

Knowledge of Healthy Eating Habits in Primary School Aged Children from Prizren

Ukëhaxhaj. A^{1,2}, Frrokaj. M¹, Vorfaj. F¹, Hoxha F^{1,3*}, Zogaj. D², Koçinaj D¹

1 University of Gjakova "Fehmi Agani"

2.National Institute of Public Health Pristina

3.University Clinical Centre

* Corresponding Author:fatoh.hoxha@uni-gjk.org

Abstract: Understanding children's eating attitudes and their behavior is important in terms of children's health. According to Center for Disease Control and Prevention; Healthy eating is indicated by consuming fair amount of fruits, vegetables, whole grains, fat-free or low milk – fat milk and milk products, lean meats, poultry, fish, beans, eggs and nuts, while avoiding saturated fats, trans fats, cholesterol, salt and added sugars within daily calories needs. The fundamental issues behind public health concerns for young people are the changes in food habits that have developed as a result of the globalization of food. Healthy nutrition interventions need to occur early in childhood and adolescence in order to prevent or reverse the adverse health effects of overweight and poor eating habits. Primary school age is the time children start enjoying busy social lives, have pocket money and begin to develop their own interests and lifestyle. Children of this age learn quickly and are influenced by friends and popular trends. This study was carried out to describe knowledge of school age children in primary school in Prizren. There were 60 children's, when 29 children's (48%) were females and 31 children's (52%) were males. The research was conducted mainly with ages from 11-15 years old. The present study aimed to focus solely on the intake of fruits and vegetables, meat, fast-food, dough and pasta and salads are often the reason where many of the problems with food intake occur these ages.

Based on findings Ministry of Education in Kosovo should integrate nutrition education and healthy school food environment aimed to improved knowledge, attitude and practice on nutrition, eating behaviors and physical activity.

Even we do not have nutrition intervention programs in any public school in Kosovo, is very necessary to have training of school teacher on the nutrition education curriculum. And finally schools must focused on promoting healthy school food environment in Kosovo. Therefore it is important to develop an intervention that integrates nutrition education, especially the school canteens that can exert a strong influence on children's food decisions.

Keywords: Knowledge, eating habits, school children, healthy eating

"We are what we eat"

1. Introduction

Good nutrition is essential for health. It is our primary duty to have a healthy body. What and why do we eat what we eat? Healthy eating by primary school-aged children is important for good health and development.¹

Many research have highlight our daily food choices which have a lot to do with our age, gender, genetic makeup, occupational and life style; where we live; our family and cultural background.²

This means to live in a clean and pollution-free environment, eat fresh, organic and unprocessed foods, to drink natural and controlled water, to do regular physical exercises and to live a quiet life without stress. Healthy eating plays a very important role in boosting our immunity. Then a strong immunity significantly reduces the likelihood of developing various diseases. Knowledge about healthy eating significantly has increases but malnutrition is still present in children, such as excessive use of fats, sugars and salts and avoiding the use of sufficient amounts of fruits and vegetables which play a key role in good health. Nutrition is and should remain one of the pleasures of life. Eating healthy and delicious are not targets that exclude each other.³

According to Center for Disease Control and Prevention; Healthy eating is indicated by consuming fair amount of fruits, vegetables, whole grains, fat-free or low milk – fat milk and milk products, lean meats, poultry, fish, beans, eggs and nuts, while avoiding saturated fats, trans fats, cholesterol, salt and added sugars within daily calories needs.⁴

Based on many studies from different countries, numerous researches done in this field as well as guides and manuals for healthy eating, we have found more valuable resources that will address this issue.

Proper nutrition should enable:

- ✓ Sufficient consumption of nutrient energy matter (fats, carbohydrates) to meet energy needs;
- ✓ Sufficient consumption of building matter (proteins);
- ✓ Consumption of protective substances (vitamins and minerals);
- ✓ Water consumption (role in digestion and cell transport).⁵

What is nutrition?

Nutrition is a process through which the main elements of food are obtained and used by the body. Which is a basic physiological need and a necessary condition for good health. Food along with water and air also fulfill the living conditions. The human body needs the main nutrients which are divided into:

- Water;
- Carbohydrates;
- Fats;
- Proteins;
- Vitamins;
- Minerals.^{6,7,8,9,10,11,12,13}

Healthy nutrition interventions need to occur early in childhood and adolescence in order to prevent or reverse the adverse health effects of overweight and poor eating habits. Childhood and adolescence is a critical period for diets of high nutritional quality as the physiological need for nutrients is high relative to energy needs. In addition, many core eating habits and behavioral patterns are developed that may persist throughout adulthood. Healthy food and improved nutrition should be a high priority on every school agenda because of the positive affect on child well-being, and subsequent enhanced learning ability and academic performance.

