

“School for Health” – For Children, Parents and Teachers Bulgarian Experience in the Prevention of Childhood Obesity

Our Experience in Re-Education of Healthy Nutritional Habits

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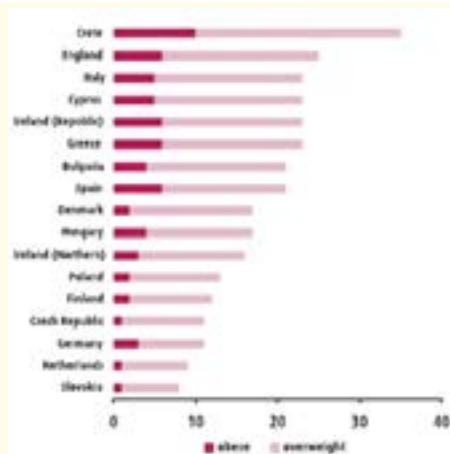
Abstract

WHO data from 2015 year shows that Bulgaria in on the fifth place on childhood obesity in the European region. In this regard BASORD participates in the three-year EPHE evaluation study (2012 - 2015), co-funded by the European Commission. On a national level BASORD organized three “School for health-for children, parents and teachers” on a roll in Albena, on the Black sea coast. This one-week initiative focused on lectures on a healthy and balanced nutrition, and physical activity games. A total of 1098 children, parents and teachers participated in the initiative held under the patronage of the Minister of Education. Families and teachers spent one week together, training and receiving professional advices and tips for a healthier lifestyle. The success of the three editions of “School for Health” gives a reason to the Bulgarian Ministry of education in collaboration with BASORD to multiply this experience by incorporating this system in the educational system in the school in different parts of Bulgaria. This is considered as a fundamental contribution to the prevention of overweight and obesity, in unison with all previous activities associated with EPODE methodology.

Keywords: School for Health; Children; Childhood Obesity

Introduction

The problem of childhood obesity is of significant medical and social importance [2,6,8,12,13,14,27]. Recent studies [15] show increase in obesity and overweight rates by 5-15% (depending on the age group). In table 1 are shown the new tendencies for food consumption which are the main reasons for the following obesity in children. Figure 1 represents the epidemiology of obesity in the countries members of the European union.



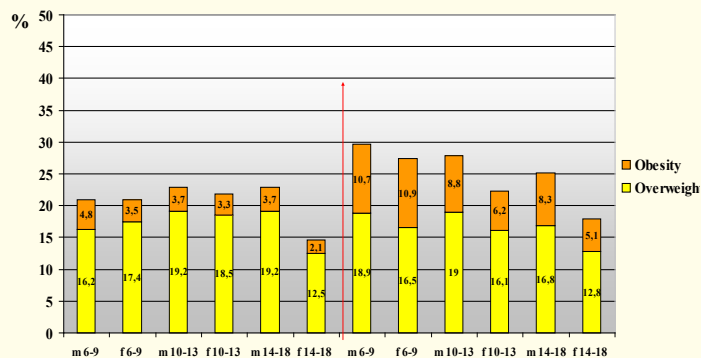


Figure 2: Overweight and obesity prevalence in schoolchildren (National survey on nutrition and nutritional status of schoolchildren in Bulgaria -1998, 2010-2011).

Aim

Introduction of “School for health” – for children, parents and teachers as a new method for prevention of childhood obesity as approach of reeducation of healthy nutritional habits.

Material and Methods

As a part of the project, in 2013 BASORD organized the first in Bulgaria “School for Health – for children, parents and teachers”. A total of 1098 children aged 6 - 12 years and their parents, from different socioeconomic backgrounds were recruited in schools. To measure the energy balance of the children and their determinants, a questionnaire was completed by parents.

From 1 to 6 September 2013 and again in September 2014, 2015 and 2016 in the sea resort Albena was organized “The health school for children, parents and teachers.” It was organized by BASORD (the Bulgarian Association for the study of obesity and related diseases “Acad. Tasho Tashev”). The event was part of the European project “EPHE” [3-5,15,16,20,21,22] and was under the patronage of the Minister of Education and Science in Bulgaria. During these 6 days parents with their children (aged 6 - 12 years) and teachers from different Bulgarian regions were taught the principles of healthy live - the balanced nutrition combined with physical activity. Anthropometric measurements were conducted to all participants – the body mass index, adipose mass and diabetes type II were examined. The children, parents and teachers we provided with all meals – breakfast, lunch and dinner which were consisted of a large variety of fruits and vegetables, dairy products, herbal teas etc. Each day was started with gymnastics on the beach and was followed by swimming in the sea and the pool and walks in the area.



