

EAT



AVOID



Good Fat vs Bad Fat

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A must-read article

I have long been interested in learning and understanding the complexities related to food selection and consumption. There are many perspectives that can lead us in any direction depending on our desires, pre-conceived ideas or learned beliefs. You can basically head in any direction you want. If you feel sugar is the best way to fuel your body and want to access fast burning energy with a dependency on constant refuel, you can find information to support that view. Fortunately, many of us have come to learn that we need to dig deeper than the corporate controlled conventional wisdom.

The impact that ingested fat has on our health is extremely critical but not in the way conventional wisdom promotes. Everyone must educate themselves on the need to ingest healthy fats to maintain optimal health, coupled with an understanding of the “must avoid” fats. Our lives literally depend on it.

I came across the featured article within this post during my continued search for knowledge and hopefully confirmation that the health path I am on is still accurate and relevant. The amount of research required to dig as deep as I want can be daunting, but I truly love the learning and sharing of what I find. I have personally felt the health and fitness benefits first hand aligning to a Primal lifestyle and know all the foundational information within the Primal Blueprint is based on sound experience and scientific research. Its compiled in a way that’s easy to understand with very actionable steps to success. I feel very fortunate that my path has been forever influenced by the logical health direction outlined within the Primal Blueprint.

Recently I came across Christopher Clarks book, *The Nutritional Grail*, and found it to not only reinforce the information I have been learning but that its concise with exceptional support references. It is laid out in such a way that this book has become my quick reference guide when looking to refresh my memory on specific dietary health practices, or to find the source of the specific science that is behind the conclusions impacting my dietary recommendations. I suggest that everyone reading this post considers purchasing his excellent resource, *The Nutritional Grail*.

I hope that you enjoy the article within this post as much as I did... I am not paid to promote this article or Christopher James’s book, it’s the value I see for all that inspired this post. 😊

<http://www.christopherjamesclark.com/blog/book/>

Good Fat, Bad Fat: A Paleo Perspective



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Coach

Nutrition, Recipes

The fear of dietary fat—butter, oil, meat, etc.—is a recent phenomenon. **Only during the past several decades have we become fat-phobic.** Fat has 9 calories per gram, compared to just 4 calories per gram for protein or carbohydrates. These basic facts, when considered superficially, underlie the myth that “eating fat makes you fat.”

During the 1970’s, most health-related institutions began embracing the US government’s low-fat dietary guidelines. The public largely followed suit, accepting the guidelines at face value and striving to implement them. We now have decades of data with which to critique these guidelines and **we can conclude, quite objectively, that they have failed.**

The following is a brief overview of what has transpired, with respect to fat consumption in the US, since the 1970’s:^{1, 2, 3, 4, 5, 6}

- Total fat consumption has decreased.
- Saturated fat consumption has decreased.

- Animal fat consumption has decreased.
- Omega-6 fat consumption has increased.
- Seed oil consumption has increased.
- Obesity has increased.
- Type-2 diabetes prevalence has increased.
- Heart disease mortality has decreased, but the prevalence of heart disease remains very high.

Guidelines at Odds With History

The guidelines were supposed to prevent weight gain, diabetes, heart disease, and other chronic, degenerative diseases. Instead, the opposite happened, but why? **The US dietary guidelines contradicted, sometimes in radical ways, traditional human diets**, including those as recent as our pre-Industrial Revolution ancestors. Specifically, the guidelines promote low-fat, high-carbohydrate diets, whereas ancestral diets were lower in carbs and higher in fat and protein.

Diets during the Paleolithic era varied greatly, because geographic variance made different foods available to different groups. This being said, **we can make some generalizations about what our ancestors ate**. For example, nearly three-fourths of hunter-gatherer societies derived at least 50% of their calories from animal foods.⁷ Practically speaking, this means more fat, more protein, and less carbs. Anthropologists estimate the following macronutrient ratios for hunter-gatherer societies:^{7, 8}

- **Fat:** 20 to 40% of total calories
- **Protein:** 25 to 35% of total calories
- **Carbohydrates:** 25 to 40% of total calories

