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Introduction

A diet is all of the things that a person eats and drinks.

Food may be placed into groups according to the nutrients it contains. These nutrients are:

- carbohydrates
- fats
- proteins
- vitamins
- minerals.

Two other important components of a diet are fibre and water.

The process of digestion allows nutrients to be absorbed by the body. Once in the body, they are used to provide energy and to supply what is needed for the growth and repair of tissues.

How can you know how much of each food you should eat?
How can you know which foods are good for you?
How can you know which foods are not good for you?

These are questions that we will be trying to answer in this unit.
The digestive system

There are different parts to the digestive system. Each part plays an important role in the digestive process.

Some stages of digestion involve physical processes, such as breaking up food in the mouth by the action of chewing. Other stages involve chemical changes brought on by the action of chemicals called enzymes.

Diet and body weight

A person’s body weight is affected by various different factors including the types and amounts of food that they eat. People come in all shapes and sizes and many are very healthy and happy. However, there is strong scientific evidence to suggest that being too thin or too fat is not good for you.

If a person eats more energy-providing foods than their body needs, the excess is stored as fat.

FIG 1.3 Exercise requires energy, so one way of burning up unwanted fat is regular exercising

Some people have jobs that are physically demanding so they get their exercise while working. Other people may have jobs in which they sit behind a desk all day. They might need regular sessions in the local gym.

In this unit you will learn how people can stay healthy by finding a balance between the amount of food they eat and the amount of exercise they take.

Challenge

To what extent does the type of food you eat, and the amounts of food you eat, determine your lifestyle?

Or is it your lifestyle that affects the types of food you eat?

Is there a conflict between eating a healthy diet and eating the things you like best?
We are learning how to:
- recognise the importance of a balanced diet
- recognise foods from different groups and know how our bodies use them.

**Food groups**

Different foods have different tastes and give us different nutrients that are important to our growth and wellbeing.

**‘Go’ foods**

‘Go’ foods provide the body with energy.

Foods such as bread, pasta, rice and potatoes, and foods that contain sugar, such as sweets and biscuits, are all sources of carbohydrates.

Oils and fats, and foods containing them, such as butter and cheese, are also sources of energy for the body.

If you eat more carbohydrates and fats than your body needs, the extra is stored as fat under the skin around the body. Fat is often stored around the waist.

**‘Grow’ foods**

‘Grow’ foods provide the body with the chemicals it needs to grow by making new cells and tissues.

Foods such as meat and nuts are rich in substances called proteins. During digestion, proteins are broken down into chemicals called amino acids.

Amino acids are important because they are needed to make new cells and tissues, and to repair damaged tissues.

**FIG 1.4** Rice is an example of a ‘go’ food

**FIG 1.5** Palm oil provides the body with oils

**FIG 1.6** Meat and nuts are examples of ‘grow’ foods
‘Glow’ foods

‘Glow’ foods contain important nutrients that you need to stay healthy. Fruits and vegetables are examples of ‘glow’ foods.

Fruits and vegetables are good sources of two groups of nutrients called minerals and vitamins, which are essential for remaining healthy. The amounts needed are much less than carbohydrates, fats and proteins.

Fruits and vegetables are also good sources of fibre. Fibre does not provide nourishment but it adds bulk to the food so that it can be pushed along the alimentary canal by muscle contraction during digestion. Fibre can also absorb some poisonous waste from food and prevent constipation.

Most foods contain a range of nutrients. Some foods are rich in one particular nutrient.

**Activity 1.1**

**Writing a menu**

This activity shows you how to plan your diet to include different types of food.

Here is what you should do:

1. Write a menu for yourself for a day.
2. You should have three meals. Over the day, eat a mixture of ‘go’, ‘grow’ and ‘glow’ foods.

**Check your understanding**

1. a) List the functions of carbohydrates, fats and proteins.
   b) Name three good sources of each type of food.
A balanced diet

Balancing your diet

To stay healthy you need to provide the body with all the different nutrients by eating foods from each food group every day. Altogether, the food you eat is called your diet. A balanced diet contains all the foods in the correct proportions that you need to stay healthy.

Nutritional information

Many food packages carry information about the contents of the food on a nutritional information panel. You can use this information to help you balance your intake of different nutrients.

FIG 1.8 You should eat food from each of the food groups every day but you need more food from some groups than from others

For example, if on a particular day, you ate twice as much carbohydrate as normal but no protein, you might be eating the same amount of food, but your body would not obtain the protein it needs for growth and repair.

GUIDELINE DAILY AMOUNTS

Each 100 g serving provides 350 calories, 1 gram of fat and no salt.

Use the following table as a daily guideline:

<table>
<thead>
<tr>
<th>Each day</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td>2000</td>
<td>2500</td>
</tr>
<tr>
<td>Fat</td>
<td>70 g</td>
<td>95 g</td>
</tr>
<tr>
<td>Salt</td>
<td>5 g</td>
<td>7 g</td>
</tr>
</tbody>
</table>

If you eat fewer or more calories, adjust the fat and salt accordingly.
Check your understanding

1. Look at Fig 1.9 again.
   a) Make a list of the nutrients present in this food.
   b) Is this food most likely to be cheese, meat or rice? Explain your answer.

Fun fact
The energy content of food is expressed both in kilojoules (kJ) and in kilocalories (kcal). One calorie is equivalent to 4.18 joules.

Key terms
- **diet** the food you eat
- **balanced diet** a diet that contains all the different nutrients that our body needs to stay healthy
- **nutritional information** information about the nutrients contained in a food