

**ATTENTION!**  
**FREE CHOICE MINERALS HAVE  
NO FLAVORING AND/OR  
LIMITING AGENTS ADDED.**

The Free Choice Mineral Program is designed to allow the animal to use its natural instinctive selective ability to satisfy nutrient requirements with specific reference to minerals and vitamins. Contrary to the thoughts of some individuals, selective breeding has not reduced the ability of the animal to select those nutrients necessary for its well being. Any more than, selective breeding has reduced the sex drive, or reduced the need of the animal to consume nutrients such as energy, or protein. Animals do select needed minerals and vitamins from the Free Choice Mineral Program in proportion to the palatability (solubility) of the individual compounds used in the formulation of the various Free Choice mineral products. Free Choice therefore must use quality products that will be soluble in the mouth of the animal so that the taste bud system, which is triggered by deficiencies of nutrients in the tissue of the animal and more specifically the blood, will recognize the nutrients by its own merits rather than by some flavoring agent which may have been added to the compound. Free Choice does not use any flavoring agent to entice the animal to consume the Free Choice minerals other than the taste of the mineral itself in soluble form.

The major benefit of the Free Choice Mineral Program is that it not only allows the animal to consume additional minerals, as necessary, to satisfy tissue deficiencies caused by previously unbalanced rations. This results in the consumption of some of the Free Choice minerals at times in amounts that are considered by some people to be more than the needs of a given ration. When offering nutrients on a separate and free choice basis, such as the Free Choice Mineral Program, it must be clearly understood that animals will satisfy totally nutrient needs. Consequently, the animal may need to consume additional amounts of the particular mineral in question until its tissue deficiencies are adequately satisfied. At that time the animal will then continue to consume only the amounts of the individual minerals that are necessary to satisfy the deficiencies of the present ration, changing its consumption from the Free Choice Mineral Program in proportion to rations with little or no consideration to the previous history of the animal.

Scientific research has proven time and again that various mineral deficiencies within the physiological system of the animal are the ones that in reality prevent the animal from producing or reproducing to optimum. The Free Choice Mineral Program both allows the animal to satisfy these physiological needs and satisfy deficiencies of the present ration.

The Free Choice Mineral Program is very aware of the importance of the interrelationship of the tremendous number of mineral elements. Many feedstuffs contain excesses of some mineral elements that seem to be considered by some of no consequence. Nothing could be further from the truth. If we consider simply the Ca:P ratio, then a ration that contains 1% calcium will cause the animal to consume quantities of phosphorus from the Free Choice Mineral Program in amounts that would be considered by some to be excessive, but if we consider that the animal's physiological system functions best with a proper ratio, then it becomes logical that the animal will consume amounts of phosphorus necessary to attempt to provide its system with that proper ratio. Genetic selection has created animals with different mineral needs than those currently published in nutrition requirement charts. People are confident that the Free Choice Mineral Program provides a more accurate mineral balance to range animals in the multitude of various soil types, climatic conditions, and animal genetics.

Healthy animals are animals that are more productive. Even in the present economic circumstances, the Free Choice Mineral Program Pays:

1. By supplying, the necessary mineral elements to better balance the ration so that it can be digested more efficiently.
2. By allowing the animal to be in better physiological condition so that it will be more productive and or reproductive.
3. By not forcing unnecessary and unneeded minerals into any animal.
4. As ration quality changes, due to either changing feedstuffs or changing climatic condition, the animal can adjust its mineral intake to maintain a balanced diet.
5. By allowing individual animals to selectively satisfy individual needs which is not possible with a mixed or force fed mineral program.

The end results improved health, which allows the animal to better produce to its genetic potential. **THE FREE CHOICE MINERAL PROGRAM PROMOTES IMPROVED HEALTH.**

# Benefits of Free Choice Minerals

## **IODINE: Metabolism Regulation**

Approximately half of the iodine in the body is located in the thyroid glands, which produce important hormones, such as thyroxin, which have a regulating affect on the body metabolism. Thyrotoxin, which contains 65% iodine, is also concerned in growth, development and reproductive process. Iodine deficiency causes birth of weak and deformed offspring which fail to survive, abortion, infertility and other reproductive problems. Severe iodine deficiency results in goiter or lumpy jaw.

## **VITAMIN A: Healthy Tissue Growth**

Three very important vitamins in animal nutrition are A, D, and E. Vitamin A maintains the skin and the linings of the digestive, respiratory and reproductive tracts. Healthy tissues resist invasion by disease. Vitamin A is needed for normal sight and to prevent night blindness. Colostrum is high in Vitamin A. Vitamin D is the "Sunshine Vitamin". It presents rickets and is essential for proper bone growth and consistent reproduction. It is linked importantly with calcium-phosphorus utilization. Vitamin E aids in absorbing and storage of Vitamin A. It is a part of enzyme and hormone systems. If you are having breed back or cleaning problems it could be a lack of available Vitamin A and/or Selenium.

## **BUFFER BLEND:**

The Buffer Blend is very successful in counteracting low rumen pH and increases utilization of protein. The combination of sodium, magnesium, potassium and calcium make this a very valuable additive to the ration. A dose of enzyme is added to facilitate bacterial growth in the rumen. One ounce per head per day of Buffer Blend will provide the same buffering as 4-6 ounces of sodium bicarbonate, plus it will produce a remarkable increase in the rumen 'bug' crop.

