

Driving New Products Through Ideation, Process, and the Consumer

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Research and development groups are the future of growth for food companies. Their new products determine the pipeline for product sales and profitability of the company. Because of this important role, research and development must drive new products through ideation, process development, and, ultimately, consumer acceptance. The product development model begins with insights that lead to idea generation and then to prototype development and finally to commercialization (Figure 1). This process must include consumer-driven ideas, speed to market introduction, and input based on team members' intuition and experience.

The first step of the process requires insights gained through consumer research. Today, this type of research can be accomplished with rapid focus group testing. This testing is an early-stage exploratory tool. The research must use general-population "real" consumers. This type of testing can be used for product and concept development, topical learning, packaging development, and cooking instructions. The key advantages of rapid focus group testing are cost, speed, and efficiency.

The second step of the process is idea generation. Idea generation can use consumer insights gained through consumer research as well as established need states that most consumers have. For example, most consumers express needs around health and wellness, convenience, value, and flavor. Most successful products meet all these need states. Ideas should also be based on established trends. Food and behavioral trends from many sources can assist in idea generation.

When looking at flavor trends during idea generation, it is important to remember that there is a natural progression from emerging to growing to mainstream. Most successful

new products are launched during the growing step in flavor trends. Flavors and ingredients continue to take on starring roles as consumers increasingly demand bigger, bolder tastes; foods that are healthy; and ingredients that are natural or sustainable. Quality as well as comfort and convenience will prevail. Ethnic flavors will expand and grow, and organic foods will continue to gain ground. Consumers are increasingly sophisticated and want more upscale flavors and ingredients. At the same time, however, there is a real move toward comfort and classic foods. Many of these flavor trends can first be identified via food service because we are more willing to experiment with new foods when someone else prepares them.

Health and wellness should also be considered during idea generation. As consumers, we are being overloaded with nutrition news. Sodium is one of the nutritional attributes most often called into question. As technologists, we must remember that salt not only has an impact on flavor and consumer preference, but also serves a role in shelf life, microbiological stability, and inhibition of pathogens. Furthermore, salt can affect the processability of our products such as sliceability, binding, texture, yield, water-holding capacity, and processing times.

The next step of the process is prototype development. The information gleaned from prior research must be integrated into the food attributes reflected in the finished product. These attributes may include aroma, visual, and textural characteristics. These characteristics can take a familiar category of products and transform them into an on-trend, successful new product. The goal of this process is to quickly develop the gold standard using as many commercially available ingredients as possible to minimize the translation from benchtop to commercialized product.

The final step in new product development is commercialization. This step is one of the most critical and technical steps of the entire process. Here, you are taking small benchtop samples and converting them into high-volume processes. Important details during this step include data collection, yield standards, product variation measurements, cooking validation, comparison with gold standards, and finally, customer approval.

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Product Development Model

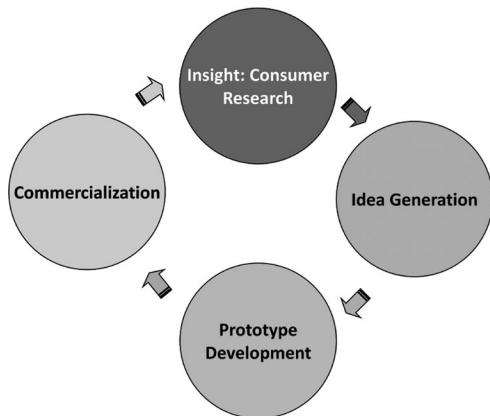


Figure 1. Product development model.

In conclusion, successful new product development should always involve a dedicated process that includes insights, idea generation, prototype development, and commercialization. Each of these steps should continue to be refined and improved to enhance effectiveness and speed.

REFERENCES

- Valdovinos, M. 2011. Personal communication with Tyson Consumer-Scape (Springdale, AR), NPD Foodworld/CREST (Port Washington, NY), and Flavor & the Menu (Lake Oswego, OR).