



The Ultra-Processed Food Pulse

Consumers are hungry for
healthier processed foods



Ultra-processed foods have been a mainstay in the American diet for decades.

Defined as “foods that have gone through multiple levels of processing and contain additives such as preservatives, sweeteners, sensory enhancers, colorants, flavors, and processing aids,” Americans frequently reach for these foods due to their taste, convenience, shelf life, and relatively low cost. While many consumers associate ultra-processed foods with easy meals and snacks like potato chips, frozen pizza, and cereal, ultra-processing is also a key part of less expected foods like almond milk, plant-based meat, and flavored yogurts.

Ultra-processed foods are [under fire](#) as [recent studies](#) explore the potential harmful long-term health impacts, but they also might be an unavoidable part of feeding the expanding population. How can we improve them instead of banishing them? Against this backdrop, plant cell ingredient company [Ayana Bio](#) set out to find out more about consumers' perceptions of ultra-processed foods, what aspects about them they like and don't like, and whether opinions would change if the ingredients were healthier. Ayana Bio surveyed 2,000 Americans aged 18+ to answer these questions and more.





Here is what we found:



Americans are split on whether all ultra-processed foods are bad for your health: 57% said yes, 43% said no.



But they are open-minded. Two-thirds of adults would eat more and pay more for ultra-processed foods that included more nutritious ingredients or added health benefits.



Younger generations and parents are most eager for options. Millennials and Gen Z adults, along with parents with children in the household, are more interested in trying and paying more for healthier ultra-processed foods.



Taste and convenience are important to Americans. Of those who include ultra-processed foods in their diets, these were the top motivators for doing so.



Ingredient quality matters. More than half of adults would be more willing to include ultra-processed foods in their diets if they had better ingredient quality.

Values behind choosing ultra-processed foods

For consumers, health in the context of food is more about increased benefits than reduced harm. Our survey found that most people (64%) think of “healthier” foods as foods that are more nutritious, rather than foods that have less harmful ingredients like fat, sugar and salt. More than half of adults (57%) believe that all ultra-processed foods are bad for your health, but the vast majority (82%) of adults report including ultra-processed foods in their diets.

82%



of adults report including ultra-processed foods in their diets

52%



of adults are willing to purchase ultra-processed foods with better ingredient quality

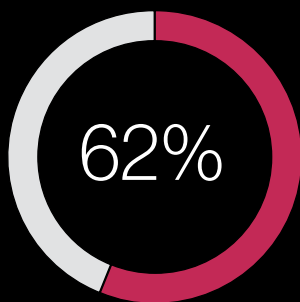
Respondents cited taste (62%) and convenience (59%), followed by a longer shelf life (34%) and typically lower price (32%) as the top reasons why they choose ultra-processed foods. Notably, ingredient quality is a big motivator in purchasing decisions—52% of adults and 62% of parents with children under age 18 would be more willing to include ultra-processed foods in their diets if they had better ingredient quality.

62%

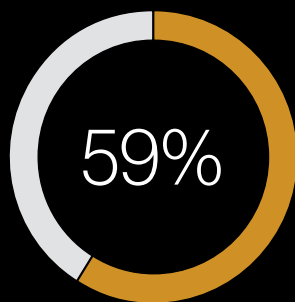


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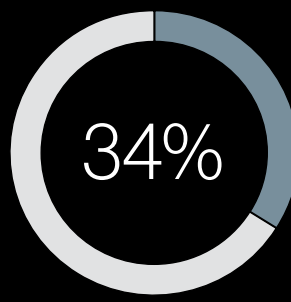
TOP REASONS TO CHOOSE ULTRA-PROCESSED FOODS



