What does success look like in calf rearing? Perspectives of dairy farmers

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Calf rearing practices vary greatly across farms, including feeding and weaning methods. This variation occurs despite research-based evidence showing the benefits associated with feeding calves higher milk allowances and weaning gradually. Survey-based studies can tell us ‘what’ calf feeding and management practices are occurring on farm, but to better understand ‘why’ farmers do what they do when rearing calves, we need to hear directly from the decision makers – the farmers themselves.

A growing body of research is now focused on directly hearing from farmers, via interviews, focus groups and other methods, seeking to better understand their attitudes, motivations, and perceptions. However, until recently no work has focused on farmer views regarding their calf milk feeding and weaning practices. A recent study from The University of British Columbia Animal Welfare Program has begun to close this gap, describing how dairy farmers view success in calf rearing, with a special focus on the time around weaning.

Elizabeth Russell, a MSc. student at UBC, interviewed farm owners, managers, and others responsible for the care of calves. A total of 18 individuals (10 men and 8 women) were interviewed from 16 different dairy farms in British Columbia, Manitoba, and Alberta. These participants answered a series of questions on the practices they use, what they view as being challenging and successful practices, how they define successful weaning, and their view of the future of calf and heifer rearing.

Interviews were recorded, and these recordings were then transcribed and anonymized. Transcripts were then subjected to qualitative analysis from which Elizabeth identified four main themes: (1) reliance on calf-based indicators, (2) management and personal experiences; (3) environmental influences; and (4) integration of external farm support. Each of these themes is described in more detail below.

Farmers relied heavily on calf-based indicators, including behaviour, growth, and health to describe weaning and rearing success. For example, participants highlighted aspect of the calves’ feeding behaviour (e.g., their ability to consume high quantities of solid feed) and social behaviour (e.g., seeing calves play) as important indicators of rearing success. Maintaining growth through the weaning period and minimizing illness were seen as indicators of how well their calf rearing program was doing, but also as sometimes a challenge to achieve.

Management practices, including employee management, were regarded as important influences on rearing success. Having designated employees responsible for calf care was considered beneficial, but smaller farms felt that they were limited in their ability to have designated employees for calf care.

Farmers discussed several environmental influences on calf weaning and rearing outcomes, including the effects of facilities and equipment. Space limitations, calf housing system (e.g., individual, group, pair, or nurse cow), and ventilation were perceived as affecting calf rearing
success. However, participants differed in their views regarding which aspects relating to housing systems were advantageous. For example, participants who used group housing viewed it as beneficial to the calf, especially for promoting social behaviours and easing transitions around weaning, but those who housed calves individually emphasized the perceived health benefits and the ease of monitoring feed intake in calves reared individually.

External farm support, from veterinarians, peers, and educational opportunities, was discussed by farmers as influencing calf rearing practices. For example, some participants specifically referred to animal care programs offered through their veterinarian (including programs to monitor success of colostrum feeding practices and calf growth) and felt that these programs helped them to achieve success. Participants also mentioned that access to advice and input from peers, and to educational opportunities (e.g., conferences and industry publications), was important for making decisions regarding calf feeding and weaning methods.

Figure 1. This word cloud shows the most common words used by participants in the interviews. Larger words were mentioned more often. Blue words represent calf-based indicators, black words represent management and personal experiences, purple words represent environmental influences, and words in green represent external farm support.

Elizabeth has now completed her MSc. and is beginning her PhD at UBC. Her aim is to now visit commercial dairies in Western Canada, to directly assess some of the measures of calf rearing success described by the participants of the current study. The hope is to identify the effects of different management and housing practices on these measures, providing farm-based data that would help farmers to decide what practices are likely to work best on their farms.

1 For further information please contact Dan Weary (danweary@mail.ubc.ca), Marina (Nina) von Keyserlingk (nina@mail.ubc.ca), or Elizabeth Russell (Elizr18@mail.ubc.ca). The results described in this article are based on the study.
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