

# Use of Nutritional Consultation in Beef Cattle Practice

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Our practice activity deals primarily with dairy cattle and feeder cattle. Cow/calf production units are not part of our practice activity and therefore will not be discussed.

The county in which our practice is located, ranks first in the state in the number of feeder cattle, about 35,000 head. In addition, for the last 15 years beef producers throughout the state have retained me to consult with them on herd health maintenance and matters relating to nutrition. This activity involves an annual turnover of some 75,000 cattle. The individual production unit annual turnover varies from 750 to 15,000 head. At least these values were representative prior to the current cooling of interest by financial institutions in cattle feeding enterprises.

When first becoming involved with herd health maintenance activities with feedlot producers it became obvious that although respiratory disease caused a substantial loss to the producer, improved management of the ration and related matters could provide an improved financial return to the producer.

**To address the topic of feedlot nutritional consultation it is appropriate to begin by discussing the ration of incoming feeder cattle.**

Since all of our producers rations have as a base corn silage and corn grain, it is desirable to set incoming cattle adapted to consuming as much dry matter from these sources as early as possible. To accomplish this often difficult task a few of our feeders prefer to start their incoming cattle on proprietary starter pellets designed for this purpose. These products are fed in two ways. One procedure is to follow the manufacturers recommendations, which is to feed the product until the intake reaches a suggested level. At that time the ration is converted to home grown feedstuffs. The other method is to feed proprietary starter pellets for two or three days and then use them to adapt the feeders to the on farm grown ration if the starter is readily being consumed.

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A greater number of our producers prefer to start incoming feeders on home grown feeds. We recommend that they follow an adaptation formula which permits the animals to adjust to a ration which will consist primarily of corn silage.

In this scheme, for starting incoming feeder cattle, the objective is to provide the cattle a nutritionally balanced diet that is compatible with the production goals of the producer. With 100 bushel corn grain silage, a producer would expect, with normal dry matter intake, a daily rate of gain of approximately 2 lbs. With additional corn grain at the rate of .5% of body weight the daily rate of gain would be expected to be 2.3 lbs. The two major concerns in adapting incoming cattle to corn silage rations are acidosis and palatability. Palatability because the dry matter of bunker silos is frequently as low as 32%. Acidosis can be a problem because corn silage on a 100% dry matter basis is 50% corn grain and with grass cattle this amount of corn may be excessive. In addition, producers recognize the need for finely chopping the corn plant to improve the quality of corn silage and this inhibits cud chewing and salivary sodium bicarbonate production.

To overcome the adaptation problems of corn silage the method that we have found to be successful is to start on day one with long stem hay in the bunks. On day two, a small quantity of corn silage is placed on the long hay. From then on a mixture of chopped hay and corn silage and some grain is fed. The level of hay is gradually reduced in a manner which reduces the dry matter percentage of the ration in a gradual manner over the time period required to get the cattle to an expected level of dry matter intake.

Once cattle have been adapted to the bunk ration, involvement with nutrition focuses on monitoring the ration for adequacy on individual nutrient components, assuring a caloric and protein density that meets the desired production goals, monitoring dry matter intakes, working with byproducts which may be available to producers at a price that will reduce the cost of gain or provides the opportunity to increase the number of cattle turned in that particular feedyard. Production management tools such as implants and the use of ionophores are stressed and monitored as well.