

Association between nutrient intake and osteosarcopenic obesity: Korea National Health and Nutrition Examination Survey 2008-2010

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The aim of this study was to examine the association between dietary intake and osteosarcopenic obesity (loss of bone and muscle mass with increased fat mass) in Korean females. Data from 3,837 women aged ≥ 50 years were collected from the 2008-2010 Korea National Health and Nutrition Examination Survey. Body composition factors including bone mineral density and fat and muscle mass were assessed by dual-energy X-ray absorptiometry. The association between nutrient and food intake and the score of body composition abnormalities, including low bone and muscle mass with increased adiposity, was analyzed by logistic regression adjusting for confounding factors. Participants with worse body composition scores tended to be older, less educated, and current smokers. There was also a tendency of less total energy and food intake for those with more adverse body composition. In women between 50 and 64 years old, those with more adverse body composition consumed significantly less milk. In conclusion, middle-aged and older women with co-occurring obesity, osteoporosis, and sarcopenia may have improper nutritional status with respect to micronutrients. This work was supported by the National Research Foundation of Korea (NRF) grant funded by the Korea government (MSIP; Ministry of Science, ICT & Future Planning) (No.2017R1C1B5017636).