The Fat Soluble Activators – Vitamins A, D, and K

“It is possible to starve for minerals that are abundant in the foods eaten because they cannot be utilized without an adequate quantity of the fat-soluble activators.” - Dr. Weston A. Price

Food Sources of Vitamins A & D:

- butter and cream (from grass fed animals)
- liver and organ meats (from grass fed animals)
- the fat of birds and mono-gastric animals, wild or raised on pasture (bear, pig, guinea pig)
- eggs from chickens, ducks, and geese
- wild caught fish, shellfish, and fish eggs
- fish liver oils
- insects

One teaspoon of fermented cod liver oil has the vitamin A equivalent of:
- 5 ½ quarts of raw milk
- 1 lb of butter
- or 9 eggs

Why Fermented?

- The traditional method – whole cod livers imported from Norway, fermented in large stainless steel vats.
- No heat is used – all enzymes and heat sensitive co-factors remain intact.
- Does not oxidize the fats – shelf stable for several years, actually gets better with time.
- The oil is filtered off in a way that does not remove vitamins.

Nutrient Levels

Green Pasture's fermented cod liver oil is sold as a food so does not contain vitamin levels on the label. It's important to note, fermented cod liver oil is beneficial because of the variety of nutrients it contains, not the amount of any one nutrient. The measurable amount of specific nutrients can change between samples and different methods of testing. Approximate values in Green Pasture Cod Liver Oil are:

- Vitamin A - 9500 IU / teaspoon
- Vitamin D - 1950 IU / teaspoon
- DHA – 500 mg / teaspoon
- EPA – 750 mg / teaspoon
- Total Omega 3 – 1750 mp / teaspoon

Serving Size

Based on Dr. Price's studies, the dosage recommendation for Green Pasture cod liver oil is:

- Children age 3 months to 12 years: 1/2 teaspoon or 2.5 mL
- Children over 12 years and adults: 1 teaspoon or 10 capsules
- Pregnant and nursing women: 2 teaspoons or 20 capsules

Cod Liver Oil + Butter Oil = Synergistic effects

Dr. Price found that the combination of cod liver oil and a high vitamin butter oil concentrate was more effective than cod liver oil alone in treating his patients for dental cavities and other signs of physical degeneration. This protocol not only stopped the progression of tooth decay, but completely reversed it without the need for oral surgery by causing the dentin to grow and remineralize, sealing what were once active caries with a glassy finish.

Food Sources of Vitamin K₂

- butter and cream from animals eating spring grasses
- livers, bone marrow, and blood from animals eating spring grasses
- fish eggs

Butter Oil is not the same as Ghee

Butter oil is highly concentrated using a low heat, centrifuge process and comes from cows fed a specific diet of rapidly growing green grass. No lactose or casein remain.

One half teaspoon of butter oil has the Vitamin K2 equivalent of:
- approximately 2 tablespoons of raw, grass-fed butter
- or 1 tablespoon of wild caught fish eggs
Mercury / Heavy Metals
Wild caught cod are considered very low risk for contamination. Every batch of cod liver oil produced by Green Pasture is tested for PCB's, heavy metals, and pathogens. To date, no detectable levels of mercury or heavy metals have been found. Read a detailed article about mercury in fish here:
http://www.greenpasture.org/mercury1

Vitamin Toxicity
Some studies have show that large amounts of vitamin A can be toxic. These studies were done using synthetic forms of Vitamin A taken in isolation. When vitamin A and D are taken together, in their natural forms and proportions, vitamin D protects against vitamin A toxicity. It is not possible to overdose on naturally fermented cod liver oil. At most you will get a stomach ache from ingesting more oil than you are used to. In times of illness or stress it may be helpful to double, or even triple, your normal dose of fermented cod liver oil.

The difference between Fish Oils and Cod Liver Oil
Most fish oils come from farmed fish that are processed using caustic chemicals, solvents and high temperatures. They contain very low amounts of natural vitamin A and D, and the fragile omega-3 fatty acids (EPA and DHA) are likely to be damaged by the processing. The current hype about EPA and DHA is mostly marketing. The real value is in the fat soluble activators.

Other Brands
Green Pasture is the only brand in the US that uses fermentation. All other brands are produced using industrial processes including alkali refining, bleaching, winterization, and deodorization. These processes damage the fats, making them susceptible to oxidation, and removes the naturally occurring vitamins A and D. If any vitamins are listed on the label, they are most likely man-made versions.

If you cannot obtain Green Pasture cod liver oil, there are a few brands of processed cod liver oil with synthetic vitamins that are at least in the right proportions.

- Carlson soft gel Cod Liver Oil Super 1,000 mg capsules
- Nature's Answer liquid cod liver oil
- NOW double strength Cod Liver Oil capsules
- Swanson double strength Cod Liver Oil capsules
- Twin Labs non-emulsified liquid Cod Liver Oil

Websites

www.AtlantaRealFood.com Information from this and past meetings are posted here as well as other local Weston A. Price resources

www.greenpasture.org has a ton of information in the FAQ section

www.westonaprice.org search for “cod liver oil” and “Activator X” for more detailed information

http://www.vitamindcouncil.org/ learn about the importance of vitamin D

Books

Nutrition and Physical Degeneration
by Dr. Weston A. Price

Cure Tooth Decay
by Ramiel Nagel