OLIVE OIL AND THE PLANT-FORWARD KITCHEN: STRATEGIES AND TECHNIQUES FOR LEVERAGING FLAVOUR IN MEDITERRANEAN-INSPIRED COOKING OLIVE OIL BENEFITS IN HEALTH AND COOKING



MERCEDES FERNÁNDEZ ALBALADEJO, MD

STANDARDISATION & RESEARCH UNIT

NTERNATIONAL OLIVE COUNCIL





SUMMARY

- 1. IOC'S ACTIVITIES AND OBJECTIVES
- 2. STANDARDISATION, QUALITY & HEALTH
- 3. FLAVOR & OLIVE OIL TASTING
- 4. OLIVE OILS IN GASTRONOMY



THE INTERNATIONAL OLIVE COUNCIL: 64 YEARS AT THE SERVICE OF OLIVE SECTOR



The International Olive Council (IOC) is the only international organization in the field of olive oil and table olives.

It was set up under the auspices of the United

Nations in 1959, with permanent headquarters

in Madrid (Spain).



WHO ARE THE IOC MEMBERS







IOC Members are currently 45 Countries

represented in **19 members,** as European Union and its 27 Member States are one single member in IOC.

ALBANIA

ALGERIA

ARGENTINA









EGYPT

EUROPEAN UNION

GEORGIA

IRAN



ISRAEL



PALESTINE



JORDAN



ARABIA SAUDI



LEBANON



TUNISIA



LIBYA



TURKEY



MONTENEGRO



URUGUAY



MOROCCO



UZBEKISTAN

COUNTRIES IN THE PROCESS OF JOINING THE IOC AS MEMBERS





BRASIL

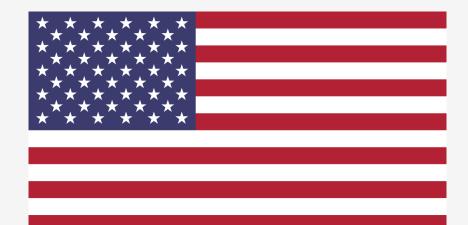
AZERBAIJAN



BOSNIA AND HERZEGOVINA

There are also **observers** participating in some of our activities without being members from countries such as the United States of America or Australia.

There is also an Advisory Committee which articulates our permanent dialogue with the **private sector** (producer, Industry and consumers). There are participants not only from our members but also from observer countries as USA, Japan, Brazil, Australia ...





GENERAL OBJECTIVES

ACCORDING WITH THE INTERNATIONAL AGREEMENT ON OLIVE OIL AND TABLE OLIVES (2015)

I. STANDARDISATION AND RESEARCH

II. OLIVE GROWING, OLIVE OIL TECHNOLOGY & TECHNICAL COOPERATION

III. OLIVE OIL ECONOMY & PROMOTION OF OLIVE PRODUCTS





I. QUALITY CRITERIA

- 1. Chemical
- 2. Sensory

II. PURITY CRITERIA

Detection of admixtures with other vegetable oils:

- 1. With olive pomace oils
- 2. With refined oils



IOC QUALITY PARAMETERS:

A. Chemical

- 1. Free acidity
- 2. Ultraviolet specific absorption
- 3. Peroxide value
- 4. Ethyl esters
- 5. Moisture and volatile matter
- 6. Insoluble impurities
- 7. Trace metals
- 8. Phenolic compounds

B. Sensory

9. Organoleptic assessment of virgin olive oil



Factors, defining quality of oil

- ✓ Area of production
- Maturity conditions
- Harvest period
- ✓ Terms of storage
- ✓ Extraction





WHY CONSUME OLIVE OIL?

