
shift when needed			
Moral			
Help others			
Engage in socially or economically useful			
tasks			
Spiritual			
Has the feeling that one's own life matters			
Sees meaning in one's life			
Deep sense of connection with others			
TOTAL			

Adapted from Christine Padesky, PhD seminar on "Identifying Clients Strengths to Build Resilience."

Does this tell you anything about building resilience?

What areas do you need to strengthen?

Something to Think About

What we habitually say to ourselves is the basis of what we say to others. Doing the work necessary to grow as a person allows you to bring confidence, flexibility and compassion to yourself and to every relationship you have. The foundation of healthy relationships that stand the test of time are strong and resilient. Personal resilience will increase your ability to welcome others as support and to be a better support system for others.

RENEW© MODULE FIVE- Welcoming Others as Support

Intimate Relationships

Real love is identifiable by the way it makes us feel. There is a peaceful quality to an authentic experience of love that penetrates to our core, touching a part of ourselves that has always been there. True love activates this inner being, filling us with warmth and light. Our love for another awakens our love for ourselves. True love never makes us feel needy or lacking or anxious. Instead, true love empowers us with its implicit message that we are, always have been, and always will be, made of love. ~Daily Om.com

Worksheet #50

Single. Married or in a domestic partnership. A parent. At some point in your life, either one or all of these words will apply to you. So how do we make the most of our most intimate relationships? At the core of each of these relationships is your relationship with your self. How you honor, talk to and take care of your self is preparation for your role as a partner, spouse and parent.

To be the best partner, spouse, or parent, try to:

- Attend to your inner vision of your life
- Expand your capacity to love and be loved
- Pursue your interests
- Seek to understand your thoughts and feelings
- Get help if you need it
- Question your version of reality by finding alternate perspectives
- Ask yourself about the qualities that make up a loving person
- Explore the qualities you seek to grow in yourself
- Seek to understand first and then to communicate
- Be proactive, not reactive
- Always come from a place of love



Ways to Stay Motivated

Introduction

We are what and where we are because we have first imagined it. ~Donald Curtis

Congratulations! You've made it to week 12. No doubt you have already made some changes, even if it's in the way you think about change. You may already be feeling the benefits of these changes and feel motivated to keep going. Or you may be so tired of seeing your lists of good reasons to make changes that you're feeling the inspired beginnings of change. Either way, congratulations! Movement is movement and thought leads to action.

Studies show that short-term change may be motivated by pain, fear, or the desire to look better, but intrinsic motivation, which comes from inside, that's supported by your value system is the best indicator of long-term change. In other words, if you perceive the changes as beneficial to your health and you value your health, you'll be more successful at integrating lasting changes.

Understanding the connection between your thoughts, your behaviors and your health further supports the likelihood of lasting change. Positive self-talk that includes compassion for the cyclical nature of behavior keeps you feeling competent and flexible, two other important predictors of long-term success. Accepting that we don't always move in a linear fashion can open the possibility of success at any time. Viewing a "relapse" as choosing to give yourself a short-term break does not mean you've failed. Quite the opposite: By allowing yourself to be human, by accepting that the ups and the downs are actually part of the process, you free yourself to ride out the inconsistencies of your life and still see yourself as successful.

Knowing when to take a break and when to get back on track is an important distinction to recognize. This final module outlines how to maintain behavioral changes and keep yourself inspired to stay motivated. The RENEW Program© focuses on developing awareness and strengthening skills that lead to maintaining behavioral change. These are: attitude, support, feeling in control, putting the emphasis on feeling good and goal setting. Reminders might include looking at the video segments repeatedly, listening to the RENEW© and relaxation CD's or doing the written exercises again from previous modules as your understanding of the material deepens and your goals evolve. Most importantly, improving your relationships, increasing your feelings of self-confidence, resilience, happiness and health will be the best motivators of all!

Maintaining Effective Responses to Stress

Training Your Expectations

Worksheet #51

You only grow as much as your expectations allow. As you are in the process of noticing your thoughts and trying to make the shift to more positive choices, practice looking for reframes. How can you see a situation differently so it becomes a learning experience rather than an exercise in self-blame?

Take a moment to picture yourself up against a challenge. See yourself overcoming any hurdle that comes to you as a sprinter jumping a barrier in a race. You are strong, motivated, capable and exhilarated by the challenge. You know you have the skills to jump this hurdle and have a supportive team on the sidelines cheering you on. You have a winning team in place. As you practice your relaxation exercises, take some time to see yourself literally jumping hurdles. Visualize it. Feel the power in it. See yourself finding new and creative solutions that flow to you effortlessly in any situation. You are capable of taking on any challenge and calling in reinforcements when you need help. Remember, if you believe yourself capable, you are capable.

What would you need to believe about yourself in order to see yourself as effective?

What do you know about yourself that gives you confidence in your ability to face challenges?

What skills or personality traits will help you with managing stress or with your health goals, moving forward from this point onwards?

Post this list so you can see it!

Ways to Stay Motivated

Keeping the Emphasis on Feeling Good

When you wake up in the morning, Pooh, said Piglet at last, what's the first thing you say to yourself? What's for breakfast? said Pooh. What do you say, Piglet? I say, I wonder what's going to happen exciting today? said Piglet. Pooh nodded thoughtfully. It's the same thing, he said. ~ Benjamin Hoff, from The Tao of Pooh

Worksheet #52

The intrinsic desire to feel good can keep you inspired for a lifetime. Your goal of spending more time feeling good, by eating healthy foods, and doing activities that help you stay motivated and happy will keep you moving in the right direction. Using your emotions as a guidance system will always help you know when you're on track. Learning how to question your feelings deepens your connection to your true self and builds your confidence.

When you self identify as healthy you'll naturally behave in ways that sustain this vision of yourself. In real life, this means that in stressful situations, losing your temper, being cranky or poorly communicating will give way to awareness when you're not being effective. You'll have the tools to change course and know what to do to get back on track.

