J Nutr Food Sci 2018, Volume 8
DOI: 10.4172/2155-9600-C11-084

Differences in dietary intake of women with standard weight but varying body fat percentages, in Japan

Minatsu Kobayashi, Eri Abe and Mieko Horiguchi
Otsuma Women's University, Japan

Because of the strong desire to be thin, the proportion of young women who are underweight (BMI<18.5) is high in Japan. However, there are so-called hidden obese people whose body fat ratio is high despite having a normal BMI. These patients have excessive accumulated adipose tissue, referred to as visceral fat type obesity, resulting in the onset of lifestyle-related diseases leading to arteriosclerosis. In this study, young females with a standard BMI (18.5<BMI≤25.0) were divided into two groups, one group with participants having a body fat ratio of 30% or more (hidden obese group) and the other group with participants having a body fat ratio of less than 30% (standard group). We aimed to identify factors that contributed to the prevention of hidden obesity, by clarifying the differences in dietary intake between both groups. We measured the height, weight and body fat ratios for Japanese female college students (n=670) and assessed their dietary intake on a food frequency questionnaire. The differences in the average food and nutrient intake for the hidden obese group (n=160) and standard group (n=368) were examined using a student's t-test or Welch's t-test. Food and nutrient intake were energy adjusted using the residual method. Energy intake and fat intake of the standard group were high (p=0.044 and p=0.028, respectively). Within the hidden obese group, the carbohydrate intake was high (p=0.019). Cereals, confections and sugary beverage intake were high in the hidden obese group (p<0.05). This study suggested that reducing high carbohydrate dense foods is effective in preventing hidden obesity.

mnkobaya@otsuma.ac.jp