〈原 著〉

練歯磨剤の飼料混入によるマウスでの 90日間経口亜急性毒性試験

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A Subacute Oral Toxicity Study of the Toothpaste Incorporated into Food in Mice

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Abstract

Three groups of 10 male and 10 female Slc-ICR mice each were fed the diets containing a toothpaste preparation at 5.0%, 2.5% and 0%, respectively, for 90 days.

Averages of daily intake of the preparation were calculated from food consumption to be 7,216 mg/kg for male and 7,993 mg/kg for female in the 5.0% group, and 3,120 mg/kg for male and 4,100 mg/kg for female in the 2.5% group, respectively. All the treated mice tolerated these doses well, and kept good general condition throughout the test period.

Growth and appetite were almost normal in the treated groups, except that the female groups demonstrated statistically significant decreases in body weight gain during the late time of the test period, comparing the control. The macroscopical and microscopical examinations for the main organs and tissues, which were performed at the termination of the test, failed to show any pathologic changes relating to the treatment, although slight but statistically significant differences in several hematological and biochemical values and in weight of a few organs were observed between the test and the control groups.

It is thus concluded that 90-day feeding of mice with the diet containing the toothpaste preparation at the highest level of 5.0% did not cause any toxicological effects.

Key words:

Subacute Toxicity Oral Mouse Toothpaste