Poor stress management starts to reveal itself and you'll want to spend more time positively managing your stress so you can get back to feeling good and relating well to those around you as quickly as possible. Having the skills and the competence to achieve balance will heal your body and ultimately strengthen your commitment to making life-sustaining choices. You'll then feel more in control and it becomes a viciously healthy cycle of thoughts, feelings and actions maintainable for a lifetime!

Please take note of these changes in yourself by answering the following questions. I now feel good when I:

I truly enjoy:

I share my progress with and feel connected to:

Circle the number which best represents your average daily level of happiness:

1 2 3 4 5 6 7 8 9 10

Something to Think About

When people ask "How are you?" What do you measure your response against? Most often people answer this question based on comparisons with recent personal experience. The more time you spend feeling well, and happy, the more often you'll answer this question, "I feel great!"

Ways to Stay Motivated

Anticipate Obstacles

When the sea was calm all boats alike showed mastership in floating. ~William Shakespeare

Worksheet #53

As we all know, challenges arise that test our skills, our responses and our fortitude. Finding a new way to rise to these challenges often leads to a more gratifying way of being in the world. This is growth. Many opportunities for self-awareness present themselves, and choosing to learn from them will keep you pointed in the direction of good health and happiness. It may not be an easy road, but consistently seeing challenges as overwhelming will cause you stress, unhappiness and ultimately, illness.

Here are some reminders of unproductive ways that some people cope. If you recognize any of these as past obstacles, take note. Part of anticipating obstacles is staying mindful of old patterns. This can help you change them in real time.

Things people think

Personal put downs or self-deprecating opinions of yourself are not helpful. This is self-defeating and closes the door on learning. It dismisses your personal ability to grow and to learn.

Telling anyone including yourself, that you "should" do something. It shuts people down. "Should" implies perfection and leads to negativity.

When being right or getting what you want is more important than anything else, it's time to ask yourself some important questions. Are you keeping yourself isolated and separate from those you love because you're absolutely convinced in your position? Anger and blame do not lead to solutions or to compromise.

Rationalizing may satisfy your intellect, but it's a way of understanding things that may not conform to reality. If you've built a solution that sounds like common sense but you feel a tug of doubt, question it. Ask for help from a trusted friend and stay neutral when you get your response.

Giving up works when all other methods of self sabotage fail. Wallowing in self-pity, or self-blame stops you from asking the questions or taking the actions that might lead to growth.

Things to do

Choose a restaurant that supports the way you want to eat.

When you can't choose the restaurant, check out the menu in advance and choose what you'll eat.

When you eat out, do your best to make good choices and don't beat yourself up afterwards.

Make a schedule for your workouts.

Practice relaxation every day, whether that means breathing calmly for 5-10 minutes twice a day or
1-2 minutes at a time several times throughout the day.

Schedule in fun!

Get a friend, a companion or a dog to be your workout buddy, your traveling companion, your inspiration, and your support system.

Join a group that inspires you.

Read some books on whatever part of health and wellness interests you.

If you're traveling, find out if there is a gym in the hotel or one close by.

If you're traveling, bring an exercise DVD and play it on your computer or in the room.

Before any anticipated obstacle, plan out how you would like to handle it.

Be positive most of the time.

Be kind to yourself. Think about how you would talk to a two-year-old. Treat yourself with the same kindness and patience.

Concentrate on positive aspects of a difficult person.

Keep a journal. Write about whatever seems important to note, such as feelings associated with food, reactions to stress, and objects of gratitude. Remember, life is filled with positive and negative. Keep your journal balanced as well. Make note of how you react in anxiety-provoking situations. Do you automatically react in some way? Do you tense your muscles? Ideally you want to train yourself to notice these reactions and immediately relax your body so you can think through the situation.

If you feel negative about a certain person or situation, it's difficult to jump to a positive feeling state. Instead, choose to feel neutral. Move one step away from annoyance towards calm, whatever that feels like for you.

Be general in your approach to happiness. Enjoy the beauty of a flower or think about all the strides you've made instead of the situation causing you unhappiness. The problem will work itself out. When you keep yourself calm and pointed towards happiness, you're more likely to think of solutions.

What are some obstacles you might anticipate and how can you plan for them? Be specific.

What are some obstacles to keeping your thoughts positive and how can you turn that around?

Ways to Stay Motivated

Staying Inspired

There is no sincerer love than the love of food. ~George Bernard Shaw

Worksheet #54

One of the greatest predictors of long-term change is focusing on the feeling of what you enjoy about what you're doing. For example, exercise: If you concentrate on how it feels afterwards, the release of endorphins and the adrenaline rush of your workout, then you're focusing on what feels good and inspiring yourself to keep doing it.

Similarly, if you concentrate on how you feel when you eat food that makes your body run better, you'll keep choosing those foods. Eventually you'll choose those foods more often than foods that make you feel badly after you eat them. This is not magical thinking, not a quick fix. It is a concentrated choice of thought, which leads to action.

Furthermore, if you can visualize yourself as thin, healthy, fit, with an abundance of energy and believe it — and concentrate on it each day — you will get there. These are the kind of thoughts and feelings that lead to action. If your motivating factor is you don't like the way you look naked, and you really feel badly about it, before long this negative thought and the feelings it evokes may send you crawling under the covers with a bag of chips!

If you focus on creating positive relationships with those you work with and those you love; believe that you're capable, that you're in control of your thoughts, and that you're able to share moments of deep connection, you'll stay motivated to find the path that makes these things a reality. Pain or dissatisfaction may get you started, but it's the love of life, falling in love with feeling good and the desire to live your life filled with more happy moments than not that will keep you on the road to success.

Stay honest on your path. If you feel effective, are having fun, stay flexible and anticipate your blocks with potential solutions you can make any change an integrated part of your life. Discuss any continued obstacle with your Lifestyle Coach for additional help if you need it.

Choose one area of The RENEW Program[©] (Responding to Stress More Effectively, Enhancing the Effects of Relaxation, Nourishing Your Immune System, Energizing Your Body, or Welcoming Others as Support) and write about it below. You may choose to do this with all the RENEW[©] steps.

Why I know I can:

Why I want to:

I'm learning that I am good at:

I'm learning that I really enjoy:

Three challenges and their potential solutions are:

1.			
2.			
3.			

