

August 2011 Newsletter



Dr. Hassell can whip up a batch of mayonnaise in 3 minutes. He uses eggs from his chickens and a blend of extra virgin and light olive oil – the recipe is on the next page.

Olive or canola? An easy choice.

We've been asked our opinion on the rumors of canola oil's nutritional superiority to olive oil. Here are a few questions we think are important to ask any time we're considering food choices:

(1) How was it processed?

Knowing how any food has been processed in order to reach our table is vital to deciding what is good to eat. Factors like heat, time, and chemical processing can easily change a nutritional profile from healthy to harmful. It doesn't make sense to extract oil from whole, raw seeds and nuts, both notable for their rich spectrum of fatty acids and antioxidants, and then process away these nutrients in order to produce useful cooking oils. It makes great sense, on the other hand, to use minimally processed oil with its original nutrients as intact as possible.

(2) What is the evidence for benefit?

We look for foods that are associated with better health outcomes in both randomized controlled and epidemiological (population) studies. On the other hand, nutritional *theory* (such as speculation based on the fatty acids in a given food), is far less valuable, and historically has been shown to lead us down unhealthy paths: corn syrup and

hydrogenated oils are two examples of this. In the case of olive versus canola, we believe the debate should be less about fatty acid composition of individual oils and more about individual health outcomes in humans when they consume the oil. We are unaware of any substantive body of such research literature for any oil except olive oil.

The winner: extra-virgin olive oil

Extra-virgin olive oil (the oil from the first pressing of the olives) is a simple, minimally-processed food which we could produce in our own backyard today, just as people have done for thousands of years – crush the olives, separate the oil from the solids, and it's ready to eat! Extra-virgin olive oil has over 200 nutritional components, including monounsaturated (omega-9) fatty acids and a broad complex of other nutrients, particularly a family of antioxidants called *phenols*.

More importantly, olive oil has a large volume of medical studies supporting its use. There is a remarkable amount of data associating olive oil with improved human health outcomes, as well as with a favorable impact on individual metabolic markers such as genetic expression associated with cancer risk, blood pressure, better blood clotting function, cholesterol and cholesterol oxidation, and endothelial function.

To illustrate the kind of outcomes data that supports olive oil: a recent study found that people who used more olive oil and had higher plasma levels of oleic acids also had 41% lower risk of stroke.¹ We are unaware of any such data concerning other vegetable oils (such as canola oil), which are mainly promoted based on theories, not outcomes.

And what about canola oil?

Canola oil (as commonly used) is *not* a simple, minimally-processed food, nor does it have any historical precedent in human nutrition. The oil is extracted from the canola seed, which was developed from rapeseed in Canada during the '70s to reduce its erucic acid to a safe level. (This is how the oil got its name – CANOLA, from **Canada**

¹ Samieri, C et al. Neurology 2011;77

Oil Low Acid.) The initial extraction must be processed to remove the color, odor, and flavor of the crude oil. (Don't forget that freshly extracted olive oil is not only edible, but prized.) If the canola oil you use is neutral tasting and light colored, it has been bleached and deodorized – and note that the final process generally requires the oil to be heated to temperatures up to 265°C. www.canolacouncil.org/uploads/Oilprocessing.pdf is a document that offers a graphic contrast to the processing of extra-virgin olive oil. We tracked down a source of cold-pressed unrefined canola oil in Quebec, Canada, described on their website [www.maisonorphee.com] this way: “Its taste is gently reminiscent of turnips and it is a bold yellow colour.” Hmm. We'll stick to our olive oil, thanks.

A bit about other oils

The other grades of olive oil (regular and “light”) have had most or all of the phenols processed out, so they are second-best but still preferable to other vegetable oils. For practical purposes, extra-virgin olive oil and virgin coconut oils are the most minimally processed vegetable oils available. (Although we once came across some small bottles of locally-produced and fresh-pressed sunflower and sesame oils – thick, cloudy, and rich with the pure flavor of the actual seeds.)

There are two main problems associated with most vegetable oils. First, even the expeller or cold-pressed versions are usually heavily processed to make them taste-neutral and to give them good keeping qualities. Micronutrients contained in the crude oils are removed and the fatty acids themselves are often damaged or altered by heat during the processing.

A second problem is that most vegetable oils (apart from olive oil) are high in omega-6 fatty acids, which appear to be pro-inflammatory and immunosuppressive when oversupplied in the diet.

We use extra-virgin olive oil for everything, including frying eggs, popping popcorn, sautéing vegetables, and for all of our salad dressings and dips. For the mayonnaise that Dr. Hassell is making in the photo, we use a blend of one third extra-virgin olive oil and two thirds light olive oil for a milder flavor. There's more information about olive oil and its role in the Mediterranean diet in our book, *Good Food, Great Medicine*, as well as tips for choosing and storing oil on page 66.

Mayonnaise (using an immersion blender)

(Makes about 2 cups)

2 eggs
2 tablespoons apple cider vinegar
2 teaspoons whole grain mustard
1 teaspoon salt

½ cup extra-virgin olive oil
1 cup extra-light olive oil

1. Combine eggs, vinegar, mustard, and salt in a bottle or container with a 3-cup capacity and a neck big enough to fit the business end of the immersion blender. Set the bottle on a wet cloth to keep it from moving as you blend.
2. Blend at medium high speed for about 15 seconds. **Keep a firm hold on the container:** the action of the blender is powerful. Then, with the machine running, add the combined oils in a very thin, steady stream. Once the mixture has thickened you can add oil faster. It will probably get too thick before all the oil is added; just drop the speed to medium low and use a mixing action with the blender stick to add the remaining oil, holding the container firmly with the other hand. It works fine.
3. That's it. The finished mayonnaise should be stiff enough to mound on a spoon. Just place a lid on the container and refrigerate. It will keep for several weeks if kept cold and sealed.

Speaking Events

9/15/2011– Making Your Way Through the Supplement Jungle: Vitamins, Minerals and Herbs: Miles Hassell MD and Cindy Reuter ND, MSOM, L.Ac., RD: Integrative Medicine Program, Providence St. Vincent Medical Center, Portland, Oregon. *This talk is free.* Preregister at Providence Resource Line: 503.574.6595.

9/23/2011– Grand Rounds: Optimal Lifestyle Choices for Reversing Insulin Resistance, the Metabolic Syndrome, and Type 2 Diabetes: What Really Works? Miles Hassell MD: St Charles Medical Center, Bend, Oregon. *Physician audience only.*

9/30/2011– American Diabetes Association Annual Diabetes Practice Update: When and How to Treat Pre-Diabetes: Miles Hassell MD and Devin Mann, MD, MS: Oregon Convention Center, Portland, Oregon. *Health professionals preregister* <http://professional.diabetes.org/adpu>

“Prove all things; hold fast that which is good.”

1 Thess. 5:21(KJV)