LETTER TO THE EDITOR

C. Hashimoto¹, C. Uno^{2,3}, H. Wakabayashi⁴, 1. Department of Nutrition, Nursing home Kagayanomori, 5-4-23 Kitakagaya, Suminoe Ward, Osaka city, Japan; 2. Institute of Innovation for Future Society, Nagoya University, 65 Tsurumai-cho, Showa-Ku, Nagoya, Aichi, Japan; 3. Department of Community Healthcare and Geriatrics, Nagoya University Graduate School of Medicine, 65 Tsurumai-cho, Showa-Ku, Nagoya, Aichi, Japan; 4. Department of Rehabilitation Medicine, Yokohama City University Medical Center, 4-57 Urafune-cho, Minami ward, Yokohama, Kanagawa, Japan. Corresponding author: Chihiro Hashimoto, Department of Nutrition, Nursing home Kagayanomori, 5-4-23 Kitakagaya, Suminoe Ward, Osaka city, Japan. Code; 559-0011, Tel: +81-6-6686-5301 Fax: +81-6-6686-5302, E-mail: chihiro6315@yahoo.co.jp

COMMENT ON POSITIVE EFFECTS OF “TEXTURED LUNCHE” GATHERINGS AND ORAL EXERCISES COMBINED WITH PHYSICAL EXERCISES ON ORAL AND PHYSICAL FUNCTION IN OLDER INDIVIDUALS: A CLUSTER RANDOMIZED CONTROLLED TRIAL

Dear Editor,

In a recent study published in this journal, Kito et al. (1) reported that positive effects of “Textured Lunches” gatherings and oral exercises combined with physical exercises on oral and physical function in older individuals. We consider this finding particularly important, because another randomized controlled trial showed that nutritional intervention increased skeletal muscle mass in inpatients with gait impairments (2). Moreover, occlusal support was associated with malnutrition and activities of daily living via dysphagia in older individuals requiring long-term care (3). However, we believe a few concerns are noteworthy.

First, the sample size calculation was inadequate. In this study, the sample size was calculated without considering the intra-cluster correlation coefficient. However, the intra-cluster correlation coefficient is necessary to calculate sample size in cluster randomized controlled trials (4). Furthermore, the authors did not describe the primary outcome used for the sample size calculation. In order to evaluate intervention effects strictly, the primary outcome must be specified. Therefore, the sample size in this study may be insufficient. Moreover, the authors did not report the number of clusters in the intervention group and the control group. The number of clusters in both groups should be described in the results because of estimating the intra-cluster correlation coefficient.

Second, the mean skeletal mass index (SMI) of the participants was too high. The mean SMI for the whole participants was 8.2 ± 1.0 kg/m². The men-women ratio in this study was 6 to 80, therefore estimated to be close to the mean SMI in women. According to the National Health and Nutrition Examination Survey for Japanese, the mean value of Japanese women’s SMI was 6.2 kg/m² (standard deviation [SD] = 0.6) at the age of 75 and over (5). The mean SMI of this study was higher than 3 SD of the mean Japanese women’s SMI. Moreover, according to the Asian Working Group for Sarcopenia (AWGS) diagnostic algorithm, the cutoff value of SMI for diagnosing sarcopenia is less than 7.0 kg/m² for men and less than 5.7 or 5.4 kg/m² for women (6). The mean SMI in this study was considerably higher than cutoff value for men.

In contrast, the mean body mass index (BMI), handgrip

strength, and body fat percentage in this study was not much different in comparison with Japanese women. The mean BMI, handgrip strength, and body fat percentage in this study was 23.7 kg/m² (SD = 3.6), 21.6 kg (SD = 4.8), and 33.5%, respectively. On the other hand, the mean BMI, handgrip strength, and body fat percentage in Japanese women were 23.2 kg/m² (SD = 3.0), 20.4kg (SD = 5.0), and 32.5%, respectively (7, 8). The mean BMI, handgrip strength, and body fat percentage in this study were standard, although the mean SMI was very high. Therefore, the mean SMI in this study was too high and suspected some mistake.

It would be helpful if the authors could address these concerns in order to clarify their findings.

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