

## Frequently Asked Questions

### **What is extra virgin olive oil?**

Extra virgin (EV) olive oil is the oil extracted from fresh olives using a mechanical process without the use of excessive heat or any form of additives or solvents.

Provided that the olives are free from disease and they are processed into oil without delay using a clean mill they should produce an olive oil that has an aroma and flavor that is free of taste defects and as such is of extra virgin grade.

Most extra virgin olive oils naturally contain higher levels of monounsaturated fats and antioxidants such as polyphenols and tocopherol. They also naturally contain plant sterols which are thought to lower cholesterol levels. All these attributes are sought after by the health conscious.

What is the significance of a high monounsaturated fat level in olive oil?

Firstly, olive oils are typified by their high level of monounsaturated fats compared with nearly all other edible oils. Monounsaturates are preferred by the health conscious. Oils high in monounsaturates are also more resistant to oxidation and as such have a longer shelf lives. Incidentally, the major monounsaturated fat in olive oils is oleic acid. Extra virgin olive oils contain between 65% and 85% oleic acid. As a result of selective breeding, some sunflower and canola oils also contain high levels of oleic acid. But these have no aroma, flavor or health giving antioxidants as they are refined oils. EV olive oil is the only high monounsaturated oil that makes your food taste better.

### **Extra virgin olive oil contains less omega three fats than say canola oil or flaxseed oil. Is this true?**

Yes it is, but..... omega three fatty acids are in the family of polyunsaturated fats. These fats oxidize very rapidly, so oils high in these fats tend to have very short shelf lives unless they are protected with artificial preservatives such as BHA and BHT. Also being refined seed oils they completely lack the aroma, flavor or health giving properties that arise from the polyphenols that are naturally found in extra virgin olive oil.

### **So what is pomace olive oil?**

Pomace olive oil is the only grade of olive oil which is extracted with the use of solvents. Making extra virgin olive oil produces a waste product called pomace which consists of the mashed up skins, seeds and pulp of the olive minus most of the oil which has been removed. Due to extraction inefficiencies, the pomace contains small, albeit commercially viable amounts of olive oil. The pomace is dried by heating and the remnant oil is dissolved by using the solvent hexane. The solvent is boiled off (and re-used) to leave a crude oil called pomace oil. This oil is then refined using the same process used to produce pure and light oils. The result? A bland characterless olive oil that is low in antioxidants. The positives? Pomace is notoriously difficult to compost down so pomace heaps have the potential to contaminate surface and ground water. So processing pomace can have some environmental advantages. The

negatives? The initial heating process has the potential to produce carcinogenic substances called PAH's which are not completely removed by refining.

### **Is it true that 'light' olive oil contains fewer calories than extra virgin oil?**

Absolutely not. All olive oils (and indeed all edible oils) have almost identical energy values. The word 'light' is made in the context of them having light aroma, flavor and color - a result of the refining process which removes pretty well all the aroma, flavor and valuable micronutrients in the oil.

### **What is the significance of the term 'pure' when referring to olive oil?**

Absolutely nothing. The term is simply a clever marketing term. 'Pure' olive oils are refined oils. They are no more 'pure' than any other olive oil

### **What does Free Fatty Acidity (FFA) mean? Is it good or bad?**

Free fatty acidity is chemical parameter of the oil which is a very broad indicator of its quality, or at least how sound the olives were and how carefully the olives were processed. For extra virgin olive oils, it ranges from 0 to 0.8%, with the lower the percentage the better. The average FFA of Australian oils in 2008 was around 0.25%, with very few even being over 0.5%. From a practical point of view, oils with lower FFA's begin to smoke at a higher temperature when heated. This property makes them a little more versatile in the kitchen. Oils with high free fatty acidity also tend to go rancid more rapidly. However, regardless of the acidity of the oil, it can't be tasted as the acids in olive oil are very weak acids.

One basic thing to remember about olive oil is that it is constantly oxidizing as a result of age, heat, air and light exposure. Always store olive oil in a dark glass bottle or stainless steel container. Do not store in plastic bottles because olive oil is very reactive and if in contact with plastic will take on the properties of the plastic container. Place the container in dark places and in areas that are slightly cooler than room temperature

"Bad olives have free radicals and impurities, and then you've lost that wonderful cocktail ... that you get from fresh fruit, from real extra-virgin olive oil."

Most imported extra-virgin olive oil appears questionable in authenticity

The University of California, Davis published a report on olive oil back in 2010 entitled Tests indicate that imported 'extra virgin' olive oil often fails international and USDA standards. In this report, researchers found that 69 percent of imported and ten percent of California-based oils labeled as olive oil did not pass International Olive Council (IOC) and US Department of Agriculture sensory standards for extra virgin olive oil.

Of those brands tested, the following failed to meet extra-virgin olive oil standards:

- Bertolli
- Carapelli

- Filippo Berio
- Mazzola
- Mezzetta
- Newman's Own
- Pompeian
- Rachel Ray
- Safeway
- Star
- Whole Foods