

CHAIN REACTION VI

How Top Restaurants Rate On Reducing Antibiotic Use In Their Beef Supply Chains

JULY 2021





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Executive Summary

At the time of the release of this report, the global community is still grappling with a worldwide pandemic. The spread of COVID-19 clearly illustrates how a public health crisis can have devastating impacts on people's health and livelihoods. Impacts have been unevenly distributed, with Black, Indigenous, Latino, and other people of color disproportionately affected. The pandemic is also revealing how effective action — or its opposite, inaction — can change the course of such a crisis. The failure to take needed steps to minimize the spread of the pandemic last year contributed to many unnecessary deaths, while the coordinated roll out of vaccines has shown the benefit of acting.

Antibiotic¹ resistance is another public health crisis facing the globe, with many of these same dynamics, albeit unfolding at a slower pace. Infectious disease experts have warned about bacterial resistance to antibiotic medicines for decades. Recently published estimates indicate that between 35,000 and 160,000 Americans die each year from antibiotic-resistant infections.² Resistance in infections leads to more severe illness, more and longer hospital stays, higher medical costs, and increased mortality.³ The impacts of antibiotic resistance likely fall more heavily on historically marginalized groups in a manner similar to other public health challenges, including COVID-19.⁴

The overuse of antibiotics is the primary driver for the public health crisis of antibiotic resistance.⁵ The pandemic likely contributed to increased antibiotic use in both people⁶ and food animals,⁷ increasing the need for action across all sectors where antibiotics are used. Almost two-thirds of medically important antibiotics in the U.S. are sold for food animal use⁸ and this use contributes significantly to the resistance problem.⁹ Without swift action, experts estimate we will lose 10 million lives globally per year to drug-resistant infections by 2050.¹⁰

This Sixth Chain Reaction Scorecard ranks by letter grade the top twenty fast food and fast casual U.S. restaurant chains that serve beef on the policies and actions related to antibiotic use in their beef supplies.

Five previous editions of the Scorecard¹¹ documented the way in which the nation's top restaurant chains have helped transform antibiotic use practices in the chicken industry by sourcing chicken produced without the routine use of antibiotics.¹² A similar transformation has not yet occurred with the beef, pork, or turkey industries. Because the animals raised by these industries typically live longer than

chickens, there are additional challenges to reducing antibiotic use in these sectors, but comparisons with other countries illustrate that much more can be accomplished.¹³

Previous Scorecards showed limited action by restaurant chains to source beef produced with responsible antibiotic use policies. We define responsible use as policies that prohibit administration of medically important antibiotics to food animals for purposes other than treating sick or injured animals or for controlling the spread of diagnosed illness. This Scorecard continues to focus on beef.

As some of America's largest meat buyers, fast food restaurants can and should act to preserve our life-saving medicines for the future by requiring their meat suppliers to adopt responsible antibiotic use practices. About a quarter of all medically important antibiotics sold in the U.S. are intended for use in cattle production, which along with swine, account for over half of all U.S. antibiotic sales.¹⁴ In the past, when resistance made an antibiotic ineffective there was often another drug that would work, but now resistance is spreading faster than the development of new antibiotics making treatment difficult and in some cases impossible.¹⁵ Given the challenge of developing new drugs, much more effort needs to go into protecting the existing ones. This is where food companies can make a difference. McDonald's, for example, is the single largest purchaser of beef in the United States¹⁶ and thus its corporate policies can help push the beef industry to eliminate the overuse of antibiotics and the associated antibiotic resistance. As more restaurant chains adopt policies restricting antibiotic use, pressure increases on beef producers to reduce antibiotic use.










In this Sixth Chain Reaction Scorecard, surveyed companies made little progress transitioning to responsible antibiotic use in their beef supplies in 2020, except for one notable exception, Wendy's. Wendy's committed to prohibiting the routine use of medically important antibiotics in its beef supply chain by the end of 2030.¹⁷ McDonald's in contrast failed to meet its own commitment to set antibiotic use reduction targets by the end of 2020. Other companies reported limited, if any, progress on their commitments.

- » Twelve chains (60 percent) earned "F" grades for taking no public action to reduce antibiotic overuse in their beef supplies. Among the 12 are burger chain giants Burger King and Sonic and the number two restaurant chain in the U.S., Starbucks. The top three pizza chains, Domino's, Pizza Hut, and Little Caesars all received zero points.

- » Wendy’s moved up to a “C” grade from last year’s “D+” for a new commitment to prohibit the routine use of medically important antibiotics in its beef supply chain by the end of 2030 and for committing to track and report on the use of antibiotics in their beef supply chain by the end of 2024. Two other companies—McDonald’s and Subway—received “C” scores for their strong commitments. However, neither company reported any implementation of their pledges. McDonald’s in 2018 committed to set reduction targets in beef by the end of 2020, but failed to meet that commitment. Subway promised in 2015 to serve beef raised without the routine use of medically important antibiotics by 2025, but has not reported taking any steps to begin that transition.
- » In 2020, Taco Bell did not report any implementation progress on its 2019 pledge to reduce medically important antibiotics in its beef supplies by 25% by 2025. The company earned a “D”.¹⁸
- » Two companies, Applebee’s and IHOP, moved from an “F” to a “D” grade for serving a limited amount (7 percent) of responsibly raised beef at their locations.
- » Long-time leaders Chipotle and Panera once again earned grades in the “A” range for their approach to responsible antibiotic use in their beef supplies.

The U.S. beef sector’s lack of progress¹⁹ on responsible antibiotic use is concerning, especially when the latest FDA drug sales data show that cattle production, along with hog production, are the two top consumers of agricultural antibiotics by far, with cattle falling slightly behind hogs for the first time in 2019.²⁰ The best way for this sector to act is to adopt and swiftly implement responsible antibiotic use policies.

Other actors in the beef supply chain—including meatpackers²¹, farms and ranches—have an obligation to do the same. Federal and state authorities should prohibit the routine use of antibiotics in food animals and do much more to monitor antibiotic use and antibiotic resistance. Finally, more needs to be done to protect workers on the farm, as well as those in slaughter and meat packing plants, who face significant risk of exposure to resistant pathogens in their workplaces. Public policy on antibiotic resistance must be designed to ensure that interventions address ongoing health disparities and inequities in worker and other vulnerable communities.

Chain Reaction VI Beef Scorecard	
A	
A-	
B+	
B	
B-	
C+	
C	  
D+	
D	  
F	           

Introduction

The COVID-19 pandemic has disrupted all our lives, shortened the lives of millions, and clearly illustrated how inaction during a public health crisis can have deadly impacts. This is no less true for the public health threat of antibiotic resistance. This sixth edition of the Chain Reaction Antibiotics Scorecard, like previous editions, aims to spur needed changes to reduce and eliminate the public health threat posed by bacterial resistance to antibiotic medicines. This report analyzes the antibiotic use policies and practices of the top 20 U.S. restaurant chains that serve beef.

