

# MAYO NEURO TASTING CASE STUDY

UNCOVERING INSIGHTS THROUGH MAYO  
NEURO-SENSORY EVALUATION

# WE ARE THIMUS

We collect data that traditional market research does not capture.  
We do this by successfully integrating neuroscience and explicit data,  
We explain and predict the complex relationship between humans and food.

Our methodology eliminates the biases of stated preferences.  
Cultural neuroscience represents the best evolution of sensory analysis.

Thimus has made cultural neuro-sensory analysis portable, robust, scalable thanks  
to our proprietary SAAS platform: the T-BOX.

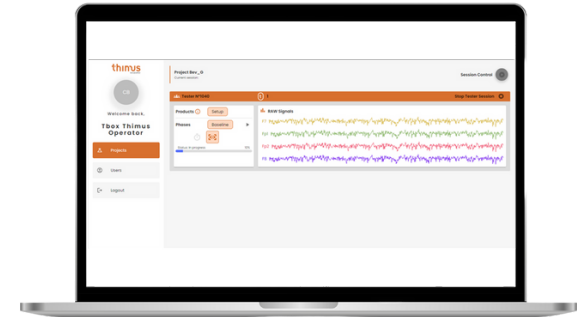
# METHODOLOGY



The EEG is a non-invasive device: it is applied to the head of the participant using a strip with integrated electrodes, in which gel is applied to facilitate recording. Once worn, the tester takes a seat at the tasting station and follows the visual indications that appear on the screen.



The HUB is an electronic device responsible for transmitting the signal detected by the EEG. It is powered by an electric cable, equipped with antennas for signal amplification and connected to the Internet. It must be located near the EEG and can connect to a maximum of 3 devices simultaneously.



The cloud T-BOX platform is where the real magic happens. Users with a login profile can configure projects, add testers, acquire brain data and explore past projects and their results. We have implemented export of data both in easy-to-read PDF format or in CSV files for further analysis.

# PROJECT BRIEF

Can the terms “organic” and “vegan” influence implicitly the quality perception of mayonnaise, even if the samples came from the same product?

# PROTOCOL

Calvé & Hellmann's products were randomized

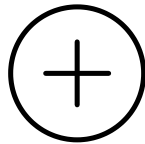
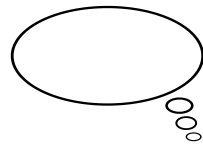
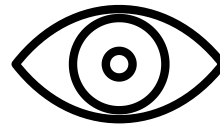


Image of the sample



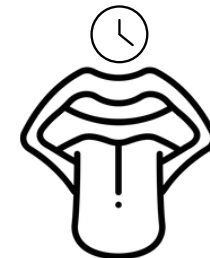
Concept text



Look of the sample



Taste



Aftertaste

Methodology note:

this is a **sample study**.

Results are to be considered only as representative of the functioning of the T-Box platform and are by no means statistically relevant.

# METRICS

1

## **FRONTAL ASYMMETRY-LIKEABILITY**

This index evaluates the natural balance of approach (associated with acceptance and positive emotions) and avoidance (withdrawal, negative emotions) of an individual about a task.

2

## **COGNITIVE WORKLOAD-FAMILIARITY**

Mental activity is based on the use of working memory. This can be caused by a particular task at a given instant (Cain, 2007). It is therefore the set of mental processes that mediate the performance in perceptual, cognitive and motor tasks.

3

## **ENGAGEMENT**

It represents emotional states, including motivation levels, excitement, attention, and interest experienced during the performance (Berka et al. 2007).

A close-up photograph of a wooden cutting board. In the center is a small, reddish-brown ceramic bowl filled with a thick, white, creamy sauce, possibly mayonnaise or a yogurt-based dressing. The word "RESULTS" is printed in large, bold, black, sans-serif capital letters across the middle of the bowl. To the right of the bowl, several coarse salt crystals are scattered on the board. In the background, a sandwich is partially visible, featuring a light-colored bun, sliced cucumbers, a slice of tomato, and green lettuce. To the left of the bowl, there are fresh green cilantro leaves. In the bottom left corner, a portion of a silver metal fork is visible. The entire scene is set against a light grey, textured background.

