PICARD ANGST

The Food Revolution

Research Paper

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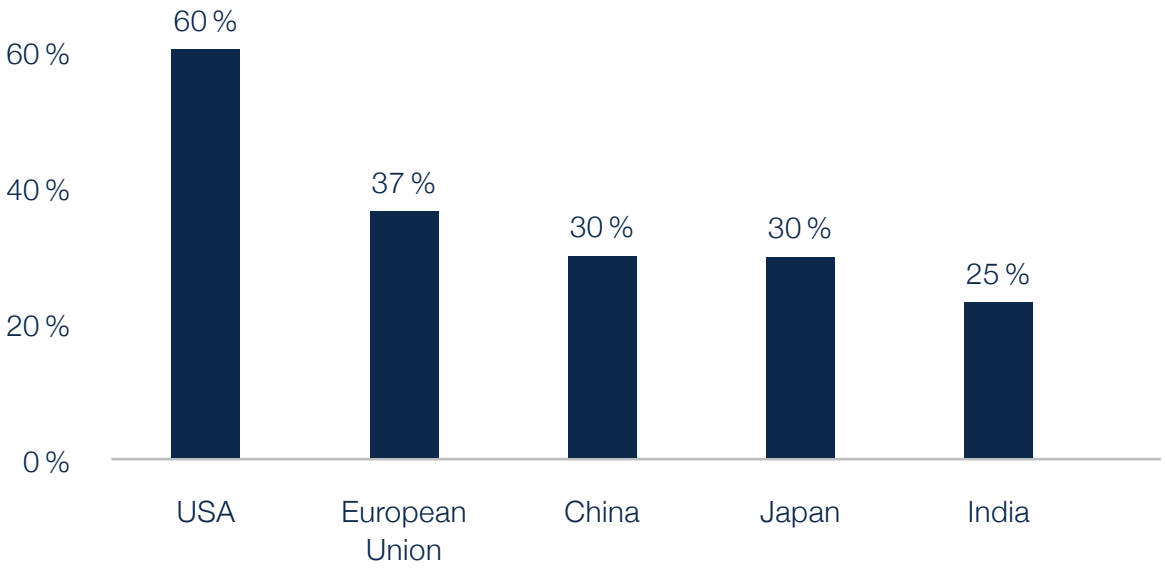
Food for Thought, Food for Health: Rethinking Healthcare through Food Innovation

Chronic diseases have emerged as one of the most pressing public health challenges around the world. As medical advancements have extended life expectancy, the burden of managing long-term health conditions has grown exponentially. Conditions such as heart disease, diabetes, cancer, and respiratory illnesses are now responsible for the majority of deaths globally and are major contributors to healthcare costs, reduced workforce productivity, and diminished quality of life.

The global burden of chronic disease continues to rise, posing significant challenges to healthcare systems and economies worldwide.

In the United States, the situation is particularly severe, with 6 in 10 adults (60%) living with at least one chronic condition and 4 in 10 (40%) managing two or more, according to the CDC's National Center for Chronic Disease Prevention and Health Promotion (2023). In contrast, Europe shows slightly lower but still substantial prevalence, with 33–40% of adults across the EU reporting at least one chronic illness. In Asia, chronic disease prevalence varies significantly: in Japan, around 30% of adults are affected; in China, some 25–35% report chronic conditions; while in India, 20–30% of adults are impacted, with rapid increases due to urbanization and lifestyle shifts.

