

Empowering Peak Performance through Microcirculation

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The best investment that you can make when it comes to your health, in addition to eating a nutrient rich diet and avoiding the intake and exposure to toxins, is to actively pursue heart strengthening, stress reducing and mental health inducing physical exercise. Yes, physical exercise!

Researchers have also now confirmed that properly fueling your body with oxygen, nourishment and a heightened level of antioxidant protection is crucial while exercising. However, to deliver the extra fuel required by your organs, muscles, joints and tissues, you need optimized microcirculation through 18,000 miles of capillaries.

Proper hydration and a diet plentiful in fresh fruits and vegetables is a must to support physical exercise. I also recommend supplementing your diet with therapeutic herbal mushrooms and utilizing 'Reflective Resonant Energy' technology when increased microcirculation is called for to help relive sore joints and aching muscles.

Regardless if you are already exercising routinely or if you realize it is time to start making your body's health a priority, you need to know that your physical output must also be balanced with the appropriate nutritional input.

It is very important to understand what happens when you exercise and what should be done to protect your body, and to support your optimized performance.

Microcirculation is Critical

To help you understand how important your microcirculation is to your muscles, consider these situations. When you feel that your arm or leg has become numb or 'fallen asleep' from compromised circulation, this can become quite painful. If you suffer from muscle cramps, often called a 'charlie horse' this too can be quite debilitating. Likewise, the burn that you can experience in your muscles from exercising can be due to a lack of oxygen and nutrients being delivered to the burning muscles.

It all comes down to the microcirculation within the 18,000 miles of capillaries in each of our bodies. It is the microcirculation that we depend upon for proper delivery of oxygen, free radical quenching antioxidants and vital nutrients. It is also microcirculation that is able to clear away the harmful and energy-draining carbon dioxide,

lactic acid build-up and toxic metabolites that are generated during health promoting exercise.

Fortunately for us, we don't always feel it when our vital tissues are suffering, yet a "silent death" of individual cells is occurring at all times. Literally a suffocation and gasping for oxygen at the cellular level occurs when you have not adequately supported your microcirculation. Most people mistakenly write this off as "part of the aging process" however; you don't have to passively accept these conditions. You can choose to take action versus non-action, and commit to thriving, not just surviving!

The most common misunderstanding among health conscious consumers is thinking that merely supplementing their diets with vitamins, minerals and antioxidants, will yield the full benefits desired to the body. The reality is that without sufficient microcirculation and good overall circulation, the key step of proper delivery of these life sustaining and exercise-enhancing nutrients cannot occur. It's like having a deep well full of water, but no way to access the life sustaining moisture. It is important to remember that regardless of your age you can benefit from turbo-charged microcirculation.

It is up to you to ensure proper nourishment is delivered to your trillions of cells. To help do this, I advise my patients to combine Traditional Chinese Medicine (TCM) medicinal mushrooms, with the advanced RRE technology. These can support your respiratory capacity, augment your endurance and deliver the building blocks needed to achieve your next level of vibrant health.

Also, when you exercise, or put any additional burden on the body, including healing from an acute injury or just from the daily wear and tear on joints, muscles and low back tension; having optimal microcirculation is vital to continued health, wellness, vitality and recovery.

Balancing Exercise and Free Radicals

Even as you sit reading this article, your body is generating something called 'reactive oxygen species' abbreviated as 'ROS'. Reactive oxygen species are the most prevalent, damaging "free radicals" in your body and are generated every time you breathe.

Researchers have documented that our antioxidant reserve capacity in most tissues are often marginal, at best. Thus pumping up antioxidant levels with a diet abundant

with fresh fruits, vegetables and TCM mushrooms like LingZhi, YunZhi, Cordyceps, Grape Seed Extract and Vitamin C helps confer the buffer needed by the body. If your intake of antioxidants are insufficient, then muscular soreness and lactic acid build-up can lead to a less than fulfilling workout.ⁱ Recent research has shown that supplementation of antioxidants is necessary for physically active individuals.ⁱⁱ

Supporting the Demands of Exercise

Traditional Chinese Medicine, commonly referred to as TCM offers abundant exercise-promoting, herbal products to augment athletic and overall exercise performance.

Clinically, LingZhi which is also the premier Chinese medicinal mushroom, it tops the list of herbs that should be incorporated into a health promoting exercise and daily regime. It supports the body's immune system against the physical stresses caused by healthy exercise by supporting several key immune functions, yet even more importantly it augments microcirculation. It is the delivery of the life-sustaining and performance-enhancing oxygen, nutrients and fuel to the body's tissues that is of paramount importance to provide energy and enhance recovery, plus slow aging by quenching free radical damage.