- ✓ Natural fruit juice, without chemical processing
- ✓ Distinctive taste encouraging consumption of other healthy food products such as vegetables
- ✓ Rich in vitamins and antioxidants, protects against free radicals
- ✓ Healthy food item: protective nature
 - Favorable chemical composition: Rich in monounsaturated fatty acids, decreases total cholesterol, LDL-cholesterol and triglycerides, enhances HDL-cholesterol
 - Prevents against various diseases (cardiovascular, cancer, diabetes, high blood pressure, digestive problems, etc.)
 - Enhances Omega-3 fatty acid (fish) absorption by cellular membranes
 - Positive effect on ageing, increases life expectancy
 - Cognitive function, protects memory and against neurodegenerative diseases (Alzheimer, Parkinson, etc.)





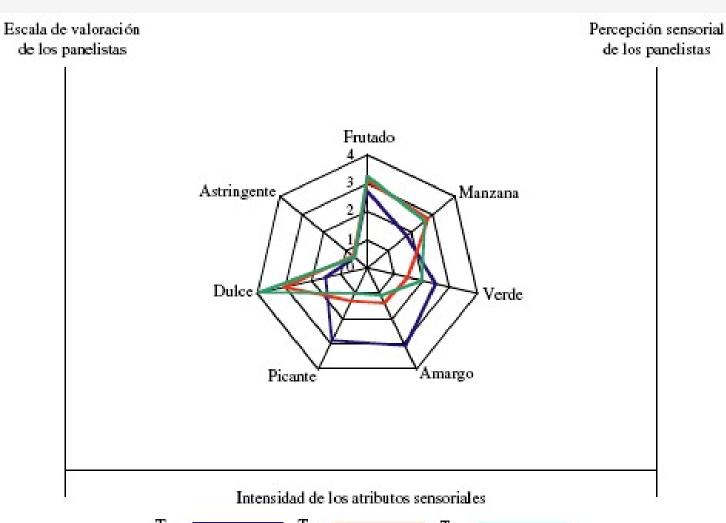


Virgin olive oil quality





Organoletic Characteristics of Virgin Olive Oils



 $T_0 = T_1 = T_2 = T_2 = T_3 = T_4 = T_5 = T_5$

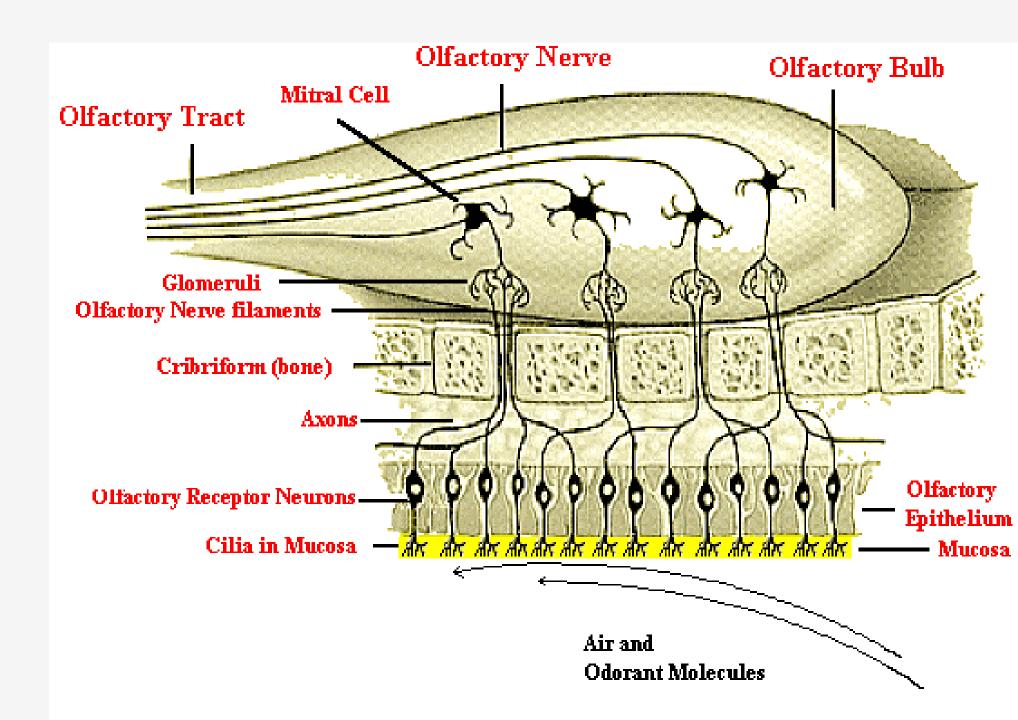
Manzana = Sabor característico de este fruto, presente en el aceite de oliva. Verde = Aromas a hierbas y vegetales verdes recién cortados.



