SPECIAL ISSUE OCTOBER 2023

Global Retail Brands

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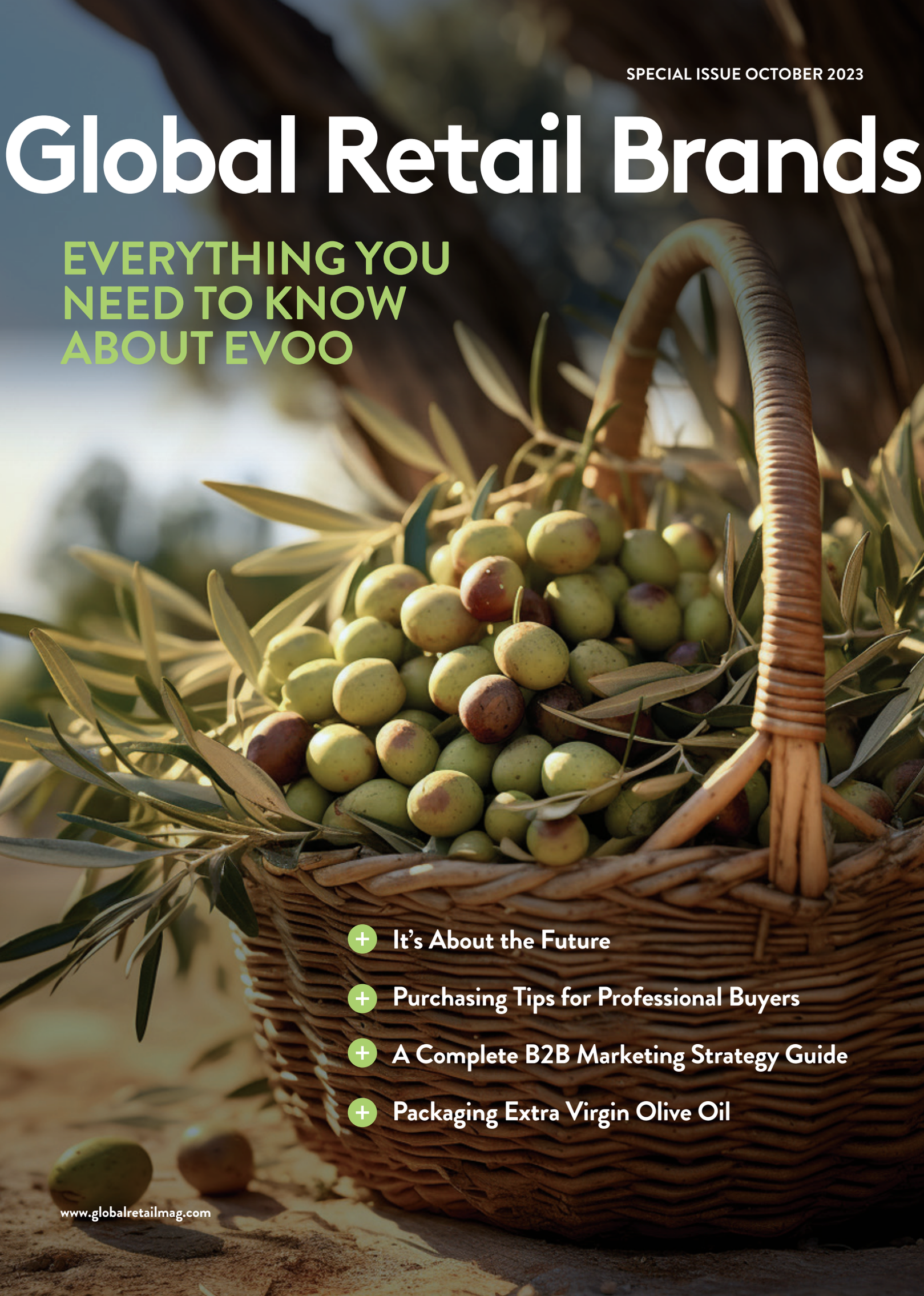

- It's About the Future
- Purchasing Tips for Professional Buyers
- A Complete B2B Marketing Strategy Guide
- Packaging Extra Virgin Olive Oil

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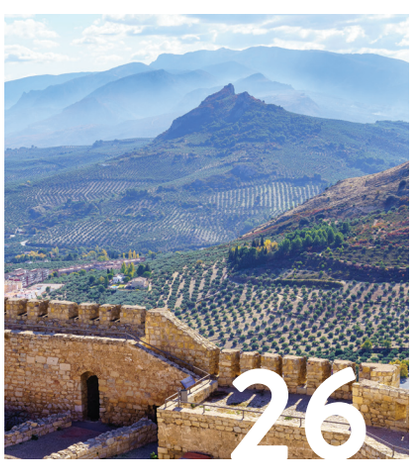





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INTRODUCTION

There's no doubt that the global olive oil market is huge. Currently valued at over $14.5 Billion USD and expected to surpass $20 Billion in less than 10 years. Farmers, producers, brokers, importers, retailers and consumers all have a stake.

But as large as this market is, dependable knowledge remains somewhat elusive. And where education lacks, unethical practices and misinformation often fill the void. The more one knows about olive, the better the outcome. This is true for consumers and retailers alike.

And that leads us to the publication you are ready right now. In April of 2022 we had the opportunity to get the know some of the executives at Certified Origins, the olive oil company Headquartered in Grosseto, Italy, with sub-headquarters in the US and Spain and offices in China and Mexico.

It became clear that this was no ordinary Olive Oil company, but instead, a fully-integrated one, built on integrity, tradition, ethics, sustainability, traceability and so much more.

A meeting with Giovanni Quaratesi, Head of Global Corporate Affairs, during the PLMA Show in Chicago last year was quite educational for me. Long story short, it led to this Special Issue of *Global Retail Brands.* The publication has but one mission. Provide information that retailers can use to make the right decisions for their olive oil programs. We've done this by allowing independent experts from different professional and geographical areas, a free space for sharing ideas and opinions.

We are grateful to Giovanni, Miljana Tosic, Creative Director and Gerard Jara, CEO and his team for their willingness to embark on this project and their tireless effort to make this publication a tool for good. Their devotion to this project is indicative of their devotion to your olive oil program.

Kind regards,

Phillip Russo
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IT'S ABOUT THE FUTURE. EVEN IN OLIVE OIL.



"The Italians buy our olive oil, put it in a nice bottle and sell it as Italian for twice the price"

The first time I heard this, I was 22 years old and a rookie to the olive oil industry. It was my first serious job. In Spain.

During my school years, I had the opportunity to do an Erasmus exchange in Montpellier (France), and in Modena (Italy). I was very much in love with France and Italy. So, those complaints and accusatory words hurt like unmatched love. A tender heart, for sure.

Was it true? How come all the Italians were cheating in the industry? That wasn't the Italy I had fallen in love with. And most unfairly, why was the Spanish olive oil less appreciated than the Italian? Damn it, we Spaniards deserved better.

When I turned 23, I made my first business trip to Italy. I was something in-between of a junior assistant buyer and a handy translator. Yes, I made contact with "the Italians". Those that in a generic way "the Spaniards" blamed for taking advantage of all the Spanish growers and exporters. Right, the whole Spanish olive oil industry, while at war with one another, were always ready to unite against foreign enemies.

And that's when I met sixty years old Carlo Carapelli and forty-five years old Massimo Neri.

Carlo looked like the Italian version of Woody Allen. Smart, kind, somewhat distracted. Extremely knowledgeable. The kind of knowledge that comes with a deep and clear understanding of the product and global market dynamics. As a life-long export-broker, Carlo had seen it all.

Massimo was a big smiling guy. As President of Oleificio Maremmano or Olma, the most important Tuscan grower Cooperative, Massimo was a true Community Leader. Bigger than life, Massimo represented the interests of over a thousand families in the less developed south of Tuscany Maremma shire.

"Gerard, the Siena-Firenze Tuscan folks, they are the fancy ones. We at Maremma have been there for centuries, since the Medici, the real food producers in Tuscany".

And there I was, naive 23 years old me, looking at both Carlo and Massimo with wide eyes and making sure no Italian word went misunderstood. Caution Gerard, I kept telling myself...remember you're on the other side of the border now. Careful!

I was fortunate to spend frequent and long stays with Carlo and Massimo. Getting lost finding my way around Tuscany long before I became a much less sharp driver thanks to Google Maps. Eating around, talking to people, spending time at Olma's mill.



Photo by Stefania - stock.adobe.com

During those days, Massimo explained to me how thousands of small olive oil farmers in rural Tuscany, and also Italy, were being taken advantage of by bottlers, exporters, importers and distributors alike. Everyone coveted the brand Toscano, "from Tuscany". And so, many brands and exporters were misrepresenting to consumers olive oil bottles that somehow called for Tuscan products while using non-Tuscan olive oil. During those days, Carlo taught me the importance of geography in global trade. "Look at the map" he kept telling me. Italy is at the center of the Mediterranean. Close to Greece, literally a few hours on a boat to Tunisia and very close to Spain. He challenged me with simple questions: why is it that Italian coffee is so well known everywhere? There's not one single coffee plant in our country. Why is it, Gerard?"

My relationship with Carlo ended because of incompatible trade choices. My relationship with Massimo evolved and grew. We became business partners and founded Certified Origins, a wonderful company which Massimo has masterly guided until his passing in November 2022.

From both mentor Carlo and dear friend Massimo, I inherited love for authentic, great-tasting Extra Virgin Olive Oil. It's part of my every day. The little smile that leads to joy when dressing my food with fresh EVOO. And yes, while my heart and taste buds rejoice in my favourite IGP Toscano extra virgin olive oil, I can testify that where there's true passion and mother nature helps a little bit, you can produce great EVOOs too.

My apologies. This article is meant to be about the Future of Olive Oil, and all I've done is talk about the past. Yet, when looking at the future, I can't help but think about where my experience comes from.

And what I see in the past is this ancient, slowly fading noise of struggle, tension and animosity both among players and countries...

What I see is the long and rewarding path we've walked together. Uniting growers from Tuscany with growers from Puglia and Sicliy. Bringing together traditional growers from Tarragona, Córdoba and Jaén in Spain and from Crete in Greece. Partnering with extraordinary Spanish/Portuguese high-intensity producers. On-boarding growers from beautiful Tunisia and now opening relationships with many other wonderful and passionate olive growers globally.

And I see love. Much love. For families, cooperatives, towns, shires, and countries. For food. Good food. The kind made with wholesome, sustainable, and authentic ingredients.



Certified Origins bottling facility in Italy, Tuscany

Large financial funds have recently invested in super-high-density groves. Large global financial and industrial players have taken positions in olive oil brands. Large grower Coops are leveraging their positions through increasing consolidation. Old family-closed groups continue to do their best to manage their legacy. And new players continue to disrupt with innovative versions of old ideas.

My safe, not-so-smart bet is that the future of olive oil will be what we all make of it.

Yet, and for some reason, I think Spaniards will probably continue to blame Italians. And Italians will probably continue blaming everyone outside Italy. And growers everywhere will continue struggling and complaining about how traders, bottlers and retailers alike treat them and viceversa...

It wouldn't be that much fun otherwise, would it?



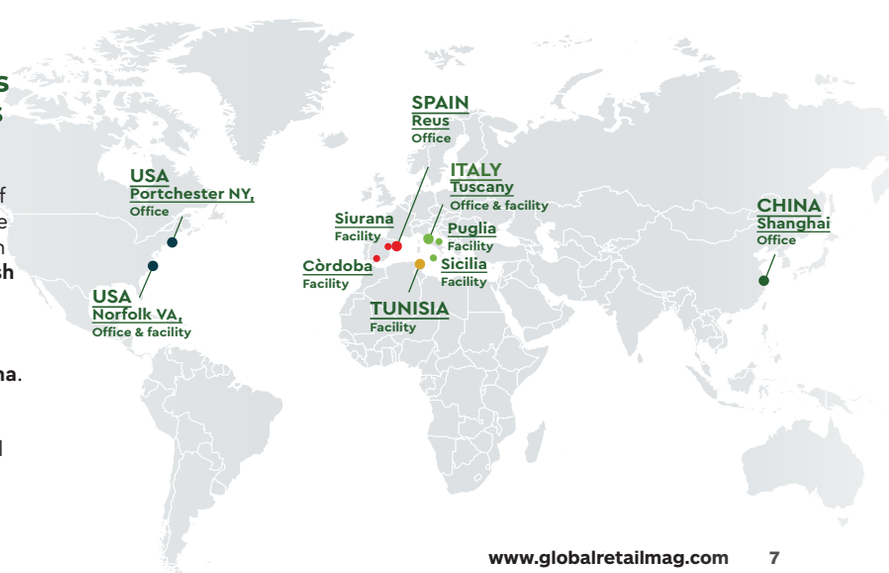
Gerard Jara is one of the co-founders and currently CEO of Certified Origins with more than 25 years of experience in the Olive Oil industry.

Certified Origins

Quality Foods
Traceable Sources
Authentic Origins

Certified Origins was born in 2006 thanks to the union of the two largest cooperatives of Tuscan Extra Virgin Olive Oil in Italy, and a solid entrepreneurial organization, with **one single goal: to source, produce, and distribute fresh and authentic EVOO to families everywhere**.

Today, Certified Origins is a multinational organization, with branches in **Italy, Spain, the USA, Mexico, and China**. With **production facilities in Europe and the USA**, it is now the **partner of leading retailers in the world**, developing successful Extra Virgin Olive Oil private label programs, and growing the category globally.



THE VALUE OF EXTRA VIRGIN OLIVE OIL

When thinking about markets, much consideration goes to the issue of cost. We spend a lot of time with the cost of goods, and prices for the consumer. In the midst of all that, it can be easy to lose sight of a related but distinct issue: that of value. It is easy to cite the price of a product, but sometimes that can be a poor measure of its value.

The value of something can differ greatly from one person to another. The bigger meaning of the word expresses this: we talk about someone's values to describe a whole set of standards, beliefs and priorities. Although it's common to think of product value in numerical terms, we miss a great opportunity if we lose sight of this larger landscape.

Extra virgin olive oil lends itself brilliantly to this broader perspective; in the world of olive oil, extra virgin is the star. If we talk about value as a big concept, few foods compare. Let's look at this from the consumer's side: what are they looking for and what can extra virgin olive oil offer.





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Seniors, parents and health-conscious consumers

Awareness of olive oil's healthfulness is widespread. Olive oil's monounsaturated good fats have well established heart-health benefits. There is also a growing body of research suggesting that the antioxidants and polyphenols found in extra virgin olive oil have additional benefits, protecting against lipid oxidation and numerous diseases such as diabetes and cancer. Research is also showing brain health benefits including protection against Alzheimer's Disease and dementia.

Another aspect of olive oil's health value is frequently overlooked: olive oil makes vegetables, legumes and other healthy plant foods taste delicious! The health benefits of a plant-forward diet are shown by the well-researched and widely recognized Mediterranean Diet pattern of eating—which features olive oil as the essential primary fat.



