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[Lab. of Health and Physical Education]

**Subjective Health Status, Perceived Menopause and Mental
and Physical Condition in 35-65 Years Old Women**

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A self-administrated questionnaire covering subjective health status, perceived menopause and mental and physical condition was sent to 1,275 women aged 35-65 years. The number of subjects replied to the questionnaire was 982, including 218 post-menopausal women. The results obtained showed that symptoms related to mental and physical condition such as shoulder stiffness and lumbar pain were common among these subjects. It was suggested that we should consider those symptoms in evaluation of health status among such subjects.

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**Effects of Different Duration of Exercise on Nonspecific Immunological
Mechanisms in Mice.**

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The effects of different duration of exercise on nonspecific immunological mechanisms, especially on macrophage phagocytosis activity and splenic lymphocyte proliferation in mice were investigated. Male ICR mice aged 4 weeks were divided into five groups: a non-exercise group (control), 15 min per day exercise group (E15), 30 min per day exercise group (E30), 60 min per day exercise group (E60) and 120 min per day exercise group (E120). The exercise applied was forced running at 13 m/min (5 days per week for 12 weeks). The phagocytosis of the reticuloendothelial system, glucose consumption capacity and lysosome enzyme activity of peritoneal macrophages in the E30, E60 and E120 groups was significantly higher than that in the control group. O_2 production capacity of peritoneal macrophages in the absence and the presence of PMA in the E60 and E120 groups was significantly higher than that in the control group. The proliferation of splenocytes induced by Con A in the all E groups was significantly increased compared to the control group. These results suggest that forced running exercise for at least 30 min per day enhances phagocytic and elimination activities in peritoneal macrophages, and exercise for at least 15 min per day augments proliferative responses to Con A in mice.