



Cattle Producer's Handbook

Nutrition Section

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Limiting Feed Intake

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Cattle producers are aware of the impact that high-cost labor has on profit. Management procedures frequently used to reduce labor requirements are to limit amounts of feed available or regulate feed intake with use of self-fed supplements.

Limiting feed intake can be an effective way to control labor cost and the amount of a daily supplement consumed by livestock. Use of self-feeding supplements permit timid, slow-eating cattle to get their share, and it is an easy method to provide Vitamin A, phosphorus, and other feed additives on a consistent basis.

One means of limiting intake is to *control the amount of supplement provided*. Simply stated the amount of supplement intended to be eaten in one day or several days is provided to the cattle and no further supplement is fed until the next scheduled feeding. This feeding schedule is maintained whether the cattle consume all of the supplement during the first few hours or during the entire day (Table 1). Cattle may need to be sorted by Body Condition Scores (see 720) to ensure consumption relative to individual animal need.

Feeding by the schedule in Table 1 will provide enough protein supplement for a 100-cow herd for one week. This type of schedule is not appropriate if the source of protein in the supplement is primarily from non-protein

nitrogen (NPN). Supplements containing high levels of NPN should be fed daily.

Protein supplement types that would work with the above plan would include block, pellet, cake, meal, cube, or hay. An *energy* supplement should be provided daily; not in an interval feeding system.

Use of *physical barriers* can also limit intake of a feed or supplement in some circumstances. If a self-feeder is used, you may place a board or sheet of plywood over the feeding tray to prevent cattle from reaching the feed. The boards may be put in place at a certain time each day, which will restrict feeding to only those hours desired. Another physical barrier is fences placed around hay stacks or feeders to prevent access to the feed until it is pitched out of the enclosure or animals are allowed inside to eat. Also, you can control the feed intake from a liquid supplement tank equipped with a "wheel" from which livestock lick by inserting a board in the spoke of the wheel to prevent it from turning.

At times you can use *certain feed ingredients* to limit intake. Salt is the normal ingredient used. If salt is unacceptable as an agent to limit intake, ingredients such as magnesium oxide, ammonium chloride, calcium sulfate (gypsum), and ammonium sulfate are quite unpalatable to cattle and may be added to a feed or supplement to assist in controlling the intake of a product offered free choice.

The feed additive Rumensin[®] quite effectively limits feed intake. Normally an ionophore is added to a feed to prevent coccidiosis, improve feed efficiency, and increase rate of weight gain. Addition of Rumensin[®] will also aid control of feed intake of a free choice supplement.

Salt is not a precise regulator of intake since certain animals will tolerate more salt than others, and having available abundant water is essential. Daily salt requirement for mature cattle is less than 1 oz/head/day, however, voluntary intake often exceeds minimum needs.

¹Original authors were T. D. Rich, Steve Armbruster, and D. R. Gill, extension beef cattle specialists, Oklahoma State University.

Table 1. Protein supplement feeding schedule for 100 cows when 1 pound daily supplement intake is desired.

Mon	Tues	Wed	Thur	Fri	Sat	Sun
250 lb		250 lb		250 lb		