

Miscellaneous Comments

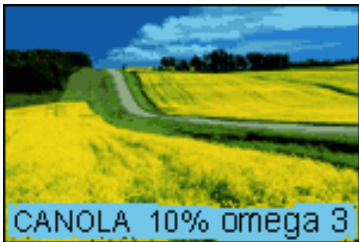
[[Home](#)] [[Simple](#)] [[Français](#)] [[Good Food](#)] [[Bad Food](#)] [[Vitamins +](#)] [[Books & Links](#)] [[Email](#)]
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31 OF THE MOST IMPORTANT FACTS, TIPS & TIDBITS



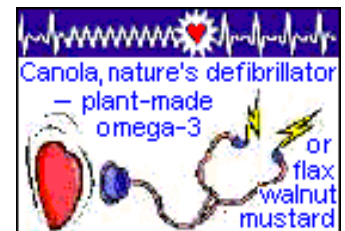
1. **About omega-3's:** "...relatively simple dietary changes achieved **greater reductions in risk of all-cause and coronary heart disease mortality .. than any of the cholesterol-lowering studies to date.** This is emphasized by the finding that *the unprecedented reduction ... was not associated with differences in total cholesterol..*" This is from a landmark [editorial](#) in *Circulation* about the 70% (!) reduction in deaths in those given 2 table-spoons of canola oil per day, most as a non-hydrogenated margarine given to the family. One measly tea-spoon of flax (linseed) oil has as much omega-3 (alpha-linolenic). Flax, a unique nutritional

power seed.

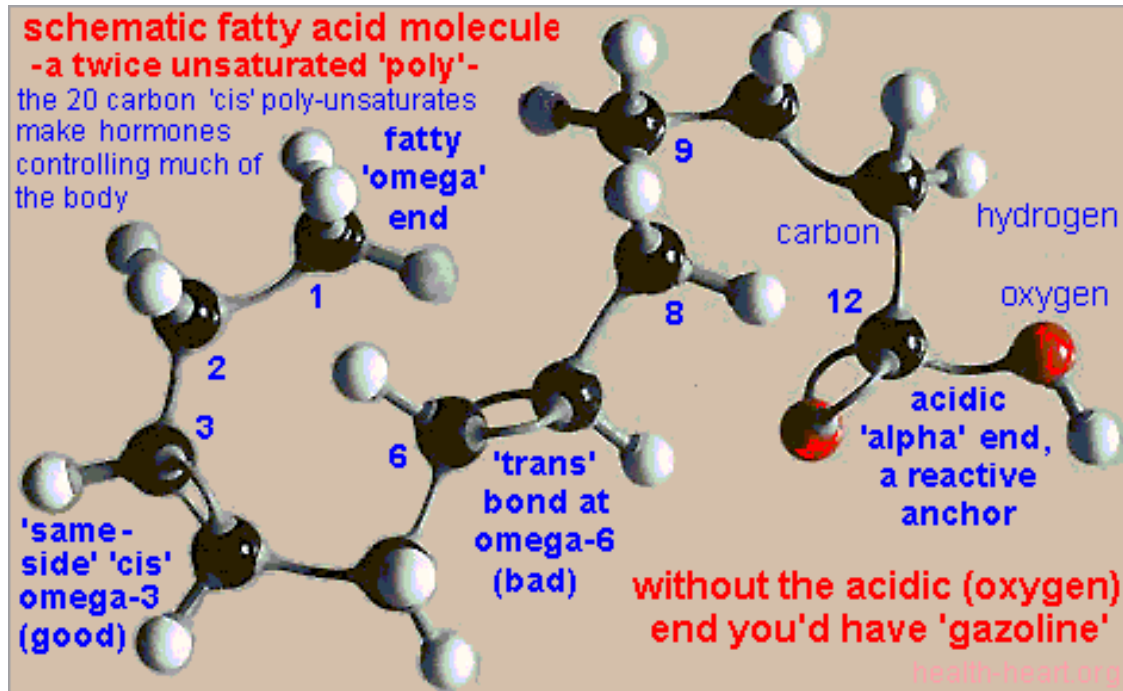


More about this *Lyon Diet Heart Study* and the oil that 'prevents' 75% (!) of heart attacks is in [Lancet 1994: 1454-9](#), [AJCN; 1995: 1360S-6](#) and [Circ; 1999: 779-85](#). Read the full data [it's a little tough] and you'll agree that this regimen is best described as "**The Canola Oil Happy French Cuisine**". [Canola](#) (rapeseed) is cheap. Cold pressed low-refined canola tastes better than English-walnut oil, another rare

source of omega-3. Canola may well lower the risk for [stroke](#), and there was also much less [cancer](#) in the Lyon canola group. More [recent evidence](#): **75% fewer heart attacks** in tropical diet low-fish intake Costa Rica: "*important protection against cardiovascular disease*" at the top intake of plant-based omega-3.



Just a few grams of omega-3 a day prevents irregular heart beat [arrhythmia] and decreases inflammation and promotes blood flow and helps keep a [by-pass](#) open and [protects you after a heart attack](#). Omega-3 from fish oil safely lowers the need for pain killers from *Aspirin* to *Celebrex*, and they slash 'triglycerides' (high blood fats). **Imagine:** 2 grams/day of fish oil after heart attack: 20% fewer deaths and 45% fewer 'sudden' deaths (GISSI trial). Omega-3 is the rediscovered half of what used to be called vitamin F -with the F from Fat. It takes omega-3 to balance the other half of vitamin F, the omnipresent omega-6 from soy, corn, sun-, safflower and cottonseed, *Linoleic Acid* (LA). *Polyunsaturate* has become synonymous with omega-6 only, which now appears to be part of a health disaster in [heart disease, diabetes and cancer](#), especially [breast cancer](#), excessive blood clotting and immune system problems including asthma. Making things worse since 1911, hydrogenation *trans*-forms unsaturates and messes with their vitamin or structural roles and raises bad-boy Lp(a). It preferentially zaps the most precious oil of all, omega-3. Virgin olive is a healthy oil but a poor source of omega-3.



Saturated fat, 40% of grey matter brain-fat, gives anchor and structure. **Mono unsaturate** (olive, canola) has molecules with 1 rigid 60° bend, 2x unsaturate linoleic (corn, soy) has 2, alpha-linolenic (flax, canola) 3, and EPA and DHA (fish) have 5 and 6 such bends. The 3, 6 or 9 with the

letter omega is the location of the first bend from the fatty end. **Factory partial hydrogenation** straightens these "functional-bends", leaving an oil unsaturated but with toxic 'trans' kinks. All fats are mixes of various fatty acids from 4 to 22 carbons long. Health depends on the length and the number and place of the 'cis' bends.

Fats: carbon chains with a fat end on one side, an acid end on the other

10 to 12 carbons (short): saturates found in coconut and palm-kernel oils (50%), in breast milk fat (10%) and in butter fat (5%). Not made in people except for baby. Anti-virus, anti-bacterial and energy roles; easy to digest.

16 carbon saturate: palmitic acid, made in our bodies (with the aid of insulin) when we eat excess sugar or starch [as do cows, pigs, poultry, etc.]. We can stretch this 16 to an 18 carbon saturate and make *mono* [not *poly*] unsaturates out of either, like the ones dominating in olive, canola, and in "peanut, pork 'n poultry".

18 carbon polys: the "essential/must-eat" polys: omega-6 **linoleic** (always excessive) and omega-3 **alpha-linolenic** (rare and beneficial; good mixes in canola & flax).

20 carbon polys: the omega-3 [EPA] and omega-6 [AA] unsaturates we use to make (cell-wall generated) **regulating-hormones** (clotting, unclotting, pain, cramping, inflammation, anti-inflammation, etc.). The 3's prevent irregular heart beat (arrhythmia) and they must balance the 6's. Used for nerve and cell-wall function (yes, walls function). Fish or self-made from the 18 carbon omega-3 and 6.

22 carbon poly: DHA, the very delicate omega-3 polyunsaturate found in fish. This is the 8%-of-the-brain-fatty acid we use for thinking. It is effectively the keyboard of the eyes, brain and nerve cells. From fatty fish and *not* self-made from plant omega-3.



Adults, but not **babies**, slowly change the omega-3 from seeds or leaf veggies into the omega-3's found in fish. Those are the ones that are found in our eyes, nerves and brain and that are key for hormonal and **cardio-vascular** balance [and for **full-term births**]. Unlike human and horse milk, cow milk and most vegetable oil based baby-formula don't have the omega-3s needed for brain development between the last months before birth to age 2.



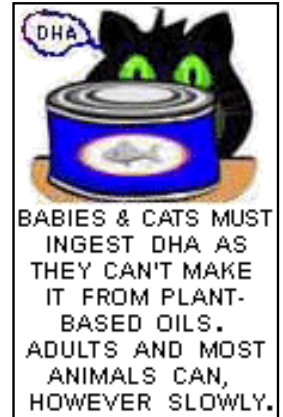
One of these fish oils -DHA- does much of the work *after* a signal hits the brain/nerve cell while the other -EPA- is present in *very* small amounts to control the beginning and end of this work; it controls a thought, motion, depression or mood swing from start to finish. In fact, the over-*activity* of certain brain-fats due to *insufficiency* of EPA [~1.8g/d?], may well underlie **schizophrenia** and some types of **depression** [**Fincastle**], **Huntington's** and **post-partum** (birth) depression.

