THIS BOOKLET WILL PROVIDE YOU WITH LOTS OF INFORMATION ABOUT CHEESE, WHICH CAN HELP YOU INCORPORATE CHEESE INTO YOUR DIET, INCLUDING CHEESE NUTRITION AND CHEESEMAKING.

Contents

2. 8 cheesy facts
3. Varieties of cheese
4. The nutritional value of cheese
6. Calories and fat in cheese
8. How is cheese made?
10. Why is there salt in cheese?
12. How much salt is in my cheese?
8 Cheesy facts

1. There are over 700 British named cheeses
2. It takes 10 litres of milk to produce a kilo of hard cheese
3. Cheddar is the nation’s favourite cheese
4. Cheese has been around for centuries
5. Cheese is made up of just a few simple ingredients – milk, a starter culture (good bacteria), salt and rennet
6. The majority of cheeses in the UK use vegetarian rennet
7. Salt is an essential part of cheese making. A 30g piece of Cheddar provides 0.5g salt
8. Whey is a by-product of cheesemaking

Varieties of cheese

VARIETY IS THE SPICE OF LIFE!

CHEESE IS A COMPLEX FOOD MADE FROM JUST A FEW BASIC INGREDIENTS – MILK, A STARTER CULTURE (GOOD BACTERIA), RENNENET (TO THICKEN THE MILK) AND SALT.

From these simple ingredients, cheesemakers around the world have developed thousands of different varieties of cheeses. In the UK alone, we have over 700 named cheeses. Each variety of cheese has its own unique taste, texture and nutritional composition.

<table>
<thead>
<tr>
<th>Cheese categories</th>
<th>Some examples of cheese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard</td>
<td>Cheddar, Double Gloucester</td>
</tr>
<tr>
<td>Semi-Hard</td>
<td>Cheshire, Wensleydale</td>
</tr>
<tr>
<td>Soft ripened or bloomy rind</td>
<td>Somerset Brie, British Camembert</td>
</tr>
<tr>
<td>Blue</td>
<td>Blue Stilton, Shropshire Blue</td>
</tr>
<tr>
<td>Washed rind</td>
<td>Stinking Bishop</td>
</tr>
<tr>
<td>Fresh</td>
<td>Mozzarella, Cottage Cheese</td>
</tr>
<tr>
<td>Blended</td>
<td>Stilton with Cranberries, Double Gloucester with Chives</td>
</tr>
</tbody>
</table>
The nutritional value of cheese

A 30g portion of Cheddar cheese contributes the following amounts to the recommended daily intake of these important nutrients*

**A SOURCE OF CALCIUM**
- 28%
- Contributes to the maintenance of normal bones and teeth
- Supports normal blood clotting
- Supports muscle and nerve function

**A SOURCE OF PHOSPHORUS**
- 22%
- Contributes to the maintenance of normal bones and teeth
- Supports normal release of energy from foods

**HIGH IN PROTEIN**
- 15%
- Contributes to the maintenance of normal bones
- Contributes to the growth and maintenance of muscle mass

**A SOURCE OF VITAMIN A**
- 15%
- Helps maintain normal vision, skin and immune system

**A SOURCE OF VITAMIN B12**
- 29%
- Helps to make red blood cells, which carry oxygen around the body
- Supports the normal functioning of the immune system
- Supports normal nerve function

*Recommended intakes are based on guidelines for adults established and used for purposes of nutrition labelling in the European Union.
Calories and fat in cheese

CHEESE PROVIDES A NUMBER OF IMPORTANT NUTRIENTS IN A COMPACT, TASTY PACKAGE.

Cheese can be consumed as part of a healthy, balanced diet. Guidelines suggest adults should have less than 70g total fat and 20g saturated fat a day.

A 30g piece of Cheddar cheese contains 10.5g fat, and 6.5g saturated fat.

A moderate amount of cheese isn’t over-the-top on calories either. Guidelines suggest that the average adult should consume around 2000 calories a day; a 30g piece of Cheddar contributes just 6% of this figure.

With the many varieties of regular fat, reduced fat and half fat cheeses available there is a fat and calorie choice available for all types of dietary needs and preferences.

The table opposite shows the calorie, fat and saturated fat content of a variety of popular cheeses.

<table>
<thead>
<tr>
<th>Type of cheese</th>
<th>Calories (Kcal)</th>
<th>Fat (g)</th>
<th>Saturated fat (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheddar (regular)</td>
<td>125</td>
<td>10.5</td>
<td>6.5</td>
</tr>
<tr>
<td>Cheddar (30% less fat)</td>
<td>94</td>
<td>6.6</td>
<td>4.1</td>
</tr>
<tr>
<td>Red Leicester</td>
<td>121</td>
<td>10.1</td>
<td>6.3</td>
</tr>
<tr>
<td>Double Gloucester</td>
<td>124</td>
<td>10.5</td>
<td>6.6</td>
</tr>
<tr>
<td>Wensleydale</td>
<td>114</td>
<td>9.5</td>
<td>5.9</td>
</tr>
<tr>
<td>Stilton</td>
<td>123</td>
<td>10.5</td>
<td>6.9</td>
</tr>
<tr>
<td>Cottage cheese</td>
<td>31</td>
<td>1.8</td>
<td>1</td>
</tr>
</tbody>
</table>

Calories, fat and saturated fat content in a 30g portion of popular cheeses.
How is cheese made?

