

## FELINE RENAL SUPPORT

*Nutritional support of the kidney is designed to support the cellular health of the kidney, which can facilitate normal organ function (filtration, absorption, detoxification, mineral reclamation, hormone production, fluid balance). **Feline Renal Support** provides important nutritional factors for direct renal support and also for indirect support of associated organs and tissues (liver, heart, bone marrow, circulation, nervous tissues). This multidimensional support using functional foods can be of critical importance in successfully managing these renal patients, providing the nutrients necessary to support regeneration, repair and detoxification.*

### Indications for use:

- Elevated renal blood values
- Age-related renal changes
- Polyuria/polydypsia
- Reduced hepatic function
- Renal injury

### Systems Supported:

- **Kidney** – primary support for the kidney mediated with kidney, buckwheat leaf juice and seed, kidney PMG, mushroom, carrot, flaxseed oil and extract of *Rhizopus oryzae*
- **Liver** – secondary support for the kidney mediated through support of the liver with desiccated liver, ribonucleic acid, orchic extract, nutritional yeast, rice bran, oat flour, pea vine juice, manganese glycerophosphate, allantoin, wheat germ oil, beet leaf and beet root
- **Adrenal glands** – secondary support for the adrenal glands with adrenal cytosol extract, rice bran, mushroom powder
- **Vasculature and blood forming tissues** – secondary support for the kidney mediated through support of these tissues with buckwheat leaf juice and seed, veal bone PMG, mushroom, flaxseed oil, black currant juice, chlorophyll, and alfalfa juice
- **Autonomic nervous system** – tertiary support for the kidney through support of the autonomic nervous system with bone PMG and parasympathetic tone with alfalfa juice

### Whole Food Ingredient Sources:

- **Tissue desiccates** – kidney, liver, adrenal, and spleen
- **Vitamin A complexes** – liver and kidney
- **Bioflavonoids** – buckwheat leaf juice and seed
- **Vitamin B complexes** – rice bran, oat flour, and defatted wheat germ
- **Vitamin C complexes** – adrenal, black currant juice, and mushroom
- **Vitamin E complexes** – pea vine juice, wheat germ oil
- **Carotenoids** – carrot
- **Minerals** – alfalfa juice, kelp, and *Strombus gigas*
- **Fatty acids** – flaxseed oil and black currant seed oil
- **Protomorphogens** – heart, kidney, veal bone

## **Individual Ingredients:**

**Bovine Kidney PMG™ Extract** – supports the renal tissue and normalizes its repair rate, improves local nutritional environment of kidney cells.

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

**Bovine liver** - liver support, provides important cell substrates for hepatic cells and the Kupffer cells. Important both for the metabolic processes of the liver such as histamine detoxification and for particulate and bacterial toxin removal (increased intensity in Leaky Gut Syndrome).

**Veal Bone PMG™ Extract** – supplies connective tissue support for all the fibrous parenchyma of the kidneys as well as bone marrow support.

**Bone meal** – provides cellular factors from immune cells in the marrow

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

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

**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.

**Buckwheat leaf juice and seed** – Source of bioflavonoids. Provide general benefits for healing and reducing inflammatory conditions. The bioflavonoids are useful for improvement of capillary fragility and promotion of normal arterial elasticity (Berger, 1992). A major source of building blocks and supportive nutrients for the heart and other vascular structures.

***Emblica officinalis*** – rich source of bioflavonoids and vitamin C. Immune enhancing properties

**Oat flour** – Rich in vitamin A, also provides vitamins B and C, supports capillary integrity.

**Ribonucleic acid** – nucleic acid occurring in cell cytoplasm and the nucleolus, supports capillary circulation.

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

**Pea vine juice** – rich source of whole vitamin E complex. Antioxidant.

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

**Ribonucleic Acid (RNA)** – nucleic acid from cell cytoplasm and nucleolus, opens capillary beds for increased circulation, supports nuclear chromatin synthesis.

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

**Bovine Heart PMG™ extract** – supports cardiac tissue at the cellular level, enhances local nutritional environment.

**Kidney Bean Extract** – supports arginase function in the kidney.

***Strombus gigas*** (Conch) – source of protein, amino acids, and trace minerals.

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

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

**Porcine duodenum** – used to improve cellular biochemistry of the duodenum. Known to produce digestive secretions, like secretin, which promotes secretion of pancreatic fluid and bicarbonate (Chey, 2003).

**Beet leaf juice** - supports proper bile production and flow, preventing accumulation of toxic bile salts (Graff 2002, Yerushalmi 2001). Also, the major protein in bile is IgA, which plays a significant part in mucosal immunity in the bile and upper small intestine (Brown 1989).

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

***Rhizopus oryzae*** – a mold grown on ***Tillandsia usneoides*** and beet root as a source of enzymes.