

OVERWEIGHT AND OBESITY AS RISK FACTORS FOR CARDIOVASCULAR DISEASE.

According to several studies there is a clear relationship between overweight, obesity and disease development. Overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health. It is caused by an energy imbalance between calories consumed and calories expended. Although being overweight or obese is attributed to many of the same diseases and health conditions, there is a difference between the two. One way to determine obesity and overweight is by measuring Body Mass Index. BMI is a simple index of weight in kilograms divided by the height in square meters (kg/m^2). The WHO definition says that Body Mass Index greater than or equal to 25 is overweight; a BMI greater than or equal to 30 is obesity.

Overweight and obesity are recognized as an “escalating epidemic” affecting both developed and developing countries and are the fifth leading risk for global deaths. According to World Health Organization 65% of the world's population live in countries where overweight and obesity kill more people than underweight. On average, obesity reduces life expectancy by six to seven years. Each year at least 2.8 million adults die as a result of being overweight or obese and 23% of those deaths are associated with heart diseases. The reason of this is that overweight causes increase in blood lipids, especially triglycerides, LDL cholesterol and total cholesterol. This condition is called hyperlipidaemia which leads to infiltration of excess LDL cholesterol into the blood vessels and its dangerous accumulation there. It is one of the most important risk factors for the development of cardiovascular diseases. The most common disorders of the heart and blood vessels are coronary heart disease (or ischemic heart disease), atherosclerosis, deep vein thrombosis and pulmonary embolism. The connection between excess body weight and heart failure was confirmed in Great Britain in 2002. The investigators followed 5881 individuals enrolled in the Framingham Heart Study, who were either obese or merely overweight, for an average of 14 years. After adjusting statistically for other risk factors for heart failure (such as diabetes, coronary artery disease or hypertension) those who were merely overweight had a risk of developing heart failure that was 34% greater than in non-overweight individuals; while those who were obese had an incredible 104% increase in risk. These findings give both doctors and patients more evidence to encourage weight loss.

Overweight and obesity, as well as their related cardiovascular diseases, are largely preventable. Supportive environments and communities are fundamental in shaping people's choices, making the healthier choice of foods and regular physical activity the easiest choice, and therefore preventing obesity.

At the individual level, people can:

- limit energy intake from total fats;
- increase consumption of fruit and vegetables, as well as legumes, whole grains and nuts (the food which is rich in fibre);
- limit the intake of sugars;
- engage in regular physical activity;
- restrict intake of fatty meats, such as pork and lamb, to a reasonable level;
- be aware that the fat may be ‘hidden’ (biscuits, cake and chocolate, for instance, are rich sources of saturated fat);

The food industry can play a significant role in promoting healthy diets by:

- reducing the fat, sugar and salt content of processed foods;
- ensuring that healthy and nutritious choices are available and affordable to all consumers;
- practising responsible marketing.

Tasks to the text
“Overweight and Obesity”

I. Read the words and word combinations and give their Russian equivalents:

1. overweight
2. obesity
3. cholesterol
4. excessive fat accumulation
5. to impair / impairment
6. to consume / consumption = intake
7. to expend / expenditures
8. to be attributed to smth = to be associated with smth
9. to define = to determine
10. on average
11. life expectancy
12. the most common disorder
13. heart failure
14. to enroll
15. diabetes
16. to increase
17. increase in risk
18. findings
19. evidence
20. to prevent / preventive / preventable
21. hidden fat
22. to promote (health, a healthy diet)
23. content / contents
24. to ensure = to provide
25. available and affordable

II. Answer the following questions:

1. How are overweight and obesity defined?
2. How are they caused?
3. What is one of the simplest ways to determine overweight and obesity?
4. What is the difference between them?
5. Do you agree that overweight and obesity are an increasing global problem?
6. What are the consequences of obesity?
7. What study confirmed the association (connection) between excess body weight and heart failure?
8. How long did it last?
9. How many participants were enrolled in the study?
10. What are the most common disorders of the heart and blood vessels related to obesity?

11. Does the study give convincing evidence to encourage weight loss in your opinion?
12. What may help to prevent these conditions?

III. Complete the sentences using the words given below

1. Excessive fat accumulation in the body may ... health.
2. Overweight and obesity are caused by an energy
3. These conditions ... developed and developing countries.
4. Obesity may ... the development of heart diseases.
5. Obesity causes ... total cholesterol.
6. The Framingham Heart Study gives convincing ... to encourage weight loss.
7. People should limit the ... of sugar.

(Evidence, result in, affect, increase in, intake, impair, imbalance)