This information was provided to me by a boxer breeder on February 24, 2009

Always check with your veterinarian before beginning this treatment. A blood panel is required to rule out other causes.

CHOLODIN for Older dogs with problems

After our 12-year-old boxer had two seizures a week apart, our vet recommended that we give her one Cholodin tablet once a day. Cholodin helps keep the neuro sensors working.

Our vet has experienced good results with older dogs who have seizures not related to epilepsy, which normally shows up in dogs between the ages of three to six years. The blood panel she did on our boxer came back with normal results.

The following web sites have information on Cholodin: http://mvplabs.com/products--supplements.html and http://lib.store.yahoo.net/lib/healthypetscom/cholodininfo.html

One economical online provider is: http://petnutritionproducts.com/cholodin-m-82.html (free shipping if the total is over \$50). A 50 tablet bottle at our vet was \$15.

Please see the pamphlet below.

CHOLODIN®

Not New . . . But Proven (Since 1982)

Cholodin[®] has been recommended by veterinarians for over 20 years.

- ... A natural aid in managing the aging process in canines.
- Contains amino acids, vitamins, and trace minerals (including zinc and selenium).
- Source of choline and phosphatidylcholine, two of the most recognized neurotransmitter precursors.
- . . . Available in four sizes
 50 count tablets
 180 count tablets
 500 count tablets
 1 lb. powder

Guaranteed Analysis Per Tablet:

All values are minimum quantities.

Minerals:

Zinc 7.2mg, Selenium .02mg

· Vitamins and other:

vitamins and (otner:		
DL-Methionine	55mg	Riboflavin	1.5mg
Choline	40mg	Thiamine	1.5mg
Inositol	40mg	Pantothenic Acid	1 mg
Niacinamide	5 mg	Vitamin B ₆	1 mg
Vitamin E	5 IU	Vitamin B ₁₂	2.0mcg
Silicon Dioxide, Inositol, Animal Magnesium Stea Tocopheryl Acet nitrate, Niacinan	Choline Liver M rate, Tor ate, Zino side, Rib	ecithin, Cellulose P Chloride, DL-Meth eal (Pork), Dried Be ula Dried Yeast, DI Oxide, Thiamine Noflavin, Calcium Pa ium Selenite, Cyano	ionine, eans, Alpha Mono- intothen-



DAILY DOSAGE

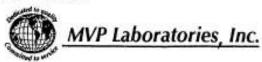
Small Dogs -1/2 tablet or 1/4 teaspoonful of powder

Medium Dogs-1 tablet or 1/2 teaspoonful of powder

Large Dogs -2 tablets or 1 teaspoonful of powder

PRECAUTIONS

Infrequently animals on a choline-loading regimen will show signs of increased neurological activity such as hyperactivity, social agitation, muscular twitching, etc. If these responses are noticed, cessation of tablet administration will quickly result in disappearance of these irregularities. After a period of three or four days, the animal may resume the same dosage, usually with no adverse reaction.



(800) 856-4648 mvplabs@mvplabs.com

Ralston, NE 68127 www.mvplabs.com

Cholodin®

Choline-loading Dietary Supplement



Providing essential nutrients for cell structure and function

BACKGROUND INFORMATION

In late adulthood the bodies of canines begin to lose cholinergic receptors. This is thought to be part of the aging phenomenon. Loss of these receptors is not the only effect of aging. In humans, the results of aging are clinically manifested in muscle atrophy, sagging skin, loss of short-term memory, and other familiar signs. Animals are similarly affected. Extensive clinical testing of the choline-loading technique has been done on geriatric dogs.

For animals displaying any of the following clinical signs, which cannot be explained by a specific pathological diagnosis, choline supplementation may be a very effective treatment:

- Increased sleep time. Animals sleep so soundly their owners have to waken them by noise or touch, but when awake, can respond to voice commands from their owners.
- Lethargy and reduced awareness of surroundings.
- 3. Poor coat; excessive shedding or thin, dry coat.
- 4. Chronic constipation or fecal incontinence.
- 5. Inappropriate urination.
- Poor mental acuity; animals appear disoriented, get lost or caught in corners, but have retained some functional eyesight.
- 7. Poor appetite; animals eat too little to maintain an adequate body weight.
- 8. Impaired hearing.

COMMENTS

A thorough examination by your veterinarian, including white blood count, urinalysis, and blood chemistry profile are needed before choline-loading is attempted. Clinical signs of sensity can reflect defects in organ systems that must be properly addressed in conjunction with or previous to the choline-loading regimen.

POSSIBLE BENEFITS OF CHOLINE-LOADING IN CANINES

A. Behavior Response

Improved response to stimuli.
Improved arousal and alert states.
Improved sleep cycles. Less tendency
to sleep during normal awake periods.
Improved posture and involuntary movements.
Improved long-term/short-term memory.

B. Hormonal Response

Achievement of optimal release of pituitary hormones by stimulating hypothalamic muclei.

C. Muscle Tone

Improved muscle tone of voluntary and involuntary muscles.

D. Skin

Stimulation of cholinergic fibers to cutaneous arteries and veins, hair follicles, skin glands, and sensory epidermal structures, resulting in improved coat and healthier skin.

H. Digestive System

Increased production by salivary gland.
Increased secretion by glands of stomach and small intestine, thereby improving digestion.
Increased peristable activity of stomach and intestines.
Helps prevent constipation and fecal incontinence.
More normal function of digestive system.

F. Urinary Tract

Increased ureteral peristalsis.
Increased contraction of detrusor muscle.
Increased maximum voluntary voiding pressure.
Improved micturition and more normal function of the urinary tract.