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Kerry global technology and innovation centres across the globe

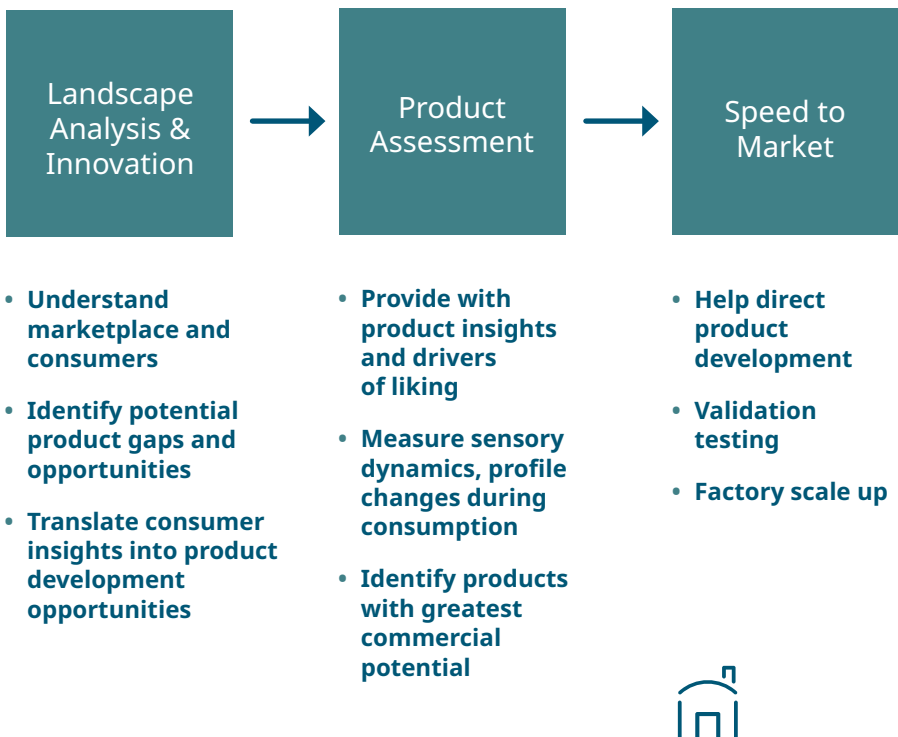
Sensory and consumer product research at Kerry

Sensory and Consumer Product Research (SCPR) teams focus on gaining a holistic understanding of food and beverage products and consumers, around the world.

Taste continues to be the number one driver of food and beverage purchasing decisions across the globe. With consumers perceiving taste differently, it creates a unique challenge (and opportunity) for food and beverage companies to develop products that appeal to consumers' taste preferences.

As the world's leading supplier of innovative taste and nutrition systems, our extensive experience in delivering tailored solutions allows us to help our customers create high quality, great-tasting foods and beverages.

We work closely with our customers and internal development teams to provide guidance for new product development and optimisation, ensuring that consumers' expectations will be surpassed every time.



What is sensory and consumer science?

Sensory science is a scientific discipline that applies principles of experimental design and statistical analysis to the use of human senses (sight, smell, taste, touch and hearing) for the purposes of evaluating consumer products.

Kerry's in-depth understanding of sensory science and consumer behaviour guides the development of our taste and nutrition solutions and provides our customers with directional guidance for new product development.

Our global SCPR team is skilled in providing scientific and objective information that enables sound business decision-making in the development of consistent, high quality products for the marketplace.



Kerry's sensory and consumer tests

1. Expert panel profile test

At Kerry, our expert panels help us to describe as well as quantify perceived sensory characteristics of food and beverages.

The most common tests include:

- Descriptive profiling
- Temporal dominance of sensations
- Sorting and napping
- Time intensity
- Sequential profiling

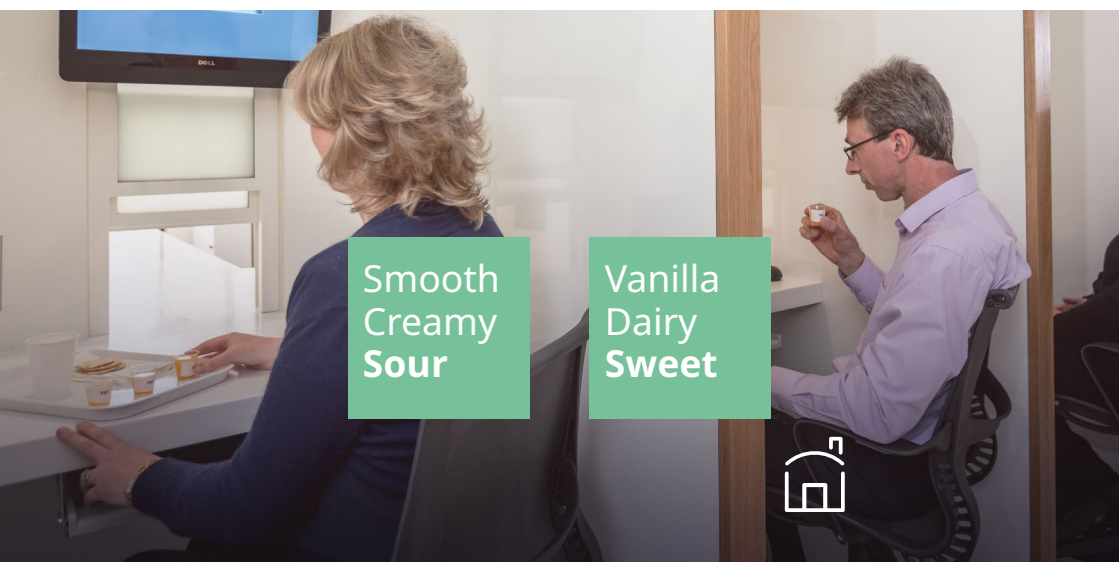
These methods can be used in:

- Category reviews
- Prototype development
- Competitive benchmarking

Case study

Kerry's SCPR team worked with customer A to launch a new product within a specific market. Following a comprehensive analysis of their brief, we suggested "competitive benchmarking".

Our expert panel provided a map of products, highlighting a similar texture experience among products, but a varied flavour profile. This process allowed us to identify a unique space for our client to launch their product in today's crowded marketplace.





2. Discrimination testing

Kerry's discrimination test determines the perceivable differences or similarities between products. This allows us to evaluate whether or not changes to product formulation or processing will be noticed by consumers, and helps to match against "gold standard" and competitive products.

The most common tests include:

- Tetrad
- Triangle
- 2-AFC
- 3-AFC
- Same-different
- A not A

These methods can be used in:

- Matching projects
Nutritional optimisation projects
- Cost reduction projects
- Evaluating alternative processes
- Shelf-life studies

Case study

Kerry collaborated with a customer to modify their product recipe to meet new nutritional regulations.

Using our discrimination testing, we were able to demonstrate to our customer the similarity between the original and nutritionally optimised samples meaning that our customer can offer their consumers healthier products with out compromising on the taste and mouthfeel.



3. Internal guidance tests

At Kerry, we have the ability to carry out internal hedonic testing, generating quantitative hedonic data on products from a large group of consumers.

The most common tests include:

- Hedonic scoring
- Just-about-right
- RATA and CATA
- Preference testing

These methods can be used in:

- Product performance
- Category review
- Concept testing
- Prototype development
- Competitive evaluations

Case study

Kerry's SCPR team worked with customer C to develop several prototypes of an improved product. Internal hedonic test helped to increase speed to market by screening them down to "best liked" by a large group of consumers available in-house at Kerry's Global Centre.

Smooth
Zesty
I like it





4. Qualitative consumer testing

Through our extensive network of research partners across the globe, we can obtain detailed qualitative information and feedback from core consumers and product users.

The most common tests include:

- **Focus group**
- **1-1 interviews**
- **Repertory grid**

These methods can be used in:

- **Brainstorming**
- **Concept testing**
- **Prototype development**
- **Competitive evaluations**

Case study

Kerry worked with customer D to launch a novelty product in keeping with their brand. A group of product users was invited for a focus group to brainstorm concepts at Kerry's sensory facilities. This resulted in several new ideas that were then developed by RD&A.



5. External consumer testing

At Kerry, we have the knowledge and expertise to obtain high-quality quantitative consumer insights, which provide data-driven information on consumers' food and beverage preferences.

The most common tests include:

- Central location test
- Home use test

These methods can be used in:

- New product development
- Competitive evaluations

Case study

Kerry's team worked with customer E to improve the taste of their food product. Once new samples were developed, Kerry's SCPR team tested them with consumers in a CLT setting.

Results showed that Kerry proposal achieved higher overall liking compared to the original product.



6. Emotional and functional profiling

The most common tests include:

- Emotional profile
- Conceptual profiling

These methods can be used in:

- Product to brand fit studies
- New product development
- Studies to decode product
- Experience/satisfaction

Case study

Customer F wanted to develop a refreshing beverage in line with their existing beverage portfolio.

Following an emotional research approach Kerry's SCPR team identified the ideal type and levels of flavour, carbonation and functional ingredients that could trigger a refreshing sensation to product users.

We then studied a number of formulation and packaging combinations and identified those that resonated the brands image while delivering the desired emotional sensation.





Consumer insights

7. Live formulation

Kerry's SCPR team has the ability to conduct co-creation sessions with our customers, allowing us to speed up the product to market process.

Using the qualitative feedback obtained from consumers, we engage with our RD&A, marketing and sales team in one live formulation session. This allows us to generate direct consumer feedback and create product concepts.

These focus groups initiate comprehensive and high quality consumer insights, which can be immediately applied to product development and presented to consumers to drastically speed-up the development process.



Product development



Consumer validation



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Kerry's sensory and consumer product research expertise is underpinned by a global infrastructure of highly qualified scientists, trained sensory panelists and dedicated facilities in 11 locations. Each year, approximately 2,500 sensory exercises are performed at Kerry facilities worldwide, ensuring that our customers can deliver great-tasting products that are preferred by their consumers.

Our state-of-the-art sensory booths, preparation rooms and interactive customer and viewing suites allow us to help our customers identify innovation and product optimisation opportunities and validate their commercial viability with trained sensory panellists and/or product consumers.