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Advocates for environmental responsibility

A steadily growing sector of the buying public is looking to make choices that are better for the planet. People are thinking about the impacts of their food on climate change, opting for fewer animal products and supporting sustainable and regenerative agriculture. Olive oil is a stand-out in the world of fats in general and vegetable oils in particular.

For openers, olives are a permanent perennial crop, unlike sunflower, corn, rapeseed (canola), safflower and soy. Permanent crops can protect biodiversity, maintain soil cover, benefit the soil structure and biome with deeper root systems, use water more efficiently, and use less fertilizer and energy. Olive trees are also exceptionally good at storing carbon. The International Olive Council found in a 2018 study that one liter of olive oil captures 10.64 kg of atmospheric carbon dioxide, and that the world production of olive oil could absorb the emissions of a city of more than 7 million inhabitants such as Hong Kong. One hectare (2.2 acres) of olives cancels out one person's carbon footprint.

Another aspect of olive oil worth noting is that unlike the major seed oils, it is never solvent extracted. Hexane—a petroleum-based solvent—is used in the extraction of the vast majority of vegetable oil whereas olive oil is always mechanically extracted. And extra virgin olive oil is always unrefined—again a point of difference with most vegetable oils—so there is no additional energy needed for refining.

Even among trees, olives are a famously thrifty crop, using far less water and fertilizer than other tree fruits and nuts. They require less pesticide use, too, especially if integrated into a biodiverse agroforest.

Diners who want to know their farmer

For the consumer who puts a high value on preserving small farms and rural culture, olive oil can be a great choice. Although some olive oil production is done on a massive scale, there are many brands that source from smaller family farms. With a little bit of research, a consumer can find a product that connects directly to the farmer who grew the olives. There are range of traceability tools and programs to help consumers make this connection.

For the ultimate in traceability, the premium extra virgin category in particular is filled with producer-owned brands doing estate production. These can be estate grown, milled and bottled, or estate grown and custom milled elsewhere, but all of them represent the most intimate and passionate side of extra virgin olive oil production!

The adventurous epicure

For those who love a deep dive, extra virgin olive oil can be as fascinating and complex as wine. Like wine, it comes in different styles, made from many different cultivars, and found in both single varietals and in blends, as well as in traditional and new growing regions. For the food enthusiast, exploring the flavors and stories of extra virgin olive oils can be fascinating.

As with wine, the pairing of food and extra virgin olive oil is a whole world in itself. One of the reasons that so many people have their "olive oil epiphany" in Europe is that for many Americans, this is the first time they will taste a flavorful extra virgin olive oil used like a sauce at the table. It's a revelation: a delicious extra virgin is all it takes to transform a simple plate of white beans into a sublime flavor experience.

Extra virgin olive oil can be delicate and subtle, full of ripe fruit notes, or bright and bold, with dominant green fruit and pronounced bitter and peppery flavors that signal the presence of lots of healthful polyphenols. Experimenting with combinations to bring out the most in a dish is great fun. Those bold early-harvest oils can function as an accent, adding a touch of fresh herb aroma to a robust soup. A delicate oil will play nicely with tender salad greens. It's easy and natural to match the extra virgin olive oil with the cuisine from the same region, but it's equally enjoyable to mix it up!



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Alexandra Kicenik Devarenne is an olive oil consultant, judge, writer and educator. She has taught classes for Culinary Institute of America, IRTA (Catalonia), Olive Oil Sommeliers of Japan, UC Davis, and many others. At olive oil conferences and events in the US and abroad, she presents on olive oil sensory, communication, marketing and quality. She is the author of Olive Oil: A Field Guide and many articles for popular and scholarly publications and sites. She is director of Extra Virgin Alliance, the specialty olive oil section of the North American Olive Oil Association. Her consulting focuses on all aspects of improving olive oil quality, from helping clients select the best olive cultivars for their farms to creating outstanding blends and telling their story in the marketplace.

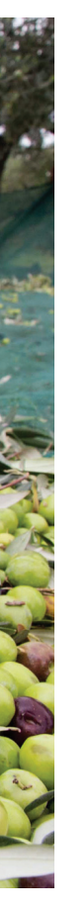




Olive oil growers in Tuscany

PACKAGING EXTRA VIRGIN OLIVE OIL

Is there a packaging solution that perfectly and internationally characterizes extra virgin olive oil? One that everyone can recognize as extra virgin olive oil's packaging? Let's see.



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Because of its history, culture, quality, and sustainability, including the association with the Mediterranean lifestyle and other values such as gastronomic pleasure and health, extra virgin olive oil deserves dedicated development and research in terms of packaging design. Consumers expect a perfect combination of nutritional and sensory values when they think about extra virgin olive oil. As one of the most sustainable products on the planet and because the process enhances the product in terms of the quality, consumer experience, and the economy of many rural areas, the role of packaging is crucial to enhancing the product's perceived value.

Preserving the characteristics of EVOO is not however easy for storage operators. Product requirements that influence oil's shelf life include the temperature of storage, light, oxygen, packaging material, color, shape, and container size. Storage temperature affects enzymatic reactions, accelerating the degradation also caused by exposure to oxygen. Light exposure contributes to the oxidations by stimulating the particle compounds such as chlorophylls, and such decomposition processes also affect the shelf life of the finished product (e.g 18 months from the date of bottling). There is much to consider when designing a package for extra virgin olive oil, and manufacturing companies are committing to research solutions to some of these challenges.



Bottles can become greasy with oil, leak, and appear damaged, all of which cause inconvenience for the consumer. From a technical standpoint, bottles for oil differ essentially by material, color, and size and they must protect the oil from light and oxygen, consequentially the dilemma arises such as plastic or glass? Plastic offers little protection from oxygen and they can cause problems in regard to the transfer of chemical compounds based on the polymer used or the thickness, just as tin can give problems of transfer in the points of the solder (tinplate). On the other hand, glass is inert and impermeable to gases, but it only partially protects from light.

Bottle size influences the shelf life as well. Creating correct ratio between product filled (ml) and bottle size (cm), and the headspace (%) is esential. In brief, bottle design has to effectively block light, and manage other variables, such as the ratio of surface area to volume of the container. Only then, can effective packaging solution can be realized. However how do you overcome lines process barriers that bind shapes, materials, and colors? While there is no perfect implementation of universal packaging principles, but rather thinking of a suitable one for the oil product, which still presents challenges.

With this in mind, it is increasingly crucial to base the packaging design approach on the circular economy including three principal axes - corporate sustainability, emotional branding, and innovation. For example, it is possible to consider supply and demand, i.e. the relationship between producer and market, as an act of dialogue and common vision in developing the correct parameters to refer to at the time of the trade, thus also educating the end consumer in the correct use of both the packaged product and the packaging itself.

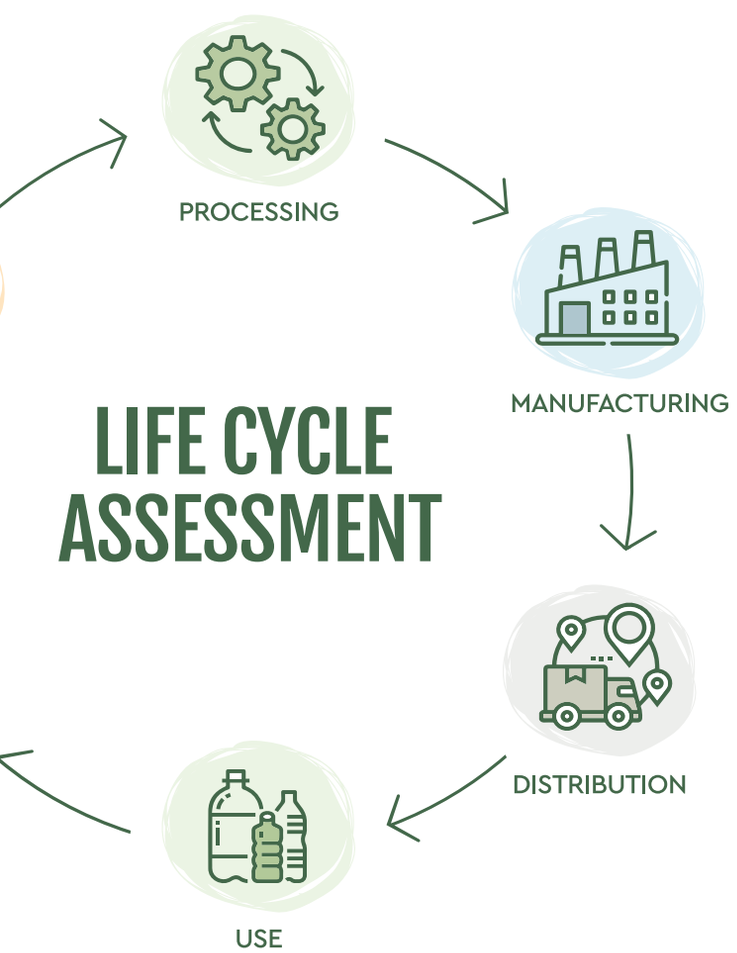
We see a number of measures and regulations around the world that focus attention on the impact of packaging on the environment. However, this means an even greater challenge when considering extra virgin olive oil. For example, with the elimination of certain types of packaging materials imposed (PET for oil packaging), oil companies have to respond by providing alternative materials able to satisfy, the environment, functionality, resistance, and cost need. Thus, the dilemma: "is it more sustainable to bottle oil in plastic or glass?" is even more difficult to resolve today. In particular, PET bottles, or rPET (Recycled PET), have a lower impact on global warming due to the recycling potential at the end of the product's life cycle, concerning the optimal alternative packaging for oil in order to guarantee not only the sustainability of the packaging but also meet the requirements of maintaining the product quality. Lastly, the shelf life results of the oil in PET did not differ much from the results obtained for the oil in the glass containers, especially if storage took place in the dark.

The most used technique to assess the environmental impact is the LCA (Life Cycle Assessment), and in the case of olive oil companies, we have to understand that PET is highly utilized in the packaging industry because it is multifunctional, durable, lightweight, has less risk of breakage, less weight, is safer in transport, and lower cost. In addition, packaging's consequences in nature are also caused by the mismanagement by consumers rather than merely by the material itself. Consequentially, companies will have to migrate to material and packaging solutions that will initially be more expensive, implying a lower profit margin in the short term.





In the case of the olive oil supply chain, LCA is mainly applied for evaluating strategic decisions to improve efficiency, including growing the regional production and bottling. Other data might include the best combination of primary and secondary packaging for oil distribution. New frontiers of material research for sustainable oil packaging materials include bioplastics (PLA or polylactic acid). The spread of this latter type of packaging could favor the triggering of a virtuous cycle that starts from the correct design of the packaging, to ensure protective properties and safety of the food to the consumer and ends with a good valorization of the product in the final stage of its life cycle.



In other words, solutions that not only focus on packaging design, but also include the impact that oil logistics has throughout distribution. We refer to Green Logistics, which consists of the adoption of logistics methods and solutions that can reduce the cost of the transport of goods. For example, how the reduction of particles emitted by means of transport and the related non-renewable energy consumption renewable energy and fuel consumption. Such monitored parameters are usually vehicle exhaust gases consisting mainly of carbon dioxide (CO2), oxygen (O2), water vapor, nitrogen (N2), carbon monoxide (CO), and sulfur compounds (CO).



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To summarize all these aspects and from a packaging design point of view, it will be useful to introduce a new universal usability oil bottle, which e.g. considers the closure system, weight, grip, pouring of contents, or the surface that does not slip when the bottle is held.



Silvia D'Alesio is a food and packaging expert as well as an international scouter on food innovation, leading several projects regarding developing new food and beverage products and businesses. She has earned a BSc. in Food Sciences and Technology along with an International MSc. in Food Innovation and Product Design. Her work includes research projects and scientific direction for Digital Food Ecosystem and FoodTech European Events; assistant professor at the University of Milan Department of Nutrition and Environment; and Professor of Futures Studies and Brand Packaging Design at NABA, Milan.

PURCHASING TIPS FOR PROFESSIONAL BUYERS IN THE OLIVE OIL CATEGORY

Quality assurance, fraud protection and clear labeling



Olive oil world production has exceeded 3 million tons recently, tripled from 60 years ago. Spain is the largest producer by far, followed by Italy, Tunisia, Turkey, Greece, and Morocco. Countries like Australia, the United States, and China have also experienced increased production thanks to the development of medium, high and super-high-density (SHD) systems. SHD was pioneered in Spain, arrived in California in 1999, and brought a paradigm shift to the state industry, which until then was constituted of primarily small, hand-harvested orchards. The system featured densely planted hedgerows (600 to 900 trees per acre vs. the traditional 35 to 90 trees per acre) that allowed for efficient harvest with over-the-row equipment. Harvests usually occur around October to February in the Northern Hemisphere and April to June in the Southern Hemisphere.

The International Olive Council (IOC), formed by the United Nations in 1959 primarily to adopt trade standards and encourage international cooperation on research, established the olive oil standards that are foundations for other olive oil standards worldwide. The United States Department of Agriculture (USDA) has voluntary standards on olive oil, and there is currently a petition at (FDA) requesting a Federal Standard of Identity for olive oil. In 2014, the California Department of Food and Agriculture (CDFA) adopted its olive oil standard and formed Olive Oil Commission Of California (OOCC). Members of the OOCC are California olive oil producers of over 5000 gallons who participate in mandatory testing programs to ensure the oil meets the CDFA standards which have stricter quality standards than the IOC and USDA standards.

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Certified Origins bottling facility in Tuscany, Italy

Virgin olive oil, by definition, is produced from olives by mechanical extraction without high heat or chemicals. Processors use mechanical means to crush olives to form a paste, then separates the oil from the paste without using heat or solvents. Decisions made by the processor influence flavor, quality, oil clarity, extraction efficiency and shelf stability. Oil quality and shelf life are predominantly dependent on fruit quality, transportation, processing, storage, and packaging. For oil that fails to meet virgin grade, it can be further processed (e.g. physically refined with vacuum distillation at high heat or chemically treated with sodium hydroxide) into refined olive oil. Grades of imported olive oil typically available in grocery stores in the United States are extra virgin olive oil (the highest grade of virgin oil), refined olive oil (often marketed as "extra light"), and olive oil (which is a blend of refined olive oil and a small amount of virgin olive oil, often marketed as "pure").

Olive-pomace oils generally are used in foodservice and food processing and may be available in some low-price retail markets focusing on imported specialty foods. All olive oils and olive-pomace oils are subject to chemistry standards, which evaluate oil quality and purity. It is important to understand the test results in the Certificate of Analysis to evaluate quality and purity, keeping in mind quality parameters such as peroxide value (PV) and UV absorbances K232 and K268/270 change with time so oils that tested at the point of production will likely have different values comparing the oils that have been sitting on the shelf of a grocery stores for months. The rate of oil deterioration depends on several factors such as initial quality (low free fatty acidity), fatty acids (polyunsaturated fats oxidize faster than monounsaturated fats) and minor compounds (phenolics and tocopherols help slowing down oxidation and extending shelf life).

