

LEHVOSS Nutrition
Solutions to Support Immunity and Gut Health



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Introduction to “Immunity & Gut Health” Ingredients

We all know that when it comes to health, the immune system plays a really important role. Signs of a healthy mind and body are based around a healthy immune system, and in today's society, courtesy of the pandemic, the need for a strong immune system is more significant than ever.

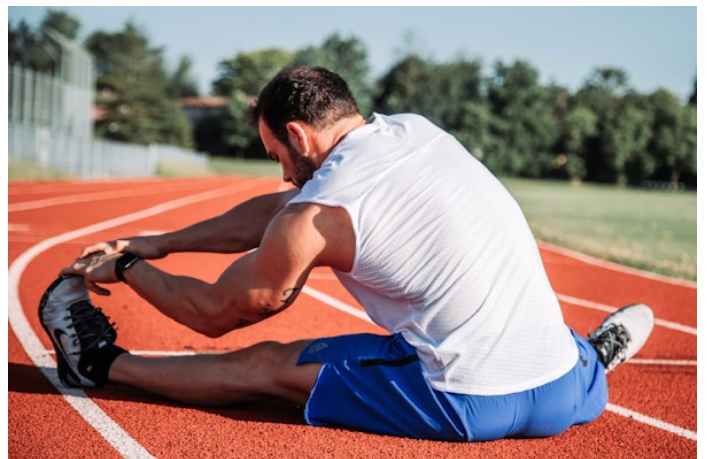
On top of that, throw in today's hectic and fast-paced lifestyle, where a work-life balance can seem quite hard to achieve, resulting in very little time to cook nourishing meals. This leads us to consume more processed foods that lack the essential vitamins and minerals therefore, not giving the body the nutrients it needs to function properly. This can cause oxidative stress where free radicals and antioxidants become imbalanced in the body, having a direct impact on our health.

Let's not forget about gut health and how this can impact our immune system as well. There is an increasing amount of evidence suggesting a healthy gut microbiome is important not only for our mental health but for our immune systems, which is why it is crucial we take care of it.

So what can we do? Regular exercise and eating a well-balanced diet are key in boosting the immune system. In addition to this you can supplement your diet with all the nutrients and key active ingredients which may play an important role in helping the body to stay healthy.

[LEHVOSS Nutrition](#) offer a wide range of ingredients to support the immune system and microbiome, from [Attenutin™](#) which supports immunity through the respiratory system and healthy lung function to [Tinofend®](#) *Tinospora cordifolia*, with a number of clinical studies, showing positive benefits on immune function, antihistamine and adaptogenic support.

Additionally LEHVOSS offers other key branded ingredients such as [OptiMSM®](#), [PureWay-C®](#) (also available in a [Liposomal](#) form), [Restoridyn®](#) especially formulated for athletes and people with active lifestyles, and scientifically researched punicalagins from [Pomella®](#) just to name few.



Attenutin™: An effective solution for Respiratory Support

Attenutin™ is a specially formulated, patent-pending natural bioflavonoid composition, clinically proven to support the mucous membrane lining of the respiratory system and healthy lung function. It is standardised to specific bioflavonoids from two botanicals with a long history of safe human consumption for respiratory health support.

Why is this important for immunity? It is well-known that prolonged exposure to oxidative stress from environmental air pollution and/or lung injury can cause impaired innate immunity by increasing HMGB1 level leading to a reduced macrophage function.¹ In multiple studies, Attenutin™ was found to modulate the immune system, reduce HMGB1 release, and balance cytokine response to prevent respiratory and lung tissue damages.²⁻⁴ These results were also supported by triple blind human clinical trial.

Tinofend®: the plant based, natural antihistamine and more

Tinofend® is a proprietary *Tinospora cordifolia* extract, standardised to active polysaccharides, with clinical studies showing positive benefits supporting immune function, antihistamine effects, adaptogenic benefits and allergies.



Tinospora cordifolia is an all-natural herbaceous vine native to India commonly used in traditional Ayurvedic medicine. According to research, Tinofend® has shown potential in supporting a healthy immune response through impacts to the adaptive (learned/remembered response to specific



pathogens) and innate (rapid response to microbes/pathogens) immune systems.

