

The Business Case for Protein Diversification



The Business Case for Protein Diversification

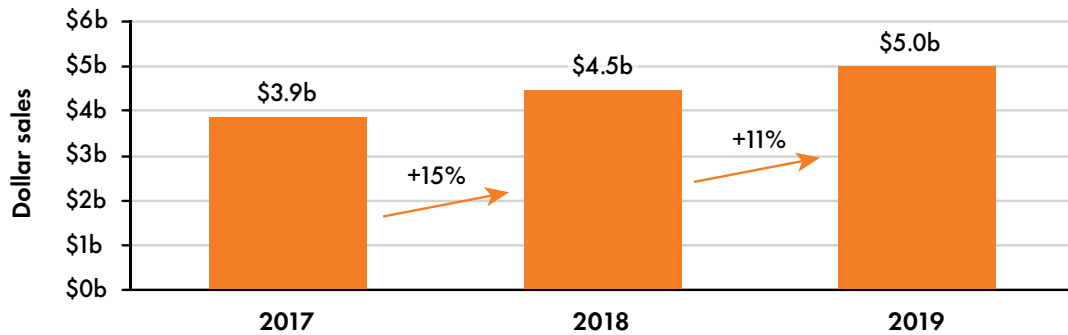


The global meat and dairy industry is currently going through an unprecedented level of competition and disruption, driven by a shift toward plant-based eating. Food businesses around the world have been investing in protein diversification to meet the demand of diners who are seeking meat alternatives for many reasons, including better health, animal welfare, and sustainability. This growth in demand for plant-based proteins has benefitted businesses with an increase in foot traffic, sales, new customer acquisition, and returning lapsed customers – all while lowering ingredient costs and providing valuable differentiation among stiff competition.

Plant-based foods are experiencing a surge in popularity as consumers seek healthier, more humane, and sustainable options. Dollar sales of plant-based foods increased by 11% over the past year and 29% since 2018. According to a report by the Good Food Institute, SPINScan Natural and Specialty Gourmet found that the plant-based meat category is currently worth more than \$939 million.¹

Restaurant chains such as Burger King®, Dunkin'®, Starbucks®, Pizza Hut®, and Just Salad® have added plant-based protein options, such as Impossible Foods and Beyond Meat burgers, sausages, and breakfast patties, to their menus with incredible financial success.

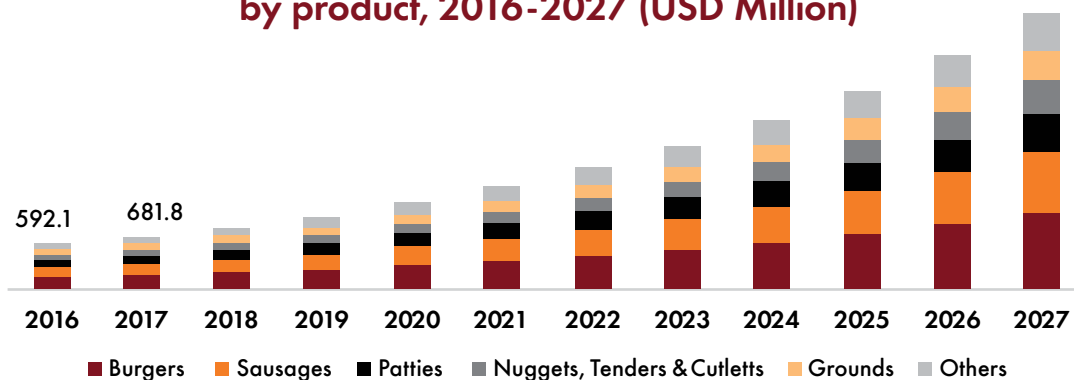
Total US Plant-Based Food Market



Sources: SPINScan Natural and Specialty Gourmet (proprietary), The Good Food Institute, SPINScan Conventional Multi Outlet (powered by IRI), 104 weeks ending 12-29-2019

According to the 2020 Plant-Based Meat Market Growth trends report by Grand View Research, the global plant-based meat market size is expected to grow at a compounded annual growth rate (CAGR) of 19.4% from 2020 to 2027. Products that are driving this growth are plant-based burgers, sausages, and chicken. Plant-based burgers accounted for more than 29.0% of the global revenue share of all plant-based meats in 2019, while plant-based chicken accounted for more than 34.0%. However, it is the plant-based sausages segment that is estimated to register the fastest CAGR from 2020 to 2027 due to the rising demand for these products specifically.²

US plant-based meat market estimates and forecasts, by product, 2016-2027 (USD Million)



