International Journal of
Health Systems and Medical Sciences

ISSN: 2833-7433
Volume 2 | No 7 | Jul -2023

Obesity is Being Overweight

Badritdinova Matluba Najmidinovna [1]

[1] Bukhara State Medical Institute, Doctor of science of the Department of Internal Medicine and Endocrinology

Abstract: Obesity is overweight defined as a body mass index (BMI) ≥ 30 kg/m2. Complications associated with obesity include cardiovascular disease (especially in people with excess abdominal fat), diabetes mellitus, certain malignancies, gallstone disease, fatty liver, cirrhosis, osteoarthritis, reproductive disorders in men and women, psychological distress and, in people with a BMI ≥ 35, premature death. The diagnosis is based on the determination of BMI.

Keywords: Overweight, obesity, prevention, metabolic syndrome.

Obesity is overweight defined as a body mass index (BMI) ≥ 30 kg/m2. Complications associated with obesity include cardiovascular disease (especially in people with excess abdominal fat), diabetes mellitus, certain malignancies, gallstone disease, fatty liver, cirrhosis, osteoarthritis, reproductive disorders in men and women, psychological distress and, in people with a BMI ≥ 35, premature death. The diagnosis is based on the determination of BMI. In 2017-2018 more than 42.4% of adults were obese (1). Prevalence was lowest among non-Hispanic Asian adults (17.4%) compared with non-Hispanic black adults (49.6%), Hispanic (44.8%), and non-Hispanic white adults (42.2%). There were no significant differences in male and female prevalence among non-Hispanic white adults, non-Hispanic Asian adults, or Hispanic adults; however, prevalence among non-Hispanic black women was higher than in all other groups (56.9%).In the US, obesity and its complications are responsible for 300,000 premature deaths each year, second only to smoking as a preventable cause of death.

Etiology: The causes of obesity are likely to be multifactorial and include genetic predisposition. Ultimately, obesity is caused by a long-term imbalance between the body's energy intake and its expenditure, including the use of energy to maintain basic metabolic processes and energy expenditure for physical activity. However, many other factors appear to increase susceptibility to obesity, including endocrine disruptors (eg, bisphenol A [BPA]), gut microbiome composition, sleep/wake cycles, and environmental factors.

Genetic factors. The heritability of BMI is about 66%. Genetic factors may influence many of the signaling molecules and receptors used by structures in the hypothalamus and gastrointestinal tract to regulate food intake (see sidebar, Ways to Regulate Food Intake). Genetic factors can be both hereditary and manifest as a result of the influence of conditions that have developed during fetal development (the so-called genetic imprinting). Rarely, obesity results from abnormal levels of food intake regulatory peptides (eg, leptin) or abnormalities in their receptors (eg, melanocortin-4 receptor). Being overweight is more often the result of an excess intake of calories than a slow metabolism. Important factors that determine energy consumption include: Serving Sizes, energy value of food, high-calorie foods (eg, processed foods), diets high in refined carbohydrates, and consumption of soft drinks, fruit juices, and alcohol contribute to weight gain. Diets high in fresh

All rights reserved. © 2023

fruits and vegetables, fiber, complex carbohydrates and "lean" proteins, and with water as the main fluid consumed, minimize weight gain. A sedentary lifestyle contributes to weight gain.

Regulatory factors. Prenatal maternal obesity, prenatal maternal smoking, and intrauterine growth retardation may interfere with body weight regulation and contribute to weight gain in childhood and beyond. Obesity, persisting from early childhood, makes it much more difficult to reduce body weight in later life.

