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DIETARY HABITS OF A PART OF THE POPULATION IN THE REPUBLIC OF MACEDONIA

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Abstract: *The habits for consuming healthy and high-quality foods enable the preservation of health and maintenance of the functionality and vitality of the organism. In order to get a clearer picture of the dietary habits of a part of the population in the Republic of Macedonia, a survey was conducted. The survey was conducted by voluntary electronic surveying of 215 people (44 men and 171 women) aged over 18, from different cities in the Republic of Macedonia, who answered questions related to their daily diet. Based on the results obtained, it can be concluded that most of the respondents have a habit of consuming fruits and vegetables every day. More than half of the respondents consume fish once a week (58.48% of women and 52.27% of men). A small number of those surveyed consume products such as canned food, ready-made dishes, pizzas (1.17% % women and 4.55% men), on a daily basis. Most of the respondents eat sweets and salty snacks twice a week. The percentage of women and men who do not pay attention to the intake of salt and sugar in their body is high. Most respondents consume food twice a day (women 51.46% and men 43.18%), while there is a small percentage of interviewees what eat in between meals. Regarding caloric intake, 47.37% of women and 63.64% of men do not care about calorie intake, although most of the respondents reported that they are familiar with the principles of proper nutrition. From the results obtained, it can be concluded that generally the percentage of people who consume healthy, properly combined foods is low. Therefore, in order to improve the health of the population in our country, the resolution of this big problem that affects the entire population must be encouraged. Promoting the habits of healthy eating and physical activity should be continued in order for such habits to become rules and norms for all people.*

Keywords: *proper nutrition, nutritional habits.*

INTRODUCTION

Proper nutrition is one of the best methods of health care and a means of preventing many diseases. Proper nutrition can prevent heart disease and blood pressure, a possible stroke and diabetes (Velija – Ašimi, Z. & Stević, E., 2009; Rosić, M. & Stoić, S.S., 2012). According to World Health Organization data, non-communicable diseases, such as malignant diseases, cardiovascular diseases, diabetes and chronic respiratory diseases, are leading causes of mortality worldwide (WHO, 2002).

Poor nutrition and poor physical activity are the most important factors contributing to the epidemic of increased body weight and obesity in the world. The situation in our country suggests that these problems are increasingly present in the population in the Republic of Macedonia. The

figures show that 60.5% of men and 47.8% of women over the age of 20 have an increased body weight, and about 20% of adults in the country are obese (Institut za javno zdravje na RM, 2014).

Healthy eating habits are crucial in preventing obesity and chronic non-communicable diseases (Memeti, Š., 2016). It should be borne in mind that the proper nutrition it is not quantity but the quality of food that is important. In the right, balanced diet, the combination of different nutrients, represented in appropriate quantities, allows for the preservation of health (Nikoloska, M. & Slabejkoska, V., 2013; Alibabić, V. & Mujić, I., 2016).

Because people are consuming different types of foods during the day, in the form of meals or snacks, research is now focused on the integral viewing of eating habits, that is, choosing a total diet that will contribute to better health (Institut za javno zdravje na RM, 2014).

Risk factors that can still be influenced include: unbalanced diet, insufficient physical activity, and sedentary activities, such as spending too much time in front of the television, on the Internet and etc. (Kjostarova-Unkovska, L. & Georgievska-Nanevska, E. (2013).

The purpose of this research is to determine the dietary habits of a part of the population in the Republic of Macedonia and to indicate which habits positively or negatively affect the health.

MATERIALS AND METHOD

The survey was conducted by interviewing respondents aged over 18 years from different cities in the Republic of Macedonia. The respondents answered 12 questions related to the daily diet from the questionnaire, which is posted on the website of the Faculty of Technology and Technology in Veles. Several answers were offered for each of the questions, and the respondents had to choose only one. The obtained results of the research were processed and presented using Microsoft Excel.

RESULTS AND DISCUSSION

The survey was filled out on a voluntary basis by 215 persons, out of which 44 are men (20.47%), and 171 women (79.53%). The results are presented graphically in percentage (%) of the total number of participants by gender. Each question asked is separately analyzed and discussed.

From the answers given to the asked questions about how often fruits and vegetables are consumed (Fig. 1 and Fig. 2), it can be concluded that most of the surveyed female population has the habit of consuming fruits and vegetables daily (77.78% and 87.72%, respectively).

