

Grape Seed Oil

Grape Seed oil is extracted from grape seeds after being pressed for wine. One ton of grapes are needed to make one 8 ounce bottle of Grapeseed oil. Cold-pressed Grape Seed oils are rare and hard to find because the seeds are very hard and difficult to press without heat and solvents. One

exception is the *Salute Santé* brand,^a which is pressed at temperatures that never exceed the outdoor temperature at the time it is pressed (around 100° F). This company also makes a natural variety that is pressed at 100° C (212° F). This relatively high temperature is still within range of the higher temperatures at which oils are “cold-pressed.” Because of Grape Seed oil’s ability to withstand heat, this high temperature does not affect the quality of the oil as much as it does with other oils that are not as heat resistant. This unique and high quality brand is packaged in UV protective dark glass bottles or stainless steel, not the usual plastic, penny-pinching bottles that allow UV light into the oil so that it quickly degrades.

Grape Seed oil has been used for centuries in Europe where, in 1569, Emperor Maximilian II of Italy granted a monopoly for the pressing of Grape Seed oil. In those days, the grape seeds were placed in giant vats, mixed with water, and covered. During the following winter, they were pounded every few days until they finally yielded a mash. This mash was then gently heated to separate the oil from the water much in the same way that traditional hand-pressed coconut oil is made today.

Grape Seed oil is very high in Vitamin E, a possible factor in its especially high resistance to heat. This quality makes it as good for baking and sautéing as it is for salad dressing.

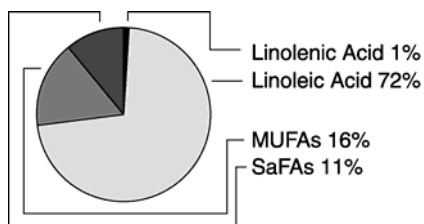


Table 1: Smoke Points of Unsaturated Oils

Source	Temperature
Grape Seed Oil	485° F
Olive Oil	250° F
Peanut Oil	450° F
Sesame Oil	410° F
Soybean Oil	450° F
Sunflower Seed Oil	392° F

^a *Salute Santé* can be reached at www.grapeseedoil.com.

As one of the fat-soluble vitamins, Vitamin E is dependent upon FAs for its circulation throughout the body. Only plants can synthesize Vitamin E; animals can not make it. Whatever small quantities of Vitamin E animal food might contain is only due to the animals eating it from plants.

The chemical name for Vitamin E is “tocopherol,” which combines the Greek words “*ol*” (meaning “alcohol”) with “*phero*” (“to bring forth”) and “*tos*” meaning “childbirth.” Accordingly, Vitamin E was first used as an essential nutrient for the normal development of the fetus. Now it is used for female reproductive problems and for male impotence. There are five kinds of tocopherols. They are named according to the first four letters of the Greek alphabet—alpha, beta, gamma, delta—and simply represent four different chemical variations of Vitamin E. The third tocopherol, gamma-tocopherol, is the most potent form for preventing breast cancer.^b

High dietary levels of Vitamin E are known to protect against abnormal blood clotting, heart attacks, strokes, and cancer,^c which arise from the abnormal oxidation of cholesterol and fatty acids.¹ This type of fatty degeneration from oxidizes cholesterol and FAs can also be observed externally in the brown spots seen on the exposed skin of the elderly.² **The Helsinki and Framingham Heart Studies claim that using Grape Seed oil reduced the risk of cardiac events by 41 to 55 percent!** According to the *Journal of Arteriosclerosis* (1990; 10:5), **Grape Seed oil added to the diet also created a 13-14 percent increase in HDL in only two weeks.**

Vitamin E is a potent AO that prevents the oxidation of LDL cholesterol by free radicals.^d Vitamin E is also a natural preservative in polyunsaturated vegetable oils and keeps them from going rancid on the shelf as well as in our bodies.³ Other kinds of AOs are also readily available from the grape plant. For example, the red pigments in grapes and wines, called bioflavonoids, are also excellent AOs known for their ability to protect the liver and arteries.⁴ An even stronger AO (30-50 times more powerful than Vitamin E) and contained in large amounts in the *Salute Santé* brand of Grape Seed oil is called proanthocyanidins (OPC). These three strong AOs present in Grape Seed oil account for much of its ability to heal those diseases associated with oxidation and free radical damage. They also account for its heat-resistant capacity.

