What is Extra Virgin Olive Oil?

Extra Virgin Olive Oil is the fresh natural juice that is squeezed from the olive fruit and is the highest grade of olive oil.

It must pass strict quality standards including laboratory and taste and smell tests to be classified as Extra Virgin Olive Oil.

In Australia, the standards for certifying and ensuring an oil really is Extra Virgin Olive Oil are very high. However, they are voluntary. Therefore, look for a producer that shows this symbol on their bottle or is taking part in the Australian Code of Practice:

What’s the difference between Olive Oil and Extra Virgin Olive Oil?

Extra Virgin Olive Oil is naturally extracted from the fruit of the olive without any heat or chemicals. This enables a wide range of natural antioxidants, plant sterols and other healthy compounds (found in the olive flesh) to infuse into the oil. These antioxidants are also responsible for the tasty flavour and aroma of Extra Virgin Olive Oil, and its suitability to cook in at high temperatures.

Olive Oil, Pure Olive Oil or Extra Light Olive Oil are refined oils. The refining process used to produce Olive Oil uses high heat, high pressure and/or chemicals to bleach, deodorize and neutralize the oil to make it suitable for human consumption. This process removes most of the antioxidants and other healthy compounds that give the flavour and health benefits to the oil. The refining process can also produce unhealthy compounds such as trans fats.
Can you cook with Extra Virgin Olive Oil?

Yes. Extra Virgin Olive Oil is one of the most stable, and healthiest oils to cook in. Even at high temperatures.

This is because it is high in healthy stable fats and natural antioxidants.

When Extra Virgin Olive Oil is heated, the natural antioxidants keep the healthy fats stable.

Extra Virgin Olive Oil is suitable for sautéing, pan frying, deep frying and oven baking. Every style of cooking at home, including all of the below:

| COOKING STYLE | TYPICAL TEMPERATURES                  |
|               |                                     |
| Sauteing      | 120 Degrees Celsius                  |
| Pan frying    | 120 Degrees Celsius                  |
| Deep frying   | 160 - 180 Degrees Celsius            |
| Oven baking   | 180 - 220 Degrees Celsius            |

What about smoke point?

It is a myth that you cannot cook with Extra Virgin Olive Oil because of its smoke point.

Even though the smoke point of a good quality Extra Virgin Olive Oil is high enough for all home cooking conditions, smoke point is not a good predictor of how suitable an oil is to cook with.

Smoke point is the point at which an oil begins to smoke continuously.

This is tested in a machine that is very different to home cooking conditions, and does not match up with cooking temperatures at home.

It is normal for Extra Virgin Olive Oil to show some steam when cooking, as it is a natural product with some moisture.
Will cooking with Extra Virgin Olive Oil produce trans fats?

Trans fats are mostly produced via partial hydrogenation in industrial kitchens, which cannot be replicated in a domestic or commercial kitchen. There is no production of trans fats when Extra Virgin Olive Oil is heated over limited periods of time in a domestic kitchen environment.

When you cook in Extra Virgin Olive Oil do you lose all the health benefits?

No. Recent research shows that when cooking with Extra Virgin Olive Oil (including deep frying and sautéing), there is an increase in antioxidants in the cooked food (particularly when cooking raw vegetables). In comparison, when boiling vegetables in water, there is a reduced level of total antioxidants.

Will cooking in Extra Virgin Olive Oil ruin pans that are non-stick?

No. This is a common myth with no technical evidence to support it. This information often comes from certain kitchenware manufacturers. There is no validated scientific evidence to indicate that the fatty acids in olive oil should act any differently to the fatty acids in other oils when using non-stick pans, or any pans for that matter.

When using a high quality Extra Virgin Olive Oil, the high natural antioxidants in the oil, in addition to the high monounsaturated fat levels, will prevent the oil from breaking down in the pan and potentially forming volatile compounds.

What are the health benefits of Extra Virgin Olive Oil?

Extra Virgin Olive Oil has many evidenced-based health benefits, as an individual food, and as the main fat in the Mediterranean Diet. These benefits include heart health, healthy weight management, and anti-inflammatory benefits. Visit the Olive Wellness Institute at www.olivewellnessinstitute.org for more information and a comprehensive list of referenced health benefits.
What is in Extra Virgin Olive Oil?

Extra Virgin Olive Oil is high in healthy monounsaturated fats. Monounsaturated fats are healthy heart fats, protect against chronic disease and are also a stable fat for cooking in.

High quality Extra Virgin Olive Oil also contains:

- **Biphenol compounds** – these are considered to be the most bioactive substances in Extra Virgin Olive Oil. They are extremely potent antioxidants and strong anti-inflammatory agents.

- **α-tocopherol** - α-tocopherols are the most biologically active form of vitamin E. They act as potent antioxidants and have functions as an enzymatic activity regulators.

