

PLANT-FORWARD BY THE NUMBERS

A Pre-COVID-19 Pandemic Look at a Consumer Juggernaut

Metrics and Insights on Consumer Trends, Business Opportunities, and the Evidence-based Imperatives Reshaping our Food Choices

Numbers about what to eat and why, and who's eating what—numbers that frame challenges from environmental sustainability to the obesity crisis, track the state of consumer preferences, and suggest future business opportunities—fly by us all the time. We've rounded up some of the recent data points reported by media and other organizations through mid-winter 2020 that we think are especially worth noting and present them here to help us map the accelerating impact of "plant-forward," past and future.

This is a data capture that immediately precedes the COVID-19 pandemic. How people will think and act around these issues and trends once we have a vaccine and can put this tragic and deeply unsettling crisis behind us is uncertain. For now and for many, just putting food on the table—and trying to address our anxieties about the virus, the health and safety of our families, and the economic wreckage this public health emergency has caused—vastly outweighs most other concerns.

And yet, looking out to the future, we see these elements that have driven the plant-forward movement of the last few years continuing to play a transformative role in what's ahead for our foodservice industry: imperatives around food and climate change, rising rates of diet-linked chronic diseases (including their role in significantly elevating risk in this current pandemic), aspirations to craft sustainable food systems that restore planetary health, and changing consumer values about plants and animals.



This snapshot in time of a mega movement-in-the-making paints a picture of the urgency to rethink our food choices—and of a growing number of people who understand that those future choices must be plant-forward. Collectively, it also reveals a significant and increasing market share of customers who, as recently as late winter, were already spending their food dollars to match their aspirations and values.

PLANT-FORWARD DEFINED

As an outgrowth of [Menus of Change](#), a joint initiative of The Culinary Institute of America (CIA) and the Harvard T.H. Chan School of Public Health—Department of Nutrition, we have crafted this definition of plant-forward:

“A style of cooking and eating that emphasizes and celebrates, but is not limited to, foods from plant sources—fruits and vegetables (produce), whole grains, legumes (pulses), nuts and seeds, plant oils, and herbs and spices—and reflects evidence-based principles of health and sustainability.”

We say plant-forward to describe a broad set of dietary patterns and approaches to menu design that deliver both personal and planetary health but also preserve a wide range of choices. Plant-forward includes vegan and vegetarian preferences and culinary strategies (some refer to this as plant-based) but it also captures that larger segment of the population that wants to eat less meat—and more foods from plant sources—but is not necessarily interested in eliminating animal-based proteins from their diets. Think omnivores on their way to becoming flexitarians.

Finally, we say plant-forward as shorthand for food and menu choices that are largely whole, minimally processed, and slow-metabolizing. Too many fast-metabolizing, plant-sourced carbohydrates in the diet—from sugary beverages to French fries, white-flour breads, white rice, and more—often lead to an endless series of surges and dips in blood sugar and insulin, overeating, obesity, and related chronic conditions such as diabetes.

More information, including a variety of relevant educational resources designed for chefs and food professionals, but available to all, can be found on the [Menus of Change](#) and [Plant-Forward Kitchen](#) websites.



PLANT-FORWARD: TRENDS, OPPORTUNITIES, AND IMPERATIVES

CONSUMER DEMAND

- 44% of consumers are trying to increase their intake of plant-based proteins like beans and nuts. [Source: Datassential, January 2020](#)
- 3%. That's the percentage of American adults who identify as vegan. [Source: Gallup](#)
- 600%. That's the percent increase in Americans identifying as vegans between 2015-2018. [Source: GlobalData report, as quoted in Forbes](#)
- 5%. That's the percentage of American adults who identify as vegetarian. [Source: Gallup](#)
 - 8%. That's the percentage of 18- to 34-year-olds who identify as vegetarian. [Source: Gallup](#)
 - "Nonwhite Americans (9%) are three times as likely as white Americans (3%) to describe themselves as vegetarian." [Source: Gallup](#)