As for men, most of them have a habit of consuming fruit twice a week (45.45%), and most of the vegetables are consumed on a daily basis (72.73%). It can also be concluded that when choosing, fruits or vegetables, both women and men prefer to consume vegetables every day (87.72% and 72.73%, respectively).

The percentage of men and women consuming fruits and vegetables daily is not small (more than 50%), but it would be good to increase it, as fruits and vegetables are the main sources of many nutrients.

It was also established with the first study on the diet of the adult population in the Republic of Macedonia conducted in 2015 that there is an encouraging trend with the input of fruits and vegetables among the population in the Republic of Macedonia. The intake of about 600g per day is above the recommendations of at least 400 g per day. The fresh fruit and vegetable intake is 467g per day. For the input of fruits and vegetables above the recommended amount, there is moderate evidence that it reduces the risk of cardiovascular disease such as a heart attack and stroke. Some types of fruits and vegetables are considered to protect against cancer (Memeti, Š., 2016).

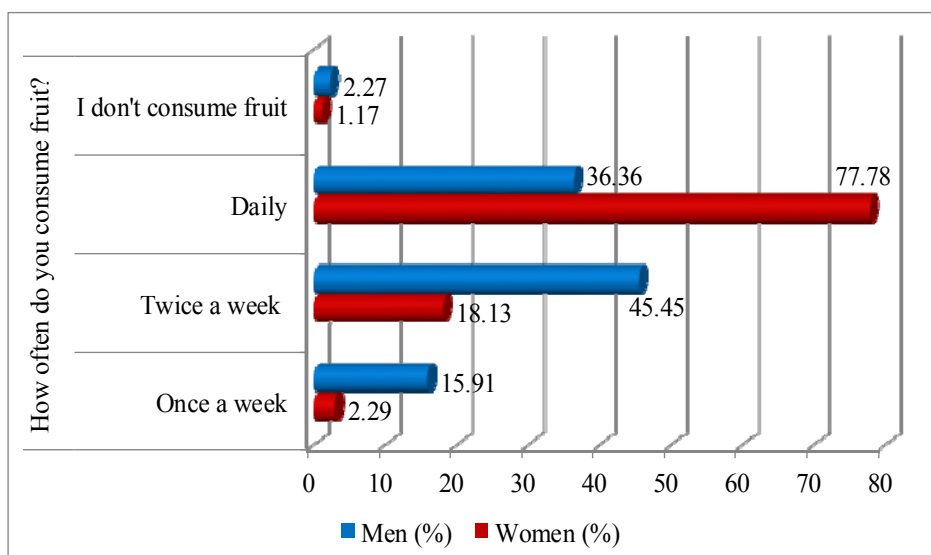


Fig. 1. Question: How often do you consume fruit?

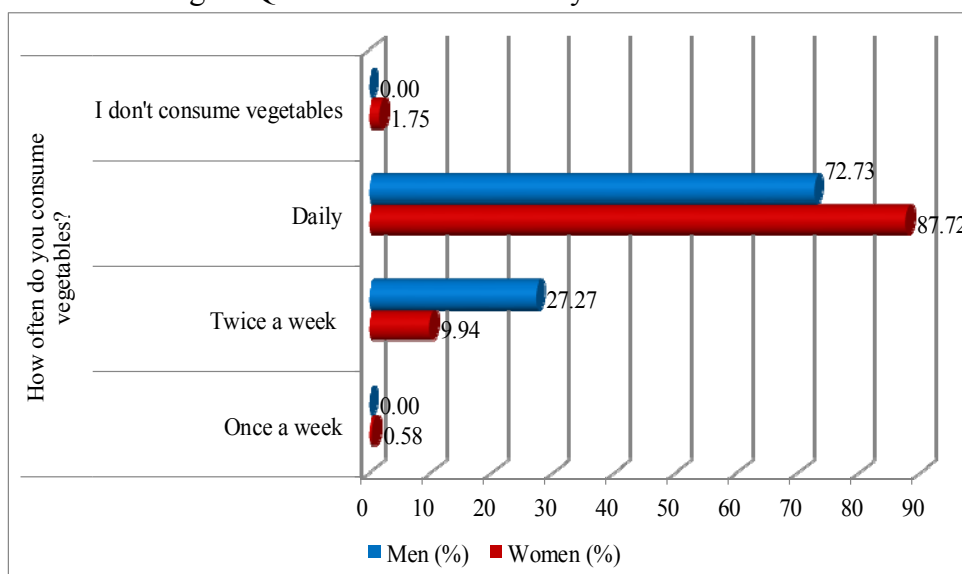


Fig. 2. Question: How often do you consume vegetables?

