

## The Definitive Guide to Oils

Before you can hope to make it as a speculator and start slingin' barrels for big money, you've got to understand exactly what's gushing forth from the earth's crust. Yes, that's right – it doesn't start and stop just with crude, and there's far more to oil than dinosaur bones. In fact, most experts agree that the bulk of crude oil is derived from prehistoric single-celled plankton remains. Then you've got the abiogenic theory, which posits that...

Er, wrong oils. Sorry.

Today's post is actually about *edible* oils. Well, they're all technically edible – they can all be swallowed and digested – but as for being palatable, let alone healthful? That remains to be seen. Not all oils are created equal, especially given the fact that most of the ones people use nowadays are actually created in an industrial laboratory. No oil "exists naturally," mind you. Olive oil isn't harvested by leaving open containers under leaking, dripping olives on the branch, nor is that liquid sloshing around inside a coconut pure oil. I'm not trying to disparage processing in and of itself. It takes a certain amount of processing to get any sort of oil, but a good general rule is to avoid consuming the oils that require processing on a large scale. If it involves an industrial plant, multiple stainless steel vats, a deodorizer, a de-gummer, and the harsh petroleum-derived solvent known as hexane, I wouldn't eat it. But that's just me (and [Grok](#), who probably wasn't processing wild rapeseed to get the precious canola oil).

But this is the Definitive Guide to Oils. Everything goes. No stone left unturned. No oil left un-tasted and bereft of analysis for fatty acid profile, oxidative potential, and rancidity proclivity.

### Canola

Canola oil comes from rapeseed, a completely unpalatable seed rich in erucic acid, which is bitter and rather toxic. Canola oil is rapeseed oil stripped of erucic acid, as I detailed in this [previous post](#). It gets a lot of attention from doctors as a "heart healthy" oil (one of the "good" fats) rich in omega-3s, but the fact that canola processing generally uses upwards of 500 degrees means a good portion of the Omega-3s could be rancid on the shelf.

61% MUFA  
21% Omega-6 PUFA  
9-11% Omega-3 PUFA  
7% SFA

### Flax Seed

I mentioned the seed and its oil a few times, and, after being initially supportive of flax consumption, I now [recommend minimizing intake](#). People generally use flax oil as an Omega-3 supplement, rather than for cooking – and this is a good choice, seeing as how flax is almost entirely made of PUFAs, which are prone to rancidity and oxidation when exposed

to heat. Meat eaters, though, would be better off just taking fish oil. The [DHA and EPA in fish oil](#) are far more useful than the ALA in flax seed oil. Strict vegetarians, have at it – just don't use flax seed oil to sautee your tofu.

19% MUFA  
24% Omega-6 PUFA  
47% Omega-3 PUFA (from ALA)  
8-9% SFA

## Corn

Corn oil boggles my mind. I can't wrap my head around how extracting gallons upon gallons of liquid oil from a lowly corncob is actually possible. How isn't it too much work for the payoff? I mean, I'm no corn eater, but I've chomped a few kernels in my day, and I don't understand how squeezing oil out of this non-vegetable sounds like a good idea to anyone.

24% MUFA  
59% PUFA (mostly O-6)  
13% SFA

## Olive (and variations)

Olive oil got a pretty [good breakdown](#) last year, so unless I'm leaving out some recent momentous news breaking out of the highly secretive olive oil world, there's not much more to say. It's a delicious salad oil, a decent sautéing oil, and it can even be used as moisturizer and shaving lotion. Olive oil is one area where [CW](#) gets it right. Enjoy this one, and keep a bottle of extra virgin, cold pressed olive oil on hand for [salad dressings](#). It also does a decent job standing up to heat, but will lose its delicate flavors if heated too high. This is a [good enough reason for me](#) to use a different fat/oil when cooking at high temps. (Why waste precious (and often expensive!) olive oil when lard, for instance, will do the trick?)

73% MUFA  
3.5-21% Omega-6 PUFA  
1% Omega-3 PUFA (not even worth mentioning, really)  
14% SFA

## Coconut

MDA's darling, coconut oil is truly a star. I went over [why](#) yesterday, and in [past posts](#), but the gist of it is this: it's a tasty, shelf-stable (no hydrogenation required) tropical oil with a ton of saturated fatty acids. In fact, it's almost purely saturated, which is why most doctors and nutritionists will probably advise against its consumption. Not us, though. We love [SFA](#). The refined coconut oil stands up to heat a bit better, and it doesn't have a distinctive taste, but [I can't recommend it](#). Unrefined virgin oil is a murky, cloudy mess – but a delicious, creamy mess. Eat the unrefined by the spoonful.

6.2% MUFA  
1.6% PUFA  
92.1% SFA

## Palm

Palm oil is controversial; just check out the comments section on my [last post](#) on the subject. Many palm oil plantations encroach upon the rapidly dwindling natural habitats of the orangutan, which are already in short supply in this world. The consensus seems to be that sustainable palm oil, especially the more complex, nutritious unrefined red palm oil, can be found. You've just got to look a little harder at the labels. West African red palm oil, for example, is considered to be pretty safe environmentally. Oh, and palm oil is also highly saturated and heat stable. Red palm oil is also stable, but it deserves special mention for its nutrient density – lots of CoQ10, Vitamin E, and SFAs.

