



Consumer and Sensory Research Considerations

by Lucinda Wisniewski

Conducting consumer research on natural and/or functional foods involves special considerations unique to products designed to deliver health benefits. When assessing consumer acceptability, introducing the product concept or product description along with the product itself is very important. With the benefits communicated as a frame of reference, the consumer can provide feedback with not only the product's sensory characteristics but also the product's attributes in mind.

Consumers have different expectations of foods and beverages that deliver health benefits. If a consumer knows a product has been designed to provide a full-day's requirement of a particular nutrient, she might be less critical if the flavor doesn't match a common equivalent. For example, a chocolate cookie packed with antioxidants and fiber may be attractive despite the fact that it may not be as decadent and rich as an indulgent non-nutritive one; this can be attributed to the positioning and fulfillment of consumers' needs. The trade-offs between taste and health benefits need to be explored fully through research that gleans information "beyond the numbers."

Getting close to the consumer as early as possible in the development process is a key initiative for many companies. Instead of investing time and money into product development and fielding large-scale, national tests downstream to assess concept viability, consumer input at the concept, or protocept, stage allows companies to filter ideas quickly and inexpensively, while determining suitability and potential success. In the early phases of development, creative combinations of qualitative and quantitative consumer research techniques yield more insightful data than either type alone. By combining traditional central location testing with mini focus groups and in-depth interviews, for example, a number of objectives can be accomplished in one session, whether it be screening of a large number of product and packaging options, gauging attitude and usage, or measuring reaction to label copy and ingredient statements. With customized research designs, clients maximize their spending by capturing consumer insights at this early stage, which helps to narrow the range of concepts to refine further, as well as to shape the appropriate verbiage and target audience for future research.

One example of a powerful study was the testing of a healthful beverage geared toward children. While the children were providing evaluations of prototypes in sensory booths using specially-designed, age-appropriate scoresheets, in-depth interviews were conducted with the children's mothers, asking about purchase intent, perception of product concept and packaging, preparation information and attitudes about the organic market. The combined information from mothers and children provided invaluable insight into purchase dynamics and formulation direction for this particular type of product.

Ethnographies are another technique that may be particularly enlightening to companies launching health-oriented products because they not only allow a glimpse of what products a target group is consuming, but how and where those consumers are preparing and using a product. Since nutritional products consumption reflects not only what a consumer believes tastes good, but also a lifestyle and a belief system, observing these consumers in "their element" brings new awareness that guides development.

Sensory research, like consumer research, also strives to measure response in consumers, but in a more controlled, scientific manner, viewing the taster as a machine. Sensory science provides the means to fully describe and differentiate between products with a minimal of variation between responses. Sensory evaluation plays a critical role in the formulation of nutritive foods because of its ability to characterize and quantify potentially negative attributes. Just by their nature, many health foods contain more ingredients than average, often unique ingredients and frequently in higher quantities. There is a potential for interesting interactions between components, resulting in potentially more off-flavors. In addition, these complex systems have a higher probability of a shortened shelf-life as many nutrients are relatively unstable. Sensory data can highlight issues with ingredient levels and combinations impacting consumer acceptability.

An interesting twist is combining sensory and consumer research to understand the product and consumer interactions. By performing sensory descriptive analysis on an array of competitive products in a category, and then putting those same products in front of consumers for

acceptability, the two sets of data can be linked with sophisticated statistics to generate in-depth insights that fall into two categories. One, are there different consumer segments that like different groupings of products? And, two, which product attributes drive consumer liking? The output can show, for example, that there are two different products that should be developed to appeal to two distinctly different consumer segments. It can also show which attributes, such as sweetness, should be adjusted to make the products the most appealing to each segment. There may even be a gap in the marketplace where consumers say they want a product, but none currently exists. Being able to make connections between the two types of information—consumer and sensory—saves time and energy in development. □

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