LEHVOSS Solutions to Benefit Active Lifestyles





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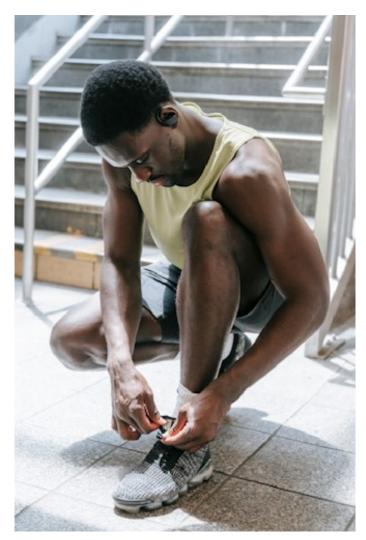
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Whether you like to exercise every day or just at the weekend, the key to achieving physical fitness goals and an overall healthier lifestyle is ensuring all nutritional needs are met.

As part of living a healthy and active lifestyle, it is important to get the right amount of nutrition to support energy and nutrient requirements. This is where rich in nutrients foods can help, however supplementation is usually needed to fill in the missing gaps.





This is where <u>LEHVOSS Nutrition</u> can help! We can offer a wide range of ingredients to support active lifestyles and help improve overall health well-being.

According to clinical studies, OptiMSM® has the ability to improve inflammatory response, reduce oxidative stress and increase performance. Or how about WokVel®, a clinically researched boswellia serrata extract, associated with joint integrity and healthy aging joint support.

Additionally, we can offer Longvida® Optimized Curcumin®, HAPLEX®Plus, hydrolysed fish collagen and Restoridyn®, which is a synergistic blend of proprietary polyphenols.







OptiMSM®: Pure & Researched MSM



OptiMSM® is a branded form of MSM, a great source of sulphur, scientifically researched to demonstrate its ability to reduce oxidative stress and muscle soreness associated with physical training.

This research also points to OptiMSM®'s role in mitigating inflammation caused by exercise, consequentially aiding the immune system and possibly enhancing the exercise recovery process. The **Informed Sport Certification** obtained by OptiMSM®, confirms additional assurance as a safe choice for sport nutrition formulas.

OptiMSM® provides the body an easily accessible pool of sulphur, which spares the essential sulphur-containing amino acids (SAAs) methionine and cysteine from being metabolised for their sulphur. Its role as a sulphur donor and its ability to preserve SAAs explains the broad range of health benefits with MSM supplementation.

OptiMSM® is a great stand-alone ingredient which we also offer in bulk as 1000mg vegetarian capsules. Why not try it in combination with Restoridyn®? This is a great ingredient for flexible dosing: 500 - 2000mg/day, depending on training requirements and support needed.

A study was conducted to investigate the effects of 500 - 1000mg/day of Restoridyn® with 500 - 1000mg/day of OptiMSM® for 30 days, on protein inflammatory biomarkers, inflammation-associated RNA, and oxidative stress.

The results supported the notion that the combined use of Restoridyn® and OptiMSM® prior to and after a race may result in reduced systemic inflammation and oxidative stress.¹









Restoridyn®: Synergistic Blend of Proprietary Polyphenols

Restoridyn® is a multi-pronged polyphenol blend (curcuminoids and punicalagins), clinically studied in healthy men and women for a synergistic solution targeting a new generation of sports and active peoples' needs for recovery from exercise, decreased muscle soreness, immune support and gut health.

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



Runners not only showed improvements in pre and postrace recovery, but also in promoting a healthy immune system. ^{2,3}

WokVel® & Longvida®: Synergy for Joint Support

As we have established, there are many benefits to being active such as weight management, health risk reduction, improved stamina & mental well-being and, strengthening your muscles.

However, individuals with a heavier training schedule could be prone to 'wear and tear' of joints so taking supplements targeting these issues could be massively beneficial.

We suggest a combination of <u>WokVel®</u> and <u>Longvida®</u> which offer a perfect synergy for joint health. Published clinical studies on both these well-known ingredients by Verdure Sciences®, offer a good amount of data demonstrating the potential benefits from a dual mechanistic approach to joint comfort and functionality through both 5-LOX and COX-2 pathways.

Boswellia serrata is known for its 5-lipoxygenase (5-LOX) inhibition activity and has been used traditionally as a joint comfort solution supporting improved mobility, comfort, joint integrity, and healthy joint aging.

Whereas Curcuma longa is well-known for its established cyclooxygenase-2 (COX-2) inhibition activity and favourable benefits promoting healthy joints, supporting improved antioxidant capacity, joint comfort, functionality, and healthy joint aging.

The results supporting this synergy are available on request. Please <u>contact</u> your local sales representative for more details.