Three things I do every day to support my good health and happiness:

1.		
2.		
3.		

Ways to Stay Motivated

Reinforcing What You've Learned about Attitude and Support

Over every blade of grass there is an angel bent over whispering, Grow! Grow! ~The Talmud

Worksheet #55

What helps you keep your attitude positive? It's different for everyone. Some things people do are post notes to themselves, read inspiring books or quotes, talk about successes with a friend, write affirmations, support a friend, attend a support group, or list what you're grateful for every morning.

Write some ideas for yourself below:

Support: The ABC's of Friendship

There are three types of friends.

1. **Associates.** They team up with you until you've accomplished a goal. They come and go throughout your life.

2. Buddies. They are on your side, and frequently enjoy the same things you do.

3. **Confidants.** They love you unconditionally and stick with you for the long haul. How do you tell the difference between a buddy and a confidant? When people are truly for you and connected with you, they are happy (not envious, jealous, or competitive) when you share your dreams with them.

Draw a circle within a circle. On the inside circle, list your confidants. On the outside circle, list your buddies. On the side of the circles, list the names of your associates, your current support team on your quest to accomplish your health goals. Keep this page where you can see it. You'll always know who to call when you either need to problem solve, someone to go have fun with and change your mood, or someone to talk with about deeper matters.

Having a positive attitude and a solid support system are two important ways to maintain your motivation levels and get inspired every day!

Ways to Stay Motivated

Dealing With Your Emotions

In the beginner's mind there are endless possibilities; in the expert's there are few. ~The great Zen master Suzuki Roshi

Worksheet #56

The quote above describes the enthusiasm and openness that comes with acknowledging you don't know what to expect when you're beginning something. You're open to all avenues of learning. When you think you know anything with certainty however, you cut yourself off from seeing the unexpected as a new opportunity to learn.

Trying to maintain the perspective of a beginner in all things allows you to see endless possibilities. Remember that learning is progressive. It adds up over time and each time you face an old habit you plant a seed of change. Over time, the seed takes root and change breaks through the surface. This process requires care, nurturing and patience over a lifetime. Resilient people see change as an opportunity for growth rather than a threat to their status quo. This attitude shift can be accomplished by anyone willing to let go of their preconceived ideas and see with new eyes.

We do the best we can to get through life. We're taught early how to cope from our parents and other adults, who may not have been the best teachers. The willingness to be aware and allowing yourself to open to a different way of doing things is an essential ingredient in behavioral change. No one knowingly creates their own suffering. The walls of denial are built to protect ourselves, but the trouble is they keep us prisoners of our own misconceptions or outdated habits. As we get older, the evidence of our repeating patterns builds over time and it's not as easy to hide from the truth. You'll see it in the condition of your body and in your lifestyle. People try to distract themselves. They stay overly busy. They become expert at avoiding bad feelings and at suppressing their fear. However, fear and suffering creates tension in the body and leads to illness over time. Suppressing emotions suppresses your immune system.

Facing Our Fears

We now know that free-floating anger creates many conditions in the body, including heart disease and cancer. In *Minding the Body, Mending the Mind*, physician Joan Borysenko likens hiding from our fear to a child hiding under the covers.

They often mistake harmless things, like the shadow of a shirt hanging over the back of a chair, for a horrible monster. Some have the courage to turn on the light and have a look. They're the lucky ones. Others can at least cry out for help and they too become free of their own illusions. But those who choose to hide under the covers, afraid even to breathe, are in the worst position of all. They are prisoners of their own imagination.

Not dealing with your health issues or the habits that created them in the first place is like the child hiding under his covers, too afraid to move. Just like that child under the covers, in reality you are in control. You have the power to throw off the covers and turn on the light. Be brave enough to do it and you'll change your life and your health outcomes.

There's great freedom in knowledge. There's great power in change. Have the courage to awaken to your own life. Deal with your emotions as they come up. Don't store them up. Get help if you need it. Talk to a friend. Seek therapy. Use your journal to write about your inner life.

A new way to deal with emotions as they happen:

& Give the emotion a name such as angry, sad, fearful etc.

Take a breath. Use the breathing exercises to relax the body, allowing more oxygen to the brain so you can think more clearly.

Detach from the feeling and observe the situation. Consider why you are feeling this way. Does it make sense?

Ask yourself questions?

Are you reacting from the past or standing in the present? Ask yourself: how old do I feel right now? Remind yourself your true chronological age and that you have the skills to deal with this emotion and the situation. You have control.

Reflect on what you have previously done with this emotion. In the past did you store it up, suppress it, act out, eat, rage, deny it or minimize it? Now allow yourself to learn from it. You are a creative component in your own life. Allow this emotion to become a teacher so you can heal from it.

From this empowered place choose one of the following actions:

1. Let it go or decide you'd like to let it go and distract yourself for the moment with better feeling thoughts or activities while the hormones and chemicals triggered by the negative emotions subside naturally.

2. Reframe it and find a new perspective or a deeper understanding with your new sense of competence. This will also help you change your feeling state.

3. Take a specific, necessary action when you feel inspired to do so. Afterall you are a self directed, resilient person.

4. Tell yourself that all is well, because it is.



RENEW© MODULE SIX- Ways to Stay Motivated

Practice Relaxing

Compassionate action involves working with ourselves as much as working with others. ~Pema Chodron

Worksheet #57

Concentrating on breathing deeply and taking the time to induce the relaxation response, while learning the skills to deal with your busy mind is also called meditation. This process teaches you how to quiet the mind and restores the ability of inner listening. It helps cultivate a sense of control, encourages you to commit to a deeper engagement with your life and gives you a sense of mastery that can be applied to life's challenges — all of which have proven to help build a healthy approach to stress.

In meditation, you can access the relaxation response and become more aware of how your thoughts create stress. Training yourself to keep a positive attitude helps the body stay relaxed and has a direct link to healing.

Can you practice deep breathing and induce the relaxation response?

What are the signals that your body has reached this relaxed state?

Are you using the emwave unit daily or are you practicing without it? Have you used the computer relaxation games recently?

