

Feedlot Receiving Period Protocol

Developed by: Dr. Francis L. Fluharty
Department of Animal Sciences
The Ohio State University
fluharty.1@osu.edu

Transitioning calves that have been weaned from a forage diet to a grain and grain byproducts based diet is a critical time period in the feedlot. Corn grain has twice the energy density, and twice the digestibility of most forages, thus a kilogram of corn yields four times the amount of digestible energy as a kilogram of grass. Allowing the animal an adequate time to adjust to this, metabolically, is critical as the bacteria in the rumen can digest the feed faster than the animal may be able to utilize this additional energy, resulting in a low rumen and blood pH. The way we manage this is through a gradual increase in feed intake that takes into account the fact that newly weaned animals in confinement are developing a social hierarchy in the pen, are being exposed to several potentially harmful pathogens that we must manage through vaccinations, and may develop respiratory problems that are managed through antibiotics. Many animals are learning to drink from an automatic waterer and eat from a feed bunk for the first time.

Having a controlled intake during the first two to three weeks allows animals to adjust to grain-based diets, and allows them to achieve Ad-libitum feed intake, on a pen basis, in a manner that minimizes the likelihood of acidosis and reduces respiratory disease outbreaks that occur when a pen of cattle has huge fluctuations in individual animal intake.

The two critical pieces of information that are needed are the number of animals in the pen and the average weight of animals in a pen. Reducing within pen variability is important, as feed intake is based on the average weight. If there is more than a 25% variation in weight, large animals may over-consume feed resulting in acidosis, and the feed that is taken away from smaller animals may result in their being in a negative energy balance, which sets them up for being susceptible to bacterial and viral respiratory diseases.

Slick bunk management should be used. When done appropriately, this does not reduce the intake of a group of cattle over time. Care must be given to never increase the amount fed in any given day by more than 5% to 10% of the prior day's intake. Normally, cattle would not have an increase in feed intake at the same time their corn portion of the diet is increasing. However, the dietary corn level is only 55%, including the portion coming from supplement, and assuming ½ of corn silage is corn grain on a dry matter basis. Therefore, digestive disturbances are not expected. Therefore, increasing intake conservatively, and NEVER increasing feed intake two days in a row, once a pen of cattle has achieved ad libitum intake, should minimize digestive disorders.

Day	Feed offered as a % of body weight, DM basis
1	1.50%
2	1.60%
3	1.70%
4	1.80%
5	1.90%
6	2.00%
7	2.05%
8	2.10%
9	2.15%
10	2.20%
11	2.20%
12	2.25%
13	2.25%
14	2.30%

Rules for Implementation:

1. When any pen reaches the point where they are leaving refusal in excess of .25 kgs / hd (.5 lb/hd), that pen will be considered to have reached Ad libitum intake and be held for at least 1 day before an increase in intake. be considered to have reached Ad libitum intake.
2. If a pen is still consuming all feed offered at 2.2 % of body weight, it will be held for 2 days before having its feed offering increased.

RECOMMENDATIONS FOR RECEIVING NEWLY WEANED CALVES and NEWLY ARRIVED FEEDLOT CATTLE

- Provide clean water and alfalfa or high-protein grass-legume hay directly off the truck and allow cattle a rest period before processing them.
- Make sure there is an electrolyte solution to the water that the calves drink immediately off the truck to restore cellular sodium and potassium levels.
- Provide 30 cm (12 inches) of bunk space per calf for the first 14 days.
- If corn silage is being fed, it MUST be kept fresh. Clean out feed bunks daily.
- Remember not to push feed to the back of the bunks where calves can't reach it. Also, don't pull feed so far forward that calves can't see it when they look in the bunk. Keep feed about in the middle of the feed bunk.

- Pull feed to the center of the feed bunk every 4 to 6 hours for the first 48 hours. Do this slowly so the cattle are intrigued, but not scared.
- NEVER yell or scream at the cattle to get them to move.
- NEVER hit the cattle, and remember that cattle prods and hot-shots are not allowed.
- ALWAYS keep the shovels and brooms in their designated areas. This helps prevent the spread of contact borne pathogens.
- NEVER walk in the feed bunks, as this spreads pathogens from your boots.
- ALWAYS talk calmly to the cattle when entering and walking the pens. They need to get used to your voice. Also, you don't want to scare them when you enter an area as this increases the incidence of foot and leg injuries, and bruises if they hurry to get up or run away when scared.
- ALWAYS keep a palm pilot or a note pad in your shirt pocket so that you can immediately write the pen location and animal I.D. of any animal that needs medical attention. Don't try to remember the number, as you may get it wrong and needlessly pull a healthy animal. This stresses the healthy animal and causes a missed opportunity for treating a potentially sick one.
- **NEWLY ARRIVED ANIMALS ARE THE FIRST PRIORITY FOR THE FEEDING CREW. ANIMALS MUST BE FED WITHIN 15 MINUTES OF THE PREVIOUS DAY'S FEEDING TIME.**