Furthermore, <u>Pomella® Pomegranate Extract</u>, in combination with <u>Longvida®</u> and <u>WokVel®</u> may contribute to cartilage regeneration and lubrication via hyaluronic acid, adding additional support to healthy joints.







Botanicals for Mental Focus

Something else to consider when it comes to a sports and active lifestyles is the mental focus and concentration it takes to succeed and achieve fitness goals.



<u>Bacognize</u>® extract derived from *Bacopa monnieri*, is commonly used as an adaptogen supporting cognitive enhancement, memory, focus, attention, mood, emotional health, and stress. Clinical research on Bacognize® demonstrates its benefits for cognitive health (focus, memory and attention) linked to three major neuroprotective mechanisms; including neurotransmitter receptor (serotonin) binding activity and antioxidant capacity.^{4,5}

In our <u>PlantNutra®</u> range, we offer Witholytin® ashwagandha and holy basil by Verdure Sciences® which both act as adaptogens that may help the body decrease stress, improve mental balance and enhance general wellbeing.

Adaptogens are known to help the body adapt to stress or resist stressors of all kinds, whether it's physical, chemical or biological. These herbs and roots have been used for centuries in Ayurvedic healing traditions. In the ancient and sacred language of Hinduism, Ayurveda means "science of life" or "knowledge of life and longevity".

High Quality Fish Collagen Peptides

<u>LEHVOSS Nutrition</u> offer high quality, sustainably certified and traceable fish collagen peptides with good organoleptic properties and solubility. Backed by research, our hydrolysed fish collagen provides numerous health benefits for those dedicated to sport and exercise.

Collagen is a great way to help build and repair the muscles, tendons, ligaments, and cartilage that are stressed during exercise. Collagen is the key component for structural support in our body; it comprises 90% of our connective tissue – this includes our joints, ligaments and tendons.

The combination of collagen's high bioavailability with its high amino acid content makes it an optimal post-exercise nutrition that rapidly absorbs and can quickly work to help repair and replenish proteins broken down during exercise.

According to research, hydrolysed fish collagen may be better than other forms of collagen as it has undergone hydrolysis, a clean, enzymatic process that involves breaking down the collagen into more digestible collagen peptides for maximum bioavailability and effectiveness. It also contains greater amounts of the amino acids glycine and proline than many other proteins.









HAPLEX®Plus: Hyaluronic Acid

HAPLEX®Plus is a high purity, food grade Sodium Hyaluronate with two different options, low and high molecular weight, scientifically proven to support joint and bone health.

A study was carried out in 2015 on 33 volunteers who partake in intense physical activity. The aim was to measure improvements in their articular cartilage. Each of volunteers took 150mg/day of HAPLEX®Plus orally for 90 days and results showed the functionality of their articular cartilage and pain were significantly improved. 6



Benefits Provided by Our PureWay® Liposomal Range

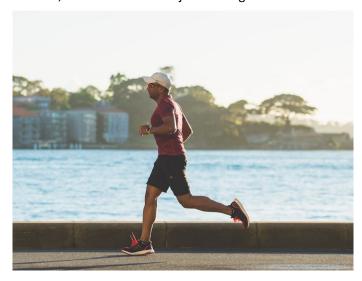
From our liposomal range, <u>LEHVOSS Nutrition</u> offer <u>PureWay™ G (Glutathione)</u>, <u>PureWay™ Q (Quercetin)</u> and <u>PureWay™ Multi-Vitamin</u> which are powder forms, created using authentic liposomal technology known as Liposomax™, as opposed to emulsions. This liposomal technology is developed 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.

PureWay™ G (Glutathione) and PureWay™ Q (Quercetin) are a high quality ingredients which, thanks to the proprietary lipid metabolites, may be more easily recognised and absorbed by the body.

According to research quercetin is reported to have antioxidant and anti-inflammatory properties. In a study, 50 women with rheumatoid arthritis (RA) were supplemented with 500 mg/day of quercetin or placebo over an 8 week period. Results demonstrated a reduction in early morning stiffness (EMS) and after pain activity.⁷

Another study investigated the effects of short-term oral quercetin supplementation on post-exercise whole-body energy metabolism. The study also aimed to determine the effects of supplementation on oxygen stress, inflammation, muscle damage, and high intensity cycling exercise performance. Twelve physically active students were given 1000mg/day of quercetin over a 7 day period. Results suggested oral quercetin supplementation may help improve high-intensity cycling time to exhaustion, which is due in part to the increase in whole-body insulin-stimulated glucose uptake and attenuation of exercise-induced oxygen stress and pro-inflammation.⁸

Our PureWay™ Multi-Vitamin offers a premium multi-vitamin complex that includes the essential B vitamins plus A, C, D, E, and K. This combination delivers a range of EFSA Approved Health Claims relating to heart and psychological function, protection of cells from oxidative stress, protein and glycogen metabolism, absorption/utilisation of calcium and phosphorus, maintenance of normal bones and muscle function, with an inclusion of just 200 mg of this blend.