Quality assurance

For oil quality, chemical standards are used to determine the grade of the oil with analytical methods that can detect negative chemical changes that occur as it ages or because of the quality of fruit, processing, or storage. Additionally, virgin olive oil is subject to sensory standards. Sensory evaluation is conducted by a panel of at least eight tasters whom a panel leader trains to identify and assess positive sensory attributes, which include fruitiness, bitterness, and pungency, and negative sensory attributes, which include oxidative defects (rancidity) and fermentative defects (fusty or musty flavors, or a flavor of muddy sediment, or a winey taste. caused by substandard fruit, processing, storage, or packaging conditions). IOC sensory standards require olive oil graded as extra virgin to have no detectable negative flavors caused by substandard fruit, processing, storage, or packaging. The IOC assesses the proficiency of the panel through an annual recognition process.



EVOO testing in Certified Origins laboratory

Fraud protection

Chemical standards can also be used to help determine whether the olive oil may be adulterated with other oils. These tests generally cost more than the quality tests such as free fatty acidity or peroxides and typically are deployed by buyers and regulators to prevent fraud. Fatty acids and sterols are commonly used to determine if the olive oil is made from olives or if it contains other oil, usually cheaper refined oil. However, these two analyses cannot tell apart virgin and refined olive oil. To ensure the oil is "extra virgin" or "virgin" olive oil (i.e. does not contain refined olive oil), chemical analysis such as stigmastadienes and UV delta k are used to indicate the presence of refined oil.

Guidelines labeling

Information on EVOO labels, such as production origin, fruit varieties, harvest time, and shelf life, should be clear and accurate. Recommendations for proper storage (e.g. store the product in a cool and dark place, away from light and heat sources and in a tightly closed bottle) and usage according to the flavor profile of the oil are also helpful for the consumers. Words such as "cold-pressed"or "first cold press" should be avoided; it misleads consumers to think pressing is still a part of modern olive oil extraction when centrifuge is used instead. "Pure" is another word to steer away from; it is prohibited in CDFA and Australian standards.

Consumers adore olive oil and deserve authentic products with traceability and transparency regarding origins, cultivars and grade quality. Professional buyers hold an important role in minimizing consumer confusion and continuing to open markets and gain consumer trust.

A chart that shows differences in CDFA, USDA and IOC chemical quality standards for EVOO

	CDFA	USDA	IOC
Free fatty acids (%)	≤ 0.5	≤ 0.8	≤ 0.8
Peroxide value (meg O2/kg)	≤ 15.0	≤ 20	≤ 20
UV K232	≤ 2.40	≤ 2.50	≤ 2,50
UV K270	≤ 0.22	≤ 0.22	≤ 0,22
UV ΔK	≤ 0.01	≤ 0.01	≤ 0,01
Pyropheophytin a (%)	≤ 17	N/A	N/A
1,2 Diacylglycerols (%)	≥ 35	N/A	N/A
Moisture and volatile matter	≤ 0.2	≤ 0.2	≤ 0.2
Insoluble impurities	≤ 0.1	≤ 0.1	≤ 0,1
Median of defects	=0	=0	0
Median of fruitiness	>0	> 0	> 0

CDFA: California Department of Food and Agriculture
USDA: United States Department of Agriculture
IOC: International Olive Council





Labeling revision in OLMA faciliy in Tuscany, Italy



Dr. Selina Wang is an Associate Professor of Cooperative Extension at the Department of Food Science and Technology, University of California, Davis. She and her research group have been working on olive oil quality and authentication since 2009 and their work helped establish the new olive oil standards for the State of California in 2014. Her current mission-oriented research focuses are food quality and purity; fruit and vegetable processing; and food sustainability. She also provides extension leadership and educating academics and processors about raw material quality, shelf life, chemical changes during processing and storage, and byproducts upcycling.

OLIVE OIL: FROM THE ICON OF MEDITERRANEAN LIFESTYLE, TO THE EPICENTER OF ONE HEALTH



Olive oil has always been the icon of Mediterranean lifestyle and Diet, which since the first studies by Ancel and Margaret Keys in Pollica (Cilento,Campania, Italy), the land of centenaries, has always represented the symbol of a precise identity, culture, relationship between soil, territories, nature and humans.

Olive oil has been teaching us for millennia the seemingly complex meaning of integral ecological development: it is the simple but extraordinary ability of a lifestyle to create prosperity – understood as well-being, and not as mere profit – in the human, environmental, political, social, economic and cultural dimensions of a territory; of the translation of an intangible heritage into a real strategy of widespread development.

One of the ingredients that most represent the symbol and identity of the Mediterranean is not by chance the one that, more than others, triggers a chain effect of integral regeneration: extra virgin olive oil.

Italy is undoubtedly the cuddle of this crucial food.

Covered by about 2 million hectares of olive trees, Italy counts more than 500 cultivars, including almost 100 in Cilento (Campania Region), the birthplace of the Mediterranean Diet.

These are numbers show us how much each olive oil is the identity of a territory, its microclimate, and its endemic biodiversity. A biodiversity that fosters the economy, food diplomacy, and soft power of our country – which is first in olive oil consumption, and second in production, with 42 PDOs (protected denomination of origin) and numerous slow food presidia. Adding to this data the remarkable results in terms of internationalization, it is not surprising that investment in olive growing has expanded all over the country.

After all, since the Middle Ages, olive oil has been traded and exported from the Mediterranean, taking on the role of mediator in exchanges and connections between distant countries and different individuals. Recently the United Nations and specifically World Health Organization implemented an approach named "One Health" in which multiple sectors work together to achieve better public health outcomes, taking into account the connections between human health, animal health and Planet health.



Olive oil groves in Tuscany, Italy.

Olive oil becomes the perfect element for implementing the One Health approach. Producing olive oil is good for nature, animals, humans.



It is frequent upcycling: a beneficial recovery not only for the purpose of savings – considering the many fields of reuse – but also (and especially) for sustainability. Then, for its carbon footprint: unique among agri-food crops, oil has a high capacity to offset greenhouse gas emissions. Each hectare of olive grove produces an average of about 2.6 tons of CO2 per year, slightly more than each individual generates on average; and it captures more carbon dioxide than it produces in the atmosphere. Since it is a permanent woody crop, the expanse of olive trees that covers our country and overlooks the Mediterranean has effects like those of a forest, beneficial to the ecosystem and biodiversity.

At the same time, it is threatened by the current climate crisis, lack of protection for small businesses, and the terrible problem of xylella, which is seriously jeopardizing this heritage of our culture, economy, and identity. Producers, consumers, retailers, and policies must join forces to protect not only its existence but its quality, aware of this certainty: as expanding on a slice of bread makes it more nutritious, oil spreads regeneration, enlivening every dimension of our ecosystem.

Olive oil, however, is good for nature and also for our bodies, as mentioned. Always used as human medicine, thanks to its high content of vitamins, antioxidants, and good fats, oil is the main source of lipids in the Mediterranean Diet. The undoubted health benefits, now scientifically proven, are visible even just on the faces of the centenarians of the Terre of Mediterranean Diet, true ambassadors of a lifestyle.

Extracted from the pulp of a fruit, this food (which it is reductive to define only as a condiment) opens or concludes every recipe of the Mediterranean Diet, transcending the boundaries of our territory and pleasing the palate of the whole world. The slow rhythm of the millstones of the oil mills and the patient dedication of the producers seem to be sacredly respected in the act of tasting, which we conduct as a ritual. Olive oil, the silent protagonist of our every banquet, a hidden orchestrator of our tables, flavoring our dialogues and relationships indirectly cares for the well-being of our minds and souls.



Photo by Lukas Gojda - stock.adobe.com



Nature's Liquid Gold

SOURCE OF HEALTH AND WELL-BEING

Monounsaturated fatty acids & bioactive components (polyphenols, vitamin E) contained in EVOO provide numerous health benefits:

Anti-inflammatory properties
Virgin olive oil is a powerful anti-inflammatory with abundant phenolic compounds

Protects against heart diseases
Antioxidants shield your heart, lower cholesterol, and fight hypertension

Reduces risk of diabetes
Olive oil's monounsaturated fats guard against Type II Diabetes

Antibacterial properties
The polyphenols in olive oil have antibacterial properties

Good for the skin
Olive oil is a skin saviour, with vitamin E, antioxidants, and age-defying compounds

Certified Origins
Quality Foods
Traceable Sources
Authentic Origins

Photo by ValentynVolkov - www.istockphoto.com

Precisely because of its health properties and sensory characteristics that associate it with quality experiences, olive oil has become a catalyst for tourism: this is demonstrated, first of all, by the frequency of thematic events organized throughout the Mediterranean. And this is evidenced by the growing desire of visitors no longer to buy only the farm product, but to participate in tastings, guided tours of the places of cultivation or production, culinary experiences in the olive groves; to discover the anecdotes of olive farms, to converse with their owners, to participate in initiatives of a recreational or educational nature. There is also a growing desire among tourists to get a close look at centuries-old olive trees, surrounded by dry stone walls that have ensured the perfect interaction of man with the ecosystem for millennia, releasing moisture that nourishes the soil and the plant.

Equally significant, then, is the recent report edited by Ismea, which records the extraordinary success of agritourism facilities in Italy, where oil is the undisputed protagonist: «multifunctional» farmhouses that allow guests to take advantage of the offerings of the territory, including from a food and wine point of view. On the other hand, it should be remembered that oleotourism in Italy – one of the homelands of olive trees – has become so widespread that since 2020 it has entered the legislative framework, equated with enotourism: a very important recognition for excellence that is the bearer of cultural and identity values even of very small areas scattered throughout the Italian peninsula.

The valorization of olive oil, together with other sacred elements of the Mediterranean Diet, has triggered a seasonal adjustment of the tourist offer, cause and effect of the development of the entire territory. Because this kind of responsible, sustainable, and conscious tourism, if based on a product that, besides being a material good, is a vehicle of identity and culture, can produce extraordinary results. It can redevelop marginal areas and prevent their depopulation and abandonment; protect not only biodiversity, but the survival of traditions; instill in the community a sense of belonging that induces care for the land and services.

The brightest example of this holistic approach to olive oil, from the icon of Mediterranean lifestyle to the epicenter of One Health approach is Pollica (Cilento, Campania Region, Italy), where the Future Food Institute founded in 2020 the Paideia Campus, an international campus on the Mediterranean integral ecology models which connects the ancestral roots of consciousness represented by the Heleatic School of Parmenide founded 500 years before Christ, to the aforementioned Ancel and Margaret Keys in the fifties to the sustainable future which is literally the only one possible for human beings.



Photo byAndrey Gonchar - stock.adobe.com



FUTURE FOOD INSTITUTE

Sara Roversi is an experienced entrepreneur and thought leader in the food ecosystem. As a seasoned growth expert, she works with globally recognized high-profile think tanks on setting the agenda for the sustainable food industry. With her Future Food, founded in 2014, she is the Focal Point of the UNESCO Emblematic Community for Mediterranean Diet, Pollica (Cilento). She is the co-founder of goodaftercovid19.org, Ambassador of the Agrifood Tech & Wellbeing (Federated Innovation project @MIND), President of the Scientific Committee of Fondazione Italia Digitale, member of the Google Food Lab, and partner of the Food For Climate League.

HOW TO TASTE EXTRA VIRGIN OLIVE OIL

Learn the technique on how to sample EVOO at home, with this step by step guide.



Pour several drops into a small glass and warm the oil briefly by cupping the vessel in the palm of your hand.

Deeply inhale the aroma trying to discern all the pleasant and unpleasant sensations if present.





Take approx. one teaspoon of oil into the mouth from the sample. Let the mouth rest a little bit, moving slowly the tongue against the palate. Spit out the oil.

Make note of the retro olfactory sensations you perceive and continue moving your tongue against the palate.



Learn more at

Certifiedorigins.com

THE IMPORTANCE OF SPANISH COOPERATIVES

Their history and their contribution to olive oil production



Many people are unaware of the history and achievements of agricultural cooperatives in the olive sector. The cooperatives have long been the backbone of the olive growing industry in rural areas. They exercise a social function, are managed democratically, support the population linked to the territory, maintain a latent power in the market of origin as they dominate production, and are becoming increasingly important in the marketing of olive oils.

Their journey has not been easy and now they face a new challenge: they have enormous power as agents of change and must become the protagonists of the rural development that is needed. On the other hand, and no less important, is the link between cooperativism and sustainability. The United Nations pointed out the importance of the Social and Solidarity Economy, indicating that it could play a key role in achieving the 2030 Agenda and especially links cooperativism, as the main family of the Social Economy, in the alignment with the SDGs (Inter-Agency Task Force on Social and Solidarity Economy, 2014 and 2015). Cooperative societies are governed by values and principles that facilitate alignment with the 2030 agenda, since many agree and, for this very reason, it is asserted that cooperatives since their birth in 1884 already incorporated sustainability into their DNA (Mozas, 2019).



