

When to start calves on automated milk feeders

Timing needs to balance labour with disease risk

By Mya Kidson

As the dairy industry continues evolving, farms are increasingly using group pens with automated milk feeders (AMF) to house dairy calves.

Previous research from the Ontario Veterinary College revealed the age at which calves were introduced to AMF varied widely.

To reduce labour requirements for farm personnel, some dairy farmers prefer to introduce their calves to AMF as soon as possible. Others feel that calves do better when fed individually for several days before joining the group.

University of Guelph research by Department of Population Medicine PhD student Catalina Medrano-Galarza and Profs. Derek Haley and Stephen LeBlanc at the Ontario Dairy Research Centre in Elora compared introduction of calves at one or five days of age.

The group's research — the first of its kind — found that introducing calves to AMF within one day after birth could be a viable option in reducing feeding-related labour without compromising a calf's growth.

"The results from this research have helped to answer practical questions for both veterinarians and dairy farm personnel to refine calf feeding practices on the farm," says Medrano-Galarza.

The study showed that calves that were introduced to AMF within 24 hours after birth took about 1.5 days longer to learn to use the AMF independently. On the plus side, it freed up time for farmers not having to feed calves by hand.

Introducing calves to automated milk feeders at a younger age



U of G researchers found that introducing calves to group pens with automated milk feeders, one day after birth in contrast to five days, was a viable option to reduce labour associated with feeding.

Calves introduced to automated milk feeders one day after birth took longer to learn how to use the automated milk feeders but their growth wasn't affected.



This frees up time for farmers to be able to tend to other tasks on the farm, but the risk of illness being more severe if it occurs requires careful monitoring.

Further research needs to be done to analyze the health risks and labour associated with treating sick calves.



Despite slightly lower milk intake in the first few days in the early group, the research showed excellent average daily gain to 60 days old, with no difference between those introduced earlier or later to AMF.

There was no difference in the overall risk of disease between the two groups, although if calves introduced early had diarrhea, the condition was more severe. That risk needs to be explored in future studies with more calves across numerous farms.

The team concluded that introduction to group housing with AMF as early as the first day after birth

can be a viable option to reduce labour requirements related to milk feeding tasks without affecting calf growth. However, the health risks and the labour for treating sick calves require more investigation before this practice can be recommended.

This research was conducted at the **Ontario Dairy Research Centre**, one of 15 Research Stations owned by the Agricultural Research Institute of Ontario and managed by the University of Guelph through the **Ontario Agri-Food Innovation Alliance**, a collaboration between the Ontario Government and the University of Guelph. This research was supported by **Dairy Farmers of Canada** and **Ontario Ministry of Agriculture, Food and Rural Affairs**.

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