

P18

## **Immunostimulation Effects of Medicinal Herb and Quality Characteristics of Bread Added Medicinal Herbal Extract**

Kim Hee-Suk and Kang Jin-Soon

School of food science, Jinju International University

The purpose of this study was Immunostimulation effects of medicinal herb and quality characteristics of bread added medicinal herb. The textural properties of Herbal Bread prepared with various concentrations of medicinal herbal extract(0%(control group), 30%(MH-30 group), 50%(MH-50 group), 70%(MH-70 group) and 100%(MH-100). Treatments enhanced the spreading ability of macrophages, and significantly enhanced some macrophage functions such as proliferative response in a dose-dependent manner. The stimulation effect of medicinal herb on macrophage phagocytosis was measured by internalization of the FITC-latex microbeads using a fluorescence spectrometer and estimated by the mean fluorescence intensity. medicinal herb composition treated macrophages were efficient in the internalization of the microbeads, as when macrophages were stimulated with there treatments, they internalized microbeads more so than the controls. The "L" value (lightness) of the control group was the highest among five groups. The "a" value(redness) of the MH-100 group was the highest. The "b" value (yellowness) was increased with the increase of medicinal herbal extract contents. The hardness, adhesiveness, fracturability, gumminess and chewiness of MH-100 group was the highest among five group, whereas MH-30 group had the highest springiness and cohesiveness. The MH-30 group showed the best quality of herbal bread through sensory evaluation.