Depression also predicts **heart disease**. Or, thinking nutritional deficiency (-



made worse by masses of omega-6-), a lack of omega-3 [EPA] may be a common linking cause in **schizophrenia**, (**bipolar**)/-**depression**, **M.S.**, **cancers**, **adult diabetes**, **bone and heart disease** [**Horrobin et al**]. Think: there's the DHA of a 2 kg (5 lb) salmon in your head -- and appropriately enough, the molecule is shaped like a ? mark or fish-hook -in fact, it wiggles like a worm on a hook, millions of times a second, around that basic shape, making it arguably the brain's most versatile molecule. This fat, DHA, is the keyboard of your eyes, the

processor-chip of the computer in your brain and may help prevent **Alzheimer's Disease!**

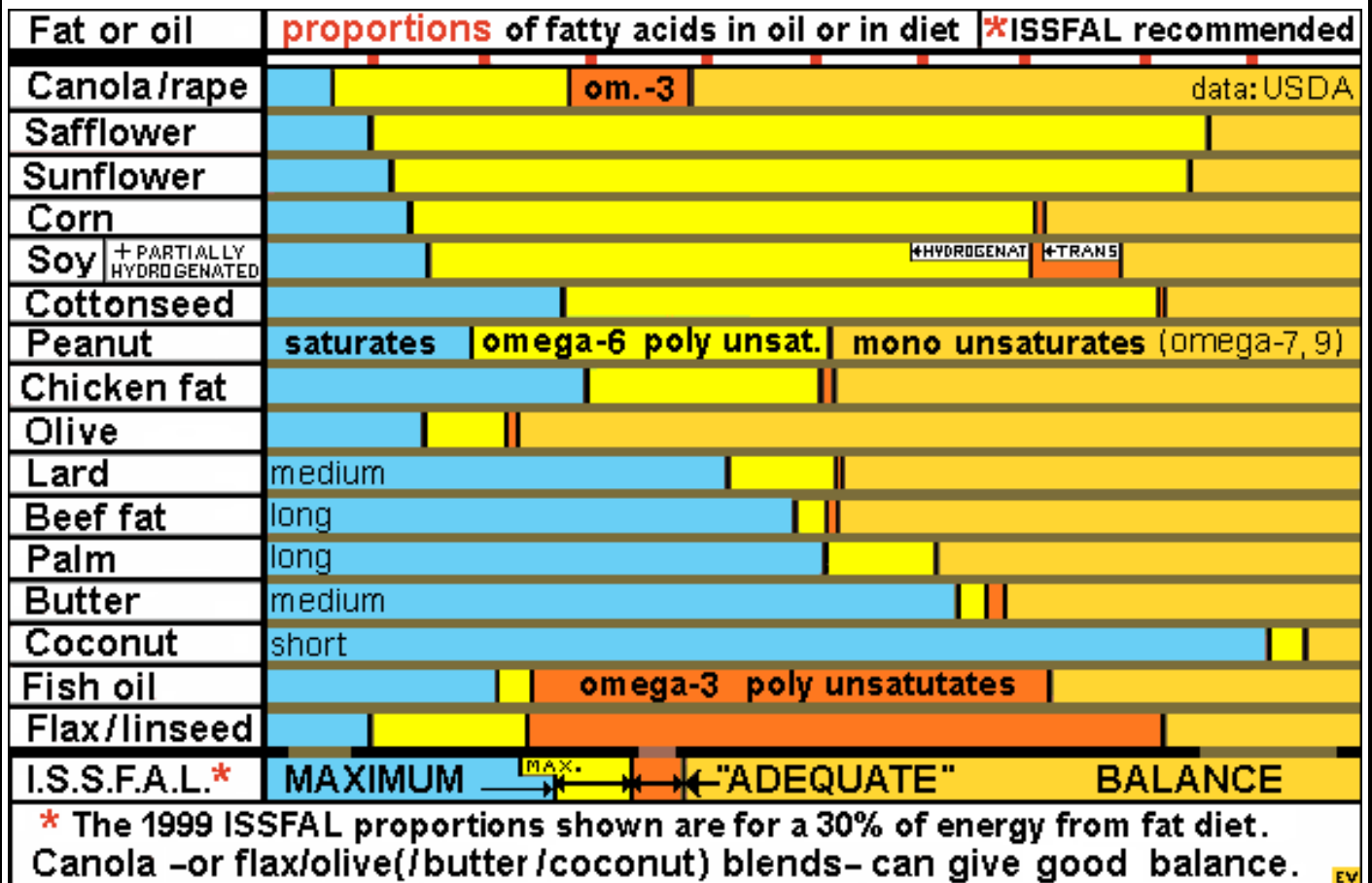


Another 1999 study found a **60% reduction in sudden heart deaths** in the high omega-3 oil group - when associated with high vitamin E or low *trans* fat intakes: ***Am J Cl Nutr*; May 99**. Fish oil is high in omega-3 and dramatically lowers blood triglycerides in people with *very* high starting levels: ***NEJM*; '85:1210-6**

An overview by Dr. Simopoulos of benefits of omega-3 and dangers of excessive cholesterol lowering omega-6 *linoleic* (again: soy, corn, sunflower, cottonseed and safflower) is here: ***Am J Cl Nutr*; Sept '99**. She has a practical book, the ***Omega Diet***. Simply put: Balance Canola, Olive and Flax --and easy on the rest. The Heavy Science is **here**, in pdf, and here's a great ***Medscape*** review about omega-3 in heart disease. Eating little fish: ***half heart attack and disease risk*** with each gram of plant omega-3.

ADULT ADEQUATE INTAKE OF FATS – per 2000 kcal diet		g/day average	Tablespoon (T) = 1/2 oz, 14 g, 120 kcal teaspoon (t) = 4.5 g = 1/3rd T
Linoleic [omega-6] [most Western diets have 2-4x the Upper Limit]	adequate maximum	4.5 g 6.7 g	Maximum 2t corn, 2t sunflower, 2t safflower, 1T soy, 2T canola, 2T peanut, 3T flax, 5T olive
alpha-Linolenic [omega-3 plant oil]	adequate	2.2 g	1t flax, 2T canola [2T soy -but too high in linoleic] U.S. intake 1/2 of adequate
EPA+ DHA [omega-3 fish oils]	adequate min. 0.2g of each	0.7 g	1/40th oz, 1 pill, 1/4t cod-liver oil or some fatty fish. Common intake 1/4 of adequate
TRANS [halt manufacture] [0 trans "per serving" can be 10% trans, "all vegetable" shortening 25%]	maximum	2 g	This is 1/5th or less the actual U.S. intake from fries, donuts, margarine, shortening, baked goods– but European fries are full of these hydrogenated fats also
SATURATED [solid – some "conditionally" essential]	maximum	18 g	5t coconut, 3T butter; meats and self-made from sugar and starch
MONO [omega 7 & 9 unsaturates]		balance	Balance, from olive, canola, peanut, meats

International Society for the Study of Fatty Acids and Lipids; 31 member working group consensus amounts, April 1999, at NIH, Bethesda MD USA
N.B. brackets & right column by E. Vos

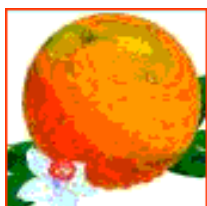


The table above by the 'cream' of the world's fat experts is *the* standard by which fats, oils, mayos, margarines and labels must be measured. If the label is bad, don't buy the fat. There was some [2004 tweaking](#) where marginally less alpha-linolenic is called '*healthy*'. *Minimum* 0.5g EPA+DHA is suggested for heart-health. Since 2002, the American Heart Association agrees. ISSFAL is dead against *trans*-fats,

made by industry from the healthiest of fatty acids.



Time for an oil-change... to unhydrogenated canola, flax (lin)seed & fatty fish. Unhydrogenated soybean might be o.k. but it's also high in omega-6 linoleic, already an excess in most Western diets (an average person already stores over 1 kg -3 lb; see also points 29 and 30 below). Here's an omega-3 reference for the little heart disease [and depression] in Japan where the oils are fish, canola and soy: [AJCN; Jan. 2000](#), and [here](#)'s the history of omega-3 by pioneer Holman. **You may want to add** some vitamin E to your oils and refrigerated them: they (like cholesterol) become harmful when damaged by processing, heat or light. While motor oils are designed for engine health, most "vegetable" oils are engineered for lack of flavor, clear appearance and shelf life. Short-chain saturates store well and are safest for frying.



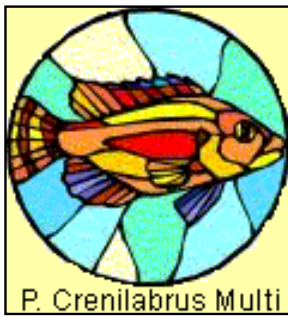
2. **Vitamin C's most important study** was in the Canadian Medical Association Journal of Sept. 23 1972. During 102 days (3.4 months) in winter, 407 about 25 year old Canadians took 1 g/day + 3 g/day during the first 3 days of any illness. An identical group on taste and look-alike **dummy pills had 40% more people seeking medical help (56 vs. 40), 58% more doctors visits [94 vs. 60] and a "similar" increased prescription drug use.** There was a 99.9% probable *reduction* in days of disability. [Here's](#) the follow-up study also proving benefit; Here's [Wikipedia](#). For long-term benefits: [Epidem; May '92](#).

In science, if no effect is found, there was none, the study was badly designed, or statistically unlucky. *Significant* results from proper studies stand until proven wrong by other studies.

According to these non refuted results, 1 g per day of vitamin C with an increase during illness would change the face of everyday medical practice.

$C_6O_6H_8$ vitamin-C
 $C_6O_6H_6$ de-hydro-C
 vitamin - C gives 2 hydrogens to oxidant

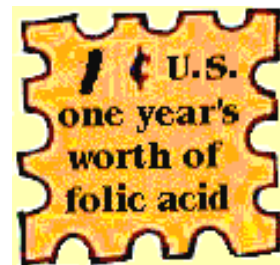
Comment. 200 mg, with some effort and cost obtainable from fruits and veggies, saturates blood and cells in totally healthy people. Illness and infection makes the need for vitamin C skyrocket. It is here and in long-term health that benefits of high amounts are likely. The biochemistry is so complex [-ProcNutrSoc; '99: 469-76](#) that only simple indicators like doctors visits, drug use and days of disability provide practical answers.



3. **'The current evidence suggests** that people who take such supplements and their children are healthier.' This quote is from an editorial '[Eat Right and Take a Multivitamin](#)' in the New England Journal of Medicine. [Dr. G. Oakley from the Centers for Disease Control and Prevention talking about "standard" multivitamins with 400 mcg folic acid.] Here's the effect in [heart disease prevention](#).

4. **The same major study** found a **75% reduction in colon cancer risk** (one of the 3 biggies) after 15 years of multivitamin use. Here's a study about long-term multivitamin use and less [cervical cancer](#). Just like it takes decades to cause cancer, it may take decades of supplement use to prevent it. Here is one folic acid based theory how: [J of Nutr; Feb 2000](#) [also: point 11, below]. Folic acid (folate, folacin or B9) is one of the most dangerous and common long-term vitamin deficiency around; liver, beans, green veggies, multi-vitamins. *Anything* you do to foods specifically destroys folic acid, and B6.

5. **Few have a financial interest** in supplements but you, your family and your insurer -but supplements are taxed and you won't get a credit on your premium. **A life-time supply of folic acid** (a cancer, Alzheimer's disease, birth defect & artery damaging homocysteine risk reducing vitamin) until recently cost \$10. The average 0.2 mg/day added to N. American grain products **costs less than 1¢ per year**. The *minimum* needed dose is 0.4 mg (400 mcg), 1/10th the weight of a tiny flax seed. Being low in folic acid is truly dangerous since it prevents many of life's diseases!



If Americans would take a [good quality](#) multi, like *Twinlab's Daily One Caps*, they would save about \$100/yr in hospital costs regarding babies and heart disease alone (estimate [WJM](#); May '97), not to mention other diseases or suffering. New: a [Down's syndrome](#) link.



