

Eating Habits of People Aged 15-18 Years

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Abstract:

Introduction: Determination of the status of eating habits is a necessary step for evaluating future changes in terms of their comparison. Children and young people are an important target group in this regard.

Objective: To determine and compare the status of eating habits in the youth and adult population in terms of the most significant risks.

Methodology and characteristics of the sample group: In 2019, the research sample consisted of 745 respondents aged 15-18 years. Of this number, 51% were girls (n = 379) and 49% were boys (n = 366). The software program Epi Data 3.1 was used for statistical processing of questionnaires from the re-

spondents. A database for inserting data from the respondents was created in the program. The data were further processed in Microsoft Excel 2007.

Results: Increasing levels of energy drinks consumption and declining milk consumption pose significant nutritional risks. On the other hand, we can see an increase in the number of consumers of raw vegetables and a decrease in the number of daily consumers of sweets.

Conclusion: Further measures need to be taken to support positive changes in the content and frequency of eating.

Introduction

Proper eating habits, or a healthy diet, is a factor that positively affects our health and helps prevent the development of various chronic non-communicable diseases. By a healthy diet we mean a diet in which macronutrients are consumed in appropriate proportions which depends on the energy and physiological needs of the body. They also differ in varying age categories. A healthy diet also provides enough micronutrients that are needed to meet the physiological needs of the individual (Cena, 2019).

The basic principles of proper diet include:

- adequate energy intake,
- elimination of risk factors (consumption of salt, saturated fats, trans fats or sugars),
- increasing the intake of factors that positively affect health (fiber, vitamins, polyunsaturated fatty acids, minerals, or trace elements),
- consumption of 4-5 servings per day,
- ensuring sufficient water intake,
- give preference to stewed or cooked foods when preparing meals,
- at least 30 minutes of physical activity in addition to proper diet (Bederova, 2018).

Sample Group Characteristics and Methods

In 2019, the Public Health Authority of the Slovak Republic carried out a survey entitled *Health Awareness and Behavior of the Residents of the Slovak Republic*. In the survey, we used a questionnaire to find out various attributes of health awareness and behavior of the population of Slovakia in the age category 15 years and over. Data collection was carried out through all 36 regional public health offices in Slovakia. In the survey, we dealt with several topics, one part being the issue of eating. Respondents aged 15 and over were included in the survey, while we

focused on the population aged 15-18 years.

The software program Epi Data 3.1 was used for statistical processing of questionnaires from the respondents. A database for inserting data from the respondents was created in the program. The data were further processed in Microsoft Excel 2007. In 2019, the research sample consisted of 745 respondents aged 15-18 years. Of this number, 51% were girls (n = 379) ; 49% boys (n = 366). Almost half of the respondents lived in a countryside (49%, n = 364) and the remaining 51% lived in cities (n = 381).

Results

In the survey *Health Awareness and Behavior of the Population of the Slovak Republic*, part of the questions focused on the issue of eating habits. Specific issues were used to determine the frequency of consumption of specific foods and beverages.

Cooked food

In our group, up to 82% of adolescents consumed cooked food at a frequency of 1-2 times a day; some days without cooked food 16% of respondents and only 2% of the respondents had cooked food only rarely.

Fish

Fish, as a source of vitamin D, were most consumed at a frequency of 1-2 times a month. Only 2% of the respondents consume canned fish and fish salads daily or every other day. 22% consume canned fish and salads 1-2 times a week and rarely or never up to 36% of the respondents. Even lower is the consumption of fresh and frozen fish. Only 1% of the respondents consume them every day or every other day. Consumption at a frequency of 1-2 times a week is at the level of 16% and of 1-2 times a month at the level of

43%. 40% of the respondents do not consume fresh nor frozen fish at all or do only very rarely.

Meat

The respondents in our sample group consume meat more often than fish. Poultry is consumed most often. 17% of respondents consume it every day, more than half (58%) 1-2 times a week; 17% 1-2 times a month; only 8% do not consume poultry meat at all. Consumption of pork is the highest at a frequency of 1-2 times a week, with more than half of the respondents (52%) choosing this option. 5% consume pork every day / every other day; 30% 1-2 times a month; 13% of respondents rarely or never. Only 4% consume beef every day or every other day. 36% of respondents consume beef 1-2 times a week; 39% 1-2 times a month. 21% of respondents avoid beef. It is similar with consumption of smoked meat products. 22% of respondents rarely or never consume smoked meat products. On the contrary, 6% of respondents consume them every day, 34% 1-2 times a week and 38% 1-2 times a month.

Lard, butter, and margarine

More than half of the respondents (58%) do not consume lard. On the contrary, 3% of respondents consume it every day. At a frequency of 1-2 times a week, 10% of respondents use lard and at a frequency of 1-2 times a month, 29% do. Butter (51%) is consumed more often than margarines (8%) - every day / every other day. Consumption of butter at a frequency of 1-2 times a week is at the level of 31% and 1-2 times a month at the level of 12%. 6% of respondents consume butter very rarely or not at all. Regarding the consumption of margarines, 18% of respondents consume them 1-2 times a week, 27% of respondents 1-2 times a month and 47% of the respondents do not consume them at all or do only very rarely.

