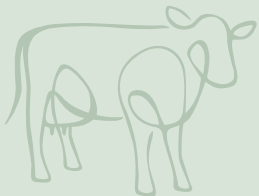




Best practice farms have confident cows who express a range of positive natural behaviours by providing an enriched indoor & outdoor environment with kind, animal-centred human-animal interactions.



Why is this important?

Attentive care and positive interactions with humans enhance welfare, production performance and favour safe and easy handling. Environmental enrichments (social, nutritional, occupational, sensory and physical) promote cognitive and behavioural health in cows. This supports stress resilience and facilitates long-term adaptation to changing farm conditions, transport, and to life in a herd.



Good practice

- ✓ Cows should have the opportunity to graze outdoors, where weather conditions permit, to encourage natural behaviours. This will enhance opportunities for stimulation and exercise whilst reducing competition and frustration and improve herd synchronicity.
- ✓ Cows should have access to diets that fulfil their nutritional requirements with sufficient forage to encourage rumination, and also satisfy their behavioural needs.
- ✓ To prevent both over and under eating by individual animals it is important that feeding stations are designed to allow all cows to eat roughage at the same time with minimal competition, and must ensure that individual animals have the time and opportunity to consume their daily ration without compromising their time budget (i.e. decreasing lying or resting time).

See the  **Cow Nutrition factsheet** for more information



Best practice

- ★ **Best practice** farms allow cows to have daily access to pasture, except in extreme weather. The time spent on pasture should be determined by the weather, daylight hours available and ideally individual preference by the cows, i.e. a choice based system. If pasture is part of the diet, this should also be taken into account when evaluating nutrition.
- ★ **Best practice** farms use food to enrich the cows' environment, including a variety of food types perceived to be more enjoyable and rewarding by the animals. This can be presented in a number of different ways to encourage exploration, exercise and mental challenge.

See the  **Cow Nutrition factsheet** for more information





Good practice


- ✓ Where tethering is currently unavoidable it is important that the tether is long enough to allow the cows to lie down and rise comfortably, and facilitate observation and handling. The cows should be given regular access to a loafing area or pasture to reduce the impact on restriction of movement, resting and social behaviour.
- ✓ Cow accommodation, indoors or outside, should support positive social interactions whilst giving adequate space for subordinate individuals to keep a distance from more dominant ones e.g. by providing visual barriers.
- ✓ Loose housing systems, or outdoor environments, should consider factors such as the age, size and temperament of animals kept together to minimise stress (from aggression, competition, undernutrition). Additional space allows animals to group naturally and where this is not feasible, divisions can be used to group similar animals together, making observation and oestrus detection easier.
- ✓ Provide adequate handling equipment appropriate for the category and numbers of animals in the herd and training for that equipment. This ensures low stress handling can be implemented and the human-animal bond protected.

See the  **Cow Environment factsheet** for more information



Best practice

- ★ **Best practice** farms provide their cows with daily access to well-managed pasture (i.e. well-drained, provision of shelter and/or shade) except in extreme weather. This offers the opportunity to walk, run, play on varying surfaces, providing exercise, improved muscle and foot condition as well as mental wellbeing. When permanently accommodated outdoors, sufficient shelter and comfortable lying areas should be provided.

See the  **Cow Environment factsheet** for more information



Good practice


- ✓ Cows should be given both opportunity and encouragement to exercise (walking and moving freely) to maintain bone, joint and muscle health. Access to well managed pasture can help to reduce problems with legs, feet and claws.
- ✓ Cows experiencing the effects of disease, pain or stress are less likely to conceive, carry a healthy pregnancy to term, calve naturally or provide adequate care for their calves. To optimise reproductive performance any underlying health problems must be addressed first. This will include conditions relating to the reproductive tract (such as vaginal discharges) but also other body systems (such as lameness).

See the  **factsheets on Cow Metabolic and Nutritional disease, Cow Reproductive, Cow Infectious Disease, Cow Locomotion and Cow Udder Management** for more information



Best practice

- ★ **Best practice** farms include behaviour and other non-health related welfare issues in the herd health and welfare plan.

See the  **factsheets on Cow Metabolic and Nutritional disease, Cow Reproductive, Cow Infectious Disease, Cow Locomotion and Cow Udder Management** for more information



