

Alternative Medicine  
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WHEN FOOD IS YOUR BEST FRIEND  
BY: JOHN ANDERSON  
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Although it's not well known in the United States, grapeseed oil has been used for centuries in European kitchens, where its light nutty taste and higher cooking temperature have made it valued over other oils. Grapeseed oil is made from the seeds of grapes after the juice has been extracted for wine. France and Italy, the top wine-producing countries, are naturally the leading makers of grapeseed oil. "The beauty of this oil is how it tastes and what you can do with it to incorporate it into your diet," states Valentin Humer of Food & Vine, Inc., in Mill Valley, California, producers of Salute Sante©! Grapeseed Oil. "As a professional chef, I consider grapeseed oil and olive oil as important in the kitchen as salt and pepper."

#### KITCHEN VERSATILITY WITHOUT SMOKE

Grapeseed oil is prized by chefs for its versatility - specifically, its ability to handle high temperatures without smoking. The recommended cooking temperature for grapeseed oil is 360<sup>1</sup>/<sub>4</sub>F, but it has a smoke point higher than most oils, at 485<sup>1</sup>/<sub>4</sub>F. This means it can be used for high-temperature cooking such as sauteing and frying without any burning or smoking. In contrast, olive oil smokes at 250<sup>1</sup>/<sub>4</sub>F, and corn and sesame at 410<sup>1</sup>/<sub>4</sub>F.

"Not only is it healthful, but it is delicious as well, with a light nutty flavor that brings out the flavor of the food," reports Fancy Food magazine. Grapeseed oil is flavorful, but without the heaviness of other oils, so it does not overwhelm foods or leave a greasy aftertaste. These qualities make grapeseed oil an excellent salad oil or dip for bread.

Grapeseed oil will stay fresh without refrigeration because of the oil's naturally high level of vitamin E. However, if refrigerated, it does not cloud like other oils. Look for grapeseed oils that contain no preservatives (such as TBHQ or BHT) and that are free of solvents. Salute Sante©! takes care to preserve the healthful qualities of their oil by using a dark-green glass bottle which filters out 97% of ultraviolet light. This protects nutrients, like chlorophyll, in the oil and prevents the formation of trans fatty acids and free radicals.

#### GRAPESEED OIL IS HEART-FRIENDLY

Using grapeseed oil in your cooking provides two key nutrients in your diet: vitamin E and linoleic acid. Grapeseed oil has a high concentration (60-120 mg per 100 g of oil) of the antioxidant vitamin E. It is also a highly concentrated source (76%) of linoleic acid, an essential fatty acid (EFA) also known as omega-6 acid, so it must be acquired through the diet. It is needed for the production of prostaglandins, hormone-like substances in the body involved in reducing platelets aggregation (blood clotting) and inflammation. Furthermore, grapeseed oil is naturally cholesterol-free. Lowering your intake of saturated fats can help reduce your risk of developing heart and circulatory problems.

A diet high in saturated fats can increase cholesterol levels in the blood, leading to hardening of the arteries and other health problems. Among cooking oils, grapeseed oil has one of the lowest levels of saturated fat - only 9%. Substituting grapeseed oil for your usual cooking or salad oil is an easy way of lowering the amount of saturated fats in your diet.

Research has shown that "The use of grapeseed oil in a daily diet appears to improve both HDL and LDL levels in weight-stable subjects with initially low HDL levels," concluded David T. Nash, MD, the lead researcher on the study.

Another study by the same team reconfirmed the beneficial effect of grapeseed oil on cholesterol levels (Journal of the American College of Cardiology, 1993) Fifty-six men and women with initially low HDL levels were instructed to substitute up to 1.5 ounces of grapeseed oil for the oil they normally used for cooking and salads. Blood tests were taken at the beginning of the study and after three weeks. At the end of the test period, the subjects showed no significant changes in weight or total cholesterol levels, but the ratio of LDL to HDL had changed.

There was a 7% reduction in LDL ("bad") and a 13% increase in HDL ("good") cholesterol levels. The ability of grapeseed oil to raise HDLs "appears unique," says Dr. Nash. "Until now, no foods and only a few drugs have demonstrated an ability to raise HDL cholesterol." The long-term effect of elevated HDL and lowered LDL levels on cardiovascular health was shown in the Helsinki Heart Study, which assessed thousands of volunteers for their risk of heart disease based on cholesterol levels. The study followed 4,081 men, between the ages of 40 and 55 years old, over a five-year period. Cholesterol levels were artificially altered (LDL level lowered, HDL level raised) using a drug called gemfibrozil. Every three months, the subjects were examined and tested for signs of heart disease.