Meat has its own nutritional value, especially for the provision of building tissue elements, primarily proteins, but also for certain micronutrients, primarily iron. Apart from the fact that meat processing is considered as the main source of saturated fats, there is convincing evidence of the connection between the increased intake of processed meat and the increased risk of colorectal cancer (if ingested in an amount over 50 g per day, the risk of colorectal cancer is increased for 18%) and cardiovascular diseases (Memeti, Š., 2016).

Meat, poultry and fish are a rich source of protein and iron. Lean meat is recommended, because animal fats in greasy meat and delicatessens increase blood cholesterol and the risk of cardiovascular disease. The recommendation is to frequently replace meat and meat products with fish, chicken meat and beans and similar bean products (Čamžić, N., 2015).

From the answers received to the question: How often do you consume meat and meat products? (Fig. 3), it can be found that most of the respondents consume meat and meat products two or three times a week (56.14% of women and 50.00% of men).

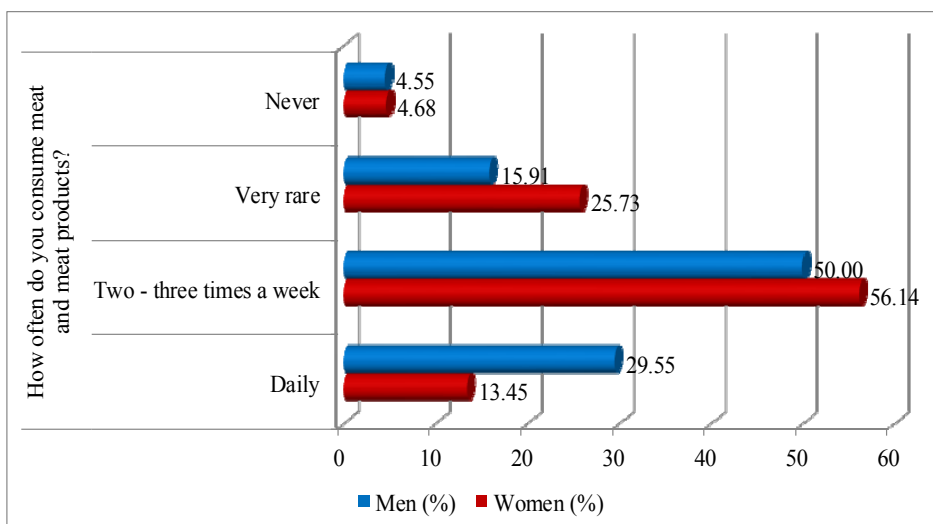


Fig. 3. Question: How often do you consume meat and meat products?

It is very important to eat fish. It is recommended that fresh fish (not canned) be eaten at least once a month. The fish, especially salt water fish, is the source of many nutrients, especially omega-3 fatty acids such as EPA and DHA acid. There is moderate evidence that the consumption of 200-250 g of different kinds of seafood daily, providing an average of 250 mg of EPA and DHA, reduces the risk of death caused by heart-related causes in persons with or without previously confirmed cardiovascular disease (Memeti, Š., 2016).

More than half of those surveyed consume fish once a week (58.48% women and 52.27% men), with roughly equal numbers of women and men consume fish once a month (32.75%, 31.82%, respectively). The fact that 8.77% of women and 15.91% of men do not consume fish at all, is worrying (Fig. 4).

