



THE FACTS

How milk is made

- · Milk production begins with the grazing of cows on the Dairy Farm
- · Cows on average are milked twice per day
- The milk is then stored in tanks at 4°C and is transported to the dairy for processing
- During the dairy process, milk is pasteurised, separated, standardised and homogenised before being bottled

Pasteurisation

Pasteurisation involves heat-treating the milk to 72°C for a minimum of 25 seconds to reduce the number of bad bacteria that can make us sick

Separation

Separation is when a large spinning force (centrifugal force) is used to separate the high fat cream of the milk from the liquid portion.

Standardisation

Standardisation is when the liquid milk and high fat cream are re-blended together. The amount of fat blended into the milk varies;

- 4% fat whole milk (blue top)
- 1.5% fat semi-skimmed (green top)
- 0.1% fat skimmed (red top)

Homogenisation

Homogenisation forces the liquid through a hole and subjects it to great pressure, resulting in the larger fat globules being broken down and dispersing evenly within the milk



How nutritional is milk?

A 200 ml glass of semi-skimmed milk is:

High in Protein 15% Daily requirements	contributes to the maintenance of muscle mass and normal bones needed for normal growth and development of bone in children
	contributes to a growth in muscle mass
	contributes to normal blood clotting
High in Calcium 31% Daily requirements	contributes to normal muscle and nerve function
	contributes to the normal function of digestive enzymes
	needed for the maintenance of normal bones and teeth
	needed for normal growth and development of bone in children
Source of Phosphorus 28% Daily requirements	contributes to the maintenance of normal bones and teeth
	contributes to normal release of energy from food
	needed for the normal growth and development of bone in children
Source of Potassium 16% Daily requirements	contributes to normal muscle and nerve functioning
	contributes to the maintenance of normal blood pressure
High in lodine 41% Daily requirements	contributes to normal cognitive and nerve function
	contributes to the maintenance of normal skin
	contributes to the normal production of thyroid hormones and normal thyroid function
	contributes to the normal growth of children
High in Vitamin B2 35% Daily requirements	contributes to normal skin, vision and nerve functioning
	contributes to the protection of cells from oxidative stress
	contributes to maintenance of normal red blood cells and helps reduce tiredness and fatigue
Source of Vitamin B5 23% Daily requirements	contributes to normal mental performance and to reduction of tiredness and fatigue
	contributes to normal synthesis and metabolism of steroid hormones, vitamin D and some neurotransmitters
High in Vitamin B12 76% Daily requirements	contributes to normal neural and psychological function
	contributes to normal production of red blood cells and helps reduce tiredness and fatigue
	contributes to the normal function of the immune system

Milk for Teenagers

During the teenage years calcium demands are higher than in any other stage of life. Bones develop quickly, as they grow in length and density. During these years it is important to consume foods rich in calcium whilst the body completes the deposition of skeletal mass. Around 80% of the skeleton has been completed by the age of 18 years. Having a good diet provides young people with healthy bones for later in adult life. However, the latest National Diet and Nutrition Survey (NDNS) shows that many teenagers fall short of the recommended calcium intake.

Source: The Dairy Council Milk Factsheet (2015)

