Managing Fed Cattle Rations  (Part 4 of the Bunk Management Series)

The rumen requires consistent deliveries of a consistent ration. Changes to the rations will occur because of changes in feed ingredients – how those changes are made will make a difference.

**Ration energy levels** can be made in 3-4 Mcal NEg increments. A 5 step ration progression could be 50, 53, 56, 59 and 62 Mcal NEg. A 4 step progression could be 50, 54, 58 and 62 Mcal NEg.

We will typically start cattle on lower energy starting or growing rations, and then we will work them up to a high energy finishing ration. How quickly we work them up depends on the starting weight of the cattle and the marketing goals of the feedlot.

Higher energy rations will generally improve feed efficiency, reduce cost of gain, and improve marbling. Higher energy rations can also make it harder to keep feed intakes steady, as the increased starch and decreased fiber makes the rumen more sensitive to any changes, so there is a limit to how high you should go.

The energy concentration of the final ration will depend in part on the bunk management skill of the feeder. Steady feed deliveries of a 60 NEg are better than up and down feed deliveries of a 62 NEg.

Effective fiber is needed to maintain rumen health and steady intakes, even in the highest energy ration. Dry ground hay is the best source of effective fiber in a balanced ration.

Never increase the energy level and the dry matter in the feed delivery at the same time. When moving up to the next ration (changing energy level) always hold the dry matter deliveries constant.

**Moisture levels** in the ration also need to be managed. Rations that are too wet can reduce DM intakes due to spoilage or freezing in the bunk, and the sheer volume of water the cattle have to consume in the feed. Rations that are too dry can be dusty, unpalatable, and will be more likely to separate in the bunk.

Ration dry matter levels of 65-75% DM work best to keep the ration together and optimize intakes.

When moving from a wetter ration to a drier ration, the as fed feed deliveries will need to be reduced in order to keep the dry matter intake steady. It is better to balance the ration set with little to no change in dry matter from one ration to the next.

**Ionophores** (Rumensin, Bovatec, Cattlyst) are used to inhibit “bad” rumen microbes and to encourage the growth of “good” microbes in the rumen, for improved rumen health and efficiency.

To be most effective, ionophores should be fed as a fixed concentration of the ration, and not at a milligrams per head per day basis. In other words, we need to dose the ration and not the cattle.

Feeding a fixed amount (say, 300 mg/hd) of an ionophore will mean the cattle are getting too much ionophore when intakes are low, and they will not be getting enough ionophore when intakes are high.

Typical ionophore levels in cattle rations would be 20-25 grams per ton of dry matter in grower rations and 25-40 grams per ton in finishing rations.

Using **batch sheets** when mixing feed is the best way to ensure that rations stay consistent from day to day. The batch sheet will keep the percentage of each ingredient steady over a wide range of mix sizes. Batch sheets should also include the DM pounds per batch to help with ration transitions.