

IN THIS CHAPTER

- » Examining the ancient origins of olive oil
- » Discovering how olive oil has been used in food, medicine, spirituality, and culture
- » Understanding the evolution of olive oil in modern times

Chapter **1**

Exploring the Story of Olive Oil

To understand what the olive tree and olive oil means to people who have grown up in its shade, it's important to know how the tree and its fruit have shaped the lives and cultural heritage of their ancestors. The olive tree is deeply rooted in the landscape and the traditions of the Mediterranean regions where it has flourished for millennia, and its history is deeply intertwined with the development of human civilization.

Throughout history, olive oil as a culinary ingredient was of great importance in cooking, and its health benefits were very much valued. In addition to olive oil, other olive products are also found in the entire region. Olives, olive wood, and olive pomace are used to make everything from food and furniture to fuel and soap.

This chapter journeys across time and continents to explore the history and significance of olive oil. It explains how olive oil has been used in food, medicine, and culture historically and in modern times.

Defining the Olive Tree throughout its History

The history of the relationship between humankind and the olive tree stretches back many millennia. There is archaeological evidence suggesting that people in the countries of the Eastern Mediterranean consumed olives in neolithic times, as well as using the wood for fire. It's likely that curing or fermenting techniques to reduce the natural bitterness of olives would have been known to communities during this time. Though these processes would be refined and improved particularly in the Roman period, the use of wood ash with brine to cure the fruit to make them more palatable was widespread. By the fourth millennium BCE, there is evidence to show the systematic harvesting and crushing of olives for oil. And by the Bronze Age, this was a well-established technique to produce oil for food, cosmetics, and lamp fuel.

From wilderness to farm

When humans started to farm rather than moving to hunt and gather food about 10,000 years ago, the wild olive tree, probably originating from Persia and Mesopotamia, was among the earliest plant species to be domesticated and planted in the so-called *fertile crescent*. The fertile crescent included lands that now span from Iran and Iraq to Syria, Jordan, Lebanon, Israel, and Palestine. Archeologists have found olive pits suggesting that the olive trees in those areas were first domesticated 8,000 years ago. Selective breeding ensured that the hardiest and most productive trees — *Olea europaea* — survived. Known as the common olive, it's a variety of an evergreen tree native to the Mediterranean region that is still growing today with its various subspecies and regional varieties.

Farming also allowed people to experiment with new agricultural techniques and improve milling to get the most oil from the olives. Olive presses were larger and became valued and protected resources near to the communities they served. Stone wheels often moved in circles by harnessed donkeys or mules became the most efficient way of crushing the olives ahead of “pressing” them and separating juice (or oil) from the flesh, pit,

and skin. Evidence of this method being used dates from 6,000 years ago and widely practiced until the early part of the last century. (An ancient press is shown in Figure 1-1.) Traditionally, each community had its own mill. Locals brought their recently harvested olives to their local mills for pressing. For this reason, there is a deep desire among people in the Mediterranean region to use “their own oil,” even today. People who live in olive-producing areas have long-lasting ties with a local, “trustworthy” mill. They bring their olives to that mill — often watching the oil being extracted — and later with their families enjoy the oil throughout the year. This way they ensure the best quality, flavors of choice, and freshest oil possible.



FIGURE 1-1:
An ancient
press in
Volubilis,
Morocco.



TIP

There are some olive oils that are still produced using ancient milling techniques. This can produce some good quality oils, but greater care needs to be taken to ensure that it is not spoiled. When visiting olive oil — producing countries, it can be a fun and informative experience to visit both modern and ancient mills. Modern methods of milling are generally much more efficient, protecting and preserving the flavor and health benefits of extra-virgin olive oil. This is discussed in greater detail in Chapter 3.

Olive trees can live for hundreds, and sometimes thousands of years. In each Mediterranean culture, the ancient trees are viewed with more prestige and importance. There are names in each language specifically dedicated to the trees that are

hundreds of years and thousands of years old. Oil that comes from those trees is extremely valuable culturally and commands higher prices when sold. In Italy, for example, *secolari* is the term used to describe trees that are hundreds of years old and *millenari* is the word used to describe trees that are thousands of years old. Olive trees are extraordinarily resilient, having adapted to thrive in harsh environments and can produce new shoots even after devastating droughts or fires. It's extraordinary to think that some trees are so ancient that they date back perhaps three thousand years. Their gnarled massive, beautiful forms are imposing and often are a symbol to local people of their own history and survival.

