



Pass the cheese, please

In many countries of the world, cheese is a dietary staple.
Grated, melted or sliced, any way you cut it cheese
is a culinary delight.

Cheddar, Brie, Gorgonzola and Munster. These are just four of the estimated 3,000–5,000 types of cheese available today. Some are soft, others hard, still others have pungent blue veins. While the number of cheeses continually grows, cheese-making techniques look back on an approximately 4,000-year-long history. However, no single person or culture is accredited with inventing cheese.

According to one legend, an Arabian merchant once put milk into a satchel made from a sheep's stomach. During his journey, the rennet, milk and warmth from the desert

sun caused the milk to curdle and separate into liquid and solid parts. That evening, the lucky man tucked into a delicious dinner of cheese and whey.

But separating fact from fiction in the history of cheese is nearly impossible. What we do know: at some point cheese-making was brought to Europe where the mighty Roman Empire adopted the art. As the Romans spread out and conquered new turf, they introduced cheese-making to many corners of Europe where it became part of local culture and remains so today.







1 Coagulation



2 Curds & whey



3 Salting



4 Shaping



5 Ageing

The art of cheese-making

All cheese starts with milk, commonly from a cow, but also from sheep, goats, ewes and buffalo. Around 4–16 litres of milk are required to produce just one kilogram of cheese. Cheese-making usually consists of five basic steps:

- 1 Coagulation – Starting agents like lactic acid or rennet are added to milk to help turn it from a liquid into a solid and form cheese curds.
- 2 Curds & whey – Using a rake-like tool, the cheese-maker cuts the cheese curds into smaller pieces, thereby drawing out the whey.
- 3 Salting – To flavour and preserve the cheese, salt is added. Alternatively, cheese wheels may be left to soak in a bath of brine.
- 4 Shaping – Cheese is shaped using a mould or basket.
- 5 Ageing – Also called ripening, this involves storing cheese at the correct temperature and humidity level and closely monitoring it.

With the exception of fresh cheeses like cream cheese or cottage cheese, all cheeses must ripen. During the ripening process the cheese develops its typical aroma and appearance. Some types of cheese are oiled, washed with brine or alcohol, or turned during the ripening process. The length of time a cheese needs to ripen depends on the type of cheese and desired taste. Blue cheeses like Stilton or Gorgonzola are injected with blue mould spores which add depth of pungent flavour and create blue veins throughout the cheese wheel. Others like Brie are rubbed with a white mould which creates its rind.

Cheese nutrition

Cheese consists of dry matter (proteins, fats, carbohydrates, vitamins and minerals) and water, which partially evaporates during the ageing process. The type of cheese – soft, semi-soft and hard, to name three examples – influences a cheese's water content. A word of caution to kidney patients: hard cheese, some semi-soft cheeses and all processed cheeses contain **high levels of**



phosphate. Avoid consuming all processed cheeses and any cheese products with E 339–343 or E 450–452 on the ingredient list. If you enjoy processed cheeses, visit your local speciality foods store and ask if they stock processed cheese that uses citrate (E331) instead of phosphate which you can eat.



How to enjoy cheese

Cheese is a good source of energy and protein, though you should take care to limit your cheese consumption. The most kidney-friendly cheeses are soft-ripened natural cheeses as they are lowest in phosphorus. Cheeses in brine like mozzarella can be soaked in water before consuming. This step helps remove some of the salt and potassium – just remember to dispose of the water afterwards.

Our advice: Choose a small piece of cheese to slowly savour with bread instead of grating

a heap on pasta where the taste is diluted. Be sure to always check the labels before purchasing or consuming because some cheese products may have higher phosphorus levels than others. You can always ask your dietician for advice on how much cheese you can consume.

Three fun facts

- 1 Cheese-worthy: Some regional banks in Northern Italy accept whole wheels of Parmigiano-Reggiano cheese as collateral. The cheese is stored in climate-controlled vaults during the length of the loan. One bank, Credito Emiliano, claims to have around 400,000 wheels under lock and key.



- 2 The un-cheese. Tofu could be considered the Asian equivalent of cheese. The bland, tasteless foodstuff is made with curdled soymilk, then pressed into blocks.
- 3 The golden ratio. Researchers at the University of Bristol discovered the ratio of tomatoes, mayonnaise, bread and different types of cheddar required to make the perfect cheese sandwich.