6. **Multi-level pyramid sales**, patented or *special* formulations are rarely cost effective, think: [Coral Calcium](#). Another example is *Ester-C*, chemically not an ester but a costly degraded mix of oxidized vitamin C. From their website: *All of the .. studies are considered to be pilot or preliminary, and although the results suggest a positive result, further studies are necessary* [but not for sales] *to verify these conclusions.*" Eleven years after the patent the largest study for 24 hours in 54 people. Six more years later, in 2006, still only one 'preliminary study' suggesting their process of 'natural oxidation' of vitamin C helps Ester-C work differently [[sic](#)]. Feel like wasting time, here's their [patent](#). Such practices based on deceptive research give the vitamin industry a bad name, yet their very friendly watch dog, the *Council for Responsible* [[sic](#)] *Nutrition*, refuses to bite this industry-wide scam. This watch dog knows who pays the dog food, collecting 0.1% of member company's *Ester-C* sales. So much for being 'dedicated to enhancing the health of the U.S. population' -



however, [they](#) do help keep vitamins legal (their CEO is a lawyer). How'bout also



patenting pre-oxidized vitamin E? Well no, they now flog [Ester-'E'](#) just because it would be oxidation protected in 'unpublished animal studies'. Promoting [Ester-C](#) as 'fatty acid ester free' is like hyping sugar for being fat-free. Shame on that industry that [price-fixes](#),

that makes good cheap *multi*'s hard to find on store shelves and refuses to self-police and weed out supplement scams.



7. [Half of American men](#) over age 40 are affected by degrees of impotence due to local artery dysfunction,

smokers 2x as often as nonsmokers. An early warning for a men's *entire* heart and

vascular system. Smoking and not taking B vitamins raises *heart disease* risk [12 fold](#); not taking C [8 fold!](#) Soon: nicotine gum, condoms and vitamins at the same counter.



8. [In women](#), the no-alcohol + low-folic acid group had [4.5x the heart disease deaths](#) of the [highest alcohol + highest-folic acid](#) group. Another study found an [almost doubled cardio-risk](#) in women with the lowest intake of nuts, and increasing without a [multi or vitamin E](#) supplement.



9. [Imagine ...](#) that just maybe a friend's colon cancer or Alzheimer's disease was caused by low folic acid, breast or prostate cancer by low selenium or fatal irregular heart beat by low magnesium, potassium or omega-3. Imagine most heart disease is caused by micronutrient deficiencies. Imagine how cheap and easy it would have been to avoid ... and how hard to undo. The list gets longer while we wait for "conclusive" evidence.

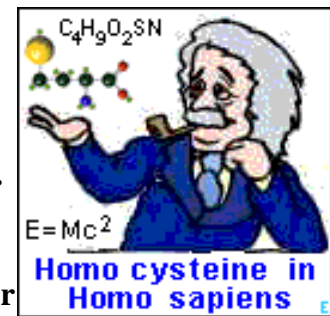
[Low vitamins D, C, B1, B3 or iodine](#) respectively cause rickets, scurvy, beriberi, pellagra and goiter (to the disbelief of the medical world at the time). The next 2 sections tell how long-term low B6, B12 and folic acid (general malnutrition or processed diets) promote heart disease, cancer, [brain \(cognitive\) decline](#) and Alzheimer's. Here's a teaser: 400 versus 100 mcg folic acid intake, and 19 years later, [20% less cardiovascular disease and stroke!](#)



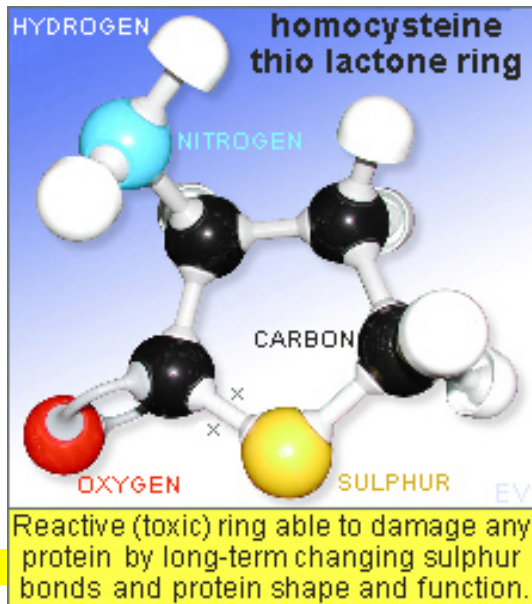
10. [More-studies-are-needed](#). While there will never be certainty, there *is* sufficient data to send the optimum-nutrition case to the jury with instructions that, in life, a hung jury is not an option. This website is one such analysis. Here's one by [Nutrition Science News](#).

Here, inPDF, is another but more technical analysis by [AltMedRev; '96: 132](#). Any doctor not having read the latter *and* the Feb. 16 '99 issue of *Circulation* about omega-3's *and* [McCully's homocysteine book](#) has dangerous information deficiencies.

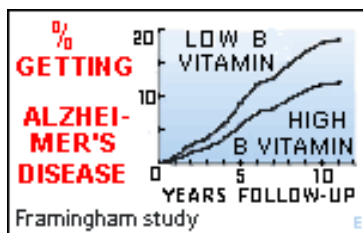
McCully, again a Harvard professor, established the link, via the blood chemical homocysteine, between many diseases and poor nutrition. This link is the Mc^2 [think McC-ully] of low micro-nutrient intake and disease: higher than minimal homocysteine *proves* malnutrition (in each of us and in groups). This discovery, for which he should be on the short-list for a *Nobel Prize*, supports Adelle Davis' views of the early research, like eating B-vitamin and methyl group supplying eggs and liver against heart disease (-research like the pioneering work of Lester Morrison and Charles "insulin" Best before that; also 11 and 24, below).



11. Dropping homocysteine is cheap and easy using a *multi* with high amounts of B vitamins [this author in [Arch Int Med](#)]. B vitamins [reverse artery plaque](#) [3rd figure below, and [here](#)] and help [blood flow and balloon \(angioplasty\) operation success](#). Without high intakes of B vitamins, this 'natural slow-poison' we make from protein hangs around longer than needed. This damages arteries, liver, brain and DNA. Let me propose: **atheromas, the fatty swellings in arteries (and many cancers and Alzheimer's disease), are proportional to the time spent at homocysteine levels over 6, the level of most 10 year olds.** 30 years at level '15' is ill-health

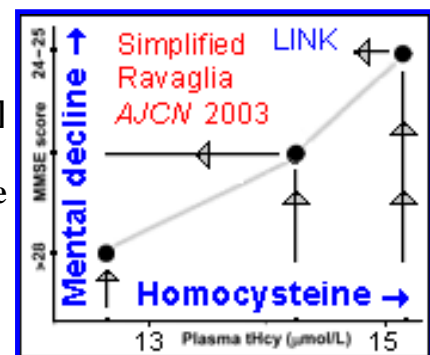


and decline; that time spent at '6' is long-term health. Science: this nasty little molecule opens at X when that carbon marries the 2nd nitrogen from lysine, disabling this amino acid needed to make collagen and elastin, the actual artery structural materials. The opening of the ring then leaves the sulphur atom on its own, ready to do more damage.



The effects of the 5 main agents [[folic acid \(B9\)](#), [B6](#), [B12](#), [B2](#) & [betaine \(B14\)**](#)] are *cumulative*, together probably lowering by $\frac{1}{2}$ the risk of heart, blood vessel

and *Alzheimer's* disease (also: [AJCN](#)). The left graph was (over) simplified from [NEJM 2002-2-14](#), a homocysteine study in 1100 elderly and the % getting dementia and Alzheimer's many years later [[vitamin B-3](#) and [fish oil omega-3](#) may also help]. High homocysteine is and proves low B vitamin status: *NEJM*: "The simple addition to a normal diet of large doses of folacin, vitamin B12, or betaine will substantially reduce plasma homocysteine in most people." [magnesium, other B vitamins also play roles].



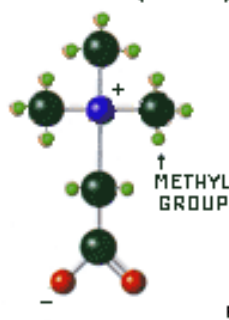
Even if in real life only half these benefits materialize this would still be a massive reduction in suffering. Other benefits of these nutrients (directly and through homocysteine) are in birth defects, pregnancy complications, (significant) cancer prevention and artery relaxation. These effects are the best rationale for taking a high-dose multi vitamin. The book [Methyl Magic](#) is a fine reference. High homocysteine is the best indicator of malnutrition and vitamin deficiency (the shameful rule in the home-bound elderly).

Happy homocysteine: below 7 in mid-age and below 9 when elderly; the lower the better with 6 $\mu\text{mol/L}$ a "target". In the Framingham Study, average was 11.5 at age 60-65 to 22.5 above age 90 but in all 7 age categories were people with ideal values of below 6!

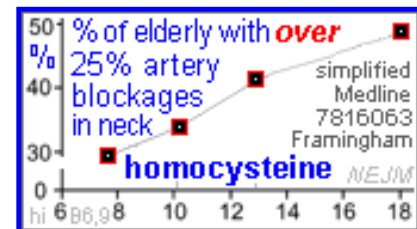
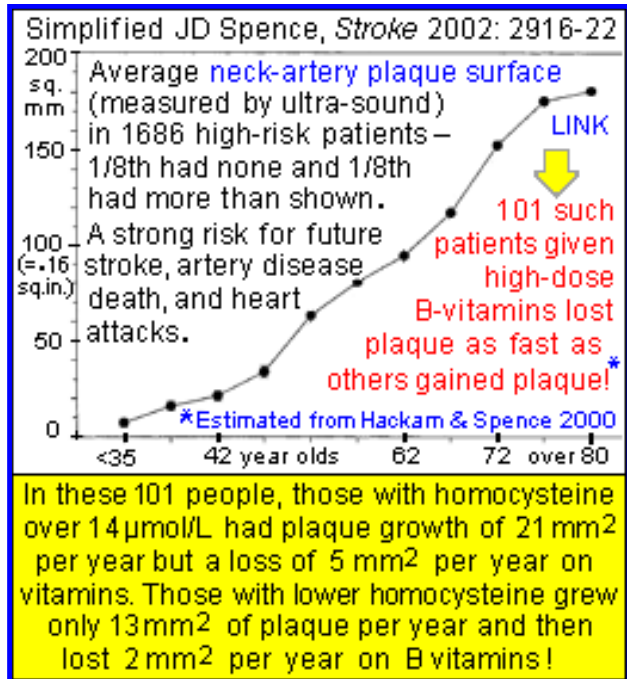
Dimes per day for the *multi* and zero risk! Add vitamins C and E, fiber, minerals (think: magnesium), omega-3 oils and eat low processed foods** and you'll reduce your statistical chances of early heart and mental ill-health to a fairly low level, regardless of your genetics. Smoking, possibly unfiltered coffee, mega-niacin and fibrate drugs increase this blood toxin. So do [stress](#) or [anger](#)!

