



OLIVE OIL SENSORIAL ANALYSIS

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Olive Oil Classification, as per IOC:

Defects	Fruitiness	Classification
$Md = 0$	$Mf > 0$	EVOO
$Md \leq 3.5$	$Mf > 0$	VOO
$3.5 > Md \leq 6$	-	Ordinary
$Md > 6$	-	Lampante

Tasting technique

According to IOC

RESPONSE: FRUITINESS

Olfactory
sensation

Tactile
sensation

Gustatory
sensation

RESPONSE: PUNGENCY

RESPONSE: BITTERNESS

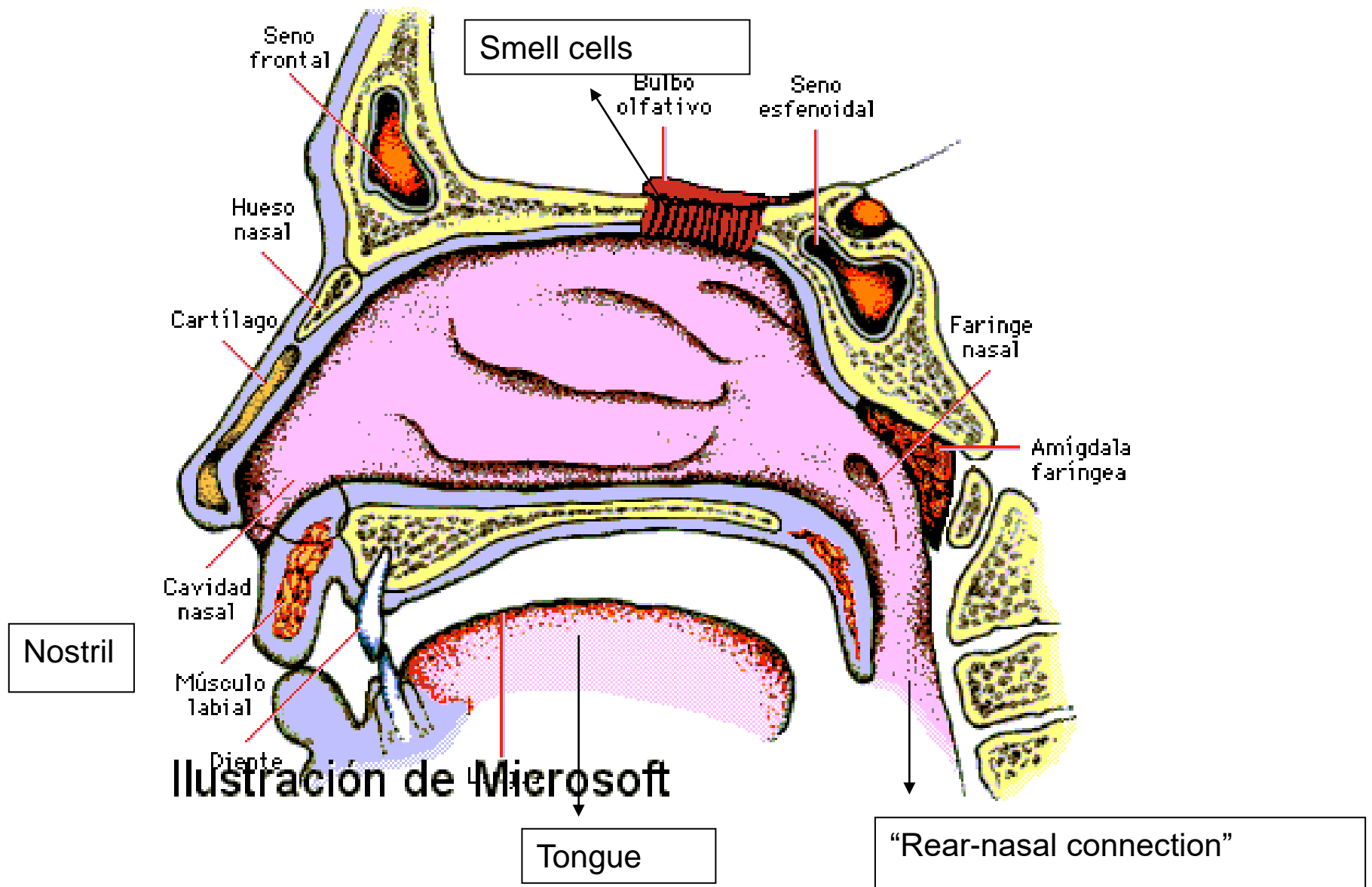


Olfactory sensations

- AROMA: **Pleasant sensations** perceived by the olfactory organ when tasting food.

