



Nourish the Body, Feed the Mind

*Health and Wellness
from a Global Foodservice
Perspective*





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Introduction

What does it mean to “eat well” today?

It's no longer just about managing weight and counting calories. Around the globe, today's consumers are seeking a holistic approach to health that can encompass everything from individual physical and mental wellness to the well-being of the planet itself. On many levels, the COVID-19 pandemic changed the way individuals define health—and it continues to play a role in many consumers' dining habits.

Of course, the decisions consumers make when purchasing grocery items in retail outlets and cooking at home do not always correlate to their foodservice ordering behavior. Consumers see foodservice occasions as a treat and an excuse to indulge, which means that healthy options need to be appetizing, accessible and affordable in order to draw attention.

In this report, Griffith Foods will examine consumers' current attitudes about health, nutrition and wellness from a macro level, supported by a wealth of innovative and informative foodservice examples.

While ingredients, trending diets and specific regulations vary across regions, the desire to nourish our bodies and our minds remains universal. Join us as we take a deeper dive into health and wellness from a global foodservice perspective.

The current state of healthy dining

For past few decades, healthy eating and diet culture had evolved around three major pillars:

- **Healthy 1.0:** Weight Management
- **Healthy 2.0:** Feel-Good Foods
- **Healthy 3.0:** Functional Foods

Today, we're starting to see a shift toward what has been described as "Healthy 4.0," a focus on *Personalized Eating*.¹ For many consumers, an individualized holistic view of health that encompasses diet, stress management, sleep and exercise² is the way to go.

And with this approach, many are doing their own research (often online) to decide which diet and health sources they can trust.³ They're choosing wellness on their own terms, and the definition of "healthy" has never been more ambiguous.

But, while consumers tend to think of health as a personal issue, the truth is that it's both personal and a public, global concern. According to the World Health Organization (WHO), 1.3 billion people experienced moderate food insecurity in 2018, meaning they were without regular access to "nutritious and sufficient food."⁴ Additionally, 2 billion adults and 40 million children under the age of 5 were considered overweight in 2019, with 670 million adults and 120 million 5-19-year-olds considered obese.⁵

Diet-related diseases are affecting a significant percentage of the global population, amplified even further by the COVID-19 pandemic as people with diet- and lifestyle-related health issues were at higher risk of severe outcomes.⁶

In fact, 31% of global consumers reported that they experienced undesirable weight gain since the pandemic broke out in 2020.⁷

So, what can be done to address these global issues?

The question is complex, but we know that the foodservice industry has the resources, the responsibility and the ingenuity to play an active role in ensuring the health of its patrons.

As we examine the mindset of the consumer, let's take an insights-driven approach to unpacking these challenges and their solutions.



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Consumer Insights

Impact of COVID-19

Between restaurant closures, supply chain issues and the health crisis, the past two years have taken a toll on both individual dining habits and foodservice as a whole. In 2020, the global value of the foodservice industry dropped by a whopping 36.8%.⁸ Today, many segments and countries are showing much-welcomed signs of recovery, and we'll examine that data later in the report.

Interestingly, while the pandemic did affect consumer *awareness* of healthy eating habits, it did not have a universal impact on consumer action or purchasing decisions. When polling consumers in the US, Mintel found that people were actually eating less healthfully when dining out or ordering food away from home in 2021.⁹ In Datassential surveys, 25% of Americans said the healthfulness of their diet changed as a result of the pandemic, but 38% said it did not affect their diet overall.¹⁰ Consumers in the UK, France, Japan and Australia also reported a low degree of change in their purchasing decisions. On the flip side, Brazilian and Mexican consumer attitudes were profoundly impacted, while the purchasing decisions of Chinese consumers fell between the two ends of the spectrum.¹¹

Percentage of consumers placing more importance on products that make health benefit claims than they did before the pandemic.¹²

74% of Brazilian consumers

66% of Mexican consumers

18% of UK consumers

16% of French consumers

It's important to note that consumers are taking the link between food and immunity seriously, even if they're reluctant to change their own habits.

The vast majority of US consumers, 86%, say that eating healthy is important for maintaining a strong immune system.¹³ Among Indian consumers, 47% say that strengthening their immune system is a top wellness priority.¹⁴ And 70% of Chinese adults regularly were including immunity-boosting foods in their diet because of the pandemic, with 50% saying they'd continue to do so in 2022.¹⁵

Global interest in foods that support immunity showed its greatest spike in March of 2021, based on internet search analysis.¹⁶ While searches have declined over the past year, interest in "immunity boosting" nutrients such as vitamin C and vitamin D remains higher than pre-pandemic levels.¹⁷



Nutrition as a form of self-care

Beyond a renewed interest in immunity, the pandemic also brought mental and emotional wellness to the forefront. The link between food, measurable health attributes and feelings of well-being continues to grow stronger.

Consumers say that having healthy eating habits is just as important for emotional and mental health as it is for physical health; 80% of Chinese adults, 78% of US adults and 73% of Brazilian adults agree.¹⁸ In fact, most global consumers (64%) say that well-being is the #1 priority for overall health.¹⁹

As consumers support their mental health through diet, “feel-good foods” take on different forms. To some, this means choosing plant-based items instead of animal products for ethical reasons, or locally sourced ingredients for sustainability—foods that consumers believe also benefit the planet.²⁰ Others are looking specifically for the inclusion of ingredients such as adaptogens (e.g., ashwagandha) and nootropics (e.g., L-theanine) purported to reduce stress, manage mood and improve sleep.²¹

Overall, 21% of global consumers are eating foods that improve their mental well-being.²² Interest in foods containing ingredients purported to aid relaxation or improve mood is significantly higher among consumers ages 55 and older, and highest in Europe and North America.²³ With 53% of global consumers self-reporting at least “moderate” levels of stress,²⁴ products aimed at stress relief are booming in many parts of the world. Countries that lead in products making mental health claims include the US, France, India, the UK, Australia, Germany, Canada, Italy, Mexico and Taiwan. Those with the lowest number of products include South Korea, Japan, Brazil, China, Indonesia and Thailand.²⁵

Another link to feel-good foods is the idea of permissible indulgence. Especially when it comes to foodservice occasions, many consumers are simply “unwilling to compromise”²⁶ on the simple pleasure of eating. A survey of US consumers found that 51% let go of healthful eating habits at restaurants because they see dining out as a treat, and “it’s okay to indulge when eating out.”²⁷

How do US consumers identify themselves?²⁸

37% “healthy diners” (always or mostly choose healthy options)

41% “balanced diners” (choose a mix of healthy and indulgent offerings)

19% “indulgent diners” (mostly or always choose indulgent options)

Permissible indulgence takes the idea of health beyond nutrition. It’s an acknowledgment that comfort food, enjoyable dining experiences and emotional happiness go hand in hand.



Making informed dining decisions

Knowledge is power, and 57% of global consumers say that information about the health benefits of ingredients is nice to have, or even essential, when it comes to making purchasing decisions.²⁹ On average, 33% of global consumers pay very high attention to ingredients in the food and drinks they consume.³⁰



% of consumers who say they pay very high attention to ingredients³¹

BY LOCATION	BY GENDER	BY AGE
47% of Middle Eastern and African consumers	36% of females	36% of 16-24-year-olds
41% of Central and South American consumers	31% of males	37% of 25-34
35% of Asian and Australasian consumers	23% of nonbinary consumers	37% of 35-44
32% of North American consumers	22% prefer not to say	30% of 45-54
28% of European consumers		28% of 55-64
		26% of 65+

Geographically, this pattern extends to making foodservice dining decisions as well. Having access to a range of healthy and nutritious menu options is one of the top factors influencing where consumers around the globe decide which restaurants to visit, according to:³²

50% of Middle Eastern and African consumers

50% of Central and South American consumers

45% of Asian and Australian consumers

28% of North American consumers

28% of European consumers

Even though 29% of US consumers place no importance on healthy menu claims, another 56% say they're eating more healthfully when dining out because more healthy menu options are available.³³

Consumers' attitudes around the world:

72% of Dutch consumers say they eat healthy all or most of the time³⁴

46% of Peruvian consumers eat healthy most of the time³⁵

85% of Chinese consumers put a lot of thought into what they eat³⁶



With such differing preferences across locations and demographic groups, and even within single countries, there is no one-size-fits-all solution to the healthy dining dilemma. However, it's clear that significant portions of the global population care about the food they eat on a daily basis.