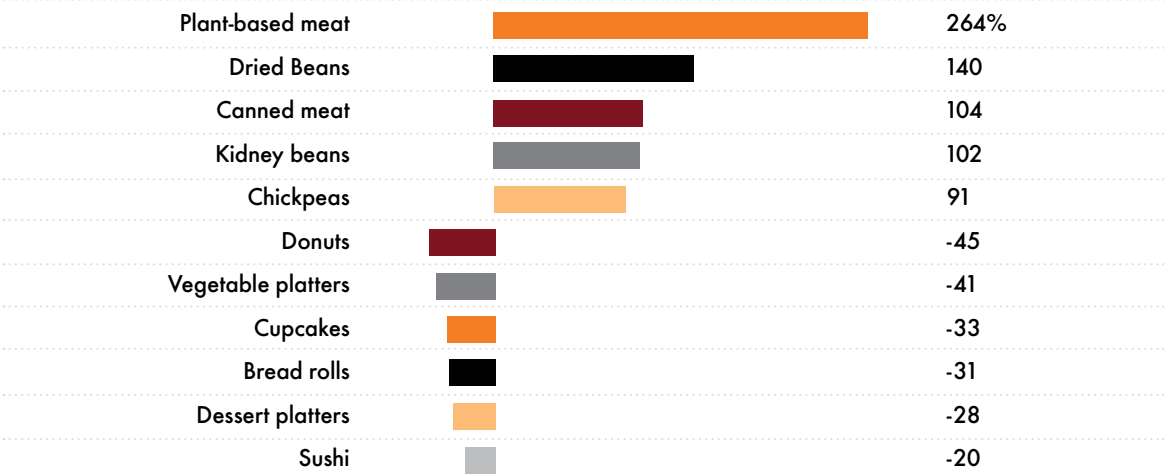
Sources: ICIS, FDA, Nutraingredients, Nutraceuticals World, D&B Hoovers, Company Annual Reports, Primary Research, Grand View Research

Growth in the plant-based sector has primarily been driven by the mainstream emergence of the “flexitarian” consumer – people who still consume meat and dairy but seek to reduce the levels they consume – as well as growing numbers of vegetarians and vegans, as consumers respond to a combination of ethical, environmental and health concerns. Increasingly, animal welfare and greenhouse gas (GHG) emissions created by the practices of the intensive animal farming industry, together with celebrity endorsements of vegan and vegetarian diets, are projected to further boost the demand for plant-based meat products.

COVID-19 Crisis

Americans Devour Fake Meat, Pass on Sweets

Meat and beans also showing robust growth since lockdown began.



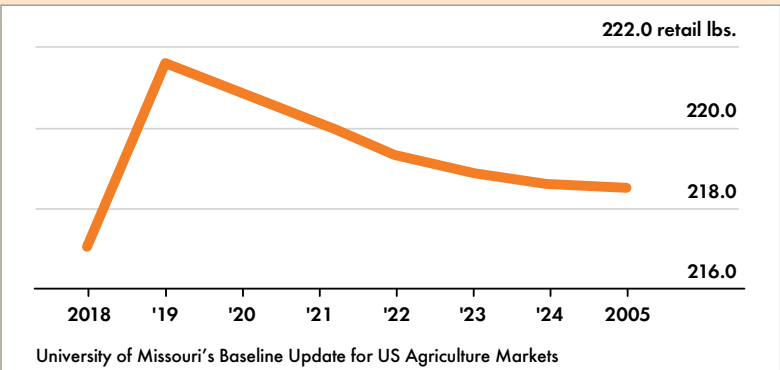
Source: Nielsen Note: Data for nine weeks through May 20, 2020

The past year has been anything but normal, and while 2020 presented many challenges to the food industry, the global pandemic and national civil unrest didn't slow demand for plant-based foods. A survey of 2,000 Americans commissioned by Eat Just Inc. and conducted by OnePoll at the end of 2020 found that 57% of respondents are eating fewer animal products since March 2020, when COVID-19 restrictions began in the United States.³ Leading market research firm Nielsen reported last year that at the beginning of the health crisis, sales of plant-based meats rose by 35%.⁴ Similarly, a 2020 poll of over 1,300 Americans asked about their food habits during the pandemic and found that almost a quarter of respondents are now eating more plant-based foods than before.⁵

To meet growing consumer demand during the pandemic, the food industry continued to innovate and expanded menu offerings to include more humane and sustainable proteins in 2020. Some of the largest restaurant chains invested in protein diversification and rolled out new plant-based offerings last year, including Starbucks and Pizza Hut.

Pass The Vegetables

Coronavirus to reduce US per-capita meat consumption after years of gains



The benefits of offering meat alternatives

Increased foot traffic

Many restaurants are reporting that diversifying protein options attracts new customers. During its testing phase, Burger King locations selling the Impossible Whopper saw foot traffic soar by 18.5%, while foot traffic at its other US locations declined by 1.75%.⁶ Similarly, Umami Burger's Impossible Burger is a consistent top driver of new sales chain-wide and accounts for one-third of all burger sales.⁷

“Since introducing Impossible to our menu last year, it’s been in the top 3 burgers sold in nearly all locations, increased overall sales by 27% during first 6 weeks of launch (began in 9 locations in LA, now at 20) and representing 20% of overall sales.”

