DAIRY COWS

BACKGROUND
There are over 240 million cows used to produce milk in the world, including over 24 million in the EU27, nine million in the USA and around two million in the UK. Commercial milk production is increasing rapidly in southern Asia, including in countries that have not traditionally consumed milk, such as China. Developed countries typically use cows from specialised milking breeds. The Holstein-Friesian type is the dominant breed in the USA, UK and much of Europe.

INTENSIVE MILK PRODUCTION
The use of high-yielding breeds such as Holstein-Friesians has resulted in dramatic increases in milk production in recent decades. Whereas a suckler cow would naturally produce around 4 litres of milk per day, a dairy cow will produce around 22 litres per day for a period of 10 months. In order to continue to produce milk, dairy cows must calve yearly and will typically become pregnant again three months after calving. Male dairy calves do not have market value as a beef breed and so, as a result, will either be shot shortly after birth or reared for veal. Some producers will use dairy-beef crosses to enable the rearing and sale of bulls for beef. Dairy cows typically live to their third lactation before being culled. Naturally, a cow can live for 20 years.

WELFARE ISSUES
The intensification of dairy farming and the increased use of high-yielding breeds over recent decades have led to an increasing number of welfare problems:

Lameness
Lameness is thought to affect 20% of all dairy cows at any one time. Lameness causes serious pain and discomfort and may reduce a cow's behavioural repertoire. Solid concrete flooring, high milk yield and zero-grazing systems with inappropriate diet and lack of exercise may all contribute to lameness.

Udder Health
Mastitis is a painful inflammation of the udder, often caused by bacterial infection, although selection for high-yielding breeds and increased indoor housing are also linked to its occurrence. In severe instances, mastitis can result in death. Mastitis is a significant disease of UK dairy herds and in the last 20 years there has been little progress in reducing its prevalence. High milk yields can also cause painful udder distension. Swollen udders may affect a cow's gait resulting in uneven pressure on the hind feet and possible lameness.

Metabolic diseases
High milk yields place enormous energy demands on the cow, leading to negative energy balance and diseases such as ketosis and milk fever, which may result in neurological dysfunction, an inability to stand and in severe cases, coma. It has been recommended that calving interval should be extended from 12 to 15 or 18 months to enable the cow to recover condition.
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Diet
Cows are ruminants and their digestive system is adapted for a high-fibre low-energy diet. High yielding cows are fed a high-energy concentrate-based diet with relatively little fibrous food in an attempt to meet their nutrient requirements to sustain high levels of production. This type of diet is inappropriate for a ruminant animal’s digestive system and often leads to acidity of the rumen and laminitis, a painful inflammation of the hoof which can lead to lameness. Severe acidosis is usually fatal.

Infertility
Infertility is becoming an increasing problem in high-yielding cows and is known to be linked to stress and loss of body condition because the cow is unable to keep up with the metabolic demands of milk production by enough intake of nutrition.

Housing
Many cubicle systems were designed some time ago and are too small for the current size of dairy cow, which can lead to injury or discomfort. The use of lying mats rather than deep bedding can reduce lying time which impacts upon other health parameters. Cows kept indoors have reduced opportunity for natural behaviour and exercise and have a greater risk of health problems. Their health may be affected by poor ventilation in the shed, leading to an increase in humidity and risks of infection. Housing cows for longer can also increase the prevalence of mastitis and lameness. Some cows may be tethered indoors.

Separation of cow and calf
In commercial dairy farming, generally calves are permanently removed from their mother shortly after birth. This causes severe distress to both cow and calf and has been shown to have long-term effects on the physical and social development of the calves. In the UK, male dairy calves may be exported to continental Europe to be reared for veal, when they are still too young to cope with the stresses of handling and transport. The export of calves is largely due to the over-specialisation of dairy breeds for high milk yield, which means that the dairy bull calves are not very valuable for beef production.

Zero-grazing
Traditionally dairy cows would obtain most of their food during the summer grass-growing season from grazing on pasture and be kept inside only during the winter, when they would be fed mainly on conserved forage (hay or silage). Increasingly, dairy cows are being kept indoors for longer, or even all year round in ‘zero-grazing’ systems. Zero-grazing is common in North America but is also increasing in the UK, especially for large and high-yielding herds. Zero-grazing systems do not meet cows’ behavioural needs and have been shown to increase the risk of certain health problems.

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HORMONE USE
In the USA, the growth hormone bST is injected into cows to increase their milk yield still further; bST is illegal in the EU on animal welfare grounds. Hormone treatment may also be used to bring infertile cows into oestrus. This poses a welfare threat by preventing cows from delaying a pregnancy they are not ready for; delaying oestrus is a natural mechanism for coping with loss of body condition.

TRANSPORT
When cull cows are sold for slaughter for low grade meat production, they are often transported a long distance because relatively few slaughterhouses will accept cull cows. Transport is stressful to cows and transport times should be limited.

HIGHER WELFARE ALTERNATIVES
Dairy cows can have a longer productive life and a better quality life in well-managed, less intensive farms based on grazing at pasture when the weather allows, with well-ventilated straw-bedded housing when needed. Dairy cows bred and managed for lower milk yields are likely to be healthier and their calves can be more suitable for rearing for meat.

Freedom Foods standards require that cows are housed with sufficient space to lie in a natural position and be able to stretch their limbs and groom. Tethering is prohibited.

Organic dairy standards (Soil Association) ensure cows are able to graze, limiting concentrated feed to 40%, use lower yielding breeds and prohibit the sale of calves to low-welfare veal systems.

RECOMMENDATIONS
You can help to improve the welfare of dairy cows and their calves in a number of ways:

✓ Join Compassion in World Farming’s campaigns or donate to our work at ciwf.org
✓ Download Compassion’s guide to Good Food Shopping at ciwf.org.uk/supermarkets
✓ Contact your local grocery shop and the retail chains and ask them not to stock any milk from zero-grazing farms. Ask them to stock more organic-certified milk, as the cows will have had access to pasture and are likely to have better health and welfare.
✓ In the UK, ask your retailer whether their milk comes from farms that sell calves for export for veal production. Several retailers have already taken action to ensure their suppliers find a market for their calves in the UK; Soil Association™ organic standards forbid calves to be sold for live export.
✓ Only buy organic-certified milk, or try a dairy-free alternative such as soya milk, rice milk or oat milk.
✓ You can find out more about the welfare standards of the major UK food retailers from our Supermarket Survey at ciwf.org.uk/publications/consumers
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SOURCES AND FURTHER READING