Photo by Josemiguelsangar - stock.adobe.com

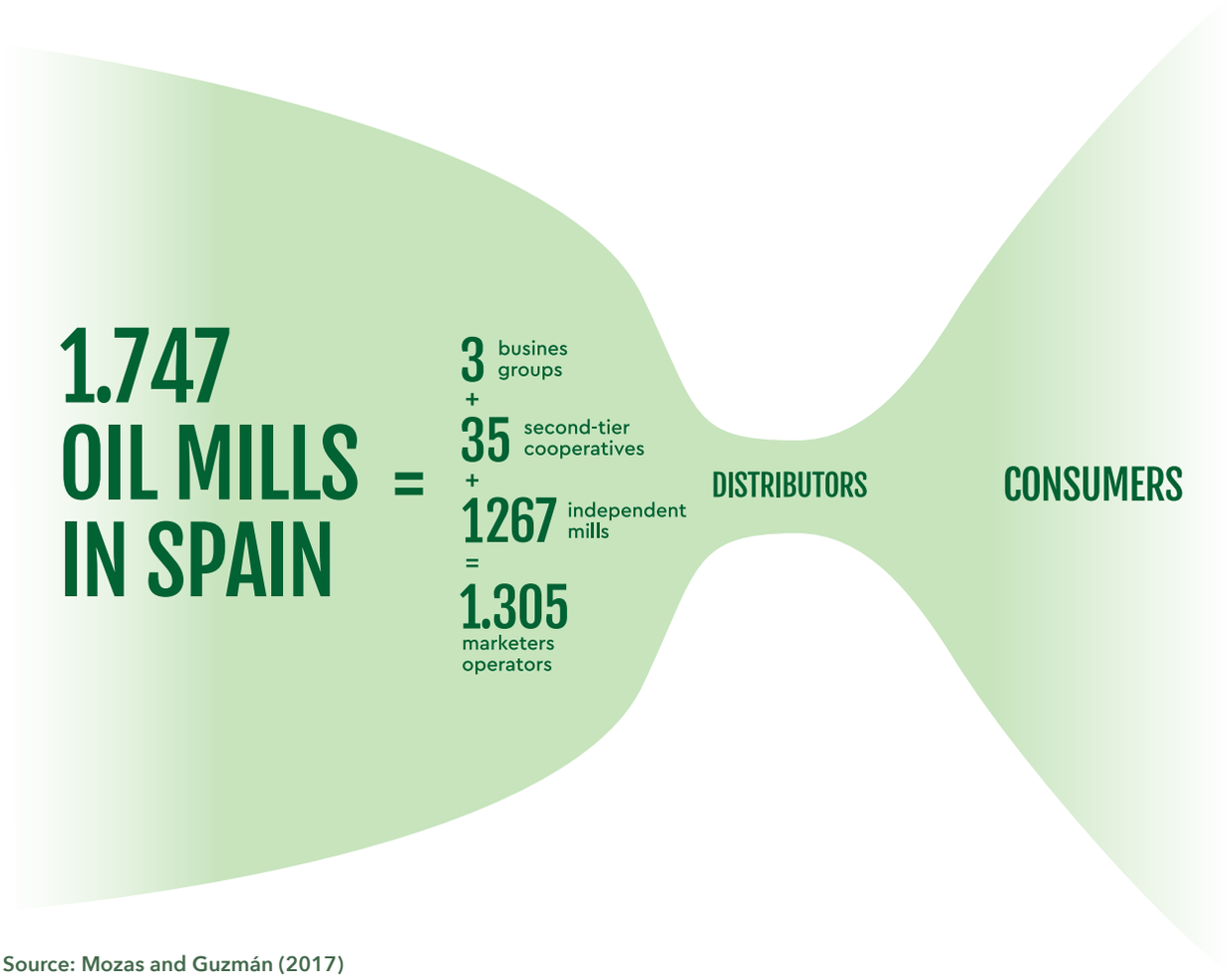


Photo by Luisfpizarro - stock.adobe.com

According to the Ministry of Agriculture, Fisheries and Food (2022), in the olive sector cooperatives play a leading role in the market oforigin, since the rate of cooperativization amounts to 65%. This means that, of all theolive oils produced in Spain, 65% are obtained in cooperative societies. In the 2021/22 campaign,Spain produced 46.14% of the world production according to the International Olive Oil Council (2022a and 2022b). Therefore, and for the same campaign, we can affirm that Spanish cooperatives produced approximately 30% of the world production, a figure that reaffirms their importance.
In our country the agrarian cooperatives were born thanks to the impulse that came from members belonging to the Catholic Church, who helped to found the so-called Agricultural Unions; but these structures did not have a long run since they ran up against the opposition of the landlords, who threatened to cancel the contracts if the farmers were associated. It was not until September 8, 1931 that the first specific law on cooperative matters appeared, which was already echoing the backwardness and smallness of Spanish cooperativism compared to that of the rest of the world. From this first law others followed, among which we highlight the Law of September 2, 1942, when two significant events took place: on the one hand the government facilitated the constitution of most of the current agricultural cooperative societies in order to contribute to reducing hunger after the Spanish civil war, and on the other hand in this law appeared the figure of the Territorial Unions of Cooperatives (UTECO), which we know today as second degree cooperatives. After the promulgation of the Spanish Constitution (1978) and the appearance of the State of Autonomies (autonomous regions) many things changed for cooperativism. Both the Spanish State and the Autonomous Communities have enacted not one, but several generations of laws on cooperative matters, which have tried to "cover" the specific needs of this type of collective enterprises in each territory and have greatly aided their development.

If we focus on the olive cooperative movement, the appearance of most of the cooperative societies (75%) was concentrated between the 1950s and 1970s (Mozas, 1999). In the last quarter of the 20th century, the integration of second-grade cooperatives began to be promoted. Thirty-five second-grade olive oil cooperatives have been created in Spain linked to the olive oil sector for the marketing of olive oil. The emergence of second-tier cooperatives was further boosted following Spain's entry into the European Union. The change in "the rules of the game", the new Community agricultural policy, forced the cooperative companies to create professionalized marketing structures and they soon realized the need for a larger size in order to have business muscle in negotiations along the chain. Other causes that had a determining influence on cooperative integration were the weakness in the market of origin, due to the great dispersion of supply, the need to export due to the enormous surpluses existing in Spain in the sector and the great concentration in distribution which imposed prices on producers (Mozas and Guzmán, 2017). The latest study analyzing integration in the sector was published in 2017. Its results point out that the integration of supply starring the cooperative sector reaches up to 26% of production and integration in terms of the number of cooperatives represents in turn 50.16 percent of those existing in Spain. It is therefore the cooperative sector which has become more concentrated. On the other hand, in the 21st century olive oil business groups have appeared, mostly made up of cooperative companies. If both processes of concentration are added together, the percentage of integrated companies in the olive sector is almost 28% and the concentration of supply exceeds 30%, which is insufficient to counteract the power of the distributers. Figure 1 shows the bottleneck of the Spanish olive oil sector.

Figure 1. Figures of the bottleneck in the marketing of the olive sector in Spain



Source: Mozas and Guzmán (2017)

In recent years, concentration and merger processes have been taking place between cooperatives. It is relevant that the merger which gave rise to the Cooperative "Almazaras de la Subbética" has allowed it to expand internationally and obtain many recognized awards such as Best Oil in the World and Best Oil Mill in the World in several years. Another example is the Unión Corporació Alimentaria, a second degree cooperative founded in Reus in 1942 which has more than 20,000 members and integrates 90 local cooperatives in the Tarragona region. They have diversified into the production of nuts, extra virgin olive oils and wines. With its commitment to innovation, internationalization and job creation, the cooperative has supported the rural world by generating higher incomes for its associated farmers. In addition, it has become a cooperative recognized by the Ministry of Agriculture as a Priority Associative Entity. Other examples are Jaencoop, SCA, Oleocampo SCA and Coop San Sebastián, whose growth has been spectacular thanks to their concentration processes. The path has been set, many cooperatives and business groups formed mainly by cooperatives are aligning themselves with the need to integrate even more, to achieve better positioning and more competitiveness that will improve their bargaining power in the chain, supporting, at the same time, the associated farmers.

The Spanish olive cooperative movement has reached the ranking of the 300 largest cooperatives in all sectors of activity worldwide, according to the World Cooperative Monitor (2022). In this sense, another olive cooperative business group stands out: Dcoop. It occupies 276th place on the list with a turnover of 38,319.37 dollars/member.

We must look ahead and have references. The one we should look to is the example of the world's largest agricultural cooperative located in Japan, which, in the ranking mentioned above, ranks fourth. It is called ZEN-NOH, had a turnover of 57.69 billion US dollars in 2020 and has a staff of 27,594 people. Quite a challenge to achieve, but it should be remembered that it started as a group of small farmers seeking, in a common way, greater profitability for their crops: the same reason for which any agricultural cooperative is created.



Adoración Mozas Moral is Professor of Business Organization at the University of Jaén and winner of the Extraordinary Doctorate Award. She has specialized in the study of the organization and corporate governance of cooperatives. Closely linked to the business world, she has developed 50 research projects/contracts and has been the lead researcher in 20 of them. She has 22 books, 46 book chapters, 80 scientific articles, 105 papers presented at national and international congresses and has made 6 stays in foreign centers. She has won 12 research awards and 3 teaching awards. Due to her experience in sustainability and SDGs, she was invited by the UN to give a lecture on the contribution of olive cooperatives to the SDGs. She is currently President of the International Center for Research and Information on the Public, Social and Cooperative Economy-CIRIEC-Spain, Vice-President of CIRIEC-INTERNACIONAL, and a member of the Board of the Instituto de Estudios Giennenses. She has been appointed by the Ministry of Labor and Social Economy as an Expert Member of the State Council for the Promotion of the Social Economy and has received the Gold Medal of her hometown, Torredelcampo (http://www4.ujaen.es/~amozas/).



Photo by Nito - stock.adobe.com



Olive oil growers in Jaén, Andalusia, Spain

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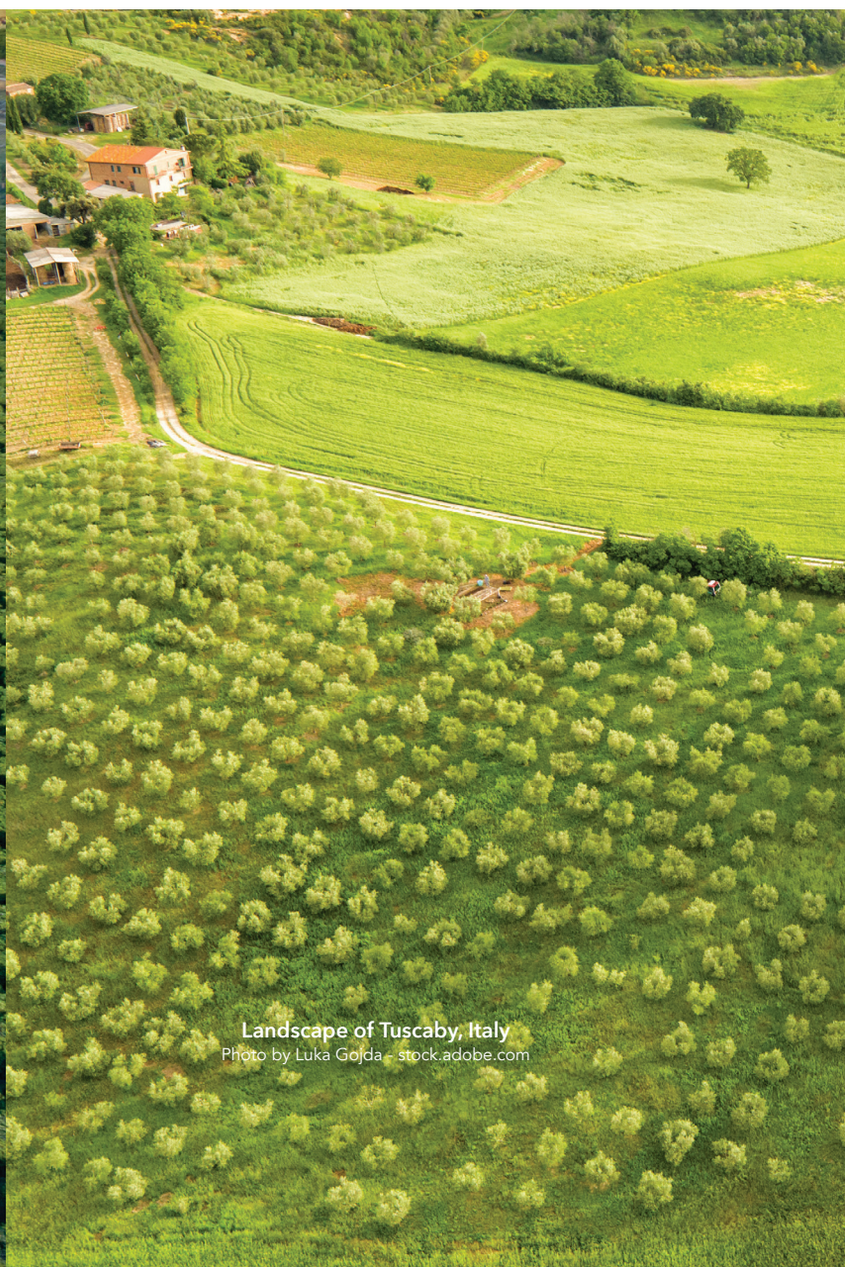
INDICATION OF ORIGIN IN EXTRA VIRGIN OLIVE OIL

A comparison of California and Tuscany farming history and approach to EVOO

California and Tuscany, despite their geographical distance, enjoy a positive global reputation with remarkable similarities. Both regions are renowned tourist destinations, celebrated for their breath-taking landscapes featured in movies, songs, and literature. Cities like Florence in Tuscany and Los Angeles in California have cultural allure, attracting and nurturing art and culture. Their local food traditions, agricultural history, and specific products like wine and extra virgin olive oil also contribute to the fame of these two regions.



Olive Plantation in Bakersfield, California, USA
Photo by Mindaugas Dulinskas - stock.adobe.com



Landscape of Tuscaby, Italy
Photo by Luka Gojda - stock.adobe.com

Geography and Agriculture

Situated in the heart of the peninsula, Florence in Tuscany benefits from access to the Tyrrhenian Sea on the west, part of the Mediterranean. California, one of the 50 American states, faces the Pacific Ocean on the west. Both Tuscany and California have diverse landscapes encompassing mountains, hills, plains, rivers, and coastlines. While differing in size and population, both regions allocate a significant portion of their territory to agriculture and food production. California's active farming area equals approximately 25% of the total land, whereas Tuscany reserves about 50% of its whole surface for farming.

National Agricultural Value

California Agriculture has a relevant weight in the whole food production of the United States, contributing with "more than 400 commodities. Over a third of the country's vegetables and two-thirds of the country's fruits and nuts (…)"ii. Tuscany accounts for only 5% of the total Italian agricultural food production value, distributed across the national territory, with Lombardia and Emilia Romagna regions leading the ranking.iii

Olive Farming and Olive Oil Production in Tuscany

While olive farming and extra virgin olive oil (EVOO) production in Tuscany has deep cultural and historical roots, their origins are not as ancient as one might assume based on the region's agricultural landscape. The presence of olive trees can be traced back to the Roman Empire in the 6th century B.C., primarily in southern Italy due to Greek influence. Specific historical evidence for the appreciation and trade of Tuscan EVOO emerged in the 15th century, with commercial agreements and contracts in cities like Siena and Florence. The cultivation of olive trees and the consumption of EVOO became integral to the region's farming economy in the late 19th and early 20th centuries. The Regional Consortium for Tuscan Oil (CROEVOTT) was founded in 1982 to protect and promote the Extra Virgin Olive Oil of Tuscany. In 1998, the Consortium registered the Extra Virgin Olive Oil Toscano PGI (Protected Geographical Indication) with the Italian Ministry of Agriculture and the European Union.

Olive Farming and Olive Oil Production in California

Olive oil production in California has a relatively young history compared to European regions. Spanish missionaries introduced olive trees in the 18th century, and the first orchards were planted near the San Francisco coastline. Until the early 1990s, most olives were used for canning and direct consumption, with minimal extra virgin olive oil production. However, a significant shift occurred with the introduction of Spanish olive varieties suitable for dry climates, along with new technologies and high-intensive farming practices. The growing demand for olive oil, fueled by the popularity of the Mediterranean diet, allowed California farmers to invest in mills and bottling lines. Today, California is a well-established region for extra virgin olive oil production.

Marketing and Labelling practices

As a reaction to global industrialization and distribution and the birth of international brands, products and brands able to claim a specific geographical origin are often perceived as more valuable when compared to generic items of undefined ownership and source. While California and Tuscany keep building a global reputation as Extra Virgin Olive Oil regions, numerous companies already use specific geographical references on their labeling and marketing content to attract potential buyers' attention. However, it can be challenging for consumers to navigate the authenticity of the claims of origin. The California Olive Oil Council (COOC) and the Tuscan Consortium have implemented measures to promote and protect their respective brands. The COOC offers a certification trademark for California extra virgin olive oil, while the Toscano PGI certification guarantees adherence to specific rules and parameters defined by the Tuscan Consortium.