Homocysteine lowering is especially important for the about *one third* of us with a genetic tendency to higher levels. For some reason, most people with heart disease have "desirable" cholesterol levels. [McCully](#): "[In 2/3rds of autopsies with severe atherosclerosis] ... the disease developed **without** evidence of elevated ... cholesterol, diabetes, or hypertension." Could low omega-3, mineral, antioxidant and homocysteine lowering nutrients cause that difference --or does your MD, heart specialist or lipidologist [yes, a "blood-fat-specialist"] have a *better* theory? Since half of you reading this website have or will have heart and blood vessel diseases, this question is worth asking.

BETAINE (TMG)

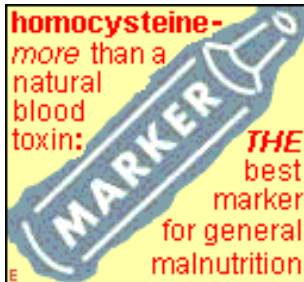


****Betaine** [be-tai-ine, bee-tain, TMG or B14] and choline are about 0.5% and 0.25% respectively of wheat bran and germ - leaving refined flour with only about 0.06% (*Cereal Chem*; 1-'67: 48-60). New 2003 figures for [wheat germ and bran](#) are even higher. Both nutrients have similar vitamin-like roles that are crucial for artery health (this author in [AJCN](#)). Choline (eggs, liver, soy, wheat bran/germ, meat, fish, and self-made from lecithin) turns into betaine (3 methyl groups stuck onto the amino acid glycine; also found in beets, spinach, wheat



bran/germ, shrimp & beer) that, after donating a methyl group (like the famous and expensive SAME) turns into DMG, another donor of methyl groups:

These nutrients produce "methyls" that drop homocysteine and protect blood, arteries, brain, liver and DNA. Methyl groups do hundreds of good things (excepting possibly in mania and some *late-stage* cancer). **Sticking methyl onto the sulfur of homocysteine generates the essential amino acid methionine, taming the beast.** Methionine, lecithin, choline and betaine are "lipotropes" that help us deal with fats [like fatty-liver caused by [alcohol](#), overweight and type 2 diabetes]. Morrison first "improved" cholesterol "types" with betaine in patients and 50 years later we have [trials](#) of betaine improving homocysteine in normal people. Interestingly, unlike B6, B9 and B12, betaine also lowers homocysteine after a meal. **Cancer:** massive DNA damage and breakage with "low normal" folic acid intake [for scientists: RNA's uracil winds up in DNA and its removal causes [major DNA disruption](#), prevented by sufficient methylation; RNA's uracil + methyl = DNA's thymine].



Nutrient Nutrient info is unlikely to come from a cardiologist. For example, the ACC's expert panel on Heart Failure *only* mention of nutrients is: "Physicians should monitor [which is difficult] and correct any deficiencies in potassium and magnesium, since these may cause ... arrhythmias [irregular heart beat]".

The ACC Guide to Preventive Cardiology for Woman:

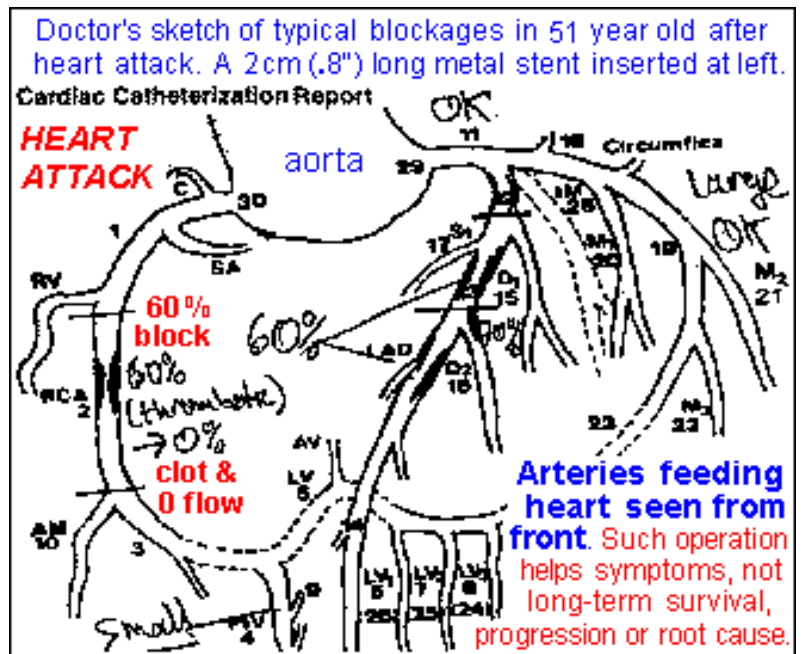
"Diets rich in antioxidant ...nutrients and folate are preferred [says who?] over supplements." (*JACC*; 5-1999: 1751-5). Why not do both since **folic acid (B9), and B12, are best absorbed from a multi-vitamin pill.** For example, [1 in 8 Americans](#) over age 60 is B12 deficient (yet able to absorb B12 from a pill) because of low or drug-reduced stomach acid. Doctors however like to *inject* people with B12. In a different "vein" (sorry), vitamin E from food plus a *multi* will not get you, as all cardiologists know, the about 200 IU's linked to a 40% lowered risk of future heart disease.



Some wise words about such "expert committees" or websites, including this one, as Dr. JRA Mitchell once said: "What passes for knowledge is often no more than well-organised ignorance." and "The alternative to scientific experiment is the expert committee. Unfortunately, just as one cannot be sure of the relationship between risk factors and disease, we cannot be sure of the relationship between the opinion of the committee and the truth: **the opinion of the committee will depend on who is selected for it.**"

12. **In most heart attacks**, plaque breaks, imitating a cut or a wound, and thus blood clots and the vessel contracts. Maintaining good intakes of magnesium, potassium and omega-3 oils will help save you by preventing the resulting irregular heart beat.

In other words, heart disease, clotting and strokes start when repair Lp(a), fibrinogen and/or homocysteine are high, HDL & CoQ10 are low, or when LDL and artery walls are damaged by homocysteine or oxidized cholesterol (old, burnt or heated fats). Plaque forms in damaged sites in vessel walls. Vitamins B3, B6, B12, folic acid and betaine and antioxidants E, C, selenium, CoQ10 & omega-3 oils prevent LDL or inflammatory damage--by keeping LDL "good", and the arteries healthy, thin and flexible.



13. **FIRST Assure Optimal Nutrition** underlies the medical principle of *first* not to cause harm. In other words, first insure that an illness cannot be cured or helped by nutrition. Nutritional medicine is also called naturopathic or orthomolecular medicine or psychiatry. The stupid idea that a "well balanced diet" gives optimum amounts of the nutrients *you* need is based on dogma, not on science. **While a 'balanced & varied' diet with lots of fruits, veggies & whole-grains is truly a superb idea (JNCI; 00-1-19)**, no scientist can say that even such diet (and more importantly your *actual* diet) has *your* optimum amounts of selenium, magnesium, calcium, potassium, vanadium, silicon, molybdenum, chromium, vitamins C, E, etc.



People don't readily change eating patterns shaped by taste, family, habit, price, availability, restaurants, vending machines, corporate profit, religion and custom -- and 1/3rd of Americans get almost half of their calories from 'Energy-Dense, Nutrient-Poor' junk foods -AJCN; Oct. 2000. This being a **human and dietary advice reality** [the '**CELL**' study], taking a few supplements (a good multi, C, E, calcium / magnesium + vitamin D, and omega-3 in the diet) is one cheap and easy thing anyone can do about the known nutrients likely to be lacking.

14. **Selenium** is crucial in heart disease and **cancer prevention** --or put the other way, many heart conditions and cancers are, at least in part, selenium deficiency diseases. Selenium is found in US or Canadian wheat flour at 1 to 120 mcg/100g depending on where it was grown, making it either a good or a terrible source (you need about 200 mcg/day for long-term health).



Since 1984, ultra-low selenium and ultra-high heart disease Finland supplements its fertilizers with selenium. Rather than supplementing fertilizer and hoping you'll get optimal nutrients, your chances are much improved with a good vitamin-mineral supplement. Sure, it looks like a pill but it's a targeted food concentrate. [This study](#) in men found a 63% reduction in prostate cancer from 200 mcg selenium and it should work for breast and other cancers as well. Selenium is an **anti-inflammatory** in rheumatoid arthritis, it **likely improves longevity** and it may reduce **HIV / AIDS** [[book](#), [science](#)] and other virus diseases.



15. **Dog food** contains a vitamin and mineral supplement, even the canned-meat variety. This lack of added supplements explains the veterinary *dogma* that your dinner leftovers are bad for a dog! Animal science accepted years ago that **a supplement is an essential food group** for dogs, cats, zoo, farm & lab animals. Farm science also proved that supplements are vital to crop health because plants may not get all the nutrients they need from the soil. As your pet and crop get supplemental micro nutrients, what are the chances you get them from restaurant or supermarket foods?



16. **Food-pyramids** of the various food groups are made by portion size and some relative importance. However **the 1995 U.S. Dietary Guidelines and Pyramid do little to prevent disease** according to studies [1](#) and [2](#), with fresh insight by the [OttoBonis](#). These studies call for a change in the guidelines. A suggestion: promote whole and unprocessed foods, omega-3 oils and a *multi*, while refined rapidly absorbed carbs (now the base of the pyramid) would move into the 'use sparingly' category. Part of the very base of an improved pyramid would be fruits and vegetables that would share this base with a category for omega-3 oil and a micro-nutrient supplement. This was in fact the comment of one of U.S.'s top senior scientists at the May 2001 Linus Pauling Institute nutrition conference ... while a second top scientist commented that a *multi* is the most conservative thing one should consider for a hospitalized patient.

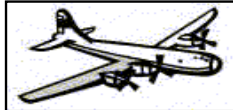
17a. **UNDER-dose of nutrients** affects most people. The most common ones are: calories, protein, iodine, iron, calcium, magnesium, potassium, zinc, selenium & vitamins A, B, C, D, E, omega-3 oils (fish - % varies, flax -57%, unhydrogenated regular canola -9%, unhydrogenated soy -7%, wheat germ -5% & unrefined walnut -5%) and last but not least: folic acid. **Anything you do to foods (freeze, can, boil, age) specifically lowers 2 homocysteine lowering vitamins: folic acid and B6.**



17b. **OVER-dose of nutrients**, apart from things like calories, omega-6, iron and copper are rare and usually benign. About *fluoride* however, the "do not swallow", **supervise-your-kids** and "use only a pea-sized amount" warnings on **Crest** toothpaste are ominous, and valid. **Fluoride** is nearly as toxic as arsenic. **Fluoride causes aging, dark skin**

blotches, white-spotted teeth, cancer, collagen and DNA damage, "unwanted" bone growth (in cartilage and in artery walls and as spurs on bones), and it may not even prevent tooth decay long term --ref's [1](#)

& 2. Applied to *growing* teeth, it forms fluor-apatite, $(CaF)Ca_4(PO_4)_3$, a hard mineral also found in bone-hard calcified arteries. Promoted as if it could be a nutrient by money and bad science, fluoride is the toxin that raised permanent "mottle" tooth damage in U.S. kids (fluorosis = *permanent white spots*) from about 6 to 30%: [CDC/JADA; Feb. 2002](#). Here is an important Canadian summary: directly applied to growing permanent teeth, there *might* be a small benefit in one (1) age-group (age 5 to 9 ?) but *ingested*-from toothpaste, water, drinks or very high tea intake (leaves)- there is risk to all (bone-fracture, cancer). P.S. The title of Dr. Leo Spira's 1953 book with the first 25 years of science is: *The Drama of Fluorine, Arch Enemy of Mankind*. Fluoride anyone?



