



OLIVE OIL

how to choose the best olive oil

BARBARA VRIJ-WESTRA

Olive oil

Your healthy diet deserves the best olive oil

Olive oil is healthy, it is tasty and these days almost everyone uses olive oil in the kitchen. In 88 BC the famous poet Homer in his work “Odyssey” already spoke about 'liquid gold' and by this he meant olive oil. A source of monounsaturated fatty acids, vitamins E and K and many powerful antioxidants.

Since the Minoan period (2500 B Chr.) The people of Crete have been harvesting olives. Olive oil was already an important part of the daily diet at that time. The olive oil was also used for lighting and heating. The olive tree and the olives are still the symbol of wisdom, peace, health and strength.

The climate, the composition of the Cretan soil and the citrus trees nearby and in the olive groves provide the fine aroma and exquisite taste of the Cretan olive oil. This oil is famous for its high quality.

But what is a tasty, healthy and above all good olive oil?

How are olives picked? How are the olives pressed? What is cold pressing? Can you eat olives right away? How do you choose the best olive oil? These questions and many more, my husband Arno and I, Barbara, get to hear regularly in our shop “Mandalí” in Kournas, on the island of Crete.

In this E-book I would like to answer these questions and give you more clarity about olives, harvesting, pressing and olive oil.

Let's start at the beginning, with the olives.

Olives

Worldwide there are more than 1500 different olive varieties. In Greece there are more than 75 species and on Crete there are 3 types of olive trees: the Koroneiki, the Tsounati and the Throumbolia.

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Olives in Crete

The **Koroneiki** olive is the most common. This little olive is strong and grows well in lesser conditions. It grows to about 500 meters above sea level and since Crete is quite mountainous, the conditions for this olive are very good.

The **Thrombolia** olive can grow well even higher, up to about 700 meters. This species must be pressed immediately after picking. This actually also applies to all olive varieties.

The **Tsounati** olive is resistant to cold and heat and is common in the area around the city of Chania, where the weather conditions are often more variable.

Not only the type of olive is important. The location and the region determine the number of hours of sunshine in an olive grove. And together with the soil conditions, this also determines the quality of the olives. The olive variety provides the different types of olive oil.

What is the difference between green and black olives?

The colour of the olive says nothing about the type of olive, but about the ripeness of the olive. Green olives are actually not ripe yet.

Unripe olives are green and the ripe olives are purple, dark brown or even black. The black olives are also often softer and have a somewhat stronger flavour.

Eating olives

The olives cannot be eaten that fresh off the tree. The taste is too bitter. They must be preserved to remove the bitter taste. There are several ways to do this.

The green olives are usually preserved in salt water with lemon and possibly herbs. The black olives can also be preserved like the green olives, but usually the larger black olives are pickled with sea salt. This removes all moisture from the olive and you get the shrivelled looking olives.

The harvest

In the spring, the olive tree blooms with many small flowers, which over time are transformed into an olive. If all goes well, this olive will ripen in the autumn or winter.



In October, the farmer regularly visits his olive trees to determine the best time to start harvesting. Harvesting early, when the olives are still green, means less oil but of a higher quality and often a sharper and more bitter taste.

Harvesting later, when the olives are dark in colour, means more oil and a sweeter taste.

Many farmers have their own opinion about harvesting. Some start in October and the other does not want to start before November, some harvest with the latest machines, while others want to harvest as much as possible without damaging petrol from a generator.



The farmers who opt for high quality harvest early. The traditional farmers and those who just want to harvest a lot of olives will do this later in the year. They even take the olives that have fallen to the ground.

These olives are often overly ripe and almost fermented and the quality and taste of this olive oil will not be optimal.

How are the olives harvested?

Harvesting or picking olives can be done in different ways. The traditional way, which is best for the tree, is so-called "milking", picking the olives by hand. Under the tree they place a large net and there the olives are gathered. When the tree is empty the olives are collected in crates or jute bags.



A modern method is a stick, powered by a generator, which shakes the branches causing the olives to fall from the tree.

Two other methods are only used in the very large olive groves, where quantity is more important than quality.

One method is with the "tree shaker", which shakes the trunk of the tree so that the tree is vibrated empty and the olives fall into a sort of umbrella.

And the second method is with a large mechanical cart, which drives along the specially pruned trees, vibrates the tree and "sucks up" the olives.

pruning



When the olives are harvested, the trees are also pruned immediately. Firstly, this is done to make harvesting easier. This is difficult when the tree is meters high. Secondly, it is done to prevent diseases in the tree. Bacteria and other germs like dark places, so the more light, the healthier the tree.

