

FREE CHOICE

Forage
Supplements



LAND O LAKES®
Feed



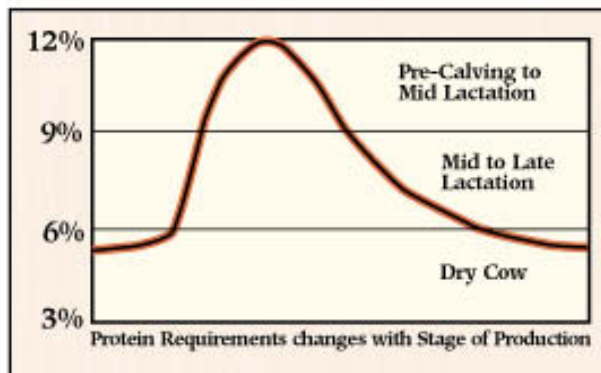


Free Choice Forage Supplements



The goal of any supplement program should be to deliver a high quality, nutritionally balanced product to the entire herd, while reducing associated costs such as time, labor, and equipment. These goals can now be accomplished without compromising your overall nutrition program. Land O'Lakes Farmland Feed offers a variety of product choices, as well as several manufacturing processes to assist producers in delivering supplements to their cow herd.

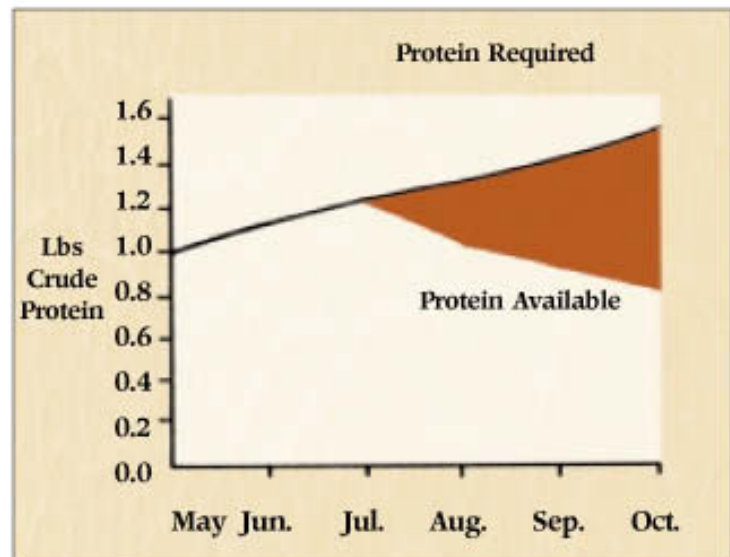
Free choice supplements provide the protein needed to meet the production demands placed on today's cow herds. Direct protein requirements for maintenance, growth, pregnancy, and lactation can be met by supplementing available forages with a self limiting product.



Diet Protein Requirements

(adapted from the University of Nebraska)
This chart shows how the protein requirement changes with the production stage of the cow. Available pasture protein will often be below the requirements of the cow and will need to be supplemented for proper rumen function (fiber digestibility), to maintain body condition for re-breeding, and to maximize milk production for optimum weaning weights.

Protein is often the limiting nutrient for proper rumen function. Rumen available protein is required to digest fiber and other nutrients the animal consumes. Providing protein enhances forage digestibility. With enhanced digestion, the animal consumes more forage, which increases dry matter intake. Supplementing protein when feeding low quality forages provides more energy to the animal and improves body condition. Optimum calf growth can be limited by shortages in available protein.





Management Tips For Free Choice Forage Supplements



Cow body condition may be the single most important indicator of how the herd will perform. University research has shown that cow condition is the most critical element in how well cows cycle and rebreed. Research has also proven that cows in good condition, (scores 5&6) will have healthier calves that will nurse quicker. On the other hand, cows that are over conditioned will not rebreed any better than cows in good condition. Good body condition is the result of maintaining the proper plane of nutrition at the right time. It is easier to maintain a cow in good condition than to replace that condition later.

Montana research on supplementing medium quality forages.

	No Supplement	3# Barley	1# Protein
Forage Intake (<7% CP)	20#	17#	23#
Forage Digestibility	50%	45%	55%
TDN (Energy) Intake	10#	10.5#	13.4#

Under many management systems, supplemental energy is not needed with appropriate protein and mineral supplementation. However, energy may need to be supplemented due to the low energy content of forages relative to the stage of production, the need to increase cow body condition, adverse weather conditions, or limited forage supply.

Grain supplementation can depress fiber digestion. Rumen microbes that digest fiber are different than those that ferment starch. Supplementing with a high grain product will create a competitive environment in the rumen, thus reducing forage intake and digestibility.