The composition of the gut microbiome also appears to be an important factor; antibiotic use at an early age and other factors that alter its composition may lead to later weight gain and obesity (1). Predisposing to early obesity, exposure to endocrine disrupting chemicals (eg, cigarette smoke, BPA, air pollution, flame retardants, phthalates, polychlorinated biphenyls) may alter metabolic set-up through epigenetic or nuclear activation, increasing the susceptibility to developing obesity (2) . Adverse events in childhood or child abuse increase the risk of certain diseases, including obesity. The Centers for Disease Control and Prevention Study of Adverse Childhood Events found that past verbal, physical or sexual abuse was associated with an 8% increase in the risk of BMI ≥ 30 and 17.3% increase in BMI ≥ 40. Certain types of abuse carry the greatest risk. For example, frequent verbal abuse had the largest increase in risk (88%) for BMI > 40. Receiving frequent hits and injuries increased the risk of increasing BMI > 30 by 71% (3). The mechanisms cited for the association between violence and obesity include neurobiological and epigenetic phenomena (4). About 15% of women consistently gain ≥ 9 kg of weight with each pregnancy. Lack of sleep (usually less than 6 - 8 hours per night) can lead to weight gain by changing satiety hormone levels, which leads to the activation of hunger. In rare cases, weight gain may be caused by one of the following disorders: Brain damage caused by a tumor (especially craniopharyngioma) or infection (particularly those that affect the hypothalamus), which can stimulate excess calorie intake. Hyperinsulinism due to pancreatic tumor. Hypercortisolism due to Cushing's syndrome, causing predominantly abdominal obesity. Hypothyroidism (rarely the cause of significant weight gain) Eating Disorders, At least 2 pathological eating habits may be associated with obesity: Compulsive overeating is the rapid consumption of a large amount of food with a subjective feeling of loss of control during overeating and distress after it. This disorder does not include compensatory behaviors such as vomiting. Binge eating syndrome occurs in about 3.5% of women and 2% of men during their lifetime, about 10-20% of them become participants in weight loss programs. This form of obesity is characterized by a complex course - many kilograms are either gained or lost, there are always pronounced psychological disorders. Night eating syndrome consists of morning anorexia, evening hyperphagia and insomnia, and eating in the middle of the night. At least 25 to 50% of the daily intake is observed after dinner. About 10% of people who need treatment for severe obesity have this disorder. Rarely, sleeping pills such as zolpidem cause a similar disorder. Similar but less extreme behaviors are likely to contribute to many people becoming overweight. For example, eating after dinner contributes to an increase in excess body weight in many people who do not suffer from night eating syndrome. Complications of obesity include: metabolic syndrome, diabetes, diseases of the cardiovascular system, liver dysfunction (non-alcoholic steatohepatitis [fatty liver disease], which can lead to cirrhosis), diseases of the gallbladder (cholelithiasis), gastroesophageal reflux, obstructive sleep apnea syndrome.

Reproductive system disorders, including: infertility in both sexes and low serum testosterone levels in men; obesity is a risk factor for the development of polycystic ovary syndrome in women. Many types of cancer (especially colon cancer and breast cancer) obesity diagnosis: body mass index (BMI) Waist circumference. In some cases, body composition analysis. In adults, body mass index, which is the ratio of body weight (kg) to the square of height (m2), is used to identify overweight or obesity (see table Body Mass Index [BMI]):

Overweight = 25-29.9 kg/m2

Obesity = ≥ 30 kg/m2

However, BMI is a primary screening indicator and has limitations in many subgroups. Some experts believe that BMI limits should vary by ethnicity, gender, and age. Asians and many Aboriginal

populations have a lower minimum score (23 kg/m2) for overweight. In addition, BMI can be high in well-muscled athletes who do not have excess body fat, and can be normal or low in formerly overweight people who have lost muscle mass. Bioimpedance analysis of body composition (BIA) allows you to estimate the percentage of body fat in a simple and non-invasive method. It directly determines the percentage of total fluid in the body; body fat percentage is determined indirectly. BIA is the most reliable method for healthy people and in people with only a few chronic diseases that do not change the percentage of total body fluid (eg, moderate obesity, diabetes mellitus). It remains unclear whether BIA poses a risk in people with implanted defibrillators. Without treatment, obesity tends to progress. The likelihood and severity of complications is proportional to: The absolute amount of fat, fat distribution, absolute muscle mass.