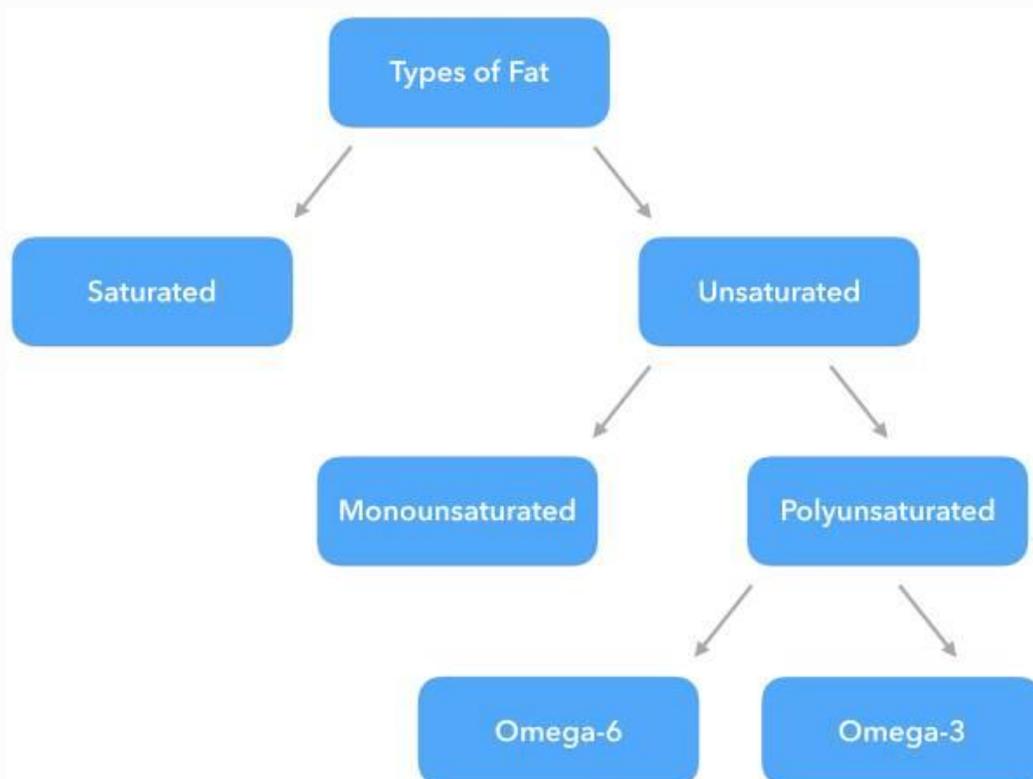
In the US, according to the National Health and Nutrition Examination Survey (NHANES), carbohydrate intake accounts for approximately 50% of total calories for adults; protein accounts 16%, while fat accounts for the remaining 34%.⁹ As you can see, compared to our ancestors, we eat more carbs and less protein, but our fat intake

is comparable. Unfortunately, the types of fat most people eat today have changed considerably.

Will the Real Bad Fat Please Step Forward?

During the past half-century, health authorities encouraged replacing saturated fat with unsaturated fat. The former was deemed “bad fat,” whereas the latter was called “good fat” or “heart-healthy” fat. To understand the consequences of this misguided advice, we need to review and summarize the various types of fat.

- Fatty acids (fat) consist of chains of carbon atoms with hydrogen atoms attached. Saturated fatty acids have the maximum number of hydrogen atoms attached to each carbon atom. Unsaturated fatty acids have carbon atoms without attached hydrogen atoms.
- There are two types of unsaturated fat—monounsaturated and polyunsaturated.
- Furthermore, there are two primary types of polyunsaturated fat—omega 6 and omega 3.



We were told that unsaturated fat is healthy, but this isn't necessarily the case. As it turns out, **instead of worrying about saturated fat, we should have been far more wary of omega-6.**

Our Ancestors Ate Seeds, but Not Seed Oils

The US dietary guidelines still push polyunsaturated fat, but fail to adequately differentiate between omega-6 and omega-3. As a matter of accuracy, we can't say that either omega-6 or omega-3 is "bad." In fact, both are known as essential fatty acids (EFAs) because the body requires them and can only get them from food. On the other hand, **omega-6 causes big problems when we eat too much of it;** and that's exactly what has happened since the 1970's.

The main culprits have been seed oils, a category of food that is relatively new to the human diet. Seed oils include:

- Corn oil
- Soybean oil
- Sunflower oil
- Canola oil
- Safflower oil
- Grapeseed oil
- Cottonseed oil

The reason our ancestors never consumed seed oils is because extracting oil from these seeds requires special processing technologies, including high heat and hexane solvents. In other words, they avoided the problems associated with high omega-6 consumption by default, because they didn't have access to omega-6-rich foods, like seed oils.

Every source of fat has its own unique distribution of fatty acids. As seen in the chart below, **seed oils are disproportionately rich in omega-6.** None of our traditional sources of fat even come close. Our ancestors certainly consumed omega-6—from

eggs, nuts, seeds, poultry, and other whole food sources—but not in the quantities consumed today.