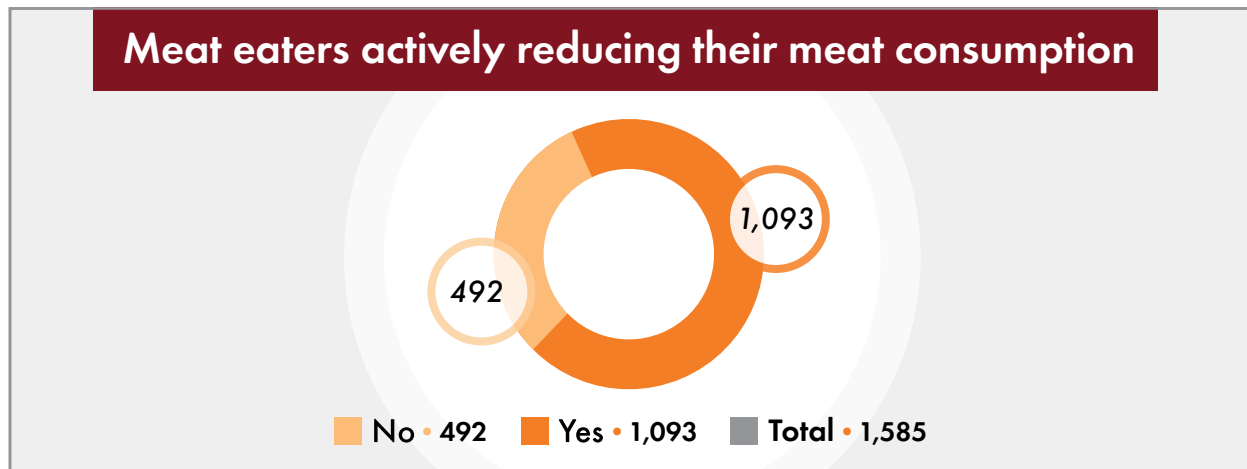
Daniel del Olmo, CEO



Greater appeal to millennials and gen Z

Millennials and generation Z are driving the global shift toward plant-based foods. Combined, millennials and generation Z account for more than 50% of the US population. Millennials spend an average of \$1,672 on dining out annually.⁸ They are far more likely than other generations to eat meat alternatives in a restaurant. As for generation Z, in 2018, they made 14.6 billion restaurant visits, accounting for a full quarter of all foodservice traffic.⁹ The USDA reports that, among all the generations, millennials dedicate the smallest share of food expenditures to grains, white meat, and red meat.¹⁰

The rise of the flexitarian



Source: World Animal Protection US

The demand for protein diversification is being driven by flexitarians who consciously choose to reduce their meat consumption – not by vegans or vegetarians. A 2020 report by Chicago-based analytics company Numerator found that 92% of those consuming plant-based meats, such as the Impossible Burger, are neither vegetarian nor vegan.¹¹

The population of those who identify as vegan or vegetarian has remained relatively constant over the past decade, but flexitarianism is being adopted more widely, particularly among health-and environmentally-conscious millennials and generation Z.¹²

“The Beyond Burger was a 6–7% sales lift compared to our previous meatless burger, which was a black bean patty. It’s definitely bringing in new people. We have been trying to ‘age down’ our brand, and the Beyond Burger has been bringing in a lot of younger people.”

Davide Spirito, Senior Director of Culinary Innovation



Increased sales

While 2020 has challenged the food industry, the largest chains have continued to diversify protein offerings regardless of the hardships. Menu innovation is feeding consumer demand for plant-based options and increasing sales. New product introductions are generating greater publicity, attracting a new customer base, and building consumer excitement.

In 2019, Burger King rolled out its Impossible Whopper to 7,000 restaurants across the United States in what the chain has dubbed “one of the most successful product launches in brand history.”¹³ Burger King’s sales rose by 5% in the third quarter of 2019, and the chain announced the testing of three new Impossible-based menu items at 180 US locations. This was Burger King’s strongest growth since 2015.¹⁴ Just prior to the pandemic, in January, February, and the first two weeks of March 2020, Burger King posted positive comparable sales growth in the US in the low single digits. It highlighted the sales being driven by “continued strong contribution from the Impossible Whopper and improved performance in the value layer of our menu.” The chain has continued to innovate despite the challenges this year brought by adding the plant-based Impossible breakfast sausage.¹⁵

“In just one year, plant-based meat went from something very few Americans had heard of to something that 40 percent of us have tried.”