The fundamental issues behind public health concerns for young people are the changes in food habits that have developed as a result of the globalization of food. Over the past few decades significant changes have taken place in eating habits and home environments.

The increase in families with two working parents and time limitations has led to the ‘convenience revolution’ with pre-packed processed products forming the basis of the majority of meals prepared in the home.

Social factors influence dietary intake, especially during adolescence. Eating habits, food choice and meal patterns of young people reflect the weakening influence of the family and increasing peer pressure. Changes in eating habits can be associated with the need to express freedom from parental control and the forging of identity. Independence can be

expressed through increased consumption of meals – often take-away fast foods – outside the home or school setting. The various psychological, social and environmental factors that influence food preferences increases with age as children and adolescents are subject to an increasing array of developmental changes and influences outside the home (NHMRC, 2003).¹⁴

2. Importance of Healthy Eating Attitudes of School Children

Understanding children's eating attitudes and behavior is important in terms of children's health.¹⁵

The importance of adopting an ecological approach to the development of health promotion programs for children has shown in many studies over the world. As this implies, eating habits, as a health behavior, are affected not only by individual characteristics but also by related environmental characteristics in the home, school and community.¹⁶

Previous studies have consistently reported that children who consume high- fat or high- sugar foods and fast foods face a higher risk of being overweight or obese.¹⁷

This issue is a major public health concern in the United Kingdom, where 30 % of children aged 2 to 15 in England are overweight or obese and that children at earlier ages are likely to stay obese for longer. On the other side according to this study inequalities in child obesity have been increasing among children ages 10-11. ¹⁸

Primary school age is the time children start enjoying busy social lives, have pocket money and begin to develop their own interests and lifestyle. Children of this age learn quickly and are influenced by friends and popular trends. This is the perfect time to learn about the importance of healthy food and physical activity.¹⁹

Many article provides an overview of habit research and discusses possibilities to increase our knowledge of the role of habits in eating behavior. It is shown that interventions targeting habitual behavior can try to, change the situation that triggers the habitual behavior, promote or inhibit the habitual response and change relevant contingencies. These insights can act as a starting point for future intervention research.²⁰

Study which was conducted within the framework of INHERIT(Horizon 2020 project)aiming at identifying and implementing policies/practices/innovations that promote health, reduce health inequalities and improve the environment and attitude to healthy eating by combining activities in the school gardens with provision of a plant-based meal once a week.²¹

3. Current Situation in Kosovo

No any extensive research had been conducted in Kosovo so far, related to this issue. This was the first one which had been assessing the healthy eating habits in municipality of Prizren.

Although such research is lacking in Kosovo, but according to systematic visits to schools by the Municipal Health Directorates many students like to consuming inadequate amounts of fruit and vegetables and eating too many foods high in fat, saturated fat, salt and sugar.

Therefore from many study have shown that high-fat and sweet foods are usually preferred by children of many countries, whereas vegetables are almost universally unwelcomed.^{22,23,24,25}

4. Literature Review

In the literature review, as well as studies from different part of the world related to eating habits and knowledge for healthy food were also found.

Some research (Rachael Brown and Jane Odgen, 2004), has explored the impact of controlling food intake by rewarding the consumption of 'healthy food'. Research also indicates that children may not only model their parents' food intake, but also their attitudes to food and their body dissatisfaction.²⁶

In the research of Scotland; Healthy eating in schools 2008, the study of imbalances in diet can contribute to children and young people developing a number of serious diet-related diseases and conditions over the course of their lifetime. On the other hand, improvements to the diet of children and young people can positively influence their current and future health. Childhood obesity is widely recognized as an increasing problem. Obesity can affect many aspects of children's lives including their physical, mental and emotional wellbeing. In addition, obesity may continue into adulthood and lead to a number of serious health conditions including some types of cancers, diabetes, coronary heart disease and stroke. Although schools alone cannot be expected to address children's poor eating habits, schools can make a valuable contribution to improving the nutritional quality of children's diets and promoting consistent messages about healthy eating within a health promoting schools environment.²⁷

In the study of Wormley, A. M.(2013):Healthy eating habits of school aged children in rural area, it was evaluate how children which are living in rural areas are consume diets higher in fat and calories, and have less exercise. Befort (2012) also stated "There is a definite cultural diet in rural America, full of rich, homemade foods including lots of meat and dessert". Children in rural areas have been said to have more screen time during the day and watch more television, which takes away from the time that they can be active. There are also barriers to addressing childhood obesity in rural areas.

They generally have increased poverty levels, and limited school resources on Physical Education and Nutrition due to budgets.²⁸

With their research in Romania Pantea Stoian and colleague try to explain much evidence indicates that eating habits and lifestyle during childhood and adolescence are risk factors for different nutritional and cardiovascular diseases in adulthood. Obesity is perhaps the most frequent chronic disease in children and adolescents, affecting each group of age, beginning with infancy.