39% That's the percentage of Americans actively trying to eat more plant-based foods. [Source: Nielsen](#)

- "More than 30 percent of Americans have meat-free days, more than 50 percent of adults drink nondairy milk and about 83 percent are adding more plant-based foods to their diets." [Source: Baum and Whiteman report, as quoted in USA Today](#)
- 21%. That's the percent of consumers who are limiting animal protein to be more environmentally friendly in 2020 (grew from 16% in 2017). [Source: Datassential, January 2020](#)
- 27%. That's the percent of consumers who want to lower their environmental impact (decrease greenhouse gas emissions, decrease water used for livestock, etc.) [Source: Datassential, 2019](#)
- Half of Millennials eat meat alternatives a few times a week. [Source: Mintel report, as quoted by Good Food Institute](#)
- "A full 70% of the world population reportedly is either reducing meat consumption or leaving meat off the table altogether. Millennials are driving the worldwide shift away from meat." [Source: Forbes quoting a GlobalData report](#)

"Food systems can provide healthy diets... for an estimated population of about 10 billion people by 2050 and remain within a safe operating space. The analysis shows [this]... requires a combination of substantial shifts toward mostly plant-based dietary patterns, dramatic reductions in food losses and waste, and major improvements in food production practices."

[Source: EAT-Lancet Commission Summary Report](#)

- À “Within the past year [2018-2019], 24% of consumers reported eating more plant protein than the previous year, while only half as many (12%) said they ate more animal protein.” [Source: International Food Information Council \(IFIC\) Foundation](#)
- À Vegetarian- and vegan-friendly dishes took 7 of the top 10 orders of the year on GrubHub in 2019. “One thing is clear: plant-based foods are here to stay.” [Source: Grubhub “Year in Food” Report](#)
- À 27%. That’s the percent growth in vegan orders on GrubHub in 2019 compared to 2018. [Source: Grubhub “Year in Food” Report](#)
- À 621%. That’s the percent growth in the term “vegan” on U.S. menus since 2009. [Source: Datassential MenuTrends, 2019](#)
- À 328%. That’s the percent growth in the term ‘plant-based’ on U.S. menus since 2018. [Source: Datassential MenuTrends, 2019](#)

COVID-19 AND THE FUTURE: WHAT PLANT-FORWARD MEANS NOW

“The COVID-19 pandemic, sadly, has laid bare the poor health of too many Americans. The ‘underlying conditions’—the chronic diseases from obesity and diabetes to heart disease and many cancers—correctly cited as heightened coronavirus risk factors for causing severe, life-threatening infections and higher death rates are closely tied to unhealthy diets and lifestyle choices. More broadly, these are the same unhealthy food choices that, in the aggregate, undermine our ability to stop climate change and achieve both planetary sustainability and resilience in our food systems.

“As chefs and foodservice operators are able to look beyond the immediate public health emergency and begin to rebuild, they have a critical opportunity to lead the foodservice industry in pivoting toward menus that strengthen our immune systems and improve overall health, lessen the impact of future pandemics, and secure a sustainable planet for our children. Chefs have already demonstrated that healthy, sustainable food choices—in short, plant-forward diets—can be immensely appealing and delicious. Now we all need to work together to scale that innovation and create a next-generation food and restaurant industry that helps all of our citizens thrive.”

