## alimentarium academy

2. Food and nutrients
2.1 The food groups

### 2.1.4 <br> The food groups

## NUTRIENTS

Food is made up of nutritional elements called nutrients. There is a way of classifying food according to its nutrients. In other words, foodstuffs belonging to the same food group share a principal nutrient and serve the same nutritional need. There are seven food groups in total and each group is represented by a colour here.


Drinks: water, tea, herbal teas,
coffee, etc.

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## THE FOOD GROUPS

The 'drinks group' of course includes water, but also tea, coffee and herbal teas.


However, it does not include sugary drinks such as cordials and soft drinks or alcoholic drinks. These drinks are part of the 'sugary products group', alongside sugar, jam, chocolate and cakes.


Milk is also not included under 'drinks' as it is comes under 'dairy products'.


This group also includes cheese. Dairy products are particularly rich in minerals. There is another type of drink, which belongs to a different group: fruit juice. Fruit juices belong under 'fruit and vegetables'.


Unsurprisingly, this group includes fruit and vegetables, but not all fruit and vegetables. For example, avocados and coconuts are not included as they are rich in fat. This means they belong to the 'fats group'.


The 'fats group' includes oil and butter as well as fatty foods such as cream, and oleaginous fruit. Oleaginous food covers plants, fruit and cereal grains which are rich in oil.

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What about pulses such as lentils and chickpeas? Do you think they belong under the 'fruit and vegetables group'? Well, no! Pulses are rich in carbohydrates so they belong under 'cereals'.


This group is an excellent source of energy and also includes cereal products such as pasta and bread.
Remember that pulses contain protein as well as carbohydrates. This is why they are sometimes included in the 'meat group'.


However, vegetable and leguminous proteins have a lower nutritional value than animal protein. Meat, fish and eggs provide 'complete' proteins, which means they are composed of all of the essential amino acids the body needs; this is not true in the case of pulses, although it is easy to supplement the missing proteins.

All of these food groups are found in NUTRIX. We need to eat more food in some groups than in others. This is one of the requirements of a balanced diet, which we will look at later.

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### 2.1.4 <br> The food groups

| Nutrients are the nutritional elements in <br> food. <br> O True <br> O False | Food in the cereals group is an <br> excellent source of... <br> O proteins |  |
| :--- | :--- | :--- |
| What defines the different food |  | O energy <br> O lipids |
| groups? |  |  |
| O Proteins |  |  |
| O Macronutrients |  |  |
| O Nutrients |  |  |$\quad$| Avocados belong to... |
| :--- |
| O the fruit and vegetables group |

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## Answers

Nutrients are the nutritional elements in food.

## - True

Well done! Nutrients are in the food you eat. They each have specific roles to play in your body.
O False
Wrong! Try again!

## What defines the different food

 groups?
## O Proteins

Wrong! Proteins are included, but they are not the only criterion.

## O Macronutrients

Wrong! It is not just about macronutrients.

## Nutrients

Well done! Food is grouped according to its main nutrients.

How many food groups are there?
05
Wrong! There are more than that.

- 7

Well done! That's right, there are seven food groups.
O 10
Wrong! That's too many.

## Soft drinks belong to...

## - the sugary products group

Well done! That's right! The high sugar content of soft drinks means they are classified as a sugary product, alongside confectionery and cakes.

## O the proteins group

Wrong! Soft drinks do not contain protein.

## O the drinks group

Wrong! Soft drinks have a high sugar content so, from a nutritional point of view, they belong in a different group.

## Milk belongs to...

## O the drinks group

Wrong! That was a tricky question because, even though milk can be consumed as a drink, it does not actually belong to this group.
the dairy products group
Well done! Just like yoghurt and cheese, milk belongs to the dairy products group.
O the proteins group
Wrong! Although milk is high in protein, it belongs to another food group.

Food in the cereals group is an excellent source of...

O proteins
Wrong! Cereals contain some proteins, but they are not the main source of protein.

## energy

Well done! Cereals have a high carbohydrate content, so they are a great source of energy for your body.
O lipids
Wrong! Cereals contain very few lipids.

## Avocados belong to...

O the fruit and vegetables group
Wrong! Avocados are fruit, but their high lipid content means they are classified in a different group.

## - the fats group

Well done! Owing to their high lipid content, avocados are classified in the fats group, just like coconuts.
O the dairy products group
Wrong! Milk and cheese belong to this group.
Broad beans, lentils and chickpeas belong to...

O the vegetables group
Wrong! Pulses do not belong to the fruit and vegetables group.
the cereals and pulses group
Well done! Pulses and cereals are rich in carbohydrates.
O the sugary products group Wrong! Try again!

The plant proteins in pulses have exactly the same nutritional value as animal proteins.

## O True <br> Wrong! Try again! <br> - False

Well done! The plant proteins in pulses have a lower nutritional value than animal proteins as, unlike proteins of animal origin, they do not contain all the essential amino acids.

Pulses and cereals are very rich in...
O proteins
Wrong! Although pulses and cereals contain proteins, these are not the main macronutrient.

## - carbohydrates

Well done! Pulses and cereals are a great source of energy for your brain and your body.
O lipids
Wrong! Pulses and cereals contain few lipids.

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## The colour palette

[11-13 years old and $14-16$ years old]


Each component of a meal has a colour to indicate its corresponding food group. Create the colour 'palette' for each meal by colouring the circles according to the food groups it includes.

For example, a cheese and ham sandwich

Meal 1: lentil salad, chicken, rice, yoghurt and water




Meal 2: spaghetti bolognese, chocolate mousse, Coca-Cola


Meal 3: avocado, tuna, marinated vegetables, apple juice
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Answers
The colour palette

## [11-13 years old and 14-16 years old]



Each component of a meal has a colour to indicate its corresponding food group. Create the colour 'palette' for each meal by colouring the circles according to the food groups it includes.

For example, a cheese and ham sandwich


Meal 1: lentil salad, chicken, rice, yoghurt and water

green, red, brown, dark blue, light blue
Meal 2: spaghetti bolognese, chocolate mousse, Coca-Cola
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brown, red, pink
Meal 3: avocado, tuna, marinated vegetables, apple juice

yellow, red, green

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## Scattergories

[8-10 years old and 11-13 years old and 14-16 years old]
Find a foodstuff for each food group and the letter indicated.

For example: the letter C

| C | coffee | carrots | cereals | cod | camembert | cashews | Cookies |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |
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## Food and the food groups

[8-10 years old and 11-13 years old and 14-16 years old]
Put the following foodstuffs into their corresponding food group: flour, strawberries, olive oil, salmon, lentils, avocados, eggs, bananas, pineapples, lamb, chips, tea, Coca-Cola, oysters, butter, lettuce, rice, crisps, courgettes, chocolate, tomato juice.


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Answers

## Food and the food groups

## [8-10 years old and 11-13 years old and 14-16 years old]

Put the following foodstuffs into their corresponding food group: flour, strawberries, olive oil, salmon, lentils, avocados, eggs, bananas, pineapples, lamb, chips, tea, Coca-Cola, oysters, butter, lettuce, rice, crisps, courgettes, chocolate, tomato juice.


Answer: Drinks: tea, Fruit \& vegetables: strawberries, bananas, pineapples, lettuce, courgettes, tomato juice, Cereals potatoes \& pulses: flour, crisps, chips, rice, lentils, Meat, fish, eggs \& tofu: salmon, eggs, lamb, oysters, Dairy products: milk, Fats: olive oil, avocados, butter, Sweets: CocaCola, chocolate.