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Indication of Origin: Tools and Legal Frameworks:

Two systems are commonly used to protect geographical indications: the sui generis system and the mark-based system. In Europe, the sui generis system is employed, with certifications like PGI, PDO, and TSG ensuring the authenticity and reputation of food products. Tuscany's Toscano PGI falls under this system, requiring all stages of production to occur within the region. In the United States, the mark-based system prevails, focusing on branding rather than indications of origin. The COOC Seal and proposed legislation, such as the AB-535 Olive Oil: labeling Bill, aims to regulate the use of California designations and provide consumers with accurate information about the origin of the olive oil they purchase.

Conclusion:

California and Tuscany share a positive global reputation due to their natural beauty, cultural appeal, and agricultural heritage. While Tuscany employs the sui generis legal frame and system to protect its Tuscano PGI extra virgin olive oil, California relies on branding and certification processes. As consumer interest in geographical indications keeps expanding, it remains to be seen if other American regions will follow California's lead. Ultimately, these efforts contribute to consumer confidence and support the preservation of authentic and high-quality extra virgin olive oil.



Giovanni Quaratesi is the Head of Corporate Global Affairs at Certified Origins, leading the company communication strategies, developing new partnerships and cooperations for the group, and contributing to launching private-label food programs and retail food brands. Currently enrolled in a Master in Food Studies from NYU Steinhardt, he holds a degree in Asian Studies in Italy, an altMBA from Seth Godin's Akimbo Workshops, and multiple certificates in Food Geographical Indications and Food Export. His international experience allowed him to work and live in Australia, Thailand, the USA,and Italy, learning to embrace cultural differences and benefit from diverse perspectives. Outside of work, his passions revolve around startups,innovation, food culture, food trends, and their impact on society. Giovanni's mission is to be an ambassador for good food and to empower others to create positive change.

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xx California Olive Oil Commission Law
xxi Codes Display Text (ca.gov)
xxii California olive oil warring parties reach compromise over controversial labeling bill AB535 (foodnavigator-usa.com)

CAN YOU TASTE THE DIFFERENCE BETWEEN OO AND EVOO?

Each Olive Oil must pass a sensory test, carried by a trained panel.
Three good traits and **several flaws** are part of sensory testing for EVOO and OO.
Extra Virgin Olive Oil must be free from defects.

Recurrent flaws:



METALLIC



SLUDGED/ HEATED



EARTHY/ MOLD



VINEGARY



RANCID

If any of these flaws are present an olive oil cannot be classified as « extra virgin ».

Good traits:



FRUITY



BITTER



PUNGENT/ SPICY

Producers must balance these good characteristics for the best tasting oil.

Discover how our blend masters can create tailor-made extra virgin olive oils to match your market and preferences.

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Traceable Sources
Authentic Origins

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A COMPLETE B2B MARKETING STRATEGY GUIDE FOR PRIVATE LABEL OLIVE OIL PRODUCERS

From Tradition to Innovation:

Private-label olive oil brands often adopt a traditional communication style. This makes it hard to stand out in a saturated market. Yet, with a strategic approach and a touch of creativity, you can break through the monotony.

Thanks to a holistic B2B digital marketing strategy, you can expand your reach, engage with potential clients, and build long-lasting relationships.

12 online searches

it is the average that B2B researches conduct **before engaging with the company**



>80% of purchasers

visit a company's website before they become a customer



70% of purchasers

and purchasers **watch videos** during their journey to find the right provider



Create your digital marketing strategy around these 3 core goals:

- Increasing brand awareness
- Educating and engaging with customers
- Generating new leads

Communication Channels:

Social Media	Website	DEM	Other platforms
LinkedIn (organic/paid) **Facebook** (organic/paid) **Google** (organic SEO/paid)	**Business card** to inform the company's current offering **Blog** to attract attention and new visitors	**Monthly newsletter** externally to potential customers and internally to employees	**Trade shows** with specific panding pages and pphysical/digital brochures **Trade Magazine** ads and organic articles

To put this into practice you can follow these steps:

1 Adopt a customer-centric strategy

Research your client's pain points to understand the drivers behind the demand for certain products. Start by:
1. Organizing customer user groups (in-person sessions or online surveys) to uncover unique pain points in your current customers' experience.
2. Doing keyword research to discover organic search demand.

These insights will help you to adapt your products to meet your customers' demands.

2 The power of proof

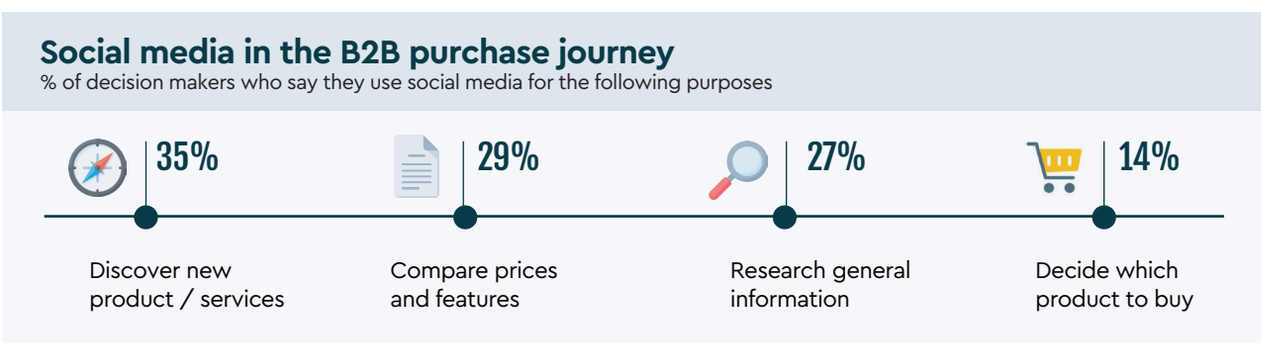
Showcase testimonials and case studies from existing customers. They add credibility, prove product performance, and help potential customers make informed buying decisions.

3 Master B2B SEO

If you want your potential clients to find you, focus on relevant keywords and optimize your website content. You'll increase organic traffic and get new business leads. Here's how to do it:

1. - Identify keywords from your website - use UberSuggest Chrome extension for a quick SEO audit and keyword suggestions
2. - Cluster your keywords based on related terms and themes.
3. - Begin with "generic" group terms before branching out to specific modifiers.
4. - Create groups for synonyms.
5. - Google Keyword Planner is a great place to begin with. You can enter up to 10 keywords per search and get data such as average monthly searches by country, competition, paid ad prices, and keyword recommendations.
6. - Cross-check using tools like Ahrefs, SEO Tools, UberSuggest, and Moz.

4 Use social media for B2B (Facebook and LinkedIn)



Focus on LinkedIn and Facebook to boost your reach to the right audience.

Statistics show the majority of B2B marketers primarily use*:

1. Facebook (85%)
2. LinkedIn (81%)
3. Instagram (74%)
4. YouTube (51%)
5. Twitter (49%)

*Data from Social Media Examiner, 2022

These platforms allow you to connect with decision-makers in the retail industry.
Yet, being active on social media won't cut it anymore. As everyone is fighting for organic reach, make sure to allocate a budget for paid social media.

LinkedIn

1. Invite connections to follow your company page.
2. Publish valuable posts on a consistent basis.
3. Encourage employees to share content.
4. Share industry trends, company information, and event participation.
5. Publish short infographic edutainment videos. And repurpose them into carousels.
6. Personalize and share your company story.
7. Engage with potential partners in the comment section.
8. Involve your sales team. Ask them to join industry groups.

Facebook

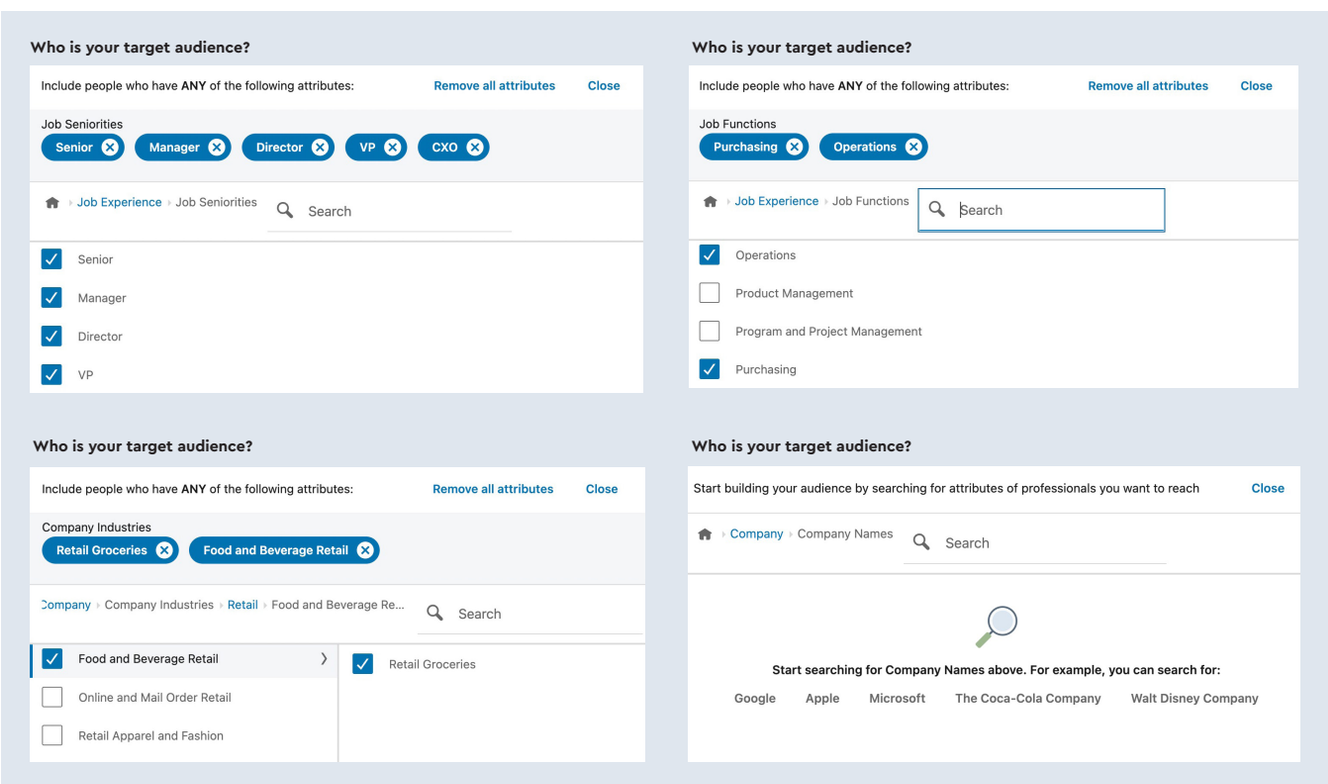
Despite its B2C reputation, Facebook is also ideal for B2B marketing.

Find your buyer persona and make use of the platform's precision targeting capabilities.
Business decision-makers also spend a higher amount of time there compared to other platforms.

5 B2B advertising (lead generation)

You can convert prospects into paying customers by developing lead-generation strategies tailored to different geographic locations and market maturity levels. And use automation to integrate with your CRM.

On LinkedIn, you can target people not only based on their location but also by their job seniority, job function, company industry, and even company name.



For example, you can target purchasing managers of a specific company like Walmart.

6 Leverage marketing automation

Use tools like Mailchimp to send external and internal newsletters. Or Leadfeeder and Dropcontact to collect warm and cold email addresses for outreach. Also, Lemlist and LinkedIn Premium will help you to create personalized and targeted email campaigns.

It's important to respect privacy policies and regulations in some geographical locations, such as GDPR in Europe when using outreach.

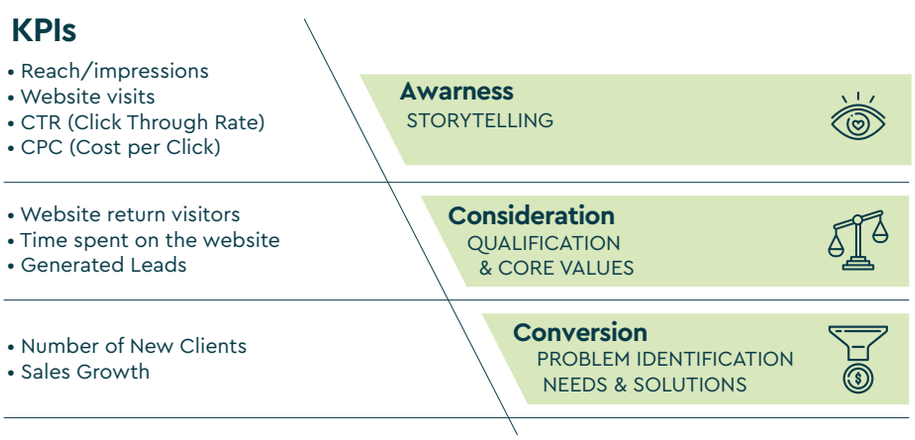
You can automate these processes so the sales and marketing teams can focus on nurturing leads and closing deals.

SOFTWARE TO USE

Collect cold mail	CRM	Cold email and LinkedIn reach	Collect warm emails	Bridge between various softwares	Social Media	DEM
dropcontact	monday.com	lemlist	leadfeeder	zapier	LinkedIn	mailchimp

7 Track campaigns and monitor KPIs

Review regularly KPIs at different stages of the customer journey. You'll gain valuable insights and make better data-driven decisions to optimize your marketing efforts.



8 Trade magazine ads and direct response

Identify influential trade magazines and tap into the power of targeted advertising.

Create ads that showcase the benefits of your products and include compelling calls to action. Boost your credibility by weaving in testimonials from renowned clients who have experienced the remarkable quality of your olive oil.

CONCLUSION

Marketing for B2B is a marathon, not a sprint. You'll need to put in long-term consistent effort.

A thorough digital marketing strategy, a strong brand presence, and authentic communication will set up your olive oil business for success in a competitive market.



Armin ZadakBar is a serial entrepreneur and influential thought leader, known across Europe, the Middle East, and North America. He has grown successful businesses in the world of marketing, food, and web3. Armin is a sought-after business coach for the European Commission, and founder of The Armin Bar, a boutique digital agency between NYC and Milan. He's been training the marketing & sales departments of international corporations, and lecturing at prestigious universities in the US, Italy and Switzerland.

EVOO: A MATTER OF POLYPHENOLS NOT OF POINTS OF VIEW

A great ingredient is one that is subtle yet adds a unique flavor and profile to the dish. Oil is a versatile ingredient that can be used both hot and cold, with unique nutritional and flavor properties. But what exactly is oil, and where does it come from? It all comes down to the polyphenols.

