Nutrition and body mass assessment of extramural students from the Medical Academy and the Academy of Physical Education and Sport in Gdańsk

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INTRODUCTION

Nutrition is one of the health behaviors that in a significant way influence our health. The purpose of the work was to assess the nutrition and body mass of extramural students. 119 extramural women students aged 23–46 participated in the investigation. Anonymous questionnaires which included questions about the respondents’ nutrition, self-estimation of quality and quantity of food were to fill by the respondents. Their fatty tissue was measured by reference to the BMI index calculated with a Tanita apparatus.

Extramural women students not only eat irregularly but do not follow the dieticians’ advice as for the number of meals eaten daily. The analysis of frequency of eating basic products revealed both positive and negative health behaviours. To the positive one belong drinking milk every day and eating diary products, eating fresh fruit and vegetables or drinking vegetable / fruit juices. However, the negative health behaviour includes rare eating grain products, e.g., groats, eating sweets frequently and drinking coffee. Self-estimation of body mass in the majority of women students agreed with the BMI index and divergences might be the result of a nowadays popular slim figure.

RESULTS

The subjects do not eat regularly (Fig. 1) and do not follow the dieticians’ advice as for the number of meals eaten daily (Fig. 2). Only 13.8% of the nurses and 20.4% of the teachers eat five times daily, whereas three basic meals (breakfast, dinner and supper) eat 32.3% of the nurses and 20.3% of the teachers. Moreover, 15.4% of the nurses and 21.1% of the teachers resign breakfasts and 21.5% of the nurses and 14.8% of the teachers do not eat suppers. The majority of the subjects think dinner to be their main meal.

An analysis of the frequency of eating meals is presented in Table 1. The extramural students prefer to eat white breadstuffs. As for grain products, they seldom eat groats. Very favourable is the fact that their

Key words: nutrition, self-estimation of body mass, obesity, underweight, BMI
daily diet includes milk and diary products, which are of a high nutritious value. Meat and its products, being of a high nutritious level, too, are a basic source of proteins. The respondents do not eat beef and veal, however, they quite often eat fish and poultry during a week and, somewhat less, supplement the deficit of proteins by eating pulse products. As for animal fat, the high percentage of the subjects do not eat cream at all. However, they often eat butter, and lard or pork fat is eaten sporadically. Potatoes as a basic carbohydrate product plays an important role in the students’ diet. A high consumption of fresh fruit, vegetables and fruit preserves or fruit and vegetable juices shows the proper eating habits. These products are the main sources of vitamins, mineral components and dietary fibre. However, a negative phenomenon is drinking too much...
coffee and an excessive consumption of sugar and sweets.

The majority of the subjects have a proper body mass (Fig. 3). 23.1% of the students are underweight and their BMI is lower than 20.0. Whereas overweight was observed in 20% of the nurses and 11.1% of the teachers. Only in 3.1% of the nurses the BMI showed obesity. Self-estimation of body mass in the majority of women students agreed with the BMI index (Fig. 4). However, a great percentage of the respondents are critical about their body mass. Thus, there were divergences in the self-estimation and objective evaluation of body mass. Nevertheless, most of the students estimate their figure as proper and accept their appearance (Figs. 5 and 6).

**DISCUSSION**

Nutrition is one of the elements that influence our health through deficit or excess of particular nutritious components and energy. The diet of Polish people in many cases strays from the recommended standards. It is characterized by an insufficient number and incorrect time of eating meals during a day. Only 10% of adults eat twice a day and over 55% only have three meals daily. Thus, the breaks between meals are long and can lead to undue accumulation of energy supplied in the afternoon and thus to obesity (3).

According to Sokołowska et al. (7), nurses from Biały Podlaska are aware of a healthy life style but do not follow it, eat irregularly. 50% of the respondents think that regular meals are hindered by shift-work, lack of time (29.2%), low remuneration (12.3%), lack of appetite (6.2%) and lack of willingness to eat regularly (2.3%). In comparison with the nurses from Gdańsk, their results were better as for the number of meals eaten per day. Over 51% ate three and 17.2% five meals daily.

Irregularity of eating habits and of the number of meals were also presented in the works of Miżsowicz and Palus (5). 10% of extramural women students from the Academy of Special Education in Warsaw eat five meals daily and about 30.8% of teachers have three regular meals.

Analysis of the frequency of eating basic products revealed both positive and negative health behaviours
regarding different types of products. The obtained results are similar to the results of other authors (5, 6). The majority of the subjects eat white breadstuffs. Macaroni or groats are seldom eaten by the students. They often drink milk and eat diary products. According to the frequency of eating the products that are the main sources of proteins (beef, pork, poultry and fish), many respondents point out a lot of incorrectness. The students often eat butter, but sporadically lard and pork fat. Very important in their diet are potatoes. A favourable eating habit is a daily consumption of fresh vegetables and fruit, drinking fruit and vegetable juices, whereas a negative factor is a frequent eating of sweets and sugar. The nurses from Biała Podlaska would like to restrict the consumption of meat and sweets, and also eliminate coffee and strong tea. 50% of the respondents agreed that the present eating habits influenced their health in a negative way.

The evaluation of one’s own appearance and body mass is particularly important, because the way the students see themselves affects their general feeling, activity and health behaviour. The authors of (5–7) claim that self-estimation of body mass in the majority of women students agrees with the BMI index and the divergences might result from the nowadays popular slim figure; e.g., the results of Mięsowicz and Palus (5, 6) revealed that twice as high percentage of the respondents think they are obese, whereas the BMI index shows the proper body mass. These results are similar to mine. It is distressing, though that 30% of the teachers in the Mięsowicz and Palus study (5) do not accept their appearance.

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