Scientific research on Tinofend® has shown a significant decrease of symptoms related to allergic rhinitis, a common immune response to histamine. Tinofend® stimulated the activity of white blood cells which regulate the immune response and reduced the number of eosinophils (immune cells that release histamine).⁵

Furthermore, a recent study (2021) highlighted the immunomodulatory properties of *Tinospora cordifolia* while acknowledging that “it has been used historically to combat acute and chronic inflammation as well as to promote a balanced immune response.” In this summary it is also mentioned that “*Tinospora cordifolia* represents a potential botanical option for augmenting the body’s natural defence mechanisms, particularly against bacterial threats, based upon a wealth of immunomodulatory preclinical and clinical substantiation data.”⁶



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Did you know you could combine WokVel®, Boswellia serrata extract with Tinofend® to create a synergistic health application? WokVel® contains a proprietary, natural complex of boswellic acids and Tinofend® offers a proprietary complex of adaptogenic polysaccharides and polyphenols associated with immuno-supportive properties, making them the **perfect robust immune support solution through impact to both inflammatory and immune responses.**

How can OptiMSM® help support the immune function?

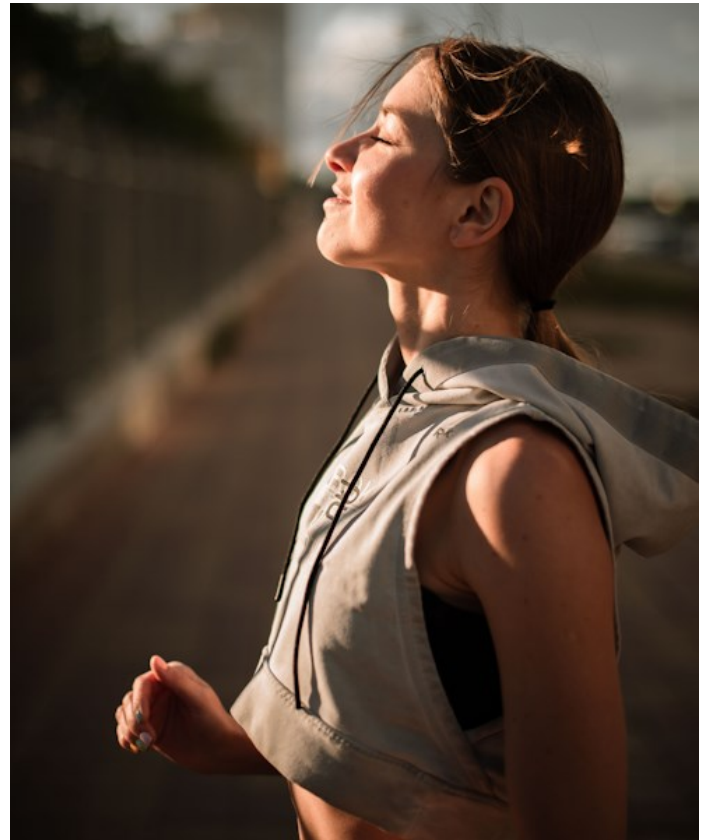
Creating a healthy immune system is vital for addressing stress which comes in many forms, and each can inhibit the immune system's effectiveness by both decreasing functions and altering the response. When functioning, the immune system locates and addresses the cause of stress and then responds by signalling tissue repair.

MSM is a small sulphur-based molecule most well-known for its joint support properties, but research has shown that it is unique regarding mitigating oxidative stress. Several studies have shown that it reduces oxidative damage, increases total antioxidative capacity, and maintains glutathione levels.

However, it is unique in that it does not itself soak up damaging reactive oxygen or nitrogen species. Rather it increases the capacity of the body's natural antioxidant pathways. In other words, it doesn't do the job for the body, it helps the body do its job better.

MSM has also been shown to have anti-inflammatory properties. Research indicates it can reduce the expression of the three primary pro-inflammatory cytokines: IL-1, IL-6 and TNF- α . However, an initial study also suggests that MSM can bolster the immune system against exercise-induced transient immunosuppression.⁷

Essentially, when the immune system is causing too much inflammation, MSM can mitigate the response and decrease damage, but when the immune system is suppressed, it helps bolster the response to fight infections. Some research has indicated that MSM can inhibit inflammatory pathways linked to metabolic disorders or chronic stress.⁸



Choose OptiMSM® from LEHVOSS at the only high quality, scientifically researched, branded form of MSM manufactured in the U.S. in a single-purpose production facility and purified through a proprietary multi-stage distillation process. This process removes impurities by utilizing unique boiling points to isolate the MSM molecules, guarantying low moisture content, reducing the risk of micro-contamination and degradation.

