The present study investigated the effects of eating warmed chamomile jelly at night or in the afternoon on subjects' sleep consciousness. The sleep consciousness was determined by the OSA sleep inventory in both seven males of 32.3±3.5 (SD) and seven females of 60.3±2.9 years of age. Both subject groups showed an improvement in their sleep consciousness in the nights when ate warmed chamomile jelly, being significantly better in the scores of the male subjects on daytime sleepiness in the morning, sleep maintenance and ease of going to sleep, and of the female subjects on sleep maintenance than control nights. From the results, eating warmed chamomile jelly improved sleep consciousness, which is consistent with our previous reports on increased skin temperature and improved mood after eating warmed chamomile jelly.

Keywords: chamomile jelly, OSA sleep inventory

P-13 Effects of Group Nutrition Education on Dietary Life of Participants in the Municipal Healthy Promotion Program

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Matsumoto municipal healthy promotion program (MMHP) aims to improve the residents' fitness through public supporting of their continuous daily walking habits and group activities. In this study, we intended to reveal the effect of simultaneous group nutritional education on the improvement of participants' dietary life. The subjects were 86 women whose average age was 57.8±6.24 and 22 men, 60.1±4.92 (mean±SD), who participated in MMHP. A self-administered diet history questionnaire was used to evaluate the subjects' energy and nutrients intakes. By the analysis of the answers for the questionnaire, we found that the subjects who participated in the nutrition education program took less lipid, cholesterol and meat, while more carbohydrate than those of control group (not participated in the education program). In addition, the subjects in the former group have little reduction on the frequency of the participation in the various other programs after the nutrition education. We concluded that this nutrition education is effective on the improvement of the residents' dietary life, and also this program promotes friendship between the participants.

P-14 Changes in Blood Volume and Oxygenation in the Brain after Ingesting Caffeine and Their Relationships with Performance on a Cognitive Task

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The present study was carried out to clarify whether caffeine affects blood volume and oxygenation in the prefrontal association cortex during a cognitive task. Relative changes in the blood volume and oxygenation were measured noninvasively using continuous-wave near-infrared spectroscopy. A modified Stroop color-word task we developed was employed as a cognitive task to activate the prefrontal association cortex. The results suggest that caffeine ingestion decrease blood volume and oxygenated hemoglobin concentration in the brain during the modified Stroop task, and that the decrease in oxygenated hemoglobin concentration would be related to change in performance on the cognitive task following caffeine ingestion.

P-15 A Survey on Dressing Room Environments for the Elderly in Fukuoka

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The purpose of this survey is to investigate the dressing room environment of the elderly, and to consider how to make it comfortable and secure. There were 203 subjects, all over 65 years old. A dressing room was present in 92.1% of the houses. In the dressing room, there was a washstand in 79.3% of the residences and a washing machine, chest of drawers, or dressing basket in about 90%. In about 50% of the residences, the dressing space was inadequate, and the placement of a chair for safety was difficult. The difference in the level between the dressing room and bathroom was 0–34 cm, and 89.3% did not fulfill the recommended criteria, and only 6.4% had a recommended handrail. Concerning the type of the door, the sliding door, which is considered to be desirable in terms of safety, accounted for 50% at both the entrance/exit of the bathroom and dressing room. Heaters were present in only 10.2% and air conditioners in only 5.3%. Measures to improve of comfort and safety are necessary.

P-16 Effects of Exercise Program on Physical and Mental Health Statuses in Older Women

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The purpose of this study is to examine the effects of physical and mental health statuses in older women who participate in home-based exercise program (EXG), and to compare then with no-exercise age-matched women (COG). Physical characteristics, nutritional status, grip strength, leg strength, stepping, one-leg standing time, sit and reach, 10-m walking, and the visual analogue scale (VAS) were measured. There were no differences among the groups in physical characteristics (weight, %fat, and WHR) and nutritional status (total energy and major nutrients intake). Leg strength (46 vs. 32 kg, $p<0.05$), one-leg standing time with eyes open (34 vs. 22 sec, $p<0.05$), and 10-m normal walking (4.2 vs. 4.8 sec,