However, obesity is the most common nutritional disorder in children worldwide, its prevalence growing in both developed and developing countries, affecting all social and economic categories, both sexes, all ages and ethnic groups. Obesity among children and adolescents represents a serious public health problem, since it is frequently associated with metabolic syndrome, type II diabetes mellitus, hypertension, dyslipidemias as well as more frequent sleep apnea and orthopedic diseases/ osteoporosis.²⁹

According to Australian National Health Research Council (2013) states that optimum nutrition is essential for the healthy grown and development of children. Healthy eating contributes to achieving and maintaining a healthy weight, and provides protection against chronic disease and premature mortality. Conversely, unhealthy eating early in life, in particular the over-consumption of energy – dense, nutrient-poor foods and drinks, as well as physical inactivity and a sedentary life style, are predictors of overweight and obesity.³⁰

Similar to our research the low intake of fruits and vegetables is of particular concern in children since such foods are protective against certain chronic diseases, including obesity, cardiovascular diseases, and some types of cancer.³¹

In another study related to Health behavior in schools-aged children study drawing on data from 44 countries in Europe and North American found that only 39% of 11 year old children consume vegetable and fruits on a daily basis.¹⁸

Regarding healthy eating, the findings of the study indicated no effects on children's vegetable consumption and attitudes to eating vegetables. This study was done in a public primary school in the London (UK) where 15.5% of children in this borough come from low-income families found that at baseline 7.1% of children from intervention group and 13.8% of children from the control group reported that they did not eat any fruit and vegetables.¹⁸

As we can show from many study high consumption of fast foods presents a considerable risk factor for obesity , with our study revealing that around 70% of children eat fast-food at least once a week.³²

According to latest study in Romania from Anca Pantea et colleagues they highlight that 70 % of children eat fast - food at least once a week, 36.3 % of the girls and 22.9 % of the boys skip breakfast, almost one third (29%) do not consume water at all during the day and they consume at least 2 glasses of sweetened fizzy drinks/day (28.61%).²⁸ With their research in Romania they highlight that many children eat snacks in the morning or in the afternoon, especially sweets (60.95 %), 4 % of children do not eat meat and 10 % from down town eat fast foods or restaurants and half of children's skip breakfast.²⁸

Our findings indicated that children drinks more refreshing drinks than water, which shows very well the possibility of justifying the risk of obesity and other disease of these children, where more than 42% intake refreshing drink more than three time per day, and 13 % of children admit that they have problems with being overweight and that it bothers them.

Similar to our study in study in Korean children by Hee Soon Kim et al they found that 13.3 % of the child participants were overweight and 86.7 % were obese. In this study authors emphasize that parents of overweight or obese children expressed that their food preferences negatively affected their management of their children's habits at home and expressed experiencing difficulties in providing differentiated diets at home for their children. Also the main think in this survey was that the parents stated that unhealthy food is easily bought and consumes around the school.¹⁶ The finding from a recent study by Choon Huey Teo and colleagues in 2019 in Malaysian children, found that prevalence of over nutrition among primary school children (33.7%) was higher than secondary school adolescents (28.5 %). Previous studies reported that Malaysian primary school children are at increased risk of poor dietary behaviors, including breakfast skipping, low fruits and vegetables intakes, unhealthy snatching behaviors and low physical activity, which may affect their nutritional status and expose children to malnutrition. Low cognitive performance and poor quality of life.³²

5. Methodology and Findings

This research is a descriptive and observational cohort study, which was conducted in March 2021 and includes 60 students aged between 11 and 15 years.

The method used to conduct this study is the survey of students of the elementary school "Mustafa Bakija" in Prizren with anonymous questionnaires consisting of 20 questions, which were easily administered to students involved in the study. The questionnaire was used to assess food behavior, eating habits, consistency of daily meals, the types and quantity of drinks and waters consumed daily, lifestyle habits-related questions, frequency and Dietary habits in school from Prizren.

Ethical considerations were taken into account for this study, where children were approached by either the researcher at the school and asked to give a consent form to their parents.

In line with this, participants circled the number of times that a snack food item was eaten in general using five point Likert scales. For "in general" the scale ranged from "never" (0) to "every day" (4). The foods were presented in a random order.

5.1 Profile characteristics of children's

Participant's profile characteristics are shown in table 1. There were 60 children's, when 29 children's (48%) were females and 31 children's (52%) were males. The research was conducted mainly with ages from 11-15 years old. From 60 children's, 8 children's (13%) were 11 years old, 9 children's (15%) were 12 years old, 11 children's (18%) were 13 years old, 19 children's (32%) were 14 years old and 13 children's (22%) were 15 years old.