Milk, dairy products, and eggs

According to our survey, up to 47% of young people aged 15-18 consume milk every day or every other day. Up to 37% of respondents consume milk 1-2 times a week. At lower frequencies, 1-2 times a month only 9% of respondents consume milk and rarely or never only 7%. Consumption of other dairy products such as cheese

and yoghurt is at the frequency every day / every other day as high as the milk consumption.

Up to 49% of respondents consume cheese and yoghurt every day or every other day. At a frequency of 1-2 times a week, they are consumed by 39% of respondents, at a frequency of 1-2 times a month by 10% of respondents. Only 2% of the respondents rarely or never eat cheese and yoghurt.

In the following question, we focused on the consumption of eggs. Every day or every other day, 26% of respondents consume eggs. At a frequency of 1-2 times a week, eggs are consumed by 52% of respondents and 1-2 times a month by 17%. Rarely or not at all eggs are consumed by 5% of respondents.

Vegetables

Other foods we asked respondents about include raw, cooked, stewed, or canned vegetables. Up to 42% of respondents consume raw vegetables every day / every other day. Another 36% of respondents consume vegetables 1-2 times a week. 15% of respondents consume raw vegetables 1-2 times a month and only 7% of the respondents never or rarely. Consumption of cooked, stewed, or canned vegetables at a frequency of every day / every other day is lower (18%) than that of raw vegetables (42%). The highest share of consumption is at the frequency of 1-2 times a week (44% of respondents). 1-2 times a month; 27% of respondents consume vegetables in this form and the remaining 11% do not consume such vegetables at all or only rarely.

Legumes

Another necessary food that we asked about in the questionnaire are legumes. Only 9% of respondents consume legumes daily. Higher consumption of legumes is at the frequency: 1-2 times a week (40%) and 1-2 times a month (41%). 10% never or very rarely consume legumes.

White and brown breads

We were asking respondents how often they consumed breads, especially the white and brown varieties. Every day or every other day, white breads are consumed more often (57%) than dark ones (51%). Similar results are true for the consumption of 1-2 times a week. 26% of respondents consume white breads 1-2 times a week

and 25% of respondents consume brown breads. White breads are consumed 1-2 times a month by 9% of respondents and brown breads by 16%. Never or only rarely consumes white breads 8% of respondents and 8% does not even consume brown breads.

Potatoes, rice, and pasta

Potatoes, rice, and pasta are not consumed at all or rarely consumed by 1-2% of the respondents. Every day or every other day, 23% of respondents consume potatoes, 19% of respondents eat rice and 14% of respondents consume pasta. The highest consumption of these foods is at a frequency of 1-2 times a week. 1-2 times a week, 66% of respondents consume potatoes; 65% rice; 63% pasta. 1-2 times a month, 21% of respondents consume pasta; 14% rice; 10% potatoes.

Sweets and confectionery products

Sweets as a risk factor are consumed every day / every other day by up to 36% of respondents. Another 39% of respondents consume them 1-2 times a week; 20% of the respondents 1-2 times a month; the remaining 5% do not consume them at all or only very rarely.

Unsweetened mineral water, soft drinks, juices

As for drinks, we were detecting the frequency of consumption of unsweetened mineral water, soft drinks, or fruit juices. Unsweetened mineral water is consumed every day / every other day the most (41% of respondents). Soft drinks are consumed daily by 26% of respondents and fruit juices by 20% of respondents. 28% of respondents drink unsweetened mineral water 1-2 times a week and 21% of young people aged 15-18, 1-2 times a month. Rarely or never drink unsweetened mineral water 10%. Soft drinks are most often consumed at a frequency of 1-2 times a week (34% of respondents). The remaining respondents drink soft drinks 1-2 times a month (24%) or rarely/never (16%). Like soft drinks, fruit juices are most often consumed at a frequency of 1-2 times a week (41% of respondents). 29% of respondent drink fruit juices 1-2 times a month and 10% rarely or never.

Caffeine and energy drinks

At this young age (15-18 years), up to 29% of the respondents consume caffeinated beverages

daily or every other day, and 9% also consume energy drinks. Caffeine drinks are consumed 1-2 times a week by 29% of respondents, 1-2 times a month by 21% of respondents and only the remaining 21% of respondents do not drink caffeine drinks at all. As for the consumption of energy drinks, more than half of respondents (54%) do not consume them at all or just rarely. 15% of respondents have energy drinks 1-2 times a week and 22% of respondents have them 1-2 times a month.

