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### what is sensory evaluation?

sensory evaluation is a science that with its methodology allows us to identify, describe and quantify, through our senses, the intensity of the attributes in the products that surround us (food, beverages, cosmetics, fragrances, ...).

this discipline is applied by two main approaches:

"voice to the consumer", and "voice to the product".

the voice of the consumer reflects preferences, tastes, habits and opinions of the consumer, about a known product or one to be developed. traditionally, this approach is known as market research or opinion polls.

on the other hand, the voice of the product is the result of human perception, objective, non-affective, clearly defined, which allows us to know the intrinsic sensory characteristics and the perceptible differences of one or more products.

in sensory evaluation, various methodologies are used to analyze the relationship between product characteristics and consumer preferences, quantitatively and qualitatively measuring the presence / absence of an ingredient, differences / similarities, integrating them as the analytical reasons of the preference.

the instrument that operates this sensory methodology is a group of people who have demonstrated a specific sensory sensitivity and have been trained to quantitatively reproduce what they are perceiving through their senses; these are known as *sensory analytical judges*.

in pentasensorial, our experience focuses on delivering the benefits of sensory discipline as a scientific tool to meet the needs of our customers around the sensory experience of their products in the stages of development, production, optimization, design and communication, for all food categories and beverages, personal and home care products.



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**these are some examples  
of the type of information that  
can provide the  
sensory evaluation:**

- the place your brand occupies in the mind of the consumer
- how the consumer rates the different characteristics (intrinsic and extrinsic) of your products
- how much the brand image of your company weighs in product appreciation
- if there are areas of opportunity for reformulation
- if other brands are a threat to yours
- why one type of consumer prefers a product over another
- which are the attributes that discriminate preferences between products of the same type but different brand
- if your supplier can really substitute the ingredient without affecting the sensory characteristics of the product or the preference
- what raw materials help reduce the cost of the product maintaining its flavor and hedonic characteristics



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## methodology for sensory-analytical research

### discriminative evidence of difference

methodologies whose purpose is to determine if there is a sensory difference between two or more samples

- triangular
- duo-trio
- 3-AFC / 2-AFC
- tetrad
- pair comparison
- A no A
- 2 of 5
- R-index

### descriptive sensory profiles (the voice of the product)

the voice of the product provides the vocabulary and detailed description of a product or category defining the sensory properties that characterize it.

therefore, it provides the intimate comprehension of the stimuli caused by the product, deconstructing them in families of visual, aromatic, basic tastes, and textural intrinsic qualities, or sensations that can eventually be related to some affective sensory experience.

### dynamic sensory methods

- time-intensity
- TDS (temporal dominance sensations)



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## consumer research qualitative tests

focus groups / sensory dynamics with consumers: the reaction of the consumer to different sensory stimuli or product, with and without a brand, is explored to identify their spontaneous expression and vocabulary, and their connection with past beliefs and experiences. conceptual paths, called sensory protocept, are proposed and evaluated, in which sensory attributes of the product are linked to the brand benefit or promise, thus addressing the positioning and the sensory brief for communication and packaging design.

## quantitative tests

### central location test (CLT)

target consumer selection to participate in one-on-one interviews, under controlled conditions in our evaluation center.

### home use test (HUT)

provide target consumer(s) of the product under study, so that through daily experience at home, and for a specific period of time, they can evaluate and rate different sensory aspects.

### consumer monitoring

monitoring of the level of pleasure and consumer preference towards the products and those of the competitors over the course of the year, with the aim of verifying your market positioning.



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## sensory quality control

### selection of new suppliers

choosing raw material suppliers is a crucial point of the business since it follows variables that affect the quality and cost of your products.

### supplier, process and / or packaging replacement

the change of suppliers of raw material, technology, packaging and processes, has implications in the quality, cost of formulation, performance of the sensory qualities of the product; as much as in the acceptance from the consumer, their choice to repurchase and the permanence of the brand in the market.

### shelf life or sensory life

in the face of the inevitable impact of time on the sensory properties of a product, it is imperative to know the limits of sensory tolerance for the acceptance, or rejection of the product, by the consumer.

### sensory specification development

the design and formulation of a product concludes with the perceived sensory guidelines that typify it, which must be constantly monitored to always guarantee the same sensory characteristics of your product. These tolerances facilitate the creation of the gold standard of our product.

### quality monitoring of ingredients, product, packaging and / or process

control the quality of the ingredients, the formulation of the product, its packaging and the process, through sensory measurements, will guarantee to give the best of your company to the consumers.