Tab.1 The age of children's involved in study

AGE				
11 years old	12 years old	13 years old	14 years old	15 years old
13%	15%	18%	32%	22%

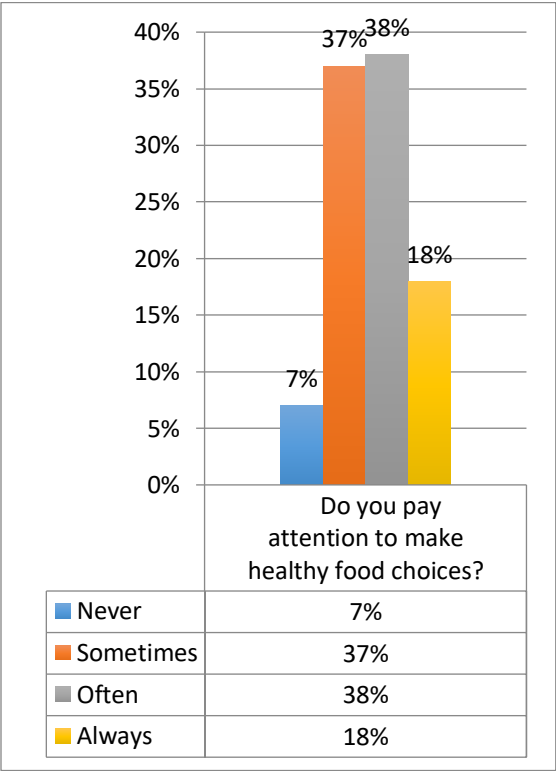
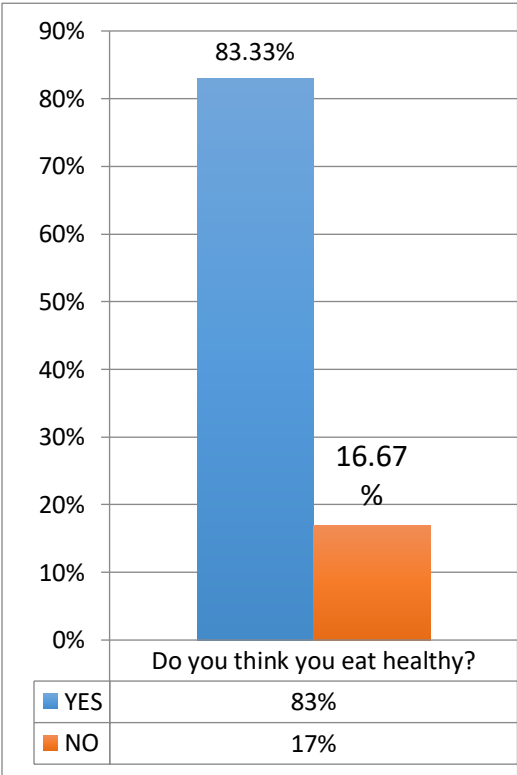
5.2. Findings related to the knowledge about healthy eating

In the survey, children describes according their knowledge how healthy they eat, where 83 % think they eat healthy and 17 % think they are not eating healthy. (Graphic 1)

In terms of their attention in selecting healthy foods we have received various responses, where approximately they said that they pay attention often to make healthy food choices (37/38%), 18% said always and 7 % never pay attention to make healthy food choices. (Graphic 2)

Graphic 1. Do you think you eat healthy?

Graphic 2. Do you pay attention to make healthy food choices?