Can you imagine either the emwave unit or meditation as an effective long-term tool to help remind you what it feels like to be truly relaxed?

What have you learned about yourself through the practice of relaxation and/or meditation?

What are some reasons you'll continue to develop this practice in your daily life?

Do you find it difficult to make time for relaxation and/or meditation?

If so, what are some possible solutions for you to create time to relax every day?

How do you feel in your body when you think about gratitude and appreciation?

When you practice feeling grateful, does this affect your daily outlook or state of mind?

Is practicing gratitude or appreciation something you can make a part of your daily routine? If so, when is the best time for you to do this during the day?

Something to Think About

Try linking an activity with a time of the day to make it a habit, like waking up and brushing your teeth. Many people find that listing five things they are grateful for first thing in the morning is a great way to start the day. Look for things that you appreciate right now. Even if you don't yet have your life or your health exactly the way you want it, you're on your way. There are many people experiencing what you envision for yourself, who were standing right where you're standing at one time. You're gravitating towards a way of living that will satisfy you even more. Can you feel it?



Ways to Stay Motivated

Giving in to Temptation

I can resist everything except temptation. ~Oscar Wilde

Worksheet #58

Lifestyle change is not mapped as a linear graph. It looks more like a rollercoaster ride. The ups and downs of change continue throughout your life, hopefully becoming increasingly manageable as you gather more skills to deal with them. There are also times that you don't follow your plan. You choose to take a break. You give in to temptation. You slip. Your perspective is critical at these times. However you word it, this is a normal part of change and everyday living. See this as a choice, a momentary left turn, and know you have the tools to get back on track. Slips can be expected. Giving in to temptation doesn't hurt your progress, but the way you react to it can. Learning a new way to react to slips will help get you back on track easily.

Having a plan in place to deal with these times is important. If you don't beat yourself up or feel guilty as you go about the task of being human, you'll have a much easier time navigating your life with purpose and direction. You can even learn more about yourself and your own process during those times that you take a break. Developing personal markers are a helpful strategy for regulating body weight, for example. No one weighs the same amount day after day for years. Some people have a three to five pound variation, and when they hit that five pound marker they use it as a signal to get back in gear. Experiment with your own strategies and write them down.

Do you think you can approach taking a break without guilt, shame, embarrassment or defeat? What are some new things you can tell yourself about it?

What personal markers would signal to you that you have slipped:

During times of stress?

In your relaxation routine?

When you eat?

In your exercise routine?

With your social support?

Examining previous habits can be helpful in anticipating obstacles and creating new solutions that work. Here are some of the kinds of questions to gently ask yourself. Be kind. This is the key to your continued success!

What things have previously caused you to slip from healthy eating?

What things have previously caused you to slip from exercising?

What things have previously caused you to slip in the way you respond to stress?

What has gotten in the way of daily relaxation?

Ways to Stay Motivated

How to Get Back on Track

If you follow your bliss, you put yourself on a kind of track, which has been there all the while waiting for you, and the life that you ought to be living is the one you are living. ~Joseph Campbell

Worksheet #59

After you take a break, you may need to experiment with ways to get yourself back on track. The following pages will help you create solutions and plan your strategy. You can complete all of them or focus on those areas that are particularly challenging for you.

Some ideas to get back on track:

Actively replace negative thoughts with positive thoughts.

Set a new, smaller goal to ease yourself back in: Make the next meal a healthy one, or the next day a good exercise day. Meditate or do something fun to help yourself relax and think more clearly and positively.

Talk to someone supportive. Enlist the help of friends or your Lifestyle Coach. Focus on what you've learned from the experience.

Take note of all the positive changes you've made already. Let yourself acknowledge them and feel good about your progress.

Don't be hard on yourself. Keep focusing forward on your ultimate goal. Use humor to help you not take yourself too seriously. Remember, taking a break from taking a break is a normal part of the cycle.

RENEW© Module Six- Maintenance Program

My Plan: How to Get Back on Track Quickly

Responding to Stress More Effectively

I will:

Roadblocks that might come up:

I'll handle them by (remember what's worked in the past):

To make my success more likely I'll (list things such as keep a positive mental attitude):

Who can help you with this?

My Plan: How to Get Back on Track Quickly and Effectively

Enhancing the Effects of Relaxation

I will:

Roadblocks that might come up:

I'll handle them by (remember what's worked in the past):

To make my success more likely I'll (list things such as talk about your successes with a friend):

Who can help you with this?

My Plan: How to Get Back on Track Quickly and Effectively

Nourishing my Immune System

I will:

Roadblocks that might come up:

I'll handle them by (remember what is already working for you):

To make my success more likely I'll (list things such as keep a positive mental attitude or focus on how good my body feels when I eat healthy food):

Who can help you with this?

My Plan: How to Get Back on Track Quickly and Effectively

Energizing my Body

I will:

Roadblocks that might come up:

I'll handle them by (remember what's worked in the past):

To make my success more likely I'll (list things such as be responsible to a workout buddy):

Who can help you with this?
RENEW© MODULE SIX- Maintenance Program

My Plan: How to Get Back on Track Quickly and Effectively

Welcoming Others as Support

I will:

Roadblocks that might come up:

I'll handle them by (remember what's worked in the past):

To make my success more likely I'll (list things such as keep my mental attitude neutral if I can't be positive, ask for help, do something off my list to change my focus etc):

Who can help you with this?

Adapted from the Diabetes Prevention Program

RENEW© MODULE SIX- Ways to Stay Motivated

Keep Yourself Inspired!

Doctors and scientists said that breaking the four-minute mile was impossible, that one would die in the attempt. Thus, when I got up from the track after collapsing at the finish line, I figured I was dead. ~Roger Bannister

Worksheet #60

You know what works for you. The first thing is to acknowledge what works — and do that! What's kept you inspired this far?

Stay aware of the benefits you've achieved already. Focus on feeling good! What did you hope to achieve when you started the RENEW program?

Have you reached these goals?

Recognize your successes! What changes do you feel the proudest of?

