

Short Report

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Randomized, double-blind, placebo-controlled, crossover study to evaluate the effects of beta-1,3/1,6 glucan on stress associated with daily lifestyle in healthy subjects

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ABSTRACT:

Background: Fatigue is attributable to physical and psychological stress. Also, fatigue is a common symptom that occurs in both sick and healthy individuals. Although its mechanism of cause is complex, stress fatigue ~~from stress~~ is known to affect an existent equilibrium of immune system status. Nutrition, such as beta-1,3/1,6 glucan, has been reported to play an important role in regulating stress and fatigue states via modulating a weakened immune system. In this study, a soluble baker's yeast in black koji vinegar (*Moromisu*); a popular and healthy beverage in Okinawa, Japan, was provided to healthy subjects with a non-strenuous daily lifestyle.

Results: By performing statistical analysis on the results of the Profile of Mood States (POMS) survey, we observed that the overall study results (n=14) showed significant differences in fatigue and confusion in the POMS factors.

Conclusions: In this study we confirmed that beta-1,3/1,6 glucan improved some of the factors related to stress and fatigue, as indicated by evaluation of POMS survey results.

Key Words: beta-1,3/1,6-glucan, vinegar, POMS, stress