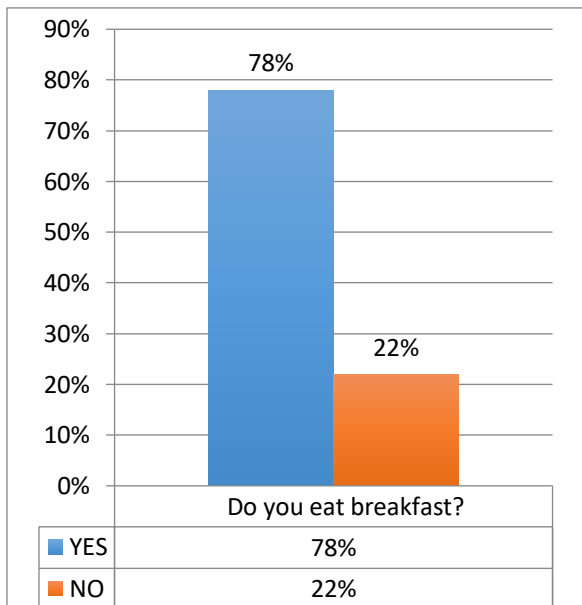


5.3 Finding on the breakfast consumption and light meals

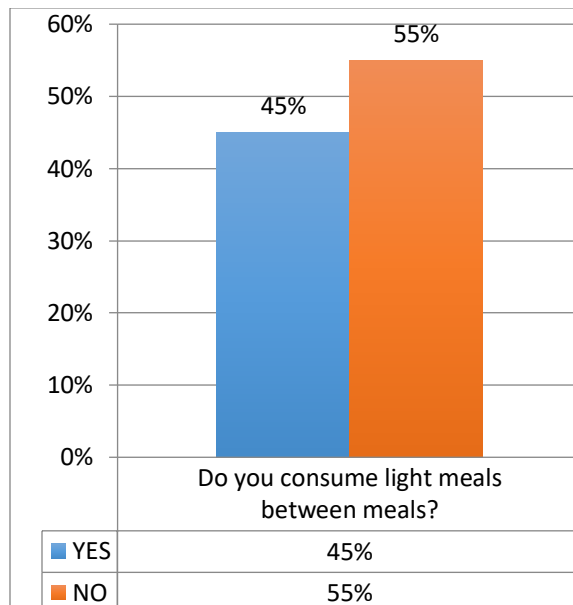
Although daily breakfast consumption is considered healthy for nutritional status, cognitive function, and body weight control, school-aged children appear not to know this information. Our study indicates that 22% of them seldom skip breakfast. According to this most of them skip breakfast because they get up late in the morning, or they are in a hurry or their parents work and don't supervise them. (Graphic 3)

Worrying is the fact that 55 % of them don't consume light meals between meals. (Graphic 4)

Graphic 3. Do you eat breakfast?

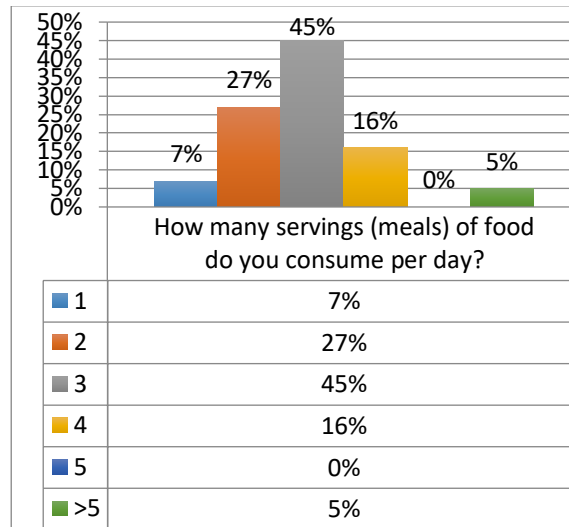


Graphic 4. Do you consume light meals between meals?



From 60 children 7% of them consume 1 meal per day, 27% of them consume 2 meals per day, 45 % of children consume 3 meals per day, 16 % of them consume 4 meals per day, none of them consumes 5 meals per day and just 5% of children consume over 5 meals a day. (Graphic 5)

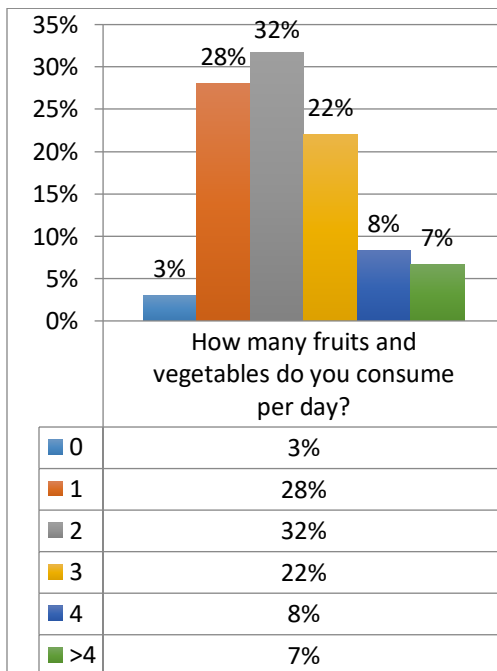
Graphic 5. How many servings (meals) of food do you consume per day?



5.4 Information on fruits and vegetables consumption

The present study aimed to focus solely on the intake of fruits and vegetables are often the reason where many of the problems with food intake occur these ages. According to this we use 6 point Likert scales ranged from 0 to over 4 times. From the answer we received it turns out that 32 % of children consume 2 times per days fruit and vegetables, 28 % once per day, 22 % three times per days and 3 % never consume fruits and vegetables. (Graphic 6)