From ship to shore

In the late Bronze Age, from around 1200 BCE, Phoenician sailors and traders from what is now Lebanon established colonies and trading posts throughout the Mediterranean to North Africa, Sicily, and the Iberian Peninsula. Historians believe they played an important role in expanding olive cultivation and milling across the Mediterranean. Archeologists often find evidence of olive oil production and typical storage jars called *amphorae* at sites and in cities that were founded by these masterful merchants and explorers. One of the recipes found in the jars was the now trendy aioli sauce, which Chef Amy teaches you how to make in Chapter 17.

Although they aren't talked about very often on a daily basis, the Phoenicians' legacy in spreading the olive tree and its cultivation practices is a testament to their role as key players in the agricultural and economic history of the Mediterranean. Many of the similarities in Mediterranean cuisine are a result of their commercial efforts.

Shaping ancient empires

In cultures such as Ancient Persia, Egypt, Greece, and Magna Grecia in the fourth millennium BCE, olive oil played a vital role as a food and important source of nutrition. It was fundamental to the economy of the expanding empire and was not only a cornerstone of everyday life but also had profound religious and symbolic meaning.

Ancient Egypt

By the fourth millennium BCE, the ancient Egyptians were using olive oil not only for culinary purposes, but also for cosmetics and perfumes. Since perfume making was so important to Mediterranean trade at that time, the role of olive oil in its production made olives an even more significant crop, surpassing even the grape in importance. According to the Egyptians it was the goddess Isis, sister and wife of Osiris, who taught humans how to grow olive trees and extract their oil. The ancient Egyptians cultivated many olive orchards. An inscription on a temple dedicated to the god Ra dating from the twelfth century BCE during the rule of Ramses II describes the olive orchards around the city of Heliopolis producing pure oil, the best quality in all of Egypt, for lighting the lamps in sacred places.

Ancient Greece

During this time, the olive became a more important crop than the grape. Mycenaean tablets mentioning olive trees dating 3,500 years ago were found on the Greek island of Crete along with amphoras at the Palace of Knossos. An example of a Greek amphora is shown in Figure 1-2.

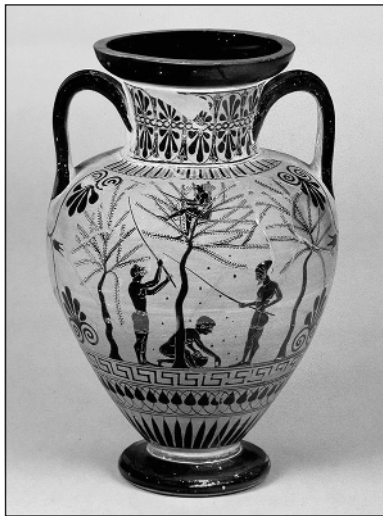


FIGURE 1-2:
An Ancient
Greek
amphora
depicting
olive
harvesting.

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REMEMBER

In the traditional diet of Crete, where scientists first described the Mediterranean diet, it is said that 70 percent of total fat consumption comes from olive oil. Mediterranean cuisine “swims” in olive oil. The culinary term *lathera*, translated as “the ones with oil,” is a traditional Greek cooking method and category of dishes. The dishes are integral to the Mediterranean diet and particularly the Cretan diet, being rich in olive oil, often with tomatoes, onions, beans, other vegetables, various herbs and spices, and bread for soaking up the oil. The olive oil not only serves as the cooking medium but also adds significant flavor and nutritional value to the dishes.

Athens was the birthplace for Greek olive oil. Olive tree depictions also decorated the walls of ancient Egyptian and Greek palaces. Olive oil during this time was used as fuel for lamps, to clean and moisturize the body, as well as for a balsam for wounds and in perfumes. Aristotle himself promoted the divine powers of olive oil, using it to anoint himself before he met with his disciples, believing that it would give him increased knowledge and confidence during debates. In Athens, the revered goddess Athena gave the founders of the city the fruit and oil of the olive tree to nourish and sustain them (see Figure 1-3), leading to the creation of an empire as well as the naming of the city.

