Getting your Dairy Feeder and Keeping Him Healthy
Margaret A. Masterson, DVM, MS

Dairy beef constitutes about 5% of the total beef produced in the US and dairy beef feeder calves make a great 4-H project. Because the calf is fairly small, it is well suited to farms with small acreage as well as larger farms. This project may be your first experience in raising cattle or larger animals. This sheet will help you to prepare for and manage your project to keep your calf healthy.

Dairy feeders may be obtained from small dairy farms or from larger farms. Many farms have regular buyers for their bull calves so you may want to call around and get your name on a list that the producer will call if he has a calf available. If you are getting more than one calf try to get them all from the same farm as this will reduce the different diseases that they are exposed to. For the Union County Fair, you will want a calf that is born between late December and mid-February so that it will weigh between 400 and 650 lbs by fair time in July.

Producers often sell calves just a few days after birth, or some may be willing to keep the calf for you until it is weaned off of milk. Weaned calves will cost more as the farmer has had to feed them for about 2 months. Either way, you will need to own the calf and move it to your property before April 1 to be eligible to show it at the Union County Fair.

If you get your calf shortly after birth, be sure to ask the producer if the calf received colostrum. Colostrum is the first milk that the cow produces after she has the calf. Colostrum contains twice as much dry matter and total solids, two to three times as many minerals and five times as much protein as whole milk. It also contains ALL of the antibodies or immunity the calf gets to fight infections for the first several weeks of life. Calves that do not receive adequate colostrum are about 80% more likely to get sick no matter how well you care for them. Most calves need 1 gallon of colostrum within the first 6 to 12 hours after birth. If they do not get it within that first day there is no way to get it into them later, so this is a very important step in keeping calves healthy. Unfortunately, calves left with their moms often do not nurse enough colostrum and some farms do not insure that bull calves get as much as they should, so ask. You will also want to find out from the farmer when the calf was born, if he has received any vaccinations or treatments and what, how much and how often he has been eating.

Look the calf over before you purchase him. In addition to conformation, the calf that you want should be alert and perky. He should not have diarrhea or a snotty nose. Be sure to look at his belly button for signs of swelling which could indicate an infection or hernia. If he has a hernia, it will probably require surgery to repair.

Before you bring the calf home you will need to have housing for the calf. The pen or hutch should be well ventilated but not drafty. That means that there should be a constant source of fresh air moving above the calf but at the level of the calf no cold air should blow on the calf. Bedding can be shavings or straw but should be cleaned regularly. A good test as to whether the bedding is dry enough is if you kneel down in the pen, your pant knees should stay clean and dry.
Young calves less than 8 weeks of age still need milk, which means that you will probably be feeding milk replacer. Most companies make a few types of replacer that vary in price and quality. Calves will not grow well and may get sick on the cheapest replacers, especially in the first 4 weeks of life. You want a milk replacer that is made from milk or milk products such as whey. A decent quality replacer should be at least 20% protein, 20% fat and less than 0.5% fiber. You do not need a “medicated” milk replacer as these seldom help to keep calves from getting sick.

Mix milk replacer according to the label direction with warm water. Do not feed dilute or watered down replacer as this can cause diarrhea or “scours”. Most calves will need ½ gallon (1 bottle) of milk replacer twice a day by the time that they are a few days old. If the temperature where the calf is drops below 10°F your calf will need more milk. When the weather is very cold offer your calf a third bottle of milk during the day. Milk can be fed in a calf bottle or the calf can be trained to drink from a bucket.

Even when your calf is still drinking milk he should always have access to all the fresh water he will drink. At first he may not drink much but the more water he drinks the more dry feed he will eat. Calves offered free choice water gained 38% more weight compared to calves without water. At about 1 week of age begin to offer your calf a small handful of dry feed. “Starter” feeds are often pelleted as they are easier to learn to eat. Starter feed should be high in protein (18-20%). It is a good idea to get a starter feed that contains a coccidiostat such as Decox®, Bovatec®, or Rumensin®. When starting a calf on solid feed you may need to put a few pellets in the calf’s mouth after he takes his milk. If he does not eat all the feed dump it and offer fresh feed the next day. Within a few days the calf will be eating up all the feed. Then SLOWLY increase the amount of feed each day offering about ¼ to ½ cup more feed each day. At about 4 – 6 weeks of age you can begin to offer small handfuls of good quality hay. Calves can’t digest hay much before this age. Do not feed too much hay or your calf will get a “hay belly” and he will not show well. If fed this way almost all calves will be eating enough dry feed to be weaned off of liquid milk by 8 weeks of age.

During these first few weeks of life watch your calf closely for signs of sickness. Sick calves will be droopy, their ears will be down and they may not drink all their milk. Take the calf’s temperature. Normal calves should be between 100 - 102°F. Check for diarrhea or scours by looking at the calf’s tail. Scours can cause a calf to loose 10% of its body weight in a day and often kills calves. If your calf has diarrhea it will be loosing a lot of fluid. The first thing to do is to offer the calf a bottle of electrolytes in between its regular milk feedings. Do not stop feeding milk as the calf needs the energy milk provides. Do not dilute the milk as this may make the diarrhea worse. Also do not mix the electrolytes with the milk as this makes the electrolytes harder for the calf to absorb.

If the calf will not drink try offering it a bottle if it is a bucket calf. If it still won’t drink or if the scours do not improve contact your veterinarian. It is illegal for the calf’s owner or your neighbor to prescribe medication for you calf and if they do not give you the correct withdrawal time you could be disqualified from the fair. While scours is the most common disease of young calves there are other things that can make your calf sick, so if in doubt contact the veterinarian.
Many of the diseases that affect calves can also cause diarrhea and illness in humans. Calves do not have to be showing signs of illness to be able to transmit disease to humans. Almost all calf diseases are spread to people by the fecal-oral route. You can pick up diseases by eating without washing your hands, putting equipment in your mouth or just touching your dirty hands to your face or mouth. Because of this remember to always **WASH YOUR HANDS AFTER WORKING WITH CALVES.**

Your veterinarian can also advise you as to when and how to dehorn and castrate your calf. Generally the sooner that these procedures are performed the easier it is on the calf and the sooner he will heal.

As the fair approaches, in addition to leading and grooming your calf, you will want to weigh your calf about two months and again one month before the fair. This can be done by hauling your calf to a feed mill, using a weight tape or asking a knowledgeable beef producer to estimate the weight. If your calf is not on target to hit the correct weight at the fair, this will allow you time to increase his feed or hold him a little so he hits your target weight. If you wait to check his weight until a few weeks before fair, you will not have time to make any feeding corrections. Also check to see if your fair requires any vaccinations.

If you follow these guidelines you will be well on your way to raising a healthy dairy feeder and learning a lot about the responsibilities and rewards of raising calves.

---

1 Donna M. Amaral-Phillips et. al. Feeding and Managing Baby Calves from Birth to 3 Months of Age. UK Cooperative Extension Service ASC 162
2 Ayars, B. and Sanders, D. Guidelines for the Purchase and care of Dairy Beef Feeders. Fact Sheet 4-H Youth Development OSU 4H-28-08