39% MUFA  
11% PUFA  
50% SFA

## Fish

Fish oil is another one of the widely accepted “good” fats. This time, though, we agree with Conventional Wisdom. The Omega-3 fatty acids, EPA and DHA, are unequivocally beneficial to us. They help balance our O6-O3 ratios (to a more appropriate, pre-agricultural level), while they also promote proper cell function, good lipid numbers, and improved insulin sensitivity. To bone up on more fish oil information, check out my [Definitive Guide](#) on the subject.

EPA and DHA levels vary by brand and type of fish. Check the label for yourself, or look at this handy [table](#) if you're getting your fish oil from actual seafood.

## Avocado

Who doesn't love a plump avocado with the right amount of give? If you can't get your hands on a good one, the next best thing might be a bottle of avocado oil. Its fatty acid profile is similar to that of olive oil, but it has an even higher smoke point, making it a decent choice for cooking. Personally, I still wouldn't use it for high heat cooking. The light, subtle taste lends itself far better to salad dressing, if you ask me. Buy in dark bottles to minimize oxidation.

70% MUFA  
12% Omega-6 PUFA  
1% Omega-3 PUFA  
12% SFA

## Walnut

[Walnut oil](#) is one of the better tasting nut oils. It is high in Omega-6s, sure, but walnut oil isn't something you're going to use every day, or even every week. The stuff tastes great, though, and a small splash goes a long way at the end of a cooking session or onto a tossed salad. I definitely would advise against using this on a regular basis, especially for cooking, and you should always store it in a dark, cool spot in the house. For those that "do dairy", try mixing a bit with some full-fat Greek yogurt, or unsweetened fresh whipped cream and berries: amazing.

23% MUFA  
53% Omega-6 PUFA  
10% Omega-3 PUFA  
9% SFA

## Macadamia Nut

I love this oil, but I also love the parent nut. The oil assumes the buttery, smooth, rich flavor of the macadamia nut, making it an interesting – but favorable – choice for salad dressings. It's also remarkably high in MUFAs and low in PUFAs, so it won't throw your ratios all out of whack. Makes a surprisingly good homemade mayonnaise, and can be used to sauté and cook in a pinch. The only drawback is its price; macadamia nut oil can get expensive.

71% MUFA  
10% PUFA  
12% SFA

## Sesame Seed

The premier "flavor oil." Sesame seed oil, especially the toasted variety, offers an unmatched and irreplaceable flavor profile. Certain Asian dishes work best with a bit of sesame oil, but if you're wary of using it over high heat (which you probably should be), you can always add it to the dish after cooking. Despite the high PUFA content, sesame oil also contains a ton of antioxidants that can help minimize heat oxidation. I wouldn't use this more than semi-regularly, though. Good to keep in your pantry (or fridge), but not an everyday item.

43% MUFA  
43% PUFA  
14% SFA

## Peanut

Restaurants like to tout that they use "healthy" peanut oil in their deep fryers. Okay, the relatively MUFA-rich peanut oil may be a better choice than corn or sunflower oil for high heating, but it's still a legume (already [off limits](#)) oil prone to rancidity. In the UK, it's known as groundnut oil. Avoid both.

46% MUFA  
32% PUFA  
17% SFA

## Sunflower Seed

Insanely high in PUFAs with little to no Omega-3s to balance them out, sunflower seed oil is a pretty bad choice for sauteeing, baking, roasting, and even salad making. Trouble is it's everywhere, and it has a reputation for being healthy. Just don't keep the stuff in your house (not a problem; it's flavorless, odorless, and completely boring), and keep dining out in cheap chain restaurants to a minimum (or you could do what I do and request everything be cooked in butter), and you should be able to avoid sunflower seed oil.

19% MUFA  
63% PUFA  
10% SFA

## Safflower

Like sunflower seed oil but worse, the oil derived from the "bastard saffron" is about 75% Omega-6 PUFAs with not a speck of Omega-3 in sight. It's also lower in MUFAs and SFAs. What's not to dislike?

14% MUFA  
75% PUFA  
6% SFA

## Cottonseed

At least most of the oils I've mentioned come from technically edible plants, in some form or another. Cottonseed oil, however, comes from cotton. You know, the stuff that shirts are made of? Yeah. It's everywhere, from margarines to cereal to shortening to frozen desserts to bread, because it's cheaper than other oils (you can thank its status as one of Monsanto's big four genetically modified crops for that) and it only needs "partial hydrogenation" to maintain stability. Luckily, that won't be an issue for PBERs who already avoid all that stuff in the first place. Warn your friends and family, though.

17% MUFA  
52% PUFA  
26% SFA

## Grape Seed

Skip this stuff. It does have a buttery taste, and it gets a lot of hype as a worthy replacement for olive oil, but it's got high oxidation potential, especially if you follow the recommended

instructions and use it for deep frying or high heat sauteeing. It's rather pricey, too, so there's no good reason to use it.

16% MUFA  
70% PUFA  
9% SFA

## **Soybean Oil**

Soybean oil is about as ubiquitous as corn and canola (again, thanks to Monsanto). In fact, you'll often see an ingredient list include "canola and/or soybean oil." Huh? Do food manufacturers honestly not know what kind of fat is going into their product? Best avoid the crapshoot and skip anything that "might contain" soybean oil altogether. The fact that it's often partially hydrogenated suppresses my appetite even further. No thanks.

23% MUFA  
51% Omega-6 PUFA  
6% Omega-3 PUFA  
14% SFA

As you can tell, seed and nut oils probably shouldn't make up a significant portion of your diet. Some, like coconut, olive, macadamia, palm, avocado, and fish, are great, but the vast majority of oils are unnatural and way too high in PUFAs. And just remember, with some of the more questionable/borderline oils, a little bit goes a long way.