Since 2015, the U.S. chicken industry has significantly reduced its use of medically important antibiotics. According to industry data, nearly 60% of U.S. chicken is raised without the use of any antibiotic drugs.²² In 2019, data collected by the Food and Drug Administration (FDA) shows that already low antibiotic sales to the chicken sector continued to trend downwards (See figure 1 below).

The story is quite the opposite for cows and pigs. Drug sales rose for the second year in a row after dropping across the meat industry in 2017. While action is clearly needed in both sectors, this report focuses on beef because of the larger per capita consumption of beef and the larger proportion of beef consumed in restaurants compared to pork.²³

In recent years, several restaurant chains made commitments to reduce antibiotic overuse in their beef supply chains. This report aims to track their progress and hold them accountable.

The COVID-19 pandemic profoundly impacted the restaurant industry. According to data from the U.S. Department of Agriculture (USDA), food expenditures away from home dropped 20 percent in the first eight months of 2020 compared to 2019 and hundreds of restaurants closed.²⁴ At the same time, restaurant workers — along with those in slaughterhouses and meatpacking plants — were one of the groups at highest risk for COVID-19 infections.²⁵ The Chain Reaction authors delayed our annual survey until the end of 2020 knowing that companies were primarily focusing on addressing the ongoing COVID-19 crisis. It was our hope that despite the complexities of COVID-19, companies would continue to make progress on their antibiotic policy commitments.

The first three Chain Reaction reports surveyed the top²⁶ 25 U.S. fast food and fast casual dining restaurant chains on their antibiotics policies and practices for all meat served. In the fourth report, we focused primarily on the beef sector with a scorecard of the top 25 U.S. burger chains. Our fifth scorecard graded the top 25 U.S. restaurant chains on their antibiotic use policies for beef.²⁷ Collectively, these surveys showed that many of these restaurants

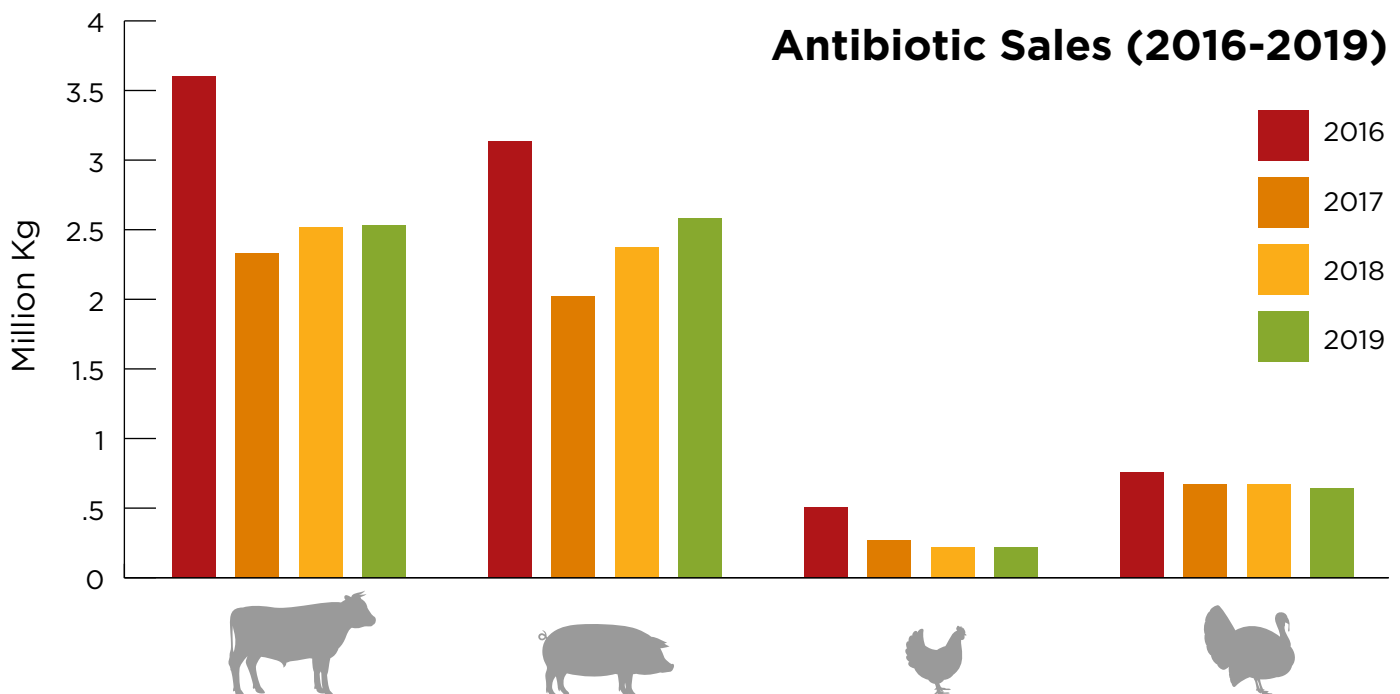


Figure 1 Source: U.S. Food and Drug Administration (hereinafter FDA), Center for Veterinary Medicine, 2019 Summary Report on Antimicrobials Sold or Distributed for Use in Food-Producing Animals, December 2020.



pledged and implemented responsible antibiotic use policies for chicken, while very few made pledges and even fewer implemented policies for other meats.

In this sixth Chain Reaction report, we surveyed the top 20 U.S. chain restaurants²⁸ that include beef items on their menus about the policies and practices related to antibiotic use in their beef supplies. This report grades these twenty restaurant chains on their (1) antibiotic use policies for beef sourcing; (2) implementation of these policies; (3) tracking and monitoring of antibiotic use in their supply chains; and (4) communication of progress related to these policies to customers.

To determine grades, we analyzed survey responses submitted by companies and reviewed public statements, corporate responsibility reports, press releases and other documents. To be considered meaningful for the purposes of this report, a company's commitment must align with the *WHO guidelines on use of medically important antimicrobials in food-producing animals* issued

by the World Health Organization in 2017, where acceptable use is limited to treatment of animals diagnosed with an illness; medical or surgical procedures; or to control an identified disease outbreak. Policies that only prohibit growth promotion receive zero points because such use in the U.S. was already banned by the FDA in 2017.

If a company pledged antibiotic use reductions but did not issue an overarching policy, they received points based on the percent reduction in their commitment with more points for larger reductions. If a company's public information does not match internal communications with the report authors, then the authors graded the company on what was publicly available. Appendix 1 contains our survey methodology and questionnaire. Our scoring criteria are described in Appendix 2. Appendix 3 summarizes policies and survey responses for the top 20 U.S. fast food and fast casual chains serving beef. Appendix 4 lists the recommendations of the World Health Organization on the use of medically important antimicrobials in food-producing animals.

