

CANINE WHOLE BODY SUPPORT

General support of a variety of body systems is essential in all patients, ranging from the growing puppy or kitten, to the aged patient, performance animals, patients with multi-system dysfunction, or those with chronic debilitating illnesses. **Canine Whole Body Support** provides balanced nutritional support for daily maintenance, as well as cellular nutrition for many endocrine tissues (and promotes a more complete recovery of function of the remaining viable cells in a compromised patient). **Canine Whole Body Support** can also be used as a broad spectrum nutritional base, in combination with more specific system support (e.g. **Canine Hepatic Support** for liver disease, **Canine Thyroid Support** with thyroid dysfunction, **Canine Adrenal Support** with adrenal dysfunction).

Indications for use:

- Daily multi-vitamin/mineral supplement for any patient
- Growing animals
- Performance animals
- Endocrine system support
- Pregnancy/lactation
- Senior animals
- Illness/surgery

Systems Supported:

- **Liver** – primary support for the liver with desiccated liver, liver PMG, rice bran, nutritional yeast, pea vine juice, wheat germ oil, orchic extract, oat flour, calcium lactate, defatted wheat germ, Brussels sprouts, *Silybum marianum*, inositol, choline, cocarboxylase, brain, celery, bet root, and liver fat extract
- **Thyroid glands** – primary support for the thyroid mediated with thyroid PMG, flaxseed oil, *Tillandsia usneoides*, soy bean lecithin, and kelp
- **Adrenal glands** – primary support for the adrenal glands with adrenal cytosol extract, mushroom, and adrenal PMG
- **Endocrine** (other) – pituitary PMG, hypothalamus PMG, and -hypothalamus cytosol
- **Digestive tract** – support of the digestive tract with desiccated stomach, brain, celery, bentonite
- **Kidney** – primary support of the kidney with kidney PMG, desiccated kidney, flaxseed oil, kidney bean, carbamide, and mushroom
- **Immune system** – primary support for the immune system with desiccated spleen, bone meal (cold processed and includes marrow components), veal bone PMG, thymus cytosol, brain, zinc liver chelate
- **Heart** – primary support for the heart with heart PMG and L-carnitine
- **Joints** – support for the joint structures with trachea, heart PMG, calcium lactate, manganese glycerophosphate, veal bone PMG and bone meal.

Whole Food Ingredient Sources:

- **Tissue desiccates** – liver, kidney, bone meal, spleen, and stomach
- **Vitamin A complexes** – liver and kidney
- **Vitamin B complexes** – rice bran, nutritional yeast, oat flour, and defatted wheat germ
- **Vitamin C complexes** – adrenal and mushroom
- **Vitamin E complexes** – pea vine juice and wheat germ oil
- **Carotenoids** – carrot
- **Minerals** – alfalfa juice, zinc liver chelate, copper liver chelate, iron liver chelate, and kelp
- **Fatty acids** – flaxseed oil
- **Botanical phytonutrients** – *Silybum marianum*, *Tillandsia usneoides*
- **Protomorphogens** - thyroid, adrenal, pituitary, hypothalamus, thymus, an heart

Individual Ingredients:

Defatted wheat germ – source of vitamin E complex, vitamin B complex, trace minerals, antioxidant.

Bovine liver concentrates – work synergistically w/liver PMG to provide important cell substrates for hepatic cells and Kupffer cells. This is important for metabolic processes of the liver and bacterial toxin removal.

Pea vine juice – source of whole vitamin E complex. Important antioxidant.

Nutritional yeast - provides a range of the whole vitamin B complexes that aid in nerve conduction and intestinal contractions.

Carrot – supplies extra carotenoid sources to provide vitamin A precursors.

Rice bran – provides whole vitamin B complex, important for cell energy reactions.

Flaxseed oil – contains alpha-linoleic acid, an omega-3 fatty acid that benefits multiple body systems including the immune system, integument, and cardiovascular system.

Bovine and ovine spleen – provides cellular materials from immune cells in the spleen, rich in super oxide dismutase (SOD), provides nutrient support for the lymphatic system and the cardiovascular system.

Alfalfa juice - source of bioavailable protein, vit A, C, E, and K complexes, carotenoids, chlorophyll, calcium potassium, isoflavonoids and triterpene saponins.

Silybum marianum (Milk thistle) – contains flavanolignans, potent liver protecting substances, stabilizes liver cell membrane against injury, assists in cellular regeneration, antioxidant.

Beet root – contains betaine, glutamine, high levels of folic acid, and triterpene saponins. Important methyl group donor, facilitates Phase II hepatic detoxification.

Porcine stomach – cellular materials derived from the stomach. Used to improve the cellular biochemistry of the gastric mucosa, submucosa, and the neuronal components. This is important for the ability to respond to physiological demands.

Oat flour – Vitamin A source, supports capillary integrity

Bovine Heart PMG™ Extract – contain specific thyroid cell determinant factors that improve the local nutritional environment of myocytes and support appropriate cell function (Lee and Hansen 1947), circulatory support.

