

CALVING EASE

October 2006

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FEED WATER

Benefits of feeding water to preweaned calves

What would you do if you heard of a feeding practice that would improve your rate of gain by sixty percent? In addition, there would be little cost for the feed ingredients? Most of us would be very skeptical of this claim. What is this? Another advertisement for "foo-foo dust?"

No, this practice is feeding water to preweaned calves. Research says to expect an average increase in rate of gain during the first 4 weeks of life of 60 percent compared to calves receiving no water. Part of this increase is due to a 45 percent increase in the volume of calf starter grain consumed. Click [HERE](#) to see daily live weight gains for both regular and intensive fed calves with and without free-choice water.

Improved calf health is another benefit of feeding water. This is probably primarily a by-product of better nutrition. As calves have more nutrients to support their immune system, they are more likely to effectively fight off infections.

Get the most out of your water-feeding program

Change the water frequently. A study used three different water management programs: changed daily, changed weekly, changed every other week. When water was changed daily, average daily gain improved 5 percent compared to weekly changing and 11 percent compared to every other week changing. In addition, calves whose water was changed every other week required 40 percent more electrolyte treatments than those calves receiving fresh water either daily or weekly.

Separate water and grain pails. A study used two different placements of water and grain pails: separated or next to each other with no divider. Calves with separated water and grain pails had a 32 percent increase in water intake, 13 percent increase in grain intake resulting in an 18 percent increase in daily gain (pounds) when compared to calves with the pails next to each other.

One option if you have holders that place the pails next to each other is to insert a vertical panel between them. With hutches, it is possible to feed all the liquids outside and the calf

starter grain inside the hutch. Some producers have replaced their double bucket holders with two individual ones - then they can be placed separately.

Feed warm water during cold weather. Why? First, the biology of the calf digestive system does not change between summer and winter. She needs water regardless of the environmental temperature. True, she will drink less water in cold compared to hot weather but still some water. Her growth rate and health will benefit during all seasons.

Two, when the outside temperature drops to the point a calf is burning energy to maintain her core body temperature, feeding warm water reduces the amount of energy she has to divert from growth to maintenance. For newborn calves, this critical temperature is about 60 degrees. One-month-old calves begin diverting energy to maintenance at a much lower temperature - about 40 degrees. Thus, rather than sacrifice the growth potential among our young calves during cold weather by feeding cold water, it makes sense to feed them water close to their body temperature - 102 degrees.

Two freezing-weather strategies for feeding water are used widely among calf raisers. The first strategy is feeding an amount close to predicted consumption. This means there is less water to dump or freeze. It is not too difficult to estimate water intake. Calves less than two weeks old drink much less water than during the next two weeks. Calves increasing their calf starter grain intake will also increase their water consumption. In fact, 60 percent of variation in water consumption can be explained by the amount of starter eaten. Therefore, by exercising some judgment, calves can be fed water at amounts close to their desire to drink it.

Secondly, feed water, let calves drink and then, before any remaining water freezes, dump it. Some producers feed water, feed grain and then return to dump any leftover water. Other calf raisers feed water before the middle of the day. After lunch break, they go through the pens or hutches and dump remaining water.

In either case, it is important to set up a regular routine and stick to it. In my experience, once calves become accustomed to the water feeding routine they will drink what they want before it is time to dump it. Consistency is essential in order to maintain good water intake.

Points to remember:

- Improve calf starter grain intake by feeding water
- Improve gains and health by feeding water
- Change water frequently
- Separate water and calf starter grain buckets
- Feed warm water

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