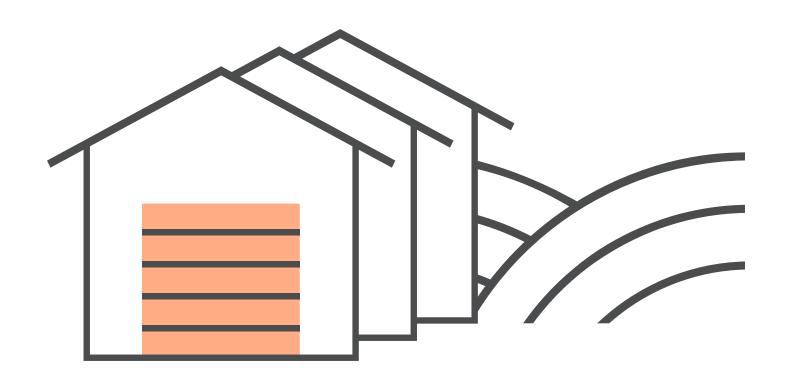
## RESPONSIBLE SOURCING



## Production process

**DAIRY CATTLE** 





## Animal welfare considerations

- Cow-calf separation
- Lack of access to pasture
- Lameness and mastitis prevalence
- Live export of excess heifers
- Practices such as calving induction and tail docking

## **Definitions**

**Calf** – Young cattle with no permanent incisor teeth, either male or female.

Steer - Castrated male cattle.

Heifer – Female cattle who have not yet produced a calf and under 42 months of age.

**Bull** – Mature male cattle with intact sexual organs and capable of reproduction.

Cow – Mature female cattle with eight permanent incisor teeth used for breeding.



Cows are curious, playful and intelligent animals. Descended from Aurochs and the most common type of ungulate, they have been domesticated for over 10,000 years. Most domesticated breeds have horns, although breeding strategies have allowed for more 'polled' (hornless) cows. A cow's natural lifespan can be up to 20 years, however in commercial dairy production a cow will likely only live up to 8 years for producing milk.

Dairy cows who are part of a milking herd, are generally raised by the dairy farmer and born on the same farm (see dairy calves production process for information from birth till calving of replacement heifers).

When a replacement heifer gives birth to her first calf (calves) she will join the milking herd which is already established on the farm. Standard industry practice is to remove calves shortly after birth. This is done to reduce the risk of disease transmission to the calf (e.g. Bovine Johne's Disease, a bacterial infection that is transmitted through calf contact with contaminated feces), to ensure adequate colostrum and feed intake, and to simplify disease detection. Separation of the calf from the dam also occurs to facilitate milking and management of the cow. Separation of the new-born calf from the cow is stressful for both cow and calf. The distress associated with separation increases the longer the calf stays with their dam. Separation within 24 hours of birth interferes with the development of the cow-calf bond and thus reduces separation distress. Cows will show a strong response (calling) if their calf is separated at an older age, e.g. 4 days after birth, compared to separation at 1 day or 6 hours after birth.

The first milk that a cow produces is called colostrum. This fluid is produced by the pregnant cow prior to giving birth to her calf in readiness for the calf at first suckling. Calves are born with little to no immunity and colostrum provides the calf with antibodies that protect it from infectious diseases. The farmer will milk the newly calved cow in a shed with the other cows, however her colostrum milk will be carefully collected so this can be fed to the calves on the farm. Cows are milked 1-3 times a day, with most Australian farmers preferring twice daily milkings. Once a cow has had her colostrum milked from her, and been milked a few days. her milk will change to be less rich and once this has happened her milk will be collected for human consumption.

The majority of dairy cows in Australia live in pasture-based systems. They spend their days and nights in grass paddocks and during lactation they are walked to a shed for milking each day. Cows are often milked twice a day and moved to a different paddock after each milking.



The time taken walking for milking depends on the location of the shed, orientation of the farm and which paddock the cows were housed in. Cows are moved to a different paddock after each milking by walking along laneways and walk back along the same laneways when coming in for milking. A farm will be divided up into many smaller paddocks so that the cow's grazing intake can be closely managed and controlled. Temporary fencing may be used to promote more effective grazing within a 'cell' and improved pasture recovery/growth once cows have been moved onto another paddock. Often cows are also provided with additional feed known as PMR (partial mixed ration), or TMR (total mixed ration), depending on their feed requirements. This feed is generally given either in shed when milking, or on a separate feed pad (concreted area with troughs).

While indoor housing is not common in Australia, these systems do exist. In year-round indoor housing, hundreds of cows are kept in large sheds, with access to individual stalls to lie down. In this type of housing, slurry (excrement) is collected in lanes between the stalls. Other housing systems may allow cows free access to lie down where they choose, however the slurry (faecal matter) collection is not as sophisticated in these sheds. Cows in indoor systems have no access to pasture for grazing.

Australian dairy cows generally have lower levels of mastitis and lameness than those in the US and UK, however cows require careful management using reduction and prevention strategies to reduce levels further.

In Australia, there are industry-wide commitments to end tail docking and the routine induction of calving in dairy cows, due to the clear negative impact on animal welfare. Within these commitments are also targets to ensure all calves are disbudded with pain relief before two months of age. However, further work needs to be done to reduce the presence of horns in dairy cattle and therefore reduce the need to disbud, through breeding strategies using naturally polled breeds.

Dairy cows come on heat (ovulate) around 2-3 months post calving depending on their age and breed. A farmer may artificially inseminate the cow when she's in heat so that they have better control over the characteristics of the progeny i.e. sex selection, breed traits. Or the farmer may select a bull to go into the herd and naturally mate with any cows who are on heat.

Dairy farmers in Australia utilise a range of different calving patterns; seasonal, batch and year-round. The calving pattern chosen often reflects the local climatic conditions and milk demand for the location of the dairy farm. Farms that use a seasonal calving pattern often supply manufacturing markets and match their calving pattern to the grass growing seasons so there is good availability of grass during the cow's lactation. These farms will calve once a year. Farms that use batch or year-round calving patterns often supply the fresh milk markets, which require a constant supply of milk throughout the year. These farms will calve twice a year or continuously.

At a certain point in a cow's lactation period her production of milk will begin to decrease until she is not producing as much milk as when her lactation period was at its peak. If she is pregnant and going to calve again to start another lactation period, the farmer will 'dry-off' the cow so that she has a dry period for around 2 months before calving. Drying off involves a change in feeding strategies (often a severe drop in total feed) and administering of antibiotic dry cow treatments. Treatments are administered directly up the opening of the teat, with teat sealant used afterwards to stop any bacteria entering the teat.

Dairy cows are culled for several reasons, the most common being prevalence of diseases that are deemed not commercially viable to treat. Other reasons include reproductive performance, milk yield, and other factors related to farm management. Dairy cows will often be transported to an abattoir for slaughter, sometimes via a saleyard, and their carcase, if fit for human consumption, may be processed into mince or, alternatively, the carcase is rendered and products used, for example, in pet food or fertiliser.

For more information visit the RSPCA's Knowledgebase kb.rspca.org.au