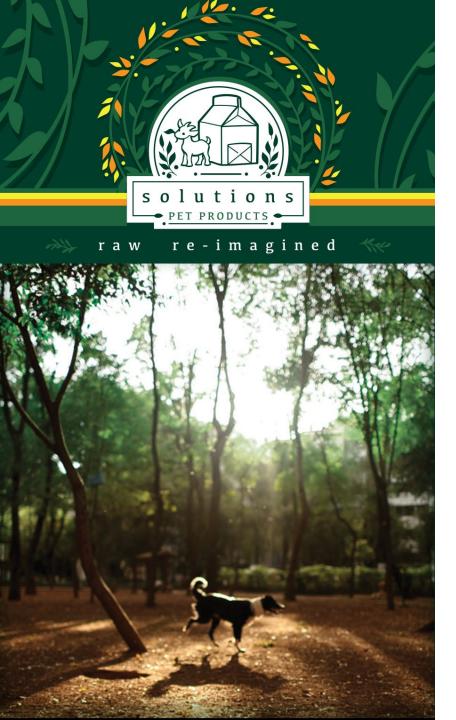


Disclaimer



- As with virtually all supplements, statements made have not been approved by the FDA.
- These products are not intended to cure, treat, diagnose or otherwise benefit your pet per regulation, only pharmaceutical products are permitted to make that claim.
- Results may vary according to the animal's diet and lifestyle.
- These products are not to be used in lieu of, but as a support to, proper veterinary care.
- The amount of time a product must be used before seeing results is heavily dependent on your pet's existing diet and current condition. Generally speaking, minimal results begin to occur between 1 dose and 3 weeks. Maximum results are often not achieved for about 3 months.
- In severe conditions, or conditions where the pet is dependent solely on the effects of the supplement because the diet has not been improved to eliminate processed foods, this time may increase greatly.
- The cleansing response, aka healing crisis, is a process in which your pet's body begins releasing the toxins that have built up in their system over the years. The speed and severity of the cleansing response will vary by individual pet according to their age, diagnosis, lifestyle, severity of symptoms, etc.
- Symptoms of a cleansing response may include: increased shedding, panting, lethargy, excessive water consumption, slightly loose stools, dermatitis, and self-fasting. These symptoms are temporary and transitory. Not every pet will have a cleansing response.





Sourcing is Key

Individually Hand-crafted

Fair Trade for Life Certified Ingredients

Non-GMO

Certified Organic

Kosher

Hand-Selected Harvesting

Zero-Waste Certified Business Ingredients

Small Farmer Supportive

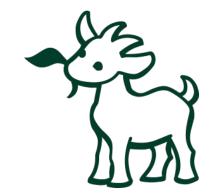
No Artificial or Natural Colors or other unnecessary junk

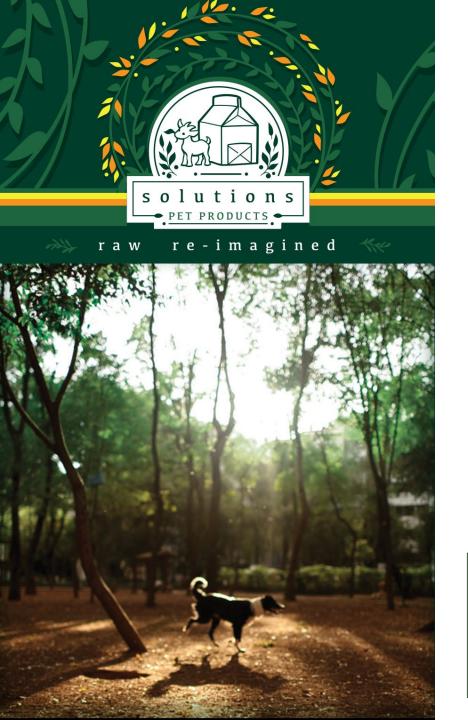
NO Fillers, Ever!

