Welcome to Innate Choice

Innate Choice®
The Science of Wellness Nutrition

Founded by

Dr. James Chestnut

B.Ed., MSc., D.C., C.C.W.P

- Scientist
- Award Winning Clinician
- Award Winning Author
- International Lecturer

Chiropractic and OmegA+D Sufficiency

The Gold Standard for Recovery, Wellness, Prevention & Performance

Chiropractic: Effective, Cost-Effective and Safe

Chiropractic: Effective, Cost-Effective and Safe

Manga et al. The Manga Report. 1993 An Independent Report Commissioned by the Ontario Provincial Government

"On the evidence, particularly the most scientifically valid clinical studies, spinal manipulation applied by chiropractors is shown to be more effective than alternative treatments for low back pain."

"Our reading of the literature suggests that chiropractic manipulation is safer than medical management of low back pain."

"There is also some evidence in the literature to suggest that spinal manipulations are less safe and less effective when performed by non-chiropractic professionals."

Chiropractic: Effective, Cost-Effective and Safe

Chapman-Smith, David LL.B. The Chiropractic Report. (2008) The Chiropractic Profession: Basic Facts, Independent Evaluations, Common Questions Answered. Vol 22 (5) pp1-8

"All formal government enquiries into chiropractic since the 1970s (Canada, Australia, Sweden, UK, New Zealand) have found contemporary chiropractic health care safe, effective, cost-effective and have thus recommended licensure and government funding."

"The most comprehensive and detailed independent examination of chiropractic ever undertaken was in New Zealand in 1978/79."

"The Commission's 377 page report, *Chiropractic in New Zealand* had obvious authority and balance. It followed judicial hearings then extensive investigations by the Commission in New Zealand, the United States, Canada, England, and Australia."

Chiropractic: Effective, Cost-Effective and Safe

Chapman-Smith, David LL.B. The Chiropractic Report. (2008) The Chiropractic Profession: Basic Facts, Independent Evaluations, Common Questions Answered. Vol 22 (5) pp1-8

From the *Chiropractic in New Zealand* Commission's report,

"By the end of the Inquiry we found ourselves irresistibly and with complete unanimity, drawn to the conclusion that modern chiropractic is a soundly-based and valuable branch of health care in a specialized area neglected by the medical profession."

Chiropractic: Effective, Cost-Effective and Safe

Chapman-Smith, David LL.B. The Chiropractic Report. (2008) The Chiropractic Profession: Basic Facts, Independent Evaluations, Common Questions Answered. Vol 22 (5) pp1-8

"For patients with common or mechanical back pain and neck pain/headache there is now a change from extensive diagnostic testing, rest, medication for pain control, and surgical intervention based on *structural pathology* as in traditional medical practice, to exercise, manual treatments, early mobilization of patients, and education about the spine and lifestyle, based on *functional pathology* as in traditional chiropractic practice."

"This management approach is not only effective but highly cost-effective."

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Chiropractic IS SAFE

Chestnut, James L. (2004) The Stroke Issue: Paucity of Data, Plethora of Unsubstantiated Conjecture. J. Manipulative Physiol Ther 27 (5): 368-72

"The only data available on the forces transmitted to the vertebral artery during a chiropractic cervical adjustment were published by Symons et al. and indicate that a chiropractic neck adjustment represents less force to the vertebral artery than turning the head within the normal range of motion."

"This is important information in light of the fact that both the chiropractic and medical literature contain(ed) information from "experts" that openly infer that a chiropractic cervical adjustment does represent potential trauma to the vertebral artery. The evidence is clear – it doesn't."

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Chiropractic IS SAFE

Cassidy et al. (2008) Risk of Vertebrobasilar Stroke and Chiropractic Care: Results of a Population-Based Case-Control and Case-Crossover Study. Spine; 33:S176-183

"We found no evidence of excess risk of VBA stroke associated with chiropractic care compared to primary medical physician care."

The evidence is overwhelmingly clear that patients have no more risk of VBA stroke caused by a visit to a chiropractor than they do from a visit to a medical doctor – they have zero risk from both!

This is because patients who have had a VBA stroke get headaches and neck pain and seek out chiropractors and medical doctors for treatment. These people get treatment for symptoms from a stroke; they are not getting strokes from their treatments.

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Chiropractic Better Than Physiotherapy and Medical Care (Drugs)

Cifuentes et al. (2011) Health Maintenance Care in Work-Related Low Back Pain and its Association With Disability Recurrence. Journal of Occupational and Environmental Medicine pp 190-198

"Those cases treated by **chiropractors** had less use of opioids and fewer surgeries."

"In addition, people who were mostly treated by **chiropractors** had, on average, less expensive medical services and shorter initial periods of disability than cases treated by physiotherapists and medical physicians."

