

## Efficacy of a Cardiovascular Behavioral Intervention Program on Measures of Stress

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**BACKGROUND.** Limited data exists on the efficacy of multifactorial lifestyle programs focusing on stress management in reducing psychosocial factors of cardiovascular risk. We examined the efficacy of a lifestyle intervention program on measures of psychosocial stress.

**METHODS.** We studied 235 subjects (mean age 49.7, 24.9% female), of which 123 were randomized to The RENEW Program[™] and 112 received standard of care. The program consisted of 9 bi-monthly face-to-face web sessions over 16-18 weeks followed by 13 monthly check-in sessions (maintenance) over 80 weeks. The program included modules on responding to stress more effectively, enhancing the effects of relaxation, nourishing the immune system, physical activity and social support. Among 86 subjects who completed the program, we examined control and intervention group baseline-follow-up changes in Type A behavior, perception of life stress, overall psychological well-being (using the Stress Profile survey) and depression (using Becks Depression Index).

**RESULTS.** Both groups showed reductions in Type A behavior: -1.82 (control,  $p=0.003$ ) and -3.39 (intervention,  $p<0.001$ ), perception of stress: -.72 (control,  $p=0.36$ ) and -1.8 (intervention,  $p=0.006$ ), and Becks depression index: -2.52 (control,  $p=0.01$ ) and -4.38 (intervention,  $p<0.001$ ), with increases in psychological well-being 1.20 (control,  $p=0.33$ ) and 2.31 (intervention,  $p=0.01$ ) that were more beneficial in the intervention.

**CONCLUSIONS.** Our findings suggest a potentially beneficial impact of a multifactorial behavioral program emphasizing stress management for reducing psychosocial risk.