

## **Cooking Oils Demystified**

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**Introduction:** Much controversy abounds over the types and quality of cooking oils that one should or should not use. In addition, supplemental oils have been a debated topic for years as supplement manufacturers, retailers and even health professionals try to raise awareness and possibly sales for the publishing they carrying; all touting their product's potency and bioavailability of Omega 3 Fatty Acids. Possible dangers, rancidity and toxicity have been topics of discussions. Here is my expert opinion on this matter.

**Dangerous cooking oils:** Many persons have promoted the much-favored extra virgin olive oil over vegetable oils from a variety of sources. This is probably partly due to the many health benefits of olives. Olive oil is monounsaturated oil and should not be used for cooking. Heat destabilizes the oil. Heat accelerates the breakdown of the chlorophyll in the oil, causing rancidity and oxidation. Even without heat oxidation occurs. It is better to store your oil in a dark glass container in the refrigerator and use as a "pour on" on vegetables. Be careful to replace the cover after each use and purchase smaller bottles to reduce storage time.

To prolong the shelf life of your olive oil, you may opt to add some astaxanthin, a powerful antioxidant or Lutein and Vitamin E Oil. There is more benefit of addition astaxanthin and lutein over vitamin E as astaxanthin has a natural reddish color and lutein an orange color; therefore it is easier to tell if these substances are still available in the olive oil. Vitamin E is colorless.

Also a part of much compare and contrast discussions are sunflower, safflower, canola, corn and soy oils; all of which are classified as vegetable oils. These are classified as polyunsaturated fats (Omega-6), which are not recommended for cooking. They are more easily denatured with heat and readily form into dangerous artery clogging Trans-fatty acids. Trans-fats increase the risk of atherosclerosis (hardening of the arteries) by increasing the body's production of lipoproteins (a) <sup>1</sup>. They also cause great insults to other areas of the cardiovascular system, vision, immunity, nervous and sexual systems and metabolism. Here are the facts:

- ✓ They also increase the risk of abnormal blood clotting (increases stickiness of platelets), hypertension (Interferes with the production of Prostaglandins E1)
- ✓ They increase the risks of heart attacks, ischemic heart disease<sup>2</sup>, insulin resistance<sup>3</sup>, developing diabetes mellitus type 2 (decreases the response of RBCs to insulin)<sup>4</sup>, gallstones<sup>5</sup>, Alzheimer's disease<sup>6</sup> and dyslipidemia<sup>7</sup>.
- ✓ They increase the permeability of cells, increasing the risk of toxins invasion.
- ✓ They increase the risk of Age-related Macular Degeneration (ARMD)<sup>8,9</sup>.
- ✓ Trans-fats have an adverse effect on the immune system <sup>10</sup>. They are known to alter the function of B-Lymphocytes, increase inflammation (↑ C-Reactive Protein)<sup>11</sup>, increase the risks of skin cancer and Non-Hodgkin's Lymphomas <sup>12</sup>, and increases the risk of cancer generally by altering the activities of the liver enzymes- Mixed Function Oxidase Cytochromes P-448/450 that metabolizes carcinogens and other toxins <sup>13</sup>. Trans-Fatty acids enhance the effects of Interleukin 1, Interleukin 6 and Tumor Necrosis factor (TNF).

- ✓ They are implicated in sexual dysfunction: female and male infertility (decreased testosterone and sperm abnormalities) and decreased cream volume in human milk during lactation and complications during pregnancy.
- ✓ They also elevate total cholesterol and LDL (bad) cholesterol and decrease HDL (good) cholesterol <sup>14, 15, 16</sup>.

So the dangers are real and should be avoided. You may ask, “If I have to cook, which oil should I use?” The answer is simpler than you think.

**A healthy alternative:** Extra virgin coconut oil is a medium chain fat. It is saturated and the body burns it like fuel for energy much in the same way as carbohydrates, however without the insulin spike. Coconut oil is highly stable oil and should be the oil of choice when cooking. Apart from its resistance to denaturing from air and heat exposure, extra virgin coconut oil also has a lot of health benefits.

- ✓ Unlike other oils, coconut oil seems to modulate the immune systems when needed. It lowers interleukin 1, Interleukin 6, Lipoprotein (a) and Tumor Necrosis Factor (TNF) levels while increasing the production of Interleukin 10 <sup>17, 18</sup>. This is crucial to proper immune function.
- ✓ Unlike other cooking oils, extra virgin coconut oil does not contribute to cardiovascular disease: atherosclerosis or ischemic heart disease. It can actually indirectly help with maintain good cardiovascular function. It also increases HDL (good) cholesterol and reduces LDL (bad), triglycerides, VLDL and total serum cholesterol while also reducing systemic inflammation. <sup>19, 20, 21</sup>. Its benefits to cognitive function cannot be overstated.

- ✓ Extra virgin coconut oil has been shown to inhibit or kill pathogens/microbes due to its high content of medium Chain Fatty Acids, particularly Lauric Acid. It shows some evidence of antiviral, anti-parasitic, antifungal and antibacterial activity <sup>22, 23, 24, 25</sup>.
- ✓ There is increased ketogenesis with coconut oil as a Medium Chain Fatty Acid some studies have shown to reduce epilepsy.

**Conclusion:** Choices in food can be complicated. Things that you thought were good for you are shockingly reported in current research to do the opposite. We have to be ardent readers and keep up to date with credible sources of health information. Here's to your health!

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Demystifying Cooking with Oils. January 17, 2014 January 20, 2014 Health and Wellness. What are the healthy oils to use and how do you cook with them? Let's demystify the oil puzzle and maze. Have you gotten confused about which oils are best to cook with or make salad dressings with? Hopefully this will help clarify. Types of oils: Saturated Fats "i.e. butter, coconut oil, palm oil. Solid at room temperature. Stable with high smoke point greater than 400F so good for cooking. 11 Healthiest Cooking Oils. Olive oil isn't your only option. From coconut to sesame, learn how to take advantage of the flavor, nutrition, and cooking profiles of the many healthy oils available at your natural foods store. Confused by all the processing methods and terms? Here's your cheat sheet! Cold-pressed: Oil is expeller-pressed, but friction is reduced so the temperature is kept below 120 degrees during processing. Refined: Tiny particles may remain in extracted oils; to make refined oils, particles are filtered out. Different types of cooking oil have different temperatures, shelf lives, and nutritional values. Here's your guide to what's what! From coconut oil to ghee to EVOO, find out which dishes work best with which type of cooking oil. By Becca DiCenso. April 30, 2016.