17c. **PRESCRIBED** drugs in U.S. hospitals *daily* kill a jumbo-jet full of people (300) and cause 6000 adverse reactions defined as 'permanent disability, more hospitalization or causing death' ([JAMA; '98-4-15](#)). **This is 1 FDA approved drug-death and 20 very serious reactions every 5 minutes!** Why worry about Anthrax as the medical drug toll surpasses that of the World Trade Center calamity every 10 days in the U.S. alone. In 2003, 1 in 4 Canadians was affected by medical mistakes. Yet, only *perceived* dangers (fear, terrorists, exams) most motivate people, not death by meds. **About sudden heart problems**: go to a hospital able to 'balloon' or 'by-pass the problem' and you'll have a 10 times greater chance of getting such intervention and a 14% greater chance of being dead 6 months later.



18. **ASPIRIN** daily kills about 46 Americans, as many as die from AIDS ([NEJM; June 17 '99](#)) *but* an ultra low dose (~1/4th of a high strength pill (125 mg) every 2nd day -but not if you take *ibuprofen* first) can be anti-clot + anti-inflammation heart healthy (for those at high-risk -see the [FDA](#)) and about 160 times more bang for your buck than cholesterol lowering statin drugs ([BMJ; Dec. 5 '98](#)). *Aspirin* however is linked to 200,000 U.S. hospitalisations for congestive heart failure ["NSAIDs should be used with caution in patients with a history of cardiovascular disease."], internal bleeding and it triggers asthma. "*Aspirin, like all other drugs, is a poison*" is the title of [this](#) editorial in *BMJ* that concludes that "...it may be more appropriate for some people to eat an apple rather than an aspirin a day." [here's the [Jan. 2002 update](#) and [discussion](#)]. Then there is *Tylenol* / *paracetamol* which like its parent, *phenacetin*, and *aspirin* to a lesser degree, may damage your kidneys and combined with alcohol is disaster for your liver --and it should therefore not be sold in bars, or used for hangovers. Two vital reality checks ...: aspirin and Tylenol.



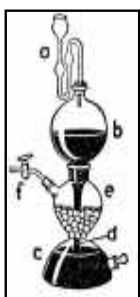
Aspirin, Tylenol and super expensive Celebrex/ Vioxx/ Mobicox work by reducing inflammation and/or pain from omega-6 oil-based molecules. The omega-3 family of oils, and most effectively fish oil, does the same but more gently, more safely and with more flavor (some would say: with too much flavor). These omega-3 effects are from "COX-regulation" in addition to the electro-chemical effects of the oil itself. These omega-3 benefits are evident in heart disease, in gut diseases like colitis and Crohn's, in arthritis, and health in general. *JAMA* sounded an alarm in 2001 about COX-2 inhibitors *Celebrex* & *Vioxx* regarding 50% more heart attacks. Three years later Vioxx® was pulled off the shelves, then *Bextra* and *Celebrex* is under a similar cloud: they reduce one of the really good prostaglandins (prostacyclin PGI-2) and prevent bones from healing.

Simply put: the *aspirins* prevent clotting but cause bleeding while the *vioxxes* may lower bleeding but promote clotting --and slow surgical, bone and wound healing.

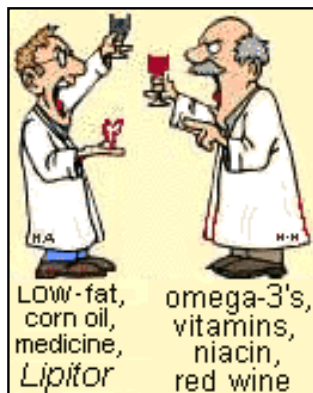
CycloOxygenases (proteins clinging to fat-based cell membranes) put the loop (**C**ycle) into and the **O**Xygen onto several already bent 20 carbon long fatty acids (removed from the host-membrane). This turns them into *prostaglandins*. Inhibitors prevent this, which can be good (for pain, inflammation and blood flow) or bad (for clotting, bleeding, kidney, blood-pressure, heart failure, etc.). Such anti-inflammatories and pain killers are little nuclear weapons against the fat-based machinery of your system, the effects of which will not be understood for decades [and now there are P-COX-1a, P-COX-1b, COX-3, and whoknows..].



All COX-1 and *some* COX-2 reside in a small sub-cell inside each cell and make the cell work properly. Other COX-2 sits around your DNA and tells it what to do and how to behave but *most* COX-2 is made in inflammation and infection, hopefully only when needed (otherwise it promotes cancer, arthritis and heart disease, and possibly Alzheimer's). Let me guess ... this is more than you wanted to know.



19. **Nutrient modification** by processing is little questioned: pick any food store shelf. This includes Europe where the foods are no better and where the nutrition labels are terrible. Since the addition at a yearly cost of 1¢ in the U.S. of folic acid to grain products and flour, many highly processed foods are now endorsed as sources of folic acid --[NEJM; May 13 '99](#). While *fortification* helps, about 90% of the world eats non supplemented refined grain and rice products --and nobody replaces the 80 - 100% of removed magnesium, zinc or vitamin E to name but a few lost nutrients. Low magnesium alone is linked to 11% of U.S. heart mortality ([Int. J. Epid; 1999](#)).



20. **The combined supplements** --E, C, the B's, minerals, CoQ10, flax or fish oil & niacin if desired & (maybe) ~1/4th of a high strength *aspirin* every other day (in non-hypertensives)-- are cheaper and a heart-healthier package than any of the cholesterol lowering *statin* drugs. Over 50 billion \$ in sales and related costs (*JAMA*; '00-4-12: \$2.2-\$5/day) and drug companies still aren't allowed to say they will improve or prolong life for most users --unlike niacin (*JACC*).

Mega-niacin does take some medical guidance and for the first few days it *will* give a harmless but frightening hot-flush. It is the *only* drug suggested by the AHA to raise HDL and it's 1 of 3 to lower LDL [including fibrates, drugs increasing deaths]. Best: plain niacin (not 'no-flush') and it may make your doctor feel better about law suits since you're doing something about 'your' cholesterol. Always take with a multi otherwise it raises homocysteine and, bonus: it lowers clotting Lp(a) and fibrinogen.

changing LDL amount, not quality



notes: E.V. **BETTER TOGETHER!**
Single or together: little or no proof they extend life. Double your flu and infections with Vytorin® (P1)

21. **CHOLESTEROL PILLS**, statins, -Pravachol, Lipitor, Zocor, Mevacor, Lescol, Crestor- '..if diet and exercise alone are not enough..' make part of a lab report look 'better'. This makes families poorer and less concerned about food choices while doctors aren't yet getting blamed for prescribing them. They hardly raise HDL and slash the production of CoQ10 by the *same % as LDL*, forcing heart, in fact *all cells*, to work with *less energy* and *more 'free radical' damage*. Their limited effect is clearly not from cholesterol but from lowering inflammation (2nd ref.) and blood clotting, and by changing artery function, as do more cheaply C-RP by aspirin, some omega-3 oils and some vitamins (high-dose E).

Stanol-sterol margarines, policosanol, fibrates, gugulipid, dextrothyroxine, estrogen, ezetimibe [Zetia, Ezetrol, part of Vytorin -click for warning] and torcetrapib all 'manage cholesterol' in various ways but **have never shown to save lives, just like Lipitor.**



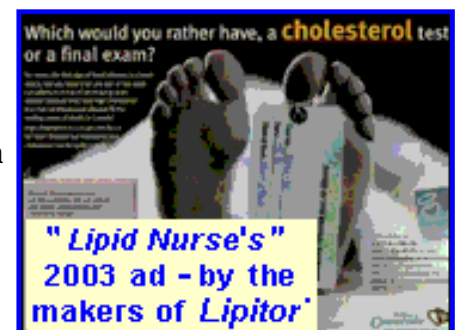
Canadian fine-print warns "**The effects of ... on cardiovascular morbidity [illness] or mortality [death] ... have not [!] been established.**" And: "Significant decreases in circulating ubiquinone [CoQ10] levels in patients treated with X or other statins have been observed [happens in all users, and this does] .. lead to impaired cardiac function [= heart failure, nerve death] ..". Also: ".. in some patients the beneficial effects of lowered... cholesterol may be partially blunted [canceled] by a [linked] increase in Lp(a) levels."



MedlinePlus list 100 statin side effects but not the most vital,

CoQ10 reduction. Simply put:

1. **Sometimes good:** inflammatory, clotting and nitric oxide effects -likely short-term (weeks or months near 'events' or 'interventions');
2. **No effect:** from changes to cholesterol [lipids];
3. **Always bad:** pain (joints, weakness), 'senior moments', inability to learn, more cancer, less CoQ10, more Lp(a), birth defects and long-term unknowns: again, cancer;
4. **Scary ads** & faulty science [*Zocor, Vytorin* and the *Pfizer* feet in the morgue fear of death campaign called 'unethical' by the World Health Organization];
5. Don't prolong survival in most high-risk groups and not in women:

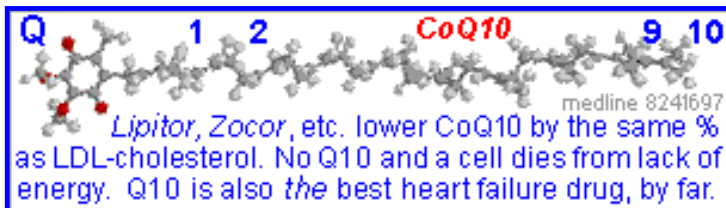




Massive benefits proclaims Oxford University about its 2002 *Zocor - Heart Protection Study*. 75% of heart attacks still happen and 300 on *Zocor* for 1 year to postpone one (1) death. Massive drug use, **few**



'men' saved. The next study claiming benefit in high-risk elderly, *Pravachol's PROSPER* had 28 fewer heart but 24 more cancer deaths and more 'new' cancers in each of 4 years in a group with 52 fewer smokers. Next, zero 'anything' was found in *Pravachol's ALLHAT* in high-risk North Americans: 1 death postponed per 1.1 million \$3 pills taken! Next was *Lipitor's ASCOT* also without mortality benefit (graph below). **From 10 years ago: cholesterol lowering by any means caused 150 more deaths per 100,000 patient-years of intervention. Cheers.** No statin benefit in "primary" prevention in 2003, click on the right picture: the University of British Columbia.



