

[P3-38]**Oral supplementation of Ginger (*Zingiber Offinale Roscoe*) water extract and splenocyte/ macrophage proliferation in mice**

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Ginger (*zingiber officinale roscoe*) has been used as a raw material in many traditional preparations since the ancient time. As a component of traditional health products, ginger is known to be effective as appetite, anti-cold, antipyretic, anagesic, and antiinflammation. We previously reported that in vitro experiment of Ginger (*zingiber officinale roscoe*) showed its immune regulatory function in mice.

The present study was focused on the immunomodulative effects of Ginger (*zingiber officinale roscoe*) water extracts in vivo experiment. Seven to eight weeks old mice(balb/c) were fed ad libitum on chow diet and water extract of Ginger (*zingiber officinale roscoe*) were orally administrated every other day for two weeks at two different concentrations(50 and 500 mg/kg b.w.). After preparing the single cell suspension, the proliferation of splenocyte was determined by MTT (3- [4, 5-dimethylthiazol-2-y]- 2,5-diphenyl terazolium bromide) assay. After 48hrs of incubation with the mitogen(Con A or LPS) stimulation, the mouse splenocyte proliferation and macrophages proliferation was increased at higher than that of control group in 50, 500 mg/kg b.w. group with Con A and LPS stimulation respectively. The result of this study may suggest that the water extract of Ginger (*zingiber officinale roscoe*) may regulate the immune function by the splenocyte proliferation and the cytokine production capacity by activated macrophages in mice.