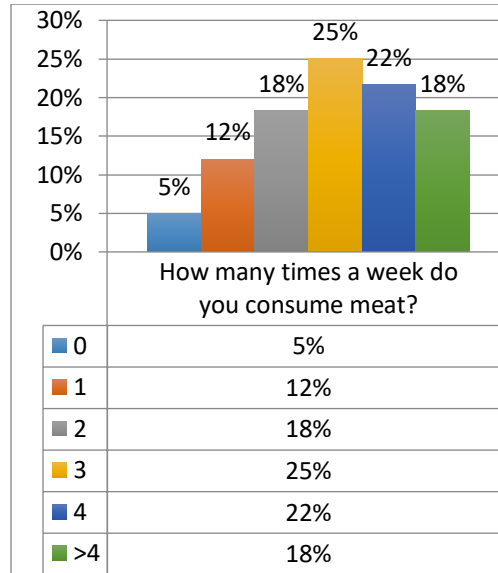
Graphic 6. How many fruits and vegetables do you consume per day?



5.5 Information on meat consumption

Same question we have also done it for meat consumption, where 25 % of children said they consume meat three times during the days, 22 % four times, 18 % more than four times they consume meat. Overall, 5 % of children do not eat meat. (Graphic 7)

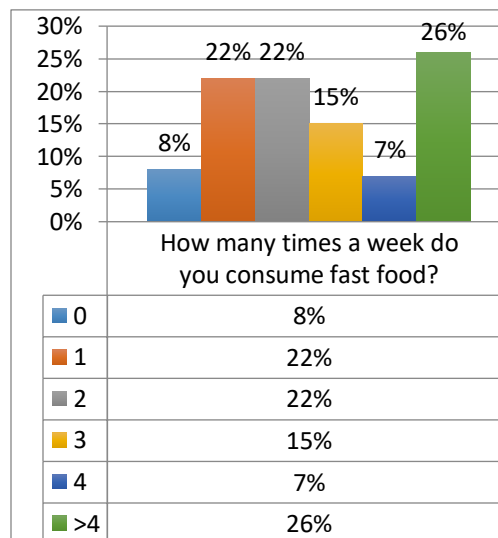
Graphic 7. How many times a week do you consume meat?



5.6 Information on fast- food consumption

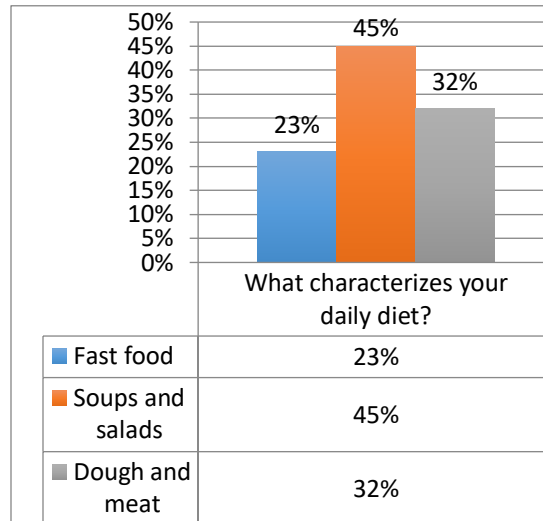
Overall we know that every children in this ages like to go out or at home to have fast food. Eating is fast foods or restaurants, more than four time per week is regular for 26 % of children. Being alone and having no idea to prepare the meal by themselves, that's way most of children's, 22 % have fast food one or two times per week out. (Graphic 8)

Graphic 8. How many times a week do you consume fast food?



In our question what characterized their daily diet we have noticed that among the most favorite foods are soup and salads (45 %), which is subjective response if we compare it with the previous question, 32 % of children said they have in daily diet dough and meat and 23 % of them have fast food in daily diet.

Graphic 9. What characterizes your daily diet?

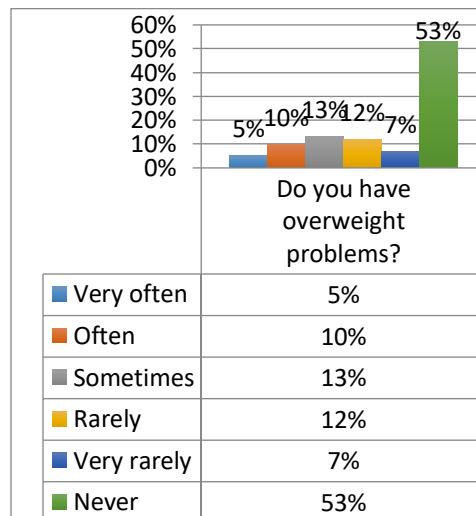


Due to consumption of fast food (23 %) and dough and meat (32%) in daily diet it is clearly seen than overweight is also present in these children.

5.6 Findings related to overweight

During our study from 60 children 53 % of them they don't have problems with overweight or obesity, 13 % sometimes have problems and 5 % always have a problem with overweight.

Graphic 11. Do you have overweight problems?



