

## Study #5: Lifestyle Stress



Compared with the placebo group, the Wellmune WGP group reported a:

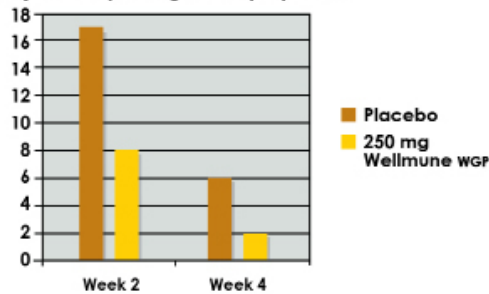
- 42% increase in vigor
- 38% reduction in fatigue
- 19% reduction in tension
- 15% reduction in stress-induced confusion

Subjects completed the Profile of Mood States (POMS) Survey Instrument. The well-validated POMS employs 65 adjective-based indicators of mood scaled for intensity (0-4); specific combinations of the adjectives define the 6 mood state factors: tension, vigor, fatigue, confusion, anger and depression.

# Wellmune WGP Reduced Health Challenges in High Lifestyle Stress Subjects

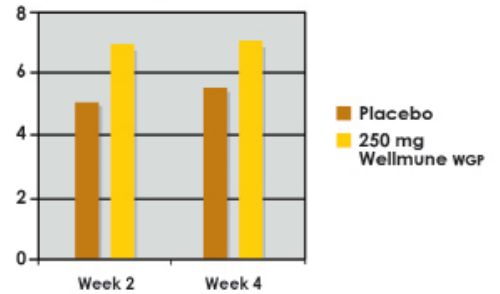
Individuals with high lifestyle stress taking Wellmune WGP over four weeks reported a significant increase in their general health, compared with the placebo group. Fully 150 subjects with high lifestyle stress were randomized, double blinded and placebo controlled. Subjects were split into two groups: placebo and 250 mgs/day of Wellmune WGP. Subjects maintained a daily health log with entries tracking the occurrence and duration of URTI symptoms (cough, sore throat, sneezing, etc.). They also responded to questions regarding physical health during the course of study.

**Subjects Reporting URTI Symptoms**



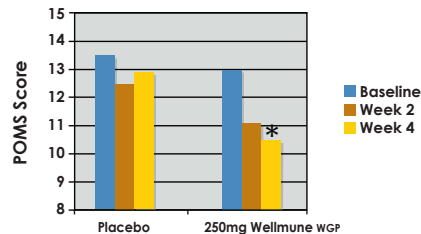
**Figure 1.** Wellmune WGP significantly reduced ( $p < 0.05$ ) the number of subjects reporting URTI symptoms.

**Self Reported Health Scores**

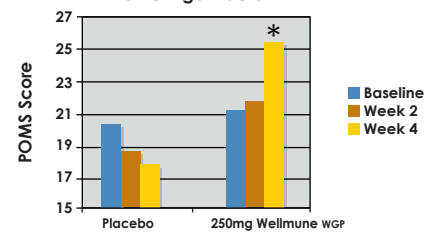


**Figure 2.** Taking Wellmune WGP significantly increased ( $p < 0.05$ ) self reported health scores.

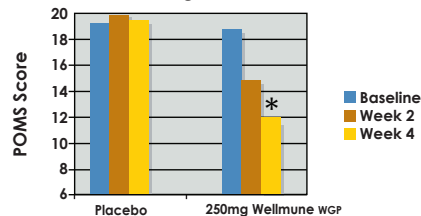
**POMS Tension Factor**



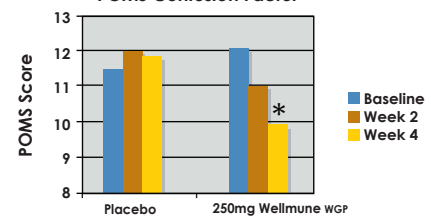
**POMS Vigor Factor**



**POMS Fatigue Factor**



**POMS Confusion Factor**



\* $p < 0.05$  vs. placebo

**Figure 3.** Analyzed data for specific POMS factors calculated from POMS Score Sheet. Data analysis was by paired t-test. A value of  $p < 0.05$  was considered significant. Each factor was determined using answers to specific adjective-based scales as described in Profile of Mood States manual by McNair et al (28).



"Beta 1,3/1,6 Glucan Decreases Upper Respiratory Tract Infection Symptoms and Improves Psychological Well-being in Moderate to Highly-Stressed Subjects." *Agro Food Industry Hi-Tech* (2010). 21:21-24.