Something to Think About

- Keep your Road Map to Success worksheet posted on your refrigerator.
- Plan your weekly activities. Post your schedule where you can see it.
- Add variety to your routine.
- Keep your journal going.
- Stay focused on feeling positive and happy.
- Pay attention to the personal signals you're off track, including your mood.
- Take a healthy cooking class or buy a cook book that looks inspiring!
- Try a meditation class.
- Set new goals for yourself. Make them specific, short term and achievable.
- Experiment with rewards. Rather than food-related, make it something to do or buy when you reach your goal.
- & Use your support group to help you stay motivated.
- & Call a friend or your Lifestyle Coach for support.
- Watch our online videos, listen to the RENEW cd or use your emwave unit and games to remind and inspire you!



Congratulations! We are all very proud of your progress in The RENEW Program[©] and will continue to cheer your successes on your way to maintaining good health, vitality and happiness! As you continue to improve your health outcomes, you'll undoubtedly inspire others as well. Let's work together to support and empower each other with knowledge, kindness and inspired action. Everyone wins in that scenario!

For additional sessions or support you can contact us through www.TheRENEWProgram.net or call 949-715-7307. Our door is always open!

RENEW© Bibliography

1. Cloutier, Marissa, and Eve Adamson. *The Mediterranean Diet*. New York, NY: Harper, 2001. Print.

2. Weil, Andrew. Natural Health, Natural Medicine. Revised Edition. New York, NY: Houghton Mifflin Company, 1995. Print.

3. Ornish, Dean. Program for Reversing Heart Disease. New York, NY: Ballantine Books, 1991. Print.

4. Holloszy, John, and Edward Coyle. "Adaptations of Skeletal Muscle to Endurance Exercise and their Metabolic

Consequences." Journal of applied physiology: respiratory, environmental and exercise physiology (1948): 831-838. Print.

5. Amen, Daniel. Change Your Brain Change Your Life. New York, NY: Three Rivers Press, 1998. Print.

6. Amen, Daniel. Magnificent Mind at Any Age. 1st ed. New York, NY: Three Rivers Press, 2008. Print.

7. Sarafino, Edward. *Health Psychology Biopsychosocial Interactions*. 5th ed. Hoboken, NJ: John Wiley and Sons, Inc., 2006. Print.

8. Smolan, Rick, Phillip Moffitt, and Matthew Naythons. *The Power to Heal: Ancient Arts and Modern Medicine*. New York, NY: Prentice Hall Press, 1990. Print.

9. Shumaker, S. A., Ockene, J. K., Riekert, K. A., (Eds.) (2009). *The handbook of health behavior change* (3rd ed.). New York, NY: Springer Pub. Co.

10. Ornish, Dean. Eat More, Weigh Less. 1st ed. New York, NY: Harper-Collins Publishers, 1993. Print.

11. Dyer, Wayne. The Power of Intention. Carlsbad, CA: Hay House, Inc., 2004. Print.

12. Orth-Gomer, K, A Rosengren, and L Wilhelmsen. "Lack of social support and incidence of coronary heart disease in middle-aged Swedish men." *Psychosomatic Medicine*. 55.1 (1993): 37-43. Print.

13. Robbins, Anthony. *Personal Power II: The Driving Force*. San Diego, CA: Robbins Research International Inc, 1996. Print. 14. Vernoff, Krista, and Az Ferguson. *The Game on Diet*. 1st ed. New York, NY: HarperCollins Publishers, 2009. Print.

15. Ellis, Albert. Overcoming Resistance: *A Rational Emotive Behavior Therapy Integrated Approach*. 2nd ed. New York, NY: Springer Publishing Company, Inc, 2002. Print.

16. Chopra, Deepak. The Seven Spiritual Laws of Success: A practical Guide to the Fulfillment of Your Dreams. San Rafael, CA: Amber-Allen Publishing, 1993. Print.

17. Covey, Stephen. *The Seven Habits of Highly Effective People: Restoring the Character Ethic.* 1st ed. New York, NY: Fireside, 1990. Print.

18. Shumaker, Sally, Judith Ockene, and Kristin Riekert. *The Handbook of Health Behavior Change.* 3rd ed. New York, NY: Springer Publishing Company, LLC, 2009. Print.

19. Davis, Martha, Elizabeth Eshelman, and Matthew McKay. *The Relaxation and Stress Reduction Workbook*. 6th ed. Oakland, CA: New Harbinger Publications, Inc, 2008. Print.

20. Gottman, John, and Nan Silver. The Seven Principles for Making Marriage Work. New York, NY: Three Rivers Press, 1999. Print.

21. Cameron, Julia, and Mark Bryan. *The Artist's Way: A Spiritual Path to Higher Creativity.* New York, NY: Tarcher/Putnam, 1992. Print.

22. Khoshaba and Maddi. HardiTraining: A Comprehensive Approach to Mastering Stressful Circumstances. Irvine, CA: The Hardiness Institute, Inc, 2008. Print.

23. Padesky, Christine, and Dennis Greenberger. *Clinician's Guide to Mind Over Mood*. New York, NY: the Guilford Press, 1995. Print.

24. Green, Judith, and Robert Shellenberger. *The Dynamics of Health and Wellness: A Biopsychosocial Approach*. Orlando, FL: Harcourt/Brace, 1991. Print.

25. Lindberg, Fedon. *The GI Mediterranean Diet: The Glycemic Index-Based Life-Saving Diet of the Greeks*. Berkeley, CA: Ulysses Press, 2009. Print.

26. Smith, Jonathan. *Cognitive-Behavioral Relaxation Training: A New System of Strategies for Treatment and Assessment.* New York, NY: Springer Publishing Company, Inc, 1990. Print.

27. Smith, Jonathan. *Relaxation Dynamics: A Cognitive-Behavioral Approach to Relaxation.* 1st ed. Champaign, II: Research Press, 1985. Print.

28. Hendrix, Harville. Getting the Love Your Want: A Guide for Couples. 1st ed. New York, NY: Owl Books, 2001. Print.

29. Borysenko, Joan. Minding the Body, Mending the Mind. Cambridge, MA: Da Capo Press, 2007. Print.

30. Hawkins, David. *Power vs. Force: The Hidden Determinants of Human Behavior*. Carlsbad, CA: Hay House, Inc., 2002. Print.