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Chiropractic Maintains Health

Cifuentes et al. (2011) Health Maintenance Care in Work-Related Low Back Pain and its Association With Disability Recurrence. Journal of Occupational and Environmental Medicine pp 190-198

"This clear trend deserves some attention considering that **chiropractors are the only group of providers who explicitly state that they have an effective treatment approach to maintain health."**

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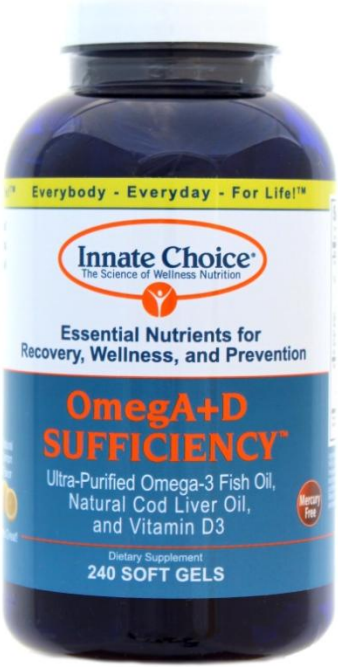

OmegA+D Sufficiency™

The Gold Standard for Recovery, Wellness, Prevention, and Performance

PERFECTLY SUFFICIENT AMOUNTS and the PERFECT RATIO of Omega-3 Fatty Acids, Vitamin D, and Vitamin A.

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Omega-3 Fatty Acids and Vitamin D are Essential Nutrients

Connor, W.E. Importance of n-3 fatty acids in health and disease. Am J Clin Nutr, 2000 71(1): 171S-175S

Holick M. High prevalence of Vitamin D inadequacy and implicatons for health. Mayo Clin Proc. 2006;81(3):353-373.

Omega-3 fatty acids and Vitamin D play a critical role in virtually every human function including:

- growth and development
- brain and nerve function
- emotions and behavior
- maintenance of skin and bones
- regulation of healing & inflammation
- cholesterol levels
- digestion
- heart function
- immune function
- vision

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Vitamin A is an Essential Nutrient

Levine, SA. The importance of a balanced approach to vitamin D supplementation. Journal of Orthomolecular Medicine. 2011;26(1):15-20.

"Both vitamin A and vitamin D are far more than vitamins, with profound effects on every tissue of the body...they are involved in regulation of everything from bone to the brain, the kidney to the immune system, the heart to the pancreas."

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The Science of Wellness Nutrition

Vitamin A is an Essential Nutrient and Cod liver oil is the best source

Farzaneh-Far et al. Association of Marine Omega-3 Fatty Acid Levels With Telomeric Aging in Patients With Coronary Heart Disease
***JAMA*. 2010;303(3):250-257**

"Vitamin A, provitamin A, and carotenoids are well-known antioxidants. However, humans cannot synthesize vitamin A and must obtain it from their diets – they are essential nutrients."

"Cod liver oil is a good source of vitamin A supplementation, as the dose of vitamin A is moderate and the quality of vitamin A is excellent."

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Vitamin A From Cod Liver Oil Superior

Huang, WB et al. Cod liver oil: a potential protective supplement for human glaucoma. Int J Ophthalmol 2011;4(6):648-651.

"Cod liver oil is used widely as a dietary supplement. It is a rich source of vitamin A, vitamin D, and essential omega-3 fatty acids, especially eicosapentaenoic acid (EPA) and docosahexanoic acid (DHA)."

"In previous studies, cod liver oil supplementation has been suggested to reduce cardiometabolic risk factors, have anticancer effects, and ameliorate cognitive impairment induced by chronic stress."

Vitamin A an Essential Cofactor for Vitamin D

Levine, SA. The importance of a balanced approach to vitamin D supplementation. Journal of Orthomolecular Medicine. 2011;26(1):15-20.

"Vitamin A and vitamin D balance, enhance, and contain each other through the retinoid X receptor (RXR)."

"Because they share a receptor, if we supplement either vitamin D or vitamin A in an unbalanced fashion, we create a functional deficiency of the one not supplemented."

"Low blood levels of vitamin D, vitamin A, and carotenoids are all correlated with greater risk of heart disease."

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Vitamin A an Essential Cofactor for Vitamin D

Vitamins A and D each increase the genetic expression of cell receptors for the other. Together, vitamins A and D cause a three-fold increase in production of receptors compared to either vitamin alone.

"This would imply that the policy of giving vitamin D supplement alone in pregnancy instead of cod liver oil would need adjustment. Cod liver oil, as natural supplement of vitamin A and vitamin D, is well know for its beneficial effects on the growth of infants and children."

Ng et al. Vitamin D and vitamin A receptor expression and the proliferative effects of ligand activation of these receptors on the development of pancreatic progenitor cells derived from human fetal pancreas. 2011 *Stem Cell Rev* 7 (1): 53–63

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FACT:

Industrial humans are dangerously deficient in Omega-3 Fatty Acids and Vitamin D_3.

