

Nutrition

A Good Nutritional Program is a Necessity

Nutrition is a difficult subject to discuss because of the wide range of feeds available across the United States and of the wide range of nutritional needs based on climate and environment.

Your nutrition program should allow your heifer to express her full genetic ability to grow, without getting overly conditioned. Also, you will want to keep costs down by making the best use of available feed. A county extension agent, area livestock specialist, or area feed salesman can help design a well-balanced, economical feeding program.

Even though your greatest concern will be from the time your heifer is weaned until she is bred, you also should know the nutritional needs of an Angus female throughout her life. These needs are continually changing due to climate changes, changes in her stage of production and maturity, and changes in her environment.

CREEP FEEDING

Angus cows are excellent mothers and provide plenty of milk to raise healthy calves. Some producers “creep feed” their calves throughout or near the end of the nursing season. This is necessary only if nutrition for your cows becomes limited due to heavy stocking rates or dry weather. Although creep feed could increase your weaning weights and reduce stress at weaning, there are disadvantages. First, you may fail to identify cows with inferior milking ability if their calves are creep fed. Second, creep feeding can make your heifer calves too fat and hinder their future production.

If you decide creep feeding is necessary, coarsely cracked grains such as corn, oats, barley or milo may be used. Creep intake should not exceed 1 percent of the animal’s body weight. The creep ration should be approximately 14 percent in protein content.

8 Forming A Future

AFTER WEANING

A beef cow’s milk production peaks two or three months after she calves. At the end of the sixth month she is at about one-third of peak production, so calves can be weaned at 150-220 days of age with little loss of milk nutrition.

With proper care and management after weaning, your calf can continue growing to reach his or her maximum yearling weight and frame development without getting fat.



If your calf weighs between 500 and 600 pounds at weaning and has the genetic ability to weigh 800 pounds at one year of age without being fat, she must gain about 200-300 pounds in the 160 days between weaning and yearling. Your calf should gain about 2 pounds per day if you feed it 1.5 percent of its body weight per day of a quality grain ration. The most common feed grains are corn and oats. Feed your calf corn that is whole kernel or very coarsely

milled. Oats can be fed whole or rolled. Grain sorghum should be coarsely milled. Since grain sorghum has a lower energy content than corn, expect slightly lower gains. Barley, like oats, works well in rations. Wheat can be used, but do not feed more than one-third of the ration as wheat because ruminants do not respond well to a high wheat ration.

Always start feeding cattle gradually. Take about 30 days to get them eating their maximum amount of feed.

PROTEIN, MINERALS, VITAMINS, GOOD QUALITY FORAGE

Along with the previous feeding guidelines, you must provide protein, minerals, vitamins and good quality forage.

Forage (roughage) production is the backbone of every cattle program. The quality will have a dramatic effect on your cattle's performance, appearance and health. Forage quality also will determine the amount and type of additional protein, vitamins and minerals you must supply. Use the following guidelines to decide on the protein supplement for your ration if you feed:

1. good quality grass hay or pasture, add 1/2 pound of protein supplement* to the daily grain ration.
2. a leafy legume hay (such as alfalfa), additional protein is not needed.
3. good quality corn silage or sorghum silage, add 3/4 pound of protein supplement to the daily grain ration.

**Most commercial (brand name) supplements are 30-40 percent protein. Soybean meal and cottonseed meal are slightly more than 40 percent.*

Cattle that receive quality forage seldom need vitamin supplements other than Vitamin A. Cattle on pasture, leafy and bright green legume hay or dehydrated alfalfa meal, however, generally receive plenty of Vitamin A.

If you feed sun-bleached or rain-bleached legume or grass hay or good quality silage, add a Vitamin A supplement. Fortunately, Vitamin A is inexpensive and most feed manufacturers add plenty in their protein supplements. Soybean meal or cottonseed meal, which are high quality protein sources, need Vitamin A added.

Always provide salt in a separate feeder that is protected from the weather. Iodized salt or trace mineral salt in granular form is best.

Feed grains are good sources of Phosphorus (P), and legume pastures and hay are excellent sources of Calcium



(Ca). Most producers provide additional Phosphorus and Calcium. Some are for forage rations and some are for grain rations, so read instructions carefully.

You can prepare your own mineral box mix with the following guidelines:

1. If your cattle receive almost all forage and very little grain, mix: 1/3 trace mineral salt, 1/3 dicalcium phosphate and 1/3 monosodium phosphate.
2. If you feed about 1.5 percent body weight daily of good quality feed grain and the roughage source is good quality grass hay or corn silage, mix: 1/3 trace mineral salt, 1/3 dicalcium phosphate and 1/3 ground limestone.
3. If you use the 1.5 percent ration above, but the roughage source is good quality legume, mix: 2/3 trace mineral salt and 1/3 dicalcium phosphate.