Key Findings

Policy and Implementation

The surveyed companies made little progress transitioning to responsible antibiotic use in their beef supplies in 2020 except for one notable exception, Wendy's. Wendy's, the third largest burger chain in the country, committed to prohibiting the routine use of medically important antibiotics in its beef supply chain by the end of 2030. COVID-19 likely impacted the ability of companies to move forward at an expedient pace, but the lack of progress is nonetheless disappointing given the urgency of the antibiotic resistance public health crisis.

McDonald's, for example, failed to meet its 2018 commitment²⁹ to establish and publicize antibiotic use reduction targets for its beef supply by the end of 2020. Most surveyed companies are not tracking antibiotic use by their suppliers nor are they asking them to reduce use. Only two surveyed companies consistently serve beef raised with responsible antibiotic use. Two other restaurants, Applebee's and IHOP, reported for the first time serving a small portion of responsibly sourced beef in their restaurants. Four others have either made commitments to source beef from producers not using antibiotics for routine disease prevention or are purchasing beef from suppliers that are actively taking steps to reduce their antibiotic use. However, from 2019 to 2020, only Wendy's among these four reported significant progress with its new commitment to end routine use in its beef supply chain.

- » Applebee's and IHOP, despite the challenges of the pandemic on dine-in restaurants, moved from an "F" in 2019 to a "D" by serving some beef raised in programs that prohibit the routine use of antibiotics and by committing to tracking and reporting antibiotic use in their beef supply. Besides long-time leaders Chipotle and Panera, IHOP and Applebee's became the first companies among the top 20 chains to actually serve some beef raised under a responsible antibiotic use policy. In 2020, 7 percent of the beef served by Applebee's and IHOP was from cattle raised either without any antibiotics or without medically important antibiotics, a small but important step forward.
- » Two companies—Panera and Chipotle—continued their longstanding practice of serving beef raised using responsible antibiotic use practices and earned grades in the "A" range.

- » Wendy's raised their grade to a "C" from a "D+" this year by making a new commitment to prohibit the routine use of medically important antibiotics in its beef supply chain by the end of 2030.³⁰ This is a significant step, but the policy needs more detail and given the long timeline to prohibit routine use, Wendy's should clarify intermediate steps to transition to the new policy.
- » Two companies—McDonald's and Subway—have policies that align with the World Health Organization (WHO) guidelines on antibiotic use by prohibiting the routine use of antibiotics for disease prevention. However, neither have reported serving any beef consistent with the policies developed for their restaurants. McDonald's committed to setting reduction targets in beef by the end of 2020 but failed to meet that commitment. In 2015, Subway committed to transitioning to serving beef consistent with its policy within a decade but has not reported any progress implementing this commitment.
- » In July 2019, Taco Bell announced a new pledge to cut the use of medically-important antibiotics in its vast beef supplies by 25 percent by 2025. This once again earned the company a D.³¹ While we welcome any meaningful progress on antibiotic use reduction in beef, Taco Bell's announcement is not accompanied by an overarching policy governing antibiotic use in the company's substantial beef supplies. Taco Bell also did not report any progress on implementing its pledge since it was made.

Most top 20 U.S. restaurant chains lack a meaningful responsible antibiotic use policy for their beef supplies:

- » Out of the top 20 chains that serve beef, 12 (60 percent) received failing grades because they do not have public policies that require producers to act beyond legal compliance with FDA regulations to address this critical public health threat. Among the 12 are beef giants Burger King and Sonic as well as Starbucks, the number two restaurant chain in the U.S. Similarly, the top three pizza chains, Domino's, Pizza Hut, and Little Caesars, all received zero points. While this is an improvement over 2019 when 14 (70 percent) of the top 20 companies received failing scores, more chains need to act to help move the beef industry in the right direction to protect public health.



Chains drop the ball on making progress on antibiotics used in cattle.

McDonald's and Subway have made commitments to eliminate routine use of antibiotics in their beef supplies, but neither company has reported any progress toward meeting those commitments in 2020. In December 2018, McDonald's committed to setting targets for antibiotic overuse reductions in its beef supply by the end of 2020³², but now well into 2021, the company has yet to announce these targets.

Subway committed to eliminating the use of medically important antibiotics in 2015 for all of its meats by 2025³³, but now halfway through the company's planned transition, it has not shown any progress towards meeting this commitment on beef despite quickly making the transition in chicken.

Even more troubling is that both companies seem to be weakening their prior positions on responsible antibiotic use. McDonald's 2018 beef policy aligned with World Health Organization (WHO) guidelines that recommend against the preventive use of medically important antibiotics in food animals,³⁴ but recent statements on the company website seem to support problematic preventive antibiotic use.³⁵ In 2019, Subway moved away from a 2015 commitment to eliminate all antibiotics from all its meats to a more limited reduction in antibiotic use.³⁶ While Subway's 2019 policy is still consistent with WHO recommendations, the change was made without showing any evidence of progress on meats other than chicken and that lack of progress continued in 2020.

Monitoring

Most surveyed companies fail to require their beef suppliers to track and report antibiotics used in the beef that they purchase.

Monitoring antibiotic use is necessary to measure the impact of corporate (and public) policies. Since the goal is to reduce antibiotic overuse, it is essential that companies actually keep track of how much antibiotics are being used by their suppliers. This is especially crucial for those companies that have committed to percent reductions in antibiotic use over time. Companies must track use to set a baseline level from which to measure change. Monitoring and reporting antibiotic use is also important to the increasing numbers of consumers who want to know how their food is produced. It is disappointing that few companies ask their suppliers to track antibiotic use, since this practice is the first step in controlling overuse. More specific findings include:

- » Chipotle is the only surveyed company that both requires suppliers to track antibiotic use and then makes that information public. Chipotle prohibits suppliers from using antibiotics on the beef purchased by the restaurant, so the chain's reported use of antibiotics in beef is zero.
- » Panera's suppliers track antibiotic use in beef, but do not report it to Panera beyond reporting that antibiotics are only used for disease treatment. Panera should ask its beef suppliers to report their antibiotic use, and Panera should make this information publicly available.
- » As part of its 2018 beef policy, McDonald's began requiring suppliers to monitor and track antibiotic use. These data are not reported directly to McDonald's but to a third party, [FAI Farms](#). FAI Farms then provides aggregated data on antibiotic use by its suppliers to McDonald's. McDonald's intended to set reduction targets based on these data by the end of 2020, and committed to reporting on their progress by 2022. So far, the target setting has not been publicized.
- » Wendy's has committed to track and report on its antibiotic use by the end of 2024. Some of Wendy's beef suppliers are already tracking and reporting data to the company.
- » Applebee's, IHOP, and Taco Bell do not currently require suppliers to track and report antibiotic use. Applebee's and IHOP anticipate finalizing their tracking plan in 2021. Taco Bell committed to reduce antibiotic use in its beef supply by 2025, but has not yet started tracking data.