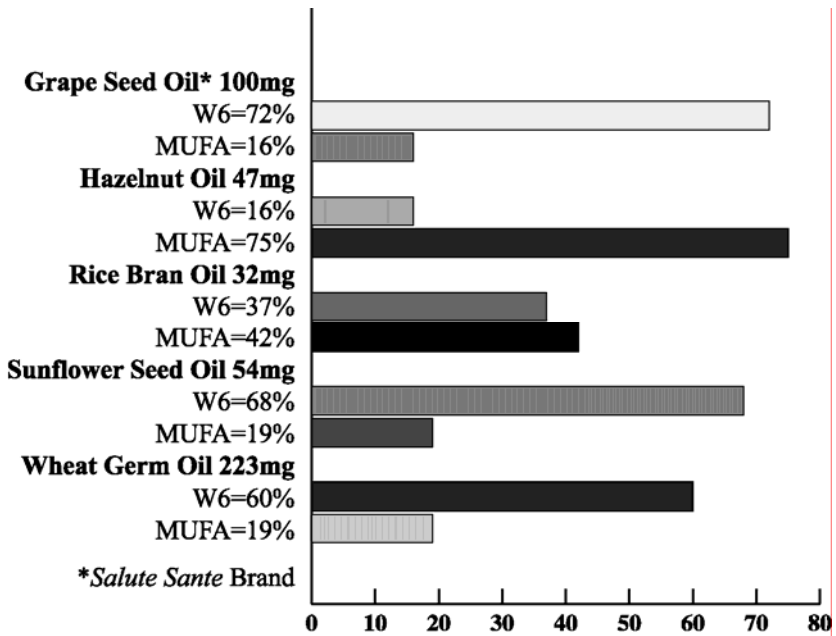
Grape Seed oil is one of the richest natural sources of Vitamin E, especially among the edible oils. Other oils rich in Vitamin E include Wheat Germ oil (223mg), Grape Seed oil (100mg), Sunflower Seed oil (54mg), Hazelnut oil (47mg), and Rice Bran oil (32mg). Two of these, Sunflower Seed oil and Rice Bran oil, are also well known for their heat-resistant qualities. Since MUFAs are also heat-resistant, oils that are higher in Vitamin E content have a lesser proportion of MUFAs.

^b Kline, K. In *Journal of Nutrition* 134:345S-346S, 2004.

^c Wagner, KH. In *Annals of Nutrition & Metabolism* 48:169-188, 2004.

^d de Nigris, F. In *Biochemical Pharmacology* 59:1477-1487, 2000; and Dutta, A. In *Journal of the American College of Nutrition* 22 (4):258-268, 2003.

Table 2: High Vitamin E Oils and their Omega 6/MUFA Proportions



Grape Seed oil is, therefore, a very good choice for rehabilitating a body ravaged by free radical damage and also for general Vitamin E depletion. Both of these conditions are rampant in the general population, twenty to forty percent of which is Vitamin E deficient. There are several reasons for this deficiency. Eighty-six percent of Vitamin E is lost through typical food processing!⁵ Much of it is also used up in frying and deep-frying where it helps protect polyunsaturated oils.⁶ The refining process of vegetable oils also removes Vitamin E altogether and replaces it with BHT, an artificial preservative⁷ associated with an increased risk for cancer. Cancer rates go up by themselves when Vitamin E is removed from polyunsaturated oils.⁸ This rate only increases more when these artificial preservatives are added. Also, the form of Vitamin E predominant in the SAD (gamma-tocopherol) does not get to the body as easily as alpha-tocopherol, which is preferentially loaded onto the LDL for circulation.