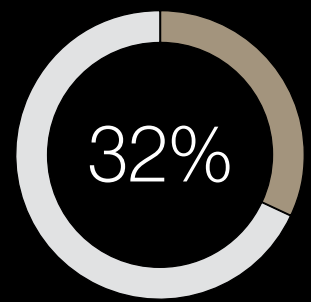
Taste



Convenience



Higher Shelf Life



Lower Price

The appeal of healthier ingredients in ultra-processed foods

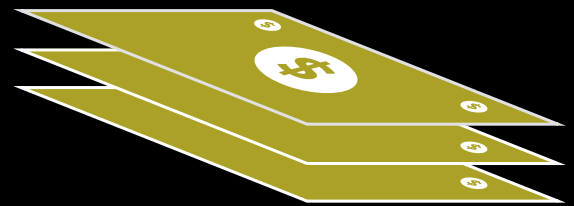
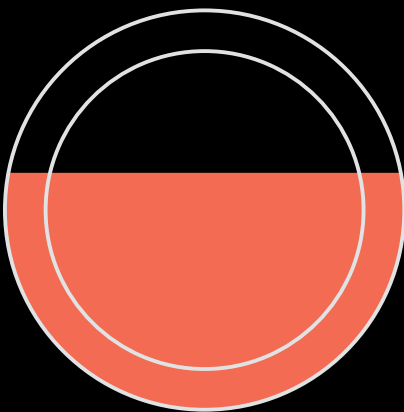
Processing food doesn't have to result in low nutritional value. In fact, processing can help incorporate nutrient-dense ingredients in easy, convenient foods so that they deliver health and wellness benefits, not just empty calories.

Our research found that nearly 2 in 3 (65%) adults are open to incorporating more ultra-processed foods into their diet if additional health/nutrition claims were listed. This rings especially true for 85% of parents who agreed. Zooming in, three-quarters of adults (74%) would be willing to try an ultra-processed food if it included one of the following health benefits: better cardiovascular function; improved brain function; better sleep; better immunity; or increased energy.

Consumers are interested in these healthier ultra-processed foods even if they come at a premium—67% of adults would be willing to pay more for an ultra-processed food that contained more nutritious ingredients that deliver better health benefits, regardless of household income. Of those, 68% would pay up to \$3 more. Younger generations of adults are even more likely than older adults to pay more for healthier ultra-processed foods (84% of 18-34 year olds vs. 43% of 65+ year olds).

67%

of adults would pay more for ultra-processed foods that contain nutritious ingredients



Of those,

68%

would pay up to \$3 more

What does this mean in practice?

For products currently on the market:

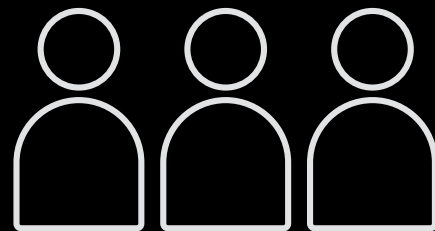
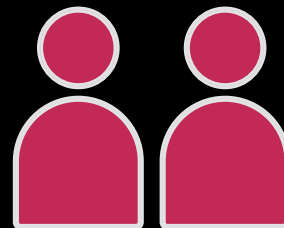
60% of respondents confirmed they would consume more meat or dairy alternatives, knowing they are ultra-processed foods, if they were enriched with ingredients that are known to have health claims (e.g., improved brain or heart health). Incorporating ingredients like this could reignite the [cooling plant-based meat market](#).



60%

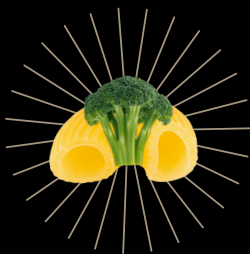
of respondents would consume more meat or dairy alternatives if they contained enriched ingredients

For innovative products: Food processing can make health benefits like increased cognitive function or better immunity possible by enhancing typically unhealthy foods with added nutrition benefits. Given specific options of unhealthy foods that could be made healthier, at least 2 in 5 adults say they would be open to eating the following potential ultra-processed foods with healthier twists: macaroni and cheese with the recommended daily value of broccoli without the taste of broccoli (43%), cereal with the recommended daily value of blueberries without the taste of blueberries (42%), and chocolate milk made with actual cacao (40%).

