

Floccinaucinihilipilification

By

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Floccinaucinihilipilification (**flok-suh-naw-suh-nahy-hil-uh-pil-uh-fi-key-shuhn**): the estimation of something as valueless; an act or instance of judging something to be worthless or trivial

There are many ideologies set forth in many different industries, each with their supporters and opponents. In the industry of health and fitness there is no shortage of anecdotal evidence which lacks the support of qualified research study to back up its claims. Many debates between opposing points of view have led to New York Time's best sellers backing each side of the debate, despite the concrete evidence of the scientific research community.

In many cases if the scientific research is abundant (and properly researched), it may be difficult to deny the truths that lie in unbiased, unabridged, and undeniable scientific evidence either refuting or backing a proposed theory. In this article many of these accepted as gospel but never challenged topics will be presented in an unbiased, un-opinionated, purely scientific manner, along with the scientific research to fortify the claims, or to consider them as examples of, well... Floccinaucinihilipilification.

*****Authors Side Note******* During the research process for this article a peculiar trends were noticed. One of the most surprising was not in the actual results of the research, but in

the presentation of this research, especially the research regarding Low Saturated Fat Diets, Soy, and Artificial Sweeteners. The research is presented in a manner in which there seems to be selective omissions of the study abstracts providing evidence that Low Fat Diets, Soy, and Artificial Sweeteners may have negative effects on human health. As you read through this article, links are provided to the National Institutes of Health's Pubmed website and where one may view these omissions for themselves. One can only speculate as to why this is a reality, but it does seem peculiar that this is the case. For example, perform a search on www.pubmed.com (or click on the link [Brain tumor rates and aspartame](#)) for "increasing brain tumor rates, aspartame". 3 research articles should show up on the screen. Click on the Koestner, A. study. On the right of the screen there is a link for "see all related articles". Click there and then begin clicking on the abstracts for each study. You may notice a lack of abstracts for the negative effects studies while many of the positive evidence studies do have abstracts.

I. Cholesterol in your diet and in your arteries: Low fat diet

Redux

"We did change our eating habits in the wake of the new guidelines (food pyramid), endeavoring to replace the evil fats at the top of the food pyramid with the good carbs spread out at the bottom. The whole of the industrial food supply was reformulated to reflect the new traditional wisdom, giving us low fat pork, low fat Snackwell's, and all the low fat pasta and high fructose (yet low fat!) corn syrup we could consume. Which turned out to be a lot! Oddly, Americans got really fat on their new low fat diet—indeed, many date the current epidemic of obesity and diabetes to the late 1970's, when Americans began binging on carbohydrates, ostensibly as a way to avoid the evils of fat (26)."

The hypothesis goes like this: Too much cholesterol in your diet may lead to the "accumulation of cholesterol in lesions on the artery walls as "biological rust" that can

“spread to choke off the flow [of blood], or slow it just like rust inside a water pipe so that only a dribble comes from your faucet (30).”

How about a little background on where this “hypothesis” came from. According to Good Calories, Bad Calories author Gary Taubes “The evidence initially cited in support of the hypothesis came almost exclusively from animal research—particularly in rabbits. Russian pathologist Nikolaj Anitschkow reported that he could induce athlerosclerotic-type lesions in rabbits by feeding them olive oil and cholesterol. Rabbits, THOUGH, are herbivores and would never consume such high-cholesterol diets naturally. And though the rabbits did develop cholesterol filled lesions in their arteries, they developed them in their tendons and connective tissues, too, suggesting that theirs was a kind of storage disease: they had no way to metabolize the cholesterol they were force fed (30).” Vivid pictures of the killer beast of the cave from Monty’s Python’s Holy Grail ring a bell?? Ruuunn Awwaaayyyy!!

The main problem with this hypothesis lies in the comparison of the consumption of high cholesterol by herbivores to that of omnivores. It proves that high cholesterol may not be the diet of choice for herbivores, but what about cholesterol and humans?

