



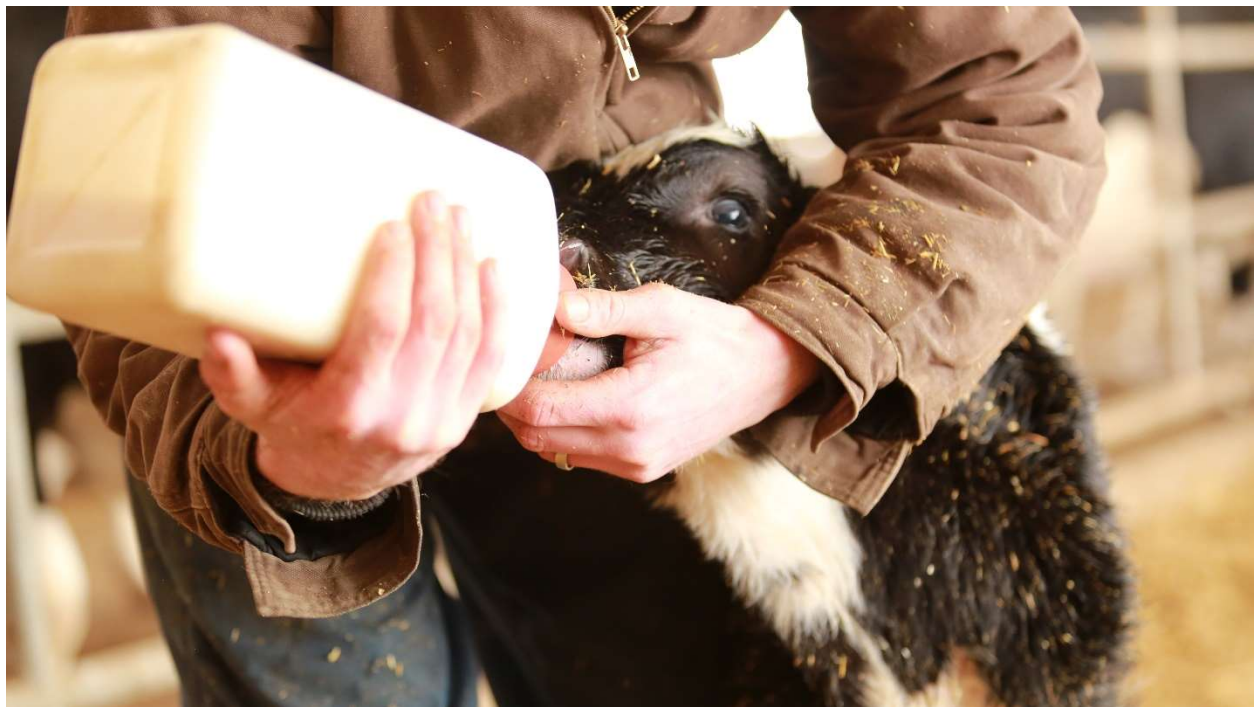
CALF CARE CORNER

calfcare.ca

Getting all your calves off to a healthy start!

THE 5 C'S

Successful calf management can be summed up in five words:
Colostrum, Calories, Cleanliness, Comfort and Consistency.



This list is courtesy of Dr. Sheila McGuirk of the University of Wisconsin.

Colostrum

Colostrum is the first milk given by a dairy cow following birth. It is rich in fat and protein and has immunity elements. Colostrum is given to newborn calves in the first 24 hours of life.

Feeding Colostrum

Wear gloves when collecting colostrum. Cleanly collect colostrum from the cow. Prepare the udder as you would for milking and collect the colostrum in a container that has been washed with hot water and soap.

Feed calves three to four litres of colostrum as soon as they are born. Calves should be fed an additional two litres of colostrum within six hours of birth. Bigger breeds, such as Holsteins, need at least four litres of colostrum right away and smaller breeds, such as Jerseys, need at least three litres.

Continue feeding transition milk for three days, as it is very rich in nutrients and energy that will benefit the calf.

