#### PALEO GUIDE TO OILS AND FATS

One of the most important parts of eating Paleo is cutting out harmful oils that are all too common in the typical Western diet. There's a lot

that goes into what makes an oil or fat harmful or not, including whether its fatty acid composition is inflammatory and whether or not it is wrecked if heated too high. By the way, "fat" (lard, butter, etc.) is solid at room temperature and "oil" (corn oil, hazelnut oil, etc.) is liquid at room temperature. Here's a primer on fats and oils. Use this guide to pick which ones you cook with, pour over salads, or avoid all together.

First, all fats and oils are made up of a combination of fatty acids. None is completely saturated or unsaturated—not even lard—as you may have thought. In the upcoming charts, we've laid out the most common fats' and oils' fatty-acid concentrations, as well as the highest temperature we suggest you cook them at.

# SATURATED, MONOUNSATURATED, AND POLYUNSATURATED FATTY ACIDS

Polyunsaturated fatty acids (PUFAs), including omega 6 fatty acids (O6) and omega 3 fatty acids (O3), are delicate and easily oxidized by light, air, or heat. Oxidized fatty acids are what make an oil or fat rancid. Saturated fatty acids (SFAs) and monounsaturated fatty acids (MUFAs) are less susceptible to being oxidized and can stand up to more cooking heat than PUFAs can.

# OMEGA 6 AND OMEGA 3

While both O3s and O6s (remember, those are both PUFAs) are necessary nutrients for human health, O3s are anti-inflammatory, but O6s are inflammatory and can contribute to everything from heart disease to joint pain to skin problems. The key is to balance them. A good ratio of O6:O3 is 1:1–4:1. The typical Western diet has devolved to around 20:1–40:1, hence our inflated incidence of chronic inflammatory diseases like diabetes, heart disease, cancers, digestive disorders, etc. It's interesting to note the differences in not only the amounts of O6 and O3 in all the oils in the charts below, but also the O6:O3 ratios. You find much higher amounts of O6 and generally higher O6:03 ratios in the non-Paleo oils than the Paleo ones.



### SATURATED FATTY ACIDS

We know, we know. You think saturated fat is bad. Well, it's time to start believing that we grew up evolutionarily eating exactly the things you've been told your whole life to avoid: lard, fatty meat, coconut oil, and saturated fat in general. Heart disease and obesity are only increasing in the Western world, and it's not because we're all eating too much saturated fat: it's because of inflammation caused by Western foods, including the corn oil, safflower oil, and others on that list. For more information on the myths about saturated fat, go to the FAQ chapter in the Quick Start Guide and Paleo Challenge eBook.

## **COOKING TEMPERATURES**

Notice the cooking heat for all of these oils and fats. (By the way, we didn't include the cooking temperatures on the non-Paleo oils because you won't be cooking with them.) Some of the Paleo oils should never be cooked with at all because they're so high in PUFAs and are easily oxidized. Thats why some of them are marked "None" in the Cooking Temp column and should just be used as salad dressings, etc. In general, use tallow, lard, or coconut oil for cooking and extra virgin olive oil for lower-heat cooking. Also, for all those high-PUFA Paleo oils, make sure you keep them in a cool, dark place and discard them six months after opening them.

#### LARD

Where do you get lard, and what on earth is that stuff? Lard is just clarified, or rendered, pig fat. You can save your precious bacon drippings in a glass jar and cook with that, or you can find a local source for pasture-raised animal fat (eatwild.com, localharvest.com) and render it yourself. Here's a great instructional blog post on rendering lard to cook and bake with. You can also buy lard from pasture-raised pigs online (prairiepridepork.com), but it's pretty expensive with shipping.

#### TALLOW

Tallow is rendered fat from meat other than pork, often beef. You can make your own by buying some high-quality (no pesticides, preferably grass fed) fat from <u>eatwild.com</u> or <u>localharvest.com</u> and read this <u>instructional blog post</u> on rendering your own beef fat into tallow. You can also buy grass-fed tallow online from U.S. Wellness Meats <u>here</u>. Most tallow you can buy in the store is hydrogenated, so you'll want to stay away from that. And unless tallow or lard comes from a grass-fed source, you'll want to avoid it, since its fatty-acid composition won't be totally favorable.



paleoplan.com 2

ACCEPTABLE PALEO OILS AND FATS											
Oil or Fat	SFA%	MUFA%	PUFA%	O6%	O3%	06:03	Cook Temp (Highest)				
Avocado oil	12	70	13	12	1	12:1	None				
Butter*	51	21	3	2	.5	4:1	Med				
Coconut oil	92	6	2	2	0	n/a**	Med High				
Cod liver oil	23	47	23	4	19	.2:1	None				
Flax oil	9	20	66	13	53	.2:1	None				
Ghee*	65	32	2	2	0	n/a**	High				
Hazelnut oil	7	78	10	10	0	n/a**	Med				
Lard	40	45	11	10	0	n/a**	Med High				
Macadamia oil	13	84	4	2	2	1:1	Med				
Extra virgin olive oil	14	73	11	11	0	n/a**	Med				
Palm oil (unrefined)	50	39	9	9	1	9:1	Med				
Tallow	50	42	4	4	0	n/a	High				
Walnut oil	9	23	63	53	10	5.3:1	None				

\*Butter and ghee are dairy and should be avoided during the first month of eating Paleo. Even after that month, they should only be eaten if your digestive system and immune system can tolerate them.

\*\*n/a = These oils are not a source of omega 3 fatty acids



## **NON-PALEO OILS**

The following is a list of oils you should avoid. They contain more PUFAs, especially omega 6's and fewer SFAs and MUFAs than the Paleo oils in general. They're also usually highly processed, heated, and chemically treated because they come from seeds that are difficult to extract oil from. That means that by the time the oil is packaged, it's at least partially oxidized or rancid. Restaurants usually use these oils, and they often use the lowest grade of them to boot. That means they've probably been chemically refined at high temperatures, hydrogenated, and chemically deodorized, or some combination of those. Also, many of these oils come from genetically modified (GM) crops, which are suspected to be seriously detrimental to our health.

OILS AND FATS TO AVOID										
Oil or Fat	SFA%	MUFA%	PUFA%	O6%	O3%	O6:O3				
Canola oil*	7	63	28	19	9	2:1				
Corn oil	13	28	55	54	1	54:1				
Cottonseed oil	26	18	52	51.5	.5	103:1				
Margarine**	15	39	24	22	2	11:1				
Peanut oil	17	46	32	32	0	n/a				
Safflower oil	8	14	75	74.5	.5	150:1				
Soybean oil	15	23	57	50	7	7:1				
Sunflower oil	10	20	66	65.5	.5	131:1				

\*Canola's fatty acid composition isn't that bad, but there are other problems with it: it's often highly processed, and it contains erucic acid, which has been found to have an allergenic effect on people.

\*\*Margarine is made up of 15 percent trans fats, which are associated with heart disease.