Cobalt is needed to enable rumen bacteria to synthesize Vitamin B12. Cobalt deficiency causes loss of appetite, weakness, anemia, decrease in fertility and milk production.

***BV+C-Blend*** is B-Vitamin complex blended with bacteria, kelp, and trace minerals, buffers and herbs for digestive aid.

### **CALCIUM: Bone Growth and Vigor**

Calcium is necessary, along with phosphorus, for sturdy bones and teeth, and for maximum growth, gain and production. Calcium regulates how well tissue cells absorb nutrients and is vital in the blood gain and production. Calcium and phosphorus team up together in a ratio of approximately one or two parts calcium to one part phosphorus. Vitamin D is necessary for proper utilization of these minerals.

Iron and **Copper** work together to form hemoglobin in the blood. Deficiencies cause depraved appetites in cattle, anemia and calves born weak or dead.

#### ***Problems Associated with a Lack of Copper***

- All Fungal Diseases
- Anemia
- Cow Pox
- Diarrhea
- Dermatitis
- Failure to Breed
- Foot Rot & Foot Abscesses
- Herpes
- Johne's Disease
- Lowered Immune
- Liver Fluke
- Lump Jaw
- Open Knees
- Osteoporosis
- Ring Worm
- Staph Infections
- Worms

### **MAGNESIUM: Bone and Blood Development**

Magnesium improves calcium and phosphorus metabolism and calcification of bone. Magnesium is needed by the body in relatively small amounts but is very important to life. About 70% of the magnesium in the body is in the bone, combined with calcium and phosphorus. Muscle contains more magnesium than calcium. Magnesium is present in the blood, organs and tissue fluids of the body.

Conditions induced by a deficiency of magnesium (w/ Calcium) include Grass Tetany, Milk Fever, Mastitis, Acetonemia, Arthritis, Founder Warts, Soft Teeth, Bent/Deformed Bones and Nervous Behavior.

Feed with 2:1 and Hi-Phos to Dry Cows and Springers a minimum of 6 weeks prior to freshening.

## **POTASSIUM:**

### **Proper Growth & Nerve Response Factors Affecting Vitamin A Consumption**

Potassium is required by the animal body for normal nutrition and is linked with calcium and phosphorus in bone building processes. Its presence affects feed efficiency by aiding rumen bacterial growth and proper cell pressure for nutrient utilization. Muscle and nerves need potassium for proper maintenance.

## **PHOSPHORUS: Growth and Reproduction**

Phosphorus and calcium together make up 75% of the total amount of minerals in the bodies of farm animals, 90% of the minerals in the skeleton and half of the minerals in milk. Phosphorus is especially important as more bodily functions are tied to it than to any other nutrient. Besides building strong bones and teeth, it is an important part of many proteins, including the casein in milk. Phosphorus regulates enzyme activity and helps maintain vital pressure balances between cells. If a cow is starved of phosphorus, she is very unlikely to bear a calf. Phosphorus is the only mineral known to significantly affect the eating quality of beef.

**Sulfur** is necessary for the life of animals, for it is an essential part of most proteins. A deficiency limits non-protein nitrogen utilization. Sulfur aids in production of healthy hair coats and in hoof and horn development. Cattle that are sulfur deficient may have lice, ticks or other exterior parasites. They will not digest their feed properly as lack of sulfur interferes with the action of the amino acids, especially cysteine and methionine. Growing animals will not progress as well as they should if sulfur is missing. Sulfur is also needed by the calf in utero in the last two months of pregnancy.

**Trace Elements: Catalist and Enzyme Systems**

Trace elements iron, copper, cobalt, zinc and manganese are minor but essential minerals in livestock nutrition. Need for trace element supplementation has increased in recent years due to the gradual depletion of minerals in farm soils. Manganese affects the metabolism of calcium and carbohydrates. Cobalt is needed to enable Rumen bacteria to synthesize Vitamin B12. Cobalt deficiency causes loss of appetite, weakness and anemia. Deficiency further decreases fertility and milk production.

**Zinc** helps to increase gains through good feed efficiency. Deficiency causes poor growth, weak legs, skin lesions. **Zinc** also helps build a healthier immune system. **Lack of Zinc** causes reproduction and cleaning problems.

**Free Choice 1:1 Mineral** - A great place to start your **Free Choice Program**. Begin balancing with **1:1**, then put out entire line of Free Choice minerals.

**Free Choice 2:1 Mineral** - Use in conjunction with HI PHOS and M-Blend, in all bred stock for a minimum of 6 weeks prior to freshening. Using all 3 along with Redmonds Salt will greatly reduce your chances of Milk Fever.

**Free Choice Hi Phos Mineral** - Use it in conjunction with 2:1 and M-Mix, in all bred stock for a minimum of 6 weeks prior to freshening. Using all 3 along with Redmonds Salt will greatly reduce your chances of Milk Fever.

**Grazers Free Choice 1:1 Mineral** - For grass based dairies and intensive rotational graziers. Also great for grass fed beef producers.

**Goat & Sheep Free Choice 1:1 Mineral** - For sheep and goat raisers this is the ideal 1:1 mineral. Does not contain enough copper to be harmful to sheep. Goat producers usually use Free Choice Cu-Blend (copper) along with this for a healthier stock.