Oil is a fundamental and sometimes controversial ingredient in cooking, but it plays a crucial role in determining the dominant element in any dish. Despite its importance, it is often overlooked or misunderstood. However, in the kitchen, we all have an equal appreciation for its value and the important role it plays in pairing and selecting other ingredients.

Olive oil is a versatile and essential ingredient in cooking. It can enhance the flavor and character of any cuisine with just a few drops. Whether it's used at the beginning or end of a dish, a good oil can make or break the final result. It can either exalt and define a dish or lead to a disastrous outcome. Just like a glass of wine, the right olive oil can elevate a meal to a masterpiece. On the other hand, a poor choice of oil can result in a culinary catastrophe. Therefore, it is crucial to choose the right oil for the dish and use it wisely.

The oil can definitely save some dishes at the very last minute, as much as it enhances their color, aroma, and otherwise imperceptible notes, thanks to its allies and trustworthy polyphenols, the very ones that, in the face of improper use, These are the same ones that, if used incorrectly, can make or break a dish, whether it is a well-made but opaque crudo or pasta e fagioli, a well-made but fruitlessly sour meat stew, a lukewarm boiled potato accompanied by a sweet salt.

What would it be without the right oil? I hope that this brief and heartfelt content of mine helps convey how necessary it is to know how to choose according to one's preferences. And to understand how the natural characteristics of the oil to obtain maximum results and endless applications and subtractions of ingredients unnecessary and badly dosed and sometimes quite boring, because, let's be clear once, and for all, oil is not a matter of points of view, but rather of polyphenols! And why is this so?



Photo by Angela - stock.adobe.com



Polyphenols and Their Nutritional and Pairing Value:

It should be noted that the polyphenolic content of olive oil consists of the presence of antioxidant substances, which promote durability and counteract the oxidation of fatty acids. High-quality olive oils contain 200 to 1,000 mg of polyphenols per kg, and I tend to prefer those above 600. The polyphenols unique to extra virgin olive oil are oleuropein, hydroxytyrosol, and oleocanthal.

These powerful antioxidants play a significant role in food-pairing. I like to use them by affinity with the dish, either by maximum contrast or by being all in line or all opposite to the ingredients. This always allows me to identify a harmony between enhancing the ingredients and emphasizing the character of the oil. It's not just a simple accompaniment but rather a driver of the tones of aroma, sharpness, and, where necessary, mitigates and, where essential, enhances. We can define some macro-categories of extra virgin oils to guide us in our choice and pairing:

Fruity: A rich bouquet of aromas and intensity of flavors, more or less intense and decisive.
Bitter and spicy: Young, pungent, and bitter on the palate.

In the presence of high polyphenols, we see not only an intense color and pronounced density and viscosity but also an intoxicating versatility and dominance, making it perfect for savory and sweet "mantecature," whether in a risotto, a chocolate mousse or ice cream, or wherever it's powerful organoleptic will contribute to a unique and unmistakable experience. This is particularly enjoyable for those like me who like to feel and distinguish their oil rather than having it latent and undervalued.

The terroir of the oil precisely tells the story of its land, crops, climate, and everything that has crossed a land both in heaven and on earth. Often referred to as green gold in its highest expressions, olive oil is always rich in medicinal properties, an elixir of youth, a natural preservative, moisturizer, and even spiritual. Its value lies in the hands, palates, and attentive eyes of those who choose it with appropriate tasting, certainly not just on a piece of bread, however tasty it may be, but as a delicious treat centered on the contrast and usability of polyphenols, a subdued savoriness, and a wheat substrate.





The "Strippaggio" is how you taste the oil: vocalizing.

While I am passionate about tasting excellent olive oil with bread, this is not the correct way to taste it. To properly taste olive oil, one must first "strip" it by bringing it to the mouth without swallowing it and then performing the "strippaggio" technique - inhaling air through the mouth at the same time, gradually increasing in intensity. This technique oxygenates the oil and releases its vapors in the mouth, allowing its flavor to coat the taste buds fully. When approaching a technical evaluation of olive oil, one should also consider its temperature and the container used for tasting. Olive oil is a living and delicate ingredient that deserves to be respected, and proper tasting should be done using suitable containers such as ceramic or glass, with dark glass preferred for storage.

Until next time, please resist the temptation to pair olive oil with bread and think of me! Extra virgin olive oil has always had its own unique voice, and it is up to us to listen to it - a voice that echoes from the past and extends into the future of world cuisine. It is an absolute, historic, healthy, and iconic ingredient.

Chef Michele Casadei Massari is a pedigreed chef and entrepreneur, currently serving as CEO, Founder, and Executive Chef at Lucciola in New York City. Born in 1975 in Riccione and raised in Bologna, Michele moved to New York City in 2009, Massari is extremely passionate about all things Italian including its cuisine, art, literature, and other creative expressions.

Michele, an alumnus of the prestigious Università di Bologna, has seamlessly integrated his diverse skill set and academic background in medicine into his culinary pursuits, positioning him as one of the world's most respected Executive Chefs and culinary consultants. His collaborations extend to renowned brands like Consorzio del Parmigiano Reggiano and Pastificio Felicetti, serving as chef and brand ambassador for the US market. Aside from his hands-on roles in the kitchen, Michele serves as the Executive Chef of the BiograFilm Food Academy based in Bologna. He also contributes his expertise as an Advisor & Partner at I Wonder Pictures, a film production and distribution company known for award-winning movies such as the Oscar winner "Everything Everywhere All At Once" and "The Whale

His cooking style is consistent with the uniquely Italian philosophy which employs a simplistic approach and relies chiefly on the quality of the ingredients rather than elaborate preparation. Occasional radio speaker on Italian national broadcasters such as Radio 2, he is also a conceptual photographer and T-shirt designer.



TRADITIONAL, INTENSIVE AND SUPERINTENSIVE OLIVECROPPING

Adapting to climate change and sustaining production in Spain using organic farming



Basket of olives

As can be found in the Bible and other sources in the literature, olive growing appeared first in the Kingdom of Northern Judah, in what is now Syria, and it was carried from there by navigators from Phoenicia and ancient Greece all over the Mediterranean. Due to its origin, the olive is a robust tree which has shown historical resilience to environmental changes, and it is very well adapted to the Mediterranean climate, characterized by prolonged summer drought, irregular rain the rest of the year, and fairly mild winters. In Spain, the country with the largest cultivated area under olives, 2.7 million hectares, the course of time has molded the so-called traditional olive farm, made up of long-lived, very large trees, widely separated, and usually not watered. But its poor productivity per hectare, and the growth in demand for olive oil around the world, have prompted a process of transformation, with new higher-density planting systems based on irrigation and smaller trees better suited to mechanized picking.

Today, the traditional system remains dominant, although it is slowly losing ground to more modern farms: according to the density, these are known as intensive (200–500 trees/ha) or superintensive (1500–3000 trees/ha). These are more productive models, needing more water and fertilizers, which already represent 20% and 10% of the total, respectively.



Photo by Fabio Lamanna - stock.adobe.com

Before answering this, we need to understand that, over the next few decades, the most important challenges humanity will have to grapple with are global warming and dwindling resources. Most scientific studies point to a drop in crop yields of 10% to 50% as the result of climate change and soil degradation. This threat, while menacing in itself, is going to be especially acute because it will arise in a context of increasing demand for food from the ever larger world population.

Against this general backdrop, Spain, because it is in the Mediterranean basin, is one of the countries that is most vulnerable. According to the United Nations Food and Agriculture Organization (FAO), southern Europe is going to have to cope with lower precipitation and scarcer impounded water, higher temperatures, and more frequent or more severe extreme phenomena such as droughts and flooding.

Looking to the future, it will be necessary to apply strategies that enhance the management and efficiency of water use



Photo by Psousa5 - stock.adobe.com

What Is happening with Spain's climate?

The climate projections for Andalusia, the region producing about 80% of Spain's olive oil, suggest that the temperature could rise almost 1.5°C in the period up to 2050, and perhaps as much as 3.5°C by 2100. At the same time, a general reduction in precipitation is expected that, although varying from one zone to another, could mean up to 23% less falling. It must also be added that its distribution in time will be highly erratic, with an alternation between extreme rainfall events and prolonged periods of drought.

With forecasts like these, the impact of climate change on olive growing in Spain could be very negative. The effect that is already most visible today is smaller harvests when these extreme phenomena, water stress and high temperature, coincide with the moment of flowering or ripening of the fruits. Moreover, the increase in torrential rain could cause losses of soil, obviously an essential component for olive trees, and this erosion affects its capacity to retain water and hold nutrients, leading to a gradual decline in volume of production, especially on mountainous or steeper ground.

Water is the key

According to official data, 75% of the territory of Spain is at risk of desertification. Given this, the consequences of a rise in temperature taken together with a fall in precipitation, would not only affect olive farms that do not have water for irrigation (rainfed), but also the irrigated ones, because the needs for water would increase at the same time as the available reserves of it decline. Looking to the future, it will be necessary to apply strategies that enhance the management and efficiency of water use. This means reducing losses of water in distribution channels, improving water use calendars using meteorological information and humidity sensors, and even matching the types of farms to its predicted availability in each territory.

The Spanish olive sector, conscious of the situation, has been expanding its environmental commitment and boosting the sustainability of its operations. While progress could be faster, olive cultivation in Spain is adapting, by introducing olive varieties that are more drought-resistant and applying techniques such as precision farming, which observes and analyzes the particular needs of the crops using drones, smart sensors, or automated irrigation systems.

Organic farming to combat climate change

Agrifood producers and companies are one of the sectors that could most contribute to meeting the Sustainable Development Goals (SDG) established by the United Nations. Indeed, governments, organizations, companies, and society in general are increasingly recognizing that organic farming is a system manifestly committed to sustainability and the mitigation of climate change.



Photo by Diego - stock.adobe.com

According to the most recent report compiled by FiBL and IFOAM Organics International, from 2018 to 2021 the area under organic crops grew 7.3% around the world, from 71.2 to 76.4 million hectares. After France, Spain is the European Union country with the largest area devoted to organic production, and it ranks seventh in the world. The land dedicated to organic production in Spain rose by 8% in 2021 to reach 2,635,442 hectares, representing 10.79% of the utilized agricultural area. Olives make a strong showing among the organic crops, with the planted area in Spain rising to 256,507 hectares (2021). One of its agronomic objectives is protecting the soil, by preventing erosion, and raising the proportion of organic matter and biological activity. Techniques from organic farming are inspiring soil management measures like putting down plant cover between lines of olive trees which, properly managed, in conjunction with shredding the prunings, enhances the soil's water retention capacity, can lower the ambient temperature, and even improve its ability to capture atmospheric CO2.

The excellent results obtained with these practices are helping to drive an organic transition for olive farms in general. The improved soil quality, encouraging biodiversity, efficient use of water, energy efficiency, and carbon capture allow producers and companies to adapt to agricultural and environmental policies, but also to the new models of relationships between providers, clients, and consumers in the agrifood chain.



José Luis García Melgarejo is currently managing director of bioQualis, a consulting firm specialized in agri-food development, organic farming, and sustainable projects. With more than 25 years of professional experience, he has held different positions at Spanish and European level, in the field of certification, industry and marketing of organic products. In the olive oil sector, he worked like managing director of Olivar de Segura, cooperative group with more than 5.000 olive farmers and 12 olive oil mills located in Sierra de Segura, the largest natural park in Spain. He has been member of the board of directors at the Protected Designation of Origin Sierra de Segura extra virgin olive oil, and also, at ANIERAC, the Spanish Association of Industrial Packers of Edible Oils. He has promoted many projects for development of the organic products sector, as part of the board of IFOAM Organics Europe, managing director of CAAE, a specialized certification body, managing director of Ecovalia association and general secretary of the Andalusian Committee of Organic Agriculture.

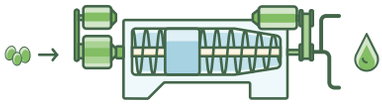
EXTRA VIRGIN OLIVE OIL PRODUCTION FLOW

A short step-by-step guide to EVOO production, from field to the shelf.



Olive reception

1



Milling

2



Testing and storage

3



Transport

4



Pre-bottling tanks

5



Filtering

6



Quality control

7



Storage and blending

when necessary

8



Filling machine

9



Bottling and labeling

10



Warehousing

11



Distribution

12

Learn more at

Certifiedorigins.com

THE GI SYSTEM: AN ITALIAN STANDARD

Two certification seals, one assurance: quality.

The standard of Protected Designation of Origin (PDO) & Protected Geographical Indication (PGI), rely on years of experience and a strong connection with the areas where products are made. This connection ties the raw, unprocessed ingredients and food products with traditions, culture, and the transmission of centuries-old know-how.

Such products bear the mark of human craftsmanship, where skilled food artisans play a pivotal role in pursuing exceptional quality. However, it is essential to note that artisans must dutifully abide by strict production regulations set forth for GI products.

Nowadays, the agri-food system of geographical indication promoted by the European Union is one of the most advanced in the world in terms of consumer protection, uniqueness, security, and food quality. It is based on the following four pillars that relate to the whole production chain with specific regulations;

- food security (to guarantee full hygienic compliance with all the go-to-market products);
- sale standards (to set minimum requirements for marketable products);
- labeling (to transmit transparent and accurate information to consumers), and;
- European quality systems (to identify, protect and promote products with specific required qualities rather than others of the same category which are not fully compliant).

This identifying quality system allows distinction and protection and adds value to one or more characteristics of specific items, making them more recognizable than other "generic products."

Therefore, from a legal and productive standpoint, the European system imposes more restrictions than other countries, which tend to prefer cyclic & rigid controls rather than accepting production standards and regulations by third-party entities.

Because of this, the European system guarantees consumers more inspections and higher quality standards than products of similar characteristics.

The GI system includes various agri-food products like cheese, wine, extra virgin olive oil, meat, processed meat, seafood, fruits, and vegetables.

The European system ensures that consumers can rely on these products to have typical characteristics, high quality, authenticity, traditional flavors, traceability, and meet healthy standards.



Pecorino Parmigiano PDO

The rigorous European rules identify, within every market, specific product categories which meet the criteria to be registered as Protected Designation of Origin (PDO) or Protected Geographical Indication (PGI).

Alongside GIs, it's possible to find **Traditional Speciality Guaranteed (TSG)** labels, which aim to promote specific traditional features of a product, such as its production process or its composition, e.g., Neapolitan Pizza.

Let's now analyze the different meanings of GI seals and product regulations:

PDO (Protected Designation of Origin) - Identifies agri-food products that originate from a specific area, in which all the production stages are made, and from which originates the product's unique qualities. E.g. Grana Padano DOP, Gorgonzola DOP.

PGI (Protected Geographical Indication) - Refers to agri-food products originating from a specific area in which at least one of the production stages is made.

The regulation governing quality schemes encompasses multiple product regulations, spanning from raw materials to finished goods. It also covers geographical considerations, ultimately culminating in creating a product passport accessible to consumers.

