Central Valley Ag
GROWING AGRICULTURE TOGETHER

TALL GRASS MINERAL

A mineral program tailored to match your local grazing and feeding conditions with the nutrient needs of your herd. Consider these options that best feed your herd's needs:

TALL GRASS BREEDER LAC MAG

- Feed from 30 days post-calving until weaning
- Contains Magnesium supplementation

TALL GRASS PRE-CALVING MINERALS

- Feed 30 days pre-calving to 30 days post-calving
- Designed to improve calf immunity
- Improved cow colostrum
- Contains organic trace minerals
- Available with MOS for scour control
- Medicated options available

IMPORTANCE OF WEATHERIZATION

CUT LOSSES with SUPERIOR ALL-WEATHER TECHNOLOGY
cutlosses.com

Look for this seal to ensure Superior All-Weather Technology®

TALL GRASS MINERAL

- Features a weatherized formula that resists moisture penetration or clumping in the feeder, reducing losses and saving time and money
- Consists of coarse particles that help reduce dust and losses from wind, saving money and allowing for more accurate monitoring of consumption
- Offers superior palatability for improved intake

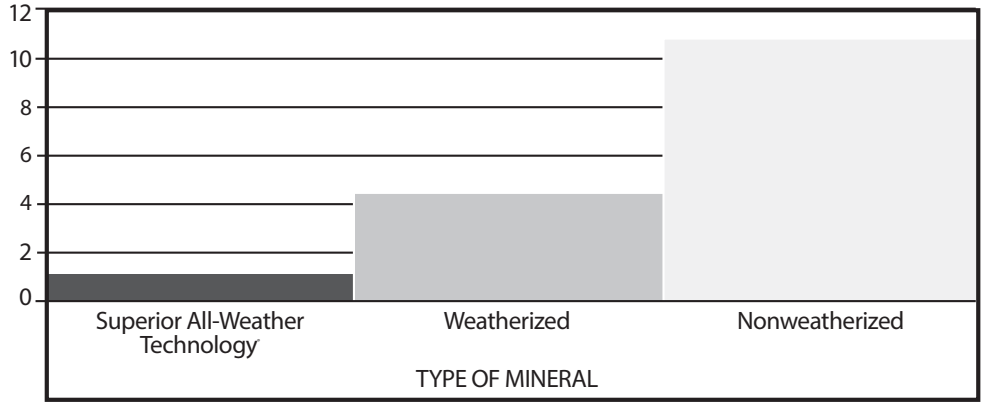
Whether it be from rain or excessive humidity, moisture is the enemy of non-weatherized mineral. Moisture causes the mineral to clump or harden, making it unavailable for cattle. Covered feeders offer little protection from the various ways moisture can affect mineral. Only Superior All-Weather Technology® prevents these losses.

"WHEN RESULTS MATTER, PUT TALL GRASS MINERAL IN YOUR MINERAL FEEDER"

MINERAL LOSSES FROM WIND

Wind research trial, Cargill Innovation Campus 2008

Wind is another major source of mineral loss. Studies have shown that with nonweatherized mineral, losses can be substantial. In a recent wind tunnel trial, minerals with various types of weatherization were exposed to winds of 15 mph for 12 hours. Superior All-Weather Technology® was clearly superior in cutting losses due to wind.



MINERAL MANAGEMENT

1. Mineral intake should be 2 to 4 ounces/head/day.
2. When figuring consumption, remember the calves that are in the pasture. As calves get closer to weaning, mineral intake could be 1 to 3 ounces.
3. Generally, cattle with high requirements will eat more than those with low requirements (i.e., lactating cows will eat more than dry cows).
4. Soil nutrient levels affect consumption. Mineral intake is low in areas with alkaline soils.
5. Forage quality and quantity influence intake. Cattle eat more mineral when grazing poor-quality forages or when there is a shortage of forage.
6. Cattle will eat less mineral when protein or energy supplements are fed.
7. Cattle tend to eat less mineral when drinking water with a high level of salinity (salt).
8. Intake will be higher when cattle have ready access to feeders. Intake tends to be higher in small pastures.
9. Changing placement of feeders relative to water and resting areas can impact intake.
10. A large portion of mineral intake might occur in the evening, prior to sunset.

MINERAL USAGE

Number of Animals	Approximate Mineral Amount
25 Cows	3 bags/month
50 Cows	6 bags/month
100 Cows	12 bags/month
250 Cows	30 bags/month

*Based on 1 mineral feeder per 25 cows

IMPORTANT: This bag may contain medicated or non-medicated feed. Please refer to the attached label for specific nutrient, medication and feeding directions concerning the product in this bag.

THE FUNCTION OF MINERALS IN CATTLE AND THE EFFECTS OF DEFICIENCIES

		Function in Cattle	Effect of Deficiency
MAJOR MINERALS	**Calcium**	Growth of bones and teeth, function of muscles and nerves	Abnormal bone development, loss of muscle tone
	Phosphorus	Growth of bones and teeth, energy metabolism and enzyme systems, proper protein utilization	Poor feed efficiency and gain, abnormal appetite, lower reproductive performance, abnormal bone development
	Sodium	Function of muscles and nerves, maintenance of water balance	Poor feed efficiency and gain, abnormal appetite
	Magnesium	Involved in almost all body processes	Poor feed efficiency and gain, grass tetany
TRACE MINERALS	**Copper**	Second only to phosphorus as the most limiting mineral; needed for blood and for proper feed utilization	Poor hair coat and color, anemia, poor growth, poor feed efficiency
	Zinc	Influences rate of nutrient absorption	Poor growth
	Iodine	Component of thyroid hormone, which controls body temperature and rate of metabolism	Poor feed efficiency
	Selenium	Needed for growth and reproduction; involved in enzyme system	Liver necrosis, poor growth, white muscle disease