

International Olive Oil Award - Zurich

Perception with the human senses

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Humans have various ways of registering sensory impulses: apart from special cell structures which are responsible for sensing e.g. temperature and pain, there are five different sensory organs, each connected with particular sensory perceptions (see the table below).

5 Senses	5 Sensory Organs	5 Sensory Impressions
Sight	Eye	Colour, Form
Smell	Nose	Odour, Aroma
Taste	Tongue	Taste, Texture
Touch	Skin	Texture, Temperature, Pain
Hearing	Ear	Crispiness, Freshness

Fig. 1: Sensory Organs and Perceptions

The most important senses in the sensory evaluation of food, and particularly of olive oil, are the palate and the nose. The palate is responsible for sensing taste (sweet, sour, salty, bitter, umami); the nose perceives odour directly and indirectly (retronasally). These together produce a total sensory impression, which we call flavour.

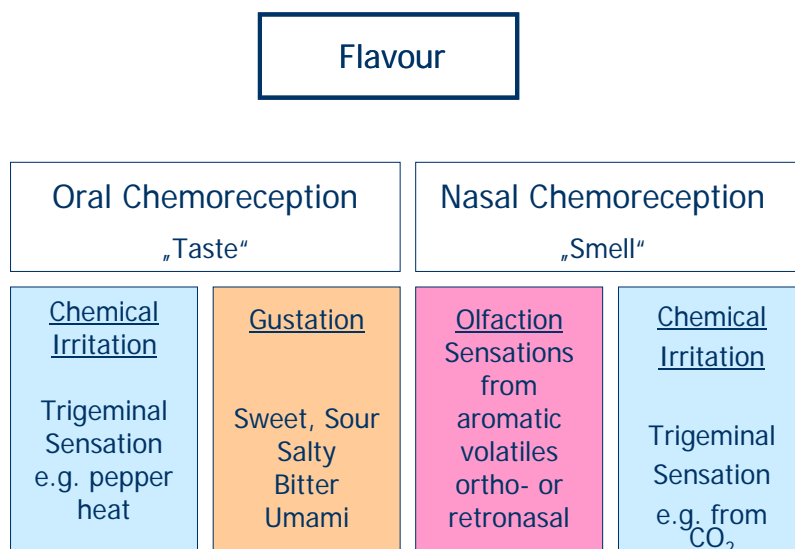


Fig. 2: Overall impression of “flavour”

Procedure when tasting olive oil:

1. Smell = olfactory impression
 - Gently swirl the glass so that the inside becomes wet.
 - Uncover the glass and inhale deeply for about 20 seconds.

2. Short pause

3. Taste = gustatory, tactile, kinesthetic impressions
 - Take a small measure of about 3 ml of oil and slowly spread it around with your tongue so that all the flavour receptors get covered from front to back (including the hard palate and throat).

4. Documentation of the intensity of sense impressions on the test form
 - Additional negative impressions can be recorded under "other". Attributes are recorded when more than 50 % of the testers notice them.