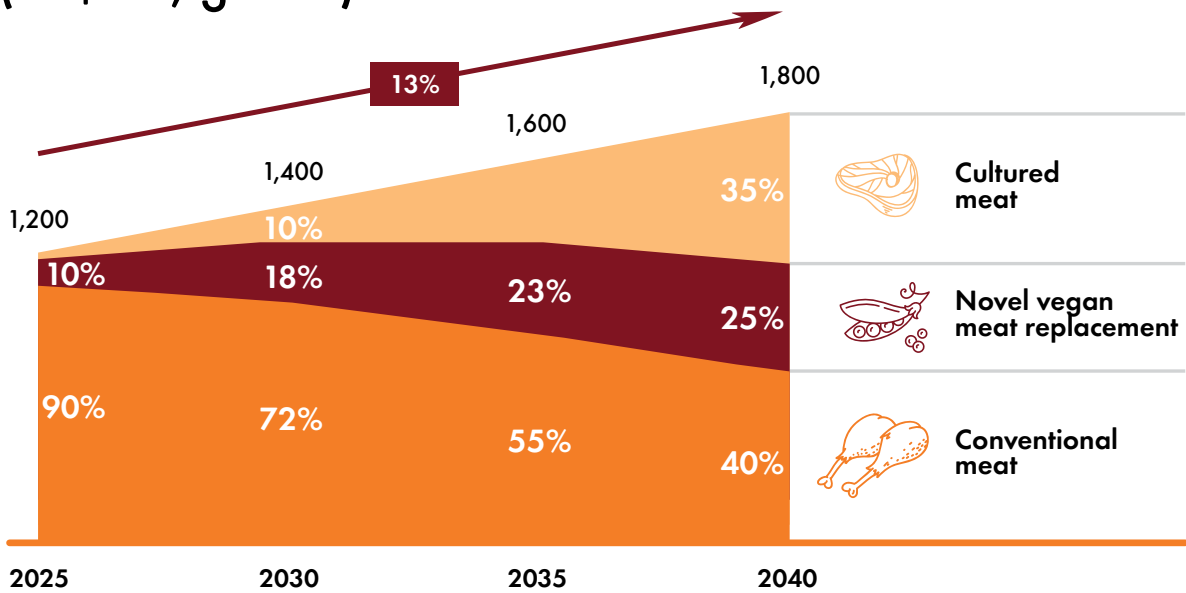
Kelsey Piper, Vox



New customer acquisition

Many consumers first encounter new trends at restaurants, which are an important target for producers of plant-based foods. What’s more, companies offering humane and sustainable proteins are seeing an increase in new customer acquisition as well as lapsed customers returning to try the new, plant-based products. The 2020 Grubhub State of the Plate report found plant-based burger orders increased by 90% and general plant-based orders by 135%.¹⁶

Global meat market forecast (in \$ bn, global)



Source: Gerhardt, Carsten, et al. (16 Jul. 2019). Global Meat Market Forecast. atkearney.com.

<https://www.atkearney.com/retail/article/?/a/how-will-cultured-meat-and-meat-alternatives-disrupt-the-agricultural-and-food-industry>.

Lower ingredient costs

Plant-based foods are made with protein-rich ingredients like legumes and grains. These protein alternatives offer numerous benefits compared to their animal-based counterparts, including lower costs, a longer shelf-life, and less price volatility. Andy Wiederhorn, the CEO of Fat Brands, told Markets Insider that while some meat alternatives are priced higher, consumers appear willing to pay a premium for these products.¹⁷