6. Results

The present study which is conducted in the primary school "Mustafa Bakija" in Prizren we notice that the awareness of primary school students on healthy nutrition is a serious public health problem.

As the children's role models, parents are a major environmental factor affecting the formation of their children's eating habits.

We conclude that a 7% of them, never or sometimes pay attention to make healthy food choices and 17% of children's think they are not eating healthy.

More than half of them (55%), do not consume light meals between main meals.

A large number of these children (45%) consume 2-3 meals per day, and 16 % consume meals more than four times.

There is a very low fish consumption and a very high meat consumption during the week, where 28 % of children said that they consume meat three times during the days, 22 % of them four times, 18 % more than four times and 5 % of children do not eat meat.

We have come to the conclusion that in fact these children "think" that they are eating healthy considering that 83% of children's said that they eat healthy, and based on other questions in the questionnaire it was confirmed that they do not actually eat in the right way.

The low intake of fruits and vegetables in the daily diet of children in this sample is a serious problem, particularly since the consumption of such foods categories are well-known protective effects.

In our study Fruits, vegetables and dairy products a large number 32 % consume only two times per day, 28 % once per day and 3% never consume fruit and vegetables.

In our study 22% of children seldom skip breakfast, which is the most appropriate meal because they have the courses 5 for 5-6 hours per day and, consequently they have no time to eat. In our research we found that children take often fast food, around 23 % of children accept that they really like to eat fast food, 45 % use to eat soup and salads and 22 % of children eat dough and meat.

7. Recommendation

Based on the result of this study, in order to children's eating attitude and behavior and healthy food in Prizren, we suggest the following recommendations for school-aged children regarding food and eating habits:

1. Ministry of Education in Kosovo should integrate nutrition education and healthy school food environment aimed to improved knowledge, attitude and practice on nutrition, eating behaviors and physical activity.
2. We do not have nutrition intervention programs in any public school in Kosovo.
3. The sustainability of the intervention beyond the study duration will be considered through training of school teacher on the nutrition education curriculum.
4. Schools must focused on promoting healthy school food environment in Kosovo. Therefore it is important to develop an intervention that integrates nutrition education, especially the school canteens that can exert a strong influence on children's food decisions.
5. Implementation of educational programs for nutrition/health education programs related to improving dietary habits for both families and schools via special classes on prevention.

6. Development of a long-term national strategy that incentivizes the benefits of an appropriate diet while dietary habits and behavior in schools from Prizren concomitantly drawing attention to non-healthy.
7. Decrease in the frequency of fast-food meals, which have become increasingly popular.
8. Higher consumption of fruits and dairy products instead of chips and sweets at school.
9. Promotion of compotes, homemade cookies, and jam instead of candies and chocolate as preferred sweets.
10. Promotion of cooked main meals, and the organization of school canteens/menus in which children should be involved.
11. More natural juice made of raw fruit/ vegetables and fewer or no fizzy drinks.
12. Increased number of sports classes at school.
13. More attractive extracurricular activities to stimulate school- aged children's participation.
14. Policies that seek to improve dietary habits of elementary school children.
15. Restricting the sale of "fast food" in schools or near them;

REFERENCES

- [1] Dean A Dudley, Wayne G Cotton and Louisa R Peralta; Teaching approaches and strategies that promote healthy eating in primary school children; a systematic review and meta-analysis; International Journal of Behavioral Nutrition and Physical Activity (2015)12:28
- [2] Laza Valeria and Lotrani Lucia Matia; Unhealthy behaviors of school children; <https://www.researchgate.net/publication/41137587,2008>
- [3] <https://medlineplus.gov/nutrition.html>
- [4] Center for Disease Control and Prevention (2016),Healthy eating for a healthy weight. Retrieved from https://www.cdc/healthyweight/healthy_eating/
- [5] <https://www.sciencelearn.org.nz/resources/528-food-function-and-structure-introduction>
- [6] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2908954/>
- [7] <https://medlineplus.gov/carbohydrates.html>
- [8] <https://medlineplus.gov/dietaryfats.html>
- [9] <https://medlineplus.gov/genetics/understanding/howgeneswork/protein/>
- [10] <https://medlineplus.gov/vitamins.html>
- [11] <https://medlineplus.gov/ency/article/002399.htm>