Figure 1: Adults with at least one chronic condition – by region



Sources: Picard Angst Research, CDE, Eurostat, OECD, WHO

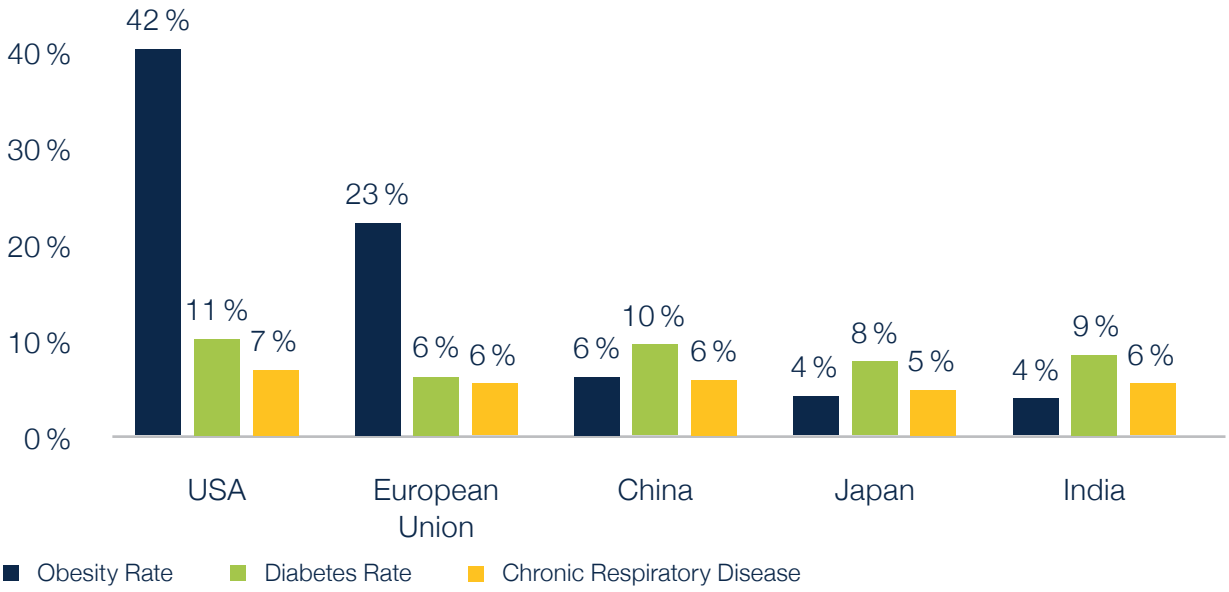
These statistics highlight the global nature of chronic disease and the urgent need for comprehensive, region-specific strategies to prevent and manage these conditions effectively.

One of the most critical factors in addressing these challenges is food – what we eat shapes our health in powerful and lasting ways

“Make America Healthy Again”: Regulation and Implications for the Food Industry

American health indicators have been worsening in recent decades, prompting new policy interventions in food and health regulation. The United States lags behind other nations in terms of life expectancy and faces high chronic disease rates.