Colostrum Quality

Colostrum should be slightly yellow in colour; it should look like and have the consistency of melted vanilla ice cream. However, looking at the colour of colostrum should not be your only test for quality. Test colostrum quality using a colostrometer or refractometer. You should check the quality of colostrum before feeding, heat-treating, or freezing it. 50 mg per mL IgG or more in colostrum is considered good quality. On a refractometer, a reading of 22 per cent corresponds to 50 mg per mL IgG. Do not feed pooled colostrum or colostrum that is runny or thin, contains blood, or comes from cows with mastitis or that were treated with antibiotics.

Calves with total protein concentration of greater than 5.5 g/dL have received adequate colostrum. This can be accessed via a simple blood test. Testing can occur between six hours after the first colostrum feeding to one week of age. Testing can indicate if your colostrum management is working well or needs improvement. Talk to your herd veterinarian about a blood testing program.

Further, colostrum samples can be sent for testing. Bacterial counts should be less than 100,000 cfu/mL. High bacteria counts are associated with poor colostrum absorption in the calf. Colostrum may also become a source of infection.

Calories

Calves need calories to grow and remain healthy. Calories for young calves come from the milk or milk replacer and calf starter. As external temperatures decrease in accordance with the seasons, the amount of milk or milk replacer you feed needs to increase.

When feeding calves, it is important to remember that a calf needs 2400 calories a day to maintain current weight – not grow – with environmental temperatures of 20°C.

The concept of feeding a calf four litres per day is based on a feeding program from the 1950s. At that time, milk was expensive to feed to calves and farmers were encouraged to transition their calves to a cheaper, grain-based diet. We now know a lot more about calf nutrition and the importance feeding calves correctly based on environmental temperature. **Feeding a calf four litres per day in cold temperatures is starvation.**

If you fail to increase calories in accordance with the weather, calves won't grow and will get sick as they will use all energy from the milk or milk replacer just to keep warm. Cold weather and lack of energy are stressors for the animals.

When calves are a couple of days old, they should be offered a small quantity of calf starter. By the time they are ready to wean, they should be eating 1 kg (2 lbs) per day.

Clean, fresh water should be offered to calves free choice from birth. Research shows that as a calf's water consumption increases, so does its calf starter intake.

Cleanliness

When the calf is born, it needs to have a clean, dry, well-bedded and draft-free environment. This is very important to the overall well-being of the calf as it is the best prevention of future health problems. By reducing bacteria in the calving area, you're giving the calf the best possible start in life.

Clean and disinfect feeding nipples, bottles or tubes after each use. This will help to reduce the spread of disease among calves.

Comfort

In order for a calf to be healthy, it needs to be comfortable. Comfort for a calf is being well-bedded, warm, and in a properly ventilated area. Ensuring the comfort of the calf means it will be healthier and will have a better average daily gain.

If you are unsure whether or not bedding is adequate, kneel on the bedding for 20 seconds. If your knees get wet, the bedding should be cleaned out or added to.

Consistency

Calves are creatures of habit and like the same routine day after day. They want to be fed the same feed at the same time each day. Feeding waste or pasteurized milk may pose challenges as they will not be the same at each feeding and feeding milk from treated cows can negatively impact developing beneficial gut flora. Mixing whole milk and milk replacer can also be unreliable and inconsistent. Feeding milk replacer alone is generally more consistent, except when you are switching between batches of feed. Therefore, it is always a good idea to blend milk powder from the current batch to the new batch, which will result in fewer digestive upsets and less diarrhea in the calves

To blend milk replacer, start with 75% of the old powder and 25% of the new powder. Mix that ratio for two feedings. Then switch to 50% old, 50% new for two feedings, followed by 25% old powder

and 75% new for two feedings. Finally, use 100% of the new powder. It is a little more work but the calves will respond better.

The most successful calf managers are always thinking about Colostrum, Calories, Cleanliness, Comfort and Consistency.

Any comments or questions about Calf Care Corner? Just drop a line to info@calfcare.ca
Calf Care Corner delivers the latest information and ideas to help you improve the way calves are raised on your farm.

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