NO Preservatives

NO Binders

No Nuts, No Soy, No Wheat, No Corn... No nothing but medicinal herbs!









Immune

This blend is designed to assist with improving immune markers and decreasing systemic inflammation.

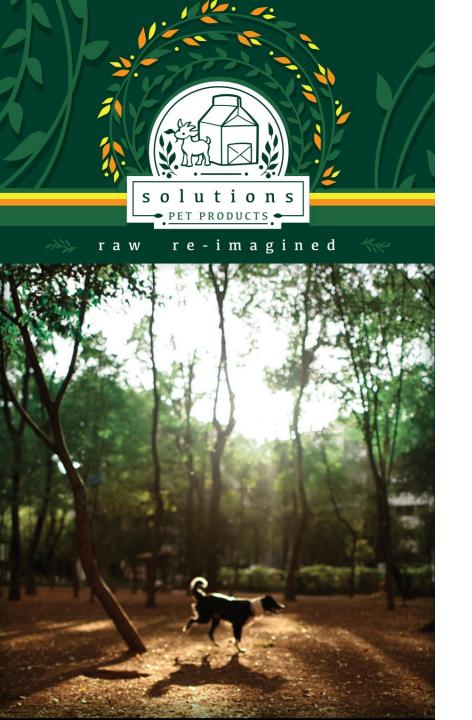
Inflammation has been stated to be a cause of:

- Allergies
- Asthma
- Autoimmune Diseases
- Some kidney diseases
- Some liver diseases
- Inflammatory bowel diseases
- Joint and bone pains
- Skin diseases

<u>Ingredients</u>

Proprietary blend of mushrooms (Shiitake, Maitake, Chaga, Reishi, Turkey Tail), Mistletoe, Cat's Claw, Astaxanthin, Montmorillonite, Frankincense







Despite the incredible benefits of each of the ingredien in Elemental Solutions IMMUNE blend, these statements have not been approved by the FDA.

IMMUNE is not intended to replace standard of care medical treatments and therapies.

There is ample scientific research associated with each ingredient in this blend. We have linked to a small number of the scientific documents. Please use the research to self-educate and discuss the research with your veterinarian and veterinary oncologist, cardiologist, or immunologist.



Medicinal Mushrooms

Elemental Solutions mushrooms are 100% certified Organic and grown in Carlsbad, CA on Oats. They include the myceliated biomass, primordia (baby mushrooms) and fruit bodies. They are dehydrated at low temperatures to maintain nutrients like beneficial <u>alpha-glucans</u>,

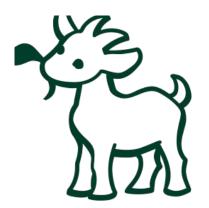
<u>prebiotic dietary fibers</u>, antioxidants (<u>glutathione</u>, <u>ergothioneine</u>, <u>polyphenols</u>, <u>SOD</u>), <u>Triterpenes</u>, <u>sterols</u>, <u>peptides</u>, <u>vitamins</u> and <u>minerals</u>. <u>Beta Glucans</u> and other bioactive compounds in mushrooms activate the immune system. <u>L-ergothioneine</u> is an antioxidant amino acid which decreases damage from oxidative stress and inflammation.

Bioactive compounds from mushrooms have been shown to activate or modulate the immune system, thereby inhibiting cancer cell metastasis and growth. These compounds work by affecting the maturation, differentiation, and proliferation of immune cells. These compounds are PAMP (pathogen associated molecular patterns) and act by interacting with receptors on leukocytes, upregulate genes associated with immunity, increase production of T lymphocytes and cytokines, activate activity of macrophages and cytokines, induce apoptosis, affect cell cycle, and increase infiltration of cytotoxic T cells in tumors. Some mushrooms upregulate genes which lead to production of anti-inflammatory and anticancer cytokines and chemokines. The polysaccharide-mediated antitumor immunomodulatory action seems to be rather common for many medicinal mushrooms and gives a major input into the therapeutic potential of at least 3 out of 4 reviewed species. This implies that any polysaccharide-rich mushroom species could possess similar or even superior immune-stimulatory properties. This would diminish the risk of tumorigenic conditions by acting as an antioxidant, antibacterial and inflammatory product.