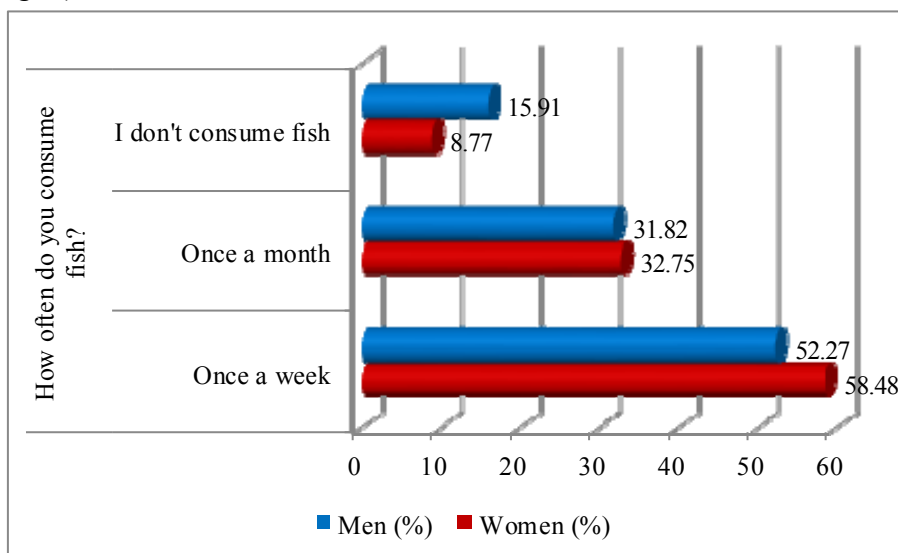


Fig. 4. Question: How often do you consume fish?

Regarding the question: How often do you consume products like canned food, ready-made dishes, pizzas?, several answers were offered. From the graphic display (Fig. 5), it can be concluded that a small number of those surveyed eat this type of products on a daily basis. The percentage of women who do not consume this food (43.27%) at all is compared to the percentage of men (22.73%). These data are encouraging, but the percentage of respondents who consume these products at least once or twice a week should not be disregarded.

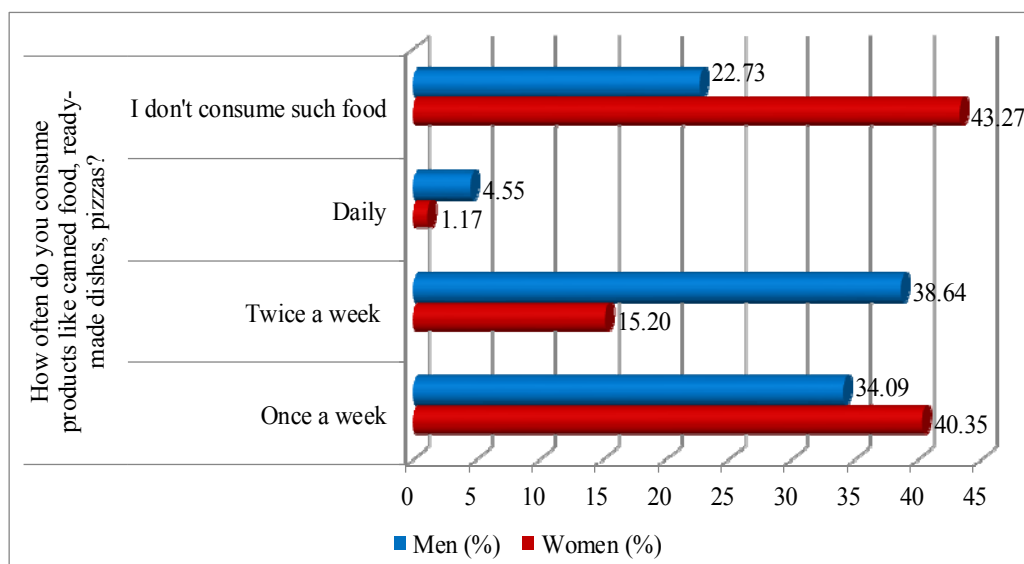


Fig. 5. Question: How often do you consume products like canned food, ready-made dishes, pizzas?

Sweets and salty snacks rich in sugars, fats and additives are counted among unhealthy foods (Alibabić, V. & Mujić, I., 2016). To the question: How often do you consume sweets and salty snacks? a larger number of respondents responded twice a week (Fig. 6).

