

[*Environ. Health Preventive Med.*, 2, 126-131 (1997)]

[Lab. of Health and Physical Education]

**Dose-dependent Activation of Immune Function in Mice  
by Ingestion of Maharishi Amrit Kalash 4.**

Ryoichi INABA, Haruo SUGIURA,\* Hirotoishi IWATA and Takuji TANAKA

The dose-effects of Maharishi Amrit Kalash 4 (MAK 4) on the nonspecific immune functions in female inbred BALB/c mice were studied. The mice were given MAK 4 by gastric intubation of an aqueous emulsion at the dose of 10, 50, 100 or 200 mg/kg once a day for 20 days. As the results, glucose consumption capacity,  $O_2^-$  production capacity, GLU activity and LDH activity in the peritoneal macrophages were significantly increased in the MAK 4-treated mice at the doses of 10 and 50 mg/kg, respectively. Stimulation indices in the MAK 4-treated groups at all doses were significantly higher than those of the control group. These results indicate that 10 to 50 mg/kg per day might be appropriate doses to enhance not only macrophage function but also lymphocyte responsiveness for the gastric intubation of MAK 4 in mice.