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Deficiency of Omega-3 and Toxicity of Omega-6 is Pandemic

"**Western diets are deficient in omega-3 fatty acids**, and have excessive amounts of omega-6 fatty acids compared with the diet on which human beings evolved and their genetic patterns were established."

Simopoulos AP. The importance of the ratio of omega-6/omega-3 essential fatty acids. Biomed Pharmacother. 2002;56:365–379

Omega-3 Deficiency Causes Ill Health and Disease

Harris, W. & Isley, W. Clinical evidence for the cardioprotective effects of omega-3 fatty acids. Current Atherosclerosis Reports. 2001 Mar;3(2):174-9.
Stevens, LJ et. al. Essential fatty acid metabolism in boys with attention-deficit hyperactivity disorder. Am J Clin Nutr. 1995;62:761-8.
Goldberg, RJ and Katz, A meta-analysis of the analgesic effects of omega-3 polyunsaturated fatty acid supplementation for inflammatory joint pain. Pain 129 (2007) 210-233.
Mozaffarian, D. Fish intake, contaminants, and human health: evaluating the risks and benefits part 1 – health benefits. Cardiology Rounds October 2006, Volume 10, issue 8.
Lewis, MD, et. al. Suicide deaths of active-duty US military and omega-3 fatty acid status: a case control comparison. J Clin Psychiatry 2011 online ahead of print August 23, 2011.
Larsson, SC et. al. Dietary long-chain n-3 fatty acids for the prevention of cancer: a review of potential mechanisms. Am J Clin Nutr 2004;79:935-45.

Omega-3 deficiencies have also been tied to many conditions, including the following: dyslexia, violence, (suicide), depression, memory problems, abnormal neurological development in children, weight gain, cancer, heart disease, eczema, allergies, asthma, inflammatory diseases, arthritis, and diabetes.

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Omega-3 Deficiency Causes Behavior, Learning, and Health Problems

Stevens, LJ et. al. Omega-3 fatty acids in boys with behavior, learning, and health problems. Physiol Behav. 1996 59(4/5) 915-920.

"A Purdue University study showed that kids low in Omega-3 essential fatty acids are significantly more likely to be **hyperactive**, have **learning disorders**, and to display **behavioural problems**."

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Vitamin D Deficiency is Pandemic

"The majority of the child, adult, and senior industrial population is vitamin D deficient."

Vicente Gilsanz, Arye Kremer, Ashley O. Mo, Tishya A. L. Wren, and Richard Kremer. **Vitamin D Status and Its Relation to Muscle Mass and Muscle Fat in Young Women**. *Journal of Clinical Endocrinology & Metabolism*, 2010; DOI: 10.1210/jc.2009-2309

Vitamin D Deficiency is Pandemic

Cannell et al. (2009) **Athletic Performance and Vitamin D**. *Medicine and Science in Sports and Exercise*. 41 (5) 1102-1110

"The mean vitamin D intake in the United States (from milk, other fortified foods, fish, and supplements combined) is 200-300 IU/day, an intake too low." **(Adults need 4000-5000 IU/day and kids need 2000 IU/day!!)**

"A total of 400 IU of vitamin D daily (the equivalent of four glasses of American milk daily for 3 months did not prevent these deficiencies." **(*milk is fortified with calcium and vitamin D supplements – it is simply an expensive delivery system that contains grossly insufficient quantities of these nutrients*)**

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Vitamin D Deficiency and Auto-Immune Issues

Cannell et al. 2008 Cod Liver Oil, Vitamin A Toxicity, Frequent Respiratory Infections, and the Vitamin D Deficiency Epidemic. Annals of Otology, Rhinology & Laryngology 117 (11): 864-870

"Evidence even suggests that vitamin D is involved in the triple current childhood epidemic of autism, asthma, and autoimmune diabetes."

"Not only do tenable mechanisms of action exist to explain vitamin D's role in all three, but epidemiological evidence suggesting a vitamin D connection to these devastating diseases is growing."

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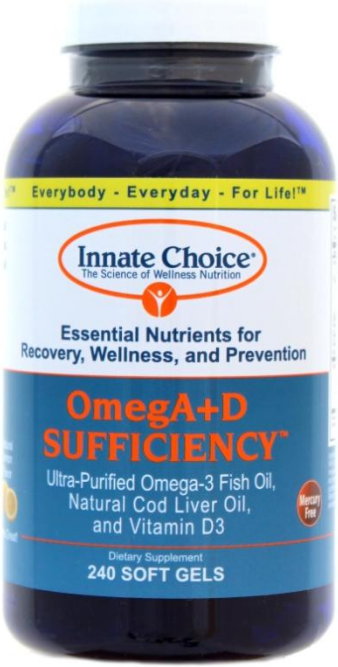
BETTER RECOVERY