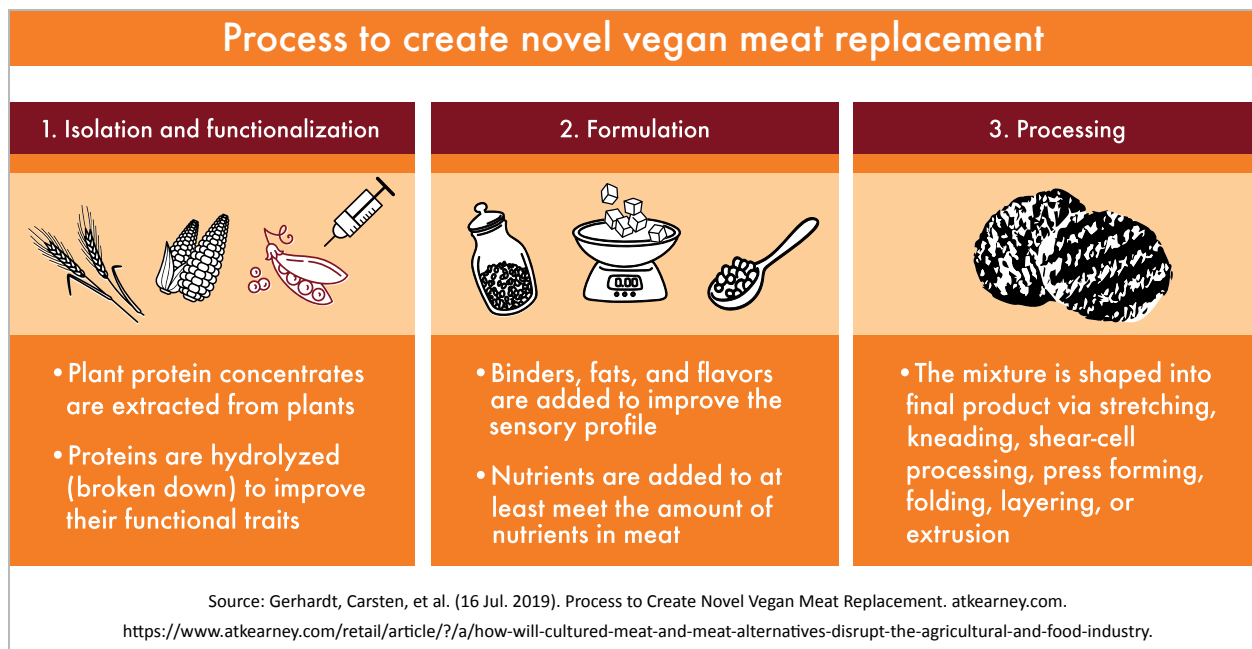
Competitive advantage

Restaurants are facing stiff competition in a saturated market. Adding plant-based entrées can provide an important point of differentiation, add interest to menus, foster innovation, and align brands with customer values regarding health, animal welfare, and environmental sustainability.¹⁸

As plant-based entrées continue to grab attention in the press and on social media, restaurants can capitalize on this interest by offering more protein-rich, plant-based menu items.

“What’s especially exciting is that the sales of the Impossible Whopper have been highly incremental and have attracted new types of guests into our restaurants. It’s really been something to see as I visited stores across the country, and our team has been getting a lot of questions as to just who this guest is that’s coming in for the Impossible Whopper. We’ve done a lot of research and found that the appeal is quite broad-based across several types of consumers. We see a lot of millennial and gen Z customers who tend to really connect with the message around sustainability. We also see older guests that perhaps used to come to Burger King but haven’t visited in a while.”





José E. Cil, President of Burger King



Sustainability

Consumers are growing increasingly concerned about the planet and are looking for ways to reduce their personal impact on climate change. A 2020 report released by the Yale Program on Climate Change Communication found that half of the more than 1,000 US adults surveyed said they would eat more plant-based foods if they had information about the environmental impact of their food choices, and one in four said they reward food companies that are reducing their impact on the environment by purchasing their products.¹⁹

Peer-reviewed studies and authoritative sources ranging from the Chatham House think tank to the United Nations have demonstrated the harmful effects of intensive animal agriculture on the environment.²⁰ By diversifying protein offerings, restaurants have a unique opportunity to demonstrate their commitment to creating a more sustainable future. For example, the Impossible Burger is tied to 87% less water use, 96% less land use, 89% fewer GHG emissions, and 92% less nutrient pollution (responsible for dead-zone creation) than its ground beef counterpart.²¹

MARKET DRIVERS	TIMELINE IMPACT ANALYSIS	
	2016-2021	2022-2027
Increasing Health Awareness and Environmental Issues		
Increasing Preference for Vegetarian and Vegan Foods		

Source: Plant-Based Meat Market Growth; Trends Report, 2020-2027, Grand View Research, Inc., 20 Oct. 2020, www.grandviewresearch.com/industry-analysis/plant-based-meat-market.

“As we have worked to better understand customer demand, some markets around the world have tested plant-based products. Informed by those learnings, we have created a delicious burger that will be the first menu option in a plant-based platform we are calling McPlant. McPlant is crafted exclusively for McDonald’s, by McDonald’s.”

Ian Borden, President, International of McDonald’s



Protects animals, workers, and communities

Conventional meat is derived from animals cruelly confined on factory farms, where they are treated like cogs in a machine and unable to engage in natural behaviors. Animal welfare is one consideration on many meat-eaters' minds. A 2020 poll conducted by World Animal Protection's US meat reduction campaign found that 75% of meat-eating respondents indicated they were more likely to buy meat that comes from sources that prioritize animal welfare. Additional concerns around animal welfare included the overuse of antibiotics in the livestock industry. Of the surveyed meat eaters who were likely to reduce or eliminate their consumption of meat, 32% said concerns about the use of antibiotics, steroids, and hormones in animals were the reason for their desired reduction in meat, dairy, and egg consumption.²²

Similar to concerns about animal welfare, many consumers are becoming alarmed by the treatment of workers in the meat industry. Over the last year, we saw this level of concern reach new heights following mainstream media coverage of COVID-19 outbreaks at meatpacking plants around the United States. Sadly, workers at these facilities are in many cases treated just as cruelly as the animals. They are often subjected to workplace hazards, including life-threatening injuries, sexual abuse, slave labor, respiratory illnesses, and exposure to dangerous, antibiotic-resistant bacteria.²³

Americans have also become acutely aware of systemic racism. In 2020 we saw millions of people around the country take to the streets to demand racial equality. Sadly, the factory farming industry preys on low-income communities and communities of color by establishing roots in these areas and sickening those living and working nearby. One study examined 67 factory farms in Mississippi and found that most were located in low-income areas and areas with a high percentage of African-Americans.²⁴

Factory farms have been caught spraying feces and urine into the air to dispose of the waste, often resulting in nausea, high blood pressure, respiratory issues, asthma symptoms, and a lower quality of life for children and others living in the vicinity. Factory farming and industrial meat production should be viewed through this lens of environmental racism.²⁵

Restaurants that opt to serve meat alternatives can rest assured that a growing customer segment will appreciate their efforts to avoid contributing to such problems, rewarding the restaurants with greater foot traffic and sales.