In EVOO the aroma should be very pleasant and enticing; predominantly of olive fruitiness, the sensation reminiscent of healthy fresh fruit collected at the optimum harvesting time. It may also be associated with other aromas of familiar foods, i.e. other fruits, fresh grass, salad leaves, vegetables, herbs, nuts, etc. The aroma should be balanced and harmonious.

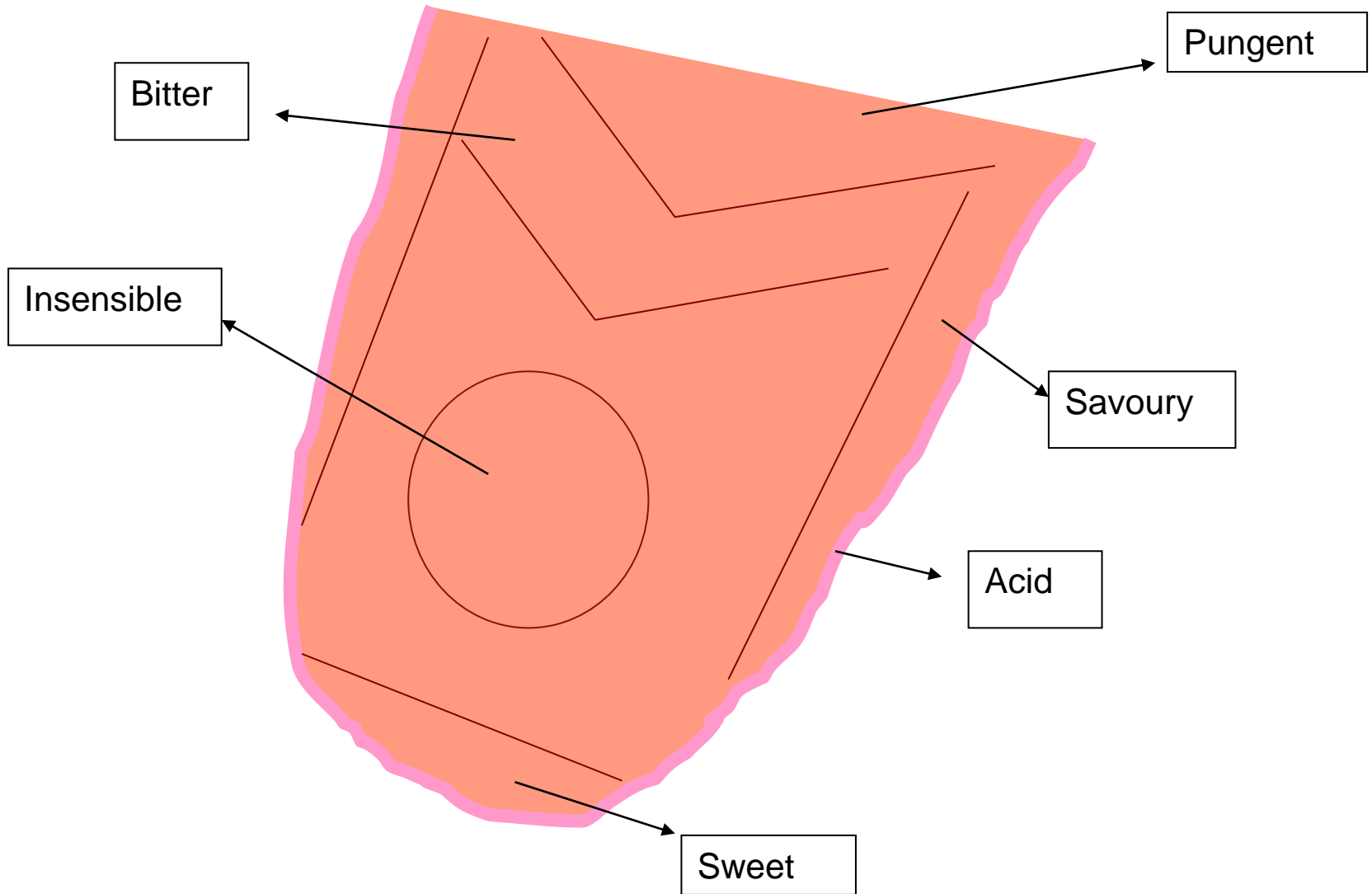
Flavour - Mouth and Nose



Gustatory sensations

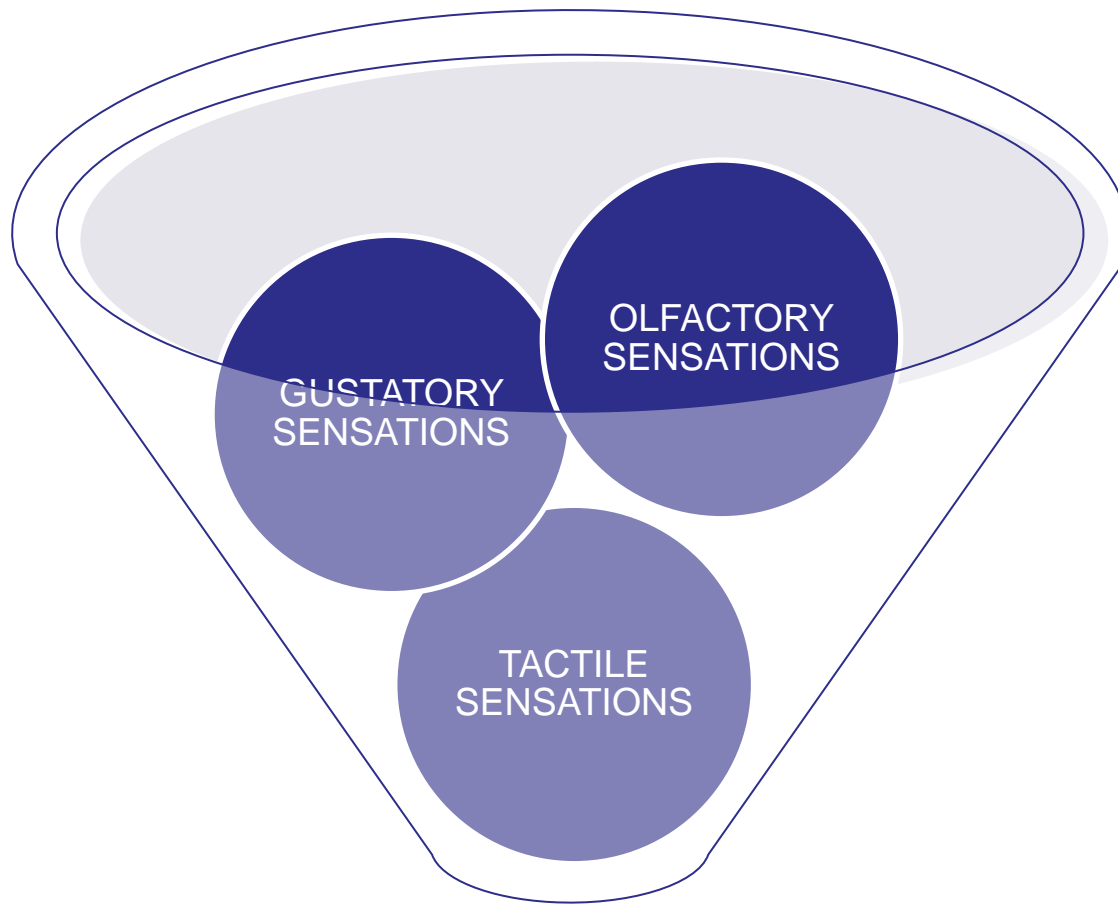
- BITTER
 - SWEET
 - AFTER TASTE: combination of sensations perceived after the stimulus has disappeared from the mouth and which differs from the sensation perceived beforehand.
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Taste - Mouth