Without these data it is unclear how Taco Bell will be able to set a baseline upon which to measure reductions.

- » Subway and the other 12 restaurant chains surveyed do not report taking any steps to require suppliers to monitor antibiotic use in their beef supplies.

Auditing and Transparency

None of the companies surveyed use 3rd party verification consistently across their beef supplies to monitor responsible antibiotic use. Twelve restaurant chains failed to respond to survey requests.

A company's press statements or published antibiotic use policy are meaningful only if the company can verify progress in sourcing beef raised without the routine use of antibiotics. This requires that suppliers are regularly audited by a third party with trained inspectors who can confirm that the standards, practices and requirements are being met. Restaurant chains with antibiotic use policies for chicken routinely use third-party auditors to verify compliance with those policies. This practice is far less common when it comes to antibiotic use in beef.

- » Chipotle reports that its suppliers use a combination of internal and/or third-party auditing from a variety of certifiers, including but not limited to Global Animal Partnership.³⁷ Chipotle also relies on supplier affidavits and random residue testing. Farms supplying beef to Chipotle are audited annually.

- » Panera does not have a third-party certification for its beef but reports that antibiotic usage is validated by the Australian government through product testing, the National Vendor Declaration, and periodic on-farm review.
- » McDonald's is working with FAI Farms to collect antibiotic use data, but the program is still in the pilot phase and it is not clear what data is reported to McDonald's beyond the amount of antibiotics administered to animals in its supply chains. These data are self-reported by producers and not audited by an independent third-party.
- » Wendy's reports that it requests information on antibiotic use in its internal welfare audit of suppliers. Wendy's also purchases cattle from suppliers that participate in industry certification programs such as Progressive Beef and Beef Quality Assurance. While these programs provide some support for Wendy's policy claims, the authors did not consider these to be meaningful third-party verification programs. Also, the standards for these programs fall far short of what is needed to transform antibiotic use practices in beef production.
- » Eight of the top 20 restaurant chains returned surveys this year, indicating a commitment to transparency regarding their antibiotic use policies. The other 12 companies did not. Those leaving consumers in the dark include influential brands Starbucks, Burger King, and Domino's.



Chain Reaction VI Detailed Scorecard

Company	Beef Policy	Implementation	Monitoring	Transparency	Total Points	Grade*
	35	32	8	19	94	A
	35	32	2	16	85	A-
	28	0	4	16	48	C
	27	0	6	9	42	C
	35	0	0	6	41	C
	20	0	2	6	28	D
 	0	6	2	13	19	D
           	0	0	0	0	0	F

* A comprehensive description of scoring methodology and criteria is provided in Appendix 1.

Antibiotic Resistance and COVID-19: Public Health and Equity

The COVID-19 pandemic has disrupted all of our lives, led to over 600,000 deaths in the U.S. as of press time⁴³ and revealed serious problems within our food and public health systems. Antibiotic resistance is a concurrent global public health crisis that likely has been worsened by the pandemic and has itself made the pandemic worse. Harms stemming from COVID-19 have been exacerbated by both governmental organizations and businesses that failed to take necessary actions to lessen the impacts of the virus. This has been excruciatingly evident within the meatpacking industry, where many meat processors and safety regulators failed to protect workers. Like the COVID-19 crisis, there is concern that antibiotic resistance may disproportionately impact socioeconomically vulnerable populations and communities of color.⁴⁴

Resistant Bacteria and Secondary Infections

Antibiotics are not effective for treating COVID-19, as it is caused by a virus (SARS-CoV2) and not a bacterium. People with COVID-19, however, do sometimes contract and suffer from secondary bacterial infections for which effective antibiotics are essential.⁴⁵ For example, an important cause of death among people hospitalized with COVID-19 is from “ventilator associated pneumonia” which can occur when a ventilator’s plastic tubes provide a path for bacteria to enter the lungs of a very sick COVID-19 patient and overwhelm an already overtaxed immune system.⁴⁶ With the slow-moving pandemic of antibiotic resistance, even last-resort antibiotics are becoming less effective treatments, making bacterial co-infections that much more dangerous⁴⁷ including in the context of COVID-19.

The pandemic itself has likely made the problem of resistance worse as prescribing and infection data for COVID-19 hospitalizations indicate that antibiotics are frequently overused in COVID-19 patients.⁴⁸ Similarly, it may also have contributed to more use in animals by delaying the age at which animals were sent to slaughter leading to more crowding and opportunity for infection.⁴⁹

Increased use of antibiotics accelerates the problem of resistance because any use of an antibiotic selects for resistant bacteria, making it less likely that the antibiotic will work for future infections.⁵⁰ Currently, about 70 percent of antibiotics sold globally are used in food animal production.⁵¹ In the U.S., nearly



For Burgers Smaller is Still Better

This year’s scorecard has seen little movement from national fast food and fast casual restaurants. However, several smaller burger chains continue to source beef raised with responsible antibiotic use practices.

Shake Shack and BurgerFi earned high marks on the 2018 Burger Chain Scorecard for serving only beef raised without antibiotics across all of their restaurants.³⁸ On their websites, these companies share those commitments loudly and proudly.³⁹ These leaders of the fast-casual burger sector also posted increased year-over-year sales from 2018 to 2019, indicating that better beef can be a win for the bottom line as well as for public health.⁴⁰

BGood, a Boston-based chain with locations in several states, serves beef raised without antibiotics as does Burgerville, a Northwestern regional chain.⁴¹ The California-based Burger Lounge serves beef raised without any antibiotics, and Virginia-based Elevation Burger sources organic grass-fed beef raised without antibiotics.⁴²

two-thirds of medically important antibiotics are sold for use in food animal production, not in human medical settings.⁵² Overuse of antibiotics in all settings — healthcare, food animal production, and plant agriculture — increases the pool of resistant bacteria and increases the chance that a COVID-19 (or otherwise ill) patient will develop a secondary infection that is drug-resistant and more difficult to treat.

In fact, recent research reveals large swaths of the U.S. population are walking around healthy, but already colonized with strains of drug-resistant bacteria. Those superbugs then find their opportunity to wreak harm once a person's immune system has first been laid low by another disease, such as, for instance, a new coronavirus or cancer.⁵³

Pandemic Spillover: Meat Supply Chains Can Spread Deadly Disease

Both SARS-CoV-2, the virus that causes COVID-19, and antibiotic-resistant bacteria are pathogens (bacteria, viruses, etc.) that move back and forth between people and animals. COVID-19 is just one of the many disease threats (e.g. Ebola, H1N1 swine flu, and SARS) that spread in animal populations before causing illness in people.⁵⁴ These diseases require effective treatment to control their spread. For COVID-19, treatments have improved from the early days of the pandemic⁵⁵ and people are now receiving vaccines to prevent the virus.

