

Dairy sources and production

Why is it important for us?

These foods provide a range of nutrients:

- **Calcium** – for the development and maintenance of strong, healthy bones and teeth.
- **Protein** – for growth and repair of muscles.
- **Iodine** – important for healthy nerve and brain function, and healthy skin.
- **Vitamin B12** - for healthy red blood cells and nerve function.
- **Vitamin B2 (riboflavin)** – to help break down proteins, fats and carbohydrates for the body's energy supply

Therefore it is important to have some dairy or dairy alternatives in our diets.

Sources

Milk - The fat in milk provides energy and essential vitamins for young children. However, for older children and adults, lower-fat milks may be better as having too much fat in your diet can result in you becoming overweight. However, as calcium is in the liquid part of the milk, it is not removed when the fat is removed, so even lower-fat milks provide just as much calcium.

Cheese – Enjoy as part of a healthy, balanced diet, but as it can be high in saturated fat and salt try not to have too much.

Cream – Again enjoy in small amounts as also high in fat. You can use lower-fat plain yoghurt and fromage frais (a creamy soft cheese) instead of cream.

Yoghurt – Plain lower-fat yoghurts are a good choice as they usually do not contain added sugars.

Quark – Soft cheese that can be used in either sweet or savoury dishes.

Unsweetened calcium-fortified dairy alternatives

NOTE: Butters, creams and dairy ice creams are not included in this group as they are high in saturated fat, and so are included in 'foods to eat less often and in small amounts'.

Alternatives

Some people need dairy alternatives for various reasons.

It could be that their bodies are unable to digest lactose, a type of sugar found in milk and dairy products. This is called lactose intolerance.

Another health reason could be they have an allergy to cows' milk protein so need to avoid milk and dairy products. This is more common in children (occurring in up to 7% of children), and most will grow out of this before they start school (average age 3-5 years depending on severity).

In addition, those following a vegan diet will not eat dairy. This diet refers to anything that is free of animal products; therefore, these individuals will not eat meat, fish, milk, cheese, eggs or honey.

There are a number of alternative foods and drinks available to replace milk and dairy products, such as:

- Soya milks, yoghurts and some cheeses
- Rice, oat, almond, hazelnut, coconut, quinoa and potato milks
- Foods that carry the "dairy-free" or "suitable for vegans" signs

How much do we need?

Recommendations in the UK state we should have 2-3 portions of dairy or dairy alternatives per day. Although we should try to use lower sugar and lower fat versions of dairy foods and drinks where possible, as some options can be high in saturated fat and sugar.

Food	1 portion	Weight/Volume
Milk or plant-based alternative	1 medium glass	200ml
Cheddar cheese	About the size of two thumbs together	30g
Low fat yoghurt	4 tablespoons or 1 individual pot	120g

Production

All dairy products are made from milk.

In the UK 500-550 million litres of milk are produced a month. Of all the milk produced, just under half is for drinking and the rest is made into cheese, yogurt and other dairy products. Cheese production continues to be the largest manufactured product, with cheddar the most popular cheese by far.

Milk comes from cows, reared by farmers around the UK. Dairy farms are all different shapes and sizes, from farms with 10 cows to farms with more than 1,000 cows.

Cows are milked around 2 or 3 times a day which produces around 22 litres. Milking is not painful or uncomfortable; it is like the cow feeding its baby calf. After milking, the milk is chilled and stored, ready to be taken away to be processed. The milk is treated so it is safe to drink and then packaged to be sold in shops.

Goats, sheep and camels milk can also be used.

What is pasteurisation?

Pasteurisation is the process where milk is heated to a specific temperature for a specific period in order to kill bacteria, while keeping all the nutrients. This makes the milk safe to drink and prevents food poisoning. Most milk and cream is pasteurised.

You can sometimes buy unpasteurised milk and cream from farms and farmers' markets. As well as some cheeses and other dairy products are made with

unpasteurised milk. For example, some camembert, brie and goats' cheese may use unpasteurised milk, so check the label, it may also be described as "raw" milk.

Children, pregnant women, older adults and people with a weakened immune system are most particularly vulnerable to food poisoning from unpasteurized foods. Therefore it is advised they should avoid unpasteurised milk or cream and dairy products made with unpasteurised milk.