

### Milk

SJ Christopher 2015

The term milk commonly refers to cow's milk because of its great commercial importance. Milk is an emulsion of fats and water, also containing proteins, sugars and mineral salts. To be more precise, it mainly consists of water (88.75%), fat (3.50%) also called milk fat or butter fat (which determines flavor, energy and nutritive value), milk sugar or lactose (4.75%) and proteins (3.20%). It lacks iron, but contains enzymes, minerals (also called ash) and vitamins, and is generally considered as the most complete food. An adequate daily intake of milk is therefore vitally important, especially for children, but babies should not drink cow's milk before they are a year old.

Milk from healthy cows is delivered to the dairy plant where it is processed and packaged for sale. Processing consists of the following steps:

- 1 It is weighed and tested for quality and milk fat content
- 2 It is cooled
- 3 Next, it is blended or standardized
- 4 It is pasteurized, i.e. most of the spoilage microorganisms are destroyed by heating
- 5 It is cooled again to inhibit the growth of microorganisms not affected by heat
- 6 It is sometimes fortified with Vitamin D or homogenized to create a more stable emulsion
- 7 Finally, the milk is transferred into bottles or cartons, which are sealed and dispatched for sale

Specialized milk products (dairy products) are produced in several ways: cream is obtained by centrifugal separation, while yoghurt and kumiss\* are obtained via fermentation. Another important dairy product is ice cream, a frozen product consisting of cream, sugar and stabilizer, and often enriched with natural or artificial flavoring and coloring. The most important dairy products are butter and cheese.

**Exercise A:** Answer the questions with complete sentences

1. Why does the term "milk" refer to cow's milk?
2. What is the main component of milk?
3. What determines milk's flavor?
4. What is another name for lactose?
5. Does milk contain iron?
6. What is the name of the place where milk is processed?
7. Why is milk pasteurized?
8. Which vitamin is sometimes added to milk?
9. What kind of containers are used to package milk?
10. Which dairy products are mentioned in this article?

\*kumiss – a slightly alcoholic fermented milk drink from Central Asia.

**Exercise B:** Use the words in the box below to fill the blanks in the text.

nutrients	bone	fragile	milk	vitamins	fractures	everyone	women	calcium
osteoporosis	nutritional	calories	mass	adults				

## Food for all the family

Because of its great (1) ..... value, milk is good for (2).....whatever their age or lifestyle. Growing children need (3).....because they require more protein, calcium and other (4) ..... in relation to their size than (5)..... They also need plenty of energy-giving (6)..... to support their active lifestyle. Grown-ups, especially (7) .....need milk for its (8) ..... and minerals, and also for that all-important calcium which is essential for maintaining good (9) ..... structure. If women don't keep up their (10) ..... levels during their 20s and 30s, they can find that after the menopause, the natural reduction in bone (11) ..... may produce a disease called (12) ..... which makes them susceptible to (13)..... In both sexes, a calcium deficiency can mean the development in old age of (14) ..... bones which break easily.