“In the summer of 1982, a group of 10 middle aged, overweight, and diabetic aborigines living in settlements near the town of Derby, Western Australia, agreed to participate in an experiment to see if temporarily reversing the process of westernization they had undergone might also reverse their health problems. Since leaving the bush some years before, all ten had developed type 2 diabetes; they also showed signs of insulin resistance and elevated levels of triglycerides in the blood—a risk factor for heart disease. “Metabolic syndrome is the medical term for the complex of health problems these Aborigines had developed: Large amounts of refined carbohydrates in the diet combined with a sedentary lifestyle had disordered the intricate system by which the insulin hormone regulates the metabolism of carbohydrates and fat.”

“The ten Aborigines returned to their traditional homeland, an isolated region of northwest Australia more than a day’s drive by off-road vehicle from the nearest town. From the moment they left civilization, the men and women in the group had no access to

store food or beverages; the idea was for them to rely exclusively on foods they hunted and gathered themselves. “

“After seven weeks in the bush, O’Dea drew blood from the Aborigines and found striking improvements in virtually every measure of their health. All had lost weight (an average of 17.9 lbs) and seen their blood pressure drop. Their triglyceride levels had fallen into the normal range. The proportion of omega 3 fatty acids in their tissues increased dramatically. “In summary,” O’Dea concluded, “all of the metabolic abnormalities of type II diabetes were either greatly improved or completely normalized in a group of diabetic Aborigines by a relatively short (seven week) reversion to traditional hunter-gatherer lifestyle (27).”

Here are those studies:

1. O’Dea K. **Diabetes in Australian aborigines: impact of the western diet and life style.** *Journal of Internal Medicine.* 1992 Aug;232(2):103-17.
******No abstract available.....Hmmm******
2. O’Dea K. **Westernization, insulin resistance and diabetes in Australian aborigines.** *The Medical Journal of Australia.* 1991 Aug 19;155(4):258-64.
“The traditional hunter-gatherer lifestyle of Australian Aborigines, characterised by high physical activity and a diet of low energy density (low fat, high fibre), promoted the maintenance of a very lean body weight and minimised insulin resistance. In contrast, for most Aborigines a Western lifestyle is characterised by reduced physical activity and an energy-dense diet (high in refined carbohydrate and fat) which promotes obesity and maximises insulin resistance. When they make the transition from their traditional hunter-gatherer lifestyle to a westernised lifestyle, Aborigines develop high prevalence rates for obesity (with an android pattern of fat distribution), non-insulin dependent diabetes, impaired glucose tolerance, hypertriglyceridaemia, hypertension and hyperinsulinaemia. The striking improvements in carbohydrate and lipid metabolism in diabetic and non-diabetic Aborigines after a temporary reversion to a traditional hunter-gatherer lifestyle highlight the potentially reversible nature of the detrimental effects of lifestyle change, particularly in young people who have not yet developed diabetes.”
3. O’Dea K. **Westernization and non-insulin-dependent diabetes in Australian Aborigines.** *Ethnicity and Disease.* 1991 Spring;1(2):171-87.
4. O’Dea K. **Obesity and diabetes in "the land of milk and honey".** *Diabetes/Metabolism Reviews.* 1992 Dec;8(4):373-88.

*****No abstract available*****

5. O'Dea K, Spargo RM, Akerman K. **The effect of transition from traditional to** *Diabetes Care*. 1980 Jan-Feb;3(1):31-7.
6. O'Dea K. **Cardiovascular disease risk factors in Australian aborigines**. *Clinical and Experimental Pharmacology and Physiology*. 1991 Feb;18(2):85-8.
"When Westernized diabetic Aborigines reverted temporarily to a traditional hunter-gatherer diet and lifestyle, all of the metabolic abnormalities of diabetes were greatly ameliorated (fasting glucose and triglyceride levels fell markedly and glucose tolerance and insulin secretion improved). In addition, they lost weight and there was a reduction in the major risk factors for cardiovascular disease (reduction in hypertriglyceridaemia and blood pressure, increase in bleeding time)."
7. O'Dea K. **Marked improvement in carbohydrate and lipid metabolism in diabetic Australian aborigines after temporary reversion to traditional lifestyle**. *Diabetes*. 1984 Jun;33(6):596-603.