# RESULTS

# SAMPLES



## Real Hellmann's

Food > Sauces > Dipping sauce > **Mayonnaise**

Pay off presented to the testers during the concept phase:  
"Produced with free-range eggs"



## Classic Calvé

Food > Sauces > Dipping sauce > **Mayonnaise**

Pay off presented to the testers during the concept phase:  
"The irresistible classic taste"



## Organic Hellmann's

Food > Sauces > Dipping sauce > **Organic Mayonnaise**

Pay off presented to the testers during the concept phase:  
"Produced from a certified sustainable supply chain"



## Vegan Calvé

Food > Sauces > Dipping sauce > **Vegan Mayonnaise**

Pay off presented to the testers during the concept phase:  
"Rich in fatty acids and omega 3"

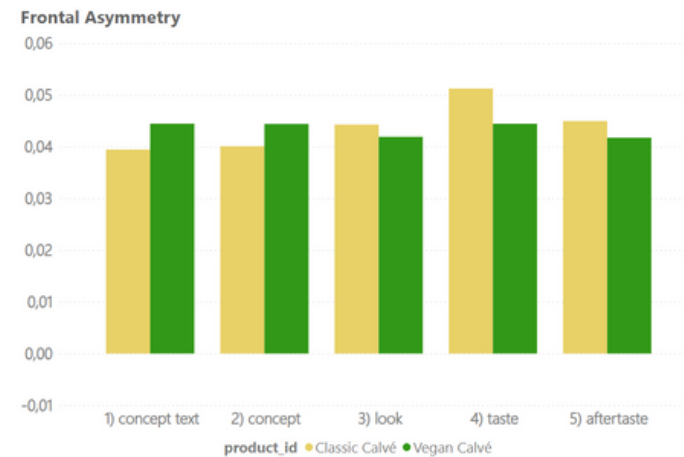
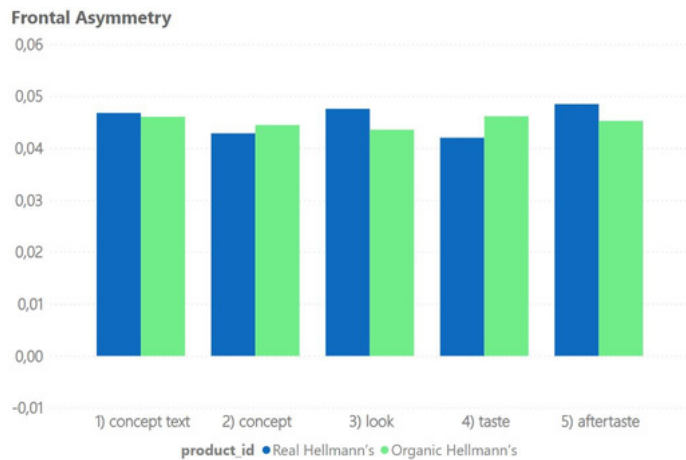
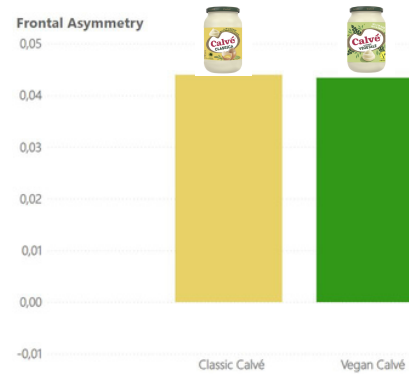
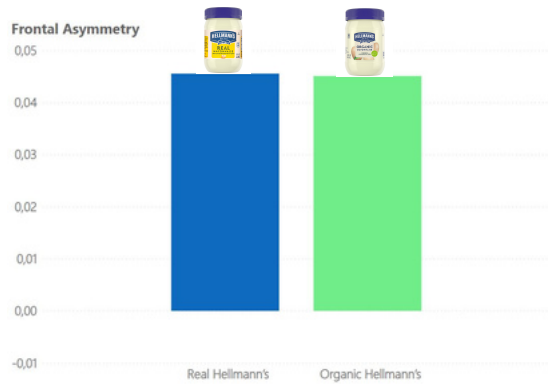


# TEST RESULTS

When comparing Calvè products, we can see that Calvè Classica is better perceived during the look, taste, and aftertaste phases: this might depend on a higher level of familiarity.