After weight loss, most people return to their pre-treatment weight within 5 years and, accordingly, obesity requires a lifelong management program similar to any other chronic disease. obesity treatment, diet therapy, physical activity, behavioral Therapy, drugs (eg, phentermine, orlistat, lorcaserin [not available in the US due to possible cancer risk], phentermine/topiramate, long-acting naltrexone/bupropion, liraglutide, semaglutide) bariatric surgery.

Physical activity

Physical exercise increases energy expenditure, basal metabolic rate, and diet-induced thermogenesis. Exercise also regulates appetite to better maintain calorie needs. Other benefits associated with physical activity are:

- ✓ Increased sensitivity to insulin
- ✓ Improved lipid profile
- ✓ Lower blood pressure
- ✓ Best Aerobic Compliance
- ✓ Improving the psychological state
- ✓ Reducing the risk of developing breast and colon cancers
- ✓ Expected increase in life expectancy

Surgery. Bariatric surgery is the most effective treatment for patients suffering from excessive obesity.

Literature

1. qizi Nurilloeva S. N. OBSTRUCTIVE PULMONARY DISEASE AND CHANGES IN MENTAL STATUS IN PATIENTS WITH COVID-19 //THE ROLE OF SCIENCE AND INNOVATION IN THE MODERN WORLD. – 2022. – Т. 1. – №. 3. – С. 91-97.
2. Kizi N. S. N. Assessment of the methods of the state of hyperglycemia at different body masses //ACADEMICIA: An International Multidisciplinary Research Journal. – 2021. – Т. 11. – №. 9. – С. 359-366.
3. Nurilloyeva S. N. PREVENTION OF OBESITY AND OVERWEIGHT IN PATIENTS WITH VARIOUS DEGREES OF HYPERGLYCEMIA //INNOVATIVE DEVELOPMENT IN THE GLOBAL SCIENCE. – 2022. – Т. 1. – №. 7. – С. 74-81.
4. Бадритдинова М. Н., Бозорова Н. З. Частота Встречаемости Гиперлипидемии Среди Женского Населения //AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI. – 2022. – Т. 1. – №. 1. – С. 6-10.
5. Орзиев З. М., Нуриллоева Ш. Н. Компетентность количественных показателей ведущих клинических признаков холестаза в дифференциации его градаций //Биология и интегративная медицина. – 2018. – №. 4. – С. 62-73.

