Milk

Summary

- Milk is an excellent source of calcium and other essential nutrients.
- There are many modified milks available.
- Lactose intolerance is caused by an inability to digest the natural sugar in milk, but most people can tolerate small amounts of milk.
- Flavoured milks (reduced fat varieties, for children over two years) are preferable to soft drinks and fruit drinks but should be consumed in small amounts.

Milk is an excellent source of vitamins and minerals, particularly calcium. It has long been recognised for its important role in bone health. Nutritionists recommend that milk and other dairy products such as yoghurt and cheese should be consumed daily as part of a balanced diet.

There is some inaccurate information around in the general community about the negative impacts of milk on health. Changing your milk intake on the basis of these myths may mean you are unnecessarily restricting this highly nutritious drink.

You should never drink raw or unpasteurised milk.

Milk contains many different nutrients

Milk and milk products contain a good balance of protein, fat and carbohydrate and are a very important source of essential nutrients, including:

- calcium
- riboflavin
- phosphorous
- vitamins A, and B12
- potassium
- magnesium
- zinc

Milk products also contain 'high-quality proteins' that are well suited to human needs. For example, having milk with cereal can provide amino acids that may be lacking in the cereal product.

Milk and health conditions

Australians tend to restrict dairy foods when they try to lose weight, believing them to be fattening. Dairy foods contain saturated fats, which have been associated with increased blood cholesterol levels. However, dairy foods like milk, yoghurt and cheese (particularly low-fat products) are not a threat to good health if consumed in moderation as part of a well-balanced nutritious diet.

Some research findings include:

- **Osteoporosis** – if milk and milk products are removed from the diet, it can lead to an inadequate intake of calcium. This is of particular concern for women over the age of 50 and the elderly, who have high calcium

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needs. Calcium deficiency may lead to disorders like osteoporosis (a disease characterised by a loss of bone).

- **Colorectal cancer** – according to the Australian Dietary Guidelines, recent evidence suggests that people who regularly eat more than one serve of dairy products each day (particularly milk) have a reduced risk of developing colon cancer.
- **Blood pressure** – research in the US found that a high intake of fruits and vegetables, combined with low-fat dairy foods, will lower blood pressure more than fruits and vegetables alone.
- **Type 2 diabetes** – a 10-year study of 3,000 overweight adults found that consuming milk and other milk products instead of refined sugars and carbohydrates may protect overweight young adults from developing type 2 diabetes.

**Flavoured milk**

Milk is an important source of nutrients for children. A glass of milk with a small amount of flavouring (such as one level teaspoon of chocolate powder) is a healthier option for children than other sugar-sweetened drinks such as soft drinks, flavoured waters, fruit drinks and cordials.

However, if you choose to give your child flavoured milk, this should be done in moderation.

As children move into adolescence, the time when they need the most calcium, they tend to drink less milk and more sugary soft drinks. As milk is a healthier choice, it is worth encouraging adolescents to drink reduced-fat flavoured milk rather than soft drinks.

Water and plain milk are the best drinks for children and adolescents.

**Milk and tooth decay**

Milk and milk products are thought to protect against tooth decay. Eating cheese and other dairy products:

- reduces oral acidity (which causes decay)
- stimulates saliva flow
- decreases plaque formation
- decreases the incidence of dental caries (tooth decay).

**Types of pasteurised milk**

There are many types of milks on the market, including:

- Full cream – full-cream milk contains around four per cent fat. For children up to the age of two years, full-cream milk is recommended.
- Reduced fat – expect around half as much fat in reduced-fat milk as full cream. Children over the age of two years can drink reduced-fat milk.
- Skim milk – contains a maximum of 0.15 per cent fat. There are some brands of reduced-fat and skim milk that have vitamin A and D added to replace the naturally occurring vitamins that are reduced when the fat is removed.
- Calcium enriched – a 250 ml glass of calcium-enriched milk contains 408–500 mg of calcium.
- Flavoured – these milks can either be full cream or reduced fat. However, most varieties contain added sugar and should be consumed only sometimes.
- UHT (ultra-high temperature-treated) milk – is treated with very high heat to allow milk to be stored for long periods.