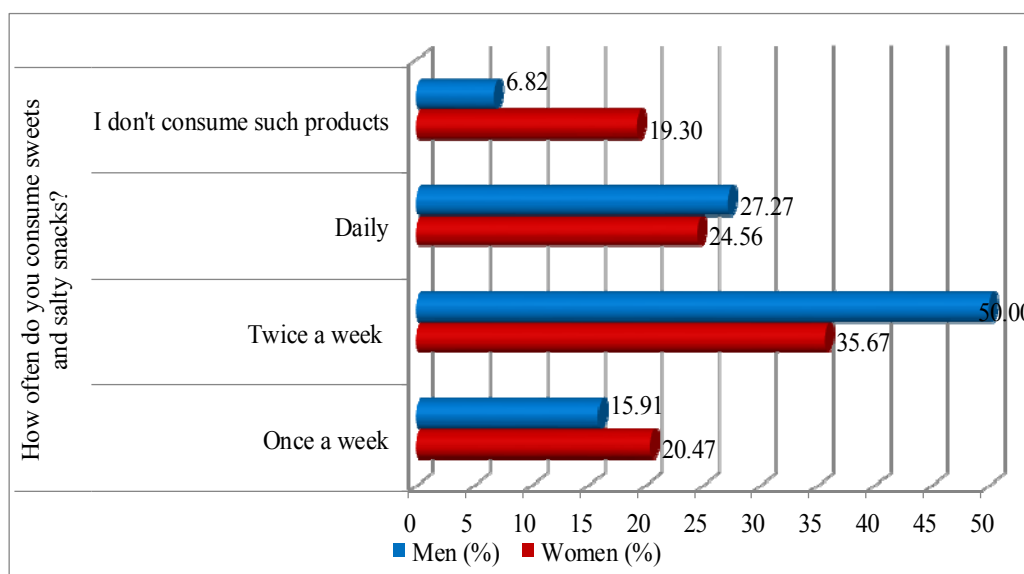


Fig. 6. Question: How often do you consume sweets and salty snacks?

Salt, as a food ingredient, has a wide variety of uses: for pickling meat, in the baking industry, for retaining moisture, for masking strange odors, for strengthening aroma, etc. It should be administered in moderation, not more than 5 g per day. Excessive salt intake leads to increased blood pressure, strokes, heart problems, kidney disease, and swelling throughout the body, as the salt retains water in the body (Alibabić, V. & Mujić, I., 2016).

Of the respondents, women are more attentive to salt intake than men (Fig.7). However, generally speaking, the percentage of women (48,54%) and men (63,64%) who do not pay attention to salt intake in the body is high, and should decrease.

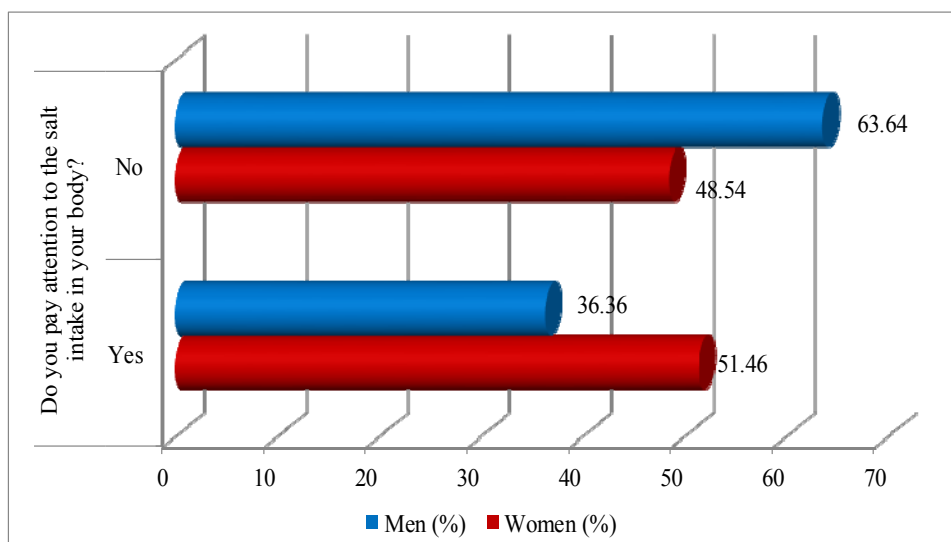


Fig. 7. Question: Do you pay attention to the salt intake in your body?