Focusing on the positives...

While consumers are certainly taking a more holistic approach to health, it doesn't mean they've forgotten about the traditional health goals and benefits (e.g., weight loss, disease management) that have typically driven the category. One way we're seeing this play out is through an emphasis on positive nutrition,³⁷ an approach to increasing consumption of foods with health benefits rather than decreasing consumption.

Research across countries has found that consumers are looking to increase their intake of foods like fruits, vegetables and nuts³⁸—though the need for convenience can sometimes interfere with this goal. When surveyed, 32% of Europeans said they ate more fruit in 2020 than in previous years and 28% said the same was true of vegetables.³⁹ And in the US, 57% of consumers are looking to increase their fruit and vegetable consumption this year, up from 47% in 2021.⁴⁰

Also in the US, 72% of consumers claim to be interested in “whole foods” that provide natural functional health benefits. Additionally, 71% would be interested in ingredients that provide those benefits added to menu items or dishes they could purchase from foodservice outlets. Interest in boosters and supplements was significantly less.⁴¹ Global interest in foods fortified with vitamins and minerals is highest among those ages 55 and older, and geographically is highest in Europe and North America.⁴²



What else do consumers believe can have a positive impact on their health? Globally, 50% say antioxidants, 44% say prebiotics and 72% say vitamins.⁴³ Calling out menu items featuring these attributes can be a great way to draw the attention of health-conscious consumers.

...And where they're cutting back

On the flip side, there are still some substances that consumers say they're trying to avoid or reduce in their diets. According to *New Nutrition Business*, sugar has become “the worst carb”⁴⁴ with 38% of global consumers actively trying to reduce their sugar consumption.⁴⁵ This number jumps to 73% in America, with 59% of consumers looking to limit sugar and an additional 14% wanting to avoid sugar completely.⁴⁶ Salt is another pain point, with 32% of global consumers actively trying to reduce their salt consumption.⁴⁷

Taking a closer look at consumers' clean label preferences for packaged goods can help foodservice operators understand the types of claims their patrons are looking for—and how they might be applied as menu callouts.

For example, 60% of global consumers say “free from artificial ingredients” and “non GMO” claims are appealing, and that number is highest among North American consumers.⁴⁸





Gluten continues to hold an unfavorable perception in the eyes of consumers, with 20% globally saying that gluten has a negative impact on health. Approximately one-third of global consumers say gluten-free formulations are essential, with even higher numbers in North America and Europe (both at 41%).⁴⁹ To reassure their customers, many manufacturers and operators are utilizing ingredients like cassava, tapioca and chickpea flours— calling out their “naturally gluten- and grain-free” status without tying those attributes to specific health benefits.⁵⁰

Calorie reduction, long associated with weight loss and overall healthy dietary habits, no longer holds the same cachet it once did for some. In the US, 41% of consumers say that counting calories actually has a negative impact on mental health, and 42% say that calorie-counting is not necessary when eating a healthy diet.⁵¹ Even so, a portion of the population does still follow a calorie-counting diet— especially as new low- or no-calorie sweeteners emerge as sugar substitutes.⁵²

That said, as consumers choose to follow a more holistic approach to healthy eating, the overall experience of a meal may be greater than the sum of its calories.

The “skinny” on diet trends

Especially with the rise of wellness influencers on social media, consumers are exposed to a variety of diet trends on a daily basis. A whopping 52% of Americans said they followed a diet or eating pattern in the past year, up from 39% in 2021 and 43% in 2020.⁵³ These range from somewhat “undefined” concepts such as clean eating and mindful eating to number- or nutrient-based diets like following USDA recommendations or the ketogenic diet.

Most common US diets (% of consumers practicing)⁵⁴

- 16% clean eating
- 14% mindful eating
- 13% counting calories
- 12% plant-based

Adherence to specialized diets tends to be greater in the US than other areas of the world, but many global consumers do follow certain eating patterns to protect their long-term health or to lose weight. Surveys show that 56% of Brazilian consumers want a diet that reduces the risk of lifestyle diseases and 41% of 18-49-year-old Chinese consumers with weight management goals are hoping to prevent chronic disease.⁵⁵

Many people experiment with variations of specialized diets in the hopes of finding a solution that works for their needs. For example, only 9% of global consumers claim to follow a strict low- or no-carb diet, but 38% say they eat fewer carbs in an attempt to lose weight.⁵⁶ The size of this gap is just one example of the striking differences in how people around the world define health and make dining



decisions. Ask ten people how they manage weight, and you may get ten different answers. Some count calories, some practice intermittent fasting, some eat less fat and some eat *more* fat!⁵⁷

Curiosity about plant-based dining (from a taste perspective) and the desire to reduce meat and dairy intake (for ethical and/or environmental reasons) have also influenced global dietary habits. In fact, 34% of consumers say they follow vegan, vegetarian, flexitarian or low-meat diets.⁵⁸ In the US, while only 5% of consumers avoided dairy in 2017, that number jumped to 17% in 2021.⁵⁹

In foodservice, catering to the needs of patrons with specialized diets can be an operational challenge. But by using softer language in menu claims, it's possible for operators to appeal to a wider range of consumers. For example, “carb-conscious” or “keto-friendly” descriptors serve as cues to patrons taking a smart carb approach, not just those following a strict ketogenic diet.

Generational differences examined

As we saw earlier in the report, younger consumers around the world pay more attention to ingredients than older generations do.⁶⁰ In part, this is due to a difference in proactive versus reactive approaches to health. For younger consumers, prevention is the most important strategy for healthy aging—making dining decisions based on ingredient or product claims and benefits to overall well-being. Older

consumers are more likely to be reactive, making changes to their diets to manage ongoing health issues.⁶¹ We saw this play out during the pandemic, as younger consumers were more likely to choose immunity-boosting foods and those purporting mental health benefits. Conversely, 49% of Baby Boomers in the US said the pandemic did not affect the healthfulness of their diets.⁶²

When asked if their food and beverage purchasing decisions changed due to the pandemic, here’s what a global sample of adults had to say.⁶³


% of people saying attribute has become more important	All ages	18-24	25-34	35-44	45-54	55+
Ingredients/products to support my physical well-being	37%	44%	45%	39%	35%	30%
Health benefit claims (e.g., immunity)	35%	41%	39%	37%	34%	31%
Ingredients/products to support my mental well-being	33%	39%	39%	37%	33%	25%
Nutrition claims (e.g., high-protein, source of vitamin D)	29%	32%	34%	30%	28%	24%

Not only are Gen Zers and Millennials more likely to self-report their health as being “very good” or “excellent,”⁶⁴ they’re also trying to maintain that status through a variety of foods consumed both at and away from home. In the US, where Baby Boomers tend to choose vegetables and proteins like chicken and seafood when trying to be healthy when dining out, Gen Z is the only demographic to include increased red meat consumption in their healthy food choices. (In general, college students consume all types of protein with higher frequency than the average US consumer.⁶⁵) They’re also boosting their fruit intake, while Millennials are adding more eggs into their diets.⁶⁶ Even as plant-based options soar, 73% of consumers agree that some animal foods are important to a healthy diet.⁶⁷

As we see in the chart above and our earlier look at holistic health, factors beyond classic nutrition information are also at play. Sixty-two percent of Millennials and 57% of Gen Zers say they would go out of their way to a restaurant to order functional menu items, versus only 49% of general US consumers.⁶⁸ And a whopping 76% of Gen Zers believe that the food they eat can impact their mood and mental health.⁶⁹ They’re the only generation with emotional and mental health in the top benefits sought from food and beverages!⁷⁰



As the influence of younger generations grows, it's also important to examine their viewpoints on the ethical and environmental impacts of food as they relate to health. Millennials and Gen Zers share more similar attitudes than they may think, with almost three-quarters of them believing that their respective generations are more concerned about the environmental impact of food choices than other generations.⁷¹ Both cohorts also demonstrate a significantly stronger consideration to whether foods and beverages are produced in a sustainable way, as compared to older consumers.⁷²

Unlike Gen Xers and older demographic groups, Millennials and Gen Zers believe that ethically sourced foods are typically healthier than other foods. And perhaps most relevant to foodservice operators: they're also more willing to pay for ethically sourced foods.⁷³ 

North America

Central and South America

Europe and Africa

India and the Middle East

Asia Pacific

Global Highlights

Industry overview

Especially in countries where tourism contributes to a significant portion of GDP, the pandemic had a crushing impact on the global economy. But as restaurants and hotels reopen and travel restrictions are lifted, the food and beverage industries of many markets are projected to grow over the next few years.