Tactile sensations

- Astringent.
 - Pungent (chili & pepper sensation).
 - Viscosity or consistency (body).
 - Metallic.
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**BALANCE, COMPLEXITY
AND HARMONY**



DIRECTIONS FOR SENSORY PANELLISTS

Assess the aroma	Hold the base of the cup in the palm of the hand and swirl the oil gently. Lift the lid and take slow deep breaths to evaluate the aroma of the oil. Sniff gently for no longer than 30 seconds.
Evaluate the taste and the flavour	Take a small sip; distribute the oil around the mouth and allow it to spread slowly over the back of the tongue and throat. Take short successive breaths to draw air in through the mouth. Swallow at least a small amount of the sample. It is necessary to allow adequate assessment of bitterness and /or pungency. Close the mouth and breathe out through the nose (to allow the volatile compounds to be perceived retronasally).
Take note	Score the sample on the tasting profile sheet
Clear the palate	Chew a small slice of apple and /or rinse the mouth with water.

PROFILE SHEET
(For use by tasters)

SAMPLE CODE:

Perception of defects

Intensity (0 – 10)

Fusty / muddy sediment

_____→

Rancid

_____→

Winey / vinegary / acid / sour

_____→

Musty / humid / earthy

_____→

Metallic

_____→

Other (specify)

_____→

**Perception of Positive
Attribute**

Fruity

_____→

Greenly

Ripely

Bitter

_____→

Pungent

_____→

Observations.....

References

0	The attribute is not present at all
0 - 1	The attribute is just slightly perceived, and the taster may still be in doubt about it.
1 - 2	The attribute is perceived by the taster, but its low intensity does not allow a clear and easy characterization.
3 - 4	The attribute is detected and confirmed
5 - 6	The attribute is clearly detected and is possible to describe it (Fruitiness or Defect)
7 - 8	The attribute shows an above average intensity. It would be easily perceived even by untrained tasters.
9	The attribute shows extreme values. Taster would think, it is one of the most...or the worst... oils that I have tasted.
?	The taster isn't sure if the attribute perceived is negative or not.

NOTES:

If taster perceives any negative attribute that is not in the list, must write down which is as well as its intensity.

- Is mandatory to indicate the absence of sensorial perception writing "0" in the assigned place.



NEGATIVE ATTRIBUTES



NEGATIVES ATTRIBUTES

Defects are commonly caused by poor handling of the olives before and during processing or/and poor handling of the oil after processing/storage.

- The length of the time and the temperature the fruit is stored before processing (i.e. Fusty, Musty, Winey).
 - The condition/damage of the fruits (i.e. Wet hay, Stewed fruit).
 - The time and temperature of the paste in the malaxer (i.e. burnt, cooked).
 - The nature of the storage container and the good practices in the storage process (i.e. Muddy, Rancid, Metallic).
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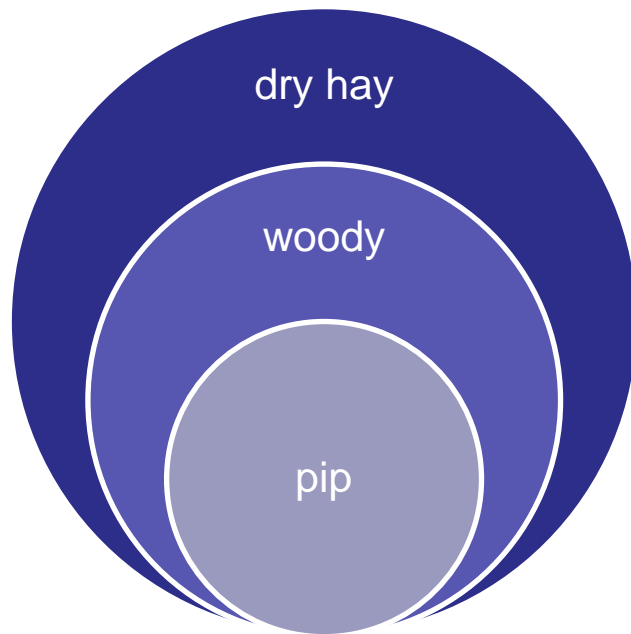
SENSORY DEFECTS ASSOCIATED WITH:

