

# Weaning with Less Stress

- **Weaning stress can be managed.**
- **Weaning is less stressful when calves meet three criteria for rumen maturity.**
- **Grain pail management and daily observation for the weaning-ready calves is the key in assessing duration and regularity of grain intake.**
- **We often underestimate the volume of calf starter grain needed to adequately meet a calf's needs for both maintenance and to continue to grow 1.7 to 2 lbs./day.**

Moving from a milk/milk replacer ration to solid feeds is weaning. That is how we transition calves from simple stomach (monogastric) animals to ruminants (multiple stomachs).

As calf care persons our goal is to make this transition as smoothly and low stress as we can. If we fail to reach this goal our calves may suffer from an abrupt drop in rate of gain. Even worse, poorly managed weaning may set calves up for sicknesses like diarrhea and pneumonia.

## Three criteria

The key question to ask when weaning is, “Is the calf ready to meet her needs for protein and energy as a ruminant?” This usually means she meets these criteria:

- She has been eating at least 1/10<sup>th</sup> pound (50gm) of calf starter grain per day for at least 3 weeks.
- She has been eating calf starter regularly from day-to-day.
- She is eating enough volume of grain to sustain her needs for both energy and protein for her body size and environmental conditions.

These criteria are based on what we believe we know about the processes of rumen development in young dairy calves.

## Grain pail management

How do we decide if our calves meet the two criteria of duration and regularity of consumption? Watch them! Regular observation will provide this information. For some calf operations, however, this not an easy task. Why? Because calf grain pails are loaded up with much more grain than a calf will eat in one day. There is no way to assess volume and regularity of consumption.

If grain consumption is currently not observed regularly, rather than load up grain pails with enough grain for a week or more, revise the grain feeding routine. If daily grain feeding is not practical try feeding less per feeding at least 2 or 3 times a week (for example, M,W & F).

So, you say, what else can we do? When raising my own calves I always emphasized “feeding-to-appetite” especially for the calves that were “weaning-ready.” That feeding method let me see the volume these key calves were eating regularly from day-to-day. If you are “loading up” all

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your grain pails remember that you are losing important information about the development of your calves.

How do we decide if the calves are eating enough grain to meet their needs for maintenance and to continue to grow 1.7 to 2 pounds a day? We have some rough guidelines to suggest some standards based on body size and environmental conditions.

### **How much grain is needed to support continued growth without milk?**

On one hand, if your calf rearing program has been only modestly successful you may be weaning large breed calves at body weights of 145 to 155 pounds. No matter how favorable the weather conditions these calves will need to be regularly eating five pounds of calf grower grain (16% crude protein) daily to approach a growth goal above 1.7 pounds a day. When the weather drops below freezing we need to add another pound of grain per day to maintain growth.

Thus, this rule, “When they are eating 2 pounds of grain a day they are ready to wean,” seems unduly optimistic. **Two pounds a day intake of grower grain will not even meet maintenance needs; heifers on this limited amount of grain will lose weight.**

On the other hand, if your calf rearing program has been very successful you probably are weaning at body weights around 180 pounds or higher. At 5 pounds of grain per day only under favorable weather conditions (at least 60 degrees F) should we expect these heifers to continue gaining around 1.7 – 1.8 pounds per day. When the weather is consistently below freezing these big heifers will need in the neighborhood of 7 pounds of grower grain for maintenance and to grow between 1.8 to 2 pounds a day.

Adding hay to the ration once they are acclimated to this roughage will cut the need for concentrate feeding. One pound of good quality hay (19% c.p.) will substitute for roughly one pound of grain. Among these young heifers, however, rumen capacity is limited. It is inappropriate to depend on the eating enough hay to replace all of the grain.

Bottom line: Do not underestimate the nutrient needs of these young rapidly-growing heifers as they are being weaned. They need lots of energy and protein. A highly-palatable grower grain mix will keep them healthy and growing rapidly while they are transitioned into a grain/hay ration.

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