



Photo credit: d3 Impact

SOLUTIONS

Prof. Trevor DeVries and his team of researchers have found solutions to promote resting time and reduce lameness in dairy cattle:

- It's important to consider cow comfort when building or renovating a barn. Ensure that **stalls are long enough and wide enough** for the cow to get up and down without making contact with the stall components. This makes it easier and more comfortable for cows to rest. Stall surfaces should always be soft and dry, with adequate bedding. Refer to nfac.ca/codes-of-practice/dairy-cattle Appendix C for recommended stall measurements.
- Although, the cows may not all rest at the same time, DeVries recommends at **least one stall per cow** be provided. Maintain stocking densities that ensure adequate space and lying spots as rest is essential to cow health and productivity.
- **Multiple feedings per day** with adequate bunk space is better for cows, and DeVries recommends feeding as often as practically possible. Pushing feed up to cows in between feedings ensures there is always feed available. This way cows do not waste time standing waiting for feed, and can devote more time to lying down.

IMPROVING DAIRY COW COMFORT

Foot and leg conditions are one of the largest management issues facing dairy farmers today.

Preventing and reducing foot and leg problems that cause lameness in dairy herds is beneficial for the cows and profitable for the farmer. Comfortable cows make more trips to the feed bunk, rest more, and visit a milking robot more frequently, often resulting in improved milk production.

Herd Management Issues

Lameness is any abnormality that alters the way a cow walks, and can be caused by a range of painful foot and leg conditions. It is caused by disease, management or environmental factors. Some common contributors to lameness are poor nutrition, factors that limit the cow's ability to get up and down in a stall, high stocking densities or other circumstances that force the cow to spend too much time on her feet.

Background

Prior to robotic innovation, cows were milked on a set schedule two to three times a day in their tie-stall or in a milking parlour. Today, automated milking systems (AMS) and free-stall barns are becoming increasingly common on Ontario dairy farms. With an AMS system, cows can choose when they want to be milked by a robot that operates 24/7. This system enables cows to be housed in a free-stall or bedded-pack barn, where they have the ability to move freely and visit the milking robot.

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