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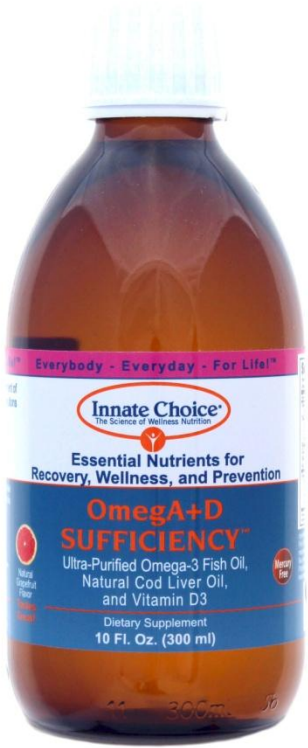
Gold Standard



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Omega-3 in OmegA+D Sufficiency Controls Inflammation and Pain

"There is extensive documentation in the rheumatology, ophthalmology, and cardiovascular literature on the beneficial **anti-inflammatory affects** of high-dose fish oil in the **reduction of joint pain from rheumatoid and osteoarthritis**, and also major positive affects on … coronary artherosclerosis, which is now considered an inflammatory disease."

Maroon JC, Bost JW. Omega-3 fatty acids (fish oil) as an anti-inflammatory: an alternative to nonsteroidal anti-inflammatory drugs for discogenic pain. Surgical Neurology. 2006;65(3):326-331

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OmegA+D Sufficiency Controls Inflammation and Pain

Maroon JC, Bost JW. Omega-3 fatty acids (fish oil) as an anti-inflammatory: an alternative to nonsteroidal anti-inflammatory drugs for discogenic pain. Surgical Neurology. 2006;65(3):326-331

"The agent **best documented by hundreds of references** in the literature for its anti-inflammatory effects is **omega-3 essential fatty acids** (EFAs) found in fish and in pharmaceutical-grade fish oil supplements."

"The active ingredients in polyunsaturated essential fatty acids are EPA and DHA (and DPA)."

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OmegA+D Sufficiency Controls Inflammation and Pain

Goldberg RJ, Katz J. A meta-analysis of the analgesic effects of omega-3 polyunsaturated fatty acid supplementation for inflammatory joint pain. Pain 129 (2007) 210-233.

"A meta-analysis of **16 studies** at 3–4 months showed significant effects for four of six pain outcomes: patient assessed pain, morning stiffness, number of painful and/or tender joints, and NSAID consumption."

All of these studies were randomized placebo-controlled clinical trials (RCTs).

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Vitamin D in OmegA+D Sufficiency Controls Inflammation and Pain

"Experts recommend that **vitamin D deficiency** and its potential for associated osteomalacia should be considered in the differential **diagnosis of all patients with chronic musculoskeletal pain, muscle weakness or fatigue, fibromyalgia, or chronic fatigue syndrome."**


Practitioner Briefing

Vitamin D – A Neglected 'Analgesic' for Chronic Musculoskeletal Pain

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Stewart Leavitt, Ph.D. Vitamin D – A Neglected 'Analgesic' for Chronic Musculoskeletal Pain. Pain Treatment Topics June 2008

OmegA+D Sufficiency Controls Inflammation and Pain

Pedersen LB, et al. 1,25-dihydroxyvitamin D3 reverses experimental autoimmune encephalomyelitis by inhibiting chemokine synthesis and monocyte trafficking. *J Neurosci Res 2007;85:2480-2490.*

"The active 1,25(OH)2D form of **vitamin D** is a **potent modulator of inflammation**, and may play a role in shutting off chronic inflammatory responses."

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OmegA+D Sufficiency Controls Inflammation and Pain

Stewart Leavitt, Ph.D. Vitamin D – A Neglected 'Analgesic' for Chronic Musculoskeletal Pain. Pain Treatment Topics June 2008

"Some researchers have found this (**vitamin D deficiency**) to occur in up to **85% of chronic musculoskeletal pain cases**, especially those involving the **lower back**."

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OmegA+D Sufficiency Controls Inflammation and Pain

Al Faraj S, Al Mutairi K. Vitamin D deficiency and chronic low back pain in Saudi Arabia. Spine 2003;28:177-179.

Subjects were treated for 3 months with 5,000-10,000 IU/day of vitamin D3 (patients >50 kg received the larger dose).

Pain **symptoms were relieved in 95% of the patients**.

The heavier (more overweight) the subject, the more vitamin D was required to obtain pain relief (adipose tissue is a storage site of vitamin D).

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Vitamin D Significantly Improves Breast Cancer Survival

"High serum vitamin D was associated with lower mortality from breast cancer."

"Patients with the highest concentration of Vitamin D had half the fatality rate compared to those with the lowest concentration."


