ABSTRACT

Consumption of sugar, sugar-containing food and drinks, related health risks and change of life style in our population are currently addressed issues with negative consequences already observed in childhood. The aim of the diploma thesis was to study the consumption of sugar and foods containing sugar in children attending kindergarten and 1st grade of elementary school. The theoretical part was focused on an overview of knowledge about sugars, both naturally occurring and added, and health risks associated with frequent consumption of foods containing added sugars. In the practical part, the consumption of these foods in terms of quantity and various forms and its influence on the development of childhood obesity and other metabolic diseases was monitored. At the same time, other aspects of children's lifestyle that could determine children's obesity were identified.

The basis of the practical part was a questionnaire survey using questions determining eating habits of children. The research showed a relationship between the BMI of children above the 75th percentile and more frequent sweets consumption and less frequent active (sports) and natural physical activities. Almost 84% of children consume sugar and sweets more often than 3 times a week, with more frequent consumption in kindergarten children than in 1st grade primary school children. 3.5% of kindergarten children and 22.5% of primary school children have free access to sweets. Sugar-sweetened drinks are consumed by most children – a half of children drink them 1-2 times a week, nevertheless, a quarter of children do not consume them at all, and the most commonly used is water with juice and syrup. Sweetened soft drinks and cola drinks were consumed only by primary school children (5% and 1.7%, respectively). Sweetened dairy products are consumed by kindergarten children every day to a greater extent than by primary school children (17.5% vs 10.0%). Also, more unsweetened dairy products are consumed by more percentages by kindergarten children than primary school children (10.5% vs 7.5%). It was also found that the most children with higher weight percentiles consume fruits and vegetables every day or 3-5 times a week. The vast majority of children have regular eating habits - more than 93% of children eat breakfast regularly and almost 90% of children have regular lunches in the school canteen. A relationship between higher consumption of a given food containing added sugar and a higher BMI percentile was observed, although, cases were also found where an overweight or obese child consumed this food only rarely. Not only the frequency is important, but also the portion size.

It would be appropriate to improve the awareness of parents and children about the risks of regular high consumption of sugar and sugar-containing foods and the possibilities of more suitable food choices, which would certainly have a positive effect on the health of our population from childhood.

keywords: sugar, added sugar, soft drinks, children, obesity, hypertension, type 2 diabetes