

## **FELINE IMMUNE SUPPORT**

The immune system is not one discreet organ, but a range of tissues and cellular functions. These tissues include: bone marrow, thymus, small intestine, spleen, lymph tissue, and liver. **Feline Immune Support** provides a combination of vitamins, minerals, tissue substrates, and phytochemicals that have an immunomodulatory effect. The nutrients in **Feline Immune Support**, known as functional foods, have been shown to contain a wide range of trace nutrients that benefit specific organs and tissues. **Feline Immune Support** is formulated to normalize immune function by supporting the entire range of tissues and cellular functions that make up the immune system.

### **Indications for Use:**

- General immune system support
- Patients with reduced immune function or with increased immune function
- Patients with chronic immune dysfunction
- Patients that are receiving drugs that are known to create immune stress
- Pre-surgical and post-surgical patients
- Patients requiring modulation of autoimmune responses

### **Systems Supported:**

- **Thymus** – primary support of the thymus mediated with thymus Cytosol™ extract
- **Bone marrow** – primary support of the bone marrow mediated with liver
- **Small intestine** – primary support mediated with desiccated jejunum, pancreas PMG
- **Spleen** – primary support of the spleen mediated with desiccated spleen and spleen PMG
- **Liver** – primary support for the liver mediated with desiccated liver, rice bran, nutritional yeast, pea vine juice, and oat flour
- **Adrenal** – secondary support of the immune system through support of the adrenal gland with adrenal Cytosol™ extract
- **Immune tissue** – general immune tissue support mediated by zinc liver chelate

### **Whole Food Ingredient Sources:**

- **Tissue desiccates** – liver, adrenal, kidney, jejunum
- **Vitamin A complexes** – liver and kidney
- **Vitamin B complexes** – liver and oat flour
- **Vitamin C complexes** – adrenal
- **Vitamin E complexes** – pea vine juice
- **Bioflavonoids** – buckwheat leaf juice and seed
- **Minerals** – alfalfa juice and *Strombus gigas*
- **Botanical phytonutrients** – *Eleutherococcus senticosus* and *Emblica officinalis*
- **Protomorphogens** – spleen, pituitary, thyroid, pancreas

## **Individual Ingredients:**

***Eleutherococcus senticosus*** – contains eleutherosides, triterpenoid saponins and other compounds that work to promote vitality, enhance immune system function and support the body's ability to adapt to stress.

**Bovine liver** - 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.

**Porcine jejunum**– contains important cellular substrates specific to jejunal tissue, contains specific cytoplasmic and nuclear fractions that improve the local nutritional environment and support appropriate enterocyte and intestinal function.

**L-glutamine** – used as a primary energy source for enterocytes. Important for maintaining mucosal integrity and tight junctions (Buchman 1999).

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

***Emblica officinalis*** – one of the richest sources of bioflavonoids and vitamin C

**Ribonucleic acid** – nucleic acid occurring in cell cytoplasm and the nucleolus, general circulation support

**Bovine and ovine spleen** – provides cellular materials from immune cells in the spleen.

**Bovine Spleen PMG™ Extract** – support splenic immune function by improving the local nutritional environment.

**Bovine Thymus Cytosol™ Extract** – cellular components that support specific thymic cellular function.

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

**Bovine Adrenal Cytosol™ Extract** – cellular components that support specific adrenal cellular function.

**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.

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

**Bovine Hypothalamus Cytosol™ Extract** – supports hypothalamic function by improving the local nutritional environment.

**Oat flour** – Vitamin A source, supports capillary integrity

**Bovine kidney** – kidney support, cell substrates for kidney cells.

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

**Alfalfa juice** – source of bioavailable protein, vitamin A, C, E, K complexes, carotenoids, chlorophyll, calcium, potassium, phosphorus, isoflavonoids and triterpene saponoids.

**Copper Liver Chelate** – provides an excellent source of copper, important for a wide range of biochemical processes.

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

**Kelp** – Seaweed, a good source of trace minerals

**Bovine Pancreas PMG™ Extract** – supports pancreatic function by improving the local nutritional environment.