"Ask your doctor if 'Rx' is right for you" prompt the ads but vital information is hidden from you and your doctor. This paves the way for after-the-damage criminal investigations and **lawsuits.**

Statins, fibrates and high intakes of the common

cholesterol-lowering polyunsaturated omega-6 'vegetable' oils (like corn) are linked to more cancer, as is just plain low cholesterol. Canadian ads but not U.S. ads warn that statins lower CoQ10; *there's* your muscle and nerve pain, **and lack of energy.** **Fewer studies were done on women**

and elderly, groups where high LDL has no evident link to mortality [low HDL does have such link, but HDL is best raised by, for example, exercise, moderate alcohol use or mega-niacin with -or it will raise homocysteine- a multivitamin].

No mortality studies were done in people taking a good *multi*, whole foods and omega-3 oil.



Many B-vitamin (homocysteine) trials are now being done but some are in people where prevention is rather (too) late, some were destined for failure (VISP) and many are set-up to have statins share the credit. The latter paves the way for *combination therapy*: statins + **niacin** and/or aspirin and/or **fish oil** and/or multi-B-vitamins ... if statins alone are not enough ...



A TV ad exclaims: '*Lipitor* did it, the lower **numbers** you're looking for.' Then, a small banner: "*Lipitor* has not been shown to prevent heart disease or heart attacks." Isn't that what people expect when taking the drug? Now, in 2005, *Lipitor* ads no longer mention heart disease, it simply 'treats' (bad) cholesterol, a concept created by the drug and food industry. Another TV couple: 'Oh, Jessie, I love you too! ...*Zocor*, Be There! Up to 87% of *Baycol** users drop to 'target levels' but 'effects on disease and death have not been established.' Why not real wellness goals such as less illness, fewer doctors visits or more time with friends?

"Targets" for pain killers are clear. However for drugs dropping blood sugar, pressure or cholesterol, ask your doctor if *real* health benefits are actually proven.

Eight authors of the U.S. ATP III 2004 treatment guideline 'update' got money from average 10 drug companies; one, a NIH gov't employee, got **\$114,000 + 'stock options'** from the statin industry. The 9th author earns a living as NCEP Coordinator with the job to *'..increase the proportion [.. of Americans] who adhere to their cholesterol-lowering regimen.'* And, oeps, they forgot the largest statin study ever, J-

LIT. More in *BMJ* on study [conflicts of interest](#). Could the brilliant beauty of a drug (industry) blind a well meaning doctor? Is it fear of not following 'guidelines'? *)*Baycol (Lipobay)* was withdrawn for causing unexpected deaths: here's an [important comment](#) about all statins. Also, [StatinAlert.org](#) or [StoppedOurStatins](#).



How about Pravachol? Two analysis by the Journal Club [here](#) and [here](#); some high risk participant would have to be treated for over 200 years at a drug cost of \$200 000 to prevent one cardiac 'event'. The WOSCOPS study selected 6600 men out of 160 000 and treated half. After 5 years and 30% giving up on the drug total deaths were not quite statistically different. The CARE study found, in patients with prior heart attacks '.. no significant differences in overall mortality ..' [1.6 per 1000 years of drug use, a statistical fluke.] *NEJM*; 99-4-8:1115 about a 3rd study (LIPID): '[Pravachol] has no particular advantage over placebo [dummy-pill].' Finally the truly massive ALLHAT study found 'zip' in *any* health department!



Also more dead on nasty Lopid -fibrates kill people-

-EXCEL-
dummy pill
3 deaths
Mevacor
8 deaths
per group
11 months:
study killed

The *Mevacor (lovastatin) EXCEL* trial had with 89% probability 2.75x more deaths (97% cardio-vascular) after 2 million pills were swallowed (11% fewer heart attacks, 40% more cancer); then, dumping 97% of the placebo group, *Merck* continued but without the risk of the drug proving conclusively to be more fatal than their dummy pill! Then, after 3 times more *Mevacor* pills, the [AFCAPS / TexCAPS](#) trial ended with 3 more drug deaths (also 40% more cancer). Next, *Merck's* 1st *Zocor* study (4S) killed 3 more women but saved men, yet with unexplained anomalies in the mortality curves after 18 months.



Scandal at Oxford: *Sir Peto* and Dr. Collins refuse to publish the *Heart Protection Study* mortality curves in men, women, diabetic or not. In 1992 both wanted '*total mortality*' trials, proposing this was relevant. They did the study and now hide the mortality curves. In 2004 Dr. Collins suggested they would release these data but did not. In April 2007, author Dr. Baigent said it would be 'inappropriate' to publish these data and author Dr. Sleight: 'It is not my decision, but it looks like that.' [not releasing data about deaths]. Study sponsor *Merck* is also mum about deaths but as always, women did not benefit. If you're a diabetic women with a 75% chance to die from blood vessel diseases, would you not like to know how many days of life you might statistically gain or lose taking *Zocor* for 5 years? That is not an 'inappropriate' question but a real one and even more so when balancing money for food or drugs.

Twenty percent of 1st time *Zocor* users were motivated by cholesterol fear instilled by a [football coach](#) (*Merck* annual report). Not to be out done *Pfizer* uses 4 sports heros and [a doctor never having practiced medicine](#).

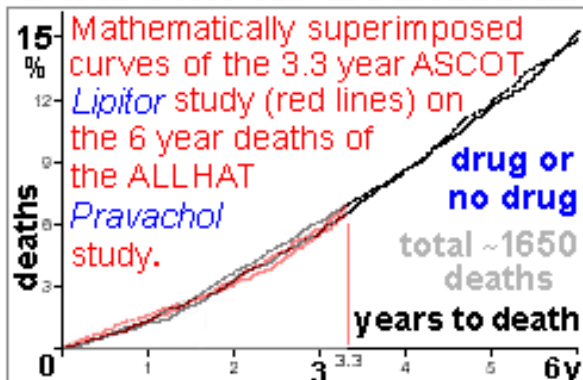


A shocking statement on the 2007 [ALLHAT](#) website: "...trials demonstrating a reduction in coronary heart disease from cholesterol lowering have not [sic] demonstrated a net reduction in [all-cause] mortality." [MedlinePlus](#) about ALLHAT: "... people taking pravastatin were no less likely to die or develop heart disease than people



receiving usual care." *Lipitor's* ASCOT 3.3 year mortality result is no different: 5168 people on statin, 5 million pills swallowed and the curves touch, and cancers, quality of life and muscle pain not reported. The 2006 SPARCL trial ended after 5 years with 5 fewer deaths in the group on dummy pills than in the group taking the top dose Lipitor.

Now we know, statins like *LIPITOR* don't save lives.. and calcification continues! 17 to 53 % less 'bad' LDL cholesterol..



Over 10,000 high-risk people for years on two typical statins, no one saved.

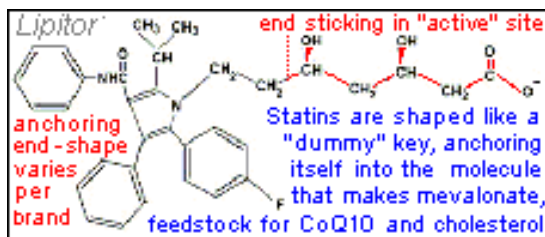
5000 more heart patients on top-dose Lipitor for 5 years suffer 2 more deaths than another 5000 on low dose in the TNT trial.

And, on either dose, artery calcium increased 26±1% in 1 year anyhow! Medline 16415377

Top dose or no Lipitor: 53% less cholesterol, the same 22% increase in calcium in the valve of the aorta per year. Medline 15944423

2006 UP-DATE 2365 stroke patients for 5 years on top-dose Lipitor suffer 5 more deaths, more serious bleeding strokes and no fewer fatal heart attacks than those on placebo. SPARCL study

Statins aren't cholesterol but mevalonate lowering 'therapy'. This mother-molecule also



makes CoQ10 and other vital stuff with names like isoprene [it takes 10 to make Q10, 6 to make cholesterol], farnesyl, geranyl, dolichol and squalene. Similarly, *aspirin* is not simply "anti-clot therapy", it rearranges all fat-based "house keeping", pain and signal machinery. Statins and aspirin hamper (*inhibit*) fundamental body processes. Whatever good necessarily comes with the bad. On the other hand, *niacin* promotes over 300 reactions and has few harmful effects since it stimulates body processes, like all vitamins. Niacin *must* be taken with a multi-B-vitamin or it will raise homocysteine. It is just a partial answer to heart disease and has other benefits but niacin did prevent heart attacks and did save lives;

2006 update.



U.S. TV ad... Steve did everything 'right'—but it wasn't 'enough'!

March 2005 Health Canada

issues a 'Dear Doctor' letter about the greater than 20 mg dose

IF you can't convince your Dr. NOT to prescribe statin and get a prescription for the highest generic dose, the price drops from \$340 US to \$20 per 1000 mg. Cut the pill into halves or quarters. Price from Canadian ZocorGeneric.com. Do Google search for 'generic zocor'.



2006 U.S. TV ad

CRESTOR has not been shown to prevent heart disease or heart attacks

Bottom Line: At 10 - 36x the price of *generic niacin* (1.2 kg for \$50 or 80¢ per week [here](#))*, in some types of (mainly male and non-congestive) heart patients, some statins *may* reduce the risk of "events" by one fifth [probably not "deaths", and you have to scrape the statistical barrel]. This leaves no less than 4/5ths of the risk. To deal with the larger under lying problem, remember that fat substitutions have proven of no value, apart from those involving omega-3 oils, and that whole-foods and supplements cheaply lower most risk factors -and survival chances. *(tel. 1.800.544.4440 or 1.954.766.8433; product 94.)

A doctor prescribing statin and not first niacin plus a good multi vitamin, without tracking homocysteine and Lp(a), and without replacement CoQ10, canola and fish omega-3 (pills) and likely a magnesium supplement is practicing incomplete medicine.

22. BLOOD PRESSURE. The **7 Countries Study** tracked 49 year old men who curiously enough had (in all these varied countries) average systolic blood pressures of 138 +/- 3% [normal is "120/75" (2.4/1.5 psi); a 10 "point" long-term drop would be success for a drug, yet represents only 13g/cm², a measly 0.2 psi]. They found (after 25 years) that heart-mortality in northern Europe and the U.S. was 4 times higher than in coastal south-east Europe or southern Japan (*NEngJMed*; Jan 6 '00: p1). At identical blood pressures, death by heart disease varied '*greatly*' between populations. Incidentally, the same factor 4 difference in heart deaths was also found for identical cholesterol levels.

