



# Dairy Details

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## Don't Let Your Calves Fall into a "Transition Slump" Part 1

Although we don't typically think of a week-old baby calf as a "ruminant" quite yet, we should be thinking about how we can get her to "ruminant" status during a calf's first week of life already. This will help us avoid "Transition Slumps" in the weeks following weaning.

The process of rumen development takes about a month to get a calf to the point where they can digest nutrients from non-milk feeds. It's critical that calves have adequate rumen development by the time they are weaning age, otherwise they will not be able to digest the grain that they are expected to eat. If they can't properly digest their new diet, they are in for a rough transition. During these "transition slumps" we see stagnant growth rates and health challenges because of the lack of nutrition.

A lot of changes happen during this process including development of bacterial populations, increase in the size and musculature of the rumen, and development of papillae (which are important in absorption of nutrients). The pictures below show a well-developed rumen from a weaning age calf with lots of papillae development on the right and a poorly developed rumen with very smooth walls and no papillae development on the right. In order for these changes to start occurring, calves need to consume starter grain. Starch from grain encourages bacteria growth. These bacteria produce special enzymes that the rumen wall uses for energy and growth. If we want all these changes to happen by the time a calf is weaning age, we need to introduce starter ASAP in life and manage starter to encourage optimum intakes.



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## Encourage Starter "Discovery" ASAP

Since baby calves consume very tiny amounts of starter in the first 2 weeks of life, many don't even bother to offer starter at this age because they see it as "wasting feed". But calves need these first few weeks of life to discover and learn what starter actually is. This will set them up to be eating larger amounts of starter earlier to help speed up rumen development. Here are some tips for encourage discovery of starter:

- Offer 0.25 pounds of starter during the first 2 weeks of life.
- Keep starter fresh, don't put new starter over old, stale starter. Dump these calves' buckets frequently. You can feed it to your older calves so that you are not wasting it.
- If your bucket holders have ledges, sprinkle a little bit of starter on the ledge so that it is easier for the calf to find.
- Consider putting shallow dog dishes in your buckets (see picture). This will make it easier for calves to find the starter and it will force you to give them fresh feed more often. Calves also seem to like to be able to reach of the bottom of their starter buckets.
- If possible, offer water year-round. Water intakes increase starter intakes and further help rumen development. Also, if calves are already use to drinking water from a bucket, it's is one less thing they have to learn to do when they are weaned.



## Have a Weaning Plan & Standards

As I'm sure you know, weaning is one of the most stressful times in a calf's life. We want to have a plan in place that will decrease this stress as much as possible. We also only want to wean calves are we know are ready and will have transition success. Below are some tips to help you avoid any "transition slumps" at the weaning time:

- Use step down weaning programs rather than "cold turkey" weaning programs. If calves are fed milk twice a day, feed them milk once a day for a week, then no milk for another week. Keeping them in the hutch/pen with no milk for a week separates the weaning stress from moving to a new home stress.
- Make sure calves are eating a minimum of 2 pounds of starter per day for 3 consecutive days before weaning.
- Keep other events, such as vaccinating, separate from weaning. Try to do it a week before weaning.
- Have a coccidia control strategy. Coccidia is a parasite that can causes diarrhea in recently weaned calves who may be stressed and energy deficient. Maybe try adding Corid to calves' water the week before they are weaned to try and prevent coccidiosis post weaning.

Next month we'll discuss more management strategies to help calves better cope with the months that follow weaning.

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