Good practice

- ✓ Keep group composition of dairy cows as stable as possible, to avoid aggression and unnecessary stress in the herd which compromises production, health and welfare.
- ✓ Minimise the negative effects of changes to group composition, environment, diet and use of interventions (vaccinations, examinations etc.) through encouraging positive behaviours (play, exploration and social interactions), providing social support of other cows, and food or other enrichments at times of expected stress.
- ✓ Group composition should be kept as stable as possible, to minimise the risk of conflict and resource guarding. If this is unavoidable, new cows should be introduced to the stable group in an open, spacious environment, preferably outdoors. This will help reduce tension and the risk of injuries from fighting or slips and falls where animals are startled or attempting to get away.
- ✓ Observe the cow herd to ensure positive behaviours are regularly identified, namely resting and rumination, play, self-grooming and allo-grooming to help gauge the mental wellbeing of the group.
- ✓ Observe the cow herd to identify problematic behaviours and help guide corrective measures. Problematic behaviours include resource guarding, startling or rushing behaviours when approached by humans or when the group is being moved; repetitive behaviours, excessive sucking or biting of fixtures; isolation from the group.
- ✓ Adopt multiple strategies to minimise resource guarding and the effects of competition at feeding stations (e.g. increase feeding frequency, use physical barriers, increase the quantity of feed offered, and make sure there is enough space at feeding stations e.g. >75 cm or one head lock per animal).
- ✓ Cows should be able to move freely (loose-housing systems) indoors or outdoors, and express socially motivated behaviours, such as rubbing, head butting, licking and mounting as part of their natural oestrus behaviours.
- ✓ Cows should be moved at their own pace, preferably without loud noise and force. Tractors or other obstacles should be removed from pathways to avoid injuries or lameness.
- ✓ Cows should have access to an outdoor environment, with proper sheltering and resources, to improve cow welfare and performance. Animals should be handled gently to avoid unnecessary stress during routine management practices (e.g. dosing, restraint for artificial insemination or pregnancy diagnosis) and help reduce development of problematic behaviours (avoidance, flinching or kicking) around calving or during milking.
- ✓ Positive human-animal interactions (such as stroking) should be practised routinely to help minimise fearful responses to handling and improve behaviour in the milking parlour.
- ✓ Avoid negative, stressful interactions between humans and cows such as use of shouting or raised voices at or around the cows; use of hands, feet, sticks, sharp or pointed implements to forcefully move the cows; forceful contact with handling equipment or fittings which might result in bruising or other injuries.
- ✓ Negative interactions can be avoided by ensuring staff are properly trained, facilities and equipment are appropriate for their intended use and well maintained and, that adequate time is allocated for moving animals or any other planned interventions (dosing, foot care, pregnancy testing, scanning etc.).
- ✓ Feeding time provides a good opportunity for encouraging healthy human-animal interactions by using associative learning, where the presence of humans equates to access to favoured food stuffs. For animals raised on pasture, make sure that they are close by and observing you when you offer or add the food stuff to the environment. These interactions must be consistently positive and occur on a regular basis to have a positive cumulative effect.
- ✓ Cows free to express their natural behaviour experience less stress and have a stronger immune system. This reduces their risk of disease with consequent economic benefits for the farmer.





Best practice

- ★ **Best practice** farms provide a choice of foodstuffs that are enjoyable to eat such as mixed herbage pastures or a variety of types and sizes of foods suitable for the stage of lactation of the cow.
- ★ **Best practice** farms provide brushes in all loose-housing systems. The number and positioning of the brushes will be dependent on herd numbers and their environment, both indoors and outside.
- ★ **Best practice** farms provide a variety of enrichments (olfactory, visual, tactile, social) to encourage a range of healthy behaviours which promote good health and welfare of the herd.
- ★ **Best practice** farms maintain and replenish enrichments to add complexity and novelty to the environment and encourage continued interactions with them by the cows.
- ★ **Best practice** farms offer cows a choice between different environment types (e.g. pasture or outdoor and indoor housing) to improve animal welfare, health and production.
- ★ **Best practice** farms promote positive human-animal relationships by increasing opportunities of positive interactions between farm personnel and cows e.g. calm and gentle handling, touching, petting, quietly talking or using associative learning with rewards (i.e. food or strokes). Staff on best practice farms should receive ongoing training in the importance of positive human-animal interactions.
- ★ **Best practice** farms plan for and prepare cows to help them cope with stressful procedures such as foot care or medical interventions, through gentle interactions, familiarisation with the environment and equipment, and positive reinforcement training.
- ★ **Best practice** farms document behavioural management protocols, developed with assistance from relevant farming and veterinary advisors. These protocols might include environmental enrichment, positive human-animal interactions, optimising rest and rumination, minimising negative behaviours (both group and individual).
- ★ **Best practice** farms actively evaluate how precision livestock farming (PLF) for behaviour monitoring (e.g. sensors, bolus, image or sound based) can help gather data on individual and herd health (health, reproductive data, food intake, rumination time etc.). This data could be useful to guide environmental changes that improve the conditions for the cows all year around, reducing stress and improving health. PLF should be considered an adjunct as opposed to an alternative to well-trained farm personnel.





Summary

By ensuring that the environment contains suitable enrichment, predictability and control by the cows, they can enjoy opportunities for a range of positive, natural behaviours, protection from stress and aversive behaviours from other cows or humans and support good health and welfare as a result.



Farm

Considerate grouping and management of cows within the herd will promote health and welfare, therefore improving performance on farm and reducing potential losses.



Cows

Provision of a positive, enriched environment will help optimise cognitive, social and physical health and welfare. This will enhance resilience and their adaptation to life experiences on the farm and if transported.



Handler

Providing attentive care and regular positive interactions with cows will make working conditions easier, safer, and more efficient in terms of time and technique.

Take pride in all of your farm's good and best practices towards animal welfare!

Additional resources



Care4Dairy.eu