Emerging evidence suggests that mushrooms may reverse myelosuppression, which makes them a promising adjunct therapy to optimize overall treatment outcomes with cancer cases.

Besides cancer, medicinal mushrooms can be used to treat:

- Diabetes Cardiovascular disease Asthma
- Arthritis Liver diseases Viruses
- Bacterial Infections Osteoporosis Aging
- Obesity Neurodegenerative Diseases







Medicinal Mushrooms



Maitake

Grifola frondosa

Contains an array of 1,3/1,6 beta-D glucan compounds which boost immune health, regulate blood sugar levels and improve resistance. insulin Breast Cancer, Colon Cancer. Maitake enhances the efficacy anti-cancer agent cisplatin, checking the decrease in the number of immunocompetent cells. It was found to be most effective against gastric adenocarcinoma.

<u>Shiitake</u>

Lentinula edodes

Shiitake produces <u>lentinan</u>, a B-glucan known to suppress **leukemia** cell proliferation.

Shiitake mushrooms are beneficial for:

- Liver support,
- Cardiovascular support,
- Immune support,
- Oral health, and
- Detoxification.



https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5937616/, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4684115/

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https://www.ncbi.nlm.nih.gov/books/NBK424937/, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3339609/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6624854/, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6056353/



Chaga

Inonotus obliquus

Native to North America, Europe and Asia, Chaga mushrooms have shown promise in their ability to reduce colon cancer and inhibit growth of melanoma. Chaga is an effective immune booster.







Medicinal Mushrooms

Reishi

Ganoderma lucidum

Reishi is an immune potentiator and immune modulator, therefore helping to balance and down-regulate an overactive immune system. Reishi has been studied and shown to assist with Lung cancer, Prostate Cancer, Sarcoma, Colon Cancer, Breast Cancer, Hepatocellular Carcinoma, Leukemia and Gastric Carcinoma. Reishi was found to possess remarkable cytotoxicity on colon carcinoma cells, colorectal adenocarcinoma and leukemia.

Studies have shown that GLP (Reishi) can inhibit tumor <u>cell</u> <u>motility</u> and invasion <u>in vitro</u> and tumor metastasis <u>in vivo</u>. Tumor cell migration is a prerequisite for metastasis. Thus, targeting tumor cell motility has received great attention for cancer therapy











Mistletoe

Mistletoe – Viscum album (leaf)

There are over 1,500 species of Mistletoe. Not all species are consumable. Several are poisonous. Of course, Elemental Solutions uses only medicinal Mistletoe. Those that are medicinal contain a variety of nutritional anti-cancer compounds and antitumor profiles which have been found to be similar to pharmaceutical <u>Doxorubicin</u>.

Elemental Solutions IMMUNE uses the leaf of Viscum Album which contains <u>phytohormone-(*cytokinin)</u>-binding-proteins. These proteins are immune-stimulating and have <u>cytotoxic</u> effects against tumor cells.

Of 23 evaluated studies, 52% showed statistically significant results, an additional 30% showed positive trends and 17% showed no to negative effects from Mistletoe. Like all other substances, Mistletoe is not effective against all forms of cancer. However, chemo patients that use Mistletoe report an improvement in QoL (Quality of Life) and a reduction of fatigue.

There are hundreds of naturally occurring <u>lectins</u> in plants. Some are beneficial and some are damaging for health. The lectins found in Viscum Album show an <u>immune-modulatory</u> effect on <u>neutrophils</u> and <u>macrophages</u>. This occurs by increasing the natural killer cytotoxicity and the number of activated lymphocytes. These lectins induce <u>apoptosis</u> in lymphocytes and boost the antioxidant system. This action may result in a decrease in adverse effects of conventional cancer treatment.