Size of the market⁷⁴

Region	Foodservice Industry Value (\$M) 2021	Projected CAGR 2021-2025
Asia	1,130,095	8.4%
North America	772,513	3.8%
West Europe	631,757	7.6%
Latin America	148,403	9.2%
East Europe	93,505	10.7%
Australasia	60,418	4.7%
Middle East, North Africa	49,654	5.7%
Africa	26,795	5.0%

Though economic conditions and market size vary, the health of the population is a global concern.

Overweight and obesity, along with their associated diet-related non-communicable diseases, are contributing to 4 million deaths globally.⁷⁵ And the pandemic has brought food and beverage health claims to the forefront in many countries.

A global sample of consumers from Australia, Brazil, China, France, Mexico, the UK and the US say that the following attributes have become more important due to COVID-19:⁷⁶

37% ingredients/products to support physical well-being

35% health benefit claims (e.g., immunity)

34% healthier options with reduced fat, salt, sugar

33% ingredients/products to support mental well-being

29% nutrition claims (e.g., “high in protein” or “source of vitamin D”)



North America

Across North America, consumers are looking for fresh and convenient food solutions. To help consumers make informed decisions when dining out, restaurants are being called upon to increase transparency. In the US, the Affordable Care Act mandated that foodservice chains with 20 or more locations (and vending machine operators with 20 or more machines) post calorie information.⁷⁷

Similarly in Ontario, Canada, the 2015 Healthy Menu Choices Act requires chains with 20 or more locations to display calorie counts on menus.⁷⁸ And while no nationwide legislation exists, the Canadian Food Inspection Agency has encouraged foodservice establishments to make nutrition information readily available to customers via tray liners, menu boards, posters or brochures.⁷⁹

- 71% of Mexican consumers agree that it's harder to eat healthy when money is tight⁸⁰
- Obesity in the US has been rising for decades, with more than ¾ of US adults considered overweight even before the pandemic⁸¹

Key opportunities:

- **Mexico:** functional, organic, natural, plant-based products, meat and dairy alternatives⁸²
- **Canada:** sustainably produced items, organic options, plant-based proteins⁸³
- **USA:** plant-based options, “superfood” ingredients, antibiotic-free and cage-free claims⁸⁴

Central and South America

Consumers throughout Central and South America vary in their preferences for cooking at home versus frequenting foodservice establishments. Additionally, during the height of the pandemic, many restaurants were not equipped to pivot toward a takeout and delivery model. While challenges remain, the Latin American foodservice market is expected to grow significantly by 2025.⁸⁵ Today, consumers say they are looking to strengthen their immune systems and fortify their diets with micronutrients,⁸⁶ desires that will drive change in foodservice operations looking to gain new customers.

70% Chilean consumers say there is too much conflicting info about what a healthy diet is⁸⁷

Key opportunities:

- **Brazil:** mindful eating, ethical/sustainable animal products, plant-based alternatives⁸⁸
- **Colombia:** single-serve items (food safety concerns), healthier bakery and starch ingredients⁸⁹
- **Costa Rica:** immunity-boosting foods, sustainable options, plant-based⁹⁰

Europe and Africa

Programs that promote transparency and incentivize healthy options are being introduced throughout Europe. Examples include SMASH (Save Money and Stay Healthy), a UK-based app offering 13-to-24-year-olds discounts on healthy food from restaurant brands,⁹¹ and a labeling system for both retail and foodservice outlets called Nutri-Score, gaining steam in central Europe.⁹²

Growing urbanization and access to technology are contributing to foodservice expansion in Africa, with demand growing alongside tourism in markets like Morocco, South Africa and Nigeria.⁹³ During the pandemic, many restaurants began offering meal kits, improving online ordering systems and increasing delivery sales as a result.⁹⁴ And with the rise of fast food consumption, there is mounting pressure on restaurant chains to provide healthier options and consumer advocacy to combat the increase in diabetes, obesity and hypertension found in areas of rapid development, such as Ghana.⁹⁵

- A study of ultra-processed food and drink (UPFD) consumption in Europe found that some countries have significant proportions of total daily energy intake coming from UPFDs⁹⁶
Sweden: 42.2% / UK: 40.5% / Germany: 38.5% / Romania: 15.3% / Italy: 13.4%

Key opportunities:

- **South Africa:** wellness products, low-fat and high-protein foods, “superfoods”⁹⁷
- **Italy:** growing preference for gluten-free, vegetarian and vegan alternatives⁹⁸
- **UK:** low-fat, dairy-free, sugar-free, low-carb, high-protein, vegetarian, planet-friendly⁹⁹

India and the Middle East

A growing number of health-conscious consumers can be found in the United Arab Emirates, looking for nutritious products with clear labeling.¹⁰⁰ An analysis of online conversation in both UAE and Saudi Arabia found that plant-based, ingredient transparency and sugar reduction were key health topics of interest to consumers.¹⁰¹ In Bahrain, voluntary menu labeling has already been adopted by most fast food chains.¹⁰²

The desire for holistic well-being is apparent in India, with consumers interested in preventive healthcare and immunity-boosting foods. For operators, it is imperative to deliver value, reliability and food safety to combat misinformation and uncertainty surrounding the pandemic.¹⁰³ Many Indian consumers, especially those of younger generations, are looking to explore a wider range of foods with perceived health benefits.¹⁰⁴

- 71% of Saudi consumers say they try to eat healthy all or most of the time¹⁰⁵
- 85% of Indian consumers wish there were more healthy snack options¹⁰⁶

Key opportunities:

- **India:** tree nuts, fresh fruit, vegetarian, plant-based vegan foods¹⁰⁷
- **Saudi Arabia:** organic, low-sodium, low-sugar, high-fiber, products with added vitamins¹⁰⁸
- **UAE:** organic, sugar-free, natural, locally produced products¹⁰⁹

Asia Pacific

Across the region, consumers are seeking out foods with preventive health benefits, including vitamins, protein, probiotics and traditional remedies.¹¹⁰ In fact, many of the items considered “health foods” on a global scale are rooted in Japanese history and culinary tradition.¹¹¹ But contemporary interpretations of healthy eating are also taking hold. This has led to an innovation boom on Chinese restaurant menus, with “light” options and plant-based meats demonstrating success.¹¹² Flexitarian diets have also become popular in Thailand, with many chains finding plant-based menu items to be solid revenue-drivers.¹¹³

China saw a record number of new restaurant openings in 2020, ranging from quick service to fine dining chains.¹¹⁴ Many restaurants in Indonesia are poised for massive growth as well. One emerging coffee chain grew nearly 40% in 2020 alone, setting in motion a plan to add 400 more units and become the second-largest chain overall in the market.¹¹⁵ Culinary tourism hotspots such as Taiwan and Hong Kong are also showing strong signs of recovery.¹¹⁶

- 70% of Thai consumers think that plant-based protein is healthier than animal-based protein¹¹⁷
- 56% of Chinese consumers think it is healthier to eat smaller meals and snacks throughout the day, rather than three large meals¹¹⁸
- 23% of Japanese consumers say they occasionally try to limit their meat intake¹¹⁹

Key opportunities:

- **China:** “light” menu items, plant-based meat¹²⁰
- **Japan:** gastrointestinal regulation, nutrient intake balance, prevention of lifestyle diseases¹²¹
- **Thailand:** plant-based meat and dairy alternatives¹²²



Channel Insights

Commercial segment overview

Traditionally, full-service restaurants have led the charge when it comes to providing healthier menu options. But it's becoming apparent that more limited-service restaurants are looking to shed the "junk food" stereotype and bring better-for-you options to a greater portion of the population.¹²³ As consumer behavior changes, major brands are considering innovation in a way that's more environmentally and socially responsible, too.¹²⁴

What types of healthful requests are consumers making at restaurants?