PureWay-C® to Boost your Body's Natural Defences

Vitamin C is an essential vitamin our bodies need, yet can't produce. It is a powerful antioxidant that can help strengthen our body's natural defences and boost the immune system. While naturally found in many fruits and vegetables such as oranges, strawberries, kiwis, broccoli, kale and spinach, it is not always possible to get exactly the amount we need, which is why supplements are a great idea.



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[PureWay-C®](#) is a proprietary, proven form of vitamin C, documented with research studies (including clinical trials) showing that it is rapidly absorbed and highly retained by the body.

The fatty acids in PureWay-C® act as ascorbic acid carriers to increase intestinal absorption and vascular distribution of Vitamin C, and enhance cellular uptake kinetics, which allows ascorbic acid to enter cells in a safe, quick and effective manner.

PureWay-C® is an advanced form of vitamin C, available in multiply grades, making it the perfect ingredient for immune boosting tablets, capsules, softgels, sachet and liquid formulations. Plus this is now available as [Liposomal PureWay-C®](#) produced with **true liposomal technology, not an emulsion.**

Benefits Provided by Our PureWay Liposomal Range

[LEHVOSS Nutrition](#) offer a liposomal product range which includes [PureWay™ B](#), a comprehensive Vitamin B complex comprising of Thiamin HCL (Vitamin B1), Riboflavin (Vitamin B2), Niacin (Vitamin B3), Calcium Pantothenate (Vitamin B5), Pyridoxine HCL (Vitamin B6), Biotin (Vitamin B7), Inositol (Vitamin B8), Folic Acid (Vitamin B9), Cyanocobalamin (Vitamin B12), and Vitamin C. By adding 160mg of this complex to your food supplement allows multiple EFSA Approved Health Claims related to normal function of the immune system and maintenance of normal red blood cells.

[PureWay™ D](#) is a premium Vitamin D3 that relates to multiple Approved Health Claims by EFSA including contribution to normal function of the immune system. Our PureWay™ D is produced using Vitamin D3 derived from lanolin, a fatty substance found naturally on sheep's wool, and it is standardised to 65,000 – 75,000 IU by HPLC.

[PureWay™ G](#) is a high quality Glutathione that has been optimised with true Liposomal technology for better delivery, absorption and uptake. Given the considerable variation in liposomal products within the industry, it is crucial to seek out high-quality and effective liposomal ingredients.

Our [PureWay™ B \(Vitamin B Complex\)](#), [PureWay™ D \(Vitamin D3\)](#) and [PureWay™ G \(Glutathione\)](#) are all powder forms that stand out because they are created using authentic liposomal technology known as Liposomax™, as opposed to emulsions. This liposomal technology is developed through a unique, all-natural process that avoids the use of alcohols or solvents and utilises Non-GMO, Vegan, Halal, and Kosher-certified sunflower lecithin.



The Role of Minerals in Immunity Support

Why not combine your vitamin C with minerals for added benefits? Vitamin C and zinc each benefit various systems in the body but together they support the immune system and according to research, could reduce the risk of disease. Taking these two nutrients together may give your immune system the extra boost it needs. Or how about vitamin C and Iron? We know that Iron is essential to our health and wellbeing, and it plays a vital role in supporting our immune system as it helps move oxygen around the body.

Another mineral to consider would be selenium as it is said to play an important role in the health of your immune system. This antioxidant helps lower oxidative stress in your body, which reduces inflammation and enhances immunity. Studies have demonstrated that increased blood levels of selenium are associated with enhanced immune response.



Our **PHARMAGNESIA**® range cover a variety of salts including zinc bisglycinate, picolinate, oxide, gluconate, acetate, ferrous bisglycinate, sulphate, fumarate and more. We offer high purity minerals, in conformity with the standard pharmacopeia (EP, USP, DAB, DAC) and EU regulations and are available in different grades, particle size distribution and bulk weights.

From our **PlantNutra**® range, LEHVOSS also offer a natural, organic certified, plant based **Natural Vitamin D** from mushroom powder; a whole-food ingredient that provides a plant-based source of vitamin D2 with all of the nutritional benefits found in mushrooms. It has been said that adequate levels of Vitamin D can aid your body's immune response and help to improve your body's ability to fight off illness and disease.

