

Read & Rate: a new approach to understanding consumer expectations in sensory research



Background & Objective

Traditional sensory market research typically involves consumers physically testing products and providing feedback, often through Central Location Tests (CLTs) or Home Use Tests (HUTs). However, consumer perception begins well before the tasting—it is shaped by expectations formed through product descriptions, past experiences, and marketing cues such as branding.

➔ This study introduces a novel methodology assessing consumer preferences by capturing projected product liking -how much a consumer believes they will like a product- based solely on a comprehensive sensory-focused description. This approach aims to explore the predictive power of narrative-driven expectations in shaping consumer preferences.

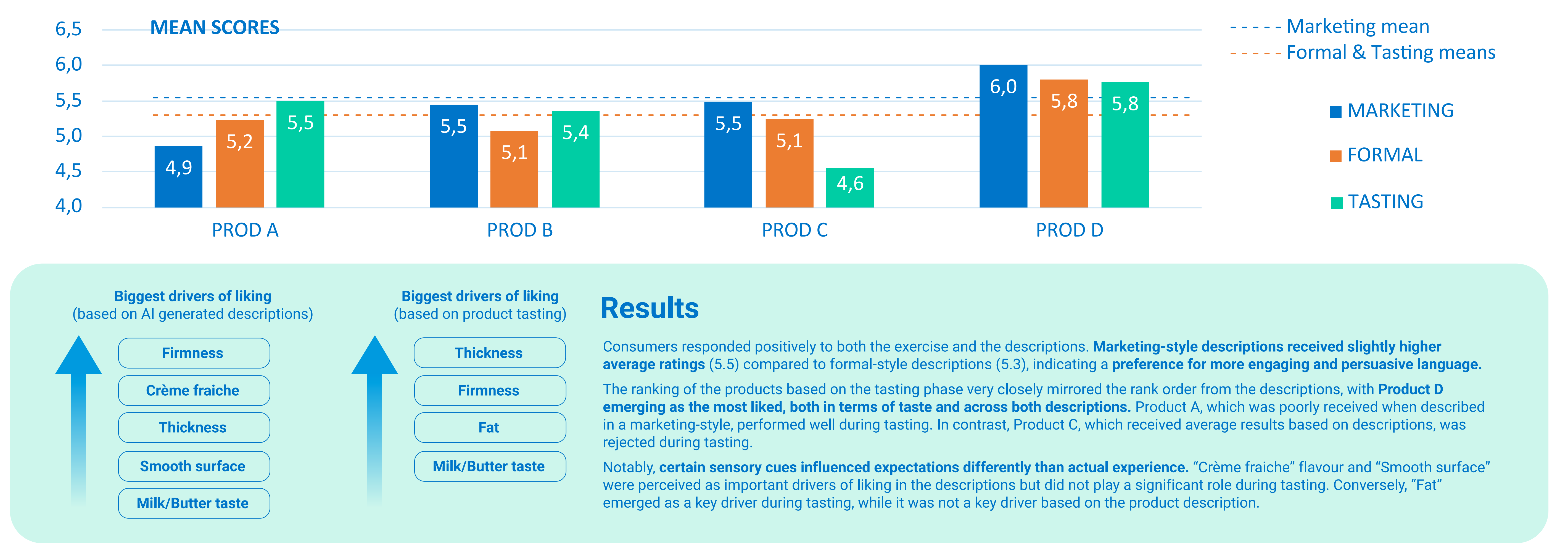
Authors

Megan Aubrey
Angélique Véron-Tarabeux
Kévin Thomas
Inès Perez
Lise Dreyfuss

Test Design & Analysis

Step 1	Blind Product Testing (Control Group)	Blind Central Location Test with n=168 consumers of the category, 4 yogurts evaluated.	Outputs: liking scores.
Step 2	Sensory Profiling	QDA expert panel to measure the sensory characteristics of the 4 yogurts.	Outputs: sensory profiles & differences between products. Statistical crossing with Step 1 to give defined drivers of liking.
Step 3	AI-Language Generation	Sensory profiles from Step 2 were used as input for a Large Language Model (LLM)-based AI-tool to produce 2 types of consumer-oriented descriptions: a marketing-style version (emotionally engaging / brand-like language) and a formal-style version (neutral / descriptive language).	Outputs: 2 descriptions (marketing + formal) for each of the 4 yogurts. 
Step 4	Online Consumer Evaluation of Projected Liking	n=438 yogurt consumers read the 2 AI-generated descriptions of all 4 products in a monadic sequence.	Outputs: anticipated liking scores; projected sensory experience; feedback on descriptions.

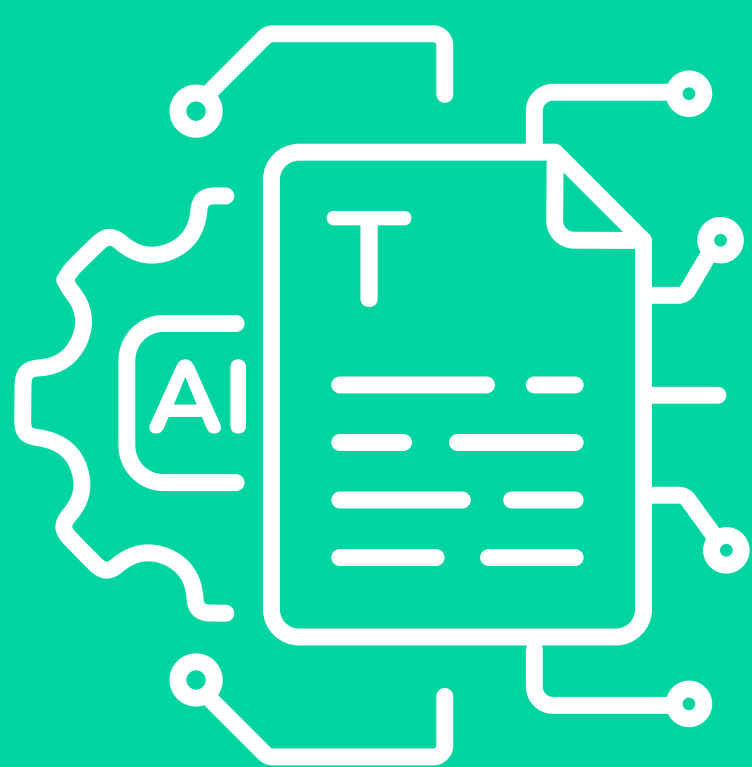
Ouputs



Key learnings

This exploratory study examined whether AI-generated sensory descriptions can effectively predict consumer preferences, and how projected liking —based on narrative expectations— compares to actual product liking in blind taste tests. While some alignment was observed, notable discrepancies highlighted the limitations of this approach.

- 1 Consumers are influenced by wording, but not always in ways that reflect true sensory impact. This may stem from the psychological gap between verbal expectations and embodied sensory perception.
- 2 Descriptors like “fat” were undervalued in written descriptions but proved significant during in tasting. This suggests a disconnect between language and perception, possibly influenced by health-related biases or social norms.
- 3 Consumers often struggle to articulate the sensory attributes that truly drive their preferences. While written narratives can shape expectations, they fall short in capturing the complexity of sensory experience and decision-making.
- 4 The LLM-based AI tool can simulate part of the perceptual process, but it cannot fully replace real-world consumer testing.



Conclusion

The “Read & Rate” methodology offers valuable insights into how narratives influence expectations. However, its predictive accuracy remains limited. Future research should focus on refining the approach, broadening the range of products and cultural context, and exploring how consumers interpret descriptive language differently from direct sensory input.