– Walter Willett, MD, DrPH, Professor and Past Chair, Department of Nutrition, Harvard T.H. Chan School of Public Health; Chair, Menus of Change Scientific & Technical Advisory Council; Co-Chair, EAT-Lancet Commission

BUSINESS OPPORTUNITY

- À The Salad-Healthful sector within the Top 500 chains a segment largely focused on plant-based and plant-forward options like salads, bowls, and smoothies was the runaway growth leader in limited service restaurants (LSR) in 2018 with increases of 10.6% in unit counts and 11.3% in sales. In 2019, Salad-Healthful retained the lead in unit and sales growth within LSR, with increases of 12.0% and 11.3% respectively. [Source: Datassential Firefly 500 Report, 2019](#)
- À 44% of consumers are seeking to reduce their meat intake. [Source: Datassential, 2019](#)
- À 45% of consumers believe eating too much meat can negatively impact their health. [Source: Datassential, 2019](#)
- À 30%. That’s the percentage of beef that is typically being replaced by a ground mushroom mixture in “The Blend” (of meat and mushrooms) that is sweeping through American foodservice menus and retail deli cases. [Source: The Culinary Institute of America and others reported by McClatchy News Service.](#) With the potential to transform 10 billion hamburgers consumed each year, this replacement translates to 10.5 million tons of greenhouse gas emissions eliminated (equivalent to taking 2.3 million cars off the road) and 83 billion gallons of irrigation water saved. [Source: World Resources Institute](#)

\$140 BILLION.

That’s the figure Barclays projects could represent annual sales of plant-based meat in 10 years, following a similar trajectory to the surging sales of plant-based milks.

[Source: Barclays as quoted by Marketwatch](#)

- À 22%. That’s the percent growth in blended burgers on menus over the past 4 years. [Source: Datassential MenuTrends, 2019](#)
- À 95%. That’s the percentage of meat-eating consumers who purchase Impossible Burger. [Source: The New Yorker](#)
- À 50,000. That’s the number of grocery stores and restaurants that carry products from Beyond Meat® or Impossible™ Foods. This includes chains such as Burger King, KFC, Subway, White Castle, and Carl’s Jr. [Source: The New York Times](#)
- À Plant-based burgers were the second fastest-growing dish on menus in 2019, with +811% 4-year growth (preceded by Avocado Toast, with +2,558% 4-year growth). [Source: Datassential MenuTrends, 2019](#)
- À Affinity for plant-based burgers skews to younger consumers (Millennials and Gen Z), consumers in the West, high-income consumers (\$100,000+) and those who self-identify as Foodies and/or Health-Focused. [Source: Datassential Flavor, 2019](#)

- 31%. That's the total percent growth in U.S. retail sales of plant-based foods from 2017 to 2019. [Source: Plant-Based Foods Association](#)
- 70% of consumers would at least occasionally order a plant-based meat if available. [Source: Datassential, January 2020](#)
- Impossible™ is the top plant-based meat brand on menus today, with 1.8% menu penetration and +779% 1-year growth. Impossible is followed by Beyond Meat®, with 1.0% menu penetration and +283% 1-year growth. [Source: Datassential MenuTrends, 2019](#)
- Plant-based is gaining its footing at chains, with plant-based meat introductions quadrupling in 2019 compared to the previous year there were 14 plant-based meat introductions at chains in 2018, and 56 plant-based meat introductions in 2019. [Source: Datassential Insider, 2019](#)
- 11%. That's the percent growth in U.S. retail sales of plant-based foods from 2018 to 2019. That's 5X the rate of the overall U.S. retail food market in that same period, "showing that plant-based foods are a key driver of growth for retailers nationwide." [Source: Plant-Based Foods Association](#)
- "The plant-based meat category alone is worth more than \$800 million, with sales up 10 percent in the past year [2018-2019]... In comparison, sales in the conventional meat category grew just two percent during the same period." [Source: Plant-Based Foods Association](#)
- "Plant-based alternatives to dairy products are soon expected to account for 40% of dairy beverage sales." [Source: Gallup](#)
- Nearly all of the top trending milks on menus today are plant-based, led by oat milk (+1,697% 4-year menu growth), almond milk (+169% 4-year menu growth) and coconut milk (+119% 4-year menu growth). [Source: Datassential MenuTrends, 2019](#)



