## "Fish Oils Require FDA Attention"

#### **QUESTIONINGS - A Four Part Series**

PART 1. How to find a safe fish oil that Performs as Promised? (06.27.08)

www.redorbit.com/modules/news/tools.php?tool=print&id=1424797 Are all fish equally close to the heart? M. A. Gebska, MD, PhD, Johns Hopkins Medical Institutions, and M. Friedman; J. H. O'Keefe; J. H. Lee; R. Marchioli; Roberto; C. J. Lavie; W. S. Harris. RE: "Table.Composition of Selected Commercial Fish-Oil Products" "In the Table I present some examples of fish oil preparations from Safeway, Rite Aid, Walgreen, and others. Some manufacturers do not even disclose the exact composition of the species, instead describing contents with a broad name: 'fish body oil'. These points all beg the question as to whether it is fair to suggest to our patients that all over-thecounter fish oil preparations have the same cardioprotective effect as long as the amount of DHA and EPA is equivalent, regardless of fish species. Or perhaps the quoted clinical trials were based on a unique fish oil formulation, and, consequently patients should be advised to look very closely at the source of fish-oil compounds (ie, species of fish from which the oils were extracted) to be sure desired health goals can actually be achieved."

www.mayoclinic.com/health/fish-oil/NS\_patient Omega-3 fatty acids, fish oil, alpha-linolenic acid. Page 10 - Dosing - The below doses are based on scientific research, publications, traditional use, or expert opinion. Many herbs and supplements have not been thoroughly tested, and safety and effectiveness may not be proven. Brands may be made differently, with variable ingredients, even within the same brand. The below doses may not apply to all products. You should read product labels, and discuss doses with a qualified healthcare provider before starting therapy.

# Part 2. - Why can't everyone have access to the health-promoting, life-extending ocean finfish fats? (06.27.08)

Everyone? Most Americans are seriously deficient in the two important omega-3 fatty acids (EPA & DHA) supplied by fish, due to the wrong selections, or insufficient, dietary, and/or fish oil intake.

Doctor's concern? Basis personal experience, not much interest. It would help if our government promulgated a "Pharmaceutical Grade".

How can a person select a fish oil? Approved lists have been prepared by **Environmental Defense Fund -** <u>http://edf.org/page.cfm?tagID=16536</u> and **ConsumerLab. Com.** Their listings provide assurance that contaminants are

acceptably low. Detailed information about oxidative damage is lacking. ConsumerLab.Com states that all approved samples were within TOTOX = 26 limit. In Canada, products with TOTOX well below 26 receive a higher rating, and the analysis is published: <a href="www.ifosprogram.com">www.ifosprogram.com</a>, scroll to the bottom, click Consumer Reports and then click either 5 Star Rating Reports or CRN Bar Graph Reports.

TOTOX means "Total Oxidation", calculated as twice the Peroxide Value plus Anisidine Value. Peroxide Value is a measure of the initial stages of rancidity. Anisidine Value measures the breakdown of the rancidity products to produce volatile aldehydes like hexanal and a non-volatile portion that remains part of the glyceride molecule.

# Part 3. - OXIDATION, A Serious Threat -(07.01.08)

**TOTOX** measures primary and secondary oxidative damage to poly-unsaturated fats and oils. It increases gradually in storage, but the dangerous forms (toxic artifacts, polymers) occur when the oil is damaged by elevated temperatures and oxygen. Part 1.of this series, quoted professional observations that over-the-counter fish oils in the U. S., may not be of suitable quality to produce the results promised by research. Permissive elevated TOTOX values undoubtedly exert negative effects.

Nutrition Research Reviews. 19(1):53-62, June, '06. Cambridge University Press. Turner, Rufus; McLean, C. H.; Silvers, K. M. *Are the health benefits of fish oils limited by products of oxidation?* "Fish oils are easily oxidized and some fish oils contain higher than recommended levels of oxidized products, but their effects have not been fully investigated."

**Nordic Naturals'** patented oxygen-free manufacturing process delivers peroxide values (indicators of freshness) down to absolute zero, with an average 0.74 mEq/kg. (European Pharmacopoeia Limit 10.0 mEq/Kg.) and Nordic Freshness Analysis - TOTOX values below 10.

Lipids, Vol. 26, No. 1/ Jan. 1991, p23-26. Vijai K. S. Shukla and Perkins, E. G., The presence of oxidative polymeric materials in encapsulated fish oils. <a href="https://www.lipidlibrary.co.uk">www.lipidlibrary.co.uk</a> "Summary: Recognition that lipid polymers can be present in refined oils, not just thermally abused frying oils, has prompted interest in methods for their isolation and determination."

## Part 4. - Fish Oil Health-Benefits for Everyone? (07.01.08)

Until mid-1950's, fatty fish were readily available from the boundless ocean fisheries, and almost everyone benefited from this natural part of the American diet. Population growth and over-fishing diminished our resources to a point where less-fortunate persons can not afford the life-extending benefits. Reliable investigators consider fish oils the most dependable source of long chain omega-3 fatty acids - a contributor to mental and physical health - essential from cradle to grave.

<u>A NATIONAL RESOURCE!</u> In dire need of government supervision - to define "Pharmaceutical Grade", standards of identity, medical and nutritional supervision - everything needed to deliver long range benefits to the most people.

<u>WHAT WE DON'T NEED</u> – Misleading media releases that promote over-the-counter fish oil products, or Academic pronouncements which cause misunderstandings, such as:

www.hsph.harvard.edu/nutritionsource/questions/omega-3/index.html where this exchange is given as a truth from Harvard U:

"Ask the Expert: Omega-3 Fatty Acids - Q6: Can omega-3 fatty acids be destroyed by high-heat cooking?

Not if the oil is fresh. In fact, even in frying oil that is used for days, you can still find ALA in it."

Wildegeest's Warning: Don't go to this professor's house for dinner!