

## Unit 8 OBESITY

### TASK 1 SPEAKING

**Do you agree with the following statements? Why? Why not?**

- 1. Fat is necessary and performs many functions in the body. Thinking of it as 'evil' is a misconception.*
- 2. Obese children are often depressed.*
- 3. Obsessing over a child's eating habits or size may make them more unhappy.*
- 4. Yo-yo dieting leads nowhere and may be damaging. Long-term change needs long-term attention.*
- 5. Improving someone's body image builds confidence and increases results. Unrealistic expectations are counter-productive.*
- 6. It's not necessary to change our lifestyle to lose weight because new drugs are being developed that may give greater weight loss with fewer side effects.*

### TASK 2 READING

**Overweight and obesity** are defined as abnormal or excessive fat accumulation that may impair health. Fat functions as an energy reservoir. It is laid down when food is plentiful and then converted back to energy when needed. Normal levels of fat are not a problem for the body. In fact, they're necessary for it to function smoothly. On a basic level, people become obese when their calorie intake is higher than their calorie expenditure. However, a host of factors complicate this picture. An individual's genetics, metabolism, culture and lifestyle all have a role to play.

#### **Body mass index**

Body mass index (BMI) is a simple index of weight-for-height that is commonly used in classifying overweight and obesity in adult populations and individuals. It is defined as the weight in kilograms divided by the square of the height in meters (kg/m<sup>2</sup>).

#### **What are the common descriptions of these BMI?**

A BMI less than 18.5

A BMI of 18.5 - 24.9

A BMI of 25.0 - 29.9

A BMI of 30.0 - 39.9

A BMI of 40.0 or higher

BMI provides the most useful population-level measure of overweight and obesity as it is the same for both sexes and for all ages of adults. However, it should be considered as a rough guide because it may not correspond to the same degree of fatness in different individuals. BMI overestimates body fat in persons who are very muscular, and it can underestimate body fat in persons who have lost body mass (e.g. many elderly).

## Waist circumference

Excess weight, as measured by BMI, is not the only risk to your health. So is the location of fat on your body. If you carry fat mainly around your waist, you are more likely to develop health problems than if you carry fat mainly in your hips and thighs. This is true even if your BMI falls within the normal range. Women with a waist measurement of more than 89 cm or men with a waist measurement of more than 102 cm may have a higher disease risk than people with smaller waist measurements because of where their fat lies.

### TASK 3 READING – Risks of obesity

Complete the text with the expressions below:

*include*      *put*      *result*      *wears away*      *block*      *affects*  
*relies*      *transport*      *is associated*      *cause*      *maintain*      *flows*

If you're obese, you're more likely to develop a number of potentially serious health problems. These may include:

**High blood pressure.** As you 1. \_\_\_\_\_ on weight, you gain mostly fatty tissue. Just like other parts of the body, this tissue 2. \_\_\_\_\_ on oxygen and nutrients in your blood to survive. As demand for oxygen and nutrients increases, the amount of blood circulating through your body also increases. More blood traveling through your arteries means added pressure on your artery walls. Weight gain also typically increases the level of insulin, a blood-sugar-controlling hormone, in your blood. The increase in insulin 3. \_\_\_\_\_ with retention of sodium and water, which increases blood volume. In addition, excess weight often is associated with an increase in your heart rate and a reduction in the capacity of your blood vessels to 4. \_\_\_\_\_ blood. All of these factors can increase blood pressure.

**Diabetes.** Obesity is a leading cause of type 2 diabetes. Excess fat makes your body resistant to insulin, the hormone that helps your body 5. \_\_\_\_\_ a proper level of a sugar (glucose) in your blood. If your body is resistant to insulin, your blood sugar is high — which isn't good — and leads to negative health effects.

**Coronary artery disease.** This is a form of cardiovascular disease. It results from the buildup of fatty deposits in arteries that supply your heart. Over time these deposits can narrow your heart's arteries, so less blood 6. \_\_\_\_\_ to your heart. Diminished blood flow to your heart can 7. \_\_\_\_\_ chest pain (angina). Complete blockage can lead to a heart attack.