Did you know..

- Cholesterol is the building block from which the sex hormones and adrenal hormones are made by the body.
- Cholesterol coats the nerves allowing for transmission of nerve impulses.
- Triglycerides are transported through the circulatory system with the help of cholesterol.
- Cholesterol is a part of cell membranes. Strong cell wall that are resistant to free radicals and oxidation are the product of these saturated fats. "Unsaturated free fatty acids stimulated the proliferation of human MDA-MB-231 breast cancer cells, whereas saturated free fatty acids inhibited it and caused apoptosis (limiting the growth of tumors) (8)."

WHAT THE RESEARCH SAYS (or doesn't say)

- **So is there a possibility that saturated fats in your diet may actually be good for you?** Pubmed is usually a great source for this kind of information, but in this case, there may be a slight lack of presented

information. Click on this link [Saturated fat prevents coronary artery disease](#) to Pubmed and read through the abstracts and notice that only studies # 3, 4, and 17 show the abstract, whereas the other 17 on the page show no abstract. It is peculiar how those three studies show increased dietary carbs and decreased dietary saturated fats to lower your risk of CHD, while the other 17 refute this point.

- In 2002 The National Institute of Health announced NHLBI's [Framingham Heart Study found the link between *risk of heart failure and OVERWEIGHT/OBESITY*](#) (they must still be looking for the definitive link between cholesterol and heart disease)
- "In post-menopausal women with relatively low fat intake, a greater saturated fat intake is associated with less progression of coronary atherosclerosis, whereas carbohydrate intake is associated with a greater progression" Moxaffarian D, Rimm E, Herrington D. **Dietary fats, carbohydrate, and progression of coronary atherosclerosis in postmenopausal women.** *The American Journal of Clinical Nutrition.* 80(5); Pp 1175-1184. 2004

For similar research studies click on

[Dietary fats, carbohydrate, and progression of coronary atherosclerosis](#)

- **So is it safe to eat steak and eggs?** Here is some of the research, so you can decide for yourself.

[Meat and cancer](#)

[Omnivores vs vegetarians](#)

II. Fish Oil

The popularity of Fish oil seems to be on the rise. Never before have there been television commercials expressing the performance enhancement and health benefits of fish oil as can be currently seen during the prime-time hours on major networks. This supplement gem seems to be greatly mis-understood though. The debate rages on from what type one should take, to which brands are better (lower in mercury, purity, twice processed, etc), to even something as simple as dosages and best time of day to take fish oil. Fish oil has been shown to be effective for many disorders including cholesterol issues, circulatory problems, attention and cognitive disorders, Insulin resistance and diabetes as well as countless other health benefits.

Dosage

Many have heard the “too much fish oil can cause excessive bleeding” argument, and have accepted this as gospel because it has often been stated by medical professionals and can be found on the National Institute of Health (www.nih.gov) website. According to the NIH website (www.nih.gov) “Omega-3 fatty acids may increase the risk of bleeding, although there is little evidence of significant bleeding risk at lower doses. Very large intakes of fish oil/omega-3 fatty acids (“Eskimo” amounts) may increase the risk of hemorrhagic (bleeding) stroke. High doses have also been associated with nosebleed and blood in the urine. Fish oils appear to decrease platelet aggregation and prolong bleeding time, increase fibrolysis (breaking down of blood clots), and may reduce von Willebrand factor.” Is it true that too much fish oil can cause excessive bleeding? This evidence is based on a study comparing Mainland Danes (and their diets) to Eskimos (and their diets), with the *assumption* that the only difference being fatty acid intake. Let’s examine what the scientific research says!!

1. Harris WS. **Dietary fish oil and blood lipids.** *Curr Opin Lipidol.* 1996 Feb;7(1):3-7. “The safety of fish oils was also supported in these studies because problems with **excessive bleeding and worsening glycemic control did not materialize**”
2. Bender NK, Kraynak MA, Chiquette E, Linn WD, Clark GM, Bussey HI. **Effects of Marine Fish Oils on the Anticoagulation Status of Patients Receiving Chronic Warfarin Therapy.** *J Thromb Thrombolysis.* 1998 Jul;5(3):257-261.