Figure 3: Daily diet.

The trends in food consumption in children are	
1.	High fat intake (36.9 E% in 1998; 40.1 E%- 2004)
2.	Low fish intake
3.	Low intake of wholegrain bread and wholegrain products
4.	Low fruit intake
5.	Low intake of dairy products, predominantly consumption of high-fat milk
6.	A favorable trend for increasing the consumption of vegetable and reducing the intake of sugar and sugar products
7.	Very high salt intake

Results and Discussion

In Bulgaria, the project has expanded its activities by integrating information to promote the consumption of dairy products in households. In a three-year project, which is implemented in the period 2013 - 2016, a pilot study was conducted in seven European cities to apply the methodology of the largest international network for the prevention of EPODE childhood obesity.

As part of the project in 2013 BASORD organized the first in Bulgaria “School for health - for children, parents and teachers.” The success of the first four editions of “School for Health” edition was the reason to make the fifth edition in 2017. “School of Health – for children, parents and teachers” brought together new participants every year who for a week on the Blacksea coast are provided with a balanced diet and active lifestyle.

For the participants were organized lectures on the importance of traditions in nutrition - the Balkan diet, consumption of vegetables and dairy products in the Bulgarian family menu, the influence of good sleep on the health of children and adults, physical activity and their beneficial effect on health. The goal of this school is to be multiplied in the different schools in Bulgaria. We hope that in the school curriculum there will be educational course on healthy lifestyle including nutrition and physical activity. It will be a project aimed against-wide dissemination of childhood obesity and diabetes type II.

During the 2013 - 2016 academic year, the program facilitators held a number of fun and engaging lessons for a balanced diet, games and competitions at school and outside. The children were learning through the use of training and diverse and interactive games. The interest in a balanced diet and sport has been great. The lessons were supplemented with healthy cooking classes, where children prepared a balanced school menu.

At the end of the school year, more than 10 schools participated “Healthy Children in Bulgaria” and the most active participants in the program had the opportunity to spend a week on the verge of sea, taking part in the second edition of the initiative “School Health for children, parents and teachers”.

All these activities are in unison with the importance of nutrition education among children up to the age of 10 years for the prevention of obesity, diabetes type II in adults [3,6,10,11,16,19,23,24]. The authors highlight the importance of education on mothers to the health of their children [18,24-26]. The relation between socioeconomic inequality and obesity has been discussed [1,9,17,23].

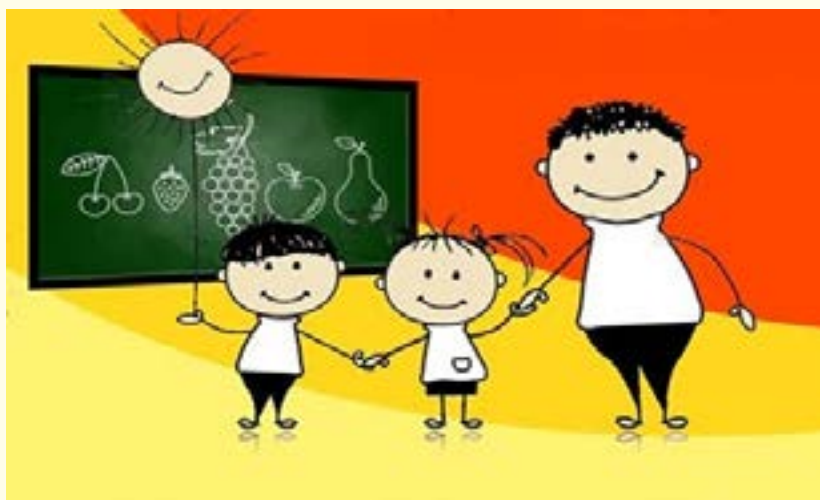


Figure 4: Logo of “School for Health”.

Conclusion

The experience that all participants gained had very positive impact on their lifestyle. Two years after their participation in the first project “School for health” they continue to apply the new methodics for nutrition and have increased their physical activity.

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