

Balancers bring consistency when feeding calves whole milk

Many dairies and calf ranches report show-stopping results for growth and health when feeding calves whole milk. In fact, nearly half of all dairy calves raised in the U.S. are fed a ration containing whole milk during at least part of the preweaning stage.

However, feeding calves whole milk that consistently meets their sensitive and specific needs can be a challenge. Some reasons for inconsistencies when feeding calves whole milk may include:

- **Fluctuation in milk quality:** First-milking colostrum averages about 24-28 percent milk solids, compared to about 12.5 percent milk solids for standard whole milk. Transition milk will fall somewhere in between, but it is still higher in milk solids than standard whole milk.
- **Cow health:** Whole milk sourced from cows whose milk cannot be sold to consumers often has an inconsistent nutrient profile. It can result in feeding calves whole milk with lower milk solids than standard whole milk.
- **Farm management practices:** Parlor management or dairy pasteurization procedures could result in flush water added to whole milk.
- **Milk handling:** Whole milk may not be agitated as frequently as salable milk, resulting in inconsistent milk solids distribution.

Dairy calves thrive on consistency. Feeding calves whole milk with highly inconsistent milk solids levels could result in inconsistent calf starter feed intake, growth and performance.

Protein-to-fat ratio is key to proper calf nutrition

We're learning more about calf growth when protein is fed at higher levels than standard whole milk contains. On a dry matter basis, whole milk usually contains about 25 to 28 percent protein and 28 to 30 percent fat.

Elevating the protein level above the fat level in calves' liquid rations results in greater lean tissue development, less fat deposition and more efficient utilization of nutrients. These results help achieve:

- Higher average daily gain
- Lower cost per pound of gain
- Maximized return on investment (ROI)

If fat levels are too high, the result is shorter, fatter calves that do not consume calf starter feed as well. Excess fat in the liquid ration is an important consideration because consumption of dry feed can boost total nutrient intake, aid in rumen development and help calves transition to weaning more successfully.

A good guideline is to maintain a protein to fat ratio higher than one. In other words, the ration should contain more protein than fat. Feeding volume and seasonality will impact the protein and fat ration needed. Consult with your calf nutritionist to evaluate the right level for your calf growth goals.

Supplement calf nutrition with a balancer

[Whole milk balancers](#) are made to effectively regulate consistent milk solid levels and achieve an ideal protein to fat ratio when feeding calves whole milk. Add a balancer to whole milk if the solids content measures below 12 percent. Balancers also can be used to elevate protein levels with a goal of increasing growth performance and feed efficiency.

Whole milk can be deficient in many nutrients, including iron, manganese, copper, iodine, cobalt, selenium, vitamin D and vitamin E. Balancer products also contain supplemental vitamins and trace minerals. Some [balancers](#) contain additional additives, such as coccidiostats to help control coccidiosis and feed-through larvacides for fly control.

How to add a balancer when feeding dairy calves

Balancers can be added to pasteurized whole milk, usually with supplemental water.

Choosing the proper level of balancer supplementation requires measuring whole milk solids, with a tool like a Brix refractometer, then adding balancer powder and water accordingly. Be sure to evaluate solids before pasteurization. Add balancer and water after pasteurization.

Do not exceed 15-16 percent total solids to protect digestive health in calves, unless abundant fresh water is always available.

Your nutritionist, veterinarian or feed supplier can help create an easy-to-follow chart for calf feeders to determine the correct amount of supplemental balancer and water to use based on solids evaluation and your calf nutrition goals. Many feed suppliers even have an app that works on a smartphone or tablet to help with these calculations.

By consistently feeding calves the correct level of solids and boosting protein content above fat levels, your future herd replacements stand an excellent chance to deliver a commanding performance. They are more likely to enter the milking string as a uniform group, at an efficient age and be poised for outstanding production in the milking parlor.