“no major bleeding episodes were observed during the study. Fish oil supplementation in doses of 3-6 grams per day does not seem to create a statistically significant effect on the anticoagulation status of patients receiving chronic warfarin therapy.”

3. Harris WS. **Expert opinion: omega-3 fatty acids and bleeding-cause for concern?** *American Journal of Cardiology*. 2007 Mar 19;99(6A):44C-46C. Epub 2006 Nov 29.
“an objective assessment of the evidence for clinically significant bleeding reveals that such **concerns are unfounded**. As such, the benefits of triglyceride lowering with omega-3 fatty acids more than outweigh any theoretical risks for increased bleeding.”
4. Bays H. **Safety considerations with omega-3 fatty acid therapy.** *American Journal of Cardiology*. 2007 Mar 19;99(6A):35C-43C. Epub 2006 Nov 28.
“clinical trial evidence has not supported increased bleeding with omega-3 fatty acid intake, even when combined with other agents that might also increase bleeding (such as aspirin and warfarin).”

Another topic of debate regarding fish oil pertains to Omega 3 consumption and Reactive Oxidative Species and the permeability of cell membranes. **Short Version bottom line:** To avoid this It may be wise to take high quality, twice processed fish oils which contain antioxidants, such as Vitamin E.

III. Soy:

Just the facts presented in Q and A form through research studies on The U.S. National Library of Medicine and National Institute of Health database website.

1. **Is Soy listed on the FDA poisonous plant database?** [FDA poisonous plant database](#)(288 records as of 2006)
2. **Is Soy really used as a Fertilizer?** [2003 Clean Green Story](#) (I wonder if it will also help my husband's hair grow back? HmMMM???)
3. **Have Soy based infancy formulas been shown to have possible biological effects?** [Tuohy PG. Soy infant formula and phytoestrogens.](#) *Journal of Pediatrics and Child Health*. 2003 Aug;39(6):401-5.

“Soy infant formula contains high levels of the isoflavones, genistein and daidzein, which are commonly referred to as phytoestrogens. Infants consuming soy formula have high levels of circulating isoflavones. These are an order of magnitude greater than the levels

of isoflavones which have been shown to produce physiological effects in adult women consuming a high soy diet. Against this generally positive view there is an increasing number of recent reports that suggest that in experimental animals, phytoestrogens have adverse effects with respect to carcinogenesis, reproductive function, immune function, and thyroid disease. Despite the absence of adequate scientific research that quantifies the level of risk to infants, most would argue for a precautionary approach to be taken in situations where there are potential developmental effects from the consumption of pharmacologically active compounds in infancy and childhood.”

[137 research studies on Soy based infancy formulas](#)

4. Have phytoestrogens been shown to effect thyroid function?

Doerge DR, Sheehan DM. Goitrogenic and estrogenic activity of soy isoflavones.

Environmental Health Perspectives. 2002 Jun;110 Suppl 3:349-53.

“soy effects on the thyroid involve the critical relationship between iodine status and thyroid function. In rats consuming genistein-fortified diets, genistein was measured in the thyroid at levels that produced dose-dependent and significant inactivation of rat and human thyroid peroxidase (TPO) in vitro. Although safety testing of natural products, including soy products, is not required, the possibility that widely consumed soy products may cause harm in the human population via either or both estrogenic and goitrogenic activities is of concern.”

[148 studies on Phytoestrogens and Thyroid function](#)

5. Have phytoestrogens been shown to disrupt endocrine function?

Roy D, Colerangle JB, Singh KP. Is exposure to environmental or industrial endocrine disrupting estrogen-like chemicals able to cause genomic instability? *Frontiers in*

Bioscience. 1998 Aug 6;3:d913-21.

“Screening of endocrine disrupting environmental estrogen-like chemicals for their ability to produce genomic instability and analysis of molecular basis of some of the adverse human health outcomes as a result of exposure of these types of chemicals should lead to a better understanding of how these environmental estrogen-like

chemicals may influence the development of some adverse effects in humans and wildlife.”