Fat Profiles of Various Foods

	Food	% Calories from Fat	% Saturated	% Mono-unsaturated	% Polyunsaturated		6:3 Ratio
					Omega-6	Omega-3	
Bad Fat	Safflower oil (linoleic)	100	7	15	78.0	-	-
	Grapeseed oil	100	10	17	73	-	-
	Sunflower oil (linoleic)	100	11	20	69.0	-	-
	Wheat germ oil	100	20	15	57.6	7.4	7.8
	Corn oil	100	14	29	56.0	1.0	56.0
	Cottonseed oil	100	27	19	53.8	0.2	269.0
	Soybean oil	100	16	24	52.9	7.1	7.5
	Sesame oil	100	15	41	43.6	0.4	109.0
	Rice bran oil	100	21	42	35.4	1.6	22.1
	Peanut oil	100	18	48	34	-	-
	Canola oil	100	7	64	19.4	9.6	2.0
Good Fat	Coconut oil	100	92	6	2	-	-
	Palm kernal oil	100	86	12	2	-	-
	Olive oil	100	14	75	10.1	0.9	11.2
	Avocado oil	100	12	74	13.0	1.0	13.0
	Ghee	100	66	30	2.4	1.6	1.5
	Flaxseed oil	100	10	21	13.2	55.8	0.2
	Butter	81	68	28	3.6	0.4	9.0
	Walnuts	65	10	14	61.3	14.7	4.2
	Almonds	50	9	73	18.0	-	-
	Cashews	44	20	60	19.7	0.3	65.7
	Avocado	15	12	74	13.0	1.0	13.0

From 1909 to 1999, for example, consumption of soybean oil in the US increased more than a thousand-fold, from 0.006% to 7.38% of calories, on average. During the same period, total omega-6 consumption increased from 2.79% to 7.21% of calories, while the ratio of omega-6 to omega-3 increased from 5.4/1 to 9.1/1.¹⁰ As discussed below, the omega-6 to omega-3 ratio is extremely important; higher ratios cause many problems. During the Paleolithic era, this ratio was very low (approximately 1/1), whereas today, ratios approaching 17/1 are common for Western diets.^{8, 11, 12}

Why the Omega-6 to Omega-3 Ratio Matters

Omega-3 is one of the body's most important nutrients. Some of its many beneficial properties include:

- Reduced inflammation¹³
- Improved risk factors for cardiovascular disease¹⁴
- Improved the quality of the skin¹⁵
- Improved brain health, especially during the developmental years^{16, 17}

If we consume proportionally too much omega-6, we cannot effectively metabolize the omega-3 we consume. This is because omega-6 and omega-3 compete for the same enzymes, which break them down into components the body assimilates.¹⁸ In other words, you won't necessarily reap the benefits of increased omega-3 consumption unless you simultaneously decrease your omega-6.

The Omega-6 Problem

We were told that saturated fat was the enemy. We were told to replace saturated fat with polyunsaturated fat—primarily omega-6-rich seed oils. **Doing so, however, has only exacerbated our health problems.**

In 2010, the British Journal of Nutrition published a meta-analysis of randomized controlled trials involving the replacement of saturated fat with omega-6 polyunsaturated fat. Doing so, the study demonstrated, actually increases all-cause mortality.¹⁹ A similar study, published in 2013, corroborated these results.²⁰

Despite the mainstream view that omega-6 is healthy, **there are many reasons to conclude the opposite.** Limited consumption of omega-6, as per our ancestors (less than 3% of total calories) is ideal, but modern consumption levels have many consequences, including the following.^{21, 22, 23, 24, 25}

- Immune system repression
- Lowering of healthy HDL cholesterol
- Increased risk of heart disease
- The susceptibility of omega-6 to oxidize, which promotes free radical damage

- Increased risk of prostate cancer
- Increased risk of breast cancer

Practical Advice: Learning From Our Ancestors

Everyone knows there is “good fat” and “bad fat.” **Saturated fat, however, isn’t the nutritional menace it’s been portrayed as.** That role should go to seed oils, based on their excessive omega-6 quantities. The US dietary guidelines have many flaws, especially with respect to fat. The following guidelines, though greatly simplified, are more aligned with ancestral diets as well as contemporary nutrition science:

- Instead of focusing on reduced fat, focus on reduced carbs.
- Eat mostly monounsaturated and saturated fat (all types of animal fat, avocado, coconut, olive oil, whole nuts).
- Minimize omega-6 by eliminating seed oils (flax oil is okay).
- Ensure optimal omega-3 by eating oily fish (sardines, tuna, salmon, etc.) and/or taking an omega-3 supplement.

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