Ever since, the olive tree was central to the genesis mythology of Athens and also featured large in other legends and tales. In 480 BCE following the battle of Salamis, the general Themistocles recaptured the Acropolis, which had been burned to the ground by the invading Persian army. A sacred tree atop the hill was said to have immediately grown healthy, fresh buds from its charred remains that represented fresh hope and the promise of a bright future to those who rebuilt the city. To the Greek poet Homer, olive oil was nothing less than “liquid gold.”

After thousands of years of promotion by philosophers, gods, goddesses, and demigods alike, olive oil continued to be highly valued and prized throughout the Mediterranean and Asia Minor. In its purest form, it was used as a medicine and food. It also provided health and cleansing of the skin, including bathing rituals of athletes, and could be used as oil for handheld clay lamps, a lubricant and even a base for paints. It was offered to the gods and was central to many religious ceremonies. Victorious Olympic athletes would be adorned with olive leaf wreaths and perhaps even more welcome was the prize of

quantities of olive oil worth a small fortune. Olive groves were a common sight in the Greek countryside, and laws were even enacted to protect these valuable trees. The olive branch remains a symbol of peace and prosperity, a legacy that can be traced back to its revered status in ancient Greece. It is extraordinary to think that the oldest living olive tree in Crete is estimated to predate the first ancient games.



FIGURE 1-3:
Amy with
“the sacred
trees of
Athena,”
Acropolis,
Athens.

Physicians and philosophers, including the “father of medicine” Hippocrates, knew of the contribution of olive oil to good nutrition and health, referring to it as “the great healer,” and it was regularly included in recipes and medicines used to cure ailments. Olive oil was also considered to sooth the spirit and calm the mind as well as treat earaches, hemorrhoids, and sunburn; reverse baldness; alleviate the bites of mythical or real sea creatures; and ward off evil spirits.

Aristotle contemporary and philosopher Theophrastus, born in Lesbos, was the first Greek author to write a treatise on the

“Maintenance of One’s Body” and in particular on the use of ointments and perfumes. He was the first to coin the term “botany” and understood it as a science that studies plants and their healing power. According to Theophrastus, the *unguentum*, an ancient Latin word for perfumed ointment, must be composed as follows: a fatty base of animal origin and one of vegetal origin (olive oil); the resin as a fixative; salts; and essences extracted from flower petals with the so-called “Enfleurance.”

Modern medicinal uses of olive oil are considered in Chapter 7.

The Roman Empire

The Ancient Greeks were efficient at producing and using olive oil, but the Romans took it to the next level by increasing production and expanding its use to a much wider area. Feeding the vast empire relied on sophisticated logistics of production and transportation of important staples like grain, wine, and olive oil. In fact, those three items became the pantry staples of what would later become known as the Mediterranean diet. By combining freshly harvested local produce and dairy with grains, wine, and olive oil, the ancients laid the foundation for the world’s healthiest eating plan.

Following Julius Caesar’s return to Rome after defeating his enemies in modern-day Tunisia, the Greek philosopher Plutarch observed that Caesar’s first reaction was to make a speech to the people in order to impress them with his victory. Caesar claimed that he had conquered a country large enough to supply the public every year with 200,000 Attic bushels (an old measurement) of grain and three million pounds of olive oil. Olive oil production on a large scale could generate great wealth and political leverage in Roman times. There were significant advances in the technology of oil production with the emergence of screw presses, the mechanism of which increased pressure and improved yield.

During the latter half of the first century CE, Pedanius Dioscorides, a military physician under the Roman Emperor Nero, known as the “father of pharmacognosy,” (the study of medicines from natural sources), advocated the use of the early harvest, bitterest, “greenest” olive oil for conditions that may have had an inflammatory basis. This ancient doctor did not

apply modern medical methods to prove his beliefs, but it can be observed that his oil was likely to be richest in anti-inflammatory compounds, which is discussed in detail on Chapter 6.

