

More Energy is Better: Ways to get more energy into calves in cold weather

Energy needs in all calves go up in cold weather. Newborn calves especially need extra energy in the winter. How can we feed them after the first day to meet these requirements?

Feed something with more energy than milk replacer.

If good quality colostrum is available, feed it.

Sometimes we actually have extra good quality colostrum. When combined with one-third warm water it makes an excellent calf ration. At about 17 percent dry matter this mix provides plenty of energy and protein for early growth. Of course, feed conversion to growth is best when free choice water is available.

If lower quality colostrum is available, feed it.

Consider colostrum of lower quality for days the first 5 to 7 days. By lower quality, we mean lower antibody content. Much heifer colostrum is like this and makes a good high-energy meal for very young calves. When combined with one-third warm water it is very digestible and palatable.

Also, consider the colostrum from a cow that gives lots of milk at first milking (for example, more than 5 gallons). This first milk might have a low antibody content and not be very desirable for first feeding for heifer calves. But, it's still great high-energy feed. With nearly 7% fat this less desirable colostrum still has 91% more solids than line milk.

No colostrum? Try saving the second or third milking from fresh animals.

It, too, is high in fat and contains nearly 50% more solids than line milk. Only a small amount of warm water will bring this milk down to about 15-17% dry matter.

Milk from the line or bulk tank – feed it.

Try feeding that the first week in cold conditions. It has about 25 percent more energy than 20-20 milk replacer. If you are milking Holsteins but have some Jersey's in the herd, try milking a couple gallons of Jersey milk into a bucket for the youngest calves. Jersey milk has about **50** percent more energy than does a 20-20 milk replacer.

Won't this milk cause scours?

Worried about scours? Set your mind at ease. Much of the protein in this whole milk is casein. In contrast to the whey protein in milk replacer, casein is coagulated in the abomasum by the enzyme rennin. The resulting curds are dissolved by another enzyme, pepsin slowly releasing nutrients into the small intestine. This slow release helps with normal digestion and, thus, a lower chance of loose feces. Naturally, we recommend having free choice water available for all these calves to promote good health and rapid gains.

Caution

Colostrum and whole milk are ideal places for bacteria to grow. The ideal situation if colostrum or milk is going to be fed is to handle it “udder-to-mouth.” Milk it and feed it right away; that is, within 30 minutes out of the cow. If extra colostrum or transition milk is stored it should be chilled to 60° within 30 minutes after harvesting to prevent rapid bacterial growth. At cow body temperature coliform bacteria in milk double every 20 minutes so rapid chilling is essential to preserve quality. **Colostrum and milk contaminated with bacteria will cause serious scours problems.**

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