The results showed that LDL/HDL levels in the blood are an important indicator of health. Over the five year period of the study, there were 34% fewer incidents of heart disease in the treated group (those with lowered LDL and raised HDL levels) compared to the placebo group, and also fewer deaths (14 vs. 19). During the fifth year of the study, the treated group had 65% fewer heart attacks than the placebo group.

A low level of HDL (and corresponding higher level of LDL) is a major indicator for the development of heart problems, even more than overall cholesterol levels, according to the study. The increase in the concentration of serum HDL cholesterol and the decrease in that of LDL cholesterol were both associated with reduced risk, whereas the changes in the amounts of total cholesterol and triglycerides in the serum were not, stated the researchers. "The risk of coronary heart disease increased with decreasing the concentration of HDL."



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The study showed that even small increases in HDL can have a significant impact in lowering your chances of developing heart disease. For each single percentage point increase in the level of HDL, there was a corresponding 3% to 4% decrease in the incidence of heart disease.

In other words, increasing your level of HDLs by 10% to 13 % with grapeseed oil can reduce your risk for cardiovascular problems by 30% to 52%. These studies demonstrated that the health benefits begin after a surprisingly short period of time. Continued use of grapeseed oil could lead to even better results.

#### GRAPESEED OIL CAN HELP PREVENT IMPOTENCE

Low HDL levels are also a significant risk factor for impotence. A 1994 study (Journal of Urology) of 1,290 men, 40 to 70 years old, found several factors which contributed to a higher probability of impotence. Age was the predominant factor, as the prevalence of complete impotence tripled from 5% to 15% between ages 40 and 70. After adjusting for age, the other main factors were heart disease, hypertension, diabetes, personality type, and HDL level.

"The probability of impotence varied inversely with high density lipoprotein cholesterol," stated the researchers. For the younger men in the study (from 40 to 55 years old), the likelihood of developing moderate impotence almost quadrupled from 6.7% to 25 % as their HDL levels decreased from 90 mg to 30 mg (per deciliter of blood). For the older men in the study (from 56 to 70 years old), the probability of complete impotence increased from near zero to 16% as their HDL levels correspondingly decreased.

While the effectiveness of grapeseed oil in reducing impotence has not (to our knowledge) been specifically tested, the fact that it can increase HDLs while decreasing LDLs and triglycerides suggests it could be of considerable benefits in preventing and reversing this condition.

#### MAKING GRAPESEED OIL: FROM WINE GRAPES TO KITCHEN OIL

Grapeseed oil is made from pomace, which consists of the stems, seeds, and skins left over after the juice has been expressed from grapes in winemaking. Pomace is usually put back into the vineyard as compost or simply discarded. Since it requires no additional crops or farmlands to produce it, grapeseed oil extraction from pomace is an efficient and ecology friendly activity, akin to recycling.

Extracting grapeseed oil is more difficult than other oils because the grape seed itself is so small, has a hard shell, and contains only a small amount of oil (8-12% of the seed). This is a blessing in disguise because the seeds are well-protected against chemicals (such as agricultural sprays) or additives (such as sulfites) likely to be introduced at any stage in the grape growing and winemaking process.

In the US and, particularly, in Europe the growing of wine grapes (for pressing) as opposed to table grapes (for direct consumption) tends to involve fewer chemical fertilizers and insecticides. The reason is that wine grapes are immediately processed after harvesting and do not need to be preserved for an extended shelf-life before use or consumption. This means grapeseed oil, extracted from wine grape pomace, has a considerably reduced, likelihood of containing any chemical residues.



Salute Sante©!, marketed out of Mill Valley, California, uses an Italian grower and manufacturer for their grapeseed oil. Here the pomace left over from winemaking is dried and the grape seeds are then separated and cleaned of dust. After that, the seeds are crushed using stainless steel mills. Then, to extract the oil, the crushed seeds are placed in a bath with an alcohol solution; this is heated until the alcohol evaporates, leaving the oil and the shells. The oil is then filtered and purified with steam and natural clay.