ANTICANCER RESEARCH
International Journal of Cancer Research and Treatment

Volume 29, Number 1, January 2009
Experimental Studies

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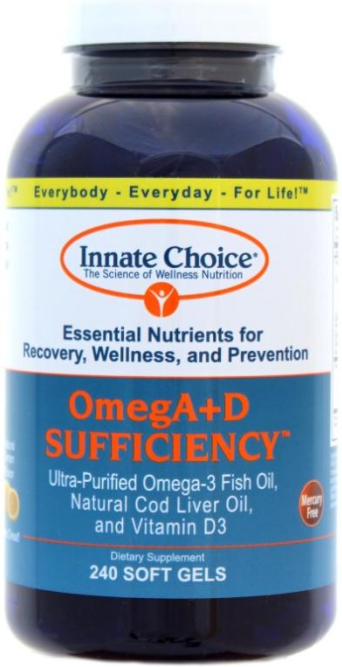
Mohr SB et al. Meta-analysis of Vitamin D sufficiency for improving survival of patients with breast cancer. Anticancer Research. 2014;34:1163-1166.

BETTER WELLNESS & PREVENTION



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Vitamin D Sufficiency and Immune Function

Nature Immunology, (Vitamin D controls T cell antigen receptor signaling and activation of human T cells) 10.1038/ni.1851

Vitamin D **dramatically up-regulates** the genetic expression of antimicrobial proteins (AMPs) in **immune cells** of the innate immune system (the part of the immune system that **immediately** attacks and kills viruses, bacteria, and fungi).

"Also, **macrophages use vitamin D** to enable the synthesis of the bactericidal peptides needed **to deal with bacterial invaders**."

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Vitamin D in OmegA+D Sufficiency Prevents Cold and Flu

Aloia, J et al. Epidemic Influenza and Vitamin D. Epidemiology and Infection 2007, Vol 135 (7) pp. 1095-1098

In a 3 year trial taking 800 IU/day of Vitamin D **reduced the incidence of colds and flu by 70%.**

In the group taking **2000 IU/day** the incidence of colds and flu was reduced by almost 100% (**only 1 of 104 subjects developed cold or flu**).

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Omega-3 in OmegA+D Sufficiency Prevents Disease

Ntambi, J.M. & Bene, H. Polyunsaturated fatty acid regulation of gene expression. J Mol Neuroscience 2001 Apr-Jun; 16 (2-3): 273-8

By affecting cell membrane composition, metabolism, signal pathways, and by direct control of gene expression, **sufficient omega 3 essential fatty acid levels play a key role in the prevention of human diseases** such as obesity, diabetes, cancer, neurological and brain disorders, and heart disease.

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OmegA+D Sufficiency Prevents Heart Disease

Bronas, U. & Dengel, D. Influence of vascular oxidative stress and inflammation on the development and progression of atherosclerosis. Am J Lifestyle Med. 4 (6) 521-34

Due to the overwhelming evidence of benefit, the American Heart Association now recommends the **use of omega-3 fatty acid supplements** for the primary and secondary prevention of coronary heart disease.

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OmegA+D Sufficiency Better Than Cholesterol Medication for Preventing Death from Heart Disease

Studer et al. 2005 Effect of Different Antilipidemic Agents on Mortality: A Systematic Review. Archives of Internal Medicine. April 11, 725-730

Statin Drugs (e.g. lipitor, crestor, etc) were 10 times more effective at lowering cholesterol than omega-3 fatty acids (20% vs 2% reduction in total cholesterol).

However, omega-3 fatty acids were 44% more effective than statin drugs in reducing death from cardiac events!!

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OmegA+D Sufficiency Reduces Aging and Increases Longevity

Richards, JB et al. Higher serum vitamin D concentrations are associated with longer leukocyte telomere length in women. Am J Clin Nutr 2007 Nov;86(5):1420-5

Researchers studying serum values of vitamin D in 2,160 twins found higher vitamin D levels may alter telomere length of leukocytes. "The difference between the highest and lowest tertiles of vitamin D was 107 base pairs (p=0.0009), which is **equivalent to a reduction of 5.0 y of telomeric aging**."

The authors go on to state that this finding "…underscores the potentially **beneficial effects of this hormone on aging** and age-related diseases."

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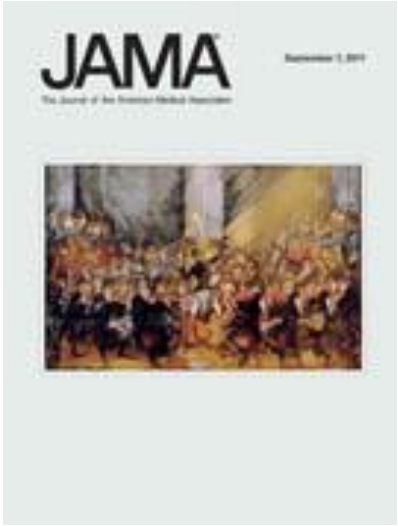
OmegA+D Sufficiency Reduces Aging and Increases Longevity

Farzaneh-Far et al. Association of Marine Omega-3 Fatty Acid Levels With Telomeric Aging in Patients With Coronary Heart Disease *JAMA*. 2010;303(3):250-257

"In addition to their role in helping our heart and brains function properly, these fats also help protect our genetic material, therefore reducing damage associated with aging."