Antibiotic-resistant pathogens can also make the jump from animals to people.⁵⁶ Food animals are common sources of resistant foodborne infections



such as *Salmonella* and *Campylobacter*. Combined, *Salmonella* and *Campylobacter* cause 660,000 resistant illnesses in the U.S. each year (which make up more than 20 percent of the country's 2.8 million annual resistant infections).⁵⁷ Animals likely contribute to many other resistant infections in humans, from staphylococcal infections and urinary tract infections to enterococcal heart infections.⁵⁸ For both COVID-19 and antibiotic resistance, public health infrastructure⁵⁹ and an effective system to monitor the spread of disease in animals are lacking.⁶⁰

Workers and Unequal Impacts

Risk from infectious threats such as COVID-19 and antibiotic resistance are borne unevenly by communities across the United States. Race-based disparities play out in terms of exactly which communities of people suffer the greatest risk of exposure to infectious agents. People who work in slaughterhouses to process animals into beef, as well as pork or poultry, are disproportionately Latino, Black, or Indigenous people, and often immigrants, as well.⁶¹ Evidence shows that people from these same communities also are much more likely to become seriously ill and die from COVID-19.⁶² Their greater vulnerability stems from discrimination, higher rates of pre-existing risk factors such as high blood pressure and asthma, lack of access to health resources, and income inequality, in addition to increased exposure through work.⁶³

This is clearly illustrated in the meatpacking industry where the predominantly Latino and immigrant workers have experienced high rates of infection and death as meat processors failed to take steps to adequately protect them.⁶⁴ Almost 60,000 meat plant workers had been infected and almost 300 had died from COVID-19 as of April 2021.⁶⁵ Unfortunately, not only have meat plant workers been disproportionately affected by COVID-19, but as a result their families and communities likely have been as well. High infection rates of COVID-19 in many meat plants likely contributed to the extensive spread of the virus in surrounding communities where packing plants are located. One estimate found that infections spread in meat packing plants likely led to hundreds of thousands of additional cases by July of 2020.⁶⁶

Farm, meatpacker, and other food system workers are also disproportionately impacted by antibiotic resistance.⁶⁷ These predominantly workers of color are more likely to be exposed to resistant bacteria, become infected and become a source of resistant infections in their communities.⁶⁸ While the impacts



of antibiotic resistance on historically marginalized groups has not been well studied, the available evidence shows that similar to COVID-19, those who are Black, Indigenous or People of Color may suffer disproportionately from the impacts of antibiotic resistance.⁶⁹ In light of the health threat caused by COVID-19, antibiotic-resistant bacteria and other infectious pathogens, health inequities and disparities need to be addressed and considered when developing policies and other interventions.

Packers and the Supply Chain

Four huge meatpackers – Cargill, JBS, Tyson Foods and National Beef – account for more than 80 percent of all U.S. beef slaughter.⁷⁰ These companies reduce their fixed per animal processing costs in part by having very large (fewer buildings, less land, etc.) slaughter plants.⁷¹ As plant size grew there was a shift

from relatively well paid labor to much lower relative wages and a shift to non-unionized immigrant labor.⁷² Under normal circumstances, this model has worked well for these meatpackers.

However, the concentration of slaughter and processing in the meat sector has resulted in a much less resilient food system, where the collapse of a single plant can impact livestock production not only regionally, but nationally. These longstanding vulnerabilities caused by concentration in the meat sector were exposed by COVID-19. Last spring, with COVID-19 spreading in packing plants, several of the largest slaughter facilities had to shut down as thousands of workers became sick. This primarily impacted pork and beef slaughter and at its peak resulted in 45 percent of daily slaughter capacity being lost in these industries.⁷³ This, in turn, had

significant ramifications for livestock producers who had no way to sell and process their animals. The industry saw steep drops in prices for live animals, along with overly-crowded animal housing for those who were unable to sell when planned, and in some cases large scale culling of animals that were not able to be sold at all.⁷⁴ Data has not been released for sales of antibiotics in animals for 2020, but it is likely that sales per animal increased due to the animal crowding and other market disruptions caused by COVID-19.⁷⁵

These large companies dominating U.S. beef production have done a poor job responding to the COVID-19 crisis in general, and more specifically have failed to protect the health of workers and the communities where the slaughter facilities are located.⁷⁶ The same could be said for the industry's response to the global crisis around antibiotic overuse, which in turn is a key driver of the global crisis in antibiotic resistance. For example, none of the major beef processors — Cargill, JBS, Tyson or National Beef — report publicly data on the amount of antibiotics used to produce the meat they sell and none have adopted policies restricting the routine use of antibiotics in feedlots.



Big Beef Packers Not Helping

The top four meatpackers control over 80% of the U.S. beef supply. While most market some beef under reduced antibiotic use programs such as organic or raised without antibiotics, none of the four prohibit routine antibiotic use as part of their standard operating procedures.

JBS explicitly allows the preventive use of antibiotics in beef. They require suppliers to track antibiotic use, but do not state that suppliers share the data with them and they do not report information on antibiotic use publicly.⁷⁷ JBS markets some grass-fed and organically raised beef.⁷⁸

Tyson Foods prohibits antibiotic use in their chickens but does not limit how antibiotics may be used in cattle for much of their beef, beyond following existing laws. Tyson Foods does market some beef as raised without antibiotics.⁷⁹

Cargill states that it is committed to not using antimicrobials that are critically important for human medicine⁸⁰ and reports that it has reduced use of one critically important antibiotic (tylosin) by 20 percent from some of its beef feedlots.⁸¹ Cargill has no policy restricting routine antibiotic use and has reported no progress since 2016 on reducing use of critically important antibiotics.

National Beef lacks any public commitment to track or reduce antibiotic use in cattle except for some beef produced under a raised without antibiotics label.⁸²





Restaurants and COVID-19

Restaurants were some of the businesses hardest hit by the COVID-19 pandemic. The pandemic-related recession, government and business action to limit exposure to the virus, and individual consumer choices not to expose themselves led to a strong shift away from eating out. In the first eight months of 2020, the spending on food away from home dropped by over 20 percent compared to 2019, while in-store sales of food and beverages increased by over 10 percent. This led to the closure of more than 100,000 restaurants and the loss of 2 million restaurant jobs.⁸³

While overall chain restaurants fared better than independent restaurants, those that were able to shift to take away did better than chains that relied on customers eating in.⁸⁴ Pizza Hut, Wendy's, and IHOP saw a large number of closures as major franchisees went bankrupt.⁸⁵ Other chains also saw closures in 2020 as well (see box for examples).

