

# The Wellness Express™



Jump on the train to good health

Issue 4, December 2013

## Vitamin D: Its Wide-Ranging Health Benefits

Presented by:

### Introduction

Vitamin D was once thought to be linked only to bone diseases (e.g., rickets, osteoporosis) but it is now recognized as an important contributor to overall health. Vitamin D is not a vitamin but instead is a powerful steroidal hormone. According to the Harvard School of Public Health, approximately 1 billion people throughout the world (including all ethnicities and age groups) currently possess inadequate levels of vitamin D in their blood.<sup>1</sup> The health implications of low blood levels of vitamin D are significant. The good news is that proper vitamin D intake may have wide-ranging health benefits, improving everything from low back pain to blood pressure.

In this edition of the Wellness Express, we look more closely at the health benefits associated with this powerful player and how possessing inadequate levels of vitamin D may leave you susceptible to numerous ailments. To learn more about vitamin D, including the proper dose for you, schedule an appointment with your chiropractor.

### Low Back Pain

A number of studies have examined the effect of vitamin D deficiency on

chronic low back pain. One study, published in 2003 in the journal *Spine*, reports that vitamin D deficiency is a significant factor in chronic low back pain in parts of the world where vitamin D deficiency is common.<sup>2</sup>



This study notes that chronic low back pain may be associated with osteomalacia (i.e., softening of the bones due to a lack of vitamin D) and that treatment with supplements should be mandatory in settings where vitamin D deficiency is prevalent. Another study, published in 2005 in the *British Medical Journal*, states that vitamin D deficiency may indeed play a role in chronic low back pain and that anybody who experiences longstanding musculoskeletal pain is at a greater risk of the consequences of untreated vitamin D deficiency.<sup>3</sup>

### Cancer

Researchers have suspected that vitamin D deficiency plays a role in cancer for some time. Approximately 30 years ago, researchers noticed that people living at higher latitudes (e.g., Canada, northern U.S., etc.) had a

### Exercise of the Week

Seated Upper Back Extension

Difficulty: Moderate

(Consult your chiropractor before doing this or any other exercise.)

**Start:** Seated in a chair with a backrest that extends up to mid-back (at or around height of shoulder blades).

**Exercise:** both hands together, and reach arms overhead. Then, reach up and back, letting upper back bend over backrest of chair. Also bring chin up toward ceiling. Concentrate on 'opening' effect this stretch can have on chest and shoulders. Hold for 30-60 seconds, and then return to starting position. Repeat 2X.



Presented by:



greater risk of dying from colon cancer than people who lived closer to the equator and experienced greater sun exposure. A 2006 review article published in the *American Journal of Public Health* notes that the majority of studies examining the relationship between vitamin D status and cancer risk show that sufficient vitamin D levels do indeed reduce the risk of cancer and that vitamin D supplementation is an affordable way to reduce cancer incidence and cancer-related deaths.<sup>4</sup> Vitamin D deficiency may be associated with the following cancers: colorectal, cervical, breast and prostate.

## Cardiovascular Disease

Research evidence now indicates that vitamin D may be important in reducing the likelihood of cardiovascular disease. According to the Cleveland Clinic, an increasing number of research studies have found that vitamin D deficiency is associated with an elevated risk of heart disease and that supplementing with vitamin D can help alleviate this risk.<sup>5</sup> One such study, published in 2008 in the journal *Circulation*, states that vitamin D deficiency is associated with cardiovascular disease, though more research may be required to determine if vitamin D supplementation might actually



prevent cardiovascular disease.<sup>6</sup> Another review article, published in 2010 in the journal *Hypertension*, notes that the majority of available data indicates that lower vitamin D levels may be associated with elevated blood pressure and a greater risk of developing hypertension.<sup>7</sup>

## Flu

Maintaining healthy vitamin D levels may be an effective way to avoid influenza. According to a 2010 study published in the *American Journal of Clinical Nutrition*, taking vitamin D(3) supplements during the winter may lower the incidence of influenza A.<sup>8</sup> This finding, notes the study's authors, was particularly significant in specific subgroups of schoolchildren. Reasons to suspect that vitamin D (especially low levels of it) might be the seasonal stimulus that leads to an influenza outbreak include the fact that vitamin D levels are at their lowest during the winter months and that kids who have rickets caused by vitamin D deficiency have a greater likelihood of getting respiratory infections. Also, the active form of vitamin D enhances immune cells' creation of antimicrobial proteins.

## Conclusion

Your chiropractor understands the wide-ranging health benefits of vitamin D and can counsel you further on how to check your vitamin D status and supplement appropriately. Ask your chiropractor for more information about vitamin D and the best ways to achieve optimal vitamin D levels.



## Quote to Inspire

*"Natural forces within us  
are the true healers of  
disease."*

*Hippocrates*

## References and Sources:

1. Harvard School of Public Health. Vitamin D and Health. <http://www.hsph.harvard.edu/nutritionsource/vitamin-d/>.
2. Al Faraj S, Al Mutairi K. Vitamin D deficiency and chronic low back pain in Saudi Arabia. *Spine*. 2003. Jan; 28(2): 177-179.
3. Lewis PJ. Vitamin D deficiency may have role in chronic low back pain. *British Medical Journal*. 2005. Jul; 331(7508): 109.
4. Garland CF, et. al. The role of vitamin D in cancer prevention. *American Journal of Public Health*. 2006. Feb; 96(2): 252-261.
5. Cleveland Clinic. Vitamin D and Heart Disease. <http://my.clevelandclinic.org/heart/prevention/alternative/vitaminandheartdisease.aspx>.
6. Wang TJ, et. al. Vitamin D deficiency and risk of cardiovascular disease. *Circulation*. 2008; 117: 503-511.
7. Vaidya A, Forman JP. Vitamin D and hypertension: current evidence and future directions. *Hypertension*. 2010; 56: 774-779.
8. Urashima M, et. al. Randomized trial of vitamin D supplementation to prevent seasonal influenza A in schoolchildren. *American Journal of Clinical Nutrition*. 2010. May; 91(5): 1255-1260.

Writer: Marty Hughes, DC  
Design: Elena Zhukova  
Graphics: Maria Camille Almirañez  
Production: Mike Talarico

Disclaimer: Information contained in The Wellness Express News™ newsletter is for educational and general purposes only and is designed to assist you in making informed decisions about your health. Any information contained herein is not intended to substitute advice from your physician or other healthcare professional.