

NUTRITIONAL HABITS IN PLUNGE DISTRICT ADOLESCENTS

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Annotation

Adolescence is a period in which physiological changes in the body occur and the habits of life and eating change. These are manifested for both, boys and girls. In order to better understand what determines the changes in eating habits, the society must educate adolescents and their parents, how physical activity and dietary knowledge are related to eating habits in adolescence. Eating habits among adolescents are particularly worrying because in early age overweight and obesity often results in adult obese and increases the risk of developing various illnesses.

Key words: teenagers, nutrition, habits, inappropriate food.

Introduction

The aim is to analyse the eating habits of teenagers and their attitude to healthy eating.

Objectives

1. To find out the teenagers' eating habits and the effect of bad food consumption on teenagers health.
2. After the analysis of survey results, to discuss the teenagers' attitude to eating according to the living place of respondents.
3. To find out the dominating eating habits according to the respondents' grade.
4. To estimate the consumption of healthy products according to respondents' gender.

Methods

The study took place in April 2017 Plungė District Municipality. The survey was carried out with the parents' consent to their children to participate in a one-time questionnaire. The study was based on the principles of general ethics: autonomy, privacy, confidentiality, harmlessness, goodness [11]. The sampling method was chosen for the study. According to the data of Plungė Education Department, the total sample size in Plungė district is 929 teenager. The age of the subjects varies from 13 to 15 years. In proportion to the number of teenagers, it was estimated that 278 teenagers (boys N = 157, girls N = 121) had to be examined in Plunge district. Students from seventh (N=99), eighth (N=95) and ninth (N=84) grades of two cities and three country schools were selected. The tool of research is a close type questionnaire. The questionnaire was the non-standardized, used only for this study, which consisted of 19 questions. Statistical analysis was performed using the software packet of data collection and analysis, SPSS 19.0 (Statistical Package for Social Science 19 for Windows). Categories were described in percentage distributions; relations between categorical signs were searched for and distributed comparing to Chi-square test (χ^2). The charts were prepared using a standard MS Excel and Microsoft Excel programs.

Background

Rational nutrition for children is the basis for health. It affects the physical and mental development of children, immunity, workability and life durability. As we know, modern adolescents do not adhere to the principles of healthy eating, so we have problems with their eating habits [6]. Consumption of unhealthy food, established habits in adolescents has become a major public health issue [10]. The scientific community has agreed that nutrition is a key factor in maintaining good health. Healthy eating is considered one of the most important means of promoting good health and also contributes to reducing the prevalence of many common chronic diseases. Healthy eating is a balanced and diverse diet, consisting of healthy foods: fresh and natural foods, lots of fruits and vegetables, and foods containing vitamins and minerals. In this regard, modern teenagers have insufficient knowledge about healthy eating, and this is widespread today. Various studies have shown that adolescents are more and more associated with various illnesses, malnutrition, lack of knowledge about healthy foods, and are not able to balance food products [4]. Researchers say that parents influence the nutrition of children not only by allowing them to get one or the other food, but also by their own example, choosing healthier foods as well as their eating behavior [1]. The environment surrounding the teenager, habits can also affect the choice of food and eating behavior. For example, when they

return home from school, teenagers watch consume encouraging commercials [7]. It is noted that food provides energy for the teenager, it is needed for growth, physical activity and vital functions of the body (respiration, blood circulation, digestion, maintenance of the body temperature, thinking). During childbirth, essential changes in its body occur, morphologically and functionally, many organ systems change. At the time of conception, metabolism is intensified and energy demand increases. Irrational nutrition undermines adolescent's health, inhibits development and growth, delays puberty, reduces the protective properties of the body, weakens memory and ability [9]. Emphasis is placed on the role of nutrition in the etiology of chronic diseases and the choice of foods that determine the nutritional habits of children and adolescents around the world [2]. Changing eating habits can improve the health of the population and increase their life duration, therefore exclusive attention should be paid to the young person's health [8].

Results

Socio-demographic data of the subjects (Table 1).

Table 1

Gender, $p < 0.001$

Gender	N	%
Male	157	56,4
Female	121	43,6

Distribution of respondents to a gender: male 157 (56,4%), female – 121 (43,6%).

The most of surveyed students live in the countryside (Table 2) – 136 (49.0%), in the city – 65 (23.4%), in small town – 77 (27.6%).

Table 2

Residence

Living region	N	%
Village	136	49
Small town	65	23,4
City	77	27,6

The difference between the rural area and the city was significant, $p < 0.001$.

The study involved 99 7th grade students (35.6%), 8th – 95 (34.2%), an 9th – 84 (30.2%) teenagers (Table 3).

Table 3

Classes, ($\chi^2 = 0.181$; $lfs = 2$; $p > 0.05$)

Class	Male (N)	%	Female (N)	%	N	%
Class 7	57	20,5	42	15,1	99	35,6
Class 8	52	18,7	43	15,5	95	34,2
Class 9	48	17,3	36	12,9	84	30,2

The difference between gender and classes is not significant ($\chi^2 = 0.181$; $lfs = 2$; $p > 0.05$).

Respondents' attitude to healthy diet (Table 4).

Table 4

Respondents' attitude to healthy nutrition by place of residence ($\chi^2 = 5.554$; $lfs = 6$; $p < 0.05$)

Living region	Yes (%)	No (%)	I do not know (%)
Village	16,9	10,1	10,4
Small town	16,2	6,5	6,1
City	15,8	6,8	11,2

In this study, adolescents living in rural areas have a better attitude towards the healthy nutrition – 47 (16.9%). The difference in the attitude to healthy nutrition in comparison with the place of residence was significant ($\chi^2 = 5.554$; $lfs = 6$; $p < 0.05$).

