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THE FAMILY FACTOR IN CHILDHOOD OBESITY

Global rates of childhood obesity have jumped dramatically in the past four decades. The number of children ages 5-19 who are obese has increased ten-fold from 1975 to 2016, and rates are highest in Polynesia and Micronesia. Rates in high-income nations like the rest of Europe and the US have plateaued, but they have not started to decline. The

rates are lowest in Eastern Europe [1]. Childhood obesity has long-term effects on mortality and morbidity. Overweight and obese children are likely to maintain their status into adulthood and are at higher risks for developing chronic diseases such as hypertension, dyslipidemia, type 2 diabetes, heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnoea and respiratory problems, and certain cancers [2].

According to some experts, the raised frequency of obesity among the child population was caused not only by changes in the lifestyle but primarily by the nature of nutrition and physical activity, as well as the influence of anthropogenic environment [3]. Most of the available publications are researching obesity in older adulthood, while the age group of schoolchildren remains mostly out of the researchers' field of view [4].

The analysis of the prevalence of obesity among children and adolescents in the Odessa region is showing the growth of this issue and needed to be diagnosed according to V.I. Velychko with co-authors [5].

For the diagnosis of obesity among children anthropometric indicators and derived indices are widely used, with the most commonly used formula $BMI = \text{weight} / \text{height}^2$ (kg / m^2) according to the Z-score charts recommended by WHO [6].

We combined anthropometric measurement and questioning of Odessa schoolchildren by random sampling method. The purpose of the first stage is to study the physical development of school-age children living in the Odessa region, to study the dynamics of the prevalence of obesity due to the excessive supply of energy resources.

Total number of children and adolescents aged 6 to 16 who took part in the survey was 667 people, including 342 boys and 325 girls, residents of Odessa city.

The survey included anthropometric measurements: height, body weight, BMI.

It was established, that the physical development of school-age children living in Odessa differs in a high frequency of disharmony among representatives of both genders. About 45-60% of children aged 6-16 years old had a normal body weight, 12-17% of children were deficient in weight, and the rest were overweight and obese.

The highest rate of overweight is diagnosed among children of 6 years old, perhaps this phenomenon can be explained as follows: school children show reduced physical activity. The group with a smallest percentage of overweight is adolescence: among children 15 and 16 years old. This can be explained by the fact that at this age, teens are more concerned with their figure and begin to visit different sports sections and pay more attention to products they consume.

In anamnesis, particular attention was paid to heredity. For this purpose, breeders were built and analyzed. An analysis of breeders showed that relatives of 1-2 degrees of kinship with obesity were found in 40% of overweight and obese children. A high correlation was established between obesity among children and parents, which can serve as a proof of the genetic component in the development of obesity, as well as an indicator of the influence of eating culture in individual families.

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