

Topic 1 Diet and Exercise



LISTEN AND THINK

An apple a day



Listen to an interview between a radio show host, Jane Goodwin, and her guest, Kate. Take notes and answer the questions below.

Tips

wedge

any shape that is triangular in cross section

saying

an adage or proverb

1. What is Kate's earliest memory about apples?
2. What is *onigiri* in English?



PAIR WORK

Sayings or proverbs about food

What does "An apple a day keeps the doctor away" mean? Do you know the sayings below? Do you know any other sayings or proverbs about food in English?

- ☐ Rice is born in water and must die in wine.
- ☐ Hunger is the best sauce in the world.
- ☐ Good food is wise medicine.
- ☐ My favorite animal is steak.

What is metabolic syndrome?

Many of you know that the digestive system breaks down food into smaller parts so that they can be absorbed in the small intestine and then transported around the body. You may also know that food is changed into chemical energy. Well, the speed in which this happens is known as the metabolic rate.

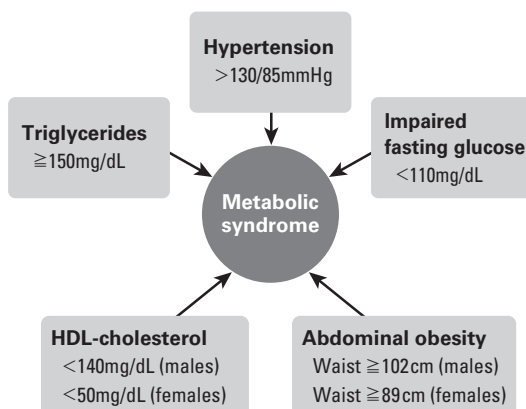


The body needs energy for its vital organs, like the heart. Also, we need a certain amount of energy for all our daily activities. This means that our energy input from food should equal our energy output. If the input and output is not the same, we lose or gain weight. Our genes and our diet are two things that affect the way we make and use energy.

So, what's a balanced diet? A balanced daily diet is a combination of carbohydrates, proteins, fats, vitamins, minerals and water. But, sometimes our diet is not balanced causing health problems. Recently you may have noticed that the topic of metabolic syndrome has been reported on the TV news. Metabolic syndrome includes weight gain, high blood pressure, and high blood sugar levels. One big reason for the concern about metabolic syndrome is that it can lead to heart disease or diabetes.

What can you do to lower the risk of metabolic syndrome? The number one thing to do is exercise. The simple exercise of walking can help use your extra

calories and lower your blood pressure. The second important thing to do is to change your diet. A diet low in fat and high in vegetables and fruits is recommended by many doctors.





Target Terms

Let's check the following words related to diet and exercise. Can you explain them to your classmate? How many of the words do you know?

- ☐ **anabolism** the part of metabolism concerned with the building up of living tissue from simple substances
- ☐ **atherosclerosis** hardening of the arteries caused by a buildup of plaque
- ☐ **carbohydrate loading** a technique used by endurance athletes to increase the glycogen stored in muscles
- ☐ **catabolism** the metabolic breakdown of complex molecules into simpler ones
- ☐ **glucose** a major energy source in metabolism
- ☐ **glycogen** a large chain of glucose molecules
- ☐ **hyperglycaemia** high blood sugar (glucose) and too little insulin in the blood
- ☐ **hypoglycemia** low blood sugar and too much insulin in the blood
- ☐ **insulin** a hormone produced in the pancreas that decreases blood sugar levels
- ☐ **lymphatic system** a part of the circulatory system comprised of white blood cells, and associated vessels and organs
- ☐ **metabolic rate** the rate that the body converts energy stores into usable energy
- ☐ **metabolic syndrome** a group of signs/symptoms that are caused by a poor diet and lack of exercise
- ☐ **type I diabetes** insulin dependent diabetes
- ☐ **type II diabetes** insulin resistant diabetes
- ☐ **vascular system** the vessels and tissues that circulate fluids through the body of an animal or plant

Radio interview about lifestyle habits

Imagine you are on a radio show. Student A is the radio interviewer, and Student B is a doctor.

Use the words on the previous page and talk with your classmate, as in the following dialogue.



A: Hello and welcome to WKRC Tokyo. Today we are with Dr. B to discuss problems related to food and exercise. Can you tell me something about type II diabetes?

B: Many people with type II diabetes are insulin resistant when the cells don't respond to insulin.

A: What type of people get type II diabetes?

B: People with metabolic syndrome can get type II diabetes.

A: Could you explain to our listeners, what is metabolic syndrome?

⋮

A: Thank you very much for joining our program, Dr B.

B: It was my pleasure. Thank you so much.

Other useful expressions

e.g. Really?

That's interesting!

What do you mean?

What do you think about ...?

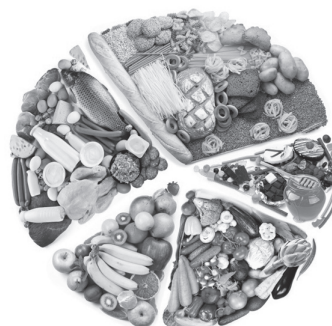
What do you mean by ...?

FOCUS ON

CONTENT

How healthy is your diet?

If you are a teenager, you will keep growing until your twenties. Therefore your diet is important. It helps with the growth of cells, tissues, and organs, and provides energy to bodily functions, like your heartbeat, breathing and so on. Your diet also gives you the energy to be active and exercise. A balanced diet of carbohydrates, proteins, fats, vitamins and minerals should provide all the nutrients needed for good health.



Carbohydrates	Proteins	Fats	Vitamins/Minerals
cereals, grains, bread, pasta, beans, corn, cakes	meat, poultry, fish, eggs, cheese, soya foods, nuts	dairy products (milk, butter, cream), meat, fish, nuts	a wide range of fruits & vegetables

A Write down anything you ate and drank yesterday. In which food group does each food belong?

e.g. bread (carbohydrates)

B Explain what you ate and drank to your classmate.

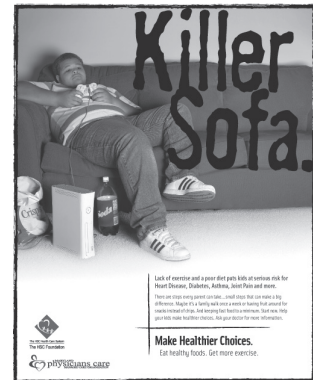
e.g. I had miso soup for breakfast.

C Was your diet balanced? Discuss what improvements each of you could make to your diet.

e.g. I think you should eat more carbohydrates every day.

Promoting a healthy lifestyle

In many countries around the world, health organizations have health campaigns. These campaigns often teach ways to be healthy. They target diseases like type II diabetes, heart disease, and illnesses like high cholesterol. They suggest ways to reduce the effects of poor lifestyle choices, and recommend what we should eat and drink, and the amount of daily exercise we should do.



A What do you think about Brad's lifestyle?

Brad is 48 years old. He has a very busy job at a tax office. He works late most nights and feels a great deal of stress. He is a smoker who enjoys eating out and drinking beer every night. To reduce his weight, on Sundays he enjoys playing golf. He has high cholesterol, and recently his blood sugar level has risen. Brad was diagnosed with type II diabetes just last week. He now requires insulin injections.

B Discuss the changes Brad should make in his lifestyle to become healthier.

C Create a poster that will be displayed to educate the public about people and their healthy lifestyle choices. Your poster should be divided into 2 sections:

Section One Show an unhealthy case study

Section Two Show the case study for an improved patient



Too much food and no exercise



Good exercise and healthy food