Chain location closures

- » McDonalds 200 closures ⁸⁶
- » Starbucks 500 closures ⁸⁷
- » Subway 2000 closures ⁸⁸
- » Burger King 200 closures ⁸⁹

Because of the impact COVID-19 had on restaurant chains, we delayed the Chain Reaction survey and report. However, antibiotic resistance as a public health crisis remains. Companies need to keep moving forward with the commitments they have made to reduce the overuse of antibiotics and companies that have not made commitments need to make them. Dine Brands, which operates Applebee's and IHOP, showed this year that they were able to increase the amount of meat from animals raised under responsible antibiotic use policies served in their U.S. restaurants despite the challenges of COVID-19. Wendy's also moved forward with a new commitment to end routine use in its beef supply chain.

Conclusion

As demonstrated in ways big and small by the COVID-19 pandemic, actions taken by decision makers save lives. A recent CDC analysis showed that state mandated mask wearing was associated with significantly decreased COVID-19 cases and death rates, while the allowance of in-restaurant dining had the opposite effect.⁹⁰ This is consistent with the evidence from meat packing plants, showing that the failure to protect workers led to increased illness and death in workers and in surrounding communities.⁹¹

Similarly, for antibiotic resistance, taking steps to reduce overuse of antibiotics is needed to protect lives. Studies from Europe have shown that countries that have reduced antibiotic use on farms have significantly lower resistance in bacteria collected from food animals,⁹² but even more importantly reducing antibiotic use in animals also is correlated with reductions in resistance in human infections.⁹³ Globally resistance is growing and unless more action is swiftly taken, like by these countries in Europe, the number of global deaths from resistant infections is likely to increase over the next 30 years to 10 million annually.⁹⁴ Action is needed at all levels — by food companies and their shareholders, by consumers, and by local, state and federal policymakers. Restaurant chains by virtue of their buying power should take meaningful actions to reduce the amount of antibiotics used by their meat suppliers to help slow the spread of antibiotic resistance that is damaging and destroying lives.



Cattle raised under healthy conditions such as these at Baseline Farm do not need routine antibiotics.

Recommendations

For Restaurant Chains

- » Make firm, timebound commitments to phase out the routine use of antibiotics across all meat supply chains. As recommended by the WHO, medically important antibiotics should only be used to treat sick animals that have been diagnosed by a veterinarian or to control a verified disease outbreak. Work closely with beef producers to require the phase out of all routine antibiotic use in a timely manner that matches the urgency of this public health threat.
- » Improve data collection and transparency regarding how antibiotics are being used by supplying farms, in what quantities, and for what species and purposes. Share these data with the public on an annual basis to ensure transparency and continuous improvement.
- » Provide regular reports and updates on progress with antibiotic policy implementation to customers and investors.
- » Use third-party certifiers and/or auditors with specific expertise in antibiotic use practices to verify progress.

For Meat Producers

- » Make commitments to require supplying feedlots and farms to phase out routine antibiotic use as recommended by WHO.
- » Identify and implement changes in company standard operating procedures to eliminate the need for routine antibiotics such as providing appropriate diets and providing time after weaning for vaccination and to adapt to solid food before transporting cattle to feedlots. [Chain Reaction V](#) describes steps beef producers can take to reduce the need for antibiotics.⁹⁵
- » Track and report all antibiotic use in the production of food animals in company supply chains.

For Consumers

- » When purchasing meat, seek options raised without the routine use of antibiotics. Look for these labels that confirm responsible antibiotic use practices: USDA Certified Organic, Global Animal Partnership (GAP), American Grassfed, Certified Humane, and Animal Welfare Approved. Animal products bearing these labels are third-party certified. Labels saying “No

Antibiotics Administered” or “Raised Without Antibiotics” also communicate the producer’s commitment to responsible use but may not be third-party verified.

- » Ask restaurant managers about their meat sourcing policies and practices and make sure they know that you’re looking for options that are better for public health, for animals and the environment—including meat produced without the routine use of antibiotics.
- » Visit the websites and social media pages of your favorite restaurant chains and leave comments asking them sell only meat raised without the routine use of antibiotics, i.e., no use of antibiotics except for treatment of sick animals or a verified disease outbreak.
- » Join our campaigns calling on top restaurant chains to commit to better meat sourcing policies. Visit the websites of the report authors for more information.

For Federal Regulators and Policymakers

- » Set a national antibiotic use reduction target for the livestock sector in 2021; this goal should aim to reduce the sales of medically important drugs for food animals by at least 50 percent below 2009 levels (the first year for which sales data are available).
- » Set policy that prohibits routine antibiotic use in food animals for all purposes, especially disease prevention.
- » Update FDA’s list of medically important antimicrobials to align with that of the WHO.
- » Establish a use duration limit of 21 days for any medically important antibiotic used in food animal production.
- » Put in place a comprehensive system to require farm-level data reporting on how antibiotics are used, including information on amounts used, reason for use, and livestock species receiving antibiotics; and improve monitoring of resistant bacteria in food.
- » Strengthen workplace protections for food chain workers, especially from infectious disease.
- » Investigate and include interventions related to racial disparities in health outcomes when addressing antibiotic resistance.

For State and Local Regulators and Policymakers

- » Adopt and implement strong laws that build on the example set by Maryland, incorporating clear language that prohibits the use of antibiotics for growth promotion and disease prevention, and establishes data collection and monitoring provisions.
- » Implement state policies that have been passed. The California Department of Food and Agriculture and the Maryland Department of Agriculture should clearly and effectively implement S.B. 27 and the Keep Antibiotics Effective Act of 2019, respectively.
- » Replicate in other cities the 2017 San Francisco ordinance requiring large grocery chains to report on antibiotic use practices of the meat they sell.

For Investors

- » Consider company policies on antibiotic use — especially for beef — when making personal and institutional investment decisions in restaurant chains.
- » Submit and support shareholder resolutions requiring major buyers and producers to adopt the responsible antibiotic use policies and practices defined throughout this report.

For Public and Private Institutional Meat Buyers, including Schools, Universities, and Hospitals

- » Insist on meat from animals raised by suppliers that do not use medically important antibiotics for routine purposes, and who use antibiotics only to treat sick animals and in temporary circumstances, to control a verified disease outbreak.
- » Look for these labels that confirm responsible antibiotic use practices: Certified Responsible Antibiotic Use (CRAU), USDA Certified Organic, Global Animal Partnership (GAP), American Grassfed, Certified Humane, and Animal Welfare Approved. Animal products bearing these labels are third-party certified. Labels saying “No Antibiotics Administered” or “Raised Without Antibiotics” also communicate the producer’s commitment to responsible use but may not be third-party verified.

Appendix 1: Chain Reaction Methodology and Survey Questions

The authors of this report surveyed (via email) the top 20 U.S. fast food and fast casual restaurant chains, as ranked by total 2019 U.S. sales, asking a series of questions about their 1) antibiotic use policies related to beef procurement; 2) beef policy implementation; 3) monitoring of antibiotic use in beef supplies and 4) transparency, including verification of policy compliance via third-party audits and reporting on implementation progress. The complete survey can be found below. The restaurant chains were given grades based on their policies and action related to antibiotic use in beef.