The light also increases photosynthesis, which keeps the tree healthy. The pruned branches are not left in the field. They are burned so that any bacteria cannot spread further.

Pressing the olives

Not every farmer has an olive press. These are expensive machines and therefore there are commercial olive oil factories and cooperatives where the olives can be pressed.

Because olives ferment quickly, they are processed as soon as possible after harvest. In the afternoon, the farmer collects the jute bags with olives and takes them directly to the olive oil factory where they will be pressed as soon as possible.

Transport

The storage conditions of the bags with olives are also important, because once the olives have been harvested, the fermentation process already starts and the olives want to get rid of their "juices". Olives must therefore be transported cool and ventilated to prevent fermentation as much as possible.

The pressing



At the olive oil factory, the olives are removed from the bags or crates and the last twigs, leaves and snails are removed with a blower. Then the olives are washed to remove any pesticides and mud.



Then the olives go into a kind of pulverizing machine or are ground with large grinding stones. The crushed olives are then placed in a container with a rotating screw.

The olive pulp is turned here until the oil and water particles stick together and a paste is formed.

The olive oil is then extracted from this paste by pressing or centrifugation.



During pressing, the paste is placed on different mats and pressed. The pressure and friction create some heat, but there is no additional heating. That is why it is called cold pressing. The temperature must not exceed 28 °C.

During centrifugation, also a cold pressing, the oil, the seeds and the water are removed from the pasta by means of a lot of force. This process is fully automated and this method is most commonly used.

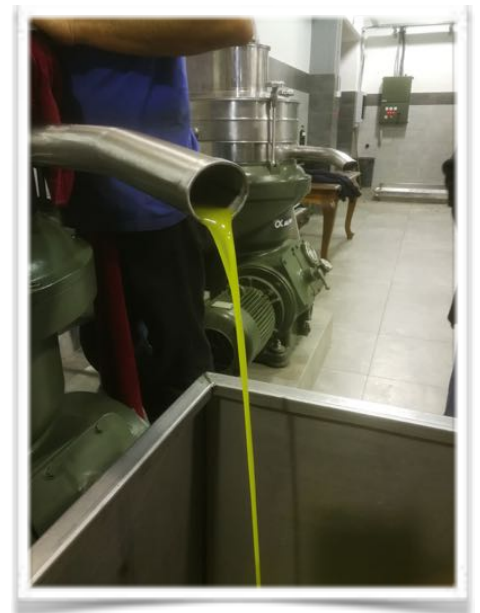


On the island of Crete, in Kalyves, an olive oil factory has been opened where the old way of pressing, with large grinding stones, is combined with modern technology.

The result is an olive oil, which contains almost all healthy nutrients.

As soon as the olive oil comes out of the press, the acidity is measured and this is noted.

The oil is put in plastic barrels of 50 litres and the weight is measured (the amount of olive oil is not determined in litres, but in kilos) The farmer has to pay the factory a percentage for pressing and he also can sell his oil to the factory, or he takes his olive oil home. If the farmer himself has enough kilos of olives, he gets his own olive oil. If he doesn't have enough, the olives from different small farmers are combined and you get a mixed olive oil.



In the factory, the olive oil is stored in special airtight stainless steel tanks to preserve the oil as good as possible. Olive oil will keep for about 18 months after pressing.

First pressing

In the past you had a first pressing and a second pressing, where water was added to the olive paste before it was pressed again. The first pressing had the best quality.

Today the machines are so powerful that everything is removed with one pressing.

Quality



It is clear that it is not easy to meet the requirements of “extra virgin olive oil”. A commercial olive oil factory benefits financially if it presses a lot of oil.

For this, he can opt for pressing with higher temperatures or continuous pressing without cleaning the machines between the different olives from the farmers.

A cooperative also depends on what the farmers bring and when they bring the olives. Sometimes farmers keep the picked olives too long before they are taken away or they use plastic bags for transport. Sometimes the olives are affected by fungi, olive flies, and other microorganisms or damaged. Sometimes the olives have been hanging on the trees too long or have been stored too long.

All aspects that influence the quality and especially the acidity of the olive oil.

What determines a good quality

There are 2 important elements that determine the quality of olive oil.

One measure is the purity of the olive oil. This is measured by determining the acidity.