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Medicinal Mushrooms

Turkey Tail

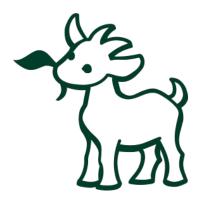
Trametes versicolor

Turkey Tail mushrooms contain a high concentration of healing polysaccharides. Research has shown that Turkey Tail mushrooms have particular benefit against:

- Gastric Cancer (PSK polysaccharide K),
- Breast Cancer,
- Colon Cancer.

and Turkey Tail reduces the growth of hormone responsive:

- Prostate cancer,
- Gastric cancer,
- Lung cancer,
- Leukemia,
- Liver cancer,
- Breast cancer, and
- Lymphoma









Cat's Claw - Uncaria tomentosa (bark)

Cat's Claw herb is from the bark of the South American Uncaria Tomentosa tree. It possesses <u>cytostatic</u>, anti-oxidant, anti-inflammatory activity as well as <u>mutagenic</u> and <u>antimutagenic</u> properties.



Studies show that Cat's Claw is beneficial for:

- Cancer while it may benefit many cancers, in Melanoma it displayed a 9-13% decrease in tumor size/weight
- Arthritis
- Gastritis
- Reducing fatigue
- Stabilizing solid tumor cancers for as long as 8 months in some patients
- Decreasing side effects to chemotherapy and radiation
- Restoring cellular DNA
- Preventing mutations and cell damage caused by Chemotherapy drugs
- Modulating the immune system (such as the proliferation of normal T and B lymphocytes)
- Modulating certain cytokines, including <u>IL-1</u> and <u>IL-6</u>, and <u>RNF-a</u>
- <u>Myelostimulating</u> effects, through <u>myelopoiesis</u> stimulation and colony-stimulating factors (G-CSF).
- <u>Thrombocytopenia</u>
- Stimulating the immune system
- Increasing resistance to diseases that occur when the body is stressed, malnourished, or affected by medication

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s o l u t i o n s



Astaxanthin



Astaxanthin is a type of Red Algae. It is harvested in controlled, farmed conditions to ensure safety. Astaxanthin has been shown to inhibit breast cancer cell <u>migration</u>. It reduces the proliferation of cancer cells and has demonstrated a consistent ability to reduce multiple types of cancer. This is important as metastasis is the main cause of death in most cancer patients.

Research on Astaxanthin shows a strong <u>anti-proliferative</u> anti-cancer effect on Oral cancer, Bladder cancer, Colon and Colorectal cancer (by inhibiting the <u>MYC-mediated downregulation of microRNA-29a-3p</u> and <u>microRNA-200a</u>), Leukemia (blood/bone cancer), Hepatocellular carcinoma (liver cancer), Lung cancer, Breast cancer, Prostate cancer, Gastric cancers, Neuroblastomas and Glioblastomas (brain cancers) (This would be further amplified with a Ketogenic Diet), and Esophageal cancer (by increasing antioxidant capacity and anti-inflammation capacity by inhibiting expression levels of <u>NFkB</u> and <u>COX2</u> proteins)

A primary cause of Astaxanthin efficacy is its ability to force apoptosis of cancer cells. Astaxanthin upregulates intracellular <u>reactive oxygen species</u> (ROS) levels which triggers apoptosis of cancer cells. Astaxanthin has proven protective against oxidative <u>stress</u>, inflammation, metastasis, liver fibrosis, non-alcoholic fatty liver, drug and <u>ischemia</u>-induced liver injury, and skin damage (via the regulation of DNA repair. In part because it prevents oxidative stress, which plays a crucial role in skin aging and dermal damage.