Sugars are distributed naturally in fruits (fructose) and in milk and milk products (lactose). Most of the modern-day sugars in the modern person’s diet come from sugars added during the preparation of food. Reducing the consumption of products that are sources of added sugars will reduce the caloric value of the diet without compromising its adequacy in terms of nutrients (Institut za javno zdravje na RM, 2014).

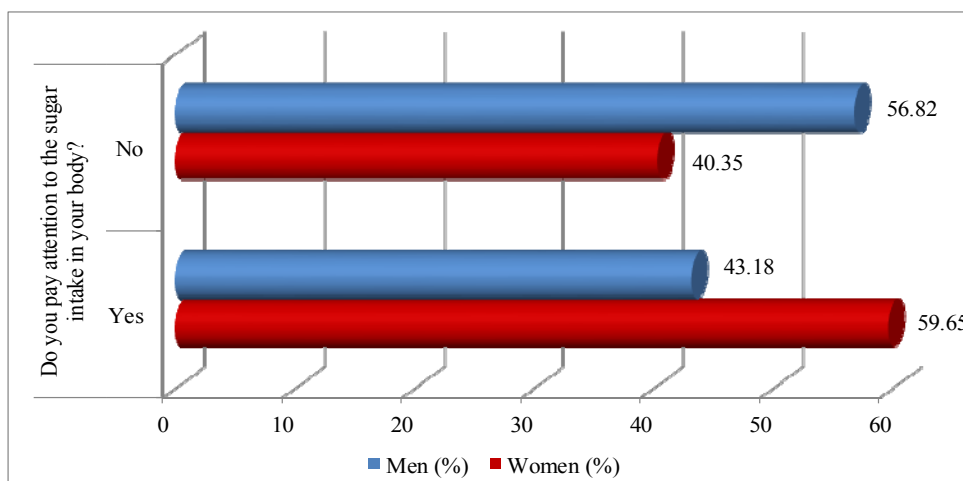


Fig. 8. Question: Do you pay attention to the sugar intake in your body?

And in terms of the intake of sugar in the body (Fig. 8), women (59.65%) are again more careful than men (43.18%). But here too, one should not neglect the fact that 40.35% of women and 56.85% of men are not aware of the intake of sugar in the body. It is recommended to limit the input of the so-called white sugar which contributes to the appearance of obesity. Excess sugar in the body turns into fat, whose accumulation leads to increased blood pressure, dental caries, and other diseases. Instead of consuming white sugar that is mosy frequently found in sweets, it is recommended to consume: fresh fruit, unsweetened fruit juices, natural unsweetened compotes and jams. To use natural honey, yellow and brown sugar as a substitute for white sugar. Excessive intake of sugars in the body leads to an imbalance in the body, cramps, moodiness and the need to intake more sugar (Alibabić, V. & Mujić, I., 2016).

Proper nutrition does not just mean consuming properly combined healthy and quality food. It is very important to have a habit of eating at appropriate times and not to take food without

control, at any time, without thinking. Meals should not be skipped and the body brought into a state of hunger, because then it can cause instability of certain brain cells in the nervous system and reduce the resistance of the whole organism (Velija – Ašimi, Z. & Stević, E., 2009).

Of the surveyed, only 38.01% of women and 31.82% of men have three main meals throughout the day (Fig. 9). The greater percentage of women (51.46%) and men (43.18%) consume food twice a day.

