Learning objectives:

1. Explain what is meant by ‘a balanced diet.’
2. Identify the different macronutrients/ micronutrients.
3. Know which foods contain these macro/ micronutrients.
A balanced diet

Essential part of a healthy lifestyle

A balanced diet **should not** be confused for being on a diet.

It is the consumption of the right proportion of all seven components of a healthy balanced diet.
What are the seven components?

Much more important than these and certainly not like the comic!

Can you identify the seven components that make up a balanced diet?

- Carbohydrates
- Protein
- Fats
- Vitamins
- Minerals
- Fibre
- Water
The ‘Eatwell Plate’

The ‘eatwell plate’ was developed by the government to inform people of the proportions of different food groups to include in a balanced diet.
If we don’t eat a variety of foods in the correct proportions, we will not get all of the macronutrients and micronutrients we need.

Eating a balanced diet is an important part of a healthy lifestyle.

It should not be associated with one eating disorder such as obesity, it can also play a pivotal role in both anorexia and bulima.

We can break down the seven components into two categories:

- Micronutrients
- Macronutrients
Macro v Micro Nutrients

**Macronutrients**
- Essential
- Fueling for performance
- Provides calories for energy and growth

**Micronutrients**
- Essential but in small amounts.
- Fueling for recovery
- Enables the body to produce enzymes and hormones

**Key term**

**Macronutrients:** Nutrients that you need to consume in relatively large amounts in order to eat a balanced diet. These are carbohydrates, proteins and fats.

**Key term**

**Micronutrients:** Nutrients that you need to consume in relatively small amounts in order to eat a balanced diet. These include vitamins and minerals.
Diet and Nutrition

So what is the importance of these?

Macronutrients:
- Carbohydrate
- Fat
- Protein

Micronutrients:
- Vitamins
- Minerals

Water and Fibre
Carbohydrates

Main source of energy for the body. Stored as glycogen, which when broken down turns into glucose to fuel the working muscles with energy.

50 – 60% of a non performers diet should consist of carbohydrates

60 – 70% of a performers diet should consist of carbohydrates due to the demand on the working muscles

Found in food such as: Rice, Pasta, Oats, Bread, Potatoes

Evidence suggests carbohydrate loading can improve the finish time of a person aiming to complete a marathon in 4 hours by up to 7 minutes
Diet and Nutrition

Fats...

Essential part of a healthy diet. Important source of energy as well as for the transportation of fat soluble vitamins around the body.

Saturated fats normally solid at room temperature. These tend to be in the form of fatty meat, butter, cheese, cakes and crisps.

Unsaturated fats normally liquid at room temperature. These tend to be in the form of oily fish, nuts, olive oil, sunflower oil and avocados.
Diet and Nutrition

Vitamins...

Plays an important role in ensuring vital chemical reactions take part.
Responsible for making sure essential bodily functions take place including blood production and hormone regulation.

Found in:
Fruits,
vegetables,
dairy products,
nuts, seeds,
oily fish and beans

There are 13 essential vitamins, in two groups:

- Fat-soluble vitamins, which are stored in fatty tissue and called on when needed: Vitamin A, Vitamin D, Vitamin E, Vitamin K and Beta-carotene
- Water-soluble vitamins, which generally cannot be stored and must be replenished every day: Vitamin C, the six B vitamins, Biotin and Folic acid.
Minerals

Minerals play an essential role in almost all bodily functions. To function properly, the body needs a wide range of minerals, including calcium, fluoride, iron, magnesium, phosphorous and potassium. For example, calcium is found in strong, healthy bones and iron plays an important part in energy production.

Minerals, including potassium, sodium and chloride, can be lost if you sweat a lot during a long or intense period of physical activity. Sports drinks containing electrolytes can help replenish these losses.

Minerals are found in many foods. For example, shellfish, almonds and watercress are all good dietary sources of iron.
Diet and Nutrition

**Water...**

Makes up 60% of our body weight
Crucial part in ensuring our bodies function correctly:

- Carries nutrients around the body
- Keeps joints lubricated
- Removes waste products through urine
- Regulates body temperature through sweating

**Key term**

**Hydration:** Being hydrated means your body contains the correct amount of water in its cells, tissues and organs to function correctly. If you do not have enough water in your body you are “dehydrated.”
Diet and Nutrition

Fiber...

Helps the body to absorb vital nutrients as well as remove waste products through the digestive system.

Fibre also makes you feel fuller for longer and helps the body stay in peak condition.

Found in: Vegetables, brown bread, bran and wholegrain cereals.