Figure 2: Overview of Chronic Diseases Rate by Country / Region

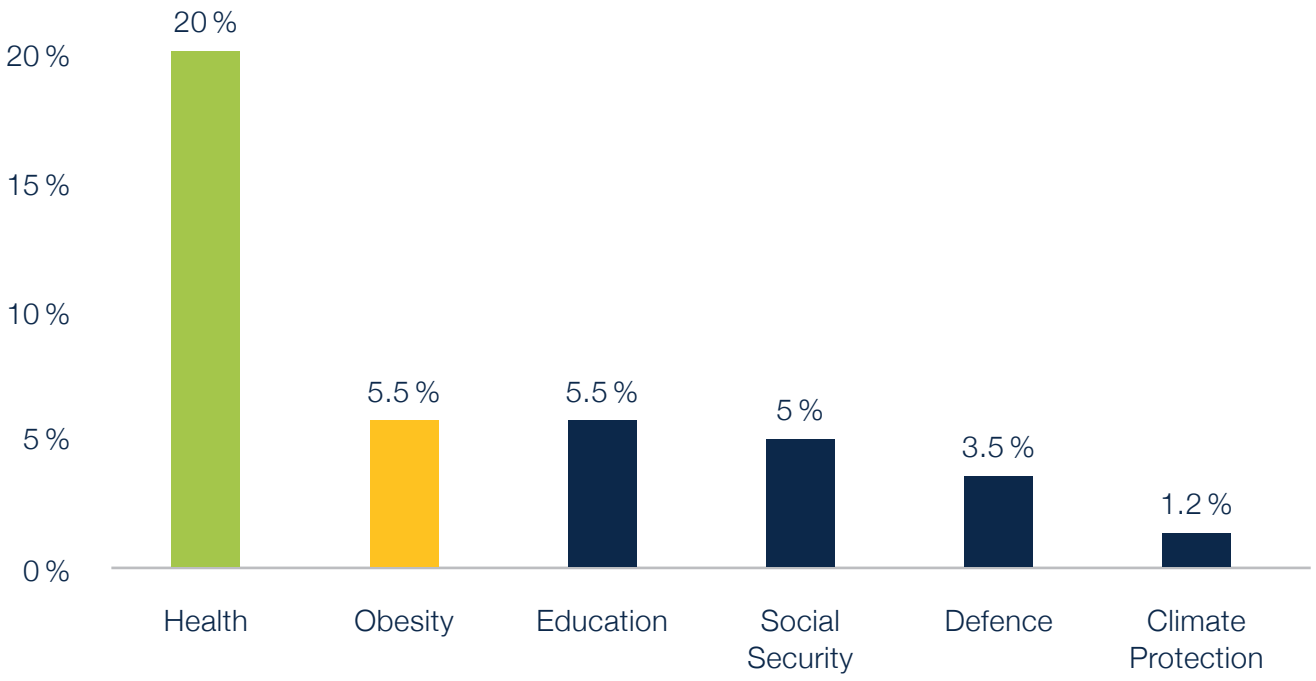


Sources: Picard Angst Research, CDE, Eurostat, WHO

In response, the federal government launched a “Make America Healthy Again (MAHA)” initiative in early 2025. President Donald Trump signed an executive order, establishing the Make America Healthy Again Commission to investigate and address the root causes of the nation’s health crisis. One of the initiative’s main focuses is reducing Americans’ exposure to potentially harmful ingredients in the food supply. The executive order explicitly references the proliferation of ultra-processed foods and additives as contributors to poor health.

The high prevalence of chronic diseases is not only a societal issue, but also an economic one, as illustrated in Figure 3. Approximately one-fifth of the U.S. GDP is spent on healthcare each year, with direct and indirect costs related to obesity accounting for approximately 5.5% of GDP. These costs are comparable to U.S. spending on education or social security—and significantly higher than defense expenditure. As such, the economic incentive to address diet-related diseases and obesity is substantial.

Figure 3: Costs as a % of US GDP



Sources: CMS; Milken Institute; Trading Economics; SSA; Statista; Atlantic Counsel; Picard Angst research

In March 2025, Health and Human Services (HHS) Secretary Robert F. Kennedy Jr., who chairs the MAHA Commission, delivered a blunt ultimatum to major food companies: remove certain artificial food dyes from products or the government will ban them. In a closed-door meeting with top representatives from PepsiCo, General Mills, Smucker's, Kraft Heinz, and Kellogg's, Kennedy stressed the urgent priority to remove artificial color additives from their products before the end of his term.

Beyond targeting specific ingredients, the MAHA initiative is tightening the overall regulatory process for food additives. Currently, under the Generally Recognized as Safe (GRAS) system, companies have been allowed to self-certify new food ingredients as "safe" without notifying the FDA, a process that critics label a loophole. Secretary Kennedy directed the FDA to initiate rulemaking to eliminate the self-affirmed GRAS pathway, which means that companies would no longer be permitted to introduce new food additives without a public and agency review.

Major food companies in the United States are still using ingredients such as Potassium Bromate, Titanium Dioxide, Red 40, Yellow 6, and Blue 1, all of which have been banned or heavily regulated in several European countries and Canada because of the associated health risks. The goal is to create a catalog and regulate chemical substances used in food production to minimize risks to human health, similar to the EU's REACH program.

Table 1: Ingredients Still Used in the United States but Largely Banned in Europe