Tillandsia usneoides (Spanish Moss) – contains significant amounts of various minerals, chlorophyll, and most of the B vitamins.

L-carnitine – important amino acid, stimulates breakdown of fats in mitochondria, shown to beneficially influence the bioenergetics of cardiac function (Ettinger 2000).

Brussels sprouts – cruciferous vegetable, contain important antioxidant properties, nutrient support for eyes, the body's natural cleansing systems, and detoxification processes.

Bovine orchic Cytosol™ extract – promotes the penetration of nutrients into tissue and various tissue compartments by its hyaluronidase activity.

Kidney bean extract - high in starch, protein and dietary fiber and an excellent source of iron, potassium, selenium, molybdenum, thiamine, vitamin B6, and folic acid. This food contains known anti-inflammatory nutrients, including Vitamin C and folate.

Kelp – Seaweed; a source of trace minerals.

Bovine liver PMG extract – provides a source of the liver Protomorphogen™ extract. Use for support of the liver (Lee, 1947).

Bone meal – mineral and bone marrow components, for connective tissue and immune system support.

Bovine Trachea – source of glucosamine, chondrocytes, sulphur compounds.

Bovine Kidney PMG™ Extract – supports the renal tissue, supports cellular repair mechanisms, improves local nutritional environment of kidney cells.

Mushroom – provides the whole vitamin C complex which is important for optimal cellular function, antioxidant activity. Vitamin C complex is felt to aid in the formation of bile and certain detoxification processes. It also acts as an antioxidant. Vitamin C deficiency has been shown to impair oxidative drug metabolism and to reduce Cytochrome P-450 and associated enzyme activity.

Bovine kidney – provides nutritional support to kidney, critical in the process of replenishing depleted cellular supplies of key factors.

Inositol – a component of the B vitamin complex. It acts as an important catalyst in energy reactions that involve metabolism of fats and carbohydrates.

Choline bitartrate – a vitamin of the B complex group, essential to liver function.

Coccarboxylase – a crystalline diphosphoric acid ester of thiamin (vitamin B1); Thiamin is essential for the normal metabolism of carbohydrates and fats.

Bovine Adrenal Cytosol™ extract – source of cytosolic components from cells of the adrenal gland, also provides critical cellular materials for proper cell metabolism.

Celery - Celery contains vitamin C, organic sodium, and several other active compounds that promote health, including phalides, which may help lower cholesterol, and coumarins, that may be useful in immune functions.

Bentonite (Montmorillonite) – a natural colloidal, adsorbing clay which can bind substances present in the lumen of the digestive tract, allowing these substances to be eliminated with the fecal material.

Veal bone PMG extract – source of protomorphogen, minerals, provides support for connective tissue structure and immune cells in bone marrow.

Bovine liver fat extract – provides substances that improve hepatic blood flow (Sato, 1927, Sato, 1928). May be beneficial for inactivating substances like histamine and maintaining optimum Kupffer cell function.

Calcium lactate – ionizable calcium source; fermented on plant sugar instead of being derived from a dairy source.

Manganese glycerophosphate – Manganese is an essential trace mineral important for skeletal and cartilage formation.

Carbamide – Carbamide is normally synthesized in the liver and may act as a physiologic diuretic.

Bovine Adrenal PMG™ Extract - support adrenal function by improving the local nutritional environment of adrenal cells.

Bovine hypothalamus Cytosol™ Extract – source of cytosolic components from the cells of the hypothalamus, providing cellular materials for proper cell metabolism

Bovine Thymus PMG™ Extract - supports thymic immune function by improving the local nutritional environment of thymus cells.

Bovine Pituitary PMG™ Extract – supports pituitary function by improving the local nutritional environment of pituitary cells.

Zinc Liver Chelate – source of liver-chelated zinc for immune, dermal and general system support.

Copper Liver Chelate – provides an excellent source of copper; copper is an essential trace mineral that is important for a wide range of biochemical processes.

Iron Liver Chelate – an excellent source of iron; iron is an important nutrient essential for a wide range of biochemical processes, including the synthesis of hemoglobin. It is also involved in the entire process of respiration, including oxygen transport and electron transport.

Soy Bean Lecithin – a rich source of lecithin, a precursor to choline. Choline is crucial for proper central nervous system, liver, cardiovascular, and immune system health. Also an excellent source of essential fatty acids.

Bovine Hypothalamus PMG™ Extract – supports hypothalamus function by improving the local nutritional environment.

Bovine Thymus Cytosol™ Extract – source of cytosolic components from cells of the thymus.

Bovine Thyroid PMG™ Extract – supports thyroid function by improving the local nutritional environment.

Potassium para-aminobenzoate (PABA) – an intermediate in the synthesis of folic acid in bacteria. Known for its ability to protect the skin from harmful rays of the sun when used topically, may also prevent or reverse the accumulation of abnormal fibrous tissue in the body.

Porcine brain – supports nerve function.