% of US operators saying they've received the following requests in the past year:¹²⁵

39% allergen-free foods

33% menu items compliant with specific diets

31% plant-based subs for signature menu items

25% non-fried/grilled versions of fried foods

23% calorie counts or greater detail nutritional info

Variety and value will play critical roles in bringing a stronger health mindset to the restaurant industry. In the US, only 20% of consumers say they can find the healthful foods they want at restaurants, while 46% say they're more likely to find them in retail and by cooking at home.¹²⁶

Full-Service Restaurants

Patrons dining at full-service restaurants are generally most receptive to a range of healthy claims. They are looking most frequently for high-protein options, low-sodium options, low-fat options, low-carb options and portion-controlled options.¹²⁷ In the US, patrons say that it's easiest to find healthful food and beverages in fine dining, as compared to all other segments of the industry. Fast casual and casual dining come in at #2 and #3, respectively.¹²⁸ And demand for healthful options is still growing in these channels; consumer surveys reveal that 50% of US patrons want to see more functional foods available at casual dining restaurants.¹²⁹



Limited-Service Restaurants

Many global chains are taking steps to align their menu offerings with nutritional guidelines established by the World Health Organization and other public health groups. For example, McDonald's has been working to achieve five Global Happy Meal Goals relating to calorie count, sodium, the removal of artificial flavors and added colors, market responsibility and transparency.¹³⁰ Yum! Brands set a goal of achieving 50% of its menu offerings at KFC, Pizza Hut, Taco Bell and The Habit Burger Grill to be consistent with the company's global nutrition standards by 2030. By the end of 2021, the brands were 64% of the way to meeting that goal.¹³¹ Plant-forward innovation has also been a major area of growth for limited-service restaurants. In the US, plant-based menu claims grew 116% between Q3 2018 and 2021 in dishes such as sandwiches, bowls and burgers.¹³²



Noncommercial segment overview

Compared to restaurants, most noncommercial foodservice channels rank low on the list of locations where consumers say they can easily find healthful foods and beverages. In the US, the K-12, C&U (college and university) and B&I (business and industry) channels all rank lower than QSRs on the scale of perceived access to healthful options. Consumers rank healthcare lower in all restaurant segments except for QSR.¹³³ So how are operators in the noncommercial channel working to combat this negative perception?

K-12 Schools

The stereotypes of school meals might be starting to change, as a survey conducted by Chartwells in the US revealed that 37% of students said they would eat school lunch more often if there were more vegetarian and vegan options available.¹³⁴ In fact, butternut squash macaroni and cheese has become one of the contract feeder’s most popular entrées. As Millennial and Gen Z parents have school-age children of their own, we expect to see their dining habits reflected in their

desires for their kids’ school meals. In the US, some states have begun passing laws and allocating public funding specifically toward increasing the number of plant-based meals offered in schools.¹³⁵ The White House recently hosted the first Conference on Hunger, Nutrition & Health in over 50 years, releasing a national strategic action plan to address access to healthy, nutritious meals for all school children.¹³⁶



College & University

As we saw earlier in this report, younger diners are open to expanding their definition of healthy eating, wanting food that aligns with their personal values. College and university menus are catering to these needs by trending toward plant-based proteins. In the US, dishes such as imitation meat sandwiches (up 500%) and tofu sandwiches (up 333%) are showing very strong growth.¹³⁷ One of the initiatives created through Portugal’s National Program for the Promotion of Healthy Eating is “Healthy Eating in Higher Education,” awarding a stamp of excellence to institutions that offer healthier foods and beverages in vending machines, cafeteria meals with less salt, a variety of vegetables and legumes, and bread higher in dietary fiber.¹³⁸



Healthcare

In addition to meeting nutritional requirements and dietary preferences for patient and resident meals, healthcare operators are working to accommodate the needs of staff and visitors looking to eat healthy—especially in a time crunch. One health system in the US has installed automated micro-marts that provide higher-quality, better-for-you food and beverage options than what are normally available in vending machines. The kiosks also help to alleviate labor concerns that are still impacting staffing across the healthcare channel.¹³⁹



Businesses & Industry

In the US, workers are returning to offices at the highest rate since pandemic closures initially went into effect in March 2020. When measured in September 2022, office use was at 47.5% of early 2020 levels in major metropolitan areas.¹⁴⁰ Offering a variety of convenient, healthful and delicious meals will be key to incentivizing workers not just to come back to the office, but to stay on premises during lunchtime.



Travel & Leisure

As nonessential businesses were forced to close during the height of the pandemic, the value of the leisure foodservice channel dropped a whopping 53% in 2020, while the accommodations channel lost 50% of its value.¹⁴¹ With the revival of global tourism, the market is expected to rebound and grow in the years to come. Plant-based innovation appears to be on the docket for the recreation segment, with meat analogues starting to find a home on theme park and movie theater menus.¹⁴² Theme park guests are also demanding menus that accommodate a variety of dietary options, including gluten-free, with more restaurant-style eateries over carnival-style food.¹⁴³



Retail Foodservice

With convenience playing such a critical role in consumers' dining decisions, restaurant-curated meal kits have become a popular solution for bridging the gap between cooking at home and dining out. In fact, 53% of global consumers say they're starting to cook more frequently from home using meal kits.¹⁴⁴ Sol Sips in New York offers "vitality" focused meal kits that are plant-based, cruelty-free, dairy-free, glutenfree, soy-free and nut-free.¹⁴⁵ One unique initiative on the D2C (direct to consumer) side is Nestlé's nesQino launch, enabling consumers to customize healthy hot and cold drinks using various superfood and base powders, water and a specially designed blending cup.¹⁴⁶





Menu Claims and Operational Trends

Which claims resonate with today's patrons?

Consumers around the world are demanding more transparency and more information about the food they consume, whether from products on a retail shelf or dishes on a menu. In fact, 57% of global consumers say that information about the health benefits of ingredients is either essential or would be nice to have. And 26% say that simple ingredient lists are essential when making purchasing decisions.¹⁴⁷

% of global consumers saying these health-related claims are essential when making purchasing decisions:¹⁴⁸

- **Natural:** 34%
- **Fat free:** 24%
- **Sugar free:** 22%

Perhaps the biggest challenge for foodservice operators looking to increase or diversify healthy menu offerings is the fact that while many consumers are looking for specific menu claims, many others simply do not want to eat healthfully when dining out.



Health claims that US consumers say are important when dining out¹⁴⁹

- 33% high protein
- 29% low sodium
- 27% low fat
- 21% organic
- 21% high fiber
- 29% “none of these” (not interested in health claims when dining out)

Opinions on some menu and product claims vary significantly by location. For example, on average, 23% of global consumers are looking for beverages that are marketed as free of artificial ingredients. That number grows to 33% in China and 43% in Indonesia but drops to 15% in Argentina and 14% in Spain.¹⁵⁰

To bridge the gap, many operators are choosing to focus on softer claims with a “feel-good” connotation as part of the positive nutrition strategy we discussed earlier in this report.

Growth of menu claims Q3 2018-2021 (US) ¹⁵¹	Decline of menu claims Q3 2018-2021 (US)
+18,500% plant-based	-35% lactose-free
+756% no preservatives	-35% fat-free
+178% non-GMO	-29% gluten-sensitive
+103% gluten-friendly	-26% sugar-free
+54% natural	-23% low calorie

Another consideration is whether patrons consider certain claims to be trustworthy. Just under half of consumers consider the following clean label claims to be truthful: organic (48%), free range (47%), fair trade (46%), eco-friendly (46%) and non-GMO (42%).¹⁵² Menu items that back up claims with sourcing information, an agriculture story or third-party certification may fare better in this regard.