Ingredient	Use	Health Concerns	EU Status	US Status
Potassium Bromate	Dough conditioner in white flour, bread, pizza crust	Possible carcinogen; kidney and nervous system damage	Banned	Allowed
Titanium Dioxide (E171)	Colorant in candies, sauces, baked goods	Genotoxicity; potential DNA damage and cancer risk	Banned since 2022	Allowed
BHA (Butylated Hydroxyanisole)	Preservative in cereals, snacks	Suspected carcinogen; cancer risk in animal studies	Banned	Allowed
BHT (Butylated Hydroxytoluene)	Preservative in cereals, snacks	Suspected carcinogen; cancer risk in animal studies	Banned	Allowed
Azodicarbonamide (ADA / E927a)	Dough conditioner in bread and packaged baked goods	Linked to respiratory issues, asthma, carcinogen concerns	Banned	Allowed
Propylparaben	Preservative in baked goods, beverages	Endocrine disruptor; fertility and cancer risks	Banned (food since 2006)	Allowed
"rBGH/rBST (Recombinant Bovine Growth Hormone)"	Hormone to increase milk production	Cancer concerns; animal welfare	Banned	Allowed
Red Dye No. 3 (Erythrosine)	Colorant in candies, cereals, snacks, beverages	Linked to cancer in lab animals	Banned	Allowed until 2027
Red 40 (Allura Red AC)	Colorant in drinks, snacks	Hyperactivity in children	Allowed with warning label	Allowed
Yellow 5 (Tartrazine)	Colorant in drinks, candy	Hyperactivity in children	Allowed with warning label	Allowed
Yellow 6 (Sunset Yellow FCF)	Colorant in beverages, baked goods	Hyperactivity in children	Allowed with warning label	Allowed
Blue 1 (Brilliant Blue FCF)	Colorant in confections, drinks	Hyperactivity in children	Allowed with restrictions	Allowed

Sources: Picard Angst Research, European Food Safety Authority, FDA, CFR

There is a pivot toward preventive health – shifting the focus of the U.S. food system from simply providing abundant calories to fostering better nutrition and wellness outcomes. By improving the nutritional environment—from limiting harmful additives to encouraging whole foods—the MAHA initiative aims to curb obesity, diabetes, and other diet-related conditions that are rampant in the American population. Moreover, as healthier formulations (free of artificial dyes, excess sodium, trans fats, etc.) become the industry norm, even people who rely on inexpensive packaged foods could see improvements in the quality of their diets.

These regulatory shifts undoubtedly pose challenges and opportunities for the food industry. In the short term, manufacturers will need to reformulate products to comply with new standards – for example, replacing synthetic dyes with natural colorings, or removing controversial preservatives. Many companies have already started down this path. Many brands often sell artificial-free versions of products in Europe (to meet EU regulations) and have been gradually reducing additives, sugar, and salt in U.S. products as well.

Complying with a revamped regulatory regime will incur compliance costs. Firms will need to invest in testing and safety assessments for ingredients under the new GRAS notification requirements.

It may also stimulate innovation in food tech—for instance, the development of natural alternatives to additives and cleaner processing methods—as demand grows for safer, simpler products. Importantly, by proactively adapting to these changes, the industry can benefit from renewed consumer confidence. When consumers perceive foods as safer and healthier, the industry can expand market opportunities for companies offering genuinely improved products.

While it is too early to judge results, the early policy actions under the MAHA initiative signal a new commitment to food safety and public health, which in our view will re-shape the entire agri-food value chain.

Reshaping the Plate: GLP-1's Influence on the Food Industry

Since 1990, global adult obesity rates have more than doubled, while adolescent obesity has quadrupled, according to the World Health Organization. Over one billion individuals now live with obesity, and current projections by the World Obesity Federation suggest that more than half of the global population will be overweight or obese by 2035. The economic consequences of obesity are alarming, with an estimated cost exceeding USD 4 trillion annually, equivalent to 3% of global GDP. Beyond the economic toll, obesity significantly increases the risk of premature death due to cancer, cardiovascular disease, and diabetes — underscoring the urgent need for effective prevention, regulation, and a fundamental shift in our eating habits.

