Bulletin #1058

Caring for Calf of an Unknown Age

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This information is provided to individuals who purchase one or more calves at a livestock auction, a livestock dealer, or a farm and who are not sure how to properly care for the calf. **If you obtain a calf (calves) and you are not quite sure of their age(s), then follow these steps.**

1. Evaluate calves before purchase for alertness, ability to walk, the umbilical cord is dried up, and the eyes are not sunken.
2. It is not recommended to buy calves at an auction as there are too many unknowns.
3. If you obtained the baby calf at an auction or from a farm, assume that the calf has not consumed its mother's first milk (colostrum). Colostrum is naturally fortified with vitamins, minerals and antibodies that are essential for a newborn's survival. If you believe the calf did *not* receive colostrum, purchase a colostrum substitute or see if you can obtain some from a local dairy farmer or beef producer. Well-prepared farmers typically keep a supply of colostrum frozen to thaw and warm for such instances. Artificial colostrum for calves is also available commercially. Newborn calves should ideally receive colostrum within eight hours after birth. The sooner they consume colostrum, the better.
4. Learn the nutrient requirements of a calf. New born calves will need 1-2 gallons of milk per day depending on their size and breed. If using milk replacer, learn how to determine the correct proportions as well as to the correct temperature for adequate mixing and feeding for the calf.
5. Adding new animals to a farming operation is a potential route for introducing disease to other animals. Keep new calves separate (quarantined) from other animals on the farm for at least 3 weeks. Observe these animals daily and watch for any signs of illness, scours, fever, or disease. Look for signs of reduced feed and water intake, listlessness and an elevated temperature (the normal body temperature of a calf is 101.5). It is a good practice to take the body temperature of a calf while in quarantine. In performing your chores, care for the new animals <u>after</u> caring for all others.
6. Determine if the calf is male or female. If male calves are likely to be kept for meat, castration at a young age (as soon as both testicles drop and before 60 days of age) is recommended.
7. Calves with scours (diarrhea) often dehydrate quickly. You can evaluate the degree of dehydration of a calf by tenting the skin and seeing how fast it returns to the body. If the skin takes a while after being "tented", the calf is likely dehydrated and needs fluids quickly. The longer it takes to return to the body, the more dehydrated the calf. Five (5) seconds or more is serious dehydration. Purchase calf electrolytes from a farm store and mix with water to the manufacturer's recommendations. Dehydrated calves that have lost their suckling reflex due to weakness

need to be tubed with the electrolyte solution to put it directly into the stomach. Feed electrolytes between normal feedings. Milk replacer or milk interferes with the osmolarity (concentration of a solution) of the electrolytes

8. If possible, weigh the calf by holding the calf and standing on a bathroom scale. Subtract your weight to get the weight of the calf.

9. Calves less than 30 days of age will need a milk and grain diet. Calves should be able to naturally drink from a bottle (If they don't nurse, it may be an indication that they are sick). However, it will be more efficient if you teach the calf to drink from a bucket. This takes determination by allowing it to suck a few of your fingers as you lower your hand into the milk or milk replacer. Learning to drink can happen in a few minutes or may take a few hours over a couple of days. One option is to feed a Holstein calf, for example, 2 quarts of milk or milk replacer twice a day. Calves should have a calf starter grain available a few days after birth and will start to nibble on it. Fresh calf starter should be provided every day. Provide fresh drinking water at all times for the calf in a clean bucket that the calf can easily reach. Calves will consume about a gallon of water a day. Adequate fresh water availability is critical. Calves can be weaned when they are consistently eating 2 lbs. of calf starter (grain) per day.

10. Purchase milk replacer (specifically formulated for calves) from the farm/feed store. Read and follow the directions for mixing the formula. For young calves, make the liquid about the warmth of body temperature. Do not overheat or microwave the milk replacer. The best way to mix the replacer is to use warm water and a whisk.

    Start with 2 quarts twice daily (no more frequently unless the calf is sick) in the first week of age and increase the quantity to 3-4 quarts 2X per day as the calf's intake increases. Over time, reduce milk replacer quantity or dilute with water to encourage water and grain consumption. Provide the formula to the calf via the bottle and nipple at regular intervals (2-3 times per day) as prescribed by the directions on the milk replacer bag. Make sure to thoroughly wash bottles and nipples after use. If the calf is unable to suck, you may need to provide the formula via a stomach tube. For information about stomach tubing a calf, see http://veterinaryextension.colostate.edu/menu2/Cattle/TubeDoc.pdf

11. Liquid feeding of calves usually stops completely at 90 days (or sooner if the calf is consuming grain on a regular basis). Do not use a nipple bottle or pail any longer than you have to. Typically, calves can be trained to drink from a pail during the first week of age. Weaning can occur when the calf is consuming 1.5 - 2 lbs. of calf grain per day for several days. Provide calf grain to the calf within the first week. Encourage grain consumption early by putting some in your hand and allowing the calf to suckle it out.

12. Keep the calf warm in a small pen and away from any drafts. The pen should be dry with clean bedding. Pine shavings under a layer of straw works well as bedding. A heat lamp will not likely be necessary—even in Maine. If the air temperature is below 40 degrees F, keep the calf inside the home or warmed area. Most calves that are fed a formula will be able to keep themselves warm even in a barn. In cold conditions, many dairy farmers cover young calves with a "jacket" to help them maintain body temperature. Calf jackets can be purchased commercially or made with a single piece of fleece or woolen fabric or purchased from farm supply stores. Fit the homemade jacket by simply cutting slits for the rear legs and sew a strap across the front.

13. Excrement (poop) from a healthy milk fed calf is usually yellow or light brown in color and has the consistency of caulking compound. As the calf matures (at about 30 days of age) their stools will become stiffer. Calves on high levels of milk replacer can have stools that are quite loose. It's OK as long as the calf is eating and is healthy.

14. Take time to observe that the calf is relieving itself regularly. Watch that the calf is both urinating and defecating.

15. If the calf's age is determined to be over 90 days of age, it should survive on grain (make sure it is a grain mix formulated for calves) and water. High quality hay (preferable 2nd crop hay) can be fed to these calves in addition to the grain. Calves are born with a working true stomach but over several weeks, the four stomach compartments of ruminant livestock develop.

16. With the exception of an intranasal vaccine for IBR and PI_3 or Calf Guard® oral vaccine at birth, no other vaccinations should be given until 4-5 months of age as not to interfere with colostral antibodies. Intranasal and oral vaccines stimulate a cell mediated response. Consult a veterinarian for recommended vaccination protocols.

17. Weigh the calf every 7-10 days to make sure it is gaining weight. Keep a record of its weight on a wall calendar or chart.

18. Make a point of identifying a veterinarian in your vicinity who cares for cattle. You should establish a farmer/veterinarian working relationship in case you need assistance.

If you have any questions or concerns about raising the calf, don't hesitate to contact your local Cooperative Extension Office, Extension Livestock Specialist, Dr. Colt Knight (colt.knight@maine.edu), or Extension Veterinarian, Dr. Anne Lichtenwalner (anne.lichtenwalner@maine.edu). Sending photos via smart phone or email to the University of Maine Diagnostic & Research Laboratory in Orono is also an option.