The Importance of a Healthy Gut

We have already established the importance of gut health and here's why: a healthy gut contains beneficial bacteria and immune cells that ward off infectious agents like bacteria, viruses and fungi.

These beneficial bacteria & immune cells communicate with the brain through nerves and hormones, helping maintain general health and well-being.

A healthy gut can be attributed to the fuel it is provided through nutrition and the balance of microbiota forming a symbiotic gut microbiome,⁹ as well as regular and consistent exercise.¹⁰ The two-way interactions between polyphenols in Restoridyn® and the gut microbiota may contribute to a host of health benefits including improved immune health.¹⁰

According to research, **Restoridyn**® promotes a healthy balance of pro and anti-inflammatory biomarkers^{11,12} that may foster a healthy gut and healthy gut microbiome, by means of the conversion of punicalagins to urolithins paired with mediation of the gut barrier through curcuminoids for a synergistic approach.

Pomella®, pomegranate extract is also another nice ingredient to consider. The antioxidant function from **Pomella**®'s powerful polyphenols work with the body to support health benefits often impacted by oxidative stress, contributing to overall wellness.

The health benefits of pomegranate have long been associated with the high content of antioxidant polyphenols, in particular ellagitannins such as punicalagins and their gut-derived metabolites, urolithins.



The symbiotic relationship between phenolic compounds and gut microbiota have gained much attention due to their relevance to bioavailability and human health.

Pomella® offers potential to promote a healthy gut microbiome through prebiotic effects enhancing the growth of beneficial bacteria, balancing pro- and anti-inflammatory status, and alleviating gut microbial imbalance induced conditions for gut and digestive support.



Restoridyn®: The importance of immunity for sports

Not only is [Restoridyn®](#) good for gut health, but it can also aid in supporting immunity. Sports driven people are always looking for healthy ways to reach the physical performance they desire while maintaining focus and positivity towards exercise. Restoridyn® is a synergistic blend of curcuminoids and pomegranate ellagitannins which offer an adaptogenic nutritional approach for recovery and immunity support.

Restoridyn® has been clinically studied in healthy men and women (26-45yrs) training for a mini-marathon. In conclusion, Restoridyn® helped in decreasing physical soreness, recovery time, and supported a balanced inflammatory response.

Runners not only showed improvements in pre and post-race recovery, but also in promoting a healthy immune system.^{11,12} Therefore helping an increase in overall performance and stamina.

The “Must Have” Essentials by LEHVOSS

[LEHVOSS Nutrition](#) provides a carefully chosen selection of ingredients from our “**must have**” Essentials range. In our essentials portfolio, we offer ingredients specially tailored to meet the needs of the Immunity and Gut Health market including [Coenzyme Q10](#) and [L-Glutathione](#). Our [Coenzyme Q10](#) and [L-Glutathione](#) are produced by fermentation and are subjected to our strict technical approval process, guaranteeing the highest quality ingredients with a shelf life of three years. Additionally, our L-Glutathione is water-soluble.

CoQ10 is produced via natural fermentation which closely mimics the structure of the CoQ10 naturally generated within the human body. This potentially helps to improve its recognition and absorption by the body. According to research [CoQ10](#) may offer numerous benefits, and studies has shown its promising results for supporting the **immune system**.¹³

There are two different forms of glutathione: reduced glutathione (GSH), which is the active antioxidant form, and oxidised glutathione (GSSG), which has no antioxidant properties. The ratio of GSSG to GSH in living cells is an indicator of cellular oxidative; the higher the ratio, the greater the stress. By taking GSH as a supplement it may be possible to **reduce the oxidative stress**¹⁴, therefore reduced forms of glutathione are preferred.

According to research, L-Glutathione is suggested to have a potential role in **supporting the immune system**¹⁵ and **aiding in cell repair**¹⁶. Its function as an antioxidant is known to protect the body from damage caused by free radicals, potentially contributing to cellular health and repair.

[We also offer PureWay™ G](#), a branded form of liposomal Glutathione. Please visit our [LEHVOSS Nutrition website](#) and check out the PureWay™ range for more information.

Now you have seen what LEHVOSS Nutrition have to offer, why not get in touch with us? Our experienced LEHVOSS Nutrition team can help you to create your own interesting solutions incorporating these unique, innovative and high quality ingredients. [Contact us!](#)



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