- **Squalene** - is used in cosmetics, and as an adjuvant in vaccines. Squalene is an important part of the Mediterranean diet with a powerful antioxidant capacity.

- **Oleocanthal** - is natural anti-inflammatory which inhibits COX enzymes in the pathway of prostaglandin synthesis.

What is the shelf life of Extra Virgin Olive Oil?

Shelf life (best before date) of freshly produced Extra Virgin Olive Oil can range from between 18 and 30 months. However, it is best consumed within 12 months from the date of harvest. Extra Virgin Olive Oil will not actually go off after that period, however, they will lose some of their freshness, flavour and nutrients. To ensure the oil stays as fresh as possible, store the bottle in a cool dark place and always keep the lid firmly on the bottle when not in use.

What is the best way to store Extra Virgin Olive Oil?

The best way to store Extra Virgin Olive Oil is in a cool dark place away from light and heat, this will ensure that the product stays fresh. Once opened, Extra Virgin Olive Oil is best used within 4 – 6 weeks from the date of opening.
### How does the type of fat in Extra Virgin Olive Oil compare to other types of oils?

#### COMPARISON OF DIETARY FATS

<table>
<thead>
<tr>
<th>DIETARY FAT</th>
<th>Monounsaturated</th>
<th>Polyunsaturated</th>
<th>Saturated</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAFFLOWER OIL</td>
<td>77</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>EXTRA VIRGIN OLIVE OIL</td>
<td>75</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>CANOLA OIL</td>
<td>61</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>PEANUT OIL</td>
<td>48</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>LARD</td>
<td>47</td>
<td>33</td>
<td>19</td>
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<tr>
<td>PALM OIL</td>
<td>39</td>
<td>10</td>
<td>51</td>
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<tr>
<td>CORN OIL</td>
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<tr>
<td>BUTTER</td>
<td>28</td>
<td>13</td>
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<tr>
<td>SOYBEAN OIL</td>
<td>23</td>
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<tr>
<td>COTTONSEED OIL</td>
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<tr>
<td>FLAXSEED OIL</td>
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<tr>
<td>COCONUT OIL</td>
<td>7</td>
<td>2</td>
<td>91</td>
</tr>
</tbody>
</table>

- **Oleic acid** (an omega-9 fatty acid)
- **alpha-linolenic acid** (an omega-3 fatty acid)
- **Linoleic acid** (an omega-6 fatty acid)

* trace  
Fatty acid content normalized to 100%


### Extra Virgin Olive Oil composition

- **Triglyceride Derivatives**
- **Hydrocarbons & waxes**
- **Sterols**
- **Vitamins & Antioxidants**
- **Pigments**

**Triglycerides** (97.0-98.5%)
Major differences between Extra Virgin Olive Oil and other cooking oils:

Macadamia oil
Virgin macadamia oil is one of the few nut oils which has a large percentage of monounsaturated fats as opposed to the other nut oils (i.e. walnut or almond) which have a higher amount of polyunsaturated fats. Unlike Extra Virgin Olive Oil, where almost all monounsaturated fats come from oleic acid, macadamia oil has a rather large fraction of palmitoleic acid, which has not been confirmed to be as beneficial as oleic acid.

Rice bran oil
Rice bran oil has a rather large amount of both saturated fat and polyunsaturated fat. It also contains just one antioxidant (oryzanol), which has not been studied extensively for health benefits in humans. Furthermore, most commercial brands are refined versions with some levels of trans fats.

Avocado oil
Virgin avocado oil has a similar fatty acid profile to EVOO, but has significantly lower levels of polyphenols and other antioxidants. As a consequence, avocado oil goes rancid more easily. Furthermore, with the rare exception of a few premium brands, most avocado oils are produced from discarded fruit for the fresh market and the quality of the oil is not as good as a high quality EVOO.

Seed oils (Including Canola, Soybean, Peanut and Sunflower)
Most seed oils (canola, soybean, peanut, sunflower) have a rather large amount of polyunsaturated fat, making them more susceptible to oxidation (breaking down when heated or exposed to oxygen), with a much shorter shelf life than Extra Virgin Olive Oil. All of them have undergone refining processes which includes high heat, high temperature and / or chemicals to bleach, neutralise and deodorise the oils. This process also includes solvents which produces unhealthy trans fats. They do not contain significant amounts of natural antioxidants. Most of their alpha tocopherol content is artificially added to give the oil added stability and extended shelf life.

Virgin Coconut oil
Being a virgin oil, this oil does not contain any trans fats or stigmastadienes. However it does not contain natural levels of antioxidants. Coconut oil’s fatty acid composition is mostly saturated fats. It is quite a stable oil to cook with.