Oxidant events of skin aging involve damage to DNA, the inflammatory response, reduced production of antioxidants, and the generation of matrix metalloproteinases that degrade collagen and elastin in the dermal skin layer. Astaxanthin has antioxidant activity and inhibits ROS formation. It prevents the deleterious effects of UV by decreasing UV-induced reactive nitrogen species production, inflammatory cytokine expression, and apoptosis in keratinocytes (which create the photodamage response after UV exposure by releasing proinflammatory mediators)

Astaxanthin is considered a potent antioxidant ketocarotenoid that prevents cancer hallmarks by inhibiting <u>PI3K/Akt</u> and the associated downstream <u>NF-kB</u> and STAT-3 signaling pathways in SCC131 and SCC4. Several studies also indicated that the normal cells were unaffected/less affected than cancer cells by Astaxanthin.





Montmorillonite Clay



Clay can be rich with minerals, probiotics, <u>homeostatic soil organisms</u> and much more. It can also be contaminated with heavy metals and toxins. For example, Bentonite clay is sold for topical use because it often contains excessively high contaminant levels for consumption. Alternatively, Montmorillonite is a higher quality source that is better fit for internal use. That said, it's important that the company test the product for heavy metals to ensure safety and quality. Elemental Solutions uses the most expensive brand that validates safety with regular lab testing.

Some of the benefits of Montmorillonite include:

- <u>Potent antibacterial</u> Clay minerals can inhibit bacterial growth and serve as an alternative to antibiotics. These may serve as the safest and most effective treatment options for antibiotic resistant infections for which there are no known therapeutic agents.
- <u>Antimicrobial</u> In comparison to organic antimicrobial agents, inorganic minerals are likely to be considerably more stable and heat resistant, making the development and use of inorganic antimicrobial agents particularly advantageous.
- <u>Tumor modulator</u> Nano-sized clay mineral particles have the ability to modulate adhesions between tumor cells and with the surrounding extracellular matrix, thus preventing tumor metastasis. During metastasis, adhesion-molecule-mediated cell forces, termed as specific adhesion, become suppressed, and lead to the release of cancer cells into the lymphatic system or blood stream. Subsequently, upon invading other tissues and organs, adhesive function may be recovered, leading to the formation of new tumor colonies.







Frankincense - Boswellia serrata (resin)

Frankincense is a tree resin which acts by multiple mechanisms, including the inhibition of <u>leukotriene</u> synthesis, of cyclooxygenase (COX) ½ and <u>5-lipooxygenase</u>, of oxidative stress, and by regulation of immune cells from the innate and acquired immune systems. Further, frankincense modulates <u>signaling transduction</u> responsible for cell cycle arrest and inhibition of proliferation, angiogenesis, invasion and metastasis.

Clinical trials showed the efficacy of frankincense and its phytochemicals against osteoarthritis, multiple sclerosis, asthma, psoriasis and erythematous eczema, plaque-induced gingivitis, and pain.

Frankincense revealed beneficial effects towards **brain tumor-related edema**, but did not reduce glioma size.

Frankincense has the potential to alleviate melanoma and liver injuries, as well as bladder transitional carcinoma

Frankincense is not toxic even when concentrated.

Frankincense appears to distinguish cancerous cells from normal bladder cells and suppress cancer cell viability.

Frankincense resin has an analgesic, tranquilizing and antibacterial effect. It reduces inflammation by inhibiting <u>leukocyte elastase</u> and degrading glycosaminoglycans. It prevents the release of leukotrienes, thus having an anti-inflammatory effect in ulcerative colitis, irritable bowel syndrome, bronchitis and sinusitis. **Boswellic acids have an antiproliferative effect on tumors. They inhibit proliferation of tumor cells of the leukemia and glioblastoma subset.** They have an anti-tumor effect since they inhibit <u>topoisomerase</u> I and II-alpha and stimulate programmed cell death.

https://pubmed.ncbi.nlm.nih.gov/32027979/, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6544398/, https://pubmed.ncbi.nlm.nih.gov/31191820/, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2664784/

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