	No Supp.	Grain	Protein
Total DM intake, lb/hd	15.0	15.3	19.1
Forage DM, lb/hd	15.0	13.9	17.6
Forage Digest., %	40.6	34.3	43.6
Forage Digestible DM Intake lb/d	6.09	4.77	7.67
% Changes vs Control	--	-21.7	+25.9

Adapted from Karchner Miles City, Montana



Management tips and opportunities for free choice supplements:

We've got the nutrition right, the challenge is helping you get the intake right! Using free choice supplements is *not* "management free". Free choice products are extremely convenient and save valuable time needed for other management functions, but some attention to detail is needed. We all need to pay attention to intakes so that cattle will get the nutrition they need, perform as expected, and keep expense budgets in line.

That's part of the reason we have so many different options. We can find the right form of product (blocks, tubs, meal) and the right nutrient density to fit your particular situation. Then we back that up with feeding techniques to meet expected intake levels.

- Initially locate supplements near water, shade, windbreaks and loafing areas. Animals must "find" the supplements.
- Distance that the supplements are placed from water and trails are important in regulating intake, especially products that use some salt to limit intake (e.g. minerals). Placement of supplements near water will increase intake as animals consume product, take a drink and wash their palate, then potentially consume more.
- Feeding on the ground (e.g. blocks) will increase consumption compared to product offered in bunks or a feeder. When product is placed on the ground, cattle can apply more pressure and more easily take a bite.
- Regulate the number of feeding stations to create or decrease competition and thereby increase or decrease intake. Caution should be exercised in creating too much competition so that dominant animals don't consume more than their share and timid animals consume none.
- Use free choice supplements to improve grazing distribution. After animals have "found" the supplements and know what they are, supplements can be moved farther from heavy traffic areas. By locating some free choice supplements in under utilized areas of the pasture, you can attract the animals to that area and improve overall grazing distribution.
- Record when product was placed and how much. Records help you hit target intake. Put out enough product for a 7 to 10 day supply according to the number of cattle in the pasture. Monitor intake in a couple of days, make adjustments, then recheck in a few days. Adjustments can include, among other things, location of the supplement, number of feeding stations, use of feeders or placement on the ground, or use of a similar product that differs in palatability (e.g. feed additive, salt level, magnesium level, etc.). After a couple of weeks, a producer should be able to determine the weekly quantity needed with few adjustments.



Cost Saving Opportunities With Free Choice Supplements



Supplement losses due to weather, trampling, or shrink can become costly over a feeding season. Most free choice supplements are packaged in such a way that they virtually eliminate product waste.

By using a free choice supplement, you can decrease the number of trips to the pasture to put out supplement. Fewer trips to feed means savings of time, labor, and equipment that translate into dollars. Time savings and convenience are critically important during certain times of the year when other farm/ranch priorities need attention (e.g. fall harvest or calving). No matter which supplement delivery method is used, knowing the entire cost associated with feeding that supplement is the real measure to evaluate. Use the following chart to assist in calculating the total cost.

	Example Calculation				Your Figures			
	Cube		Rangeland Tub		Option 1		Option 2	
Product	Cube		Rangeland Tub					
Feeding Frequency	Daily		1X/wk					
Number of head	100		100					
Days supplemented	70		70					
Supplement cost:								
Price, \$/ton	280.00	XXX	450.00					
Feeding rate, lb/h/d	1	XXX	1					
Suppl. cost, \$/h	XXX	9.80	XXX	15.75				
Equipment, feeder & bulk bin depr.	XXX	6.00	XXX	-0-				
Labor								
Hours/trip	1	XXX	1	XXXX				
Hourly rate, \$/hr	8.00	XXX	8.00	XXXX				
Labor, \$/h	XXX	5.60	XXX	0.80				
Pickup								
Miles per round trip	25	XXX	25	XXXX				
Mileage rate, \$/mile	0.40	XXX	0.40	XXXX				
Pickup cost, \$/h	XXX	7.00	XXX	0.70				
Total cost, \$/head		28.40		17.25				
Total herd cost, \$		2840		1725				

Equipment: Depreciation estimate of overhead storage bins and cube feeder.

Labor: Based on 1 hour for a 25 mile round trip to load supplement, drive to the pasture, feed cows, and return each time cattle are fed. (Daily labor cost = hourly rate x hours/day x days / number of head)

Pickup: Ranch vehicles often have greater depreciation and upkeep expenses than over-the-road vehicles. This mileage rate may be low. Example based on a 25-mile round trip, 40 c/mile, 63 days supplementation, and 100 head. (Daily feeding cost = miles x mileage rate x days / number of head).



For More Information on Beef Production Visit Our Website at www.beeflinks.com