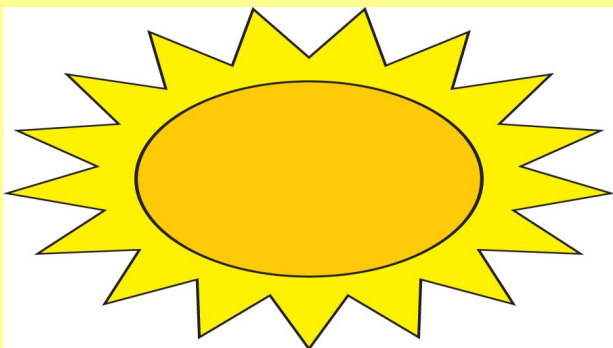




We now know that previous advice to stay out of the sun, can in fact put health at risk, especially for those living in big cities. People with low levels of vitamin D in their blood have more heart disease, cancer, diabetes, asthma and infectious disease including flu. They die younger. I have spent years studying healthy lifestyles and vitamin D was scarcely mentioned. Then about ten years ago, studying the scientific literature, I began to understand how important vitamin D is for general health – not just bones. I was amazed that I had not heard about it before and since then I haven't been able to stop myself telling others about this miracle vitamin D. Others share our concern that the benefits of sunlight are being covered up. "It's the great cancer cover-up. Panicked into avoiding sunlight by health experts, we are now dying in our thousands from diseases linked to deficiencies of vitamin D. But still the exaggerated warnings come." - Dr Oliver Gillie



"Vitamin D deficiency is the single most important dietary deficiency in the world today. It has already been linked to prostate cancer, colon cancer and breast cancer. After almost 35 years of increases in allergic and autoimmune disease, we are beginning to understand the causes of the epidemic". - Harvard Medical School.

Publications consistently indicate physical and athletic performance is seasonal; it peaks when 25—hydroxyl—vitamin D [25(OH)D] levels peak, performance declines as levels decline, and reaches its lowest when 25 (OH) D levels are at their lowest.



Vitamin D also increases the size and number of Type II (fast twitch) muscle fibres. Most cross-sectional studies show that 25(OH)D levels are directly associated with musculoskeletal performance in older individuals. Most randomized controlled trials, again mostly in older individuals, show that vitamin D improves physical performance.

CONCLUSIONS:

Vitamin D improves athletic performance in vitamin D-deficient athletes. Peak athletic performance may occur when 25(OH)D levels approach those obtained by natural, full-body, summer sun exposure, which is at least 50 ng/mL. Such levels may also protect the athlete from several acute and chronic medical conditions. Do you know about Vitamin D? Wow. The research overwhelmingly shows that Vitamin D deficiency is the cause of an incredible amount of pain, disease, and physical dysfunction that we just consider to be normal these days.

**Contact: Bob Powrie
 DocsD3 Health Labs.
 Florence Avenue
 Orewa 0931
 Auckland New Zealand
 Phone: +64 9 554 1352
 Email: docsd3@gmail.com**

**WHAT YOU DO
 TODAY
 CAN IMPROVE ALL
 YOUR TOMORROWS**

ATHLETIC PERFORMANCE



What's DocsD3 secret?

- How good would it be to increase your muscle power by 25%?
- Imagine reducing muscle infiltration fat by 24%, getting those lean sculptured muscles.
- Protecting against bone & cartilage injuries.
- Reduce overall body fat.
- Get a 800% reduction in colds & flu.
- Can control inflammations—the culprit that causes sore muscles and slow recovery.
- Want better coordination, reaction time, strength, speed and endurance.
- And The cost: As little as 15cents/day.



NON-PERFORMANCE THRU DEFFICIENCY

PERFORMANCE THROUGH VITAMIN D DEFICIENCY

Potentially, Vitamin D deficiency may impact upon training quality, injury and illness frequency and duration & as a result, athletic performance

Vitamin D deficiency is and is now endemic everywhere, with athletes not being spared. Three independent lines of evidence, namely Vitamin D and muscle morphology, age related changes in muscle function, and the presence of the Vitamin D Receptors in muscle cells, support the proposition that Vitamin D plays a significant role in muscle structure and function. However, athletic performance at all levels is increasing, & limited evidence supporting the proposition that Vitamin D deficiency is performance limiting, or that maintenance of Vitamin D at supra-physiological levels will result in enhanced muscle development and performance.

Another area of interest for athletes is inflammation. Intense exercise leads to elevated levels of pro-inflammatory cytokines. These are associated with overtraining and other sports-related injuries. Vitamin D has been shown to reduce the production of these cytokines, while increasing the production of anti-inflammatory cytokines. Is it possible that an high supply of vitamin D may speed recovery from intense exercise?

Magnesium

Magnesium is a mineral that is often overlooked, yet it is vital for our health and wellbeing. It is estimated that 75% of us do not consume the daily recommended amount of magnesium but it is needed for over 350 biochemical reactions within the body.