In addition to reviewing survey responses, the authors examined company websites, annual reports, corporate sustainability reports and other publicly available information on company policies. We sent at least two follow up emails in cases where a company did not respond to the survey. In cases where survey responses or website statements were not clear, we followed up with clarifying questions via email and phone. In instances where there was a discrepancy between the information provided on the survey and in publicly available sources, we made every effort to clarify the gaps and asked companies to align public information with internal communications. In cases where this was not possible, we based our analyses on publicly available information. Appendix 3 contains a summary of surveyed company policies and survey responses.

Survey on Restaurant Antibiotic Policies Related to Beef Procurement October 2020

NAME OF COMPANY¹ _____

ANTIBIOTICS POLICY AND IMPLEMENTATION

1. Does your company have a publicly-available, written policy restricting the use of antibiotics by your beef suppliers? Yes _____ No _____

If yes, please provide the policy URL:

Please mark which of the options best describes your company's beef policy.

- A. No antibiotics ever (raised without antibiotics) _____
- B. No routine use of medically important antibiotics*(e.g. feeding tylosin for liver abscesses and/or chlortetracycline for shipping fever prevention is prohibited) _____
- C. Reduction in volume of antibiotics administered _____
1. Target for reduction (% decrease) _____
 2. What is your baseline for reductions (i.e. what year)? _____

What percent of currently marketed product is compliant with above policy? _____

When (i.e. which year) does your company commit to fully implementing the above policy? _____

¹All inquiries in this survey apply to your company's U.S. locations, either company or franchise owned.

*Medically important includes all those antibiotics that the World Health Organization (WHO) classifies as important, highly important, or critically important.

MONITORING ANTIBIOTIC USE

2. Do your suppliers track the type and amount of antibiotics used to produce the beef served at your restaurants?

Yes _____ No _____ I do not know _____

If yes, do they share these data with you?

Yes _____ No _____

If they do report to you, what metric is used for this data (e.g. mg of antibiotic per pound of live weight produced, or number of antibiotic doses per animal raised?)

Do you report on antibiotic use shared with you by your suppliers?

Yes _____ No _____

If yes, provide URL: _____

If no, do you commit to reporting these data in the future?

Yes _____ No _____

If yes, when (i.e. which year) does your company commit to reporting these data? _____

ANTIBIOTICS POLICIES REPORTING AND VERIFICATION

3. Do your suppliers use independent third-party auditors to verify compliance with your company antibiotics policy?

Yes _____ No _____

If yes, what is the name of the third party auditor (i.e. USDA PVP, GAP, organic certifier, etc.)?

Are the supplier auditing standards publicly available?

Yes _____ No _____

How frequently are supplying farms visited by auditors as part of antibiotic policy audits

4. If your company does its own antibiotic policy auditing of suppliers, please describe your approach:

5. If your auditing standards are publicly available, please provide the URL or indicate that the standards are attached: _____

6. What is your policy regarding suppliers who are found to be non-compliant?

7. Do you publicly report progress on the implementation of your policy at least annually, or when important milestones are met, on your website or elsewhere?

Yes _____ No _____

If yes, provide URL for progress report: _____

If your policy is less than one year old, have you committed to issuing a public progress report on the one-year anniversary of your antibiotics policy?

Yes _____ No _____

Appendix 2: Scoring Criteria

Report authors adapted the typical Chain Reaction scoring rubric to capture the inherent complexities and variation in antibiotic use policies adopted by companies for their beef supplies. Our approach considers that some companies are using a continuous improvement approach to their commitments, with gradual reductions in antibiotic use made year to year though not across entire supply chains or all medically important drugs in some instances. It also allows for the fact that some companies do not have meaningful policies in place, though they are asking suppliers to reduce medically important antibiotic use. This is similar to previous scoring protocols in that it awards a total of 100 potential points to the top companies but it includes a new category “Monitoring” in addition to the three categories used for scoring previously: 1) Policy; 2) Implementation; and 3) Transparency. The authors made minor adjustments to points allocations within existing categories compared to previous years and surveyed the top 20 chains serving beef not the top 25 chains overall.

Category #1: Policy

Total points available: 35

The authors consider a company policy “meaningful” if it aligns with the following standard, which is consistent with the WHO Guidelines issued in 2017.

“A publicly available company policy that prohibits the use of all antibiotics, or antibiotics in classes used in human medicine, for growth promotion and disease prevention. Treatment of sick animals and use to control a verified disease outbreak or for medical or surgical procedures are acceptable.”

The policy subscore reflects whether it applies to the full beef supply, and the percent reduction in medically important antibiotic use. We considered commitments to antibiotic use reductions only a partial policy and scored accordingly. Companies can receive up to 25 points for either having a meaningful, comprehensive policy as defined above, or for committing to reducing antibiotics use in beef based on a percent reduction. Another 10 points could be earned if a policy will be fully implemented by 2025 or 3 points for a commitment to fully implement the policy by 2030.

GRADE SCALE: CHAIN REACTION VI SCORECARD	91-100	A
	84-90	A-
	77-83	B+
	67-76	B
	60-66	B-
	51-59	C+
	41-50	C
	30-40	D+
	19-29	D
	<18	F

Policy Criteria	Available Points
<i>Meaningful policy (as defined above) applied comprehensively, across entire supply chain</i> OR	25 points OR
<i>Pledge to reduce medically important antibiotics (pro-rated based on percent reduction)</i>	
15-24%	5
25-40%	10
41-60%	15
61-90%	20
91% or higher	25
<i>Completing policy implementation within 10 years</i> OR <i>Completing policy implementation within 5 years (or already completed)</i>	3 points OR 10 points

Category #2: Implementation

Total points available: 32

Companies received points based on their beef policy implementation progress. For policies that apply to only a fraction of a company's supply chain, points are prorated as follows: % of supply under policy x # of points available for appropriate implementation category.

Percent of beef supply compliant with antibiotic use policy or approach	Available Points
5-40%	6 points
41-60%	12 points
61-75%	18 points
76-90%	24 points
91-100%	32 points

Category #3: Monitoring Antibiotic Use

Total points available: 8

Companies received points for purchasing from suppliers that monitor antibiotic use data and report it to the restaurant chain. Companies could get partial credit (1 point) if a proportion of their suppliers monitor antibiotics use and an additional 1 point if some of their suppliers report use to the company. Points were given for the company reporting or committing to report antibiotic use data within 5 years.