The second indicator is determined by the way of pressing.

The International Olive Council (IOC) has established rules for the different categories of olive oil.

An "**Extra Virgin**" olive oil is an European protected name for the best quality olive oil. This means that the oil is only mechanically pressed, that the oil is cold pressed, below 28° Celsius and that the olive oil may contain a maximum of 0.8% free fatty acids (the acidity).

A “**Virgin olive oil**” is also cold pressed and has an acidity of maximum 2.0%. The higher acidity is due to the use of riper olives.

The “**Regular olive oil**” is a combination of a small part “Virgin olive oil” and a large part “Refined olive oil”. This olive oil often has a more neutral taste and is suitable for baking and deep-frying.

Oil can be extracted from the remaining pulp and kernels after pressing by post-pressing at a high temperature. This “**Refined olive oil**” is used as lamp oil or for making soap or skin oil.

However, this is also the olive oil that is processed and purified with chemicals and with the addition of a little “Extra Virgin olive oil”, an affordable olive oil is made, the so-called “supermarket oil”.

Did you know that in Greece more than 75% of the harvest is “extra virgin”?

Acidity of olive oil

One of our customers' first questions about olive oil is often about its acidity. Almost everyone is sure that this is the most important measure of good olive oil. We too have thought this for a long time.



Until we visited the olive oil factory in Kalyves to see how olives were pressed with the latest method. We tasted a delicious olive oil there. The taste was great: full, fruity and mild. And yet this olive oil had an acidity of 1.7%. We were speechless.

We understood from the owner of the olive oil factory that in the future the acidity of olive oil will no longer be such an important indicator. The amount of polyphenols and other valuable components will play an increasingly important role in determining a good quality olive oil.

And this is a very good development, because it means that it will become increasingly difficult to cheat with the quality of olive oil.

The taste of olive oil

If you taste olive oil and it tastes a bit spicy in the back of your throat, a kind of tickle in your throat, then you have chosen a good olive oil. This tickling is caused by the healthy nutrients, such as polyphenols, the most powerful antioxidants.

Taste does not determine quality. Nowadays it is easy to influence the taste with all kinds of chemical additives.

Personal taste and preference also play a role when choosing olive oil. In recent years we have noticed that many French and Italians are fond of a more bitter olive oil.



Colour

Olive oil has a green or yellow colour, as well as different shades in between. The colour has nothing to do with the quality. The colour of the olive oil is determined by the type of olive, the ripeness of the olive and the way of pressing.

Storage

The quality of olive oil is sensitive to light. It is best to store olive oil in a dark glass bottle. You can simply put olive oil in your kitchen, at your counter or in a cupboard. An ordinary kitchen temperature is fine.

Using

Olive oil is delicious on salads, with a piece of (home-baked) bread and over cooked dishes, but did you know that you can also cook with olive oil? If the olive oil is of good quality, it can be heated up to max. 180° C without problems. Up to this temperature, no oxidation occurs. However, don't do this too often or for too long.

When heating olive oil, the smoking point of olive oil is important, which can vary by quality and by the type of olive. A high quality Extra Virgin Olive oil has a high smoking point. Low quality Virgin Olive oil has a lower smoking point. An olive oil that has been exposed to oxygen, light or heat has already partially broken down and also has a lower smoking point.



Why is a high smoking point so important?

A high smoking point is better because the best properties of a product emerge when it is baked well hot.

When food is put in a good hot oil, the sugars caramelize and the natural proteins turn into a thin shell that protects the food from absorbing the oil. So the outside stays crispy and the inside is just cooked.

In most cases and is 185° C is more than enough to achieve this result.

(source: Irma Rombauer, the joy of cooking)

The correct smoking point therefore depends on several factors.

Produce and price

The "International Olive Oil Council (IOC) tells us: When heated, olive oil is the most stable fat, which means it stands up well to high frying temperatures. Its high smokepoint (210° C) is well above the ideal temperature for frying food (180° C). The digestibility of olive oil is not affected when it is heated, even when it is re-used several times for frying.



A well-maintained olive tree produces an average of 20 to 50 kilos of olives per year. We see the first olives when the small tree is about 8 years old. We see the maximum produce of olives when the tree is about 60 years old.

For 1 litre of olive oil you need about 5 kilos of olives, so the average produce is 4 to 10 litres of olive oil per tree.

Good harvest

But olives are actually fruit and the harvest of olives is not that good every year, just as with fruit trees.