Minerals & Vitamins to Support Active Lifestyles

As part of our PlantNutra® range we offer a natural source of potassium from coconut which is an easy, innovative way to formulate this essential mineral into food supplements. This could help regulate fluid balance, muscle contractions and nerve signals, plus a high-potassium diet may help reduce blood pressure and water retention and, support cardiovascular and joint health.

Or why not add our PlantNutra® <u>vitamin D from mushrooms</u> to your formulation? This will allow or EFSA claims such as contributing to the maintenance of normal bones, the maintenance of normal muscle function and the protection of cells from oxidative stress.

Let's not forget Vitamin C, which 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. Vitamin C contributes to maintaining the normal function of the immune system during and after intense physical exercise, plus the normal collagen formation for the normal function of bones and cartilage.

<u>PureWay-C®</u> 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, including Liposomal PureWay-C™ which is produced with true liposomal technology, not an emulsion.

Additionally, you could consider adding minerals from our PHARMAGNESIA® range, such as calcium, iron, zinc or magnesium in order to boost your food supplements. Backed by EFSA health claims, calcium contributes to healthy bones, while Iron and magnesium contribute towards normal muscle function and support the transport of oxygen in the body. Zinc on the other hand, is essential

for helping maintain a strong immune system in order for active people and athletes to train harder with less chances of being side-lined with a viral infection, or other illness.



The "Must Have" Essentials by LEHVOSS

LEHVOSS Nutrition provides a carefully chosen selection of ingredients from our "must have" Essentials range, along with natural, plant-based solutions under our PlantNutra® brand. In our essentials portfolio, we offer ingredients specially tailored to meet the needs of the Active Lifestyles market. This includes Citrus Bioflavonoids, Green-Shelled Mussel Powder and L-Glutathione, which are subjected to our strict technical approval process, guaranteeing the highest quality.

Our <u>Citrus Bioflavonoids</u> is a premium complex from sweet oranges standardised to contain 60% Hesperidin by HPLC. It is offered as a natural, plant-based ingredient, extracted by water with good solubility and suitable for vegetarians & vegans.

Research has focused on citrus flavonoids, suggesting that hesperidin might contribute to improving post-intensive exercise recovery. Study results indicated that both short-term and long-term consumption of 500mg of 2S-hesperidin notably improved anaerobic performance in amateur cyclists.⁹







Our <u>Green-Shelled Mussel Powder</u> is harvested in the pristine waters of New Zealand. Studies have indicated a direct correlation between the reduction of glycosaminoglycan levels in the joint and surrounding cartilage and the increased severity of arthritis and joint pain.



In one study, twenty-one participants diagnosed with knee osteoarthritis (OA) received 3000 mg/day of Green-shelled Mussel Powder for 8 weeks. The outcomes demonstrated improvements in knee joint pain, stiffness, and mobility. 10

There are two types of glutathione: reduced glutathione (GSH), which acts as an active antioxidant, and oxidised glutathione (GSSG), which has no antioxidant properties. The balance between GSSG and GSH within cells serves as an indicator of cellular oxidative stress, with higher ratios indicating increased stress levels.

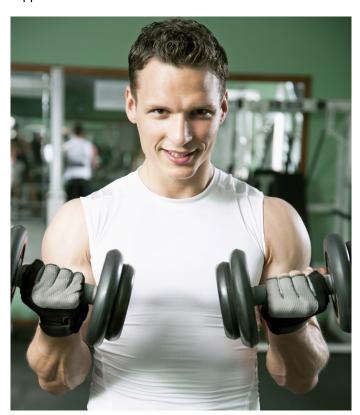
Supplementing with GSH can potentially **decrease oxidative stress**¹¹, hence this is the preferred form of glutathione. Our standard L-Glutathione is water-soluble and we also offer $PureWay^{TM}$ G, a branded form of

liposomal Glutathione (please see our section about the PureWay® Liposomal page on this document).

According to research, L-Glutathione is suggested to have a potential role in **supporting the immune system**¹² and **aiding in cell repair**¹³. Its function as an antioxidant is known to protect the body from damage caused by free radicals, potentially contributing to cellular health and repair.

In conclusion, living an active lifestyle is key to staying fit and healthy. Staying active can help reduce the risk of certain health conditions, once of which is heart disease. Not forgetting the positive effect it can also have on cognitive function and mental health.

Choose <u>LEHVOSS Nutrition</u> as your solution provider, offering a number of interesting, scientifically researched ingredients and formulations to support your next food supplement idea.









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