

THE EFFECTS OF SUPERJAMI RICE BRAN ON GLUCOSE AND ANTIOXIDANT METABOLISM

Su-Jin Nam, Soo-Im Chung, Da youn Lee and Mi-Young Kang

Kyungpook National University, Daegu, Republic of Korea

We evaluated the effects of glucose and antioxidant metabolism in color rice (Superjami). Superjami has higher contents of cyanidine 3-glucoside (C3G), a strong antioxidant than those of currently cultivated black rice cultivars. We performed a randomized, double-blind experiment with 25 subjects in common. The Superjami group was composed of 13 people and placebo group with 12 people. The trial includes the uptake of pills (Superjami rice bran extract and dextrin), which were served for 12 weeks. Once a month as a part of trial, the blood samples were taken for the experiments. The results shown that lower insulin intake was significant in Superjami group over time. But dipeptidyl peptidase-4 (DPP4) was not significantly seen in two groups. We analyzed the effects of plasma and erythrocyte on Thiobarbituric acid reactive substances (TBARS). Both plasma and erythrocyte of Superjami group showed significantly higher values in the last 12 weeks than in control group. In all experiments, glutathione peroxidase (GPX), catalase (CAT), and superoxide dismutase (SOD), exhibited significantly higher antioxidant activity in the blood than placebo group in 12 weeks. In particular, the GPx showed significant differences of $p < 0.001$.

Biography

Su Jin Nam has been graduated from Kyungpook National University. She has completed Master's presently pursuing PhD at the same university. She studied the Effects of Menopause Related Metabolism.

mykang@knu.ac.kr