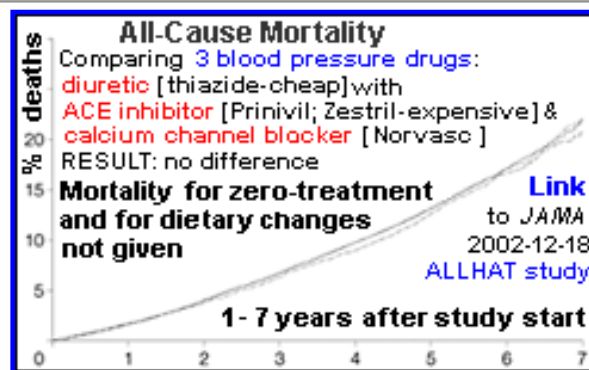
Within each location however people with heart disease were found to have higher blood pressures. The [report](#) and [editorial](#) interpret this link in the sense of blood pressure *causing* heart disease (thus the potential for drug treatment). The reverse is more logical: the heart pumping into hardened arteries evidently causes higher pressures than if pumping into healthy ones.

the question

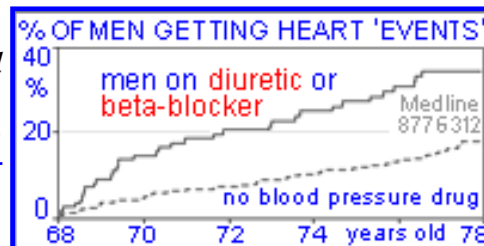
Do high cholesterol and high blood pressure cause heart disease?
OR
Does poor nutrition cause heart disease, high cholesterol and high blood pressure?

Bottom line. High blood pressure is not good for bleeding stroke but helps maintain blood circulation and prevent dizziness and falls in the elderly. **An increasing pressure is a warning for possible artery and kidney disease.** The quality of your diet -and often your belt size- are *the* important risk factors for both heart disease and blood pressure. If cholesterol or blood pressure are not risk factors in your case, simply lowering the numbers with drugs is like painting a car while ignoring the oil change.

Blood pressure drugs: in 85,572 patient-years of observation, 13% fewer deaths in men but **26% more deaths in women**. More heart attacks in men (see figure below) as with a 3rd "artan" type .."*and patients may need to be told.*"



There seems consensus that drugs are maybe only warranted in *very* high blood pressure (and with added diabetes?) and that in *all* cases nutrition and often weightloss are of primary importance and proven worth [--as can be [CoQ10](#)]. If you *must*: 'go water pill' but aks your doctor about needing more magnesium and potassium!





All blood pressure drugs have side effects -and have not been clearly shown to prolong life! If you have a drug name, check [RxList](#). You may also want to find out about lowering **salt** and increasing high **potassium** foods (fruits and veggies) and increasing **omega-3** oils and the amino acid **arginine** that makes (with help from **vitamin C**) the artery relaxant nitric oxide (found in: lean meat, eggs, low fat dairy, nuts, whole grains, wheat germ or or **nitroglycerin**; - think: dynamite). There are several other nutritional approaches (see book 2 in [links](#)).

About the complexities of drugs in heart conditions: [BMJ; Feb. 12 '00](#).



23. **The AHA** is a 1/2billion\$/year organization with 3.8 million volunteers. Unfortunately, *most* of its prevention approach is tainted by the massive soft-money from interest groups [... treating to "targets", reaching number "goals" in lab reports]. The focus is prevention by lowering fat and cholesterol "as part of a balanced eating plan". Its [website](#) recommends in general not to take supplements while among the foods suggested are **water bagels**, **molasses cookies**, **angel cake** and [check for yourself] ... **frankfurter buns**. These are all refined-starch, finely ground flour-based foods, that are high-glycemic, trigger insulin, promote obesity and type 2 diabetes which eventually leads to heart disease and stroke.



There are 3 AHA "heart-checks" on Lipton's "**Promise Ultra Fat Free Nonfat Margarine**" which has "0% fat", zero protein, zero etc. Some *Promise*, 2 of the 50 nutrients you need: water and supplemented vitamin A. Telling you not to supplement, they endorse an imitation margarine for its supplemented vitamin A. How about "**Smart Beat Fat Free American Flavor Non-Dairy Slices**"? Cheers! Also endorsed is the *Breakfast Candy* listed below, because it contains a piece of a multi-vitamin. Such "*nutrient-fortified and enriched starches*" [sic] are in evident conflict with the [CHD-Taskforce](#) and [AHA Dietary Guidelines](#): "...individuals should choose foods and beverages low in sugars, particularly added sugars.



AHA endorsements are sold for a yearly fee and include *Frosted Flakes* (42% sugar and only 1 g fiber), *Cocoa Krispies* ("chocolatey sweetened rice cereal"), *Cookie Crisp* (sugar and hydrogenated oils) and *Cocoa Puffs* (1st ingredient sugar: 47% + 0.2 g fiber, 1/125th of your daily requirement --I managed to grow mold on it so it *does* support life). Then, there's scary *Count Chocula*, synthesized from de-germed corn meal (corn starch), sugar and marshmallow bits, a hydrogenated *Frankenfood* through marriage to the equally spooky *Frankenberry* (95% carbs and 0.2 g fiber -not certified). No joke, but no yolk! No AHA scientists could possibly suggest that *Count Chocula* or spreads like *Promise* "fight heart disease and stroke".

If a food has as much as 1/10th of an egg, a whole food with all the nutrients to make a new chicken and **no evidence of harm**, it won't be endorsed but **sawdust** with over 10% of 1 of only 6 required nutrients (fiber) qualifies. Endorsements based on saturated fat and cholesterol and only one added nutrient is irresponsible. **America's most reliable source of heart-health information**, according to itself, must change its orientation if it doesn't want to remain part of the core problem. Using its dedicated doctors and without corporate money, simple science based advise should be given endorsing all healthy foods even without industrial sponsors. A good step is AHA's position on [omega-3 oils](#) (flax,

canola, fish-oil). If only the word *cholesterol* could be banned; that horse has been dead for 30 years, buried by the trials finding no fewer deaths from cholesterol lowering ([page](#) or [CMAJ](#)). Cholesterol-thinking poisons heart associations world wide: time to face these facts and tell the people.



Donations: Until the AHA gets nutrient-wise, stops endorsing stuff like *Cocoa Puffs* and puts your donation supported 5 journals free on the Internet, Americans may consider giving instead to the excellent nutrition dedicated [Pauling Institute](#) with their *free* news-letter. Why give to the AHA (or similar group) for probably over \$200 million/yr, corporate soft money tainted advice that helps cause disease in the first place? The AHA gets \$90 million/yr from estates but spends \$100 million on fund raising and [\\$3 million on its CEO and vice-presidents](#) with average \$60,000/yr incentive bonuses. Now *that* is charity!



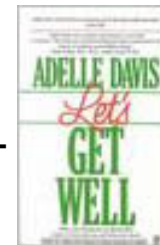
24. **Avoiding liver or fresh eggs** for their cholesterol is most often bad for your heart since they also provide protein, lecithin, choline and B vitamins. Liver is low in fat and it happens to be *the* best source of heart-healthy folic acid (B9), B6, B12, choline and of most other B vitamins, while its betaine (trimethylglycine or TMG) may soon become a heart health food. High cholesterol shrimp are heart-healthy ([AJCN; Nov. '96](#)) -but avoid *trans*-fat filled batter, and dried egg product.

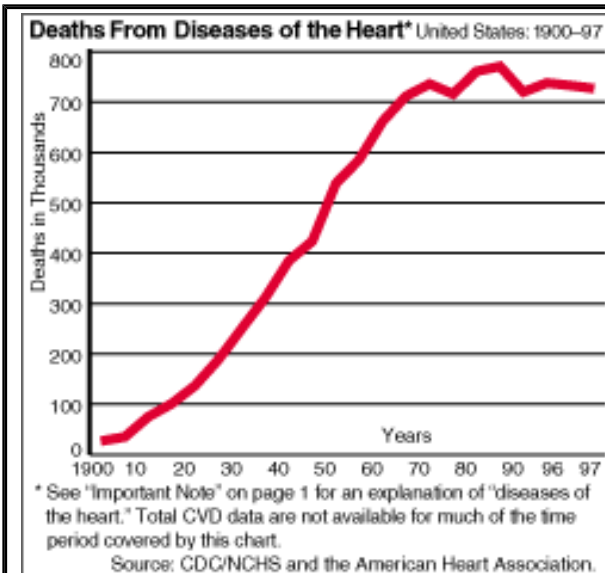
America's most celebrated nutritionist, says her publisher*, Adelle Davis: '*..eggs.. should never be restricted in the diets of persons with atherosclerosis.*' Her chapter about 'cholesterol problems' instead suggests high-cholesterol liver [4 oz or 110 g/day]. It is now clear that fresh *unoxidized* cholesterol is not toxic but that oxidized cholesterol as in egg or milk powder is. It is also clear that the B vitamins in liver lower homocysteine. Recently, Veteran's Administration and Harvard prof., career-long heart researcher McCully published a chopped liver recipe: 1 lb (450 g) chicken livers, 1 boiled egg, 1 tblsp. butter, 1 onion, salt and pepper -fry lightly. Delicious and heart healthy!



About half of the brain, your hormones, nerves and cell walls are various types of fats and cholesterol. It is thus logical that even slightly modified or lacking fats or cholesterol have major effects on physical, and mental, health. Since your brain is basically a machine made of fats (directing other fats and proteins), it is for its own protection not primarily equipped to burn fats (like your heart) and it constantly needs glucose for energy --dying quickly when this blood sugar supply stops (called: a stroke). The brain also protects itself from oxidized cholesterol, the dried egg product variety, by *making* all of its own cholesterol.

It is amazing that 35 years ago Davis suggested the amount of omega-3 now proven as cardio-protective: 1 tblsp. flax/lin or 2 tblsp. *unhydrogenated* soy or of the later developed canola. She was also right that high omega-6 safflower, sunflower and corn don't have such benefit. She was wrong with the theory of the day that people can turn omega-6 into omega-3 [there may be good biological reason to keep these 2 systems separate]. **The same publisher who 6 years after her death concocted "her" to-be-avoided book *Let's Stay Healthy*. Her original 1965 [Let's Get Well](#) with 2280 scientific references however could be a text book in a course Treasures of the First 50 Years of Nutrition Sciences (mistakes and foresight included). A similar book with parallel thinking and 1100 references is [Nutrition Against Disease](#) by vitamin discoverer R.J. Williams.





25. **This chart** illustrates the great underlying puzzle. **Some areas [and here]** still have no heart disease while others suffer steep increases like some former East Block countries. **The steep part of the curve** follows: 1.) the use of low fiber/nutrient flour, made by steel 'roller mills' rather than grind stones; 2.) the invent of hydrogenated fats; 3.) the explosion of added sugars and refined starches and 4.) the reduced use of eggs and other whole foods. Leveling rates follow vitamin additions to breakfast cereals in 1962, the increasing supplement use and omega-3 intake from soy and canola. Since 1998 when folic acid was added to grain products, the decline increased from 1 to 4.5%/year in the U.S.

