

# **TWO-STAGE WEANING FACT SHEET**

## A Fact Sheet for the Canadian Beef Industry

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Weaning is the process of stopping calves from drinking milk. The Canadian beef industry typically weans its calves at 6-8 months of age [1]. This process has been shown to be stressful for both the calf and the cow. It has been suggested that this stress is due to the separation of the cow and calf, a change in diet, and a change in environment [2].

The Code of Practice for the Care and Handling of Beef Cattle by the National Farm Animal Care Council (NFACC) recommends the following [3]:

- Develop a weaning strategy that minimizes stress
- Consider preconditioning (a method of preparing calves for the feedlot) or prevaccinating calves as part of your weaning strategy
- Consider a low-stress weaning strategy, such as two-stage or fenceline weaning
- Avoid castrating and dehorning at weaning to reduce stress
- Be prepared to wean earlier if pasture resources are limited and cow body condition scores are below target levels

Stress at weaning has been associated with weight loss and increased chance of becoming sick (i.e. bovine respiratory disease). Calves that are transported to a feedlot at weaning have been shown to lose more weight and become sick more often than those calves that stay at home for preconditioning [1].

#### **Traditional Abrupt Weaning**

Traditional abrupt weaning is a method of weaning in which the cow and calf are physically separated. In this method the cow and calf cannot touch, see, or hear each other. Numerous studies have shown that this method of weaning is stressful for both the cow and calf [1, 3].

### **Two-Stage Weaning**

Two-stage weaning is a method of weaning that first prevents the calf from nursing by placing a nose-flap (see Figure 1) on the calf, but allows the calf to remain with the cow. Later (approximately 4-7 days), the nose-flap is removed and the cow-calf pair are physically separated. This method allows the calf to remain with their dam during the beginning of weaning [1,3].

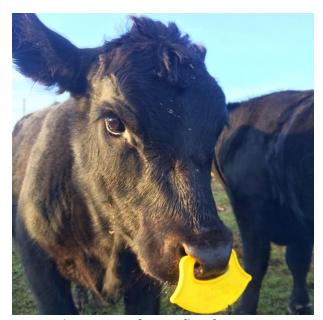


Figure 1: Placement of nose-flap for two-stage weaning.

Research has shown that two-stage weaning causes less stress to the calves. This has been demonstrated by decreased stress-related behaviours (e.g. pacing and vocalizing) and by improved weight gain. Of course, having appropriately nutritionally managed feed available for the calf during this time, and after weaning, will affect its average daily gain [4].

For information about fenceline weaning, please see AFAC's "Fenceline Weaning Fact Sheet".

#### **Keeping Calves at Home**

After separating the cow-calf pair, there are a few options available to the producers.

- 1. Transport the calves immediately
- 2. Keep the calves home for a period of time
- 3. Precondition calves prior to sale

Research has shown that calves transported on the same day as weaning are more stressed and are more likely to become sick or to lose weight at the feedlot, than those calves kept at home [1]. Calves kept at home have also been seen to gain more weight at feedlot, than those immediately transported after weaning [1].

Preconditioning calves prior to sale includes weaning, vaccinating, and starting calves on feed [3]. Although preconditioning your calves for sale benefits the feedlot, it does come with cost for the cow-calf producer. Take into consideration what benefits your operation can receive from preconditioning your calves and weigh that against the costs. Every operation is different and what works for preconditioning in one, may not be beneficial to another.

#### Acknowledgement

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#### **References:**

- 1. National Farm Animal Care Council (NFACC). Code of Practice for the Care and Handling of Beef Cattle: Review of Scientific Research on Priority Issues. 2013 [August 14, 2014]. Available from: <a href="http://www.nfacc.ca">http://www.nfacc.ca</a>.
- 2. Weary DM, Jasper J, Hötzel MJ. Understanding weaning distress. Appl Anim Behav Sci. 2008;110(1-2):24-41.
- 3. National Farm Animal Care Council (NFACC). 2013. Code of practice: for the care and handling of beef cattle. Available at: <a href="http://www.nfacc.ca/pdfs/codes/beef">http://www.nfacc.ca/pdfs/codes/beef</a> code of practice.pdf. Accessed: 08/29/14.
- **4.** Haley DB, Stookey JM, Bailey DW. The effects of weaning beef calves in two stages on behavior and growth rate. J Anim Sci. 2005;83 (9):2205-14.



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