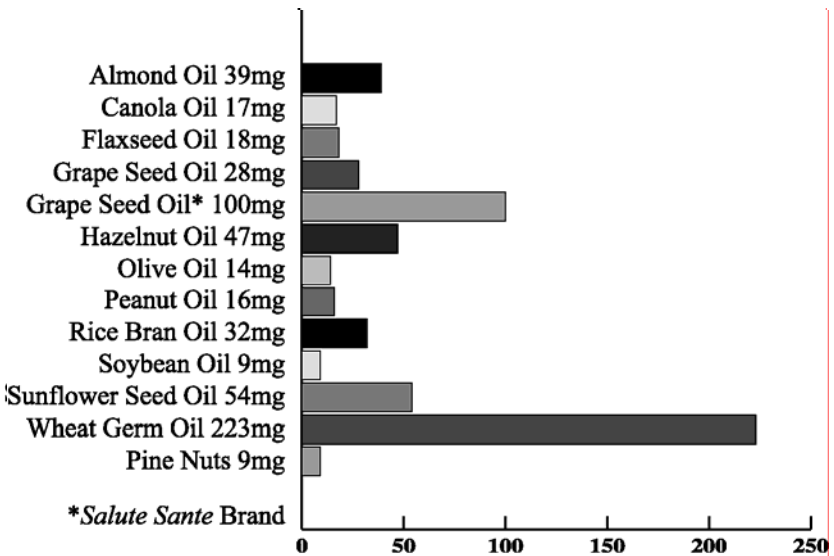
Grape Seed oil is also known to raise HDL and lower LDL in humans. Raising HDL levels is also correlated with the reversal of both hypertension and impotence. These results are more likely due to the high AO content in Grape

^c One tablespoon of Omega 6 per day requires almost the entire RDA (less than 30 International Units) of Vitamin E for AO protection. The *Salute Santé* brand of Grape Seed oil contains 100mg per 100g of Vitamin E, which at 14 IU, is 47 percent of the RDA.

Seed oil than its high, unrefined Omega 6 content (72-76 percent), although both can raise HDL levels in people used to eating refined, hydrogenated, or partially hydrogenated vegetable oils.^f The Vitamin E forms part of the plasma lipoprotein carrier vehicles necessary for transporting cholesterol from the liver to the body.⁹ In fact, increased cancer from cholesterol-lowering drugs may result from the suppression of Vitamin E distribution through these carrier vehicles. Vitamin E delivery to the cells decreases in direct proportion to the decrease in carrier vehicles for cholesterol as occurs through artificial cholesterol lowering with drugs.¹⁰

Conversely, as the Vitamin E and other AOs increase through the addition of Grape Seed oil in the diet, the LDL and HDL protein carrier vehicles pick up cholesterol more easily. Once these AOs reach the peripheral tissues of the body, they are then able to displace the oxidized cholesterol found there into the bloodstream where HDL can pick up the cholesterol so that HDL is increased and the cholesterol can be returned to the liver. In the following table, we can see the Vitamin E quotient in edible oils measured in mg per 100g of sample. Because the Omega 6 level of Grape Seed is so high (72-76%), an additional source of Omega 3 such as Fish oil, Flaxseed oil (4:1), or Chia Seeds (3:1) should be taken in compensation.

Table 3: Vitamin E Quotient in Edible Oils



¹ Erasmus-202.

^f According to Erasmus, other foods, herbs, and supplements known to increase HDL include garlic, onions, brewer's yeast, ginseng, fish, lecithin, chromium, and Vitamin C. [Erasmus-336]

² Erasmus-140.

³ Erasmus-135, 139.

⁴ Erasmus-203.

⁵ Erasmus-75-76.

⁶ Erasmus-125.

⁷ Erasmus-428.

⁸ Erasmus-157.

⁹ Erasmus-199.

¹⁰ Erasmus-201.