Food allergies

It is estimated that between 1.1% and 10.8% of the global population has a food allergy, with even more consumers experiencing food intolerances.¹⁵³ In England, Wales, Scotland and Northern Ireland, Natasha's Law requires all food produced and packed for sale in the same premises to provide complete ingredient lists with the top 14 allergens emphasized.¹⁵⁴ Interestingly, some consumers are choosing to purchase food that is marked with allergy labels even when not medically required. In the US, 38% of consumers said they purchased food with allergy/intolerance labels in the past year, with more people saying that "foods that limit certain ingredients are generally healthier" than those who said they were actually allergic or intolerant to a specific ingredient.¹⁵⁵ Additionally, 43% said they would be willing to pay more for foods and beverages with allergy relief offered at restaurants.¹⁵⁶

McSwiggan's restaurant and pub in Galway, Ireland, takes pride in offering food prepared from fresh, local ingredients that satisfies every palette. To that end, they offer dedicated lunch and dinner menus to accommodate the needs of patrons with food allergies.¹⁵⁷

Functional foods

Even though there is no agreed-upon definition of "superfood" in the nutrition community, the term has gained a following among consumers looking for ingredients perceived to deliver greater health benefits. There is a high level of interest in "naturally functional" foods such as almonds, avocados, blueberries, Greek yogurt and chia seeds, due to the belief that these ingredients possess naturally occurring health benefits.¹⁵⁸

"Superfood" ingredients trending on US menus¹⁵⁹ (4-year growth 2017-2021)

Bone broth	+440%
Raw honey	+350%
Ancient grains	+260%
Prebiotic	+200%
Turmeric	+191%
Bee pollen	+171%
Matcha	+140%

Many consumers are adding these types of ingredients into their daily diets, seeking such purported benefits as energy boosts, sleep management, stress reduction, heart health and immunity.¹⁶⁰ In the US, 37% of consumers say they want to consume more "superfoods" and functional foods than they currently do,¹⁶¹ and 42% of German functional food customers use those types of foods to support their immune system.¹⁶² In foodservice, we've seen functional ingredients move from smoothies to salads and bowls—and if consumer interest continues, so will the breadth of menu applications showcasing these types of foods.

Digestive health

Consumers are also starting to consider the connections between gut health, brain health and emotional well-being as science around the gut-brain axis continues to grow. Researchers are looking into how improving the microbiome may result in benefits toward treating or preventing depression, Alzheimer's disease, stress and inflammation.¹⁶³ Consumers around the world agree that foods with gut-friendly prebiotics (including vegetables, fruit and whole grains) and probiotics (e.g., yogurt, sauerkraut, kimchi and kefir) can help to support the immune system; 65% of Polish consumers, 52% of Italian consumers and 52% of Spanish consumers agree.¹⁶⁴ In China, 44% of adults believe that having a healthy gut reduces anxiety.¹⁶⁵ And 29% of US consumers say they're looking for digestive or gut health benefits from food and beverages.¹⁶⁶

With gut-brain research happening at the product innovation level, this concept may soon gain momentum in the foodservice space. Indonesia, for example, has recently approved a prebiotic claim for chicory root fiber for people concerned about their digestive health.¹⁶⁷ Two-thirds of consumers in that country associate prebiotics with a healthy gut,¹⁶⁸ making the implications for this ingredient claim quite compelling.

McDonald's India served up spins on traditional immunity-boosting beverages with their Turmeric Latte and Masala Kadak Chai. The drinks contain ingredients said to “detoxify, improve gut health and fight infections.”¹⁶⁹

Ingredient swaps

Incorporating “on-trend” ingredients doesn't need to mean overhauling a menu. Foodservice operators can consider ways to swap ingredients in or out of popular menu items to create better-for-you alternatives. Examples include chickpea flour (a staple of Indian cuisine that can be used as a gluten-free swap for pizza crusts, flatbreads, pancakes and deep-fry breading), carob powder (an alternative to chocolate that is high in antioxidants, fat-free and contains twice the amount of calcium as cocoa) and Arctic char (a sustainable aquaculture swap for salmon or trout).¹⁷⁰

Philadelphia-based vegan and raw food café **All the Way Live** serves up homemade carob ice cream made with coconut milk, carob, raw agave and fresh vanilla, calling out its flavor as similar to chocolate—without the caffeine.¹⁷¹

The plant-based revolution

If there's one category with seemingly unlimited potential for growth, it's plant-based cuisine.

But as we've seen with other health and wellness trends, the concept means different things to different people. In the US, 29% of consumers define "plant-based" as vegan (no meat, dairy or eggs), 32% say vegetarian (no meat), 26% say a meal can contain some meat as long as the focus is on plant-based food and 13% are simply unsure.¹⁷² What is clear is that many consumers are trying to reduce their meat consumption in some way and many are open to trying plant-based dishes, even if they're not committing to a strict vegetarian or vegan lifestyle. In the UK, 24% of adults try to limit their meat intake all or most of the time,¹⁷³ and 28% of Peruvian consumers either have tried or would be interested in trying plant-based food that looked or tasted like meat.¹⁷⁴ Among US consumers who have increased their consumption of plant-based foods, 49% said they did it to improve their overall health.¹⁷⁵

A whopping 73% of global consumers say that plant-based products are "somewhat or very appealing,"¹⁷⁶ opening the doors for creative new dishes.

One chef-driven trend is the application of techniques that showcase produce and other naturally plant-based ingredients as meat replacements, such as artichoke "oysters" served with kelp "caviar," hearts of palm "lobster" rolls and beer-battered

banana blossom "fish tacos."¹⁷⁷ These types of dishes allude to the textures and flavors of animal proteins without serving as exact duplicates.

This approach also serves the customer base not necessarily interested in meat analogues. In Japan, for example, the plant-based movement is not taking off with the same speed as in other parts of the world. Consumers simply don't see anything "wrong" with animal protein, and pricing is a major issue of concern.¹⁷⁸ Even in regions where the trend has been embraced, such as Europe and the US, flavor and affordability may keep consumers from trying plant-based foods as often as they would like.¹⁷⁹

Because the majority of consumers are consuming plant-based items alongside animal protein, it's a good idea to keep recipes within patrons' comfort zones. Plant-based proteins made from familiar ingredients, such as chickpeas or lentils, can be used to ensure the acceptance of new menu items.¹⁸⁰ On US menus, items showing triple-digit (or higher) growth include many plant-based versions of typically indulgent foods, including plant-based burgers cauliflower wings, Mediterranean bowls, avocado toast, kimchi fries, loaded tots and acai bowls.¹⁸¹

Plant-based menu examples in global QSRs.¹⁸²

- **OmniPork**, McDonald's Asia
- **Meat Zero**, KFC Thailand
- **Beyond Meat**, Starbucks UAE and Kuwait
- **Just Egg**, Dicos China
- **Beyond Beef**, Panda Express US
- **The Vegetarian Butcher**, Burger King Europe

While plant-based meats are a major topic of conversation, plant-based dairy is also gaining momentum. In the US, dairy-free claims have grown 60% on restaurant menus over the past four years.¹⁸³ And in 2021, the UK plant milk market grew 12% in a crowded category with 30 brands fighting for share.¹⁸⁴ (Germany and the UK are Europe's biggest markets for plant-based milk.¹⁸⁵) Vegan cheese is another plant-based dairy category with potential for the foodservice industry, demonstrating 110% growth on US restaurant menus. When surveyed on their preferences, 42% of US consumers who have tried vegan cheese said they like or love it.¹⁸⁶



Abattoir Végétal, or the “green slaughterhouse,” is a colorful and contemporary bistro in Paris serving exclusively vegan cuisine. The menu also caters to the needs of patrons looking for gluten-free items as well as low glycemic index foods.¹⁸⁷

In 2021, the Michelin-starred New York restaurant **Eleven Madison Park** reconcepted its menu to eliminate all animal products. Chef Daniel Humm described his plant-forward approach as “making changes for a healthier and more sustainable future.”¹⁸⁸

When **Burger King** added a plant-based Whopper and vegan nuggets to its menus in South Africa, it became the first quick-service chain to serve a vegan menu across the continent of Africa.¹⁸⁹

Brazilian chain **Delírio Tropical** sources many ingredients for its soups, salads and sandwiches from its own organic vegetable greenhouse, ensuring a uniform harvest throughout the year with practices that do not harm the environment.¹⁹⁰

