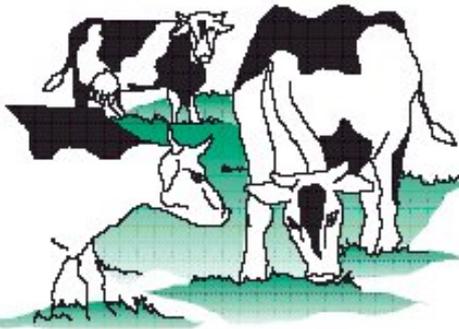


## Primary production of milk

### Cow Milk

Milk production began 6000 years ago, or even earlier. The dairy animals of today have been developed from untamed animals which, over thousands of years, have lived at different altitudes and latitudes, at times exposed to natural and, many times, severe and extreme conditions.

The most widespread milking animal in the world is the cow, which is found on all continents and in nearly all countries.



Milk is the only food of the young mammal during the first period of its life. The substances in milk provide both energy and the building materials necessary for growth. Milk also contains antibodies which protect the young mammal against infection. A calf needs about 1,000 litres ( 264 gallons ) of milk for growth, and that is the quantity which the primitive cow produced for each calf.

There has been an enormous change since man took the cow into his service. Selective breeding has resulted in dairy cows which yield an average of more than 6,000 litres ( 1585 gallons ) of milk per calf, i.e. six times as much as the primitive cow. Some cows can yield 14,000 litres ( 3698 gallons ) or more.

MilkoPet® UHT (Ultra High Tempera-

ture –long life) milk for dogs is 100% natural milk, produced from commercially farmed dairy cows; relaxed in their wide green pastures and cared for in technologically advanced milking environments.

Already containing natural vitamins, minerals, and antibodies, MilkoPet® milk is further enhanced by leading Veterinary nutrition experts to contain **added vitamins, minerals, Omega 3 and 6 oils, and is lactose free** to enhance digestion, delivering a tasty nutrient rich, fresh milk drink to help improve your pets nutritional balance.

### Secretion of milk The lactation cycle

Secretion of milk in the cow's udder begins shortly before calving, so that the calf can begin to feed almost immediately after birth. The cow then continues to give milk for about 300 days. This period is known as lactation.

The first milk the cow produces after calving is called colostrum. Colostrum contains extremely high concentrations of immunoglobulins, growth factors, anti microbial proteins and carbohydrates that transfer immunity from cow to the calf.

Milk production is somewhat lower during the first lactation period. A cow is normally productive for 3-5 years.

### Milking

A hormone called oxytocin must be released into the cow's bloodstream in order to start the emptying of the udder.

The oxytocin begins to take effect about one minute after preparation has begun and causes the muscle-like cells to compress the alveoli. This generates pressure

in the udder and can be felt with the hand; it is known as the let-down reflex. The pressure forces the milk down into the cows teat cistern, from which it is sucked into the teat cup of a milking machine or pressed out by the fingers during hand milking.

The effect of the let-down reflex gradually fades away as the oxytocin is diluted and decomposed in the bloodstream, disappearing after 5-8 minutes. Milking should therefore be completed within this period of time.

MilkoPets® is produced in a beautiful clean green farming environment which promotes production of high quality milk, and our highly efficient Dairy Industry is our leading rural industry and a significant global competitor. As such huge investment is committed by the industry in leading technology to maintain this strong global market position.

Dairy farmer organisations, dairy companies, and government agencies, including food regulators, work together through research and development, processing standards, quality monitoring and reporting systems at all levels within the industry, to achieve high quality, nutritionally beneficial, tasty, milk products to be enjoyed throughout the world. MilkoPet® UHT milk for dogs brings this quality, balanced nutrition, and superb taste to your dog.



Fig. 1.3 Milking takes 5 – 8 minutes.

MilkoPet® (Milko Nutritional Products P/L ACN 118 015 295)

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