Magnesium is an essential mineral for healthy nervous system function. Magnesium threonate is unique in that it can cross the blood-brain barrier to improve synaptic density and quality. With improved nerve cell connections, additional brain formulas will work even better.

Many doctors believe that magnesium is the single most important mineral to sports nutrition. Not only does it help optimize an athlete's performance, but it speeds up recovery from fatigue and injuries.

Optimal muscle contraction and relaxation is the foundation of an athlete's performance. Proper magnesium levels are required for muscles to relax fully following a contraction. Doctors believe that injuries to hamstring muscles can be partially avoided through intake of magnesium and stated that "A shortened hamstring is a result of lack of available magnesium."

ATHLETIC RESEARCH

There is great research on Vitamin D3 and athletic performance. Studies done in Russia and Germany during the early part of the 20th century that indicated a possible link between vitamin D and athletic performance. It is now firmly established that low Vitamin D levels affects athletic performance results. **Dr. John Cannell book "Athlete's Edge, Faster, Quicker, Stronger"** reveals a long-held secret once known only to Eastern European athletic trainers. In the 1960s and 70s, it was called Sunlamp Therapy, and it gives athletes a definitive edge over their competitors, particularly for athletes who train for indoor or winter sports. That Vitamin D, the sunshine vitamin, improves muscle tone, muscle strength, balance, reaction time and physical endurance, as well as immunity and general health, is a recent discovery in western medicine. It has application ranging from improved performance of standing armies in the field, to Olympic and everyday athletes, and even seniors who need to avert falls and age-related loss of muscle mass and muscle tone.

Vitamin D3 is a fat-soluble vitamin that's considered by sports scientists to be essential for boosting the immune system, enhancing recovery and ultimately helping the entire body cope with the physical stress it's put under during periods of intense performance and training.

Now specifically for athletes and those who train when working at 90% of your maximum heart rate or near exhaustion, your immune system can become suppressed. This is because your oxygen usage skyrockets which in turn causes an increase in lactic acid accumulation in the muscles, which in turn causes your body to pull alkaline reserves from other mineral sources. It's what's known as an 'immune crash' and it's during this time that your body is susceptible to viruses, bacteria and overtraining.

Vitamin D3 has been shown to help combat this since it plays a crucial role in activating the body's 'T' Immune System Cells (the cells in the body that seek and destroy anything 'foreign' that enters the body such as bad bacteria or a virus). Vitamin D3 is therefore a great supplement for those who want to help relieve overtraining.

Vitamin D3 has also been shown to play a role in reducing inflammation in body tissues, again a common problem of overtraining and intense exercise. This is especially important for athletes who continually load their body above its habitual level during training or competition.

Recently there's been promising evidence that suggests high Vitamin D3 levels are associated with the maintenance of power and strength by potentially increasing the size and number of fast twitch fibres. This means that Vitamin D3 supplementation could not only improve immune function and prevent overtraining, and actually have performance enhancing properties. Muscle cells contain Vitamin D receptors and several studies have demonstrated that serum levels of Vitamin D correlate with improved physical performance.

On the other hand, people with insufficient levels of Vitamin D3 are likely to have fatty muscles because of an increase in fat infiltration. Obviously, this information is valuable for everyone not only for both dieters and fitness enthusiasts- who wouldn't want to lose fat and gain some definition? Whilst Vitamin D3 is used as a permanent supplement in many athlete's nutrition plans, it's particularly important during winter training since it's during this period when the body can become deficient in it due to lack of sunlight. This is why it's recommended to take Vitamin D3 in the months leading up to the winter so it can accumulate in the body and therefore boost immune health.

PERSONAL WEIGHT PROBLEMS

Body Weight Dictates How Much Vitamin D You Need. If you weigh more than the average person for your age your vitamin D requirements will need to be adjusted upward. Vitamin D levels tend to be low in obese individuals as well as in those who are physically inactive, and it's been stated that vitamin D deficiency is the primary cause of common obesity and metabolic syndrome. Several studies have also confirmed a link between vitamin D deficiency, abdominal obesity and visceral fat, as well as the possibility that increasing your vitamin D levels may improve weight loss.



The Role of Vitamin D in Injury Resistance Among Athletes Vitamin D & the Chicago Blackhawks

The Chicago Blackhawks ice hockey team are the first vitamin D team in modern professional sports history. The Chicago Blackhawk team physicians began diagnosing and treating vitamin D deficiency in all Blackhawk players about 18 months ago. Apparently, most players are on 5,000 IU per day. Improved athletic performance is only one of the benefits for the Blackhawk players. The other is a reduction in the number and severity of colds and flu and a reduction in the number and severity of repetitive use injuries. After many losing seasons, last year the Blackhawks came out of nowhere to get to the Western conference finals. This year they are playing even better.

**DOCS D3
HEALTH LABS.**