Discussion

Changes in eating habits in terms of composition of the diet are also confirmed by the international HBSC survey in the age category of 15 years. The incidence of fruit and vegetable consumption among Slovak schoolchildren has been growing since 2014. However, it should be noted that despite the positive trend, there is still great potential in this area, as the percentage of children consuming vegetables every day is still at the level of 28% - 44%, in the case of fruit of 31% - 52% (Ochaba, 2020). Compared to our sample group, the percentage of consumers of raw vegetables is 42%. Compared to the Slovak adult population, children are worse off, as according to data from 2019, up to 49% of the adult population consumes raw vegetables every day and every other day (Ochaba, 2021). We can also see an increase in vegetable consumption since 2013. From the point of view of the food components, milk is an important nutrient. In general, we see a decrease in an everyday milk consumption in both the child population and in the adult population. In our group, 47% of the youth population aged 15-18 years consumed milk. Compared to adults, the difference represents 10% with the adult population having worse results (Daníhelova, 2020). In terms of the frequency of sweets consumption, 36% of daily consumption is a high number. Unfortunately, the data itself is also confirmed by the HBSC survey, where the daily consumption of sweets in 15-year-olds is approximately at the same level, but with a declining trend compared to 2010 (Geckova, 2019). In the adult population, it was at the level of 23.5% in 2019 with a trend of a slight decrease compared to 2013 (Daníhelova, 2020). Another significant risk is the daily consumption of energy drinks, being it reported by 9% of young

people and 15% consumption during the week from our group of young people aged 15-18. According to the HBSC survey, among 15-year-olds, the consumption of energy drinks is at a level of 25% during the week, with boys dominating (Ochaba, 2019). In the adult population, daily consumption of energy drinks is 3.6% and weekly consumption is 6.9% (Danihelova, 2020).

Conclusions

Based on the assessment of the nutritional status of the population of the Slovak Republic, milk consumption has decreased from 67.8 kg / person / year to 67.1 kg / person / year since 1992. Cheeses and curds recorded rather significant increase in consumption by 8.4% and fermented milk products by 14.9%. Compared to the recommended food rations, the consumption of butter is 7.1% higher; consumption of lard is 6.7% higher; the consumption of vegetable fats and oils 16.7% higher. Consumption of vegetables and vegetable products decreased by 3.2 kg / person / year compared to 2001. Consumption of fresh vegetables decreased by 0.4 kg / person / year (0.7%). Consumption of fruit and fruit products decreased by 1.6 kg / person / year (3.1%). (4) However, since 2017, consumption of fruit and fruit products has also increased by 2.3 kg, which represents an increase of 3.7%. The increase reached the value of 64.7 kg per person in 2018. The consumption of alcoholic and non-alcoholic beverages increased. Consumption of alcoholic beverages has increased by 2.4% and consumption of non-alcoholic beverages has increased by 4.7% since 2017 (Sitarova, 2018).

Eating habits are closely related to the health of the population; support the immune system; reduce the risk of non-communicable diseases; increase life expectancy. A healthy diet is an essential part of a healthy lifestyle. The basic condition for the implementation of a healthy diet is moderation in eating, which means a recommendation to control the food consumed in terms of its amount. The survey on the health awareness and behavior of the population shows a positive trend, especially around: increasing consumption of raw vegetables; declining daily consumption of meat other than poultry. On the contrary, the negative trend is a decrease in milk consumption and increased consumption of energy drinks in young people as well as in the adult population (Ochaba, 2021).

Declaration

The questionnaire in the submitted work was anonymous. At the beginning of the questionnaire respondents received information about the purpose of the questionnaire and its evaluation. The authors have no conflict of interest.

References

1. BEDEROVA A et al. (2018) Healthy diet. Bratislava. Public Health Authority of the Slovak Republic, 2018. p. 38. ISBN 978-80-7159-232-7.
2. CENA H, CALDER P (2019) Defining a Healthy Diet: Evidence for The Role of Contemporary Dietary Patterns in Health and Disease. In. *Nutrients*. ISSN 2072-6643, vol. 12, # 334 (2019) pp.1-15.
3. DANIHELOVA V et al. (2020) Development of health awareness and behavior of the Residents of the Slovak Republic in 2013 - 2016 - 2019. Bratislava. Public Health Authority of the Slovak Republic, 2020. p. 104. ISBN 978-80-7159-244-0.
4. GECKOVA A et al. (2019) Social determinants of schoolchildren's health: HBSC – Slovakia – 2017/2018: National report on health and health-related behavior of 11, 13 and 15-year-old schoolchildren based on a survey conducted in 2017/2018 within the international project "Health Behavior in School-aged Children". Bratislava. Public Health Authority of the Slovak Republic, 2019, p. 203. ISBN 978-80-7159-242-6.
5. OCHABA R et al. (2021) Changes in eating habits in the adult population. In *Lekarsky obzor*. ISSN 0457-4214. vol. 70, no. 2 (2021), pp. 65-71.
6. OCHABA R, GECKOVA A (2019) Social determinants of schoolchildren's health - key results. In *Lekarsky obzor*. ISSN 0457-4214. vol. 68, no. 9 (2019), p. 291-296.
7. OCHABA R, GECKOVA-MADARAS-ZOVA A, KACMARIKOVA M (2020) Key findings from a survey of social determinants of schoolchildren's health. In *Zivotne podmienky a zdravie*. Bratislava: LF UK, 2020, pp. 253-259. ISBN 978-80-223-4934-5.
8. SITAROVA T (2018) Food consumption in the Slovak Republic in 2018. Bratislava: SU SR, 2018, p. 28. ISBN: 978-80-8121-693-0.