- "Vegan cheese" is the top-growing cheese variety on menus today, surpassing all other trending dairy cheeses. Vegan cheese has 1.6% menu penetration and 137% 4-year menu growth. [Source: Datassential MenuTrends, 2019](#)
- "In the past year [2018-2019], plant-based yogurt has grown 39 percent, while conventional yogurt declined 3 percent; plant-based cheese has grown 19 percent, while conventional cheese is flat; and plant-based ice cream and frozen novelty has grown 27 percent, while conventional ice cream and frozen novelty has grown just 1 percent." [Source: Plant-Based Foods Association](#)

"A full 70% of the world population reportedly is either reducing meat consumption or leaving meat off the table altogether. Millennials are driving the worldwide shift away from meat."

[Source: Forbes quoting a GlobalData report](#)

- \$4.5 billion. That's the total value of the plant-based food market. [Source: Plant-Based Foods Association](#)
- \$6.3 billion. That's the estimated value of the plant-based food market in 2023. [Source: report by Markets and Markets, as quoted in Forbes](#)
- "While meat consumption in America is at an all-time high, many Americans have shifted from eating beef to poultry. In the past three decades, beef intake has fallen by about a third, while chicken intake has more than doubled and pork intake has remained fairly steady." [Source: The New York Times](#)
- "The 'hidden costs' [e.g., obesity, undernutrition, pesticides, fertilizers, pollution, greenhouse gas emissions] of global food and land use systems sum to \$12 trillion, compared to a market value of the global food system of \$10 trillion." [Source: Food and Land Use Coalition](#)
- Shifting to plant-rich diets would save \$1 trillion in annual healthcare costs and lost productivity. [Source: Project Drawdown](#)



HEALTH AND ENVIRONMENTAL IMPACTS

- ⌘ Among 80 solutions for reversing global warming, plant-rich diets is ranked #4.
[Source: Project Drawdown](#)
- ⌘ 14.5%. That's the percentage of global greenhouse gas emissions that come from livestock. [Source: The New Yorker quoting the UN Food and Agriculture Organization \(FAO\)](#)
- ⌘ "According to a 2016 study, business-as-usual emissions could be reduced by as much as 70 percent through adopting a vegan diet and 63 percent for a vegetarian diet, which includes cheese, milk, and eggs." [Source: Project Drawdown](#)
- ⌘ "A planetary health plate should consist, by volume, of approximately half a plate of vegetables and fruits; the other half, displayed by contribution to calories, should consist of primarily whole grains, plant protein sources, unsaturated plant oils, and (optionally) modest amounts of animal sources of protein." The planetary health diet is a flexitarian diet, "which is largely plant-based but can optionally include modest amounts of meat and dairy foods."
[Source: EAT-Lancet Commission Summary Report](#)
- ⌘ "Transformation to healthy diets by 2050 will require substantial dietary shifts. Global consumption of fruits, vegetables, nuts, and legumes will have to double, and consumption of foods such as red meat and sugar will have to be reduced by more than 50 percent. A diet rich in plant-based foods and with fewer animal source foods confers both improved health and environmental benefits."
[Source: Dr. Walter Willett, EAT-Lancet Commission Summary Report](#)
- ⌘ "Global targets [for the planetary health diet] will need to be applied locally – for example, countries in North America eat almost 6.5 times the recommended amount of red meat, while countries in South Asia eat only half the recommended amount." [Source: The Lancet](#)
- ⌘ "We can ... reduce current food-related emissions to near the planetary boundary for food ... with a 40 percent global shift to healthy plant-based diets by 2030 (75 percent by 2050) and reducing food loss and waste by 25 percent (50 percent by 2050)." [Source: EAT Foundation](#)
- ⌘ "In addition to the direct impact of agricultural pollution on public health, food systems generate widespread malnutrition. More than 820 million people, most of them in sub-Saharan Africa and South Asia, still regularly go hungry. At the same time, some 680 million adults are obese. On current trends, half of the world's population will suffer from malnutrition and related health effects by 2030." [Source: Food and Land Use Coalition](#)
- ⌘ 23%. That's the amount that agriculture, together with forestry and other land use impacts, contributes to man-made greenhouse gas emissions.
[Source: IPCC Special Report on Climate Change and Land](#)
- ⌘ "The ecological devastation [to the Brazilian Amazon] is done in the service of the surging demand for beef. About 80 percent of Brazil's beef is consumed domestically, said Nathalie Walker, the director of the tropical forest and agriculture program at the National Wildlife Federation. But the real shift can be traced to the global market, particularly in Asia, where demand is growing at a much faster rate than it is domestically. 'The expansion is driving the deforestation,' Walker said." [Source: The Washington Post](#)