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OmegA+D Sufficiency Reduces Mortality

Schottker et al. (2013) Strong associations of 25-hydroxyvitamin D concentrations with all-cause, cardiovascular, cancer, and respiratory disease mortality in a large cohort study. Am J Clin Nutr;97:782–93

"In this large cohort study, serum 25(OH)D (vit D) concentrations were inversely associated with all-cause and cause-specific mortality.

In particular, vitamin D deficiency [25(OH)D concentration <30 nmol/L] was strongly associated with mortality from all causes, cardiovascular diseases, cancer, and respiratory diseases."

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OmegA+D Sufficiency Reduces Mortality

Mozaffarian et al. (2013) Plasma phospholipid long chain n-3 fatty acids and total and cause-specific mortality in older adults. Ann Intern Med. 2013;158:515-525

"After adjustment for demographic, cardiovascular, lifestyle, and dietary factors both individual and combined levels of EPA, DPA, and DHA were associated with lower total mortality."

"Across quintiles, individuals with higher EPA, DPA, and DHA levels had 17%, 23%, and 20% lower risk, respectively, and those with higher total 3-PUFA levels had 27% lower risk."

Note the increased combined effect of EPA, DPA, and DHA!

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OmegA+D Sufficiency Contains DPA!

OmegA+D Sufficiency™ contains the full complement of fatty acids (including DPA) that naturally occur in fish and cod liver oils.

OmegA+D™ Sufficiency is not chemically altered but is kept in it's natural triglyceride (not ethyl ester) form and does not remove DPA and the other naturally occurring fatty acids. Virtually all other fish oil supplements only contain EPA or DHA because they remove DPA and the other fatty acids during the concentration process.

Although this allows you to take less capsules, it also prevents you from getting DPA and all the other naturally occurring fatty acids and this prevents you from getting the full combined benefit of EPA, DPA, and DHA that you get with OmegA+D™ Sufficiency .

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DPA and DHA in OmegA+D Sufficiency Reduces CHD and Stroke Death

Mozaffarian et al. Plasma phospholipid long chain n-3 fatty acids and total and cause-specific mortality in older adults. Ann Intern Med. 2013;158:515-525

"For cause-specific deaths, all 3 PUFAs were associated with lower CVD mortality and their combined levels were associated with 35% lower risk across quintiles."

"Among CVD subtypes, DHA seemed most strongly related to CHD death (40% lower risk), especially arrhythmic CHD death (45% lower risk), whereas DPA was most strongly related to stroke death (47% lower risk)."

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Vitamin D in OmegA+D Sufficiency Significantly Reduces Breast Cancer

Lappe, JM et al. Vitamin D and calcium supplementation reduces cancer risk: results of a randomized trial. Am J of Clin Nutr 2007;85:1586-1591.

Four year study on vitamin D supplementation showed a 77% reduction in all invasive breast cancers in women who received vitamin D supplementation versus those who did not supplement.

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Vitamin D Deficiency and Cancer

Jemal A, et al. Cancer statistics, 2007. CA Cancer J Clin. 2007 Jan-Feb;57(1):43-66.

Vitamin D-sensitive cancers are responsible for **257,000 deaths** (**46% of all cancer deaths in U.S. in 2007**).

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Vitamin D Sufficiency and Cancer Prevention

Garland CF, Grant WB, Mohr SB, et al. What is the dose-response relationship between vitamin D and cancer risk? *Nutr Rev 2007;65:S91-S95.*

Colon cancer could be reduced by 50% with Vit D levels maintained above 34 ng/ml and breast cancer could be reduced by 50% with Vit D levels maintained above 52 ng/ml.

Investigators have reported a decrease in breast cancer risk in 107 countries with increased UVB irradiance and higher 25(OH)D levels.