All rights reserved. © 2023

6. qizi Nurilloeva, S. N. (2022). OBSTRUCTIVE PULMONARY DISEASE AND CHANGES IN MENTAL STATUS IN PATIENTS WITH COVID-19. *THE ROLE OF SCIENCE AND INNOVATION IN THE MODERN WORLD*, *1*(3), 91-97.
7. qizi Nurilloeva, Shahodat Nurillo. "OBSTRUCTIVE PULMONARY DISEASE AND CHANGES IN MENTAL STATUS IN PATIENTS WITH COVID-19." *THE ROLE OF SCIENCE AND INNOVATION IN THE MODERN WORLD* 1.3 (2022): 91-97.
8. Nurillokizi N. S. Metabolic Syndrome: Methods of Prevention and Treatment //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2021. – Т. 1. – №. 6. – С. 475-482.
9. qizi Nurilloeva S. N. OBSTRUCTIVE PULMONARY DISEASE AND CHANGES IN MENTAL STATUS IN PATIENTS WITH COVID-19 //THE ROLE OF SCIENCE AND INNOVATION IN THE MODERN WORLD. – 2022. – Т. 1. – №. 3. – С. 91-97.
10. Nurilloeva Shakhodat Nurillo kizi. Diagnosis of Tubuloglomerular Relationship in Patients with Metabolic Syndrome // Journal of advanced research and stability (JARS) Volume: 01 Issue: 06 | 2021 ISSN: 2181-2608. –P. 469-474
11. Нуриллоева Ш. Н. Частота встречаемости избыточной массы тела и ожирения //При нарушение углеводного обмена Журнал гепато-гастроэнтерологических исследований, 75-ой Международной научно-практической конференции студентов-медиков и молодых учёных № 02(1), 18 мая 2021, стр -403
12. NSN Kizi Assessment of the methods of the state of hyperglycemia at different body masses //ACADEMICIA: An International Multidisciplinary Research Journal 11 (9), 359-366
13. Жураева Х. И., Бадридинова Б. К., Кадыров Б. С. Распространенность и состояние лечения артериальной гипертензии по данным анкетирования //Биология и интегративная медицина. – 2017. – №. 3. – С. 78-85.
14. Жураева Х. И., Алимова Ш. А. Применение опросного метода в ранней диагностике стенокардии в качестве скринирующего теста при профилактических обследованиях населения //Биология и интегративная медицина. – 2017. – №. 6. – С. 14-22.
15. ZHURAEVA K. I. et al. PECULIARITIES OF THE COURSE OF JOINT SYNDROME IN PERSONS WITH TYPE 2 DIABETES MELLITUS //Journal of Natural Remedies. – 2021. – Т. 22. – №. 1 (1). – С. 92-98.
16. ZHURAEVA K. I. et al. Peculiarities of the course of joint syndrome in persons with type 2 diabetes mellitus //Journal of Natural Remedies. – 2021. – Т. 22. – №. 1 (1). – С. 92-98.
17. Бадритдинова, М. Н., & Бозорова, Н. З. (2022). Частота Встречаемости Гиперлипидемии Среди Женского Населения. AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI, 1(1), 6-10.
18. Бадритдинова, М. Н., & Орзикулова, Ш. (2020). Основные аспекты гастродуоденальной патологии в подростковом возрасте (обзор литературы). Биология и интегративная медицина, (5 (45)), 43-59.
19. Erkinovna, T. D., & Halimovich, M. N. (2022). Characteristics of the Main Indicators of the System, Hemostasis in Individuals with Arterial Hypertension. International Journal of Formal Education, 1(1), 33-39.
20. Erkinovna, T. D. (2021). Modern understanding of the occurrence of cognitive impairments in arterial hypertension and their correction. Asian journal of pharmaceutical and biological research, 10(3).
21. Бадритдинова, М. Н., Кудратова, Д. Ш., & Очилова, Д. А. (2016). Распространенность некоторых компонентов метаболического синдрома среди женского населения. Биология и интегративная медицина, (2), 53-61.

All rights reserved. © 2023

22. Бадритдинова, М. Н., & Нигматуллаева, М. А. (2019). Особенности нарушения ритма сердца у лиц с некоторыми компонентами метаболического синдрома. Биология и интегративная медицина, (12 (40)), 18-29.
23. Бадритдинова, М. Н., & Бозорова, Н. З. (2022). Частота Встречаемости Гиперлипидемии Среди Женского Населения. AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI, 1(1), 6-10.
24. BADRITDINOVA, M. N., & NORMURODOV, E. F. O. G. L. БИОЛОГИЯ И ИНТЕГРАТИВНАЯ МЕДИЦИНА. БИОЛОГИЯ, (5), 83-89.
25. Бадриддинова, М. Н., Раупов, А., Саидова, Л. Б., & Бакаев, И. К. (2018). Эпидемиология и состояние выявляемости ряда экстрагенитальных заболеваний, метаболического синдрома среди женщин фертильного возраста (обзор литературы). Актуальные проблемы гуманитарных и естественных наук, (6), 131-141.
26. Бадритдинова, М. Н., Жураева, Х. И., & Язмурадов, Ф. А. (2018). ВОЗРАСТНАЯ ВАРИАБЕЛЬНОСТЬ КОМПОНЕНТОВ МЕТАБОЛИЧЕСКОГО СИНДРОМА СРЕДИ ЖЕНСКОГО НАСЕЛЕНИЯ. Теория и практика современной науки, (4), 684-688

All rights reserved. © 2023