

Abstract Template

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From Better-for-You to Built-for-Wellness
How Health and Wellness Is Reshaping Food Innovation and Food Engineering

Authors & affiliations: Font Calibri 10

Sheyla Ramsay, Ph.D., PepsiCo Global Foods Research and Development, Plano, Texas, USA

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Health and wellness expectations are reshaping the food industry from the inside out. Consumers are no longer just asking for less sugar, sodium, fat, or artificial ingredients — they want foods that actively deliver protein, fiber, gut health, metabolic support, healthy aging, and sustained energy. That shift moves health and wellness out of marketing and formulation and into a broader food engineering challenge: not just what goes into a product, but how it is processed, packaged, and manufactured at scale. Reformulation, functional nutrition, Food as Medicine, and digital health tracking are pulling companies in the same direction, even as cost, accessibility, taste, shelf life, safety, sustainability, and regulatory approval all still have to be satisfied at once.

Delivering on that promise falls largely to food engineering. Heat-sensitive nutrients and bioactives need protection through processing. Protein- and fiber-enriched systems need to be able to be processed and hold their texture in the finished product. Sodium and artificial additives need to be removed from recipes without losing the product's consumer appeal. None of this happens without better processes — advanced thermal and non-thermal treatments, precision drying, fermentation, digital monitoring, AI-enabled formulation, and smart packaging. Commercial food systems will be used to illustrate what is already working on an industrial scale, where gaps remain, and what it will take to close them.

This presentation treats health and wellness as a system-level engineering problem. It looks at how consumer expectations are shifting and what that means for the way foods are designed and manufactured. The goal is to show where food engineers can turn “better-for-you” goals into products that are actually scalable, safe, affordable, and consumer-preferred over the next decade.