



What Can Vitamin D do for You?

By Alexandra Bernardin, B.Sc.

Why do you need to get your vitamin D levels checked?

The role of vitamin D in improving overall health has become more and more evident. Vitamin D deficiency has become a world wide concern. If you live in a location where you get limited exposure to sunshine, especially in the winter months, you are at risk of vitamin D deficiency. UVB sun block also limits our body's ability to produce vitamin D. The amount of sun exposure required to make enough vitamin D is less than the amount of sun that causes redness or burning; 20-30 minutes on your arms and face will usually do the trick.



There are two biologically inactive precursors to vitamin D; they are D3 and D2. The D3 form is more biologically active and is the form that is produced in the skin. "Normal" levels of vitamin D (measured as a circulating concentration of 25(OH) D in the blood) are 25-60 nmol/L but these normal levels are based on bare minimum levels to avoid sickness. Optimal levels recommend by top functional medicine doctors are around 80-120 nmol/L. People need to supplement their diets with at least 5000 IU/day, once their blood levels are optimal.

Here are some promising research findings on the role of vitamin D and optimal health.

- Optimal vitamin D status has been linked to greater weight loss when following a calorie reduced diet.
- Low vitamin D status may increase the risk of metabolic syndrome. Metabolic syndrome is condition where the individual has hypertension, has poor glucose and insulin metabolism, and has central obesity. These individuals are at greater risk for type II diabetes and cardiovascular disease.
- Low vitamin D levels may increase the risk of female infections. Probiotics have shown to be effective in preventing and for the relief of these infections in conjunction with vitamin D supplementation.
- High vitamin D levels may decrease the severity of seasonal flu symptoms. "Influenza infection is correlated geographically and seasonally with levels of solar ultraviolet radiation (Cannel, 2006). Researchers believe that the same may be true with the H1N1 virus... research in Canada is being done to confirm this.

Here are some benefits of having optimal levels of vitamin D.: healthy teeth and bones (especially important with growing kids), promotes calcium absorption and bone mass building, prevents bone loss and fractures, prevents auto immune diseases protects against muscle weakness, and lowers the risk of most forms of cancers. Most importantly, especially with the flu and H1N1 virus hitting hard, vitamin D boosts immune system function.

On the other hand, vitamin D3 deficiency can lead to rickets, osteoporosis, osteopenia, diabetes, multiple sclerosis.

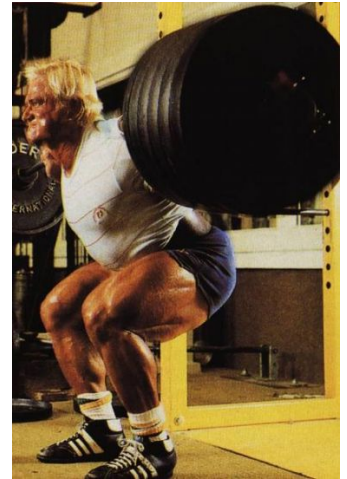
So with all these benefits...why are you not taking vitamin D? The first step would be to get your levels checked (a simple blood test can do that). Vitamin D is a fat soluble vitamin therefore it is important to check your levels regularly to avoid toxicity. Once we have your results, then we will recommend the appropriate supplement protocol for you.

The Back Squat: Part 2

By Tony Soaib, B.Sc.

In part one, technical execution of the squat was covered. The next step is to properly implement the exercise into your program. Training experience, strength levels, and personal goals are qualities that will determine how you train the squat.

The Breathing Squat. This style of squatting has been used by lifters for decades. It is best suited for hard gainers looking to gain size. But I recommend every serious lifter give it a shot. To execute a proper set of breathing squats, load a barbell in the squat rack with your ten rep max. Next, execute ten repetitions. Now, in standing in the top position, without racking the bar, take three deep breaths. Squat again. Three more deep breaths. Squat again. Continue in this pattern until you've completed 20 reps. After the first twelve reps, you should be breathing like a locomotive and ready to quit. Just keep going. After sixteen reps, your legs are shaking. You are positive there is no way you can complete one more rep... you can. Just keep going. After nineteen, you are worried you won't survive this experience. These could be your last moments on earth. They are not. You must push through one more rep. Complete it, then rack the bar. Strongmen and bodybuilders from John McCallum to Tom Platz have touted this as one of the best ways to gain size and strength. Their results speak for themselves. I dare you to try it.



The 5x5 method. Bodybuilder, Reg Park, is credited with the original 5x5 program. Over the years many lifters have modified that program. Here, I will give you what I think is the optimal version. Start with your squat five rep maximum. The goal is to complete five sets of five with this weight. If you selected the proper weight, you should not complete more than one to two sets of five reps. For the rest of the sets, do as many reps as possible. Every leg training session thereafter, strive to complete more reps, the whole time keeping the weight constant. Not until all 5x5 are completed with that weight are you permitted to increase it. When you are finally able to squat the weight for all twenty-five reps, increase your poundage by 3-5%. Be patient with this method, and the gains will come.



The 1-6 method. The one-six method should be reserved for advanced lifters. This style of training has been used by eastern bloc weightlifters for some time. It wasn't until 1991 that Coach Dragomir Cioroslan brought it to North America. From there, Charles Poliquin and Ian King popularized the method. Here are the nuts and bolts. First, perform a single repetition with a near maximal poundage. After adequate rest, perform a set of six repetitions. Continue alternating sets of one with sets of six. The single repetitions prime the nervous system. Because of this effect, the weight you use for the sets of six will be greater than otherwise. It is not uncommon for lifters to break personal bests using the 1-6 method. That being said, a word of caution: be conservative with your weight selections. You don't want to bite off more than you

can chew on your first few sets. As a guideline, start with ~95% of your one-rep maximum and make small jumps from there.

These three methods have passed the test of time. Now pick the one that is right for you.

Happy Squatting!

Janet's Corner

By Janet Stoff

We have worked hard this past month to try and work with some of the top local high schools. We have visited with athletic directors and asked them for their help to reach students and parents about our upcoming Youth Athlete Workshop as well as our Winter Scholarship Program. We have partnered with Steven Jackson, Barret Jackman, Keith Tkachuk, and Bobby Keppel to offer training scholarships to five local upcoming youth athletes. In addition to that, we have restructured our pricing options for youth athletes and are anxious to get this information out to the public. Please see Janet for more information.



Also, just in time for the Holiday season... It's Holiday/Winter wear from Dick's Sporting Goods. Let us do your Holiday shopping for you! We will have sample apparel for you to choose from at the service bar. Just make your selection (color and size) and we will take care of the rest. Including CIHP logo printing! We will pick it up, logo it, and will even have wrapping options available. We will be taking orders from November 30th to December 18th. Please have orders in by Mondays. We will pick items up on Tuesdays. Gift wrapping will be available on Thursdays. Please see Janet for more details.

EVERY SEASON STARTS AT



CIHP Calendar

December 5-6, 2009

Dr. Skaggs will be presenting his Manual Therapy and Rehabilitation for Temporomandibular and Cervical Spine Disorders (TMJ) Seminar at CIHP

December 3, 2009

CIHP Youth Athlete Workshop with special appearance by St. Louis Rams Running Back Steven Jackson

December 4, 2009

Deadline for submitting CIHP Winter Scholarship applications

January 8-10, 2010

International Symposium on Musculoskeletal Pain and Motor Control: Highlighting the Assessment and Management Approaches of Pavel Kolar and Stu McGill in Naples, Florida