31. Caras, Jim. *How to Reshape Your Body! A Proven, Step-By-Step Guide to Losing Weight and Shaping Your Body.* Laguna Beach, CA: Inspired Health Publishing, 2008. Print.

32. Kabat-Zinn, Jon. *Wherever You Go, There You Are: Mindfulness Meditation in Everyday Life.* 1st ed. New York, NY: Hyperion, 1994. Print.

33. Ornish, Dean. The Spectrum. New York, NY: Ballantine Books, 2008. Print.

34. Chopra, Deepak, and David Simon. *Grow Younger, Live Longer: Ten Steps to Reverse Aging.* 1st ed. New York, NY: Three Rivers Press, 2001. Print.

35. Lee, Roberta. The SuperStress Solution. New York, NY: Random House, 2010. Print.

36. Lee and Febiger. *Guidelines for Exercise Testing and Prescription*: American College of Sports Medicine. 4th ed. Malvern, PA: Lea & Febiger, 1991. Print.

37. Lluch, Alex. Easy Workout Journal. San Diego, CA: WS Publishing Group, Print.

38. Smith , Jonathan. *ABC Relaxation Theory: An Evidence-Based Approach*. New York, NY: Springer Publishing Company, Inc, 1999. Print.

39. Greenberger, Dennis, and Christine Padesky. *Mind Over Mood: Change How Your Feel by Changing the Way Your Think.* New York, NY: The Guilford Press, 1995. Print.

40. Beinfield, Harriet, and Efrem Korngold. *Between Heaven and Earth: A Guide to Chinese Medicine*. New York, NY: Ballant 41. Beck, Judith. *The Beck Diet Solution: Train Your Brain to Think like a Thin Person*. Birmingham, AL: Oxmoor House, 2007. Print.

42. Barnard, Neal. Dr. Neal Barnard's Program for Reversing Diabetes: The Scientifically Proven System for Reversing Diabetes Without Drugs. New York, NY: Rodale Inc, 2007. Print.

43. Crinnion, Walter. *Člean, Green, and Lean: Get Rid of the Toxins that Make You Fat.* Hoboken, NY: Wiley & Sons, Inc, 2010. Print.

44. Childre, Doc, Howard Martin, and Donna Beech. *The HeartMath Solution*. 1st ed. New York, NY: HarperCollinsPublishers, 2000. Print.

45. Moore, James, Kate Lorig, Michael Korff, Virginia Gonzalez, and Diana Laurent. *The Back Pain Helpbook*. Reading, MA: Perseus Books, 1999. Print.

46. Hansen, Anne, Christian Fischer, Peter Plomgaard, Jesper Anderson, and Bengt Saltin. "Skeletal muscle adaptation: training twice every second day vs. training once daily." *Journal of Applied Physiology*. 98. (2004): 93-99. Print.

47. Holloszy, John, and Edward Coyle. "Adaptations of skeletal muscle to endurance exercise and their metabolic consequences." *Journal of applied physiology: respiratory, environmental and exercise physiology.* 56.4 (1984): 831-38. Print.

48. Reis, Harry, Kennon Sheldon, Shelly Gable, Joseph Roscoe, and Richard Ryan. "Daily Well-Being: The Role of Autonomy, Competence, and Relatedness." Personality and Social Psychology Bulletin. 26.4 (2000): 419-35. Print.

49. Deci, Edward, Haleh Eghrari, Brian Patrick, and Dean Leone. "Facilitating internalization: The Self-Determination Theory Perspective." *Journal of Personality*. 62.1 (1991): 119-42. Print.

50. Brown, Kirk, and Richard Ryan. "The Benefits of Being Present: Mindfulness and Its Role in Psychological Well-Being." *Journal of Personality and Social Psychology.* 84.4 (2003): 822-48. Print.

51. Ryan, Richard, Jessey Bernstein, and Kirk Brown. "Weekends, work, and well-being: Psychological need satisfactions and day of the week effects on mood, vitality, and physical symptoms." *Journal of Social and Clinical Psychology.* 29.1 (2010): 95-22. Print.

52. Emoto, Masaru. "Healing with Water." *Journal of Alternative and Complementary Medicine* . 10.1 (2004): 19-21. Print. 53. Radin, Dean, Nancy Lund, Masaru Emoto, and Takashige Kizu. "Effects of Distant Intention on Water Crystal Formation: A Triple-Blind Replication." *Journal of Scientific Exploration*. 22.4 (2008): 481-93. Print.

54. Mora, J, Makoto Iwata, and Ulrich Andrian. "Vitamin effects on the immune system: vitamins A and D take centre stage." *Nature Reviews*. 8. (2008): 685-98. Print.

55. Pryor, William. "Vitamin E and Heart Disease: Basic Science to Clinical Intervention Trials." *Free Radical Biology & Medicine*. 28.1 (2000): 141-64. Print.

56. Wintergerst, Eva, Silvia Maggini, and Dietrich Hornig. "Contribution of Selected Vitamins and Trace Elements to Immune Function." *Annals of Nutrition and Metabolism.* 51. (2007): 301-23. Print.

57. Chandra, Ranjit. "Impact of nutritional status and nutrient supplements on immune responses and incidence of infection in older individuals." *Ageing Research Reviews.* 3. (2004): 91-104. Print.

58. Niers, Laetitia, Marianne Stasse-Wolthuis, Frans Rombouts, and Ger Rijkers. "Nutritional Support for the Infant's Immune System." *Nature Reviews.* 65.8 (2007): 347-60. Print.

59. Mattson, Mark, Wenzhen Duan, and Zhihong Guo. "Meal size and frequency affect neuronal plasticity and vulnerability to disease: cellular and molecular mechanisms." Journal of Neurochemistry. 84. (2003): 417-31. Print.

60. B. S. McEwen, "Protective and Damaging Effects of Stress Mediators," *New England Journal of Medicine* 338 (1998): 171-79.

61. Research presented by Dr. Charles Nemeroff at the 161st Annual Meeting of the American Psychiatric Association. As reported in *NeuroPsychiatry Review* 9, no. 6 (2008).

