

The composition of the food groups

NUTRIENT CONTENT

Foodstuffs are grouped according to their nutrient content. They often comprise several nutrients, but foodstuffs in the same group provide the same principal nutrient or nutrients.

WATER



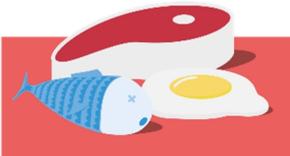
It comes as no surprise that **water** is the main nutrient in drinks. It is a key element in all the body's vital processes. Some kinds of water are rich in **minerals**, such as calcium and magnesium. Others contain less minerals.

FRUIT AND VEGETABLES



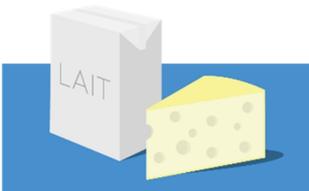
Vegetables are rich in **vitamins**, particularly vitamin C, beta-carotene and some B vitamins. They also contain **fibre** and numerous **minerals** such as potassium. Fruit has a similar composition to vegetables. In general, fruit has a higher **carbohydrate** content.

MEAT, FISH, EGGS, TOFU



Meat is the group principally associated with a relatively high **protein** content. The food in this group also contains **minerals** and **vitamins**. Meat contains iron, fish contains iodine and egg yolks are rich in vitamin A. We also need to remember the **fats** provided by some kinds of meat or oily fish.

DAIRY PRODUCTS



Dairy products primarily provide **minerals**. Milk is very rich in calcium. It also provides phosphorous which makes it easier for the body to digest calcium. The food in this group also contains **proteins** and greater or lesser amounts of **lipids**, depending on the product. The food in this group also provides **vitamins**. Almost all B vitamins are present in milk.

Vitamin A is found in full-fat milk but not in skimmed milk. Finally, some dairy products are not classed under this group as they do not have the same nutritional properties. Butter and cream are included under fats.

alimentarium academy

CEREALS, POTATOES, PULSES



The cereals group is primarily a source of starch, which is a **complex carbohydrate**. We should also be aware of the vegetable **protein**, **B vitamin**, **mineral** and **fibre** content. Dietary fibre, minerals and vitamins are present in larger quantities in unrefined products such as wholegrain cereals, pulses and potatoes.

SUGARY PRODUCTS



Food in the sweets or sugary products group basically contains **simple carbohydrates**, such as sucrose, glucose and fructose. The body easily absorbs sugar so it is a source of energy we can use quickly during intense physical effort. Some foodstuffs in this group also contain **lipids**. This is true for chocolate or toffees. The food in this group provides energy but no, or very few vitamins or minerals.

FATS



The fats food group is characterised by food with a high **fat** content. Cream contains approximately 30 to 35% fat; butter and margarine over 80% and oil is 100% fat! However, fats also provide **vitamins**; butter and cream provide vitamin A and oils provide vitamin E.

DIGESTIX

DIGESTIX illustrates the nutrient content of food. Food is first broken up into fragments which are then transformed into nutrients. It quickly becomes clear that fruit and vegetables are rich in vitamins, and that meat contains proteins.

The composition of the food groups

Food in the fruit and vegetables group is rich in...

- proteins and minerals
- vitamins, dietary fibre and minerals
- dietary fibre and lipids

Food in the meat group contains a high amount of...

- dietary fibre
- lipids
- proteins

Milk and dairy products are a very good source of calcium.

- True
- False

The cereals group mostly contains...

- carbohydrates
- lipids
- vitamins

It is preferable to eat...cereals.

- wholegrain
- refined
- chocolaty

Calcium and potassium are...

- trace elements
- minerals
- proteins

Fats provide us with other nutrients as well as lipids. Which ones?

- Carbohydrates
- Fibre
- Vitamins

All the food in a particular food group has one single nutrient.

- True
- False

Which of the following is mainly linked to the drinks group and is ideal for keeping your body hydrated?

- Coffee
- Lemonade
- Water

Butter and cream belong to...

- the fats group
- the sugary products group
- the dairy products group

Answers

Food in the fruit and vegetables group is rich in...

- proteins and minerals**
Wrong! Fruit and vegetables contain few proteins.
- vitamins, dietary fibre and minerals**
Well done! Fruit and vegetables mainly comprise these three nutrients. It is worth noting that fruit generally has a higher carbohydrate content than vegetables.
- dietary fibre and lipids**
Wrong! Fruit and vegetables contain very few lipids.

Food in the meat group contains a high amount of...

- dietary fibre**
Wrong! Meat does not contain dietary fibre.
- lipids**
Wrong! Lipids are not the main component of meat.
- proteins**
Well done! Meat mainly consists of proteins.

Milk and dairy products are a very good source of calcium.

- True**
Well done! Milk is very rich in calcium. It helps strengthen bones.
- False**
Wrong! Try again!

The cereals group mostly contains...

- carbohydrates**
Well done! Cereal products are very rich in complex carbohydrates and are a great source of energy.
- lipids**
Wrong! Cereal products contain only few lipids.
- vitamins**
Wrong! Cereal products contain vitamins, but they are not the main nutrient.

It is preferable to eat...cereals.

- wholegrain**
Well done! Wholegrain cereals have the best nutritional properties. There are larger amounts of dietary fibre, minerals and vitamins in non-refined cereals.
- refined**
Wrong! A percentage of dietary fibre, vitamins and minerals are removed during the refining process.
- chocolaty**
Wrong! Chocolate breakfast cereal may taste delicious, but it often contains more sugar.

Calcium and potassium are...

- trace elements**
Wrong! Calcium and potassium are macroelements.
- minerals**
Well done! Calcium and potassium are minerals. Unlike other nutrients, they are inorganic.
- proteins**
Wrong! Unlike proteins, these nutrients are inorganic.

Fats provide us with other nutrients as well as lipids. Which ones?

- Carbohydrates**
Wrong! Fats do not contain large amounts of carbohydrates.
- Fibre**
Wrong! Fats do not contain any fibre.
- Vitamins**
Well done! Butter and cream provide us with vitamin A, and oils supply us with vitamin E.

All the food in a particular food group has one single nutrient.

- True**
Wrong! That is not the correct answer.
- False**
Well done! Food in the same food group can provide more than one main nutrient.

Which of the following is mainly linked to the drinks group and is ideal for keeping your body hydrated?

- Coffee**
Wrong! Coffee belongs to the drinks group and can help hydrate your body, but not optimally.
- Lemonade**
Wrong! Lemonade belongs to the sugary products group and should be consumed in moderation.
- Water**
Well done! Water is indispensable for all life processes and should be favoured over sweet drinks.

Butter and cream belong to...

- the fats group**
Well done! Owing to their high lipid content, butter and cream belong to the fats group.
- the sugary products group**
Butter and cream do not contain large amounts of sugar.
- the dairy products group**
Wrong! Although both these products are made from milk, their high lipid content puts them in the fats group.