"7 of the top 10 leading causes of death in the United States are from chronic diseases. Eating a diet rich in fruits and vegetables daily can help reduce the risk of many leading causes of illness and death, including heart disease, type 2 diabetes, some cancers, and obesity."

[Source: Centers for Disease Control and Prevention](#)



“If America does not collectively adopt healthier eating habits, over half of the nation will be obese within 10 years.”

Source: NEJM study, as quoted in CNN



⌘ 70%. That's the amount that agriculture uses of total available freshwater.

Source: [IPCC Special Report on Climate Change and Land, Summary for Policymakers](#)

⌘ Nearly 1/3 of agriculture's freshwater use comes from raising livestock.

Source: [The New Yorker](#)

⌘ 1/3 of the total arable land on Earth is used to grow feed for livestock.

Source: [The New Yorker](#)

⌘ “If the livestock sector were to continue with business as usual, this sector alone would account for 49% of the emissions budget for 1.5°C by 2030, requiring other sectors to reduce emissions beyond a realistic or planned level.” Source: [The Lancet Planetary Health](#)

⌘ “Since the first Intergovernmental Panel on Climate Change assessment report in 1990, the production of meat, milk, and eggs increased from 758 million tons to 1247 million tons in 2017, and is projected to further increase. Continued growth of the livestock sector increases the risk of exceeding emissions budgets consistent with limiting warming to 1.5°C and 2°C, limits the removal of CO₂ from the atmosphere through restoring native vegetation, and threatens remaining natural carbon sinks where land could be converted to livestock production.” Source: [The Lancet Planetary Health](#)

⌘ “If cattle were their own nation, they would be the world's third-largest emitter of greenhouse gases.” Source: [Project Drawdown](#)

⌘ 2/3. That's the proportion of the livestock sector's greenhouse gas emissions that come from cattle. This is due to their methane emissions, and methane is 25 times more heat-trapping than carbon dioxide. Source: [The New Yorker](#)

⌘ “There are approximately 1.5 billion cows in the world, a population second only to humans among large mammals.” Source: [The Washington Post](#)

⌘ “Every four pounds of beef you eat contributes to as much global warming as flying from New York to London—and the average American eats that much each month.”

Source: [The New Yorker](#)

⌘ “Extensive cattle ranching is the number one culprit of deforestation in virtually every Amazon country, and it accounts for 80 percent of current deforestation (Nepstad et al., 2008). Alone, the deforestation caused by cattle ranching is responsible for the release of 340 million tons of carbon into the atmosphere very year, equivalent to 3.4 percent of current global emissions.” Source: [World Wildlife Fund](#)

⌘ “Cattle ranchers in the Brazilian Amazon the storied rainforest that produces oxygen for the world and modulates climate are aggressively expanding their herds and willing to clear-cut the forest and burn what's left to make way for pastures. As a result, they've become the single biggest driver of the Amazon's deforestation, causing about 80 percent of it, according to the Yale School of Forestry & Environmental Studies.”