Green Common in Singapore is a vegetarian restaurant that doubles as a grocery store, offering a wide range of dishes and cuisines (Korean, Chinese and Western-inspired) made with organic, non-GMO and plant-based ingredients.¹⁹¹

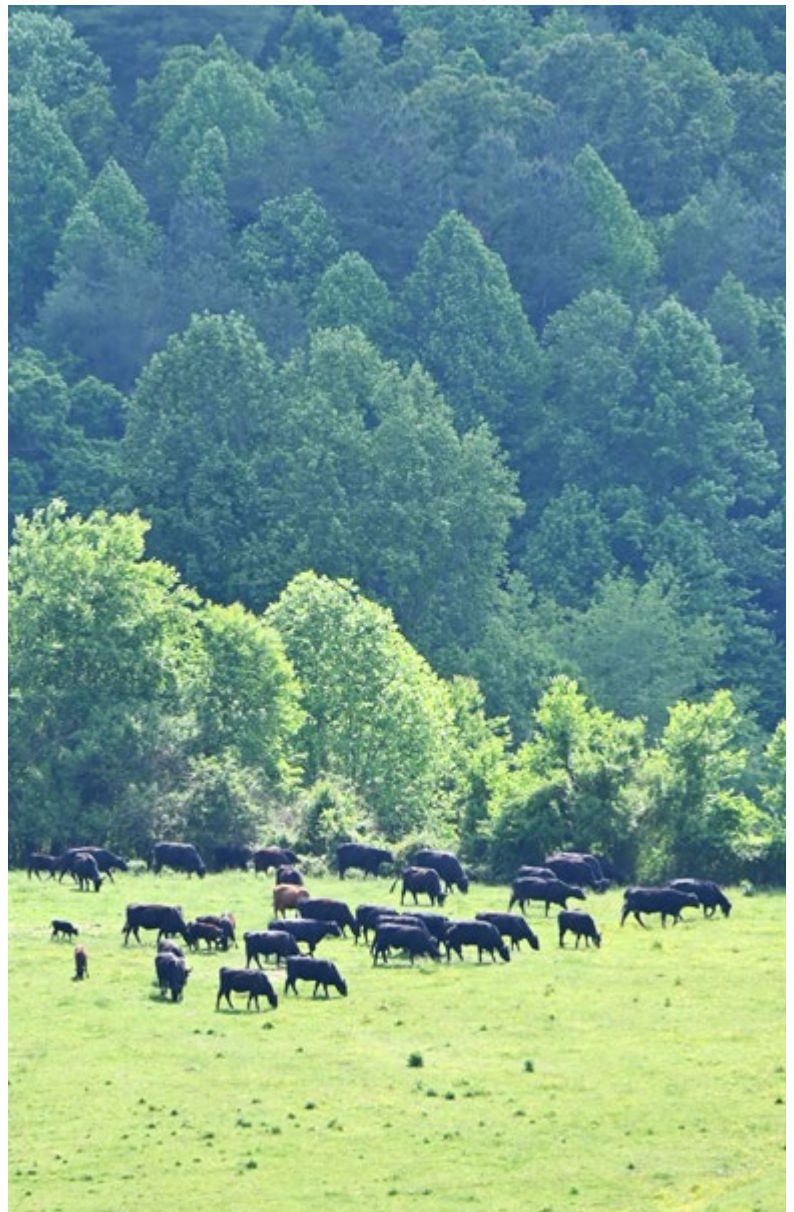
Sustainability and ethical concerns

While plant-based foods are obviously making up a large share of today's food conversations, we've also discussed how the majority of consumers are still including animal products in their diets. And with that, it's important to see how the meat industry is responding to claims that plant-based products are more "sustainable" than their animal-based counterparts—especially as some plant-based companies have not been able to provide evidence to support their environmental impact.¹⁹² US sales of meat with a verified sustainability claim, such as grass-fed, locally sourced, organic or carbon neutral, are growing at 6.4% annually.¹⁹³ This consumer interest has exciting implications for the foodservice industry, with 48% of US consumers saying they'd be willing to pay more for free-range or pasture-raised meats, and 43% willing to pay more for low-carbon foods.¹⁹⁴

What does this mean from a health perspective? In the US, 54% of adults agree that sustainably sourced foods are generally healthier than other foods. A whopping 70% of 25-34-year-olds agree with this sentiment.¹⁹⁵

"Sustainable" is one of the fastest-growing terms on restaurant menus in the US.¹⁹⁶

"The Do Good Dog" from **Applegate Farms** is the first hot dog available nationally in the US made with beef raised on verified regenerative grasslands. SunFed Ranch, Applegate's beef supplier, has also committed to being 100% carbon neutral across operations by 2024 and carbon negative by the end of 2027.¹⁹⁷



Portion sizes

Ideal portion sizes for foodservice offerings can vary tremendously depending on segment, pricing strategy and global market. Using the US as an example, only 27% of consumers say they would want the options of a smaller portion size as a way to choose healthful options at restaurants.¹⁹⁸ This sentiment may seem at odds with the way consumers are eating today, consuming snacks more frequently and putting less priority on eating at traditionally defined mealtimes. (Seventy-three percent of Americans say they snack at least once a day, up from 58% in 2021.¹⁹⁹) But at the same time, smaller portions can imply giving a consumer the permission to indulge, especially when it comes to carb-heavy dishes like tacos and sliders.²⁰⁰ Desserts are another area of the menu where downsized portions can play a role in giving consumers the permission to indulge. Adjustments to portion size may also be a technique for operators looking to manage rising ingredient costs.



US-based fresh grill chain **Seasons 52** menus “Mini Indulgences,” a range of desserts in diminutive portions. The layered treats inspired by coffee cake, key lime pie, turtle cheesecake and raspberry chocolate chip cannoli are also offered as a mix-and-match flight of 6 mini desserts.²⁰¹

Cooking and prep methods

On an operational level, certain culinary techniques are often attributed to health benefits or a healthy halo. For example, methods of preservation, such as brining, pickling and canning, are associated with gut health and a feel-good message about reducing food waste.²⁰² Yum China has been working to tweak their recipes, not only to reduce sugar, salt and oil but to incorporate healthier cooking methods.²⁰³ In the US, 43% of consumers would consider substituting grilled or baked preparations for fried items as a way to eat more healthfully in restaurants.²⁰⁴ Choice and customization are key.



Operator Spotlight

Julia Braun, Director of Global Nutrition at McDonald's

We caught up with Julia to discuss the trends, claims and consumer behavior she's seeing in her role as the Director of Global Nutrition for McDonald's.



How do you define "healthy eating?"

We know many customers are increasingly prioritizing a balanced diet, which includes having a variety of options from recommended food groups, being mindful of appropriate portion sizes and managing intake of nutrients of concern. As we make menu decisions at McDonald's, we are thoughtful about ensuring we're giving customers choices that meet their needs.

Which diet trends or specialized diets do you see as impacting the patrons you serve?

Clean label and simple ingredients continue to be key trends, and we know sugar and salt remain the leading nutrients of concern from a global health perspective. That's why within the Happy Meal, for example, we've set a series of goals that aim to improve the nutrition and ingredient profile of Happy Meals around the world.

How have customers responded to health-focused menu items; what are they asking for?

We've seen demand for balanced menu options shift over time and by market, and we continue to be guided by consumer research to ensure we're refreshing our menus accordingly. In particular, we've focused on adding recommended food groups to Happy Meals around the world, such as fruit, vegetables, low-fat dairy, whole grains and lean protein. We're also seeing interest in plant-based offerings in several markets, driven by a variety of customer interest drivers, which gives us an opportunity to innovate in this area alongside the balanced core menu items our consumers already know and love.

Which health trends have surprised you, from a foodservice perspective?

It's a really exciting time in this space, as consumers are more enthusiastic than ever about bringing variety and diversity into their diets, with everything from alternative protein sources to more bold flavor profiles. I look forward to seeing where our customer insights take us next.