The Romans were experts in agriculture and the writer Pliny the Elder in his book *Natural History* described the way in which olives should be grown and even categorized olive oil according to quality in a classification, which is quite similar to modern chemical and sensory grading. Coincidentally, the oldest preserved olive oil in the world, now in a museum on Naples, was discovered close to where the author met his death in the devastating eruption of Vesuvius at Pompeii in 79 CE.

At the time, the city of Naples was heavily influenced by Greek culture. Nero used to recite in Greek, not Latin, in Rome's amphitheaters, and writers of the time dubbed it as a city in which "one could live and die in the manner of the Greeks."

Religious and culinary influences

In the Mediterranean, the ancient traditions of using olive oil as a healthy food continued alongside the symbolic and cultural importance of the olive tree in religion and culture. Olive oil and the olive tree had an important place in ceremonies and mythology, including giving the strength to Hercules, not least in his fearsome club of olive wood. The olive leaf and branch continued to have symbolic meaning, including signifying peace and hope.

The topic of the historical religious appreciation of olive oil deserves a book of its own, as olive oil has a revered position in three monotheistic faiths — Christianity, Judaism, and Islam — as well as in ancient worshipping traditions. The Bible refers to the olive tree as "the key of trees" and the "tree of life." It is mentioned on numerous occasions in the Qur'an and the Bible. From an olive branch brought by a dove as a sign of peace to Noah in the Old Testament, to events on the Mount of Olives in the New Testament, and the description of the olive representing the gifts of variety and abundance in the Qur'an, the olive tree has a special and sacred status to many people of faith.

The reason why olive branches were used as symbols of peace in the Mediterranean since antiquity is because it took 20 years for them to bear fruit. Olive trees weren't planted in areas where people couldn't establish long-term settlements (meaning areas of conflict). For this reason, olive trees became associated with peace from a practical sense as well as a spiritual one. Hanukkah commemorates the miracle of one day's worth of olive oil lasting eight nights as recorded in the Talmud. Christians use olive oil to consecrate crowned rulers and church dignitaries. According to Islamic tradition, the Prophet Muhammad is said to have proclaimed, "Take oil of olive and massage with it. It is a blessed tree." In antiquity, olive oil was coveted as an ointment, fragrance, and an essential element of religious ceremonies in addition to its flavor and nutritional uses.

PROTECTING A CENTRAL MILL BEHIND STONEWALLS

The value of olive oil in antiquity can't be overstated. A few years ago, a local farmer in a remote part of Jordan was expanding his olive grove on a high plateau when he came across stonework, which was obviously of great historical importance. Archeologists from the capital Amman, in partnership with the British Museum, soon established this site to be a significant, heavily defended and protected structure dating back to the Bronze Age — 4,500 years ago. This seemed odd because it was known that at that point in history, raids by the Egyptians had decimated large settlements in the area, the result of which was "urban collapse" and the retreat of populations to rural areas.

Living in smaller, scattered locations reduced the likelihood of attack, so there was less need to build thick walls for defense. The walls here seemed to be different, and as the soil was carefully removed, it became apparent that this was an ancient olive press for the area. No doubt, bringing large quantities of harvested olives over the space of a few weeks to a central mill for the production of valuable olive oil made it a very real target for attack. It's easy to imagine people in those ancient times bringing their precious fruit to a place of safety for the production of olive oil, reassured as they made their way up the hill past heavily armed guards and the solid walls of the olive mill.

Northern and Central European writers and artists began documenting olive trees in their famous works during the nineteenth and twentieth centuries. Featured in the poetry of Wilde and Yeats and the paintings of leading artists, the allure of olive trees could not be ignored. Vincent van Gogh, the Dutch post-impressionist painter, held a deep fascination and reverence for olive trees, for whom they held a sense of history and awe (see Figure 1-4). He struggled to capture their intricateness and beauty, especially the shimmering silver of the underside of the leaf.



FIGURE 1-4:
Olive groves
painting by
Vincent
van Gogh.

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Much of what we know about olive oil and the deepening of its usage is due to the many Muslim Caliphates and empires that ruled in the Mediterranean.