Cheese is a concentrated form of milk and the cheesemaking process begins with the milk being pasteurised and a starter culture being added to ‘sour’ and thicken it.

Rennet is then added to the milk to form curds. In years past, animal rennet was used but these days much of the rennet used in the UK is from non-animal sources which makes the majority of cheeses suitable for vegetarians.

The curds produced by the steps above are left to set. In cheesemaking the curds must be separated from the whey. So, after setting, the curds are cut so that the whey is released. To produce hard cheeses, the curds are cut finely whereas to produce soft cheeses, the curds are only lightly cut.

After cutting, the curds are then either ‘cooked’ or piled on top of each other to further release the whey.

At this point, the curd is milled, salt is added, and for the majority of cheeses, the curd is pressed into moulds.

The cheese is then stored and ripened. During this phase, temperature and humidity are tightly controlled and vary according to the type of cheese being produced.
Why is there salt in cheese?

SALT IS AN INTEGRAL PART OF THE CHEESEMAKING PROCESS. CHEESE SIMPLY CANNOT BE MADE WITHOUT IT. IT IS ADDED FOR SAFETY AND TECHNICAL REASONS AS FOLLOWS:

- Salt **slows** the development of the special bacteria used in the cheesemaking process. Without salt these bacteria would multiply uncontrollably and cause the cheese to spoil quickly.

- Salt acts as a **preservative**, preventing the growth of undesirable bacteria. This is essential for the safety of cheeses, particularly those with a longer shelf life.

- Salt **speeds up** the release of whey from the curd. This is an essential part of the production of semi-hard and hard cheeses.

- Salt is important in helping the curds to **mature**. A lack of salt would prevent the curds from maturing, meaning cheese will remain in its raw state and be inedible.

It’s often asked why cheeses of the same type have different salt contents e.g. Cheddar. However, Cheddar cheese can be mild or mature. A mild Cheddar is only ripened and stored for a few short months whereas matured Cheddars are often stored for years before they are aged enough to reach the store shelf. In order to safely produce a 2 year old mature Cheddar, the cheesemakers must add more salt than if they were producing a mild Cheddar, to prevent bacterial growth and cheese spoilage, so the cheese remains safe to eat.

Cheese manufacturers have worked very hard to overcome technical barriers and reduce salt levels in their products. They have worked constructively and positively with government agencies to do this whilst producing products which are nutritious, safe and acceptable to the public’s taste.
How much salt is in my cheese?

Public Health Guidelines recommend that children over 11 years, and adults consume no more than 6g of salt per day.

The following table shows that information for a number of popular cheeses.

If your favourite cheese isn’t included in this table, don’t worry. The package your cheese comes in will list the nutritional information specific to that product, including the salt content.

The Amount of Salt in Commonly Consumed Cheeses

<table>
<thead>
<tr>
<th>Type of cheese</th>
<th>Salt in a 30g portion</th>
<th>% of daily maximum amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheddar</td>
<td>0.54</td>
<td>9</td>
</tr>
<tr>
<td>Stilton</td>
<td>0.59</td>
<td>10</td>
</tr>
<tr>
<td>Red Leicester</td>
<td>0.50</td>
<td>8</td>
</tr>
<tr>
<td>Double Gloucester</td>
<td>0.50</td>
<td>8</td>
</tr>
<tr>
<td>Wensleydale</td>
<td>0.33</td>
<td>6</td>
</tr>
<tr>
<td>Cottage cheese</td>
<td>0.19</td>
<td>3</td>
</tr>
<tr>
<td>Cream cheese</td>
<td>0.20</td>
<td>3</td>
</tr>
</tbody>
</table>
Information Sources

British Cheese Board. How is cheese made  
[accessed 08/2017]

Department of Health (1991) Dietary Reference Values for Food Energy and Nutrients for  
the United Kingdom: Report of the Panel on Dietary Reference Values of the Committee on  
Medical Aspects of Food Policy. London: HMSO. (Report on Health and Social Subjects; 41)

Finglas PM et al (2015) McCance and Widdowson’s The Composition of Foods,  
Seventh Summary edition, Cambridge: Royal Society of Chemistry

PHE & FSA (2016). National Diet and Nutrition Survey: UK Results from Years 5 and 6  
(combined) of the Rolling Programme (2012/13– 2013/14).  
https://www.gov.uk/government/statistics/ndns-results-from-years-5-and-6-combined  
[accessed 08/2017]

NHS Choices. Salt: the facts  
http://www.nhs.uk/Livewell/Goodfood/Pages/salt.aspx [accessed 08/2017]

British Cheese Board. Salt and Cheese  
[accessed 08/2017]

Other factsheets include:

For details on additional information sources  
please contact The Dairy Council

© The Dairy Council 2018

Tel 020 7025 0569  
info@dairycouncil.org.uk

For free copies of The Dairy Council’s  
publications visit www.milk.co.uk

Last reviewed: 01/2018  
Next review due: 01/2019