Source: [The Washington Post](#)

- ⌘ “The ecological devastation [to the Brazilian Amazon] is done in the service of the surging demand for beef. ‘About 80 percent of Brazil’s beef is consumed domestically,’ said Nathalie Walker, the director of the tropical forest and agriculture program at the National Wildlife Federation. But the real shift can be traced to the global market, particularly in Asia, where demand is growing at a much faster rate than it is domestically. ‘The expansion is driving the deforestation,’ Walker said.” [Source: The Washington Post](#)
- ⌘ Agriculture is the main cause of deforestation, and “Deforestation is a particular concern in tropical rain forests because the forests are home to much of the world’s biodiversity. For example, in the Amazon around 17 percent of the forest has been lost in the last 50 years, mostly due to forest conversion for cattle ranching.” [Source: World Wildlife Fund](#)
- ⌘ “A shift of 40 percent of the global population to healthy and sustainable diets by 2030 and 75 percent by 2050 can keep total food-related greenhouse emissions in line with a +1.5°C world.” [Source: Exponential Roadmap 1.5](#)
- ⌘ China currently consumes 28 percent of the world’s meat. It has set a target to cut meat consumption in half by 2030. The result? A 12 percent reduction in global agricultural emissions. [Source: Exponential Roadmap 1.5](#)
- ⌘ “Seven of the top 10 leading causes of death in the United States are from chronic diseases. Eating a diet rich in fruits and vegetables daily can help reduce the risk of many leading causes of illness and death, including heart disease, type 2 diabetes, some cancers, and obesity.” [Source: Centers for Disease Control and Prevention](#)

14%

The percentage of global greenhouse gas emissions that come from livestock.

[Source: The New Yorker quoting the UN Food and Agriculture Organization \(FAO\)](#)

- ⌘ More than 3 billion people are currently malnourished. That includes both those who are undernourished and overnourished. [Source: The Lancet](#)
- ⌘ At least 1 in 3 children under 5—over 200 million—is undernourished or overweight, and “two thirds are at risk of malnutrition and hidden hunger because of the poor quality of their diets.” [Source: UNICEF report, “The State of the World’s Children 2019”](#)
- ⌘ “If America does not collectively adopt healthier eating habits, over half of the nation will be obese within 10 years.” [Source: NEJM study, as quoted in CNN](#)
- ⌘ “Even worse, one in four Americans will be ‘severely obese’ with a body mass index over 35, which means they will be more than 100 pounds overweight.” [Source: NEJM study, as quoted in CNN](#)

“Every four pounds of beef you eat contributes to as much global warming as flying from New York to London—and the average American eats that much each month.”

[Source: The New Yorker](#)



Shifting to the planetary health diet could prevent 11 million adult deaths per year, or approximately 19-24 percent of total adult deaths.

Source: EAT-Lancet Commission Summary Report



⌘ 42%. That's the prevalence of adult obesity in 2017-18. From 1999-2000 through 2017-2018, the prevalence of adult obesity increased from 30.5% to 42.4%.

Source: Centers for Disease Control and Prevention

⌘ 530,000. That's the number of people estimated to die each year as a result of poor diets, according to a recent study. Source: JAMA study, as quoted by CNN

⌘ 121.5 million. That's the number of American adults who have some form of heart disease. Source: American Heart Association, as quoted by CNN

144.4

Million Americans have diabetes or prediabetes.

Source: Centers for Disease Control and Prevention

⌘ 5%. That's the percentage of Americans who consume the recommended amount of fiber. Healthy, plant-based foods can help meet the population's daily need for dietary fiber. Source: International Food Information Council Foundation

⌘ 10%. That's the percentage of Americans who consume the recommended daily amount of fruits and vegetables. Source: Centers for Disease Control and Prevention

⌘ 160,000. That's the number of deaths per year caused by antibiotic-resistant infections. On the bright side, tremendous progress has occurred in phasing out antibiotic use in the chicken supply across the chain restaurant sector, though further progress is greatly needed around antibiotic use in beef production.

Source: Consumer Reports.

