

Sensory Analysis

brewing lecture at TU-Berlin

Christopher Weyand

April 21, 2016

Brewing is a widespread field including the scientific discipline of sensory analysis that, for the purpose of evaluating consumer products, applies principles of experimental design and statistical analysis to the use of human senses.

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1 Main Goals

1. Comparison
2. Description
3. Preference

2 Definition of Sensory Analysis

A sensory evaluation is performed to detect, identify and evaluate characteristics of products utilizing all of the sensory pathways. (olfactory, visual, gustatory, auditory, tactile)

3 tactile analysis

- tingling
- viscosity
- temperature

4 Testing Methods

Below follows a section about the methods of sensory testing in scientific environments. They are listed in alphabetical order.

4.1 authenticity test

Does the product meet customer expectations.

4.2 aversion test

This test is a preference test that permits just like or dislike as an answer.

4.3 blind test

The test subjects are left in the dark about the type or brand of the sample.

4.4 branded test

The branded test is the counterpart to the blind test.

4.5 descriptive testing

QDA: quantitative descriptive analysis

4.6 difference tests

Difference tests include the difference ranking test.

4.7 duo-trio test

It is to determine with which of two original samples a third sample matches.

4.8 hedonic test

Hedonic or affective tests are simple processes to determine one's preferences offering just a few options to choose from.

4.9 monadic test

The monadic test is done using just one sample and no comparison.

4.10 threshold test

//todo

4.11 time intensity test

Refers to the behavior of sensory impressions like bitter -or tartness over time as seen in figure 1.

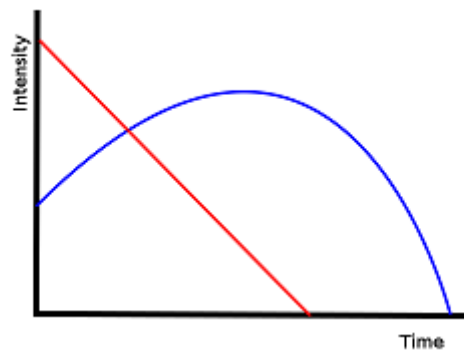


Figure 1: intensity of sensory impression over time

4.12 triangle test

//todo

5 Miscellaneous

Before Sensorik you shall not:

- smoke
- eat chocolate
- use perfume
- forget to shower

Also women are more sensitive to olfactory impulses. Furthermore they gustatory perceive more intense in special ways including the bitterness. This leads to aversion of bitter beer by most women.