

Milk

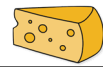


The source of all dairy foods is milk.. In the UK cow milk is used more than any other. From milk we can produce butter, cream, cheese and yoghurt.

Many consumers choose plant based milks as an alternative to animal milks. This could be due to health benefits (reduced saturated fat content), vegetarian diets, ethical choices, intolerances or personal preferences.

Cheese

Table of cheeses



cheese	properties	uses
Mozzarella	Fresh, mild, stretchy, soft	Melting on pizza or pasta
Parmesan	Hard, strong flavour	Grating on pasta dishes
cheddar	Mild or strong in flavour, hard	Sandwiches, on crackers, grated onto dishes
Stilton	Soft, strong flavour, crumbly	Soups, on crackers
Feta	Soft, crumbly, tangy	salads

Yoghurt

Yoghurt contains good bacteria which aids digestion. Yoghurts can come in a range of textures, fat content and flavours. Yoghurt, like other dairy products should be stored in the fridge at 5°C.

Uses of Yoghurt - Yoghurt can be used as an ingredient in dishes to give a creamy texture, a healthy alternative to cream, an alternative to mayonnaise or simply consumed as a snack.



The nutritional value of dairy products

Macronutrients

- Contains high biological value protein.
- Contains saturated fat. It is advised low fat dairy products are consumed.
- Contains sugary carbohydrates in the form of lactose.

Micronutrients

- A good source of calcium.
- Contains water soluble Vitamin B.
- Contains Vitamin A and D depending on the fat levels of the product.

May contain sodium depending on the product.

Key nutrients and functions

Fat - Protects vital organs, insulates the body, energy source, absorbs fat soluble vitamins A,D,E,K.

Protein - Builds and repairs cells.

Carbohydrate - main source of energy and NSP (wholegrain varieties).

Vitamins:

- A**-Healthy eye sight
- B** - energy release
- C** - immune system
- D** -helps strengthen bones and teeth.

Minerals:

- Iron** - healthy red blood cells
- calcium** - strong bones and teeth
- sodium** -regulates water in cells .

Low fat dairy options

Choose lower fat dairy foods in order to maintain a healthy weight. Dairy products can be high in saturated fat. To reduce fat in dairy products you could:

- Replace whole milk with skimmed or semi skimmed.
- Replace milk with a plant based alternative such as soya milk.
- Replace cream with low fat crème fraiche.
- Replace ice cream with low fat frozen yoghurt.
- Swap cheeses for reduced fat cheeses.
- Swap butter for plant based margarine.

Types of milk

Most milk in the UK is pasteurised. Milk can be skimmed, semi -skimmed and whole fat.

Pasteurised	Heated and then rapidly cooled. This destroys most pathogenic bacteria.
Condensed	Fresh milk is heated and sweetened with sugar. It is then evaporated and cooled rapidly before canning.
Dried	Reduced by evaporating all of the water in the milk.

Y10 Food & Nutrition - Dairy

Factors affecting food choice

Some of the different factors that affect our food choice are:

- Physical activity level
- Healthy eating
- Cost of food
- Income
- Culinary skills
- Lifestyle
- Seasonality
- Availability
- Special occasions
- Religion or ethical reasons
- Intolerances or allergies.

Supermarkets sell a wide range of dairy products for some of these reasons e.g. plant based milks for lactose intolerance/vegans, or flavoured milks for children.



Lactose intolerance

Lactose intolerance is a common digestive problem where the body is unable to digest **lactose**, a type of sugar mainly found in milk and dairy products.

The body digests lactose using a substance called **lactase**. People with lactose intolerance do not produce enough lactase, so lactose stays in the digestive system.

Symptoms:

- flatulence (wind)
- diarrhoea
- bloated stomach
- stomach cramps and pains
- stomach rumbling
- feeling sick



Lactose free alternatives include plant based milks such as almond or soya milk. Lactose free milk is also now available. Vegan and plant based cheeses made from soya are becoming more readily available.

Key vocabulary

Marinate	soak (meat, fish, or other food) in a marinade.
Foam	a mass of small bubbles formed on the surface or in a liquid
Aeration	Incorporating air into a mixture.
Coagulation	An irreversible change to proteins from a liquid or semi-liquid state to a solid state.
Enrich	An ingredient added to improve the colour, flavour and nutritional properties of a food.
Shortening	Fat coats the flour in cake and pastry which gives a waterproof coating to prevent gluten from forming, giving a crumbly, short texture.
Emulsion	A fine dispersion of minute droplets of one liquid into another.
Cross contamination	The transfer of bacteria from one food to another, from humans, animals. other food or equipment.
Caramelisation	A change in the food's molecular structure due to the removal of water resulting in a nutty flavour and brown colour.

Knowledge Organiser

Primary and secondary processing

A **primary food** is food that has been grown or reared and is not edible in its original state, e.g. wheat.

Primary processing - Changing the primary food from its raw state into a product that can be eaten or used to make another food product e.g. milling wheat to flour.

Secondary processing - When a primary processed food is changed into another food product e.g. wheat flour used to make bread.

Provenance of milk

'Food provenance' means where your food comes from i.e. where it is grown, raised or reared. Milk can have many different provenances from animals to plants.

Animal sources:

Cow Sheep Goats Buffalo



Plant sources:

Soya Almond Coconut oat.