CARING FOR YOUR PREGNANT HEIFER

Around 600 pounds, your heifer should reach puberty and come into heat. Most Angus producers breed heifers so they will calve at 24 months of age, which means they must be bred at 12-15 months of age. If you follow the nutritional program discussed, your heifer should be able to be bred at that age. Typically, your heifer should reach 75 percent of her mature cow weight when she is bred for the first time.

COMMON CATTLE DISEASES

Bacterial

Anaplasmosis
Bacterial Calf Scours
Foot Rot
Hemophilus Somnus
Lumpy Jaw
Pinkeye
Pneumonia

Sudden Death

Black's Disease
Blackleg
Enterotoxemia
Malignant Edema
Redwater

Parasites

Flies
Lice
Mites
Ticks
Warbles (grubs)
Worms (intestinal & internal)

Viral

Bovine Virus Diarrhea (BVD)
Infectious Bovine Rhinotracheitis (IBR)
Para-Influenza Complex (P13)
Pneumonia
Viral Calf Scours
Warts

Nutritional

Bloat
Fescue Foot
Grass Tetany

Reproductive

Brucellosis-bacterial
BVD
IBR
Leptospirosis-bacterial
Trichomoniasis-protozoan
Vibrosis-bacterial

Fungus

Ringworm

VACCINES

A planned health program will help you avoid sickness and setbacks in your cattle. Follow these four steps from the beginning of your project.

1. Consult your local veterinarian for advice on disease prevention in your area. Explain your plans to exhibit your heifer and develop her into a cow, and use their suggestions for a health program.
2. Construct a “work calendar” to remind you of the best times to vaccinate against disease and to control parasites. Coordinate a year-round health schedule with your breeding, calving and weaning seasons. Mark the calendar to remind you when to get the work done.
3. Each time you buy an animal, ask about its vaccination record and the general herd health program. Mixing animals can spread diseases. Always try to isolate incoming animals for one month to determine if they are incubating a disease.
4. Study the most common diseases in your area, and learn the best treatment. Make a card file and record which treatment is most effective for each disease. Even if you know the recommended treatment, put it in the card file in case another family member needs it for reference. Describe the treatment (such as the brand name of antibiotic), how much, how long to administer and where the equipment is kept.

Vaccines are available to prevent many of these diseases. A comprehensive vaccination program is recommended. Most livestock shows have health requirements that require a health certificate that must be issued and signed by your veterinarian. Obtaining these certificates takes time, so check well in advance of show dates to make sure you have time to obtain the proper certificate. But, even a health certificate does not certify that an animal is free of all diseases. Transportation and environmental stress on your heifer can make her more vulnerable to diseases; so careful observation and a vaccination program are essential.

Keep your heifer growing before and after she is bred. Good nutrition will increase her chances of getting pregnant early in the breeding season. However, do not let your heifer get excessively fat. This will reduce her chances of becoming pregnant and her ability to produce milk. Continually analyze her body condition. If necessary, ask an experienced cattlemen or extension specialist for help. If she is getting too fat, reduce the feed grain portion of her ration. A body condition score of 5 is ideal for a cow that has calved.

Your heifer’s growth will naturally slow down as she matures, and she will put on fat much easier as she becomes a yearling. Soon after she is bred, you should put her on an all forage ration. She should be able to maintain her body weight and continue skeletal growth throughout her pregnancy with little or no grain in her ration.

The last 90 days of your heifer’s gestation period (pregnancy), manage her nutrition so that she gains about 1 pound per day. She will lose more than 100 pounds when she calves. This weight loss represents the weight of her calf, fluid and fetal membranes. Properly fed heifers and cows have less calving problems, deliver stronger calves, and rebreed for their next calf much sooner.

FEEDING YOUR LACTATING FEMALE

After your heifer has her first calf, her nutritional needs increase. Her body must perform three major functions.

First, she must provide milk for her calf. Second, she must get back into shape to rebreed, and third, she must continue to grow.

The key to managing a first-calf heifer is to feed the best quality forage available to supply extra energy and protein needs. If you cannot provide superior forage, feed enough grain to keep your heifer growing and gaining some weight while she nurses her first calf. When she is rebred you can manage a first-calf heifer as you would a mature cow.

FEEDING ANGUS COWS

Your major goal now is to keep your cow calving on schedule each year and raising healthy, valuable calves. Each year, be sure she receives enough energy to gain about 100 pounds during the 90 days before calving. While she is nursing a calf and being rebred, she needs good quality pasture.

The least critical period for nutrition is after a cow weans her calf until 90 days before she calves again. Crop residues, like corn and grain sorghum stalks, are sufficient for her needs. She can even lose weight during this period and still come back with a strong, healthy calf if you manage her properly.

Maintain your cow completely on forages. The only time she might need grain is during extremely cold weather. Even under these conditions, your Angus cow should be able to survive and do what she’s been selected to do best—raise and wean a good calf every year.