Individual Free Choice Minerals

Feeding Free Choice Minerals Has Effects on Many Levels.

- * Helps the animal to balance nutritional minerals and trace minerals.
 - * Helps the animal to balance the Cation/Anion charge in feed.
 - *Helps the animal to balance the Cation/Anion charge in water.

Precision Tools

Addressing Mineral Balance to Individual Needs Assuring Nutritional Herd Health

\$\$\$ Money in the Bank \$\$\$



"Low Boy" Mineral Feeder

Wooden 12-Hole Mineral Feeder

Feeder plans are available upon request.

Individual Free Choice Minerals

Kits and Pallets for Ruminants

Note that consumption of minerals varies from farm to farm. Your animals may eat more or less than the average rate, depending on their needs.

15 Mineral Kit

Item no. P100

Includes One Starter Bag of Each of the Following:

- A Mix
- P Mix
- BVC Mix
- S Mix • TS K Mix
- Buffer Plus • C Mix
 - Zn Mix
- Cu Mix
- MOP
- 2% I Mix
- Redmond Salt
- K Mix
- G.R.P. Free Choice
- M Mix

12 Mineral Kit

Item no. A181

Includes One 25 lb Bag of Each of the Following Minerals:

- A Mix
- K Mix
- BVC Mix
 - M Mix
- Buffer Plus P Mix
 - S Mix
- C Mix
- Cu Mix TS K Mix
- 2% I Mix Zn Mix

40 Bag Free Choice Pallet

Item no. A187 (40 x 25 lb Bags) Recommended for 250 head based on average usage

Includes:

A M1X	11 Bags
BVC Mix	9 Bags
Buffer Plus	2 Bags
C Mix	4 Bags
Cu Mix	1 Bag
2% I Mix	1 Bag
K Mix	2 Bags
M Mix	1 Bag
P Mix	4 Bags
S Mix	2 Bags
TS K Mix	2 Bags
Zn Mix	1 Bag

80 Bag Free Choice Pallet

Item no. A190 (80 x 25 lb Bags) Recommended for 500 head based on average usage

Includes:

A Mix	22 Bags
BVC Mix	18 Bags
Buffer Plus	4 Bags
C Mix	8 Bags
Cu Mix	2 Bags
2% I Mix	2 Bags
K Mix	5 Bags
M Mix	2 Bags
P Mix	7 Bags
S Mix	4 Bags
TS K Mix	4 Bags
Zn Mix	2 Bags

Should I Supplement Selenium? Selenium is not included in our free choice kits; however, we do carry Selenium supplements which can be purchased separately and offered if needed. While many soils are Selenium deficient, some may have excessive amounts of selenium. To find out if your area is selenium deficient, consult your local veterinarian.

Note: Offer a Free Choice common white salt block or common white feed mixing salt with all ABC Free Choice products.

Advanced Biological Concepts® Free Choice Mineral Program

History of ABC's Mineral Program

Dr. William Albrecht of the University of Missouri is reputed to have been the first scientist to propose that animals have the ability to choose plants with good mineralization over those with poor nutrition. Albrecht's work was the inspiration for Talbot and Carlson to develop the free choice mineral program.

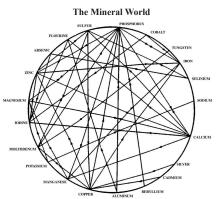


Tully Talbot of Talbot-Carlson, Inc., and Bill

Johnson were pioneers in marketing the individual free choice mineral program. In 1972, Bill Johnson started working for Tully's company, TCI. In the 1980's, Bill worked to introduce the self-regulated mineral concept to mega-dairies in California. In 1987, Bill moved back to Iowa, and when Tully Talbot passed away, TCI was dissolved. A few years later, Bill resurrected the individual free choice mineral program and continued to refine the technology under the logo of IDM. Advanced Biological Concepts began manufacturing the minerals for IDM, and when Bill retired, Advanced Biological Concepts purchased IDM. The Free Choice Mineral mixes are still manufactured and sold today at ABC.

Free Choice ABC Mineral Products Have No Flavoring or Limiting Agents Added

The ABC 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



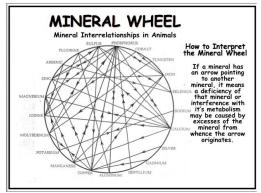
vitamins from the ABC Mineral Program in proportion to the palatability (solubility) of the individual compounds used in the formulation of the various ABC mineral products. Advanced Biological Concepts therefore, must use quality products that will be soluble in the mouth of the animal so that the taste 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 a flavoring agent which may have been added to the compound. We do not use any flavoring agents to entice the animal to consume the minerals, other than the taste of the mineral itself in soluble form.

The major benefit of **ABC's Free Choice Mineral Program** is that it not only allows the animal to satisfy mineral deficiencies of the present ration, but it also 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 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 with the ABC Free Choice Mineral Program, it must be clearly understood that animals will satisfy total 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 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 and or reproducing to optimum. The **ABC Free Choice Mineral Program** allows the animal to both satisfy these physiological needs and satisfy deficiencies of the present ration.

Advanced Biological Concepts 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 to be 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 ABC 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. A self-regulated 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 more productive. Even in the present economic circumstances, the **ABC** 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. Because as ration quality changes, due to either changing feedstuffs or changing climatic conditions, 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 result is improved health, which allows the animal to better produce to its genetic potential. THE ABC MINERAL PROGRAM PROMOTES IMPROVED HEALTH.