Protection Consortia are responsible for ensuring that product regulations are followed. They are unions that oversee quality standards, and their primary duties include protecting, promoting, and adding value to GIs and informing consumers. To fulfill these responsibilities, Consortia enlist third-party entities to analyze and evaluate whether producers comply with specific product regulations before the items reach the market.

Another confirmation of the quality standards, in addition to PDO and PGI labels, is given by the Country mark, a band realized by the Poligraphic Institute of Italy with the same anti-forgery techniques used for paper money. This mark identifies the uniqueness of each product and allows traceability within the supply chain.

It's also a synonym for security and tamper-proofing and, furthermore, avoids forgery and irregular usage. Lastly, it has the role of informing consumers through scanning the data matrix code. This system has been integrated with QualiGeo, the first European database realized by Qualivita Foundation.



Pecorino Toscano PDO

MAIN OLIVE OIL CATEGORIES AND PRODUCTION PROCESSES



EXTRA VIRGIN OLIVE OIL
The highest quality grade



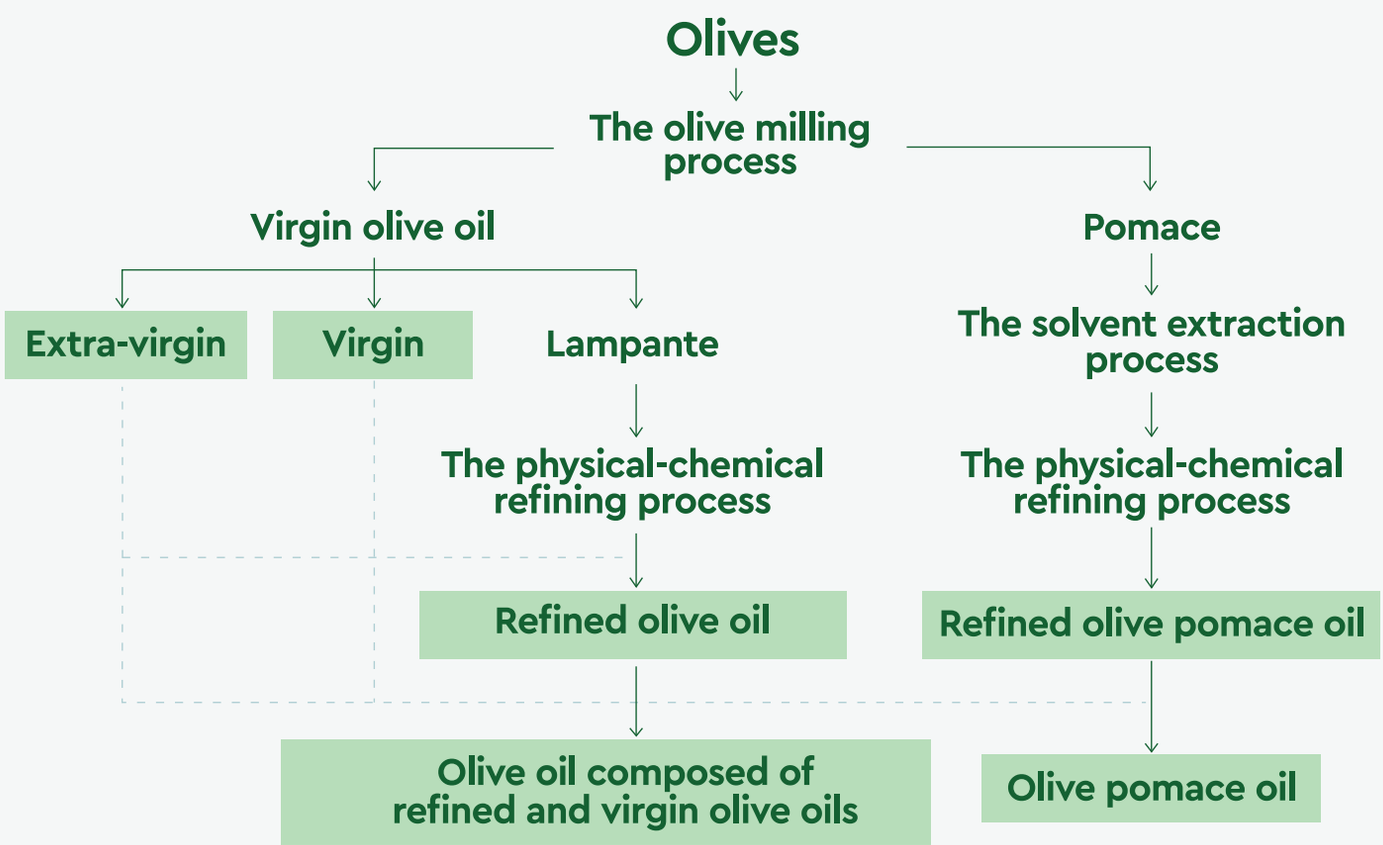
OLIVE OIL
A blend of refined olive oil with extra virgin and/or virgin olive oils



OLIVE - POMACE OIL
A blend of refined olive-pomace oil with extra virgin and/or virgin olive oils

Chemical Standards	Extra Virgin	Virgin	Lampante	Olive Oil
free Acidity (%)	≤ 0,8	≤ 2,0	> 3,3	≤ 1,0
Peroxide Numeber (meqO2/Kg)	≤ 20	≤ 20	-	≤ 15
K232	≤ 2,5	≤ 2,6	-	-
K270	≤ 0,22	≤ 0,25	-	≤ 1,15
ΔK	≤ 0,01	≤ 0,01	-	≤ 0,15

Sensory Standards	Extra Virgin	Virgin	Lampante	Olive Oil
Median defects (Md)	0	0 ≤ Md ≤ 3,5	> 6	-
Median fruity (Mf)	> 0	> 0	-	-



N.B.: Only the boxes highlighted in green are suitable for human consumption

Learn more at **Certifiedorigins.com**

The Importance of Extra Virgin Olive Oil in Italy

An extra virgin olive oil (EVOO) labeled with a designation of origin constitutes the best assurance regarding authenticity, healthiness, safety, and quality. Product regulations are guaranteed for each bottle, and a consortium verifies that the supply chain takes place in a specific Italian area, from olives harvesting to milling to packaging.

Regulations also govern the harvesting process, mandating manual picking during the optimal period that aligns with the olives' maturation stage.

Additionally, there is a prescribed time limit from harvesting to milling, and specific guidelines must be followed during the milling process. These measures are crucial to obtaining oil that meets the necessary organoleptic standards, guaranteeing quality and health benefits. Because of this, each EVOO undergoes chemical and sensorial tests (e.g., oil tasting by expert committees approved by the government) to ensure full compliance with regulations.

This process results in an oil 100% produced within a specific area, with a strong bond of typicality with that same area, certified by the European labels of PDO and PGI, and fully compliant with the rigorous product regulations.



Toscano Extra virgin Olive Oil PGI

fondazione QUALIVITA

Qualivita Foundation

Qualivita Foundation was founded in 2000, thanks to Mauro Rosati and Paolo De Castro, with the primary objective of adding value to the GI system and the PDO and PGI agri-food chains. This cultural and scientific foundation promotes the role of quality agri-food systems. It is involved - nationally and internationally - in safeguarding and adding value to the GI's agri-food and vinicultural markets by bringing up the key elements of these market developments: nutrition, well-being, sustainability, cultural heritage, innovation, authentication, and enogastronomic tourism. Qualivita Foundation's efforts encompass a range of activities, including implementing strategies and communication content, fostering education and scientific dissemination, investing in research and innovation, and establishing a global network that connects all Geographical Indication (GI) chains.



Mauro Rosati, CEO at Qualivita Foundation
Mauro is an expert in Italian agri-food. He benefited from extensive experience within various institutions and has been directing the Qualivita Foundation since 2000. He is also the head of Origin Italia, an association that gathers the most important Consortiums engaged with protecting GIs in the agri-food market. He served twice as a Counsellor of the Ministry of Agricultural Policies for Made in Italy. Additionally, he was the author of numerous publications focusing on Italian DPO and PGI products. He also holds the director position for the magazine "Consortium," published by the Poligrafico e Zecca dello Stato, and is part of Eurispes's Osservatorio Agroalimentare.

Discover the Origins Trust the Journey

DO YOU KNOW WHERE YOUR OLIVE OIL COMES FROM?



We use Oracle Blockchain technology to give you full transparency on shipment and to reduce the risk of manipulation of the information at the source.

Certified Origins

Quality Foods
Traceable Sources
Authentic Origins

Photo by ardasavasciogullari - stock.adobe.com

BLOCKCHAIN TECHNOLOGY IN THE FOOD INDUSTRY BENEFITS AND APPLICATIONS

Blockchain technology is a revolutionary innovation that has transformed various sectors, including the Food Industry. It is a decentralized, immutable ledger that records transactions and stores data in a secure and transparent manner.

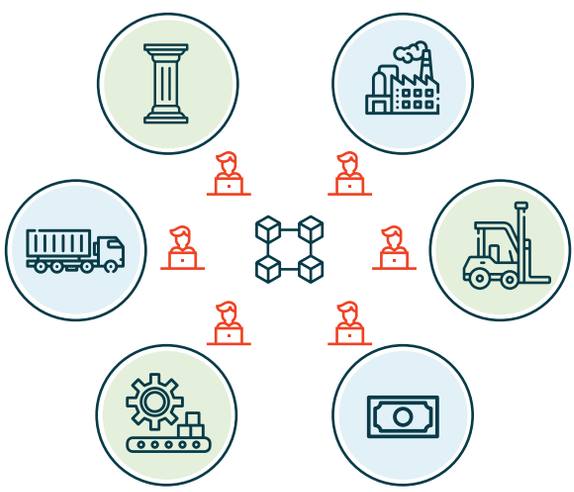
How does Blockchain work?

TRANSACTIONS ARE COMPLEX

① Each participant has his own separate ledger - increasing the possibility of human error or fraud.

② Reliance on intermediaries for validation created inefficiencies.

③ It can be a paper-laden process, resulting in frequent delays and potential losses for all stakeholders.

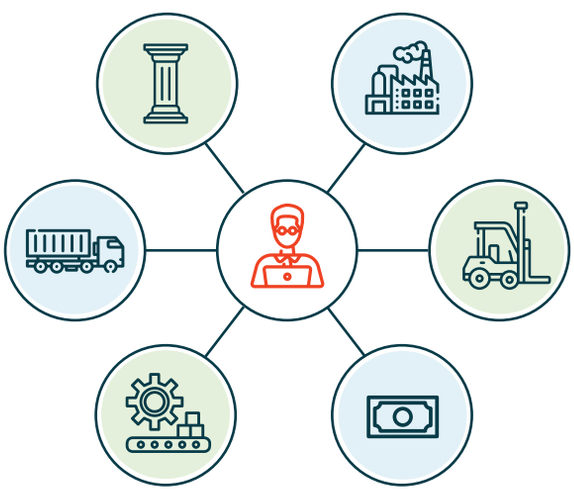


BLOCKCHAIN MAKES IT BETTER

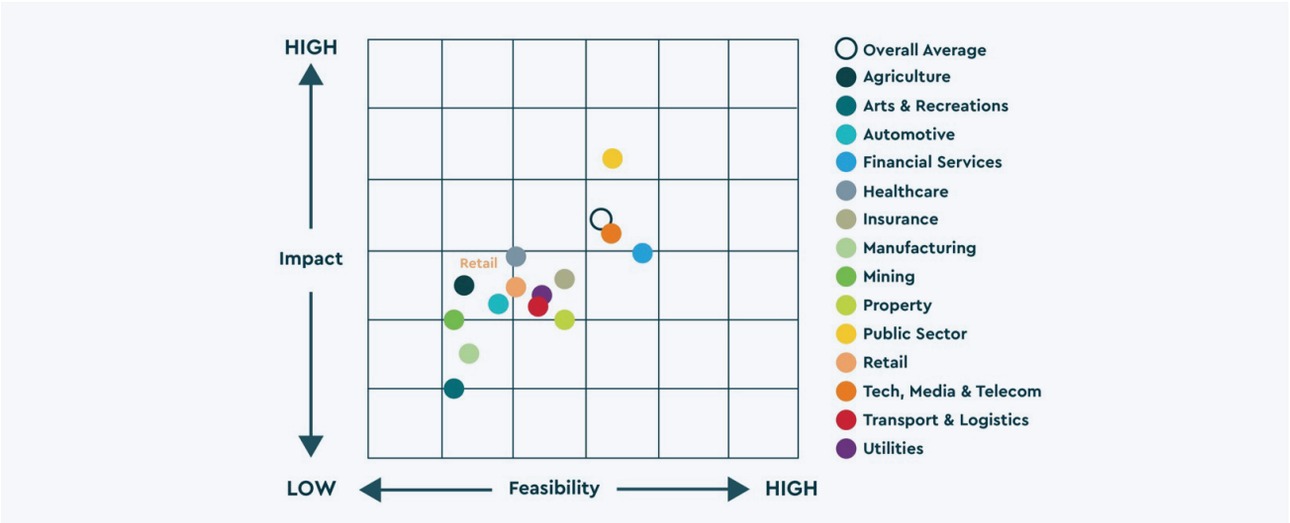
① A single shared ledger that is temper evident. Once recorded, transactions cannot be altered.

② All parties must give a consensus before adding a new transaction to the network.

③ Eliminates or reduces paper processes, speeding up transaction times and increasing efficiencies.



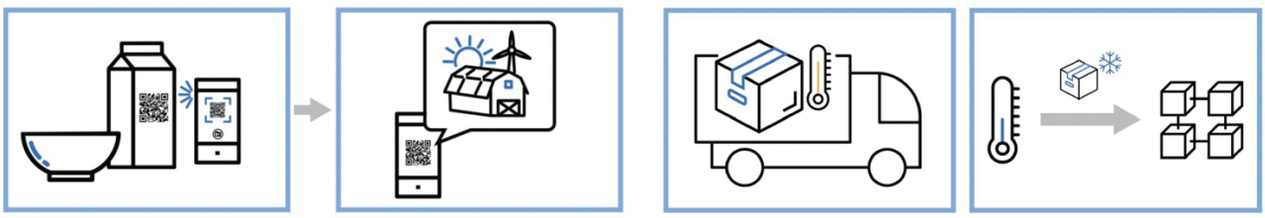
McKinsey & Company projects that the global blockchain market could generate up to $1 trillion in annual business activity by 2030, with the bulk of this coming from the financial services sector. Global block-chain market seems to be poised for significant growth over the next few years, with increasing adoption across different industries and regions.



The increasing adoption of blockchain technology will be driven by several factors, including government initiatives, increasing demand for transparency and efficiency in supply chain management and global trade, and the growing popularity of cryptocurrencies.

As for the Food Industry, its application can go range in traceability, supply chain management, and proof of authenticity.

Blockchain technology can be used to track food products from farm to table, ensuring accuracy of claims such as authentic origins or ethically sourced. This technology can help reduce the number of food recalls and prevent outbreaks of foodborne illnesses. In the event of a food recall, blockchain technology can help to quickly and efficiently identify the source of the issue , speeding up the recall process.