Regulatory Landscape

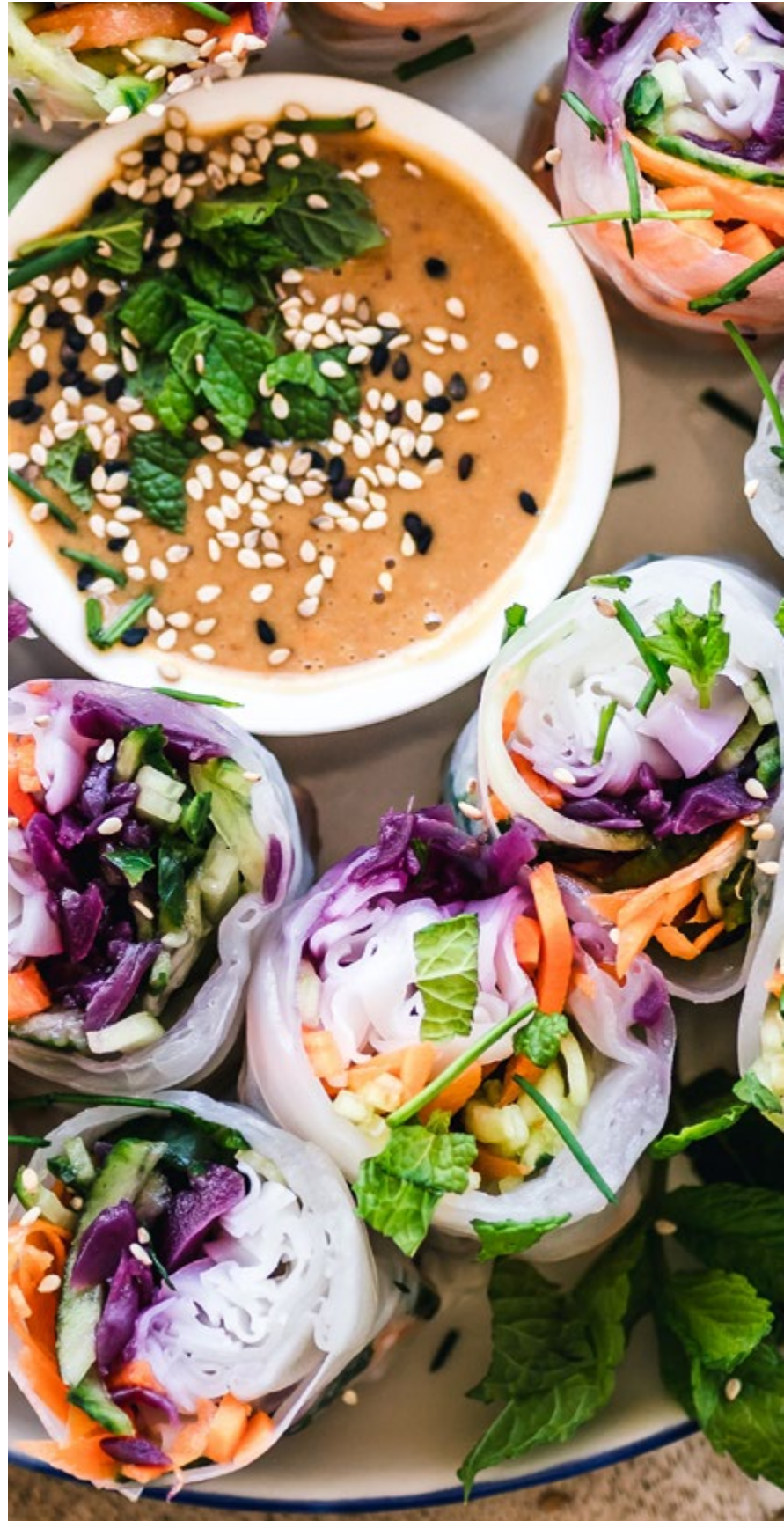
What is being done to bring about change?

The battle for public health is not without controversy and challenges. Due to economic and political challenges, power structures and differing consumer attitudes, among other issues, the scale and scope of nutrition legislation varies around the world. Government standards that “encourage” versus “require” are seen by some as insufficient, failing to hold the food industry accountable. In fact, many nongovernmental consumer advocacy groups are pushing back against the lack of formal legislation.

One common criticism is the lack of global standards for what constitutes a healthy and nutritious diet. And so, to establish a more universal framework, the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) have developed guiding principles for Sustainable Healthy Diets. These principles consider international nutrition recommendations, the environmental cost of food production and consumption, and social, cultural and economic circumstances.²⁰⁵

“Sustainable Healthy Diets are dietary patterns that promote all dimensions of individuals’ health and well-being; have low environmental pressure and impact; are accessible, affordable, safe and equitable; and are culturally acceptable.”²⁰⁶

The groups have also suggested actions to guide change across the food industry that would make Sustainable Healthy Diets “available, accessible, affordable, safe and desirable,” including the development of national dietary guidelines.²⁰⁷ These guiding principles acknowledge the role that diets contribute to the UN’s 17 Sustainable Development Goals²⁰⁸ and align with the WHO’s action plan for the prevention and control of noncommunicable diseases.²⁰⁹



Mandatory compliance

In some markets, legislation surrounding nutritional content, information transparency and food marketing has already taken shape. South Korea was an early adopter, having required all chains with 100 or more locations to display nutrition information since 2010. In Australia, restaurant chains with 20 or more outlets must display the kilojoule content of food products on menu boards. Similarly, in the US, chains with 20 or more locations have been required to disclose calorie counts since 2018,²¹⁰ although the formal implementation of this program was delayed almost eight years from the time the requirements had been signed into federal law.²¹¹ Businesses with more than 250 employees in the UK must display the calorie information of prepared food and soft drinks as part of a larger government strategy to tackle obesity.²¹² And in Taiwan, c-store, beverage and fast food chains are required to label the sugar and caffeine content of drinks prepared to order.²¹³



Why is nutrition labeling so important?

Consumers are used to having nutritional information readily available when shopping in retail outlets but may need more help finding that information when dining out. While calorie counts are often prominently displayed on menus, other numbers are often hidden or require additional communication or research by the consumer. In fact, 67% of American consumers agree that “nutrition information should be easier to find for restaurant menu items.”²²¹⁴ In the US, where packaged goods contain Nutrition Facts labels, consumers most frequently look for calorie, sodium, total sugar, added sugar and protein information²¹⁵ (attributes that align with the nutrition labeling work being done on a global scale as well).

Globally, we saw more flexibility and leniency from the regulatory agencies due to the pandemic. Labeling compliance, product reformulations and other changes have been delayed or suspended in markets including the UK (sustainability and clean label), France (recycling and sustainability) Australia (“genetically modified food” definition) and the US (bioengineered food disclosure).²¹⁶

Protein 9g		
Vitamin D 2mcg	10%	15
Calcium 130mg	10%	20
Iron 3.6mg	20%	20%
Potassium 150mg	4%	89
Vitamin A		
Vitamin C	10%	20%
Thiamin	10%	10%
Riboflavin	20%	

Voluntary programs and self-regulation

In some cases, public health boards and governmental agencies have established reduction targets for manufacturers and foodservice establishments, with compliance being voluntary. For example, the Australian Healthy Food Partnership encourages manufacturers to reformulate foods and beverages to reduce sodium, sugar and saturated fat; Health Canada published voluntary targets to reduce sodium in the food supply by 2025;²¹⁷ and Malaysian fast food restaurants are encouraged to display nutrient information as part of a nationwide effort to eliminate false claims and boost transparency.²¹⁸ Singapore's Healthier Dining Programme is open to all food and beverage companies, helping to assist businesses in their efforts to incorporate more healthy options on their menus.²¹⁹

The US Food and Drug Administration has also issued final guidance for voluntary sodium reduction, which applies to all processed, packaged and prepared foods. Restaurant foods have been included in these targets, as it is necessary for consumers to adapt their taste buds to lower sodium not just when cooking at home, but when dining out.²²⁰ A government initiative launched in Mexico City encouraged restaurants to provide salt shakers only if guests asked for them. Less than a year after launch, over 2,400 restaurants were voluntarily participating in the program.²²¹