- [12] <https://medlineplus.gov/minerals.html>
- [13] <https://www.uofmhealth.org/health-library/ta3912>
- [14] WHO; Food and nutrition policy for schools; A tool for the development of school nutrition programmes in the European Region Copenhagen 2006
- [15] Rachael Brown¹ and Jane Ogden Children's eating attitudes and behaviour: a study of the modelling and control theories of parental influence; *Health Education Research* Vol.19 no.3,Oxford University ; DOI: 10.1093/her/cyg040 ;p 261-271,2004
- [16] Hee Soon KIM., Jiyoung Park., Yumi MA., Mihae IM; What are the barriers at home and school to healthy eating? Overweight/Obese child and parent perspectives; *The Journal of Nursing Research*, Vol.,27,nr 5,2019
- [17] Dattilo, A. M., Birch, L., N. F., Lake, A., Taveras, E.M.,& Saavedra, J.M (2012).Need for early interventions in the prevention of pediatric overweight: A review and upcoming directions. *Journal of Obesity*,2012,123023.<https://doi.org/10.1155/2012/123023>
- [18] Matluba Khan and Ruth Bell; Effects of a school based intervention on children's physical activity an healthy eating: A mixed- methods study; *International Journal of Environmental Research and Public Health*,2019,www.mdpi.com/journal/ijerph
- [19] Nutrition & Food Services The Royal Children's Hospital Melbourne, Sydney; www.rch.org.au Updated; July 2013
- [20] The importance of habits in eating behaviour. An overview and recommendations for future research Jonathan van'tRiet Siet J.Sijtsema HansDagevos^aGert-JanDe Bruijn Elsevier Volume 57, Issue 3, December 2011, Pages 585-596, <https://doi.org/10.1016/j.appet.2011.07.010>
- [21] Van Der Vliet N; Staasen, B; Kruize,H; Morris, G; Costongs, C Bell, R;Marques, S; Taylor, T'Quiroga, S;Martinez Juarez,P; et al. The INHERIT Model: A Tool to Jointly Omprove Health, Environmental Sustainability and Healthy Equity through Behaviour and Lifestyle Change.*Int.J.Environment. Resp. Public Health* 2018, 15.1435 (Cross Ref)
- [22] Bellisle F, Rolland-Cachera MF; Kellogg Scientific Advisory Committee 'Child and Nutrition. Three consecutive (1993, 1995, 1997) surveys of food intake, nutritional attitudes and knowledge, and lifestyle in 1000 French children, aged 9–11 years. *J Hum Nutr Diet* 2007; 20:241–51.
- [23] Cooke L, Wardle J. Age and gender differences in children's food preferences. *Br J Nutr.* 2005; 93:741–6.
- [24] Skinner JD, Caruth BR, Bounds W, Zeigler PJ. Children's food preferences: a longitudinal analysis. *J Am Diet Assoc.* 2002;102: 1638–47.
- [25] Silvia Scaglioni, Chiara Arrizza, Fiammetta Vecchi, and Sabrina Tedeschi; Determinants of children's eating behavior. *Am J Clin. Nutr.* 2011;94 (suppl) :2006S–11S. Printed in USA. _ 2011 American Society for Nutrition.
- [26] Healthy Eating in Schools A guide to implementing the nutritional requirements for Food and Drink in schools (Scotland) regulations 2008, Published by The Scottish Government St Andrew's House Edinburgh.
- [27] Wormley, A. M. (2013). Healthy Eating Habits of School Aged Children in Rural-Areas. *The Spectrum: A Scholars Day Journal*, Vol. 3 , [https:// digitalcommons. Brockport .edu /spectrum/ vol3/iss1/12,2013](https://digitalcommons.Brockport.edu/spectrum/vol3/iss1/12,2013)
- [28] Pantea Stoian, Anca; Andronache, Liliana F.; Hainarosie, Razvan; Padurarur, Dan N.; Badiu, Cristinel D.; Arsene, Andreea; Mehedintu,Claudia; Ditu, Georgiana; Pituru, Silviu M.; Orlov, Cristina; Oros, Mihaela; and Nitipir, Cornelia () "Dietary habits and lifestyle in school-aged children from Bucharest, Romania," *Journal of Mind and Medical Sciences*: Vol. 5 : Iss. 1 , Article 14.DOI: 10.22543/7674.51.P8592 Available at: [https:// scholar. valpo.edu /jmms /vol5/ iss1/14](https://scholar.valpo.edu/jmms/vol5/iss1/14)
- [30] Adegbite -Adeniyi C, Gron B, Rowles BM, Demeter CA, Findling RL. An update on antidepressant use and suicidality in pediatric depression. *Expert Opin Pharmacother.* 2012; 13(15): 2119-30. PMID: 22984934, DOI: 10.1517/14656566.2012.726613

[31] Gandy J. Water intake: validity of population assessment and recommendations. *Eur J Nutr.* 2015; 54 Suppl 2: 11-6. PMID: 26048039, DOI:10.1007/s00394-015-0944-8

[32] Choon Huey Teo, Yit Siew Chin, Poh Ying Lim, Shahril Azian Masrom and Zalilah Mohd Shariff; School – based intervention that integrates nutrition education and supportive healthy school food environment among Malaysian primary school children: a study protocol; *BMC Public Health*(2019) 19:1427