

Northwest Veterinary Associates Newsletter

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Cold Weather Calf Care

It seems as though the cold winter weather has finally caught up to us! This makes it an important time for everyone to re-evaluate their calf care protocols. In the cold winter months calves have higher nutrient requirements, especially if housed in hutches or other outdoor housing. Calves are generally comfortable between 50°F and 75°F, known as their thermo-neutral zone. Within this temperature range, calves experience the least amount of heat or cold stress and don't require additional energy to maintain their body temperature. Below this range, calves start using more of their energy to maintain their body temperature, and this limits their ability to build energy reserves or grow.

In an ideal situation, calves are fed a diet that has the energy needed to both resist cold stress and continue growing. When calves are fed just at or below maintenance requirements they are more likely to become sick with exposure to disease and will fall even more behind on weight gain and overall structural growth.

So now you may be asking yourself: "How can I increase energy intake in my calves?"

Options for boosting calorie intake of calves include:

- Increase the amount of liquid milk replacer volume by 25 to 50% (for a calf on 2 quarts twice daily, this would be an extra 1 to 2 pints per feeding).
- Feed an extra 1/2 to 1 bottle in a third feeding in the middle of the day (this is a good option for calves less than 3 weeks of age, which may not be able to handle more than 2 quarts per feeding).
- Feed a milk replacer with a higher fat level (18 to 20% is standard for most calf milk replacers; 22 to 24% is sometimes available as a "winter formula").
- Add a fat supplement product into your milk or milk replacer.

IMPORTANT! Any feeding change should be transitioned slowly over several days in order to allow the digestive system of the young calf to adjust. Remember to keep fresh water available at all times as calves consume considerably more starter feed when water is available. If frozen buckets are a problem, offer lukewarm water to calves at least 2-3 times daily, after milk feedings.

Cold stress can weaken a calf's immune system, making them more susceptible to diseases such as navel infections, calf scours and pneumonia. Scours are especially prevalent during the winter months and cause electrolyte loss and dehydration. Primary treatment should be geared toward restoring the hydration status by feeding oral electrolytes and/or administering subcutaneous fluids at body temperature. This is in addition to continued feeding of the calf's normal milk or milk replacer, which will continue to provide the energy needed for regular maintenance and growth.

Use these additional management tips below to help set your calves up for success, especially in the chilly winter months.

1. Feed all calves at least 4 quart of high quality, clean colostrum no later than 6 hours after birth.
2. For calves consuming a primarily liquid ration, feed enough milk/milk replacer appropriate to the environmental temperature to provide enough energy for both maintenance and at least one pound per day growth.
3. For calves on a combination liquid and calf starter ration, feed free-choice calf starter grain.
4. Provide free-choice water to all calves.
5. Feed liquids (milk, milk replacer, or water) at body temperature (102°F).
6. During cold weather, dry calf hair coats at birth enough to fluff in order to reduce evaporative heat losses.
7. During cold weather in calf barns, provide adequate air exchange (15cfm/min/calf) without creating drafts on individual calves.
8. In all housing in cold weather, keep an adequate layer of dry bedding underneath calves to insulate them from a cold base. Remember though that much of the insulating value of bedding is lost when it is wet. In fact, wet bedding can have three times the heat loss as dry bedding.
9. In all housing in cold weather, control convection losses either by adequate soft bedding to allow “nesting” or by the use of calf blankets.

Although adding extra feedings and around-the-clock care may seem like a lot of work, especially in nasty winter weather, you are providing your calves with the tools they need to overcome cold stress and develop into healthy, well-grown heifers that will impact the future productivity and profitability of your milking herd.

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