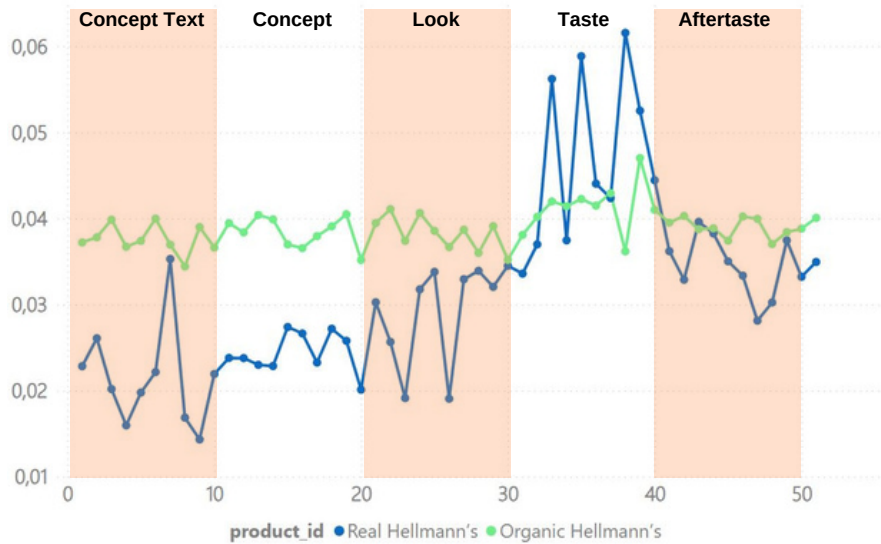
Calvè Vegetale is however more attractive during the exposure to the pack and the concept description. This proves that sustainability claims only have an impact before the actual tasting of the product.

The reason we don't find this same tendency when looking at Hellmann's results could be because Hellmann's Organic is not currently available in the Italian market.



# FINAL RESULTS

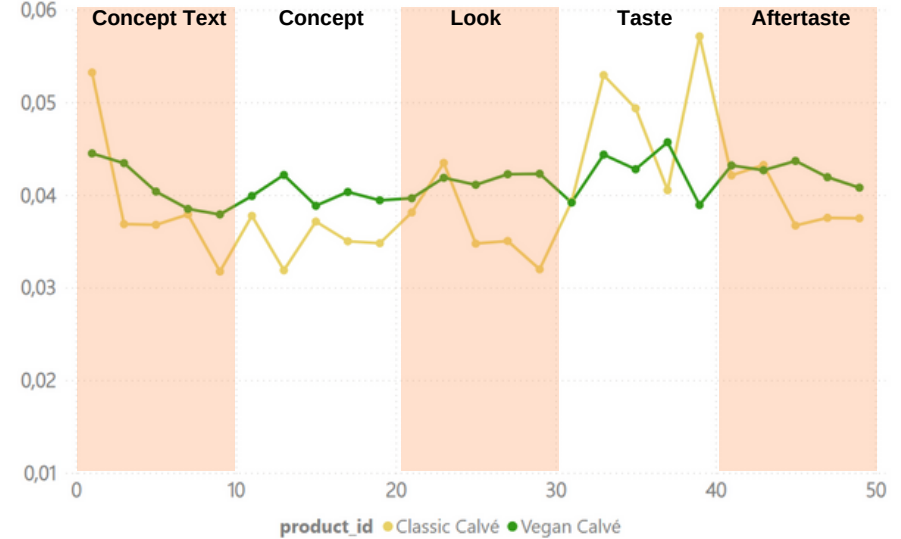
Frontal Asymmetry by Time and Product



**Concept phase:** we observed a visible higher acceptance for the Organic product up until the tasting moment. This can be caused by socially induced inclination towards sustainable products.

**Actual tasting phase:** despite an apparently low performance in the initial phases of the test, Hellmann's Real visibly outperforms Hellmann's Organic during tasting. This might depend on a familiarity induced expectation towards the most common product. (despite the fact that both samples were taking from Hellmann's Real).