SENSORY ANALYSIS

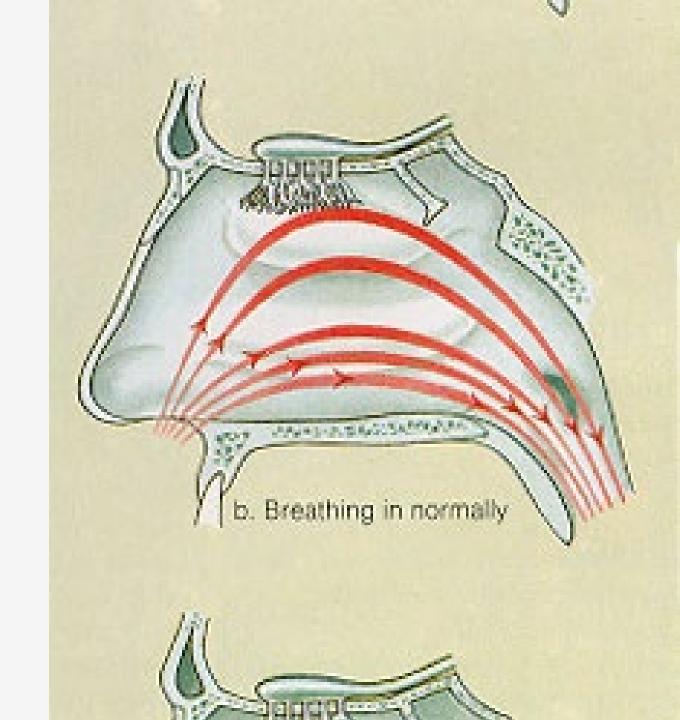


Olfactory system



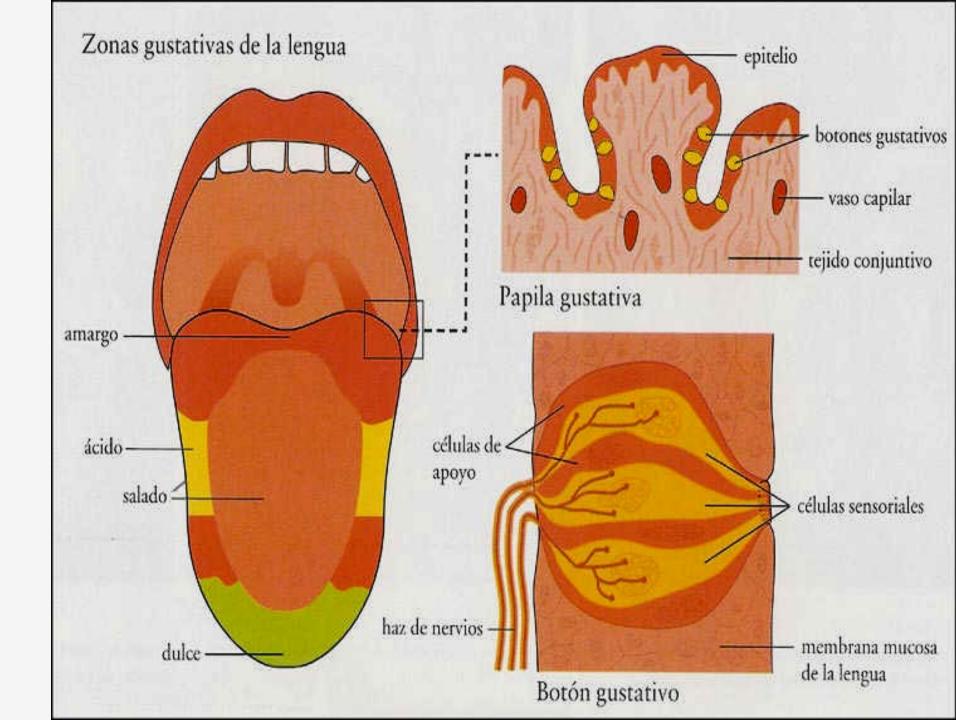


Retronasal breath

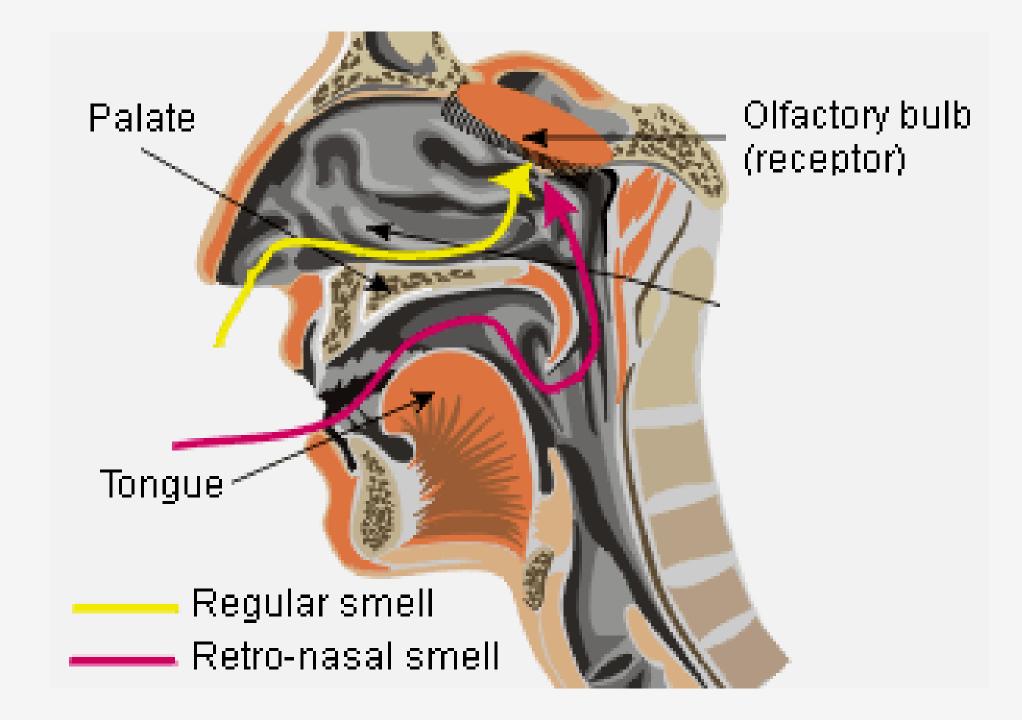




Gustative sensitivity









Sensory description of shipped Olive Oils





RIPE FRUITINESS

A medium fruitiness to ripe olive on the nose, expressed through rich nuances including almond, banana, tomato and aromatic herbs such as fennel with later hints of apple and vanilla.

Extraordinarily sweet, fluid and light to start, followed by a light and pleasant bitterness, which is slightly spicy but well balanced. A highly complex and harmonious oil.





ROBUST GREEN FRUITINESS

Robust green olive fruit; clean and very complex. On the nose, aromas of freshly cut grass, olive leaf, artichoke, green almond, tomato, aromatic herbs such as mint and rosemary and hints of green fruits such as apple and green banana. With a wide range of flavours, the oil is well balanced between bitter and spicy. It lingers long on the palate for a harmonious finish.