[133 research studies on Phytoestrogens and endocrine function](#)

6. Have phytoestrogens been linked to growth of tumors?

Allred CD, Ju YH, Allred KF, Chang J, Helferich WG. **Dietary genistin stimulates growth of estrogen-dependent breast cancer tumors similar to that observed with genistein.**

Carcinogenesis. 2001 Oct;22(10):1667-73.

“The estrogenic soy isoflavone, genistein, stimulates growth of estrogen-dependent human breast cancer (MCF-7) cells in vivo. The glycoside genistin, like the aglycone genistein, can stimulate estrogen-dependent breast cancer cell growth in vivo. Removal of genistin or genistein from the diet caused tumors to regress.”

[383 research studies on phytoestrogens and Tumors](#)

7. Have phytoestrogens been shown to have an impact on immune function?

Yellayi S, Naaz A, Szewczykowski MA, Sato T, Woods JA, Chang J, Segre M, Allred CD, Helferich WG, Cooke PS. **The phytoestrogen genistein induces thymic and immune changes: a human health concern?** *Proceedings of the National Academy of Sciences of the United States of America*. 2002 May 28;99(11):7616-21

“These results raise the possibility that serum genistein concentrations found in soy-fed infants may be capable of producing thymic and immune abnormalities, as suggested by previous reports of immune impairments in soy-fed human infants.”

[287 research studies on Phytoestrogens and immune function](#)

8. Have phytoestrogens been linked to breast cancer?

[476 research studies on Phytoestrogens and breast cancer](#)

Peeters PH, Keinan-Boker L, van der Schouw YT, Grobbee DE. **Phytoestrogens and breast cancer risk. Review of the epidemiological evidence.** *Breast Cancer Research and Treatment.* 2003 Jan;77(2):171-83.

“For an evaluation of the effect of phytoestrogens on breast cancer risk we reviewed the analytical epidemiological data. A total of 18 studies were included. Up to now, there are 13 studies that have assessed the direct relation between the individual dietary intake of soy products and the risk of breast cancer.”

9. Have soy based infancy formulas been linked to maturation issues?

Zung A, Glaser T, Kerem Z, Zadik Z. **Breast development in the first 2 years of life: an association with soy-based infant formulas.** *Journal of Pediatric Gastroenterology and Nutrition.* 2008 Feb;46(2):191-5.

“Of the participants, 92 had consumed soy formulas for more than 3 months. Breast tissue was more prevalent in the second year of life in infants fed soy-based formula vs those that were breast-fed and those fed dairy-based formula.”

[96 research studies on Soy based Infancy formulas and maturation](#)

10. What about Soy Lecithin, as it is found in almost everything?

“Lecithin isn’t supposed to contain any of the soybean’s allergenic protein, but there’s always the chance that a bit might remain. For the allergy sufferer, that little bit could cause anything from gastrointestinal upset to life-threatening anaphylactic shock. For everyone else, a little lecithin sold from the sludge left over from soy oil manufacture isn’t really a big deal. There are many worse additives in processed foods namely soy protein, soy oil, soy isoflavones, and soy sterols(5).”

For more information on Soy, www.soyonlineservice.co.nz and www.westonaprice.org/soy are excellent informational websites.

IV. Artificial Sweeteners

Just the facts in Q and A form with links to the scientific research.

1. Have artificial sweeteners been linked to brain tumor rates?

[Brain tumor rates and aspartame](#) - 137 Research studies (You may notice that 13 out of the first 20 studies have no abstract available. Notice if they are pro or against)

2. Have artificial sweeteners been linked to migraines?

[Formaldehyde, aspartame, and migraines](#) - 102 Research studies (7 out of first 20 have not abstract available)

3. Have artificial sweeteners been linked to brain function?

[Aspartame and the Brain](#) 102 Research Studies

4. Has the consumption of soda been linked to health issues?

[Soda consumption and health](#) 103 Research Studies

V. Butter vs Margarine: Short version.

In his book Nutrition Made Simple, Dr. Robert Crayhon describes hydrogenated oils (margarine) as “liquid oils that are turned solid through the addition of hydrogen, pressure, and metal catalysts like nickel. This process creates fatty acids known as trans fats that have wide ranging destructive power. These strange fatty acids walk through your body like Frankenstein, terrorizing your metabolism(4).”