Blockchain technology can save time and money for food manufacturers, retailers, and consumers as well. With this technology, food manufacturers can streamline their supply chain processes, reduce manual record-keeping, and ensure compliance with food safety regulations. Additionally, retailers can monitor inventory levels, improve demand forecasting, and optimize their supply chain operations, reducing waste and improving profitability.

It also enables transparency in supply chain management, allowing stakeholders to monitor every aspect of the supply chain, from the farm to the consumer. This technology enables cost-saving activities by eliminating intermediaries, reducing manual record-keeping, and improving the accuracy of data. For instance, a restaurant can use blockchain technology to monitor the origin and quality of its ingredients, ensuring compliance with food safety regulations and reducing food waste.

We went from the summary description of facial features in documents issued before the advent of photography to the electronic passport. This latter normally encloses, besides a colour photo, also a chip containing all the data of a specific person, including his fingerprints. Just as the police can recognize someone by analysing mugshots and fingerprints databases, one can recognize the oils and their origin from their "molecular photos". These "photographs", better defined as metabolic profiles, can be obtained by using nuclear magnetic resonance spectroscopy and consist of a quali-quantitative complete description of all the molecules that an oil contains.

This is because extra virgin olive oils characteristics are affected by the so-called different "pedoclimatic conditions" (they grow in a different climate and soil). This is exactly the same as in the case of identical twins who, despite having the same DNA, will have different plasma or urine if they follow different diets. Accordingly, the "molecular photos" of a Spanish, Greek, Tunisian and Italian oils show differences due not only to the different used cultivars but also to different soil and climatic effects. The specific oils characteristics and differences are all easily identifiable by their NMR data analysis. Databases consisting of "molecular photo albums" of these oils can help verifying to which "album" the "photograph" of an unknown oil may belong. The oils "molecular photos" consisting of the metabolic profiles obtained using nuclear magnetic resonance spectroscopy are, like modern digital photos, very high resolution pictures. Other spectroscopic techniques, perhaps more common and easily available, give much less satisfactory results, just as happened with the first low-resolution digital cameras.

In the USA, the economic burden of food illness caused by pathogens was estimated to be $17.6 billion in 2018.

The FDA reports that foodborne pathogens cause roughly 8.9 million cases of illness and 54,000 hospitalizations, and 1,480 deaths yearly.

TOP FDA FOOD CATEGORY BASED ON RECALLS

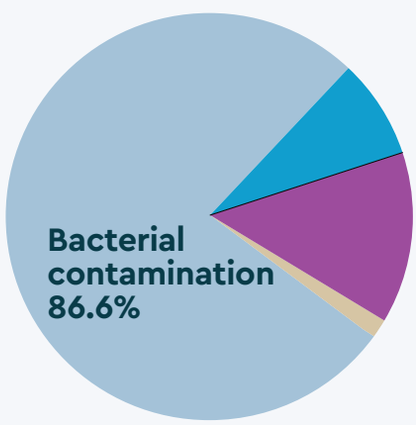


Prepared food



Seafood 10,1%

TOP FDA FOOD RECALL CAUSES BASED ON UNITS



Walmart, one of the largest retailers globally, has implemented blockchain technology to track the origin of its food products. Walmart's blockchain technology records information about each product, including the farm it came from, the date of harvest, and the date it arrived in stores. This information is available to customers, enabling them to track the origin of the food products they purchase.

Lastly, it can be used to verify the authenticity of food products, especially in markets where counterfeit products are prevalent. For instance, the Tuscan Extra Virgin Olive Oil industry has been plagued with counterfeit products, leading to significant financial losses for producers and consumers. Blockchain technology can help verify the origin and authenticity of Tuscan Extra Virgin Olive Oil, protecting producers' brands and consumers' health.

The implementation of blockchain technology in the food industry can lead to significant benefits, including speeding up the food recalls, saving time and money, verifying the authenticity of food products, and optimizing supply chain management. Therefore, food manufacturers, retailers, and consumers should embrace blockchain technology (when possible) to enhance transparency, safety, and efficiency in the food sector.



Diary 11,2%



Supplements 10.1%

8.4%
Undeclared Allergin

4.8%
Foreign Material

0.2%
Other

TOP USDA CATEGORY BASED ON POUNDS



Poulty 72.3%



Multiple 18.8%



Beef 6.3%



Pork 1.7%



Cris Nulli
After 20+ years working in the Advertising and Media Industries, including 10 years in Meta, Cris has recently launched Appetite for Disruption, a consulting firm for Food, Food Retail and Food Tech, with the mission to build a platform to grow across these industries, through innovation.

NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY OF EXTRA VIRGIN OLIVE OIL

Is it possible to take pictures of olive trees in their natural context?



Professor Francesco Paolo Fanizzi in his laboratory

Olive Oil Times

Scientists Use Nuclear Magnetic Resonance to Identify Olive Oil Blends

...create blends, certifying the Italian origin of the final product, differentiating between main cultivar and the other olive oils used for the blend, in this way defining the whole of the characteristics of a specific production," Francesco Paolo **Fanizzi**, a chemistry professor...



Chemical Authentication Process Can Verify Olive Oil Origins

...from the University of Salento in Lecce, Italy, a new chemical authentication procedure could provide a solution. Southeast Italy's Apulia region is the foremost EVOO producer in the country. It's also the site of the University of Salento, where **Fanizzi** is a professor...



PubMed®

^{1}H NMR Spectroscopy to Characterize Italian Extra Virgin Olive Oil Blends, Using Statistical Models and Databases Based on Monocultivar Reference Oils

Chiara Roberta Girelli [1], Francesca Calò [1], Federica Angilè [1], Lucia Mazzi [2], Daniele Barbini [2], Francesco Paolo Fanizzi [1]

Yes, of course. We often find them in the photos reporting the popular landscapes of Tuscany or Apulia countryside in Italy. How about taking pictures also of the extra virgin olive oil obtained from them. Well the answer may not be that simple as it appears. What does it actually mean getting the picture of an oil?

Perhaps just photographing the oil bottle, maybe defining its colour or transparency. Indeed, one can also think of a more detailed oil photo able to link the product to its geographical origin, exactly as it occurs for people with their passports. At the present, there is a specific regulation within the European Community (Reg. N. 182/2009), which requires the compulsory labeling of the extra virgin olive oil bottles with an indication stating the geographical origin of the product. Nevertheless, this regulation still lacks of an official method able to guarantee consumers and settle possible disputes in the event of disagreement on the declared origin authenticity. Only for extra virgin olive oils with protected designation of origin (PDO) and protected geographical indication (PGI) there are certification procedures linking the product to a specific geographical area. However, even in this case, the guarantee is only on a paper basis.

Unfortunately, there are no officially recognized scientific methods to settle disputes in case of disagreement on the declared origin authenticity. This is why many scientists, both food and not food chemists started, about twenty-five years ago, analysing oil samples with nuclear magnetic resonance spectroscopy (NMR). This is an advanced technique, based on the magnetic properties of the atoms nuclei and exhibited when they interact with radio frequencies once positioned in a strong magnetic field. Nowadays, this technique is well known for the images provided for the soft parts of the human body, but originally it was scientifically designed and introduced specifically to "photograph the molecules".

Thanks to NMR, even extra virgin olive oil can today be assigned with an identity card complete with a "photo", all using a few tens microliters of oil. Interestingly, it is now occurring for foodstuff and extra virgin olive oil in particular, exactly what happened for the identification of people.

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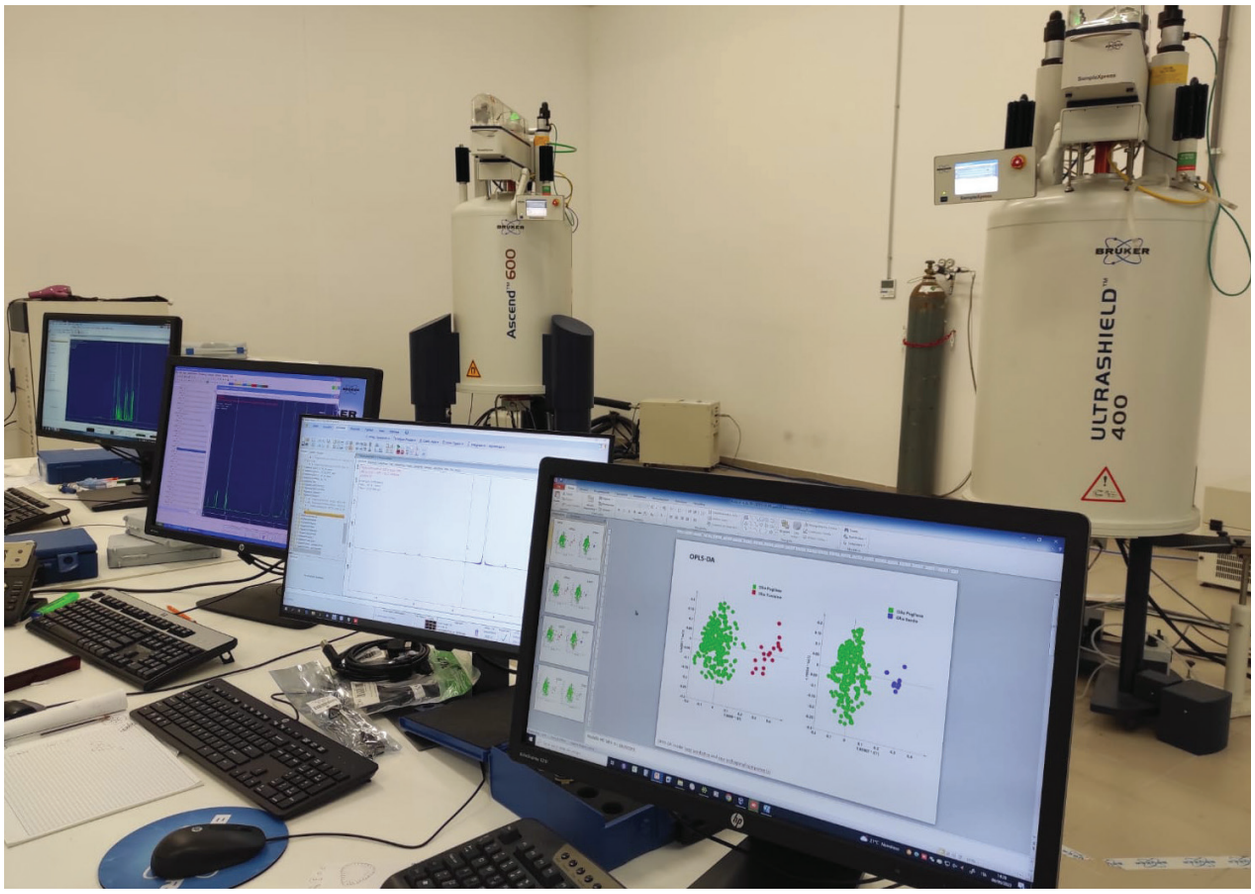


NMR equipment

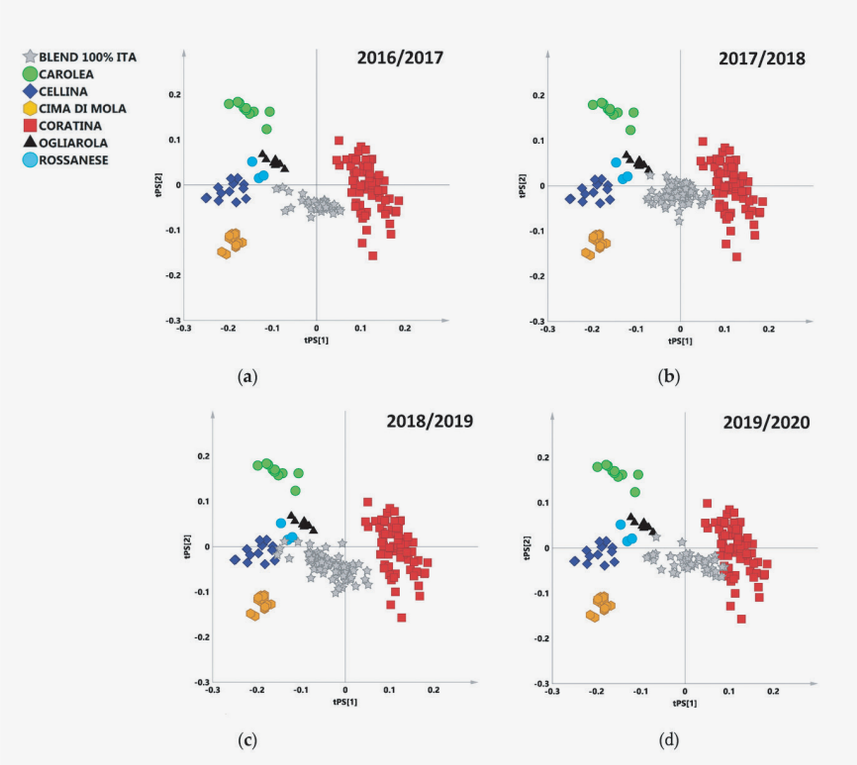
On the other hand, nowadays, similarly to digital cameras, also the NMR spectrometers, allowing extra virgin olive oils data sets building and unknown samples classifications, are becoming more affordable and easy to use.

Analytical methods based on nuclear magnetic resonance (NMR) and statistical analyses have been developed for some time at the University of Salento in the Metabolomics group of Professor Francesco Paolo Fanizzi, full professor of General and Inorganic Chemistry. A long-standing collaboration of Professor Fanizzi group with Certified Origins focused, in the last decade, on the quality and geographical origin assessment of extra virgin olive oils. These comprises several international blends as well as PDO and PGI products, including Italians. Modern NMR based methods offer a wealth of possible useful applications and are complementary to conventional analyses currently required by EU and other international regulations.

NMR technology could reduce the risk of food fraud in the Olive Oil industry



100% EVOOs Italian blends (grey) fall within the field defined by their monocultivar constituents in the NMR data based prediction model





Prof. Francesco Paolo Fanizzi is a full Professor at the Department of Biological and Environmental Sciences and Technologies, University of Salento and responsible for the Metabolomics Unit, served as President of the Inorganic Chemistry Division, President of the Apulia Section of the Italian Chemical Society and Consultant to the Parliamentary Commission of Inquiry into the Phenomena of Counterfeiting, Commercial Piracy and Abusive Commerce. Correspondent Member of the National Academy of Olive and Oil, Professor Fanizzi is Editor in Chief of Bioinorganic Chemistry and Applications (Hindawi) and Editorial Board member of Scientific Report (Springer Nature), Molecules (MDPI) and Sustainability (MDPI).

Fast And Efficient Olive Oil Delivery At Scale Across Continents

FAST TRACK TO FRESHNESS

1-2 weeks across Europe
In as short as 2 Days in the USA and Canada



Certified Origins

Quality Foods
Traceable Sources
Authentic Origins

Extra Virgin Olive Oil and Private Label experts. We help you find healthy foods and trusted sources for your brands.

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