MEDIUM GREEN FRUITINESS

An elegant fruitiness with green notes, hints of the vegetable and herbaceous tones of tomato and artichoke, and notes of fresh green almond and green banana fruits and aromatic and floral plants.

With great harmony on the palate, the oil gives medium-intensity bitter and spicy notes to start and a slight astringency that enhances its structure and persistence in the mouth.

DELICATE GREEN FRUITINESS

A delicate fruity taste, with notes of cut grass, banana, alloza and the vegetable aromas of tomato and artichoke, culminating in pleasing hints of aromatic herbs. Fluid and sweet to start, with pleasant astringency and balanced spice and bitterness. A rounded and elegant oil overall.



Extra virgin olive oil in gastronomy and restaurants

Contrary to what happens in the world of wine, nowadays, there are not many gastronomic critics or restaurateurs who have entered the world of olive oil enough to treat it with enough importance as wine assumes in the culture of our countries (Spanish Academy of Gastronomy, 2006).

Its great variety offers the chef a very wide range of possibilities when creating a dish and seasoning it.



The Mediterranean diet is undoubtedly the healthiest diet. One of its basic pillars is olive oil. Within the Mediterranean diet, we can ensure that olive oil is a basic element in the kitchen, it can be consumed in different ways, for example:

- ✓ Raw, since extra virgin olive oil preserves all the aroma in salads, sauces or dressings in vegetables. Also, sprinkled on bread or toast or even on smoked with table olives, fruits (strawberry, orange, etc.), pasta, sandwiches, etc.
- ✓ In **dressings**, this important order must be considered: first the salt, then the vinegar or lemon juice and finally the oil. The oil covers the salad ingredients with a layer, preventing the other elements of the dressing from penetrating them, that is why the oil is the last thing to add.
- ✓ In **sautéed and stewed**: At a low heat and low temperature, cooking is carried out with the steam given off by the meats, vegetables and the liquid that is added to them and the aromas are concentrated in the cooking. Virgin olive oil maintains all its properties, especially with legumes and vegetables.





Olive oil is ideal for frying.

Monounsaturated fatty acids in olive oil make it more resistant to heat and more stable. It is very suitable for frying and can be used several times without undergoing processes that eliminate its beneficial effects

A crust forms on the outside of the food, stops the oil from penetrating through and makes the food tastier

Food fried in olive oil contains less fat, which makes it recommended for controlling obesity.

Keys for olive oil pairing:

The wide range of aromas of the different varieties of olive oils allows experimentation with their flavors and combinations.

- ✓ Complementary olive oil pairing: combining ingredients with similar organoleptic profile. Mild flavored olive oils are combined with foods with flatter flavors; and more intense olive oils are mixed with strong flavored ingredients.
- ✓ Olive oil pairing by contrast: to obtain different and very surprising results. It is necessary to combine foods with different organoleptic characteristics in order to enhance their flavor compared to what each one would have separately.



Olive oil pairings:

- ✓ <u>MILD GREEN FRUITY</u>: herbs, green leaves and tomato. Suitable for roast, fried and sautéed foods, and seafood.
- ✓ **MEDIUM GREEN FRUITY**: rich in aromas recalling almonds and fresh herbs. Special for oily fish, preserves, salads, gazpacho, salmorejo, cooked white beans, and for strong emulsions.
- ✓ **ROBUST GREEN FRUITINESS**: intense flavor recalling wood, grass and green fruit. It pairs very nicely with beans/pulses (as well as another vegetables) enhances the flavor of legumes, vegetables, fruits and cheeses. Perfect also for chickpea soups, legumes, hummus as well as for frying.
- ✓ **RIPE FRUITY**: aroma of apple, banana and almond. Ideal for cold salads, sauces, mayonnaise, vinaigrettes, fish, seafood as well as desserts. In general, in any dish where we do not want to mask the flavor of the food.





MERCEDES FERNÁNDEZ ALBALADEJO M.FERNANDEZ@INTERNATIONALOLIVEOIL.ORG



Thank you!

