

Obesity - an epidemic of the 21st century

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The body is the baggage that you carry all your life. The heavier it is, the shorter the journey

Arnold Glasgow, American scientist

"Don't make a cult out of food," Ostap Bender warned at the beginning of the twentieth century, but he was not listened to. And so, by now, obesity has become a global problem in modern society, in the full sense of the word, leading millions of gluttons to death.

Residents of highly developed countries got acquainted with the problem of overweight a little earlier, but today obesity has affected even the most remote and disadvantaged corners of the planet. For example, in the poorest rural areas of Papua New Guinea twenty years ago, overweight was practically not observed among the population. However, over the past five years, the prevalence of obesity in the region was 1% for men and 5% for women, despite generally unchanged living standards.

According to statistics, overweight people age faster and live shorter lives. The latest research results by American scientists indicate that obesity can shorten a person's life by an average of 5-10 years. For African Americans, due to genetic characteristics, obesity is doubly dangerous - their life can be 20 years shorter. Moreover, obesity is especially dangerous for people aged 20-30 years.

Today Russia is one of the five most "obese" countries in the world. According to the Russian Academy of Medical Sciences, more than half of Russian adults (55%) are overweight (of whom 26% are obese), and among children this figure exceeds 10%. In people with obesity, diseases such as hypertension, diabetes mellitus are three times more likely to be diagnosed, and atherosclerosis is twice as likely. Overweight people have a higher risk of developing cancer, damage to the joints and blood vessels, the gall bladder and other organs.

In recent decades, domestic medical and public organizations have realized the depth of the problem of overweight. Taking into account all the diseases associated with obesity, it turned out that obesity is the most common disease on the planet, leading to death and taking on the nature of a global epidemic. The Ministry of Health of the Russian Federation has developed a number of programs to improve the quality of food at enterprises and organizations, especially in children's state institutions - kindergartens, schools, summer camps. Also, there are more and more sports centers and programs aimed at increasing the physical activity of the population.

OBESITY is a disease characterized by excessive development of adipose tissue. Most often, obesity occurs after 40 years, mainly in women.

Etiology, pathogenesis

Obesity (overweight) - a very difficult problem, because it has more reasons than effective remedies.

1. Primary (alimentary-constitutional) obesity is not associated with any diseases. It is caused by excess calories in food. It may be related to family traditions, when a child is taught to eat well from childhood. Usually in a family where everyone is overweight.

2. Attacks of gluttony (namely attacks), occurring 2 times in a week, after which the awareness of the inadmissibility of such behavior remains, but there is no way to cope with oneself. It is not a disease, but a behavioral disorder that can be corrected with psychotherapy.

3. Wrong diet, which can be associated with both ignorance what you need to eat in order not to get better, and with financial capabilities (dietary products are expensive, for example, vegetables and fruits in winter, not everyone can afford).

4. Heredity.

5. An immobile lifestyle with a tendency to eat well.

6. Secondary obesity is a manifestation of certain diseases a) endocrine diseases:

- hypothyroidism (lack of thyroid hormones);
- hyperinsulinism (excessive amounts of insulin - a hormone pancreas, which regulates the flow of glucose into cells);
- hypercortisolism (excess amount hormones bark adrenal glands - corticosteroids);
- brain diseases (tumors, etc.);
- hereditary genetic syndromes (rare).

7. Taking certain medications (hormonal contraceptives, steroid hormones, etc.

The main factor leading to the development of obesity is an imbalance in the energy balance, which consists in a discrepancy between energy inputs to the body and their costs. Most often, obesity occurs due to overeating, but can occur due to a violation of the control of energy expenditure. The role of hereditary constitutional predisposition, a decrease in physical activity, age, sex, occupational factors, and some physiological conditions (pregnancy, lactation, menopause) is undoubted.

Obesity is a hypothalamic-pituitary disease, in the pathogenesis of which a leading role is played by hypothalamic disorders expressed to some extent, causing changes in behavioral reactions, especially eating behavior, and hormonal disorders. The activity of the hypothalamic-pituitary-adrenal system increases: the secretion of ACTH, the rate of cortisol production increases, and its metabolism accelerates. The secretion of growth hormone, which has a lipolytic effect, decreases, the secretion of gonadotropins and sex steroids is impaired. Characterized by hyperinsulinemia, a decrease in the effectiveness of its action. The metabolism of thyroid hormones and the sensitivity of peripheral tissues to them are impaired.