FRUIT CONDITION	CRUSHING	MALAXING	STORAGE
Fusty	Metallic	Heated/Burnt	Rancid
Winey/Vinegary	Fusty	Metallic	Muddy
Musty/Humid			Metallic
Frozen/Dried			Cucumber
Grubby			
Earthy			

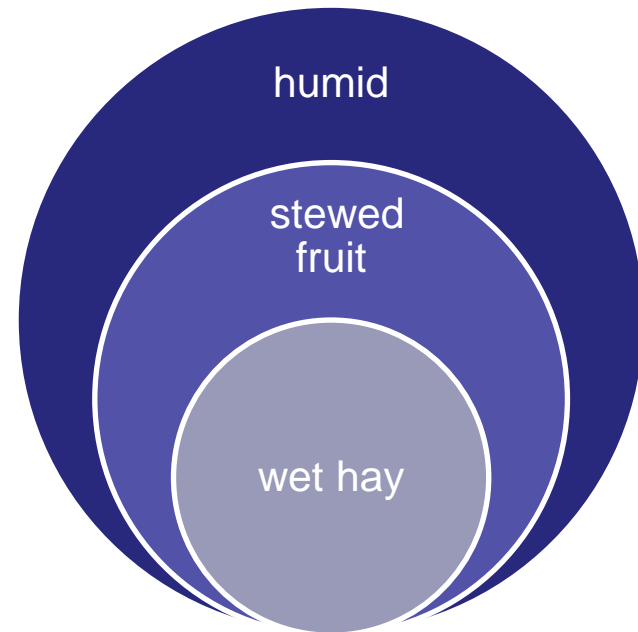
FROST DEFECT

- **ORIGIN** Flavour of oils produced from frosted fruits or oils produced from olives that have dried out because of frost damage.

“DRY FROST”



“WET FROST”





POSITIVE ATTRIBUTES



POSITIVE ATTRIBUTES



When healthy olives picked at the optimum stage of ripeness are processed using appropriate techniques, the resulting oil will have a volatile fraction formed largely by compounds that also contribute to the aroma of many fruits and vegetables.

LIST OF AROMAS

- ALMOND/ WALNUT
 - APPLE / BANANA
 - ARTICHOKE
 - CAMOMILE
 - CITRUS FRUIT
 - EUCALYPTUS
 - FIG LEAF
 - FLOWERS
 - GRASS
 - EXOTIC FRUITS
 - SOFT FRUITS
 - GREEN PEPPER
 - HERBS
 - OLIVE LEAF
 - PEAR
 - PINE KERNEL
 - RIPE FRUITINESS
 - TOMATO
 - VANILLA
 - CANDIES
 - GREEN FRUITINESS
-

Varieties Descriptors

Frantoio	Leccino	Barnea	Picual	Coratina	Koroneiki	Arbequina
Artichoke	Caramel	Banana Fruit / Skin	Tomato fruit / Leaves	Green grass	Green grass	Red apples
Floral	Toffee	Sea weeds	Fig leaves / tree	Woody	Cut grass	Candies
Dried Herbs	Vanilla custard	Buttery / creamy	Rocket salad	Cut grass	Green tomatoes	Tropical fruits
Green almonds	Condense milk	Shallots	Passion fruit	Leafy	Green banana	Creamy
Green tea	Vanilla biscuits	Grassy	Tropical fruits	Nutty	Timber	Berries
Dry grass	Creamy	Woody	Overripe apples	Green almonds	Pine kernel	Ripe fruits

COMPLEXITY AND PERSISTENCE

- **COMPLEXITY** is defined as an interesting range of aromas and flavour with many layers.
 - **PERSISTENCE** is defined as the length of time that the flavour is perceived in the palate, it is also associated with the aftertaste.
 - Both characteristic are essential in competition shows but not much at supermarket range.
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THANK YOU!

