



ALIVE!

WHAT OIL SHOULD I USE?

DO YOU REMEMBER WHAT goals and aspirations you had for yourself when you were a senior in high school? Do you remember how challenging it was to answer the question on everyone's lips, "So, what are you going to do with your life?" Ascertaining and picturing the future, knowing what steps to take to get there is not easy. Each high school senior in our daughter's class was given the assignment of accomplishing a senior project. Our daughter chose to produce a web page and blog that pertained to cooking multicultural foods. She focused on flavor and visual appeal, with a plant-based emphasis. She had to present her project to three assessors at her school from whom she would receive a grade. After her presentation and the assessors had sampled the dishes she provided, she was asked various questions. One being, did she plan on becoming a chef? They had thoroughly enjoyed her food. No, she replied, she was not planning on cooking for her career. Then why did you choose this as your senior project? How does this pertain to your future? She responded, "I plan on getting married, and having children, and I want to be able to cook well for my family." I think this is the best answer she could've given. The value of good home cooking is far beyond what many estimate. The food prepared in the home is life changing.

Cooking takes time and effort. Cooking healthfully takes additional knowledge and commitment. A healthy food can

be transformed into something unhealthy as a result of the choice of fat used to cook it with as well as the cooking method. For example take a perfectly good potato, slice it into thin strips. Submerge it into a vat of hot oil and, voilà, you have French fries.

Fat, a necessary nutrient and a vital part of a well balanced diet, comes in a variety of packages in the Western world. A stroll down the oil aisle in the supermarket or health food store presents us with a myriad of options. Which one is preferable? What is the best one for the job?

To understand which oils are better to use for some cooking methods, we need to address smoke point. Smoke point is the temperature at which oil starts breaking down, changing chemically, and forming free radicals and substances such as acrolein, AGEs, and acrylamide which are harmful, cancer-causing chemicals. When oil starts to smoke it is better to throw out the oil and whatever was cooked in it.

Every oil has a smoke point. Minerals, enzymes, phytochemicals, and other compounds in oil from nuts, seeds, avocado, fish, flax, or milk fat, are more vulnerable to heat and make it susceptible to being damaged at lower temperatures. Typically, the more refined the oil, the higher the temperature it can be heated to before smoking. The more virgin the oil, the lower the temperature it should be used at. Said another way, the more refined the oil the milder the flavor, the more devoid of nutrients or antioxidants and the higher the smoke point. Unrefined oils are less

processed, have more flavor, and are often higher quality, but you have to be careful about using them over high heat.

The source of the oil also impacts smoke point. Extra virgin olive oil is often the first choice of the health conscious individual. Extra virgin olive oil, however, has a smoke point of approximately 325 degrees. Extra virgin olive oil is great to use on salads, as a dip for breads to replace butter, or drizzled on popcorn. But cooking with it is another story. Light colored olive oil would be preferred for sautéing as it has an approximate smoke point of 425 degrees. For

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cooking at higher temperatures, avocado oil (not virgin) is a good choice. While it is high in monounsaturated fat, like olive oil, it has a smoke point of 500-520 degrees. Oils rich in omega-3 fatty acids include flaxseed and hemp oil. Americans typically do not consume enough omega-3 fatty acids. However, flaxseed oil begins to degrade at 225 degrees and hemp oil at 330 degrees. Flaxseed oil is definitely not for cooking purposes. The smoke point for coconut oil and butter are both 350 degrees.

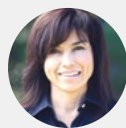
I do not recommend polyunsaturated rich oils such as canola or those labeled as vegetable oil as the formation of lipid peroxides, a toxic substance, occurs more in polyunsaturated fat than in saturated (coconut) and monounsaturated (avocado, olive) fat.

Another way a healthful food item, including good oil, can become harmful to you is through the process of becoming rancid. Rancidity is a term to describe changes in the natural structure of a fat molecule, cell damage that usually occurs as a result of oxidation. Any fat, given the right conditions can become rancid. Light, air, heat, and the antioxidant content of the oil all factor in to what makes oil susceptible to becoming rancid. Changes in odor, palatability, nutritional quality, and even food safety, result. While light, air, and heat can initiate the oxidative process, the antioxidant content of the oil protects it. This is why oils are best stored in a cool, dark location, tightly capped and not kept for months on end. Unsaturated fats are more likely to become rancid. Yes, even olive oil can go rancid.

The greener, more flavorful olive oils have a higher content of compounds that help protect the oil and you.

Purchasing good quality oils is not the cheapest route to go. Often it seems cost effective to buy large containers of oil, but in the long run you will more than likely end up paying for it in with a reduced quality of life. Purchasing oils in smaller, darker glass containers can help ensure usage before it becomes rancid. When nuts or oils taste or smell off, it is best to throw them away, as that is an indicator of rancidity. When using oil in a frying pan or skillet, if it begins to smoke, throw it out as well. Start over and either turn the heat down or choose a different oil. Adding oil after the vegetables have been cooked, drizzling olive oil after the bread has been toasted, and using lower temperatures for cooking are a few options worth trying.

All of us face numerous choices. More frequently than not, we make decisions based on habit or what is patterned for us. It takes less time, thought, and effort. When it comes to the choices we face that pertain to what we are going to do with our lives, it is worth taking the time, putting forth the effort, acquiring knowledge, and developing commitment. High school seniors are not the only ones who are faced with the question. What you are going to do with your life pertains less to your career choice and more to what you are going to live for. A career or vocation is simply a vehicle used to accomplish the what. The what is deeper. What are you going to live for? The answer you give to this question will permeate every other you make, including what you choose to eat. 🌱



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