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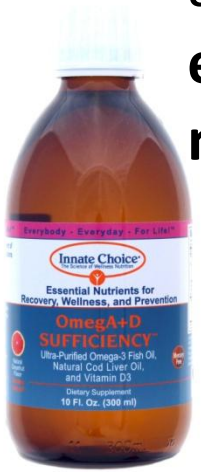
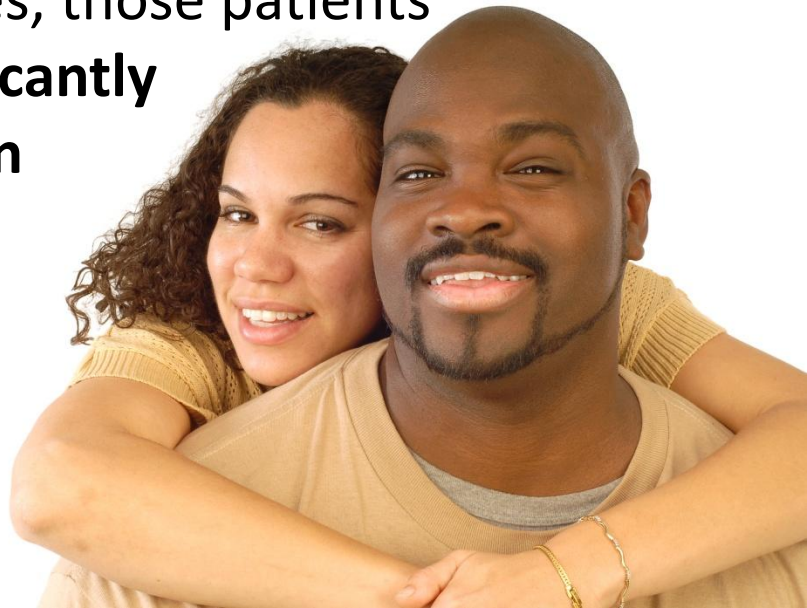
Vitamin D Prevents and Improves Depression

Stewart Leavitt, Ph.D. Vitamin D – A Neglected 'Analgesic' for Chronic Musculoskeletal Pain. Pain Treatment Topics June 2008

"In an earlier study, patients with clinical depression were randomized to receive vitamin D3 supplementation or placebo. On self-reported measures, those patients administered **vitamin D had significantly enhanced mood and a reduction in negative-affect symptoms**."





OmegA+D Sufficiency Promotes Weight Loss and Fat Burning

Omega-3 fatty acids promote weight loss and fat loss by inhibiting fat synthesis, enhancing fat break-down and thermogenesis (fat burning), and preventing fat storage.

**Omega-3 fatty acids also increase insulin receptor sensitivity which also contributes to the prevention of diabetes and obesity.*

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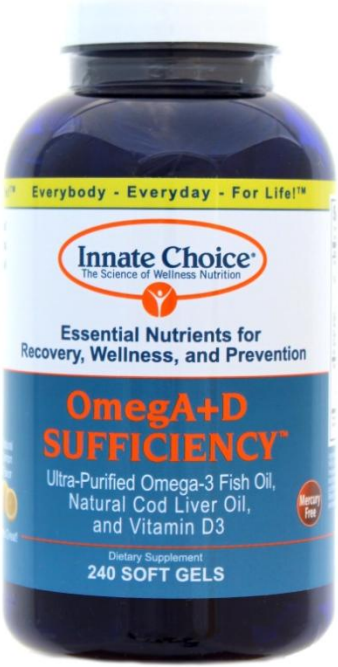
Li & Huang. Anti-obesity effects of conjugated linoleic acid, docosahexaenoic acid, and eicosapentaenoic acid. Mol Nutr Food Res. 2008 52: 631-45

Vitamin A in OmegA+D Sufficiency Reduces Macular Degeneration

Participants with some degree of age-related macular degeneration reduced their risk of developing advanced AMD by 25% by taking a daily supplement of beta-carotene.

Age-Related Eye Disease Study Research Group. A randomized, placebo-controlled, clinical trial of high-dose supplementation with vitamins C and E, beta carotene, and zinc for age-related macular degeneration and vision loss: AREDS report no. 8. Arch Ophthalmol 2001;119:1417-36.

BETTER PERFORMANCE



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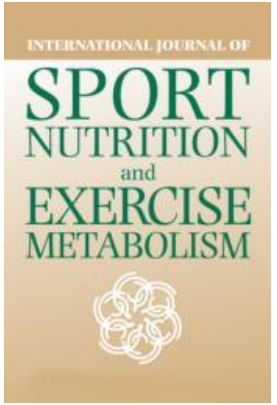
OmegA+D Sufficiency Enhances Performance

Mickleborough, T.D. Omega-3 polyunsaturated fatty acids in physical performance optimization. Int J Sport Nutr. Exerc. Metab. 2013; 23: 83-96

Fish oil supplementation reduces exercise-induced inflammation, decreases delayed onset muscle soreness, increases the rate of recovery, and reduces the risk for infection due to immunodeficiency.

Fish oil supplementation is associated with improved cognitive abilities including reaction time, decision making, and stabilizing mood.



Vitamin D Enhances Athletic Performance

Glerup H, Mikkelsen K, Poulsen L, et al. Hypovitaminosis D myopathy without biochemical signs of osteomalacic bone involvement. *Calcif Tissue Int*. 2000; 66:419-424.