62. B. Bower, "Well Groomed Rodents Stay Cool, Calm: Individual Rat Response to Stress Influenced by Mother's Style of Nurturing," *Science News*, vol. 152, no. 11, p. 167, September 13, 1997.

63. *National Institute of Diabetes and Digestive and Kidney Diseases* (NIDDK). The Diabetes Prevention Program. Available from: http://www.bsc.gwu.edu/dpp/index.htmlvdoc. The investigators of the Diabetes Prevention Program (DPP) designed the protocol between August, 1994 and November, 1995.

64. U.S. Department of Health and Human Services 2010 Physical Activity and Fitness Objective.

65. William R. Lovallo, Noha H. Farag, Andrea S. Vincent, Terrie L. Thomas, and Michael F. Wilson, "Cortisol responses to mental stress, exercise, and meals following caffeine intake in men and women." In: *National Insitute of Health* (Internet). Cited: 2006, May 2. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2249754/

66. Environmental Working Group found at: http://www.ewg.org/

67. Environmental Protection Agency found at: http://www.epa.gov/

68. Katharine Rosman, "Blackberry Orphans," Wall Street Journal, page W1, December 8, 2006.

69. T. Colin Campbell, PhD, Thomas M. Campbell II. The China Study. Texas. Benbella Books. 2006. Print.

70. American Diabetes Association. "Economic consequences of diabetes mellitus in the US in 1997." *Diabetes Care* 21 (1998); 296-309. Cited in: Mikdad AH, Ford Es, Bowman BA et al. "Diabetes trends in the US: 1990-1998." *Diabetes Care* 23 (2000): 1278-1283.

71. Austin MA, Breslow JL, Hennekens CH, Buring JE, Willet WC, Krauss RM. Low-density lipoprotein subclass patterns and risk of myocardial infarction. *JAMA* 1988;260(13):1917-21.

72. Libby P. Inflammation and cardiovascular disease mechanisms. *American Journal of Clinical Nutrition*. 2006; 83 (suppl):456S-60S

73. Katherine Esposito and Dario Giugliano. Diet and inflammation: a link to metabolic and cardiovascular diseases; Division of Metabolic Diseases, Policlinico Seconda Universita` di Napoli, University of Naples, Piazza L. Miraglia, Naples, Italy, 80138, *European Society of Cardiology,* May 30th, 2005.

74. Don D. Sin, MD, MPH; S.F. Paul Man, MD; Why Are Patients With Chronic Obstructive Pulmonary Disease at Increased Risk of Cardiovascular Diseases? The Potential Role of Systemic Inflammation in Chronic Obstructive Pulmonary Disease, From the Department of Medicine, Pulmonary Division (D.D.S., S.F.P.M.), *University of Alberta, Edmonton, Alberta, Canada, and The Institute of Health Economics* (D.D.S.), Edmonton, Alberta, Canada.

75. Barbara J Nicklas, Walter Ambrosius, Stephen P Messier, Gary D Miller, Brenda WJH Penninx, Richard F Loeser, Shana

Palla, Eugene Bleecker, and Marco Paho; Diet-induced weight loss, exercise, and chronic inflammation in older, obese adults: a randomized controlled clinical trial 1–3, *American Journal of Clinical Nutrition* 2004;79:544 –51.

76. Peter J. Barnes, D.M; Nuclear Factor kB- A Pivotal Transcription Factor in Chronic Inflammatory Disease; *New England Journal of Medicine*, April 10th, 1997 1065-1071.

77. Logan AC (November 2004). "Omega-3 fatty acids and major depression: a primer for the mental health professional." *Lipids in Health and Disease* 3 (1): 25.

78. Heather Hutchins, MS, RD (10/19/2005). "Symposium Highlights -- Omega-Fatty Acids: Recommendations for Therapeutics and Prevention\" found at http://www.medscape.com/viewarticle/514322_1

79. Cunnane SC (November 2003). "Problems with essential fatty acids: time for a new paradigm?" *Progress in Lipid Research* 42 (6): 544–68.

80. Menendez JA, Vellon L, Colomer R, Lupu R (November 2005). "Effect of gamma-linolenic acid on the transcriptional activity of the Her-2/neu (erbB-2) oncogene". *Journal of the National Cancer Institute* 97 (21): 1611–5.

81. Kruger MC, Horrobin DF (September 1997). "Calcium metabolism, osteoporosis and essential fatty acids: a review". *Progress in Lipid Research* 36 (2-3): 131–51.

82. Honoré E, Barhanin J, Attali B, Lesage F, Lazdunski M (March 1994). "External blockade of the major cardiac delayedrectifier K+ channel (Kv1.5) by polyunsaturated fatty acids". Proceedings of the *National Academy of Sciences of the United States of America* 91 (5): 1937–41.

83. Reiffel JA, McDonald A (August 2006). "Antiarrhythmic effects of omega-3 fatty acids". *The American Journal of Cardiology* 98 (4A): 50i–60i.

84. Landmark K, Alm CS (November 2006). "Alpha-linolenic acid, cardiovascular disease and sudden death." (in Norwegian). *Tidsskrift for Den Norske Lægeforening* 126 (21): 2792–4.

85. Herbaut C (September 2006). "[Omega-3 and health]" (in French). *Revue Médicale De Bruxelles* 27 (4): S355–60. 86. Rees AM, Austin MP, Parker G (April 2005). "Role of omega-3 fatty acids as a treatment for depression in the perinatal period". *The Australian and New Zealand Journal of Psychiatry* 39 (4): 274–80.

87. Daniel T., Kaayla. "The Whole Soy Story." New Trends Publishing, Inc.

Washington DC. 2005.

88. Sacks FM et al. "Soy protein, isoflavones, and cardiovascular health": *Circulation* 2006: Feb 21: 113(7): 1034-1044. 89. Sirtori CR. "Risks and benefits of soy phytoestrogens in cardiovascular diseases, cancer, climacteric symptoms and osteoporosis". *Drug Safety*. 2001: 24 (9): 665-682.

90. Balk E, et al. "Effects of Soy on Health Outcomes": *Agency for Healthcare Research and Quality* Publication Number 05-E024-1 August 2005.