'If I were to say what is probably the most dominant shift in consumer behavior, it is this whole shift to plant-based. And that is a shift both in beverage and in food.'

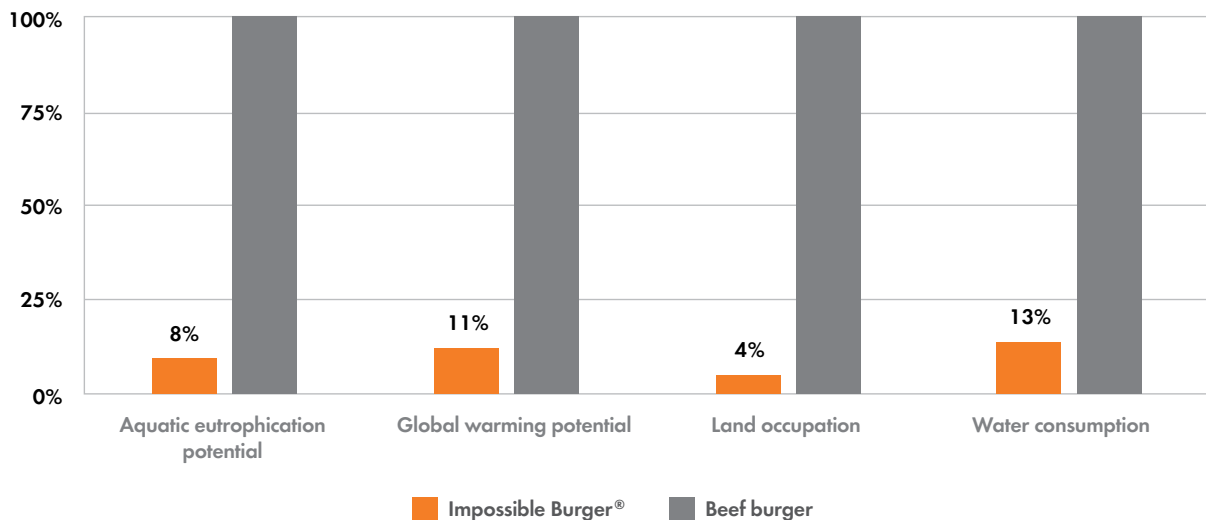
Kevin Johnson, CEO, Starbucks



Plant-based market key players:

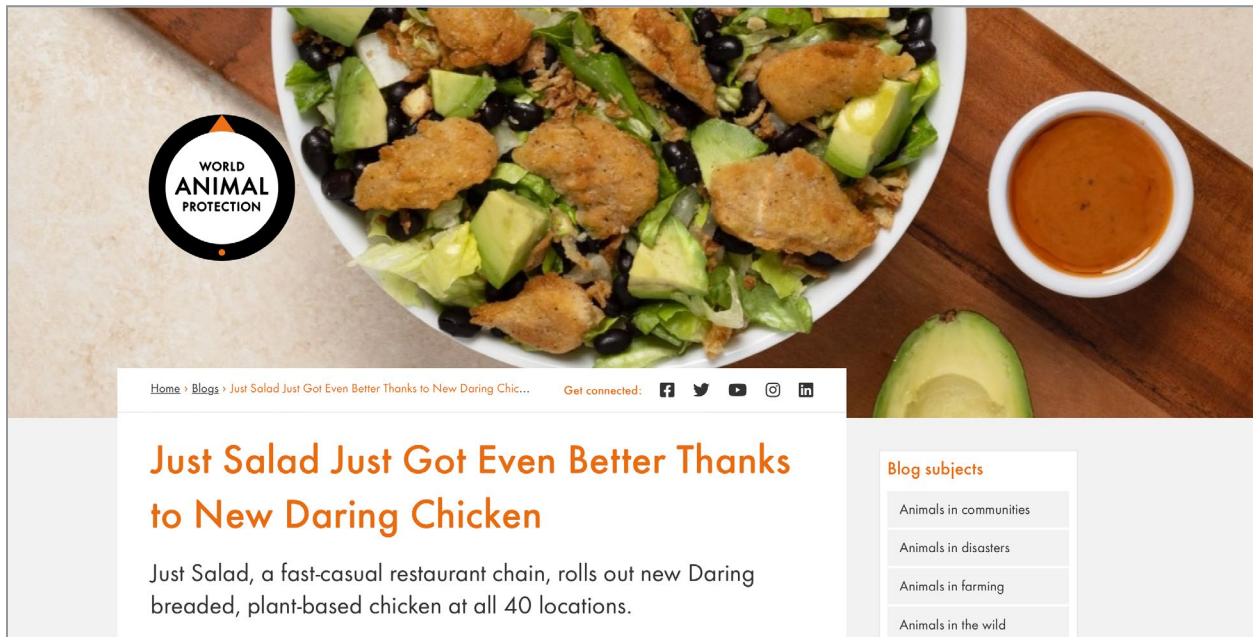
- Beyond Meat
- Impossible Foods Inc.
- Maple Leaf Foods
(Field Roast & Lightlife Foods)
- Conagra, Inc.
(Gardein Protein International)
- Kellogg NA Co.
(MorningStar Farms)
- Nestlé USA
(Sweet Earth Foods)
- Daring Foods
- Quorn
- Tofurky
- Good Catch
- Violife Foods
- Hungry Planet
- Planterra Foods
- Sophie's Kitchen, Inc.
- Alpha Foods
- Miyoko's Creamery
- Follow Your Heart
- Eat JUST Inc.
- NUGGS
- Daiya Foods Inc.
- Upton's Naturals
- No Evil Foods
- Dr. Praeger's sensible foods