Antioxidant Protection

LingZhi also possesses a remarkable array of antioxidant properties. In a study conducted in Hong Kong at the Hong Kong Polytechnic University, the antioxidant properties of LingZhi were investigated by the "gold standard" of medical research, a "double-blinded, placebo-controlled, cross-over intervention" trial. Blood and urine samples were collected multiple times from 10 healthy volunteers. Consumption of LingZhi caused a significant post-ingestion increase in plasma antioxidant capacity. After 10 days of supplementations with LingZhi, an increased level of antioxidant capacity was also demonstrated. The pattern specifically reflected the ability of LingZhi's benefits in terms of both antioxidant and cardiovascular heart disease risk.ⁱⁱⁱ

Likewise Cordyceps another highly-recognized TCM has also been shown to increase antioxidants, specifically SOD (super oxide dismutase) that helps quench free radicals. It is has been hypothesized that it is this very property of Cordyceps ability to increase the "super protective" SOD that helps it to help protect against the aging process.

Grape Seed Extract provides a clinical and synergistic balance to the properties of LingZhi and Cordyceps. Researchers from around the world have now concluded that grape seeds provide superior antioxidant protection compared to vitamin C and vitamin E at equal doses by weight.^{iv} "Grape seed extracts contain a number of polyphenols including procyanidins and proanthocyanidins and are powerful free radical scavengers."^v The reality is that every time we take a breath or exercise we increase our oxidative damage (free radical damage) to our bodies. As reflected in the 2005 Neuroscience Letters, it is of paramount importance that the free radical damage (pro-oxidants) be quenched with adequate antioxidants otherwise our DNA and lipids (fats within the body) become damaged "leading to the common pathway for cell death".^{vi} At the most fundamental level our health is reflected in the health of each and every one of our 50-100 trillion cells that comprise our bodies. Thus I recommend to all my patients that incorporating a Grape Seed Extract, Vitamin C and plant based antioxidants should be the cornerstone in their pursuit of longevity and vitality.

Enhancing Stamina and Endurance

Traditional Chinese Medicine (TCM) herbals have been studied for their ability to help improve vitality, endurance and overall stamina. In a study designed to measure the mechanism for how Cordyceps helps improve physical endurance and helps alleviate fatigue, the study concluded that Cordyceps is effective in improving bio-energy status.^{vii}

In addition, Cordyceps has been shown to improve clinical vitality and heighten energy levels. It has also been shown to help support cardiac function according to a study reported in 1995, in the Journal of Management of Traditional Chinese Medicine. When combined with other TCM herbal products as is the routine practice in the tradition of Chinese Medicine, the potential for even greater benefit clinically is routinely seen in medical practice.

Plus, clinically in practice, the adrenal support and endurance building properties are often sought after from Cordyceps. Typically within two weeks and sometimes even sooner, patients have reported a heightened state of well-being, less irritability and more stamina, endurance, enhanced sexual performance and overall vitality, equating to a major health and wellness victory.

In Summary

Preventative action is a much wiser choice, than a reactive action. Too often, a failure to take positive actions can cause us to experience devastating consequences.

In summary, you must support your body when asking it to perform additional work. Put simply, that while exercise is critical to your overall health, this also causes extra work for the body.

Therefore it is essential to augment your body's microcirculation of the oxygen and nutritional fuel supply and also to remove metabolic waste such as carbon

dioxide and lactic acid, to help achieve your peak performance.

You must also offset the increased production of damaging free radicals with an increase in antioxidants, which are also more effectively distributed through optimal microcirculation. In the case of TCM mushrooms they help your body achieve both augmented microcirculation and confer antioxidant protection simultaneously.

It is also important to note that LingZhi and Cordyceps are all-natural and are legally used by professional athletes and world-class amateur athletes, including Olympians.

ⁱ Close GL, et al., Eccentric Exercise, Isokinetic Muscle Torque and Delayed Onset Muscle Soreness: The Role of Reactive Oxygen Species. *Eur J Appl Physiol* Dec 18, 2003.

ⁱⁱ Banerjee AK et al., Oxidant, Antioxidant and Physical Exercise. *Mol Cell Biochem* Nov 253(1-2):307-12, 2003.

ⁱⁱⁱ Watchtel-Galor S., et al., Ganoderma lucidum ('Lingzhi'): acute and short-term biomarker response to supplementation. *Int J Food Sci Nutri* Jan 55(1):75-83, 2004.

^{iv} Bagchi D, Garg A, Krohn RL Oxygen free radical scavenging abilities of Vitamin C and E, and a grapeseed proanthocyanidin extract in vitro. *Res Comm Mol Pathol Pharmacol* 1997;95:179-190.

^v Feng Y, Liu YM, Fratkins JD et al., Grape seed extract suppresses lipid peroxidation and reduces hypoxic ischemic brain injury in neonatal rats. *Brain Research Bulletin* 2005; 66:120-27.

^{vi} Sohal RS, Agarwai S, Sohal BH. Oxidative stress and aging in the Mongolian gerbil. *Mech Ageing Dev.* 1995;86:1398-1400.

^{vii} Dai G., et al., CordyMax CS-4 Improves the Steady State BioEnergy Status in Mouse Liver. *J Altern Compl Med* Jun 7(3):231-40, 2001.

**Note: These statements have not been evaluated by the Food and Drug Administration.
These products are not intended to diagnose, treat, cure, or prevent any disease.**