Frontal Asymmetry by Time and Product

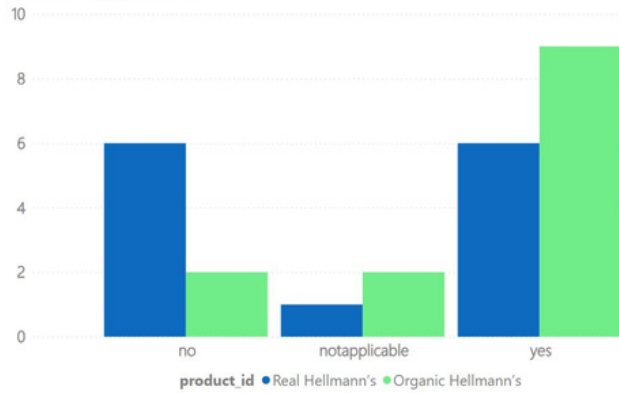


**Concept phase:** Calvé Vegetale shows an average higher level of appreciation when compared to Calvé Classica, possibly because of cultural shared positive valence of sustainability claims.

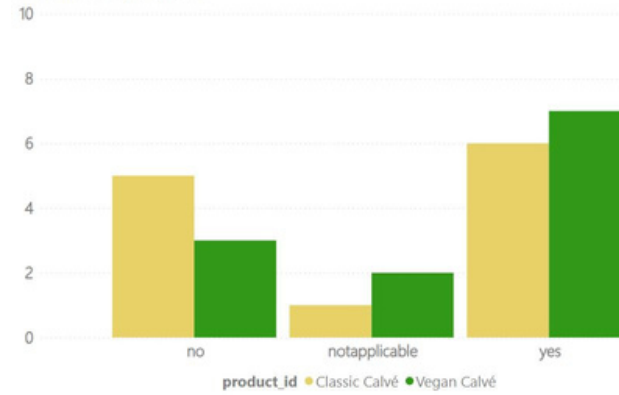
**Actual tasting phase:** Even when the product sample was the same, Calvé Classica got a higher value, perhaps explained by the erroneous conception that vegan products does not have as much flavor as the classic versions.

# FINAL RESULTS

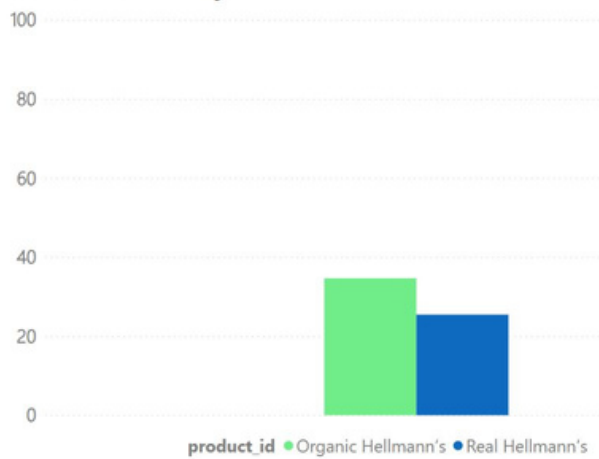
Sustainability Criteria



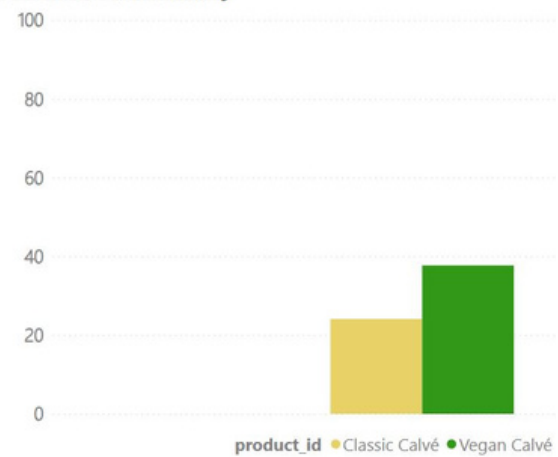
Sustainability Criteria



Perceived Sustainability



Perceived Sustainability



# INTERESTING QUESTIONS

How different could the outcomes be within an American sample?

What would have happened if the sample had tested the product before the concept phase?

What are the “Organic” and “Vegetale” true meanings for consumers and how does it affect their purchase intention?

Is the “Organic” and “Vegetale” concept well explained in the packaging?

During what phase is it more important to engage with consumers to convert them into clients?

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humanizing neuroscience