Results comparison of Impossible Burger® and beef burger (Impact 2002+ v2.28).



Source: Khan, Sofia, et al. (20 Mar. 2019). Results Comparison of Impossible Burger and Beef Burger (Impact 2002+ c2.28).
impossiblefoods.com/mission/lca-update-2019/.

How World Animal Protection can help your business



World Animal Protection is an international animal welfare organization. As part of our larger food system efforts, we work with companies big and small on developing, testing, and promoting new plant-based products. We hold relationships with the largest plant-based food producers and key stakeholders.

Since the inception of our meat reduction campaign, we've made it our mission to do all that we can to empower and champion companies investing in protein diversification. We've worked closely with Pret a Manger®, Taco Bell®, Just Salad®, Danone N. America®, Biggby®, Starbucks®, Panera Bread®, and more on developing, testing, and promoting new plant-based products. Our experts in meat reduction have decades of experience in the plant-based foods sector and a deep understanding of the market landscape. We conduct original research into effective behavior change strategies, market insights, and animal impact.

“In 20 years, only 40% of global meat consumption will still come from conventional meat sources.”

ATKearney

Source: Gerhardt, Carsten, et al. "How Will Cultured Meat and Meat Alternatives Disrupt the Agricultural and Food Industry?". atkearney.com. 16 Jul. 2019.
<https://www.atkearney.com/retail/article/%/a/how-will-cultured-meat-and-meat-alternatives-disrupt-the-agricultural-and-food-industry>.

References

1. "Plant-Based Market Overview" [gfi.org/marketresearch](https://www.gfi.org/marketresearch), The Good Food Institute, 16 Apr. 2020, <https://www.gfi.org/marketresearch>.
2. Plant-Based Meat Market Growth; Trends Report, 2020-2027, Grand View Research, Inc., 20 Oct. 2020, www.grandviewresearch.com/industry-analysis/plant-based-meat-market.
3. SWNS. "Americans Are Eating Less Meat, Dairy during Coronavirus Pandemic, Survey Claims." Fox News, FOX News Network, 5 Sept. 2020, <https://www.foxnews.com/food-drink/americans-eating-less-meat-dairy-coronavirus>.
4. Nierenberg, Amelia. "Plant-Based 'Meats' Catch On in the Pandemic." The New York Times, The New York Times, 22 May 2020, www.nytimes.com/2020/05/22/dining/plant-based-meats-coronavirus.html.
5. Danziger, Lucy. "23% Of Americans Are Eating More Plant-Based During COVID-19." The Beet., The Beet, 11 May 2020, thebeet.com/survey-23-percent-of-americans-eating-more-plant-based-foods-during-covid-19/.
6. Shieber, Jonathan. "For the Next Month, the Impossible Whopper Will Be Available at Burger Kings across the Country." Techcrunch.com, Tech Crunch, 1 Aug. 2019, <https://techcrunch.com/2019/08/01/for-the-next-month-the-impossible-whopper-will-beavailable-at-burger-kings-across-the-country/>.
7. "Plant-Based: The Business Case." Goodfoodscorecard.org, The Good Food Institute, 12 Mar. 2019, <http://goodfoodscorecard.org/why-plant-based/#114>.
8. Shoup, Mary Ellen. "A Year in Food: Survey Reveals Millennials' Eating and Spending Habits." Foodnavigator-Usa.com, Food Navigator, 28 Aug. 2019, <https://www.foodnavigator-usa.com/Article/2019/08/28/A-year-in-food-Survey-reveals-millennials-eating-andspending-habits>.
9. McSweeney, Ryan. "Generation Z's Favorite Food Trends and Eating Habits." Restaurant Insider, Restaurant Insider, 21 Nov. 2019, upserve.com/restaurant-insider/generation-z-new-food-trends/.
10. Kuhns, Annemarie, and Michelle Saksena. "Food Purchase Decisions of Millennial Households Compared to Other Generations." Usda.gov, USDA, Dec. 2017, https://www.ers.usda.gov/webdocs/publications/86401/eib186_summary.pdf?v=43097.
11. "Impossible Foods' Growth Accelerates as Flagship Product Rolls Out in More Than 11,000 Stores in All 50 States." Wire, Impossible Foods Inc., 16 Sept. 2020, www.businesswire.com/news/home/20200916005221/en/ImpossibleFoods%E2%80%99-Growth-Accelerates-as-Flagship-Product-Rolls-Out-in-More-Than-11000-Stores-in-All-50-States.
12. Kleckler, Abby. "Plant-Based Meats Capture Millennials." Progressivegrocer.com, Progressive Grocer, 1 Nov. 2019, <https://progressivegrocer.com/plant-based-meats-capture-millennials>.
13. Lucas, Amelia. "Burger King to Launch Meatless Burgers across Europe and Test More Impossible Burgers in the US." Cnbc.com, CNBC, 11 Nov. 2019, <https://www.cnbc.com/2019/11/11/burger-king-to-expand-meatless-burgers-in-europe-and-us.html>.
14. La Monica, Paul R. "Impossible Whoppers Are a Huge Hit at Burger King, Fueling Its Best Quarter in Four Years." Cnn.com, CNN Business, 28 Oct. 2019, <https://www.cnn.com/2019/10/28/investing/restaurant-brands-earnings-burger-kingpopeyes/index.html>.