Many of these reduction strategies are due in part to WHO's aforementioned action plan, with one target being a 30% relative reduction in mean population intake of salt/sodium, with a goal of less than 2000 mg per day.²²² (Interestingly, the US' voluntary targets are starting from a higher baseline, designed to reduce consumption from 3400 mg per day to 3000 mg.²²³) The organization has acknowledged the efforts of countries already taking action to reduce sodium intake but has cautioned that additional efforts are necessary to reduce the health consequences, including the prevalence of high blood pressure in low- and middle-income countries.²²⁴ Reformulation of products and recipes is a critical component of this effort, as the majority of the sodium people consume comes from processed, packaged and prepared foods²²⁵ versus table salt added when cooking or eating at home.²²⁶

Despite sodium reduction guidelines being voluntary on a national level, some US cities have established their own systems to help consumers make more informed foodservice decisions. In 2015, New York City was the first to require restaurants with 15 or more locations to post a warning icon next to menu items that contain at least 2300 mg of sodium.²²⁷ Philadelphia followed suit, with a similar law in effect since 2019.²²⁸

The desire for nuance

Sometimes, in the effort to create health and nutrition standards, the nuances of local cuisine have not been fully considered. One example is Europe's Nutri-Score, a labeling system that classifies all foods by their nutrient profile (A being the healthiest and E the least healthy).²²⁹ Supporters say the system makes it easy to compare foods within a single category, while critics say the scoring algorithm lacks nuance. Many traditional foods like smoked salmon, French and Italian cheeses, and olive oil are penalized, while foods like french fries and cereal have received "A" ratings.²³⁰

Unsurprisingly, the Italian government is resisting the Nutri-Score, and food scientists in the Netherlands have taken their concerns to the Ministry of Health, claiming that Nutri-Score's guidance directly contradicts the country's dietary guidelines.²³¹ As a result, the international Scientific Committee of the Nutri-Score recommended changes to the scoring algorithm that better align the nutrition label with dietary recommendations. For example, differentiation between whole and refined grains, sweetened and unsweetened dairy products and different types of cheese will all be improved. Protein point limitations for red meat and new classifications for oils and fatty fish will also be established.²³² These modifications, and others, will be implemented into the new version of Nutri-Score.²³³

Food marketing is another topic that has come under scrutiny, with public health scholars and global agencies recommending policies to restrict or eliminate unhealthy food marketing to children as a critical strategy for obesity prevention.²³⁴ South Korea, Ireland, Mexico, Ecuador, Poland, Uruguay,

Taiwan, Chile, Turkey, Canada (Quebec), Norway, Hungary, Sweden, Spain and Costa Rica have all placed regulations on unhealthy food marketing to children.²³⁵ Initially proposed in 2020, the UK was set to completely ban online and television ads for junk food shown before 9:00pm. The restrictions were then modified to include significant exemptions after pushback from the broadcasting industry. In a move criticized by many, the ban has now been delayed until January 2024.²³⁶

In many markets, as lifestyles evolve and convenience becomes more of a priority, consumers are dining outside the home more frequently.

These growth and expansion opportunities can come at a price, as regulatory divergence creates complexities for manufacturers and outlets operating around the globe. But it also serves as an opportunity to consider long-range R&D planning that supports public health. A balance of both legislation and voluntary milestones, with support from key industry players, is essential for bringing positive change in terms of choice, affordability and innovation in healthier foods and beverages.



Outlook for the Future

Topics on the horizon

With the consumer's definition of health in constant flux, it's hard to say what the future will hold. But dietary health, wellness and nutrition trends cycle over time, evolving with science, current events, the media and more. As we've examined in this report, the idea of "personalized health" drives many of today's consumer purchasing and dining decisions, and we expect that to continue. Technology companies are already taking this concept even further with creations like handheld carbon dioxide breath analyzers and genotype-based personalized nutrition analysis²³⁷—innovation that appeals to biohackers looking to control as much of their health as humanly possible.

But especially among younger generations, there is a desire to balance individualized needs with a more empathetic mindset—considering personal wellness within the context of bigger-picture issues about food insecurity, access and affordability. Issues like federal feeding programs, lifestyle-related noncommunicable diseases and nutrition disparities have been revealed on a greater scale due to the pandemic,²³⁸ and the idea of “nutrition justice” as a form of social justice may lead to new ideas and solutions that address inequality across food systems.²³⁹ The social sustainability movement is already growing, with more than half of consumers saying it’s important that people working in food production, retail and foodservice be treated fairly and equitably.²⁴⁰

Demand for sustainable ingredients will also continue to grow. Consumption of insects, while standard practice in many global cuisines, does not currently have widespread acceptance. But consumer curiosity, education and health concerns may drive change in this space. In the US, 83% of consumers say they “can only tolerate the thought of eating insects if they can’t visibly recognize what they’re eating,” but 41% admit that they would try eating insects if there were health benefits to be had.²⁴¹ That opportunity may come sooner rather than later. In 2021, the European Food Safety Authority approved yellow mealworm for human consumption—the first insect ever approved by the agency.²⁴²



Algae is another source of sustainable protein with incredible possibilities for the industry.

Algal protein has been described by Leatherhead Food Research as “perhaps the most abundant protein on the planet,” and different strains of food-grade microalgae can be made into meat and cheese alternatives or used in baked goods, snack bars and cereals.²⁴³ The European Commission (governing body of the EU) has launched a platform called EU4Algae to accelerate the development of the algae industry and promote its nutritional benefits.²⁴⁴

Of course, the push to uncover and scale more sustainable sources of nutritious food goes hand in hand with advances in technology. Carbon-sequestering seaweed, mushrooms and other functional ingredients combined with alternative production methods may help the food processing industry lower its carbon footprint.²⁴⁵ And biotech companies are bringing modern technology to the time-tested method of fermentation in order to replicate animal proteins. Some food scientists see this technique as an opportunity to improve the nutritional value of plant-based meat and dairy alternatives.²⁴⁶



The Griffith Foods Impact

Blending care and creativity to nourish the world

The health and nutrition of our offerings is of paramount importance to Griffith Foods. Our teams—including the Global Innovation Council (GIC), Global Culinary Council (GCC) and Global Nutrition team— bring expertise from cross-functional areas of our business to look at new ingredients and processes that can provide customers and consumers with great-tasting food that also supports healthy lifestyles.

Jackie Schulz, our Director of Global Nutrition, provides global nutrition leadership and guides our continued focus as we build nutritional expertise as a core capability.

“By 2023, our goal is for 50% of our product portfolio to have a health and nutrition component. We are also working to align 60% or more of our portfolio with globally recognized nutritional science and sustainability criteria by 2030.”

Ultimately, we want to develop an industry-leading portfolio that combines the benefits of being both planet-friendly and nutritious, to become the healthy and sustainable product development partner of choice for our customers.”

–Jackie Schulz, MS, RDN

We have channeled our efforts into five areas of strategic focus:

- **Reduction:** Products that allow the finished product to make a claimable reduction in fat, sugar or sodium content.
- **Fortification:** Products formulated to add micronutrients (vitamins, minerals) or other ingredients (e.g., protein, fiber) that improve the nutritional composition of the final product. The level in the final application (at recommended use levels) must be sufficient to allow a product claim.
- **Clean Label:** Products formulated without any artificial colors, artificial flavors, artificial preservatives or synthetic ingredients. In addition, the product must meet any additional ingredient restrictions specified by the customer.
- **Organic:** Products that can be validated to meet the definition of organic (or biologique, etc.) in the local regulatory environment.
- **Elimination:** Eliminating ingredients that negatively impact some people's health, such as partially hydrogenated oils and gluten.

Moving forward, we will add nutrition targets by product category that align with external recommendations from global public health and academic sources.

But our focus on health doesn't stop with our product offerings. We have also developed a nutrition education course, available globally and adapted to reflect regional and local food label laws and customs. The course covers nutrition facts and fiction, links between food and health, and healthy eating guidelines.



We are also looking to the future with Nourish Ventures, our business unit created around the concept of “Shared Value.” With new partners such as Kuli Kuli, ReGrained and TechnoServe, we work to develop and scale innovations around four key priority areas:

- Alternative proteins
- Food loss commercialization
- Health and nutrition innovation
- Agricultural technology development

Access. Affordability. Innovation. Partnership. To address the ever-changing health and wellness needs of our customers and their consumers, we must stay nimble, forward-thinking and willing to grow.

Together, we can serve the world through better food—making an impact one ingredient, one product and one meal at a time.

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