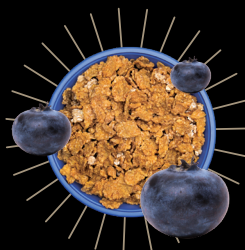


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adults would be open to eating ultra-processed foods with a healthier twist:



43%



42%



40%

How to improve ultra-processed foods

Our survey results showcase that the majority of Americans are not against food processing specifically, they just need a compelling reason to eat processed foods. They want foods that have higher nutritional value with quality ingredients, while maintaining taste and convenience. Given this data, it's important for food companies to think critically about how they're using food processing, if it will enhance or deplete the nutritional aspects of ingredients, and how the health benefits influence consumers' purchasing decisions.



High quality ingredients and taste need to be prioritized.

Incorporating healthy, high-quality ingredients that taste good are a must for food manufacturers. More than ever, consumers are selective about their choices. By ensuring quality and taste, manufacturers will have an advantage over companies that don't prioritize quality, nutrition and taste.



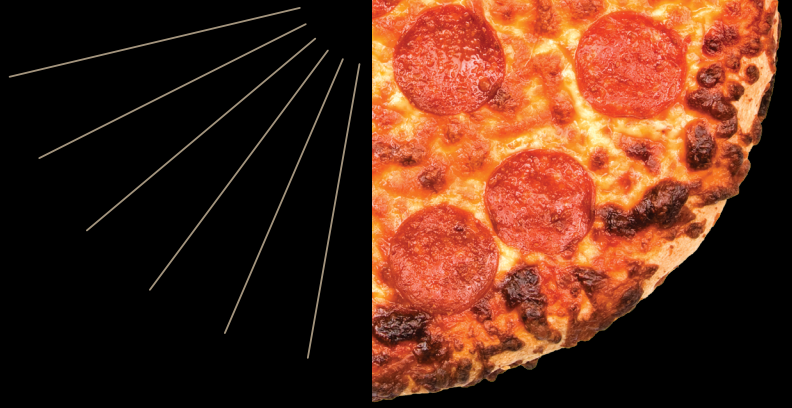
People will pay more for healthier ingredients - even if they're processed. Despite continued inflation, people still value health quality over price. Processing doesn't have to lead to cheap, empty calorie foods. The majority of adult consumers are interested in high-quality ingredients and foods with higher nutritional value — even if that incurs an extra cost.



Processing can incorporate nutrient-dense ingredients.

New technologies like plant cell cultivation can help produce affordable, nutrient-dense ingredients. Plant cell technology grows plant material directly from cells and optimizes for important characteristics like high bioactive content (e.g., antioxidants), stability and purity. These plant cell ingredients can boost nutritional content and build in health benefits when added to foods, with full traceability and a neutral taste and color.

Let's keep exploring the future of food together.



About Ayana Bio

Ayana Bio leverages cellular technology to produce bioactive ingredients that support health and wellness. Ayana Bio collaborates with global industry leaders in food and beverages, dietary supplements, sports nutrition, animal care, and cosmetics to bring standardized plant and fungal bioactives to market. We provide consumers with confidence in quality and reliability. Ayana Bio has partnered with Ginkgo Bioworks, a synthetic biology platform company that is redesigning the living world to solve some of the globe's growing challenges in health, energy, food, material, and more. Ayana Bio is backed by Viking Global Investors and Cascade Investment to democratize nature's bioactives in a way that is standardized, safe, and sustainably sourced. For more information visit www.ayanabio.com.

About the Methodology

The survey was conducted online within the United States by The Harris Poll on behalf of Ayana Bio from September 7 - 11, 2023 among 2,049 adults ages 18 and older. Data are weighted where necessary by age, gender, race/ethnicity, region, education, marital status, household size, household income and propensity to be online, to bring them in line with their actual proportions in the population.

Respondents for this survey were selected from among those who have agreed to participate in our surveys. The sampling precision of Harris online polls is measured by using a Bayesian credible interval. For this study, the sample data is accurate to within + 2.8 percentage points using a 95% confidence level.

All sample surveys and polls, whether or not they use probability sampling, are subject to other multiple sources of error which are most often not possible to quantify or estimate, including, but not limited to coverage error, error associated with nonresponse, error associated with question wording and response options, and post-survey weighting and adjustments.