Supplementation of Vit D in subjects with deficient Vit D levels resulted in a **50% increase in muscle force and reaction time**.

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The Science of Wellness Nutrition

Vitamin D Decreases Risk of Injury

American Orthopaedic Society for Sports Medicine (2011, July 11). Vitamin D lower in NFL football players who suffered muscled injuries, study suggests. *ScienceDaily*. Retrieved April 9, 2013, from http://www.sciencedaily.com- /releases/2011/07/110710132807.htm

"Screening and treatment of vitamin D insufficiency in professional athletes may be a simple way to prevent injuries".

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Vitamin D Sufficiency Increases Muscle Power

Ward et al. Vitamin D status and muscle function in post-menarchal adolescent girls.
***Journal of Clinical Endocrinology & Metabolism*, Feb 2009 DOI: 10.1210/jc.2008-1284**

"We know that vitamin D deficiency can weaken the muscular and skeletal systems, but until now little was known about the relationship of vitamin D with muscle power and force".

"Our study found that vitamin D is positively related to muscle power, force, velocity, and jump height."

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The Science of Wellness Nutrition

Vitamin D Sufficiency Increases Muscle and Athletic Performance

Cannell et al. (2009) Athletic Performance and Vitamin D. *Medicine and Science in Sports and Exercise*. 41 (5) 1102-1110

"Those caring for athletes (and the general public) have a responsibility to promptly diagnose and adequately treat vitamin D deficiency."

"Adequate treatment requires thousands, not hundreds, of IU of vitamin D daily; doses that may make many sports physicians uncomfortable."

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The Science of Wellness Nutrition

Vit D Sufficiency Reduces Physical Performance Decline with Aging

Wicherts, IS et al. Vitamin D status predicts physical performance and its decline in older persons. J Clin Endocrinol Metab 2007:92:2058-2065.

Almost 50% of the population had serum vitamin D below 20 ng/ml.

Those with blood levels of vitamin D at 30 ng/mL had almost double the measured neuromuscular performance level of those at only 10 ng/mL. The greater the levels of vitamin D the greater the neuromuscular performance.

*The greater the neuromuscular performance the better balance and the fewer falls

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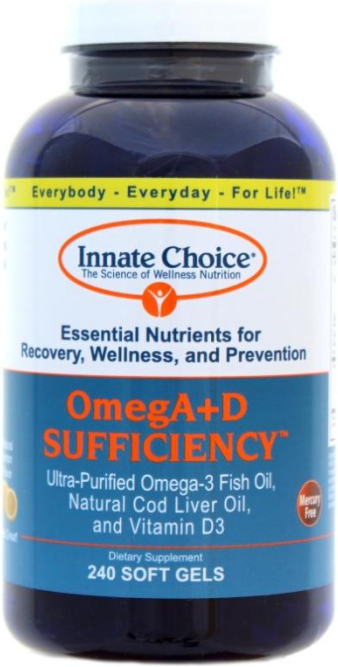
Gold Standard



OmegA+D Sufficiency™

The Gold Standard for Recovery, Wellness Prevention, and Performance

PERFECTLY SUFFICIENT AMOUNTS and the PERFECT RATIO of Omega-3 Fatty Acids, Vitamin D, and Vitamin A.

Innate Choice®
The Science of Wellness Nutrition

OmegA+D Sufficiency Meets Omega-3 Fatty Acid Daily Requirements

Mickleborough, T.D. Omega-3 polyunsaturated fatty acids in physical performance optimization. Int J Sport Nutr. Exerc. Metab. 2013; 23: 83-96

"Experts recommend intake of 1-2 grams of omega-3 fatty acids per day."

***Each bottle of OmegA+D Sufficiency™ contains 30 servings of 2.36 grams of EPA, DPA, and DHA essential fatty acids.**

Innate Choice®
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OmegA+D Sufficiency Meets Vit D Daily Requirements

Stewart Leavitt, Ph.D. Vitamin D – A Neglected 'Analgesic' for Chronic Musculoskeletal Pain. Pain Treatment Topics June 2008

"Experts recommend intake of 4000 IU of vitamin D3 per day."

***Each bottle of OmegA+D Sufficiency™ contains 30 servings of 4000 IUs of Vit D.**

Innate Choice®
The Science of Wellness Nutrition

OmegA+D Sufficiency Meets Vit D:Vit A Synergistic Ratio Requirements

Levine, SA. The importance of a balanced approach to vitamin D supplementation. Journal of Orthomolecular Medicine. 2011;26(1):15-20.

"Evidence clearly indicates that vitamins A and D work synergistically."

***Each bottle of OmegA+D Sufficiency™ contains 30 servings of 1800-3400 IUs of preformed, naturally occurring vitamin A and 4000 IUs of Vit D.**

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Chiropractic and OmegA+D Sufficiency

The World's Most Evidence-Based Spinal Health Protocol