- 2. Food and nutrients
- 2.4 A balanced diet

2.4.2

Food equivalence

A VARIED DIET

Food equivalence means replacing one foodstuff with another, so long as they have similar nutritional properties.

Equivalent foodstuffs can belong to the same food group but equivalences also exist between groups.





For example you can get 10 g of fibre from 100 g of porridge oats or from 170 g of peas. Equivalences allow you to eat a variety of food while continuing to take in the essential elements your body needs and alternating the taste of your meals.



100 g porridge oats 10 g fibre



170 g peas 10 g fibre

The choice of food depends a lot on availability and financial means and is also heavily influenced by social, cultural and religious customs. We cannot overlook the fact that food consumed by one person will be unpleasant to another.

A BALANCED DIET

Equivalences allow us to deal with these issues and eat a balanced diet whatever food is available, whatever food restrictions exist and whatever our personal tastes. If you do not like certain kinds of fruit, you could choose between a handful of apricots or cherries or even quarter of a melon.



All of these provide a roughly equivalent amount of carbohydrates.

We either choose to, or sometimes have to, avoid certain foodstuffs. We may not wish to eat meat on principle or wish to avoid pork for religious reasons, or have to avoid peanuts due to an allergy for example.



If there is not an excessive number of restrictions, the variety of food we can access should allow us to eat a balanced diet and satiate hunger.

Food equivalence

Food equivalence means replacing one foodstuff with another, provided they both have the same O taste O nutritional properties	Calcic equivalence means finding two foodstuffs with the same amount of O proteins O calcium O carbohydrates
O colour When talking of food equivalence, the two foodstuffs can belong to the same group or to different groups. O True O False	How many oysters, on average, would provide the same amount of protein as 100 g of beef? O 10 O 50 O 1
In the case of special diets or allergies, food equivalence helps ensure a balanced and varied diet. O True O False	If you don't like milk or yoghurt, what can you eat that is a good source of calcium? O Cheese O Pasta O Fruit
If I don't like peas but would like an equivalent intake of fibre, I can eat oats instead. O False O True	To obtain the same amount of energy, we need to eat more potatoes than bread. How much more? O 10 times more O 3 times more
I would need to eat 1 kg of meat to have the same calcium intake as 100 g of yoghurt. O False O True	How many eggs provide the same amount of protein as 100 g of ground beef? O1 O2 O5

Answers

Food equivalence means replacing one foodstuff with another, provided they both have the same...

O taste

Wrong! Nice try, but that's not right.

nutritional properties

Well done! We talk about food equivalence when two foodstuffs have similar nutritional properties.

O colour

Wrong! That's not right.

When talking of food equivalence, the two foodstuffs can belong to the same group or to different groups.

True

Well done! As long as the replacement foodstuff has an equivalent composition of nutrients, it may come from another group.

O False

Wrong! Try again!

In the case of special diets or allergies, food equivalence helps ensure a balanced and varied diet.

True

Well done! That's right! Food equivalence can prevent nutrient deficiency.

O False

Wrong! Try again!

If I don't like peas but would like an equivalent intake of fibre, I can eat oats instead.

O False

Wrong! Try again!

True

Well done! That's right, because they have the same amount of dietary fibre.

I would need to eat 1 kg of meat to have the same calcium intake as 100 g of yoghurt.

O False

Wrong! Try again!

True

Well done! On average, meat contains only a tenth of the amount of calcium found in milk.

Calcic equivalence means finding two foodstuffs with the same amount of...

O proteins

Wrong! Try again!

calcium

Well done! That's right!

O carbohydrates

Wrong! Try again!

How many oysters, on average, would provide the same amount of protein as 100 g of beef?

10

Well done! Oysters are rich in protein, but not as rich as beef.

O 50

Wrong! Contrary to what we might think, oysters are quite rich in protein.

01

Wrong! Oysters do not contain that much protein.

If you don't like milk or yoghurt, what can you eat that is a good source of calcium?

Cheese

Well done! Cheese is a great source of calcium. It contains much more calcium than milk or yoghurt do. Don't forget, though, it also has a higher fat content.

O Pasta

Wrong! Pasta is mainly rich in carbohydrates.

O Fruit

Wrong! Fruit is mainly rich in fibre and vitamins.

To obtain the same amount of energy, we need to eat more potatoes than bread. How much more?

O 10 times more

Wrong! Less than that!

3 times more

Well done! As potatoes provide three times less energy than the same weight of bread, we need to eat 3 times more.

O 5 times more

Wrong! Less than that!

How many eggs provide the same amount of protein as 100 g of ground beef?

01

Wrong! It's more than that.

2

Well done! Two eggs provide the same amount of protein as 100 g of meat.

O 5

Wrong! It's less than that.

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Protein content

[11-13 years old]

Value for 100 g	Proteins (g)
beef	18
chicken	21
tuna	27
egg	13

Calculate the following equivalences.

200 g of beef p	rovides the equivalent amount of protein to
gr	ams of chicken
gr	ams of tuna
gr	ams of eggs

Answer: 171 g chicken, 133 g tuna, 277 of eggs

Answers

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