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 how to use the AMF independently. On the plus side, it freed up time for farmers not having to feed calves by hand.

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 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.