

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

Yoshihiko Ojiri,¹ Hiroshi Endoh,² Tadashi Okumoto,³ Kazushi Atsuta⁴, Oriie Yoshinari,⁵ and Hiroyoshi Moriyama⁵

¹Faculty of Medicine, University of the Ryukyus, Nishihara, Okinawa 903-0215, Japan; ²Faculty of Education and Graduate School of Education, University of the Ryukyus, Nishihara, Okinawa 903-0213, Japan; ³Faculty of Human Health Sciences, Meio University, Nago, Okinawa 905-8585, Japan; ⁴Chuko Awamori Distillery Co., Ltd., Tomigusuku, Okinawa 901-0235, Japan; ⁵The Japanese Institute for Health Food Standards, 6-26-12 Hongo, Bunkyo-ku, Tokyo 113-0033, Japan

***Correspondence Author:** Oriie Yoshinari, PhD, The Japanese Institute of Health Foods Society, 6-26-12 Hongo, Bunkyo-ku, Tokyo 113-0033, Japan

Submission date: April 22, 2015; Acceptance date: May 22, 2015; Publication date: May 27, 2015

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, 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