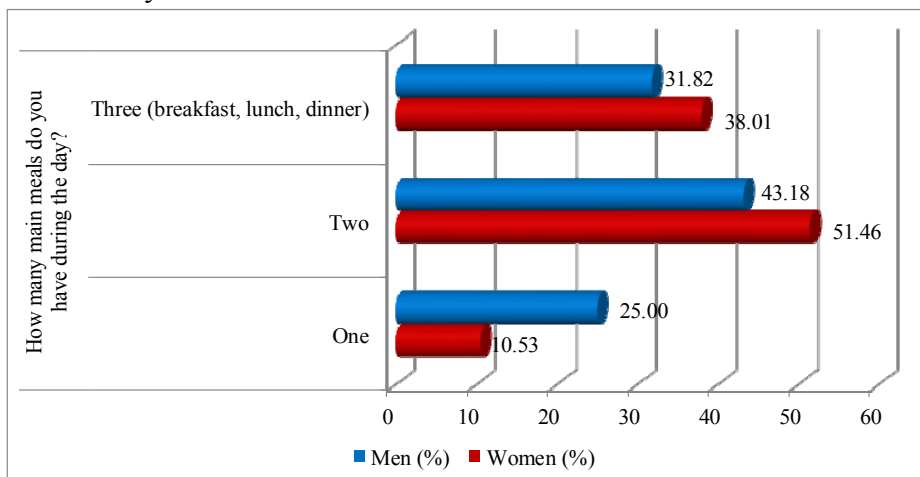


Fig. 9. Question: How many main meals do you have during the day?

In terms of consumption of food between main meals, a small percentage of respondents do this (Fig. 10).

Most women (40.35%) and men (61.36%) do not practice eating anything between the main meals. This type of diet may be due to insufficient information about the correct way of nutrition or the overload of everyday tasks. It is recommended there is at least three meals within the daily diet, and it is best to have several in-between smaller meals (Mijatović, R. & Mirčevski, M., 2013). Normally breakfast represents 30% of the daily meal, lunch 40%, and dinner 30% of the daily meal. Sometimes, depending on various factors, this ratio in the daily meals may change, for example, for decrease the share of dinner and increase the share of breakfast or lunch (40%, 40%, 20% or 30%, 40%, 20%). For physical workers and children, one or two additional meals are recommended (Petruševska-Tozi, L. & Ivanovska, P. T., 2010).

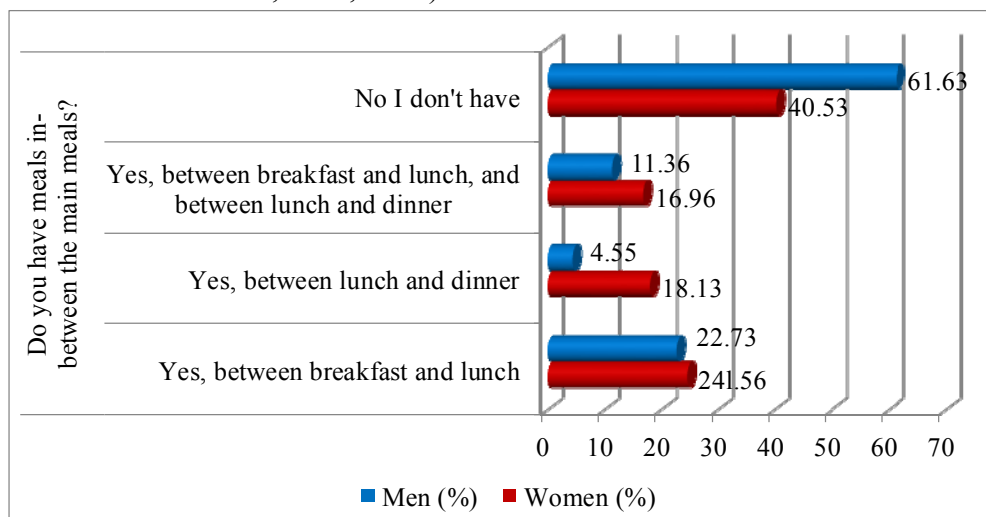


Fig. 10. Question: Do you have meals in-between the main meals?

Controlling calorie intake through food and beverages is crucial to achieving caloric balance. The best way to evaluate whether the calorie intake is appropriate is to monitor body weight and to adjust the diet and physical activity to the weight changes. The calories entered must be equal to

those consumed if you want to maintain the same body weight (Institut za javno zdravje na RM, 2014).

The answers given to the question: Do you pay attention to your calorie intake?, are shown in Fig. 11. Most of the subjects do not pay attention to the intake of calories (47.37% women and 63.64% men) that may reflect an increase or decrease in body weight.

