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## Sensing Future Packaging #sensingfuturepackaging

### Survey Report



CAROL RAITHATHA LIMITED

Sensory Evaluation Consumer Food & Drink

Research Consultancy



### Content of the report



### About the survey

- A pre-survey to gather information and ideas for the #sensingfuturepackaging workshop held at Pangborn 2019 on July 29 2019. The workshop was co-sponsored by the Institute of Food Science and Technology Sensory Science Group and the Society of Chemical Industry Food Group.
- Self-completion survey scripted into Compusense and distributed on sensory/consumer professional social media channels
- Fieldwork in June/July 2019
- 85 anonymous completes







## Respondents

### Job role and sector

What is your current professional focus? (please tick the one that best applies):



75% of respondents are focused on sensory and consumer or market research. Which sectors/categories do you mainly work in? (tick all that apply):



Food, beverages, and personal care are the most common sectors. Only 20% work in packaging.

### Organisation and location

What type of organisation are you currently working for? (tick the one that best applies):



Respondents currently work in a range of organisations, but most commonly in market research or agencies and consultancies.

### Where are you based?



Most respondents are based in Europe.

# Results for packaging types, materials, and features

## How important will each of the following types of packaging be for future products?



■ Not very important ■ 2 ■ 3 ■ 4 ■ Very important ■ Don't know

How much do you agree with the following statement? – 'Packaging is needed for all food products':



## Which of the following packaging materials do you see as sustainable (check all that apply)?



Which two of the following types of multisensory features do you see as most promising for packaging of the future?



# Results for the role of sensory and consumer science in packaging

Of the senses, current packaging usually focuses on sight and touch. If you were going to design a new innovative pack using one of the remaining senses, which one would you choose? Why?

- Can be a cue for quality or to identify materials or state of closures, etc.
- More feasible than others
- Fun and novel
- Wouldn't interfere with product
- Complements touch/feel
- Could work online
- Emotive and subtle

- Edible packaging has a role in the future and is sustainable
- Novel
- Important sense for food and drink products – key driver of liking



- Can be used to inform consumers of product attributes, quality, safety and freshness
- Can attract consumers via expectation and emotion
- Relates to food and something that one does naturally before consumption
- Creates an interactive journey
- A key driver of liking in food and drink
- Easier to use in packaging compared to taste or hearing
- Could be used at a subconscious or subtle level

## Which of the following methods/technologies have you used when researching packaging (check all that apply)?:



A large proportion of respondents have used consumer testing and qualitative methods for researching packaging. Other popular methods include sensory profiling, emotional response, and eye-tracking. 28% (24 out of 85) say they have never been involved in research on packaging.

## How important do you think each of the following methods/technologies will be for research on packaging in the future?



■ Not very important ■ 2 ■ 3 ■ 4 ■ Very important ■ Don't know

And also in the future consumer testing, qualitative consumer research, emotional response, eye-tracking and sensory profiling are thought by most to remain quite important. In addition, the majority of respondents see virtual reality and ethnographic methods as important (top two box) for the future.

Can you name any other sensory and consumer methods/technologies that are likely to be important for packaging research in the future?



Can you describe an example where sensory/consumer science could play a role in the design of **Sustainable** packaging?

### Explore and understand

- Meaning of sustainable packaging and how to create awareness
- When and where packaging is needed
- Consumer needs and point of view
- Packaging material properties
- Emotional and physiological reactions to packaging
- Key drivers for purchase

#### Develop and create

- Making sustainable packaging as appealing to and safe for consumers as traditional packaging
- Quality/freshness of products packed in sustainable packaging
- Input into NPD and development
- Co-creation uses for packaging post initial

### Measure and change behaviour

- Understand behaviours around re-usable packaging
- Help with creating behavioural changes – make packaging easy to recycle or reuse pack
- Guide branding of sustainable packaging and retain brand equity
- Create sensory cues for sustainability

### Techniques

- Profiling
- Choice experiments, liking, purchase intent, preference mapping,
- Focus groups, depth interviews
- Ethnography, home use and longitudinal testing

Can you describe an example where sensory/consumer science could play a role in the design of **Smart** (active, intelligent or interactive) packaging?



### Explore and understand

- Consumer perception/liking of smart packaging
- How consumers want to/will interact with a pack
- What information is important to access via the pack
- Usability/effectiveness research – ease of opening, smart features, etc.

### Develop and create

- Calibrate smart sensors for freshness or taste and Best Before date
- Additional features to enable interaction (e.g. braille)
- Using sensory aspects to convey smart features

### Techniques

- Sensory profiling
- CLT's, focus groups, HUT's, ethnological research, quant and qualitative consumer research, longitudinal research
- Emotional response, implicit testing, eye tracking

## Can you name a product that you think has truly innovative **multisensory or crossmodal** packaging? Please also describe what makes it innovative.

- Pringles pack pop on opening and tube that complements product shape
- Trident gum packed with edible paper that increased perception of the flavour
- Coke can see brand and classic sound when open can
- Coke and Coors with thermochromic ink to tell consumers when product is sufficiently chilled
- Rexona/Sure with soft matte texture and soft sounding spray
- Nivea body mousse with scratch and sniff
- Magnum Ice Cream tubs that have to be squeezed until the chocolate cracks to reveal the ice-cream
- Re-usable jars/pots such as Nutella and Gu
- Freixenet sparkling wine in embossed glass bottle innovative because it is tactile and inviting, coupled with the ability to see the liquid inside
- Apple AirPods case has a feel, weight and satisfying click when you shut it that projects quality and design

- Rustle of crisp packets
- Egg boxes multifunctional and texture
- Straws that have flavoured beads to drink milk through
- Lemon juice pack
- Bubble wrap

Origina

2009

- Packaging that changes colour depending on ripeness of fruit
- The edible water bubble packaging that has been developed for water stands at marathons, allowing runners to grab a bubble, consume the water and chew the packaging with no waste
- Pack is made with cardboard and seeds. It gives texture and smell to the packaging and then can be plant in soil to grow the seeds



## Key Take-outs

- Aesthetically pleasing and multi-sensory packaging, as well as packaging that is congruent with brand message, are all seen as quite important for the future, but not judged as critical as sustainability features.
- Using odour is thought to be an innovative way to develop expectations and convey emotional messages in packaging. Sound is also believed to be important by some.
- Development of edible packaging is challenging and will require input of sensory and consumer science.
- Techniques such as quantitative and qualitative consumer testing and sensory profiling are likely to remain important in developing optimum packaging of the future. Methods such as ethnographic research, eye-tracking, emotional response and augmented and virtual reality may become more important.
- Packaging that allows the consumer to interact with and deliver an optimal product via sensory/multi-sensory
  features is thought to be promising.
- Sensory and consumer sciences have a role to play in the development of sustainable and smart packaging.
  This includes:
  - Exploring and understanding materials, perceptions, effects, etc.
  - Developing and creating features and functionalities
  - Monitoring and changing behaviours

### Contacts

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