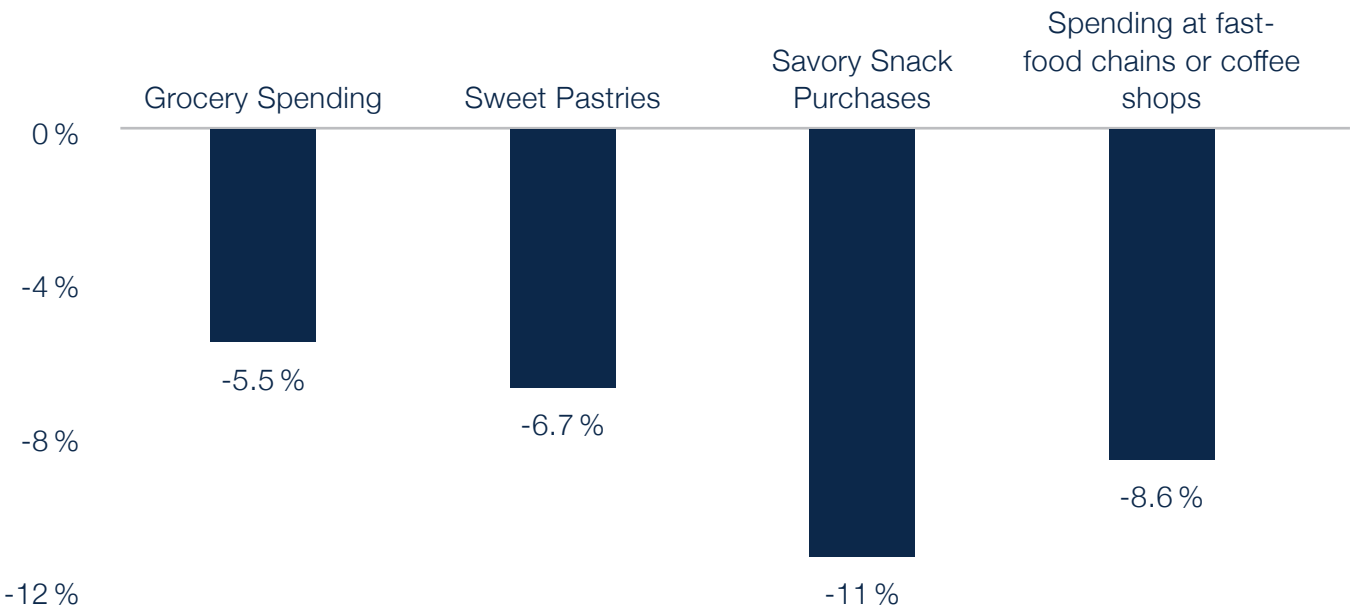
In this context, the use of GLP-1 (Glucagon-Like Peptide-1) drugs such as Ozempic, Wegovy, and Mounjaro have gained widespread attention. GLP-1 is a hormone that regulates blood sugar and appetite by stimulating insulin secretion, reducing glucagon production, and slowing gastric emptying. These mechanisms help lower blood glucose levels and promote weight loss, making GLP-1 drugs a powerful tool in managing type 2 diabetes and obesity.

The adoption of GLP-1 medications is expanding rapidly and could ripple through the food ecosystem, with substantial implications for the food industry and restaurants.

As GLP-1 usage increases, noticeable shifts in consumer food preferences have emerged. A study from Cornell University, "The No-Hunger Games: How GLP-1 Medication Adoption is Changing Consumer Food Demand," revealed that households with a GLP-1 user reduced grocery spending by 5.5% within six months of adoption. Higher-income households showed even greater reductions, up to 8.6%. These declines were driven mainly by reduced purchases of calorie-dense, processed foods, with an 11% drop in savory snack purchases. In contrast, spending on nutrient-dense foods, such as yogurt and fresh products, showed directionally positive changes.

Additionally, spending at fast-food chains, coffee shops, and other limited-service restaurants dropped by 8.6%. Data from the U.S. aligns with these trends, with GLP-1 users reporting significant reductions in the consumption of snacks, frozen foods, chocolate, soft drinks, alcohol, and high-sugar products. GLP-1 users also consumed more fruits, vegetables, poultry, fish, and functional foods.

Figure 4: People Taking GLP-1 Medication – Shift in Consumer Food Preferences



Sources: Cornell University, "The No-Hunger Games: How GLP-1 Medication Adoption is Changing Consumer Food Demand". GLP-1 users reduced food spending after six months of adoption.

These behavioral changes present both challenges and opportunities for the food industry. Companies heavily reliant on indulgent, calorie-dense products could face declining demand. In contrast, categories such as yogurt, cheese, protein supplements, flavored water, fruits, nuts, and dried foods are likely to benefit. Food manufacturers and retailers may need to adapt by reformulating products, offering smaller portions, and packaging convenient, nutrient-dense options to align with changing consumer preferences.

Restaurants, particularly fast-food chains, could also be at risk. An MS AlphaWise survey highlights the decreased consumption and a shift away from indulgent dining. However, chains with flexible menus may be better positioned to weather this shift. Full-service restaurants might adapt by offering healthier options and focusing on the social experience of dining.

