

The dietary treatment of obesity

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Abstract. *The review article represents an analysis of sources dealing with the issues of dietary therapy of obesity. The internet resources were used such as PubMed, MedLine, The Cochrane Databases, Google Scholar, Science Direct, Web of Science, and Scopus. Obesity has reached pandemic proportions worldwide, with more than 1 billion adults overweight (at least 300 million of them are clinically obese) and is a major contributor to the global burden of chronic disease and disability. This is a complex multifactorial disease, in which the accumulated excess fat in the body leads to negative impact on health. The main cause of obesity is a long-term energy imbalance between consumed and expended calories. Lifestyle modification remains the cornerstone of obesity treatment. An individually selected diet is recommended, which allows you to achieve a state of negative energy balance and is focused on quality food for health promotion. Most often, recommended diets for the treatment of obesity use the following energy restrictions based on changes in the composition of macronutrients: a low-fat diet, a low-carbohydrate and high-fat diet, a low-carbohydrate and high-protein diet, a paleo diet (with a high protein content). Intermittent fasting is considered an alternative to calorie-restricted diets. After an initial period on a high-protein diet, a Mediterranean diet may be an attractive option for continued treatment of obesity, provided that it is given in an energy-restricted form. This diet has been shown to be associated with lower levels of inflammatory biomarkers and metabolic markers of cardiovascular disease risk. The results of many studies indicate successful weight loss with the help of the Mediterranean diet, not only in the short term, but also in the long term. For the majority of obese patients, a purposeful change in lifestyle with adherence to the principles of dietary nutrition and regular physical activity allows for effective weight loss, adequate control of metabolic disorders, reduced risk of concomitant diseases, and long-term maintenance of body weight achieved in the process of losing weight.*

Keywords: *review; obesity; diet; diet therapy; weight loss*

Obesity is a chronic relapsing disease, which is accompanied by an excessive accumulation of fat in the body, an increase in body weight and the subsequent development of various complications. The results of the Global Burden of Disease study indicate that obesity is the fifth leading cause of premature death each year (4.72 million). For comparison, this is 4 times more than the number of people who die in traffic accidents, and almost 5 times more than the number of people who die from human immunodeficiency virus infection. In Ukraine, obesity ranks fourth among risk factors for premature death (106.7 thousand cases every year) [1].

The results of the STEPS study indicate that 59.1 % of the population in Ukraine in 2019 were overweight, and 24.8 % were obese. It was also established that among Ukrainians, one in three women and one in five men suffer from obesity [2].

Among the main reasons for the global spread of overweight and obesity are an imbalance between energy intake and expenditure, lifestyle (eating habits, physical activity, social and psychological factors, economic status), genetic factors (violation of the control of leptin synthesis in adipose tissue cells) and various diseases (hypothyroidism, Cushing's syndrome, polycystic ovaries, damage to the hypothalamus by a tumor or trauma, genetic syndromes associated with hypogonadism, etc.) [3, 4]. The nature of nutrition has changed dramatically towards increased consumption of energy-intensive products with a high content of fat, sugars, table salt and a low content of dietary fibers, vitamins, minerals and trace elements [5].

Obesity is a risk factor for the development of diabetes mellitus type 2, diseases of the cardiovascular system (CVD), musculoskeletal system, hepatobiliary system, obstructive



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