There are many surviving Medieval Arabic culinary texts that provide a wealth of knowledge into this much overlooked area of Mediterranean culinary history by the West. During the Medieval period it is the reign of the Abbasid Caliphate, which set trends from Baghdad to modern Spain. In fact, the palace meals were so lavish during the time that the Muslim prince Abd al-Rahman hired his chief cook and trendsetter, nicknamed Ziryab, to bring his knowledge and insights to the courts of Andalusia in the ninth century CE. Thanks to Ziryab, whose real name was Abu al-Hasan, Andalusia gained music (he was credited for

inventing the lute), fashion styles, rich garden architecture, numerous elevated recipes, and “new” ingredients such as rice, saffron, spices, and hibiscus procured from Egypt.

When combined with the olives and olive oil tradition already deeply rooted in Spain thanks to the Romans, Medieval Spanish and practices introduced from Iraq, as well as the cuisine of the lands under their empire, gained many layers of flavor and intricacy. Marinated olives in herbs were served on the table of Ibrāhīm ibn al-Mahdī, an eighth century CE Abbasid prince, singer, composer and poet, just as they are served across the Mediterranean today. The Abbasid caliphate based much of their cuisine on the Persian tradition. Vegetables sautéed in olive oil and then finished off with vinegar were very popular at the time. The Bedouin method of roasting lamb in olive oil also continued to flourish. Simple recipes for items such as bulgur with lentils, garlic sauce, chicken with olives, and meat and stuffed olive stew used at least $\frac{1}{4}$ cup of olive oil for a recipe that serves four. Original Moroccan recipes for tajines with vegetables such as cardoons (similar flavor to artichokes) were created to test the quality of the new olive harvest.

In the tenth century, for example when Fatimid rulers from modern-day Tunisia ruled from Sicily and Tunisia and as far East as Mecca, they used to promote cross-cultural religious festivities. They would encourage people of all faiths to come out and partake in the merrymaking of religious festivities of their neighbors. Because of the multi-religious populations of the Mediterranean region, which were ruled by different groups, cooking with olive oil continued to be a way in which to create cuisine that could be enjoyed by all. During Orthodox fasting periods, for example, animal fat is prohibited and meals that were once cooked with meat or animal fat were now replaced with olive oil. The Jewish community also embraced these dishes because they were meat-free options, ensuring that no non-kosher animal products were part of the dishes.

Court rulers who held dinners for large multi-national organizations needed to ensure that all of their guests could partake in the lavish foods that they were serving, despite their religious origins. By the end of the Ottoman Empire (fifteenth through nineteenth centuries CE) an entire category of olive oil-based dishes called *Zeytinyağlı* emerged and is still

popular in modern Turkiye today. In fact, internationally acclaimed chef, humanitarian, and restaurateur José Andrés named one of his restaurant concepts Zaytinia in Washington, DC, after it.

The most popular of these olive oil–laden dishes that graced the tables of Ottoman palaces included artichokes and string beans braised in olive oil. While the ingredients are few, it is the manner of cooking the vegetables that makes them “sing.” And modern Turkish cooks follow strict guidelines in order to make the recipes live up to their legacy. Sometimes rice and tomatoes are added to the dishes, and they are usually served at room temperature. Garnished with dill or parsley, these recipes are still a testament to Medieval cooking and the capacity for food to be both delicious and nutritious. Vegetables, legumes, grains, cheese, and extra-virgin olive oil continued to nourish and entice palates and feed the masses in the Mediterranean during the Middle Ages as in ancient times.

Recognizing the New World of Olive Oil

With the “discovery” of the Americas by ships launched from Spain and Portugal came a new chapter in the expansion of the olive tree. Those who love the olive tree and olive oil and who inhabit parts of the world with a climate similar to the Mediterranean have for centuries experimented with growing and harvesting its fruit in new regions. In general, this hardy tree can survive and flourish where summers are hot and dry, with mild and often wet winters. Although there will always be localized variations in climate, these conditions are often found between 30- and 45-degree latitudes both north and south of the equator as shown in Figure 1-5.