⌘ 35 grams (about 1 ¼ oz) per day. Amount of meat and poultry combined consumed on a per capita basis in Crete in the early 1960s. This is one of the key reference points for the optimal, traditional Mediterranean Diet, and is a good example of a flexitarian or plant-forward eating pattern in a recent historical, eminently palatable, food culture. Source: AJCN: Special Supplement to Vol. 61, No. 6.

⌘ 21%. That's the amount of reduction in coronary artery disease found in a new study on replacing unhealthy fats with higher quantities of olive oil.

Source: Harvard T.H. Chan School of Public Health research reported by CNN

PLANT-FORWARD QUOTABLES

KEY FACTS AND SUMMARY STATEMENTS UNDERSCORING THE PUSH AND PULL TOWARD A PLANT-FORWARD FUTURE

- “Food is the single strongest lever to optimize human health and environmental sustainability on Earth.” [Source: EAT-Lancet Commission Summary Report](#)
- “Global food production threatens climate stability and ecosystem resilience and constitutes the single largest driver of environmental degradation and transgression of planetary boundaries.” [Source: EAT-Lancet Commission Summary Report](#)
- “Food systems can provide healthy diets ... for an estimated population of about 10 billion people by 2050 and remain within a safe operating space. However, even small increases in the consumption of red meat or dairy foods would make this goal difficult or impossible to achieve. The analysis shows that staying within the safe operating space for food systems requires a combination of substantial shifts toward mostly plant-based dietary patterns, dramatic reductions in food losses and waste, and major improvements in food production practices.” [Source: EAT-Lancet Commission Summary Report](#)
- “The main way that most people will experience climate change is through its impact on food what they eat, how it’s grown, the price they pay for it, and the availability and choice they have.” [Source: Tim Gore, head of food policy and climate change at OXFAM, as quoted in The Guardian](#)
- “Studies show that cost, convenience and health concerns are among the top reasons Americans have cut back on beef.” [Source: The New York Times](#)
- “To cut emissions in the food sector and improve health, we must swing the pendulum back in the other direction reversing the shift towards diets high in animal source foods in higher-income countries and slowing or stopping its progression in lower-income countries while improving access to and affordability of nutritious foods for all, especially the most vulnerable.” [Source: Exponential Roadmap 1.5](#)
- “Food is the dark horse in our fight against climate change. What we eat and how much is lost and wasted is the final battleground in determining whether or not we will achieve the Paris Agreement.” [Source: Exponential Roadmap 1.5](#)
- “Unhealthy diets now pose a greater risk to morbidity and mortality than unsafe sex, alcohol, drug and tobacco use combined.” [Source: EAT-Lancet Commission Summary Report](#)
- “A review of 25 randomized control trials and/or observational studies specifically examined the health effects of adopting a flexitarian diet ... The results of these studies found emerging evidence suggesting that potential benefits of the flexitarian diet include improved markers of metabolic health, lowered blood pressure and reduced risk of type 2 diabetes. A semi-vegetarian or flexitarian diet may also have a role to play in the treatment of inflammatory bowel diseases, such as Crohn’s disease.” [Source: International Food Information Council Foundation](#)

“Awareness is rapidly changing, and I believe we are on the edge of a fundamental reshaping of finance. The evidence on climate risk is compelling investors to reassess core assumptions about modern finance.”

[Source: Larry Fink, CEO of Blackrock, as quoted in The New York Times](#)

“The shift toward plant-based foods is being driven by millennials, who are most likely to consider the food source, animal welfare issues, and environmental impacts when making their purchasing decisions.”

[Source: Fiona Dyer, consumer analyst at Global Data, as quoted in Forbes](#)





“Plant-Forward by the Numbers” was prepared as part of the Menus of Change Initiative.

For more information and further resources, please visit: [menusofchange.org](https://www.menusofchange.org) and [plantforwardkitchen.org](https://www.plantforwardkitchen.org)



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Department of Nutrition

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