Allocate alimentary-constitutional, hypothalamic and endocrine obesity. Alimentary-constitutional obesity is of a family nature, develops, as a rule, with systematic overeating, violation of the diet, lack of adequate physical activity, often in members of the same family or close relatives. Hypothalamic obesity occurs as a result of impaired hypothalamic functions and, therefore, has a number of clinical features. Endocrine obesity is one of the symptoms of the primary pathology of the endocrine glands: hypercortisolism, hypothyroidism, hypogonadism. However, with all forms of obesity, there are, to varying degrees, hypothalamic disorders that arise either primarily or during the development of obesity.

Symptoms, course

Overweight is a common symptom of all forms of obesity. There are four degrees of obesity and two stages of the disease - progressive and stable. At grade 1, the actual body weight exceeds the ideal by no more than 29%, at grade II - the excess is 30–40%, at grade III - 50–99%, at grade IV - the actual body weight exceeds the ideal by 100% or more.

How to determine if there is obesity?

In recent years, the calculation of body mass index (BMI) has been used to assess weight and obesity in adults. This indicator is calculated using the following formula:

$$\text{BMI} = \text{weight (kg)} / (\text{height (m)})^2.$$

For example, if the weight is 90 kg and the height is 160 cm (1.6 m), then $\text{BMI} = 90 / 1.6^2 = 35.5$ kg / m².

BMI is considered ideal, equal in women to 19-24 kg / m², and in men 19-25 kg / m²; at the I degree of obesity, the index is 25-29.9; for II - 30–40; at III - more than 40. If, when calculating BMI, it turned out to be less than 19 kg / m², this indicates a lack of weight, which often happens in young, very slender girls. Such a BMI in young men indicates that they are also very thin, but it is also an indicator that they do little sports and have underdeveloped muscles, which is naturally bad for a healthy young person. And, on the contrary, men involved in power sports, weightlifting, wrestling have increased BMI indicators, but excess body weight is not associated with obesity, but with well-developed muscles.

In addition to calculations, you can also use special devices to accurately measure the amount of fat in the body. Typically, fat% of total body weight is taken as an indicator.

One of the methods for assessing the amount of fat was developed by the American doctors R. Schmidt and G. Tevs in 1895. For this, using an instrument called a caliper, the thickness of the skin folds is measured in four anatomical regions of the body. Then the obtained figures are processed and the% body fat is obtained.

Another device for determining body fat with maximum accuracy determines the percentage and total amount of fat in the human body. His work is based on the principle of bioelectric analysis

resistance. This method analyzes the electrical resistance of tissues by passing an extremely small current through the body. Since adipose tissue has close to zero electrical conductivity, it is not difficult to determine the relationship between adipose tissue and other tissue.

Having determined the amount of fat in the body or calculating the BMI, you can use the tables and determine if there is obesity.

Assessment of obesity by the percentage of adipose tissue in the body
man Woman

<10%	<20%	thin
10-20%	20-30%	normal
20-25%	30-35%	full
25-30%	35-40%	fat
> 30%	> 40%	very obese

Definition of obesity and its severity

Body mass index, kg / m²

man Woman

19	19	norm
26	25	overweight
30	30	I degree of obesity
35	35	II degree obesity
40 or more	40 or more	III degree of obesity

Patients with I - II degree of obesity usually do not present complaints, with more massive obesity, they are worried about weakness, drowsiness, decreased mood, sometimes nervousness, irritability; nausea, bitterness in the mouth, shortness of breath, swelling of the lower extremities, pain in the joints, spine.

With hypothalamic obesity, increased appetite is often disturbed, especially in the afternoon, hunger at night, thirst. In women - various menstrual irregularities, infertility, hirsutism, in men - a decrease in potency. Uncleanliness and trophic disorders of the skin, small pink striae on the thighs, abdomen, shoulders, armpits, hyperpigmentation of the neck, elbows, friction areas, increased blood pressure. An electroencephalographic study of patients with hypothalamic obesity reveals signs of damage to the diencephalic structures of the brain. Determination of the excretion of 17-OCS and 17CS often reveals their moderate increase.