GLP-1 medications are expected to continue reshaping consumer habits, potentially leading to a measurable decrease in the consumption of unhealthy food categories and a potential boost for companies aligned with healthier lifestyles, such as **Glanbia, Simply Good Foods, Bellring Brands, and Vital Farms.** The long-term impact of GLP-1 on public health and food industry economics remains to be fully understood, but current trends signal a paradigm shift in how people are addressing dietary habits and adopting healthier lifestyles.

Food Innovation Addressing Healthcare and Reformulation Needs

As awareness regarding longevity and health rises, the focus is increasingly shifting toward nutritious and healthy food. Consumers are moving from a reactive approach to health—addressing issues after they arise—to a proactive one, using food to prevent, manage, and even reverse conditions such as obesity, diabetes, and cardiovascular disease. The right foods can act as medicine, while the wrong ones—particularly ultra-processed foods—can contribute to inflammation, digestive issues, and long-term health complications.

Figure 5: Allocation of Healthcare Costs: Treatments vs. Preventive Measures

Sources: DSM-Firmenich 2024 CMD, Picard Angst Research

As a result, both consumers and food manufacturers are showing a growing interest in ingredients that can fortify foods with added health benefits. There is rising demand for healthier food alternatives, including organic, gluten-free, or plant-based options. In response, manufacturers and food brands are increasingly offering clean-label products – free from artificial additives and rich in nutritional value.

Recent advancements in food technology—particularly in ingredient innovation and fermentation processes—are transforming the food industry by introducing healthier and more sustainable alternatives to current products and traditional production methods.

Fermentation

Fermentation, an ancient food preservation technique, is now at the forefront of modern food technology. By harnessing microorganisms such as fungi, yeast, and bacteria, fermentation offers efficient, eco-friendly alternatives to traditional animal-based and large-scale agricultural production. It plays a key role in producing cheese, milk, yogurt, various types of bread, beer, and many other foods.

Fermentation is revolutionizing protein production by significantly reducing resource use. Compared to soy and meat production, it uses up to 100% less water, 95–100% less land, and yields 10–175 times more product per unit of land. Furthermore, it achieves a 1:1 food-to-feed conversion ratio—vastly superior to cows (10:1) and chickens (3:1)—while offering complete nutritional value, including 60–90% protein content, fiber, B vitamins, and essential minerals.

Pioneers such as Solar Foods exemplify this fermentation potential. They have developed “Solein”, a protein derived from microbes that consume air and electricity. It has a protein content of 78%, 6% fat (primarily unsaturated fats), 10% dietary fibers, 2% carbohydrates, and 4% mineral nutrients. Such a breakthrough innovation is a good example that points to a future where food production is both sustainable and scalable.

Ingredients

Key trends in the F&B innovation landscape include salt and sugar reduction, the use of natural ingredients, and enhanced nutrition profiles offering added health benefits – such as supporting the microbiome and gut health. Food technology has advanced significantly, enabling the creation of individualized, functional ingredients and targeted delivery systems. Brands can differentiate themselves by promoting nutrient-dense products with clear labeling and essential vitamins.

Ingredient suppliers are at the forefront of these developments, leveraging specialized expertise. **Kerry**, for instance, is particularly proud of its salt reduction platform, while **Tate & Lyle** offers one of the fastest-growing low-calorie sweetener platforms based on stevia. **Novonesis** supplies a probiotic targeting the gut-brain axis, promoting mental wellness, and paving the way for stress-reducing food and beverage products. **Symrise** has made natural ingredients a core focus, and **Givaudan** has developed a compelling hydration and refreshment platform, crafting healthy beverages with functional benefits. **DSM-Firmenich** is transforming early-life nutrition through Human Milk Oligosaccharides (HMO), bringing baby formula closer to breast milk.

Flavor and functional ingredient producers stand to gain significantly from the current surge in innovation, which is already showing tangible progress.

Together, alternative proteins, ingredient companies, and organic, healthy, and functional food players constitute approximately 50% of “The Food Revolution” portfolio. As a result, the fund is well-positioned to capitalize on these necessary trends toward healthier products with clean labelling.

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Source: MSCI ESG Platform

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