Eating habits of respondents (Table 5). The results of the survey: breakfast, dinner at school every day is mostly eaten by children of grade 7, 22 (7.9%). The highest in daily fruit

intake during breaks is also in class 7 – 11 (4.0%), the difference between fruit eating and gender is very significant ($\chi^2 = 19.458$; IIs = 6; $p < 0.001$). A study was conducted in Klaipėda district in 2014, during which teenage nutrition in schools was analyzed. According to the study, two main criteria for food choice in schools were distinguished: taste characteristics (35.9%) and price (34,7%) [3].

Table 5

The frequency of eating by the respondents' class, warm breakfast / lunch ($\chi^2 = 2.414$; IIs = 6; $p > 0.05$); light snacks ($\chi^2 = 12,544$; IIs = 6; $p < 0,05$); sandwich ($\chi^2 = 6.302$; IIs = 6; $p < 0.05$); sweets, etc. ($\chi^2 = 8,363$; IIs = 6; $p < 0,05$); fruit ($\chi^2 = 19.458$; IIs = 6; $p < 0.001$); fast food ($\chi^2 = 3.600$; IIs = 6; $p > 0.05$).

A warm breakfast or a lunch in the school canteen	Class 7 (N)	%	Class 8 (N)	%	Class 9 (N)	%	
Every day	22	7,9	18	6,5	19	6,8	$(\chi^2 = 2,414$; IIs = 6; $p > 0,05$)
3-4 times a week	10	3,6	10	3,6	11	4,0	
1-2 times a week	10	3,6	6	2,2	8	2,9	
Rarely or never	57	20,5	61	21,9	46	16,5	
Easy snacks in the school canteen							
Every day	10	3,6	5	1,8	3	1,1	$(\chi^2 = 12,544$; IIs = 6; $p < 0,05$)
3-4 times a week	15	5,4	15	5,4	8	2,9	
1-2 times a week	25	9,0	34	12,2	18	6,5	
Rarely or never	49	17,6	41	14,7	55	19,8	
A sandwich brought from school to school							
Every day	1	0,4	6	2,2	3	1,1	$(\chi^2 = 6,302$; IIs = 6; $p < 0,05$)
3-4 times a week	4	1,4	5	1,8	7	2,5	
1-2 times a week	7	2,5	8	2,9	8	2,9	
Rarely or never	87	31,3	76	27,3	66	23,7	
Sweets, cookies, crisps during breaks							
Every day	2	0,7	4	1,4	6	2,2	$(\chi^2 = 8,363$; IIs = 6; $p < 0,05$)
3-4 times a week	16	5,8	11	4,0	8	2,9	
1-2 times a week	40	14,4	28	10,1	26	9,4	
Rarely or never	41	14,7	52	18,7	44	15,8	
Apples or other fruits during breaks							
Every day	11	4,0	7	2,5	10	3,6	$(\chi^2 = 19,458$; IIs = 6; $p < 0,001$)
3-4 times a week	12	4,3	19	6,9	17	6,1	
1-2 times a week	24	8,7	25	9,0	37	13,4	
Rarely or never	51	18,4	44	15,9	20	7,2	
Buy fast food at school (kebabs, burgers, etc.)							
Every day	11	4,0	11	4,0	13	4,7	$(\chi^2 = 3,600$; IIs = 6; $p > 0,05$)
3-4 times a week	8	2,9	7	2,5	10	3,6	
1-2 times a week	20	7,2	14	5,0	13	14,7	
Rarely or never	60	21,6	63	22,7	48	17,3	

59 (20.8%) teenagers never eat breakfast or lunch at school canteen 74 (26.6%) teenagers prefer a high calorie snack. The study found that 22 (7.9%) adolescents in grade 8, eat sweets every day. In 7 th grade, 35 children (12.6%) eat sweets 3-4 times a week. The difference between the use of sweets and classes was significant ($\chi^2 = 12.210$; IIs = 6; $p < 0.05$). Sweet, carbonated beverages are mostly consumed by students on daily basis in grades 7 and 8, with 24 (8.6%) teenagers. Rarely or never – students in class 9, 43 (15.5%). It has also been shown that the majority: 50 boys (31.8%) and 27 girls (22.3%) are consuming dairy products every day. The difference between the consuming dairy and gender was statistically significant ($\chi^2 = 7.830$; IIs = 3; $p < 0.05$). Teenagers drink two liters of water a day, 75 (47.8%) boys and 38 (31.4%) girls. The difference of drinking water per day between the gender is very significant, ($\chi^2 = 23,805$; IIs = 4; $p < 0,01$). The results of the study „Nutrition habits of different sex teenagers in Utena region“ that was accomplished in 2014, showed that teenagers are not consuming enough of water, half of the students druk just 1 l a day [5].

Conclusions

1. Teenagers are lacking fruits and vegetables in their diet whereof sweets and non alcoholic beverages increased. Breakfast is often out of daily diet.
2. It has been established that adolescents are more interested in healthy diets living in rural areas (18.0%). Adolescents living in the countryside have a higher positive attitude towards healthy eating (16.9%). Teenagers living in the city are not very interested in healthy food (14.0%).
3. The habits of daily consuming fruits during the breaks in the seventh grade – 4.0%. Potato chips are mostly eaten in grade 9 – 8 children (2.9%). Sweets are eaten daily by children in grade 8 – 22 (7.9%). Sweets, carbonated drinks are mostly taken by students in grades 7 and 8 (8.6%) on daily basis, however, 47.8% of adolescents did not eat fish at all.
4. 33.8 % boys and 21.9 % girls have breakfast every day. The majority uses dairy products daily, 31.8% boys and 22.3% girls.

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