Crayhon goes on to explain a study in which a **“a stick of margarine was left on a windowsill for one year; and no life form would even touch it.** These altered fats are a plastic food that only humans can be tricked into eating. “(Upon reading this the authors tried a similar study with a stick of margarine in a dumpster, in the woods, and on a driveway next to an ant nest. NOTHING! Not a single bug, maggot, fly (besides the one that got stuck on the margarine) or animal had even touched it. It even took about three weeks in the middle of August for the margarine to melt.)

Here’s a look at some of the research.....(Note: there may be a lack available abstracts.)**

1. Jacob S, Gutzwiller F. [**Butter versus margarine?**] Soz Praventivmed. 1990;35(4-5):182-4. **(No abstract available. Well, this one we understand as it is in German)**
2. Martin W. **Margarine (not butter) the culprit?** *Lancet.* 1983 Aug 13;2(8346):407. **(No abstract available, and this one is not in German)**
3. **Judd JT, Baer DJ, Clevidence BA, Muesing RA, Chen SC, Weststrate JA, Meijer GW, Wittes J, Lichtenstein AH, Vilella-Bach M, Schaefer EJ.** Effects of margarine compared with those of butter on blood lipid profiles related to cardiovascular disease risk factors in normolipemic adults fed controlled diets. *American Journal of Clinical Nutrition.* 1998 Oct;68(4):768-77.
Let's see what this study funded by the Diet and Human Performance Laboratory, Beltsville Human Nutrition Research Center, Agricultural Research Service, US Department of Agriculture, MD 20705, USA has to say.
 "Compared with butter, total cholesterol was 3.5% lower (P=0.009) after consumption of TFA-M and 5.4% lower (P< 0.001) after consumption of PUFA-M. Similarly, LDL cholesterol was 4.9% lower (P=0.005) and 6.7% lower (P< 0.001) after consumption of TFA-M and PUFA-M, respectively. Neither margarine differed from butter in its effect on HDL cholesterol or triacylglycerols. Thus, **consumption of TFA-M or PUFA-M improved blood lipid profiles for the major lipoproteins associated with cardiovascular risk when compared with butter**, with a greater improvement with PUFA-M than with TFA-M."
Interesting??? Then why can't we get bugs, maggots, or animals to touch margarine?
4. Loudon M. **Margarine vs. butter. Let's put the facts (fats) on the table.** *Journal of General Orthodontics.* 1995 Jun;6(2):19-22.
******NO ABSTRACT AVAILABLE.....Are we seeing a trend here?**
5. Wolff SP, Nourooz-Zadeh J. **Hypothesis: UK consumption of dietary lipid hydroperoxides--a possible contributory factor to atherosclerosis.** *Atherosclerosis.* 1996 Jan 26;119(2):261-3. **(No Abstract Available)**
6. Krut L. **To the Editor. Margarine.** *South African Medical Journal.* 1969 Sep 27;43(39):1207-8. **(No Abstract Available. This is getting comical)**

7. Kluger J. **Margarine Misgivings.** *Time.* 1999 Jul 5;154(1):63. **(No Abstract Available)**
8. Gattereau A, Delisle HF. **The unsettled question: butter or margarine?** *Canadian Medical Association Journal.* 1970 Aug 1;103(3):268-71. **(No Abstract Available)**
9. Holmqvist O. **Trans fatty acids in hardened vegetable oils.** *Atherosclerosis.* 1996 Feb;120(1-2):245-7. **(No Abstract Available).**

Conclusion: In order to make the best decisions regarding ones health and nutrition, it appears necessary to collect abundant and relevant information from all sources (pro, against, medical professionals, anecdotal evidence, testimonials, research, etc..) pertaining to the topics of interest. Once all the information is collected and analyzed, rational, unbiased decisions can be made, the rewards of which may be priceless!!

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