

Geri-Form

Advantages

- For geriatric and convalescing animals
- Supplies essential nutrients required for intracellular nutrition
- Supplies fatty acids and vitamins vital for cell function
- Provides choline, the precursor to the neurotransmitter acetylcholine

VET-A-MIX offers a complete line of quality, research-proven chewable nutritional supplements and drug dosage forms. These tablets are formulated in a palatable flavored base and are readily, even eagerly, accepted by dogs and cats.

Vet-A-Mix products are available only through licensed veterinarians.



**A high
potency
nutritional
supplement
for geriatric
dogs and
cats.**



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Choline Loading Theory

There have been many advances in neuro-physiology, and particularly understanding the functions of the neurotransmitters. There are at least 20 known neurotransmitters, which are chemicals manufactured and released by nerves to initiate nerve transmissions.

Acetylcholine is the most abundant neurotransmitter in the body. The results of recent research show that increasing the diet with choline and choline-active ingredients results in the production of acetylcholine.

As aging progresses, a slow loss of nerve cell function occurs which results in a decline in the strength of their transmissions. Since the cells in the brain involved in all memory functions use only the chemical acetylcholine to transmit their messages, dietary choline loading can be of significant benefit. Loading the diet with important components of acetylcholine such as choline and phosphatidylcholine aids the body in its attempt to restore and maintain normal cell function.

Seizures are the result of abnormal nerve transmissions in the brain. In some cases, seizures may result from reduced activity of control (inhibitory) nerves, resulting in over-activity of the motor (excitatory) nerves they were keeping in check. Another possibility is under-functioning of some (excitatory) nerves, causing over-functioning of other motor nerves, as they attempt to compensate for the loss of function of their companion nerves.

Enhancing the supply of the chemical acetylcholine aids the body's attempt to "normalize" the altered nerve function by replacing this depleted chemical in the seizing dog.

Also, concurrent use of choline loading with any schedule of dosage with anti-seizure drugs has been shown in some cases to reduce the amount of drug required. Frequently, in animals that seizure only occasionally, a choline loading product alone may eliminate further seizures.

Since the action of most anti-seizure drugs is to stabilize abnormal nerve activity, the normalizing effect of dietary choline loading on malfunctioning nerves is additive to the effects of these drugs; therefore, less drug dosage can frequently be used.

A further benefit involves the lipotropic action of choline. Lipotropic nutrients can help the liver in the detoxification of drugs. There have been no reports of hepatotoxicity from anti-convulsant therapy when choline loading products are used concurrently.

REFERENCES

1. Alberts, B. et al: Molecular Biology of the Cell. Garland Publishing Company, New York, NY, 1983; pp 255-266.
2. Bretcher, M.S.: The Molecules of the Cell Membrane. Scientific American 253(4): 100-108; 1985.
3. Wurtman, R.J.: Nutrients That Modify Brain Function. Scientific American 246(4): 50-59; 1982.
4. Harless, S.J. and C.C. Turbes: Choline Loading: Specific Dietary Supplementation for Modifying Neurologic and Behavioral Disorders in Dogs and Cats. VM/SAC 77(8): 1223-1231; 1982.
5. Kullenberg, F.W.: Nutritional Therapy: Managing Disease and the Effects of Aging. VM 80(12): 58-64; 1985.

Ingredients: Lactose, lecithin, cellulose powder, silicon dioxide, choline chloride, DL-methionine, DL-alpha tocopheryl acetate, animal liver meal (pork), inositol, magnesium stearate, torula dried yeast, calcium pantothenate, zinc oxide, niacinamide, thiamine mononitrate, riboflavin, vitamin A acetate, pyridoxine hydrochloride, menadione sodium bisulfite complex, cholecalciferol, sodium selenite, vitamin B₁₂ supplement. **Lipids:** Acetone fractionated soy lecithin 600 mg. (Typical lipid profile: Phosphatidylcholine, phosphatidylethanolamine, glycolipids, phosphatidylinositol, phosphatidic acid, phosphatidylserine.)

Guaranteed Analysis per Tablet (All values are minimum quantities unless otherwise stated.)

Minerals:

Zinc 10 mg
Selenium 20 mcg

Vitamins and Others:

Choline 40 mg
Inositol 25 mg
Vitamin E 15 IU
Niacinamide 10 mg
D-Pantothenic acid 10 mg
Thiamine mononitrate 2 mg
Riboflavin 2 mg
Pyridoxine hydrochloride 1 mg
Vitamin A acetate 1,000 IU
Vitamin K 0.3 mg
Vitamin B₁₂ 10 mcg
Vitamin D₃ 80 IU

Indications:

For use as a dietary supplement in nutritional programs to increase levels of phospholipids and glycolipids, plus choline (acetylcholine precursor) and other important nutrients.

Administration:

Feed free choice from the hand or crumble and mix into the food.

Protect from light and excessive heat (104° F).

Store at room temperature.

Feeding Directions:

Cats and small dogs – 1/2 to 1 tablet daily.

Large dogs – 1 to 2 tablets daily.

KEEP OUT OF REACH OF CHILDREN

How Supplied:

Bottles of 50 and 150 tablets.



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