There should be a good harvest once every 2 years. Usually there is a good year, followed by a year with less olives. This is in the tree's DNA.

But we also have to deal with weather influences, which can sometimes destroy an entire harvest. That is why we may not have a good harvest for 2 years in a row.

The olive oil from Crete is one of the best in the world and is sold at high prices. Then it is bizarre that the Cretan farmer cannot live on it.

The price that the farmer receives at the olive oil factory for his olive oil is currently between € 2.50 and € 3.50 per kilo. (Yes, this is calculated per kilo) But the farmer also has costs: for fertilization, watering, labour costs, a percentage for the olive oil factory for pressing his olives, etc. These costs should actually be deducted from the low amount.

The harvest method is also an important factor that can determine the price of the olive oil. Picking olives by hand is much more labour intensive than harvesting with machines.

So the price the farmer gets for his olive oil should actually be much higher. That is why most farmers keep their olive oil for their own use and for family and friends.

Fair price

There is a lot of manipulating with the price of olive oil in e.g. supermarkets. Manufacturers of well-known olive oil brands have regularly been criticized for selling "Extra Virgin" olive oil that did not meet the associated quality

standards. These big industrial companies buy and mix the cheapest olive oil anywhere and sell it.

Buying olive oil directly from an olive oil factory is also no guarantee of good quality. The factory receives a percentage of the olive oil for pressing from the farmers and this oil is stored in large stainless steel barrels. This oil is therefore a mix of different types of olive oil. They are all cold pressed in the same factory, but the quality of the olives can be very different, so can the quality of the olive oil.

If the oil meets the standards of the IOC with regard to pressing and acidity, this olive oil may be called “Extra virgin”. Only then you can wonder what is the taste of this olive oil and what about the amount of polyphenols? And what is the colour and how long has the olive oil been stored in the barrel?

It sometimes happens that a farmer pays the olive oil factory for pressing with olive oil that he has had in plastic barrels at home for a few years and not with the olive oil that is being pressed at that time.



Olive oil from Kournas

In our shop Mandali we have 3 types of “extra virgin” olive oil and each type comes from one and the same farmer who takes good care of his olive trees and who is proud of his quality product. We believe that these products deserve a good price and are therefore we are happy to pay the farmer a higher price, so that he can continue to take good care of his olive groves.

If you are looking for olive oil, choose quality over quantity and you don't buy good quality for a low price.

Hippocrates (460-373 BC), the founder of Western medicine said it already, **“Let your food be your medicine and your medicine your food”**.

In short, this was the process from olive to olive oil. Of course this story is not complete and there is so much more to tell about the olives, the harvest and the working method.

I think this information makes it easier for you to choose a good olive oil and I hope it is clear that you can't buy a good olive oil for a few euros.

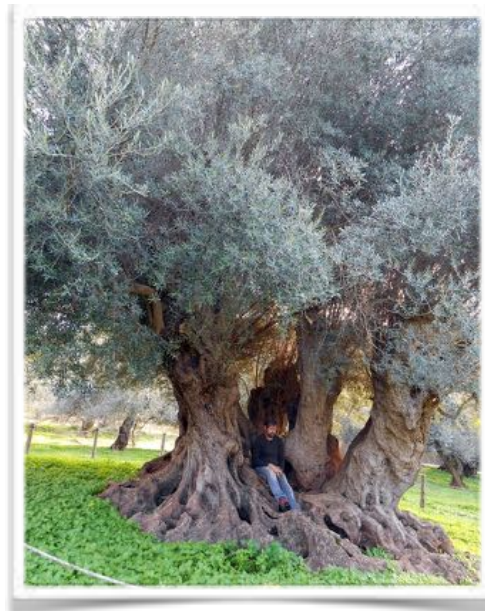
Do you have questions or do you want to see with your own eyes how the harvesting is done and how the different olive oil factories press the olives? Or would you like to help with the harvest?

Write me an **email**, I will be happy to answer your questions.

We are happy to help with the harvest from friends and acquaintances. At farmer Stelios we were allowed to make a photo shoot and the result was a photo album. This allows us to show our customers how the olive turns into oil. You also can see the album on the internet via **this link**. On our **website** you will also find information about olive oil, olives and many more healthy products from Crete.

Would you like to stay informed about our activities, our shop Mandali and our 4 donkeys? Then register for our **Mandali Mail newsletter**.

Best regards,
Barbara



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Kournas 73007
Crete, Greece