**Unpasteurised (raw) milk**

Most milk on the market is pasteurised (heat treated then cooled). While pasteurisation reduces the amount of
some vitamins, such as vitamin C, it also kills bacteria. Unpasteurised or raw milk should never be consumed, as you have an increased risk of gastrointestinal illness from pathogens (bugs, germs, bacteria).

**Milk and mucous**

Many people in Australia believe that nasal stuffiness is related, in part, to how much milk you drink. However, there is no scientific basis to this theory. Milk doesn’t encourage extra mucous production.

**Cow’s milk versus goat’s milk**

Some people switch to goat’s milk because of perceived sensitivities to cow’s milk. If a person has an allergic sensitivity, it is usually due to one or more of the proteins in milk. The proteins in goat’s milk are closely related to those in cow’s milk, so replacing one type of milk with the other usually doesn’t make any difference. Milk allergies are more common in very young children and most tend to grow out of them or build up a tolerance to milk.

**Lactose intolerance**

Lactose is a type of carbohydrate or sugar that naturally occurs in milk from any mammal, including humans. Normally, an enzyme in the small intestine called lactase breaks down lactose so it can be absorbed into the bloodstream. Some people don’t produce enough lactase – undigested lactose is broken up by the bacteria in their large intestine causing gas, bloating, pain and diarrhoea. This condition is called ‘lactose intolerance’.

You can be born lactose intolerant or develop it later in life. If you think you may be lactose intolerant, see your doctor.

Milk and milk products are highly nutritious, so people who suffer from lactose intolerance should not give them up entirely. You can still consume milk in moderate quantities. You can also buy lactose-free milk.

Most people can tolerate the amount of lactose in:
- half a cup of milk
- three quarters of a cup of yoghurt
- three quarters of a cup of unripened cheeses like cottage or ricotta.

**Some dairy foods contain less lactose**

Some dairy foods contain less lactose than others and may be better for people who suffer from lactose intolerance. For example:
- Fermented milk products, including some yoghurts, mature cheeses (like cheddar cheese, fetta and mozzarella) and butter, generally pose no tolerance problems. (However, butter is high in saturated fat and is not recommended for good heart health.)
- Heated milk products, such as evaporated milk, seem to be better tolerated than unheated foods, because the heating process breaks down some of the lactose.

Foods that contain lactose are better tolerated if eaten with other foods or spread out over the day, rather than being eaten in large amounts at once.

**Soy as an alternative**

Soy foods are lactose free and a good substitute for milk or milk products if fortified with calcium. Soy milk, custard, yoghurt and cheese are now widely available in Australia, but check that they are calcium fortified.
Other sources of calcium

Although milk is an excellent source of calcium, it isn’t the only one. Other good sources include:

- cheese, especially hard cheeses
- yoghurt
- calcium-fortified soy products
- calcium fortified rice drinks
- calcium-fortified cereals and orange juice
- fish with edible bones, like canned salmon and sardines
- some nuts (almonds, brazil nuts)
- sesame seeds (and tahini)
- dried fruit (figs, apricots)
- dark green leafy vegetables (Asian greens like bok choy).

Daily calcium requirements

To meet the body’s daily calcium requirement, it is recommended that adults eat between two and a half to four serves of dairy products a day.

One serve is equivalent to:

- 250 ml (one cup) milk – fresh, UHT long-life or reconstituted dried
- 120 ml (1/2 cup) evaporated unsweetened milk
- 200 g (3/4 cup or one small carton) yoghurt
- 40 g (two slices, or a 4x3x2 cm piece) hard cheese (such as cheddar)
- 120 g ricotta cheese
- 250 ml (one cup) soy, rice or other cereal drink with at least 100 mg of added calcium per 100 ml

People who do not eat any dairy products may have difficulty meeting their daily calcium requirements. They will need to pay special attention to other dietary sources of calcium.

Where to get help

- Your doctor
- Gastroenterologist
- Dietitians Association of Australia Tel. 1800 812 942

Things to remember

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