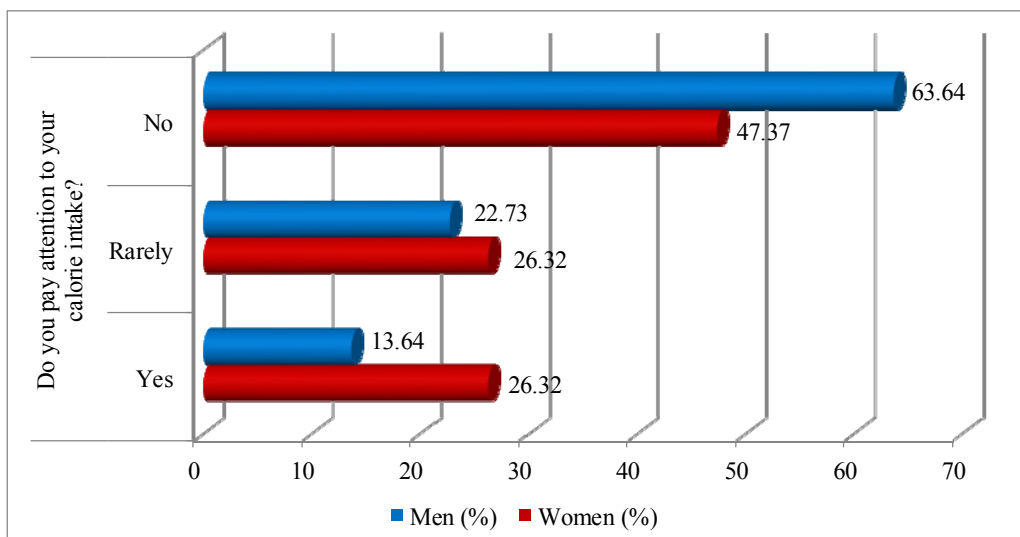


Fig. 11. Question: Do you pay attention to your calorie intake?

Regarding how informed the respondents are on the principles of proper nutrition, we can state from the answers obtained that most of them are familiar with the principles for proper nutrition (Fig. 12), whereby women (78.95%) are more informed than men (50.00%).

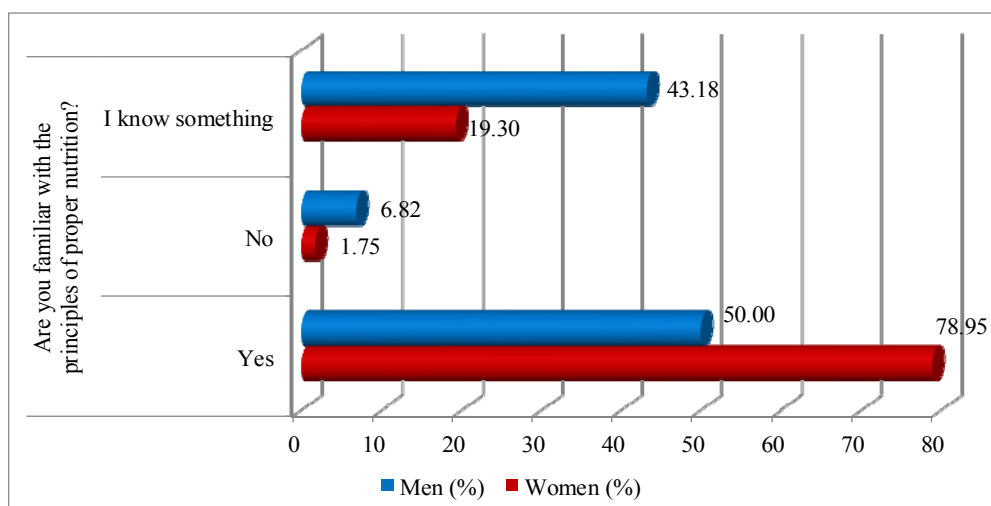


Fig. 12. Question: Are you familiar with the principles of proper nutrition?

CONCLUSION

Improved diet, proper eating habits as well as increased physical activity are lifestyle-related activities that have remarkable potential to reduce weight gain, reduce morbidity and premature mortality, and overall improve public health for the population.

Based on the results obtained from the conducted survey on the diet of a part of the population in the Republic of Macedonia, it can be concluded that, despite the fact that in recent years our country has been working intensively on improving the habits of nutrition by raising the awareness

about the healthy way of the diet, the percentage of people who consume healthy, properly combined foods is still low. Therefore, in order to improve the health of the population in our country, the resolution of this big problem that affects the entire population must be encouraged. We should continue to promote the habits of healthy eating and physical activity, in order for such habits to become rules and norms for all people.

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