Groves going west

In the sixteenth century the great powers of Spain and Portugal began to explore and colonize the Americas. Early settlers in Argentina, Chile and Peru found the climate in the Southern

Hemisphere conducive to agriculture they were familiar with at home and brought with them vines for wine cultivation and olive trees for olives and olive oil. The first olive cuttings were brought to California in the late eighteenth century by Franciscan missionaries. More recently, olive oil production has expanded to other regions including Florida and Texas in the United States, and countries like Uruguay, Brazil, and Mexico in Central and South America.

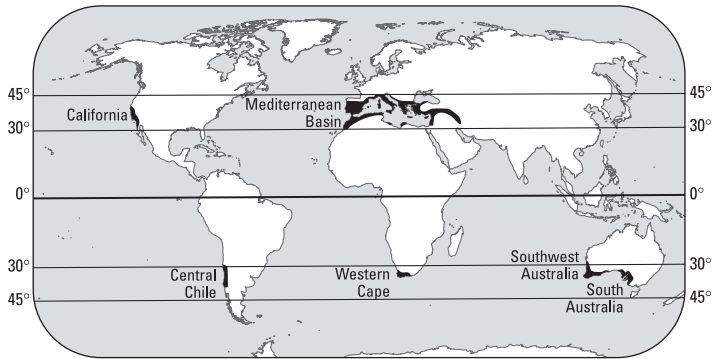


FIGURE 1-5:
Map of
latitudes
where olive
trees thrive.

Thomas Jefferson, the third President of the United States, encountered olive oil during his time as a diplomat in Southern France and considered the olive tree to be “surely the greatest gift of heaven.” He was also an advocate of excellence in nutrition. Unfortunately, the climate thwarted his attempts to establish a working olive grove at his Monticello estate in Virginia.

Nowadays the California olive oil industry has emerged as a major player in the global marketplace. Olive oil is one of the most important of the state’s 350 agricultural products. According to the California Olive Council, the modern industry includes 75 different varieties of olives. Known for having a great variety, creative blends, and tasty flavor profiles, the unique *terroir* (soil, environment, and climate) of Californian olive oils distinguishes them from oils made of the same varieties in other places. Despite the large amount of olive oil that California produces, American demand is still far greater than the supply, making it necessary to import olive oil from the Mediterranean region and from other areas of the world.

Expansion into Asia and beyond

The expansion from traditional growing areas in the Mediterranean to South and East Asia is a more recent phenomenon, mainly occurring in the twentieth and twenty-first centuries.

India has seen experimental and commercial planting of olive trees, especially in the states of Rajasthan and Gujarat. The initiative, often supported by collaboration with experts from established areas of production, aims to tap into the growing domestic demand for olive oil in India and explore export possibilities. China has also embraced olive cultivation, with regions like Sichuan province becoming centers for olive production.

The Japanese consume more olive oil per person than other Asian countries. This is mainly imported. However, there is some local production which began in 1908 on the island of Shodoshima in the Seto Inland Sea, which enjoys a moderate climate that allows olive cultivation.

Regions with a climate similar to the Mediterranean are often suitable for wine production, and so it is no coincidence that the cultivation of vines and olive trees often goes hand in hand. Australia and New Zealand, with vast areas of land potentially available, are now not only famous for large scale production of wines, but also production of high-quality olive oil. Olive oil production on this scale has been introduced relatively recently in comparison to winemaking, but the 1990s saw significant planting and investment in large scale facilities for olive oil production.

Olive oil in Africa

Countries on the North Coast of Africa bordering the Mediterranean Sea, including Tunisia, Algeria, Morocco and Libya were central to the early story of olive oil cultivation and production and its story is included in our narrative above.

In the Southern Hemisphere, African olive oil production is a more recent development.

The first recorded attempt at olive oil production in South Africa dates back to the sixteenth century, when Jan van Riebeeck, commander and founder of Cape Town, in 1655 attempted to produce foods that would sustain Dutch trading ships sailing around the Cape of Good Hope to the Dutch East Indies. However, it wasn't until much later, in the nineteenth century, that olive cultivation became more established in South Africa, with several farms in the Paarl and Stellenbosch regions planting olive trees, resulting in the wine and olive route journeys possible today (see Figure 1-6).



FIGURE 1-6:
An olive grove in the Cape area of South Africa.