91. Beer WH et al. "A long-term metabolic study to assess the nutritional value and immunological tolerance to two soy-protein concentrates in adult humans." *American Journal of Clinical Nutrition*, 1989, 50, 97-1007

92. Anderson JW, et al., "Meta Analysis of the effects of soy protein intake on serum lipids." *New England Journal of Medicine*, 195, 333, 276-282

93. Anderson RL et al. "Compositional changes in trypsin inhibitors, phytic acid, saponins and isoflavones related to soybean processing." *Journal of Nutrition*, 1995, 125, 581S-588S

94. Roebuck, "Trypsin inhibitors; Potential concern for humans." Journal of Nutrition, 1987, 117, 398-400

95. Gunn RA et al. "Gastrointestinal illness associated with consumption of a soybean protein extender". Journal of Food Science, 1980, 43, 525-527

96. Anderson RL et al. "Compositional changes in trypsin inhibitors, phytic acid, saponins and isoflavones related to soybean processing." *Journal of Nutrition*, 1995, 125, 5185-5885

97. Liener IE, "Implications of anti-nutritional components in soybean foods". *Critical Review of Food Science Nutrition*, 1994, 34, 1, 46-47.

98. Wolfson, Richard. "Research of Dr. Arpad Pusztai on genetically modified foods." Biotech News, May 1999.

99. Kimura S et al. "Development of malignant goiter by defatted soybean with iodine-free diet in rats". Japanese Journal of Cancer Research, 1976, 67, 763-765

100. Johnson IT et al. "Influence of saponins on gut permeability and active nutrient transport in vitro." *Journal of Nutrition*, 1986, 116, 2270.

101. Adlercreutz G et al. "Soybean phytoestrogen uptake and cancer risk." *Journal of Nutrition*, 1995, 125, 757S-770S 102. Divi RL et al. "Anti-thyroid isoflavones from soybean." *Biochemical Pharmocology*. 1997, 54:1087-1096

103. Simopoulos P. Artemis. "Omega-3 Fatty Acids in Inflammation and Autoimmune Diseases". *The Center for Genetics, Nutrition and Health, Washington D.C. Journal of the American College of Nutrition*, Vol. 21, 2002, 495-505

104. Nicklas J. Barbara et al. "Diet-induced weight loss, exercise, and chronic inflammation in older, obese adults; a randomized controlled clinical trial." *American Journal of Clinical Nutrition* 2004; 79: 544-551

105. Mischoulon D. "Docosahexanoic acid and omega- 3 fatty acids in depression." *Psychiatric Clinical North America*; 01-Dec 2000; 23 (4) : 785-794

106. Kris-Etherton, Penny. "Lyon Diet Heart Study Benefits of a Mediterranean-Style, NCEDP/AHA Step 1 Dietary Pattern on Cardiovascular Disease"; *Circulation* 2001: 103; 1823-1825

107. Fito, Montserrat et al. Effect of a Traditional Mediterranean Diet on Lipoprotein Oxidation; Archive of Internal Medicine, 2007: 167(11): 1195-1203

108. Pilz et al. "Elevated plasma free fatty acids predict sudden cardiac death"; *European Heart Journal*. 2007; 10.1093. 109. Scarmeas, Nikolaos et al. "Mediterranean diet and Alzheimer disease mortality". *Neurology* 2007; 69: 1084-1093

110. Ungvari, Zoltan et al. "Resveratrol increases vascular oxidative stress resistance.

Departments of Physiology and Biochemistry", New York Medical College: December 2006.

111. Robertson, Rose Marie; "Can A Mediterranean- Style Diet Reduce Heart Disease?"; *Circulation* 2001; 103: 1821 112. Rallidis, Loukianos et al. "Close adherence to a Mediterranean diet improves endothelial function in subjects with abdominal obesity." *American Society for Clinical Nutrition* 2009. 113. Panagiotakos B. Demosthenes et al. "Mediterranean diet and inflammatory response in myocardial infarction survivors"; *Oxford University Press on behalf of the International Epidemiological Association*; 2009.

114. Fung T. Teresa et al. "Mediterranean Diet and Incidence of and Mortality From Coronary Heart Disease and Stroke in Women". *Circulation*. 2009; 119: 1093-1100

115. Merrill R. M. et al. "Chronic disease risk reduction with a community-based lifestyle change program". *Health Education Journal*, September 2008; 67 (3): 219-230

116. Djuric, Zora et al. "Design of a Mediterranean Exchange List Diet Implemented by Telephone Counseling." *Journal of the American Dietetic Association*: 2008: 2059-2065. 117. William R. Miller Phd, Stephen P Rollnick PhD. Motivational Interviewing, Second Edition: Preparing People for Change. NY. The Guilford Press. 2002. Print.

118. Friedman, Steven. The New Language of Change. New York: The Guilford Press, 1993. Print.

119. Levitin, Daniel. *This is your brain on music: The science of a human obsession.* London: Plume Books, 2007. Print. 120. Sally A. Shumaker (Editor), Eleanor B. Schron (Editor), Judith K. Ockene (Editor), Wendy L. McBee (Editor). *The*

Handbook of Health Behavior Change. New York: The Springer Publishing Co. 2009. Print.

121. Shavinina, Larisa V. The International Handbook on Innovation. Oxford: Elsevier Science Ltd. 2003. Print.

122. Somers, Suzanne. Ageless: the naked truth about bioidentical hormones. Three Rivers Press. 2006. Print.

123. Lipton, Bruce H. *The Biology of Belief: Unleashing the Power of Consciousness, Matter and Miracles.* Santa Rosa, Ca: Mountain of Love, 2005.

124. Northrup, Christine MD, The Wisdom of Menopause. New York: Bantam Dell. 2001. Print.

125. L. Smith-Lovin and M. McPherson, "Social Isolation in America: Changes in Core Discussion Networks over Two Decades, " *American Sociological Review* 71 no. 3 (June 2006): 353-75.

126. Benson, Herbert MD and Klipper, Miriam Z. The Relaxation Response. New York: Harper. 2000. Print.