For differential diagnosis of hypothalamic obesity and hypercortisolism, a small dexamethasone test, X-ray examination of the skull and spine are performed.

In the presence of thirst, dry mouth, the blood sugar level is determined on an empty stomach and during the day, according to the indications, a glucose tolerance test is performed.

In case of menstrual irregularities: gynecological examination, ultrasound examination of the pelvic organs, measurement of rectal temperature, other tests of functional diagnostics.

LLC "Center for Energy Information Medicine" works in Samara with

2001 year. Considering the fact that the number of people who are obese or overweight in recent years has increased dramatically, in 2002 a program to combat excess weight "Eat and lose weight" was developed.

As already mentioned, the causes of obesity are very diverse, and for successful treatment it is necessary to accurately identify not only the cause, but also the degree of violation of fat, protein, water-salt and carbohydrate metabolism, the presence of diseases associated with metabolic disorders. The equipment of the "IMEDIS" company renders invaluable help in this.

The program includes:

1. Express diagnostics. Using the vegetative resonance test the identification of metabolic disorders, their causes, the degree of violation is carried out. A hereditary predisposition to obesity is revealed. The use of the vegetative resonance test makes it possible to select food products and draw up an individual diet aimed at correcting impaired metabolism and treating obesity. An individual therapy program is drawn up. At the reception, the measurement of height, body weight is also carried out, the fat content is calculated in percentage and weight terms, and the body mass index is calculated.

2. To increase energy costs, a special intensive course has been developed. respiratory gymnastics, aimed at enhancing catabolic processes in adipose tissue and, as a result, reducing volumes, restoring the endocrine system, improving the drainage function of the lymphatic system.

3. Herbal medicine.

In identifying diseases and conditions that led to the emergence of obesity, a course of resonant frequency and endogenous bioresonance therapy is carried out.

The program is long-term and is designed for the gradual restoration of impaired metabolism and weight loss. According to our data, on average a month there is a decrease in body weight by 4–5 kg and a decrease in volumes by 4–6 cm. Monthly control diagnostics are carried out, which determines the state of the body, the level of metabolic processes, corrects nutrition and carries out a session of endogenous bioresonance therapy. ... The number of receptions and the duration of observation depends on the initial body weight and the degree of metabolic disturbance.

As an illustration, I would like to give an example from practice.

Patient O., 31 years old. I applied to the Center for Energy Information Medicine in February 2004 with complaints of excess weight, abdominal pain, weakness, and increased fatigue. Diagnostics was carried out using the Voll method and vegetative resonance test. A violation of fat, carbohydrate and water-salt metabolism, anabolic processes in adipose tissue of the 6th degree of activity were revealed. The metabolic disorder is associated with intestinal dysbiosis and depletion of the endocrine system 1 tbsp. A thorough examination revealed a decrease in the level of hormones T3 and T4, a decrease in the iodine content.

Height - 167 cm, body weight - 75 kg: BMI = 26.8 which corresponds to obesity of the 1st stage. percentage of fat 28.2% at a rate of 20% (21.37 kg at a rate of 15

kg).

After the examination, the patient underwent a session of endogenous bioresonance therapy with the manufacture of private and general bioresonance preparations aimed at normalizing the functioning of the intestines and the endocrine system. Food products were selected and an individual diet was drawn up, aimed at correcting the disturbed metabolism, drainage homeopathic preparations were selected by the method of drug testing. A course of resonance frequency therapy was carried out. Subsequently, control sessions were carried out once every 3-4 weeks. They included control measurements, diet correction by individual selection of food products using IMEDIS equipment, and BRT sessions. In April 2004, height - 167 cm, weight - 67 kg: BMI = 24, which corresponds to the norm, the percentage of adipose tissue is 20% (norm = 20%) (14 kg at the norm = 15 kg).

The state of health is good. There are no complaints mentioned earlier.

The patient is currently under observation. Control sessions are held every 6 months. and are aimed at stabilizing the exchange. The achieved results are saved.

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