The American Heart Association directed the fat and cholesterol phobia and a 700% jump in heart disease that [no surprise] paralleled the one in cancer. With this track record, endorsements of *Cocoa Puffs*, *Count Chocula* and other **high glycemic index starches** and heavy reliance on drugs, the role and direction of the AHA beg for an inquiry. Now, *there's* a job for U.S. vice-president and *1st* heart patient Cheney. The year was 1912: *Procter & Gamble* introduced *trans* fats (foremost made from omega-3's; ***Crisco 1912***) and heart attacks were first described in the U.S. (Herrick. *JAMA*; Dec. 12: 2015-). Angina, nitroglycerin and digitalis *were* known but heart attacks were rare and journal worthy. The ***Crisco*** ad writers with incredible foresight: "*and realize why its discovery [trans fats] will affect every family in America.*" Ain't that the truth! Life without omega-3': *On Sale* in the U.S.: 3 lbs (1.4 kg) brick-like '100%' cholesterol-free soy margarine, 10,000 kcal, for \$0.99 -Cheers!



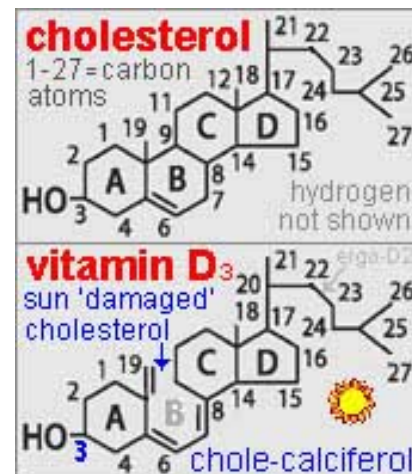
26. **Carotenoids** are "functional pigments" related to vitamin A of which beta-carotene and lycopene [[.org](#)] are 2 out of over 600. They are best eaten in lightly steamed carrots, tomato (or tomato paste), and in *all* deeply colored fruits and veggies. Without some oil in the same meal they *won't* be well absorbed! Lack of vitamin A in some Asian and African countries is *the* major cause of blindness and one major cause of death in kids. In Western countries, low antioxidants and low carotenoids lutein (**the yellow in yolk, and in green-leaf veggies**) and zeaxanthin (**corn, spinach, greens, fruits**) are linked to **macular** [central vision] blindness in older people (***JAMA*; 1994: 1413-20**) and to adult onset diabetes (*AJCN*; 4-'00). Low lycopene (**tomato/paste, watermelon, grapefruit, guava and apricot**) is linked to heart disease and prostate cancer (many studies). While vital to good health, *especially* if pregnant or smoking, I'd avoid *supplements* with over about 10,000IU (6 mg) of beta-carotene. Lycopene is *the* predominant carotenoid in the prostate, as are lutein and zeaxanthin in the eye where these "macular pigments" have protective antioxidant roles.



27. **Bone loss (osteo-arthritis / fracture):** eat bone (water, 10% fat, 20% protein, and 25% mineral that is 96% calcium based). It is surprising that not all research about low bone density *first* suggests to eat more bone and/or calcium. Think: when your tire has low air density, you give it air.

Amazing: women at age 84 building better bones when given 1.2g calcium + 800 IU (20 mcg) vitamin D per day: 43% less hip fractures in just 18

months. Low vitamin D is extremely common and a huge player in hip fractures and 22% fewer fractures with a 2.5 mg vitamin D supplement every 4 months (equivalent to 800 IU/day). It is made in the skin when *not* using sun block under a high-angle sun only: burn is bad, sun exposure is vital [[book](#)]. **Surprise, the "D" (all of 10 mg/year) is more important than the calcium.** More: the [vitamin-D-council](#) [best sources: sun, fish liver oil, fatty fish]. BMJ *Lesson of the week: common muscle and lower back pain!* Here's a free [book](#), a cancer [link at SunArc.org](#) and [a great song](#).



Another bone-density risk factor is low vitamin K intake (green leaf veggies, broccoli and cabbage: 2/3rd reduced hip fractures in high vs. low intake --[AJCN; May 2000](#)). Note that [Coumad\(r\)in / Warfarin](#) and antibiotics mess with vitamin K (think: Koagulation, Klotting, Kalcium and Koumad(r)in).

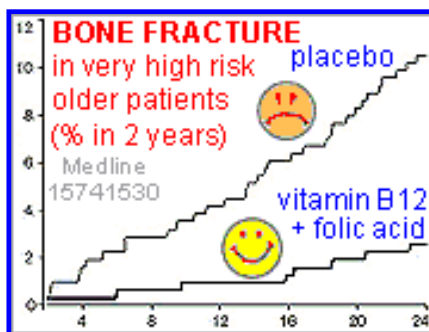
--PS If you can now afford a broken hip or wrist, you could have afforded the about 1.2 g calcium, 700 mg magnesium, 800 -1600 IU vitamin D [[2006 update: 4000 IU/day](#)] and green leaf or cabbage type veggie for vitamin K to have prevented this fracture, or indeed today's bad back -and calcium + D may prevent colon and breast cancer, tooth loss and gum disease and deliver healthy babies; how about flu / influenza! Low D, NOT just an extinct disease in kids! After the sun, my cheap source of D.



2 kids w rickets; 10 mg/yr of vitamin D prevents this.

--PPS High protein (even milk) and soft-drink intake consume calcium from bones unless you also get sufficient extra calcium-type minerals or alkali buffers (fruits and veggies). -and milk over age 30 may not help!

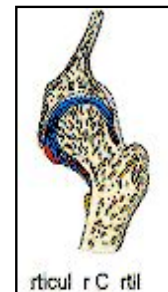
--PPPS Omega-3 (fish oil) helps grow bone! [T Terano or BA Watkins]. Also, lowest vitamins [= highest homocysteine]: men 4x and women 2x the hip fractures in the [Framingham Study](#).



--PPPPS Paradox: faster bone *loss* in bone, faster bone *growth* in arteries. In the lab this happend by oxidized LDL-cholesterol [think: egg & milk powder].



28. **Similarly**, in the case of cartilage loss (**again: arthritis**): eat cartilage (when purified, called glucosamine - shells of crustaceans- and chondroitin -shark and animal cartilage- sulfates) and a lesser source, soft bone itself. Biochemically not surprisingly, research links cartilage health with artery health and heart disease survival ([Morrison/Schjeide](#), medical library book WG300 M879c 1973 and [Angiology](#) 1973; 24(5):269-87). The chondroitin taken for cartilage (joint) health may well help the cartilage (connective tissue = collagen, elastin and 'glyco-s-amines') of your artery walls!



29. **People and animals store** the *types* of fat they eat. For instance 20 mg of butt-fat ('adipose tissue aspirate') reveals your long-term consumption of fats. Feed chickens flaxseed, their eggs retain omega-3. The regular intake of flax oil makes one's heart beat (and skin) stay 'smooth', while lecithin and fish oil keep things 'fluid'. Now imagine: *more than* half their energy from 'killer-coconut' fat yet artery disease was '**uncommon**' in these **Polynesians** -found the great Dr. I.A. Prior. Coconut has mostly rare fats that we *don't* store but that do kill viruses and microbes.

Naturally saturated tropical fats [link under palm-tree], tallow and butter are much **healthier** -and certainly for frying- than the common "vegetable" oils, margarines and shortening (think: **French fry and donut**) as shown in this **Figure 1** in *NEJM*. Surprise, fats are as important as protein: surrounding and controlling every cell and every factory in and on each cell. There are hundreds of fat combinations in the miscellaneous cell walls that "host" this machinery: channels, proteins, enzymes and some DNA -all of which these fats control. They, the fats of the host-membranes, control where the guest proteins go, how they behave and fats may perform tasks for the guest proteins. Fats, in a balance between omega-3 and -6, control every motion, emotion, pain and heart beat, with your brain effectively a glob of smart fat!

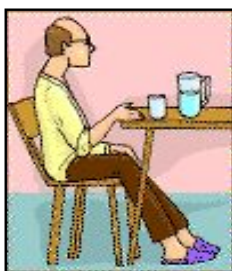


30. **Omega-3** is a problem to food processors as they are liquid and quick to spoil. This is why this vitamin F that prevents death by -and in- a heart attack is eliminated by hydrogenation. This turns it into toxic *trans* fat, a double nutritional whammy underlying heart-disease that is found in 1/2 of N. American vegetable (read: seed) oils. Omega-3 type vitamin F can also be eliminated from the plant, like in the low omega-3 (yellow, not brown) flax/linseed *Linola* or soy cross-breed *Soyola*. There is no guarantee that these nutritionally

inferior stains can be kept separate in the plant kingdom. Regardless, they reduce the few available plant sources of omega-3.

For deep-fat frying low omega-3 strains are still not as safe as saturated fat but they are safer than hydrogenated canola or soy -however at what risk to the long-term omega-3 type vitamin F supply? The key in *all* plant and food engineering is extreme caution and long-term public interest. This is clearly not served by vitamin F removal. Superb omega-3 and *trans* labels are coming to Canada: here's the one proposed for soy. That won't fix the fact that in the U.S. up to 0.49 g "per serving" [there's your loophole] will continue to be advertised as zero *trans*, like '**I Can't Believe It's Not Butter!**' margarine. *Trans* warnings on labels and menus would give consumers health options until governments ban hydrogenation altogether. **Until then**: if the listed fats don't add up to the total fat, the balance is *trans*, so avoid [in the above label: 2+1+7+4 = 14, thus 0 *trans*].

Nutrition Facts	
Serving 1 Tbsp (14g)	
Amount Per Serving	
Calories 130	
	% Daily Value
Fat 14g	22%
Saturated Fat 2g	10%
Omega-3 Fat 1g	
Omega-6 Fat 7g	
Monounsaturated Fat 4g	
Carbohydrate 0g	0%
Protein 0g	
Note: Not a significant source of trans Fat, cholesterol, sodium, fibre, sugars, vitamin A, vitamin C, calcium, and iron	



31. **Eddie's Muesli "The Breakfast Mix"**: 1/3 no-fat yogurt +1/3 fruits (currants, raisins, apple, banana, strawberries, blueberries, cantaloupe, apricot, prune, papaya) + 1/4 whole rye (cook 1-2 min.) & oat kernels, oat bran & wheat germ (&/or rolled oats or low-fat granola type cereal) + 1/6 lecithin, flax seeds, flax oil, sunflower seeds, Brazil & walnuts (better oil than pecans and almonds). Powdered vitamin C keeps things fresh. Mix in 1 gal. (4 l) container. Let sit for 12 hours. Refrigerate & eat within 7 days. **Good & delicious breakfast and snack food; increase the fruits and you'll get a dessert -vary to taste.**



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Made in Canada. 🇨🇦 Good health! April 26th, 2007.