**Stroke.** Obesity is associated with atherosclerosis — the buildup of fatty deposits in arteries throughout your body, including arteries in your brain. If a blood clot forms in a narrowed artery in your brain, it can 8. \_\_\_\_\_ blood flow to an area of your brain. The result is a stroke. Being obese raises your risk of a stroke.

**Osteoarthritis.** This joint disorder most often 9. \_\_\_\_\_ the knees, hips and lower back. Excess weight puts extra pressure on these joints and 10. \_\_\_\_\_ the cartilage that protects them, resulting in joint pain and stiffness.

**Sleep apnea.** This serious condition causes a person to stop breathing for short periods during sleep and to snore heavily. The upper airway is blocked during sleep, which 11. \_\_\_\_\_ in frequent awakening at night and subsequent drowsiness during the day. Most people with sleep apnea are overweight, which contributes to a large neck and narrowed airways.

**Cancer.** Many types of cancer are associated with being overweight. In women, these 12. \_\_\_\_\_ cancers of the breast, uterus, cervix, ovaries and gallbladder. Overweight men have a particularly higher risk of cancers of the colon, rectum and the prostate.

**TASK 4 Discuss:**

**What causes obesity and overweight? Explain the role of these factors:**

increasing urbanization, marketing, education, nature of many forms of work, new modes of transportation, food processing, poverty...

**TASK 5 Complete the text**

**HEALTHY AT EVERY SIZE – NEW HOPE FOR OBESE PEOPLE?**

The “Every Size” strategy, a health-centered rather than weight-centered program, may help chronic dieters reshape their thinking, shed unhealthy habits, adopt new patterns of eating, become more physically active,.....(1).

“Chronic dieters are those who either have failed at a sequence of diets, or, after successfully losing weight, gain back the pounds,..... (2) ” explains physiologist Marta D. Van Loan.

“For obese folks who can’t find a healthful weight-loss regimen that gives them lasting results, this alternative to conventional dieting may offer greater.....(3).”

Every Size clients learn how to build their self-esteem; recognize..... (4); make healthy choices at mealtimes and in between; and enjoy some form of physical activity—an approach..... (5).

- A) and start the dieting cycle all over again
- B) and increase their self-esteem
- C) that’s different from exercising mainly to lose weight
- D) and more sustainable improvements to several key indicators of their health
- E) and follow the body’s natural, internal cues to hunger and satiety (a feeling of fullness)

**Question:** Do you think this strategy will have better results than traditional weight-loss programmes?

## TASK 6: Key recommendations

(Guidelines on the Identification, Evaluation and Treatment of Overweight and Obesity in Adults)

Finish the sentences:

1. Use the BMI to assess...
2. The waist circumference should be used to...
3. Physical activity should be part of a comprehensive weight loss therapy and weight control program because it...
4. Weight loss should be about ... per week
5. Weight-loss and weight-maintenance therapy should employ the combination of...

## TASK 7: Modals

Complete the gaps with suitable modal verbs (can, may, must, have to, should, be able to...)

### An explanation of angina

Having examined you, I'm confident that you're suffering from angina.

The heart is a pump. The more you do physically, the harder it \_\_\_\_\_ work. But as we get older, the blood vessels which supply oxygen to the heart begin to harden and get furred up, so they become narrower. They \_\_\_\_\_ supply all the oxygen the heart needs. The result is the pain you feel as angina.

Because you are experiencing pain at rest as well as on exertion, I'm going to have you admitted to the coronary care unit right away so that your treatment \_\_\_\_\_ start at once. You'll be given drugs to ease the pain and I expect you'll have an angiogram. They \_\_\_\_\_ advise surgery or angioplasty – that's a way of opening up the blood vessels to the heart so they \_\_\_\_\_ provide more oxygen.

You \_\_\_\_\_ try to give up smoking. You \_\_\_\_\_ smoke at all in hospital so it's a good time to stop.

I expect the treatment will improve your pain at least and \_\_\_\_\_ get rid of it completely. We \_\_\_\_\_ never be absolutely certain about the future but you \_\_\_\_\_ remain optimistic.

Do you have any questions?

(Adapted from Glendinning, Howard – Professional English in Use – Medicine, Cambridge University Press, 2007).