-
15. Elias, Jennifer. "Starbucks Launches the Impossible Foods Breakfast Sandwich as America's Appetite for Plant-Based Meat Grows." CNBC, CNBC, 23 June 2020, www.cnbc.com/2020/06/23/impossible-foods-business-booms-as-demand-for-plant-based-meat-grows.html.
 16. "Grubhub Releases Second Annual 'State of the Plate' Report." Grubhub, Inc. - Grubhub Releases Second Annual "State of the Plate" Report, Grubhub Inc., 9 July 2020, media.grubhub.com/media/News/press-release-details/2020/Grubhub-Releases-Second-Annual-State-of-the-Plate-Report/default.aspx.
 17. Reinicke, Carmen. "Beyond Meat Costs More than Traditional Meat, but Data Show Consumers Are Willing to Pay the Premium Price—for Now (BYND)." Markets.businessinsider.com, Business Insider, 11 Jul. 2019, <https://markets.businessinsider.com/news/stocks/beyond-meat-sales-are-high-but-so-is-price-2019-7-1028346898>.
 18. Cameron, Brianna, and Shannon O'Neill. "State of the Industry Report: Plant-Based Meat, Eggs, and Dairy." The Good Food Institute, Version 1.4, Jun. 2019, <https://www.gfi.org/non-cms-pages/splash-sites/soi-reports/files/SOI-Report-Plant-Based.pdf>.
 19. Crawford, Elizabeth. "Most Consumers Don't Link Diet & Climate, but Sustainability Marketing Could Boost Plant-Based Sales." Food Navigator, 17 Feb. 2020, www.foodnavigator-usa.com/Article/2020/02/17/Most-consumers-don-t-link-diet-climate-but-sustainability-marketing-could-boost-plant-based-sales#.on-the-details/2019/12/08/465a9d5e-0d6a-11ea-8397-a955cd542d00_story.html.
 20. Carrington, Damian. "Eating Less Meat Essential to Curb Climate Change, Says Report." Ourworld.unu.edu, Our World, 5 Dec. 2014, <https://ourworld.unu.edu/en/eating-less-meat-essential-to-curb-climate-change-says-report>.
 21. Khan, Sofia, et al. "Environmental Life Cycle Analysis: Impossible Burger 2.0." Impossible Foods, Quantis, 20 Mar. 2019, impossiblefoods.com/mission/lca-update-2019/.
 22. 4Media Group, and World Animal Protection. "Meat Reduction Audience Research." New York, 15 Jan. 2021.
 23. Cook, Christopher D, and Natalie Jones. "Two Amputations a Week: The Cost of Working in a US Meat Plant." Theguardian.com, 5 Jul. 2018, <https://www.theguardian.com/environment/2018/jul/05/amputations-serious-injuries-us-meat-industry-plant>.
 24. Wilson, Sacoby M, et al. "Environmental Injustice and the Mississippi Hog Industry." National Institutes of Health, Apr. 2002, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1241163/>.
 25. Hellerstein, Erica, and Ken Fine. "A Million Tons of Feces and an Unbearable Stench: Life near Industrial Pig Farms." theguardian.com/Us, The Guardian, 20 Sep. 2017, <https://www.theguardian.com/us-news/2017/sep/20/north-carolina-hog-industry-pig-farms>.



We are World Animal Protection.

We end the needless suffering of animals.

We influence decision makers to put animals on the global agenda.

We help the world see how important animals are to all of us.

We inspire people to change animals' lives for the better.

We move the world to protect animals.

We strive to end injustice.

535 Eighth Avenue, 3rd Floor,
New York, NY 10018

Phone: 646-783-2800

Email: info@worldanimalprotection.us

 World Animal Protection US

 @MoveTheWorldUS

 worldanimalprotectionus