Monitoring Criteria	Available Points
<i>Supplier tracks antibiotic use data</i>	2 points
<i>Supplier reports data to restaurant chain</i>	2 points
<i>Chain publicly reports antibiotic use by suppliers</i> OR	4 points OR
<i>Commits to report data within 5 years</i>	2 points

Category #4: Transparency

Total points available: 25

Companies were scored on several transparency criteria: whether a company responded to the survey; if antibiotic use policy claims are being audited; and if it publicly reports on implementation progress.

Companies could receive full credit for complete survey responses, or partial credit if key information was missing. Full credit was awarded to companies that either utilized independent third-party audits to verify compliance with their antibiotic use policy or purchased from suppliers that conducted third-party audits of their own supply chains. Half credit was given to companies that showed evidence of auditing suppliers using internal resources. Additional points were awarded if audit standards are public and if the audit includes at least one on-site farm visit annually.

Full credit also went to companies that provided regular progress updates on implementation of their policies. For full credit, companies must publish updates online, at least annually. We gave full credit for various forms of update communication, including dedicated webpages, press releases, and corporate social responsibility reports. If a policy was less than a year old, and a company made a commitment to issue a progress report in the future, they received half credit.

Transparency Criteria	Available Points
Complete response to survey OR	6 points OR
Partial response to survey	3 points
Company works with independent third-party auditors; or suppliers that have third party audits for entire beef supply chain under antibiotics policy OR	6 points OR
Internal company audit	3 points
Audit standards are public	3 points
On site farm inspection annually	3 points
Public progress report on policy implementation is available online OR	7 points OR
If policy is less than a year old, commitment to issue annual online progress report	5 points

Appendix 3: Summary of Policies and Survey Responses for Top 20 Restaurants Serving Beef [Updated 7/5/21]

Information in this Appendix concerning company ownership, number of restaurant locations and sales of fast food restaurant companies comes from Restaurant Business “2020 Top 500 Chains”⁹⁶ and/or company websites. Companies are listed in order of total 2019 sales, in dollars.

Information concerning companies’ antibiotics policies and other policies comes from companies’ responses to the survey, follow up emails, public statements made by the companies, and/or efforts by the report’s authors to locate such policies online. The report’s authors encourage restaurant chains to contact them directly with additional information concerning antibiotics and/or meat sourcing policies, and to make such information publicly available.

1. McDonald’s

Owned by: McDonald’s Corporation (NYSE: MCD)

Corporate headquarters: 110 N Carpenter St, Chicago, IL 60607

CEO: Chris Kempczinski

Number of U.S. Locations: 13,846

2019 U.S. Sales: \$40.41 billion

Returned the Survey: Yes

Information concerning beef sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policies:

Overall policy: <https://corporate.mcdonalds.com/corpmcd/our-purpose-and-impact/food-quality-and-sourcing/responsible-antibiotic-use.html>

Beef Specific Policy:

https://corporate.mcdonalds.com/content/dam/gwscorp/scale-for-good/McDonalds_Beef_Antibiotics_Policy.pdf

“Routine use of medically important antibiotics for prevention of disease is not permitted. Medically important antibiotics for human medicine are not permitted for the prevention of infectious diseases in food-producing animals in McDonald’s Supply Chain except in the following narrowly-defined non-routine situation: Based upon the determination of a qualified veterinarian familiar with the disease history in the herd, non-routine prevention uses may be permitted if there is a high risk of contraction of a particular infectious disease...”

Implementation Strategy and Timeline:

By the end of 2020, we will establish market-specific reduction targets for medically important antibiotics, based on our pilot findings.

Starting in 2022 - we will be reporting progress against antibiotic reduction targets across our top 10 beef sourcing markets.”

McDonald’s failed to meet the goal to set market-specific reductions by the end of 2020.

Antibiotic use monitoring in beef:

McDonalds “partnered with FAI Farms in Oxford, UK, which collects and checks data independent of McDonald’s in relation to antibiotic use within our beef supply chain during our pilot test.”⁹⁷

Third Party Antibiotics Audits for Beef:

Not reported beyond data sharing as part of pilots described above.

2. Starbucks

Owned by: Starbucks Corporation (NASDAQ: SBUX)

Corporate headquarters: 2401 Utah Ave S, Suite 800, Seattle, WA 98134

CEO: Kevin Johnson

Number of U.S. Locations: 15,049

2019 U.S. Sales: \$21.38 billion

Returned the Survey: No

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy: <https://stories.starbucks.com/press/2018/animal-welfare-friendly-practices/>

Mentions serving only poultry that was raised without the eliminating routine use of medically important antibiotics but has no similar policy for beef. The welfare policy states the following is a focus but does not indicate any related action:

“Supporting the responsible use of antibiotics to promote animal health, including the elimination of routine uses, such as growth promotion and routine disease prevention, of medically important antibiotics.”⁹⁸

Monitoring for Antibiotic Use and Third-Party Antibiotics Audits:

None found

3. Taco Bell

Owned by: Yum! Brands, Inc. (NYSE: YUM)

Corporate headquarters: 1 Glen Bell Way, Irvine, CA 92618

CEO: Mark King

Number of U.S. Locations: 6,766

2019 U.S. Sales: \$11.29 billion

Returned the Survey: Yes

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policies:

Overall policy: <https://www.yum.com/wps/wcm/connect/yumbrands/2db663b1-31c9-4637-96d7-7fbc72cb9d94/Good-Antimicrobial-Stewardship.pdf?MOD=AJPERES&CVID=n8OZWde>

Beef Specific Policy: <https://www.tacobell.com/faq/our-purpose-food>

“Building upon its commitment to making its beef more sustainable from January 2019, Taco Bell has committed to reduce antibiotics important to human health* in its U.S. and Canada beef supply chain by 25% by 2025.”

Monitoring for Antibiotic Use and Third-Party Antibiotics Audits:

None reported in survey response.

4. Subway

Owned by: Doctor's Associates Inc.

Corporate headquarters: 325 Sub Way, Millford, CT 06461

CEO: John Chidsey.

Number of U.S. Locations: 23,801

2019 U.S. Sales: \$10.20 billion

Returned the Survey: Yes

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy:

Overall Policy: https://www.subway.com/-/media/_SubwayV2/ResponsibilityPage/Docs/Subway-Global-Antibiotics-Policy.pdf

“Suppliers will be required to eliminate the use of all classes of “medically important antimicrobials” as defined by the WHO for preventative purposes when disease has not yet been clinically diagnosed.”

Subway has committed to transition all meats to this policy by 2025 with poultry already compliant.⁹⁹

Beef specific policy: Subway has no beef specific policy but beef is covered by the general policy.

Monitoring for Antibiotic Use and Third-Party Antibiotics Audits:

None reported in survey response

5. Burger King

Owned by: Restaurant Brands International (NYSE: QSR)

Corporate headquarters: 5505 Blue Lagoon Drive, Miami, FL 33126

CEO: José Cil

Number of U.S. Locations: 7,346

2019 U.S. Sales: \$10.20 billion

Returned the Survey: No

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy: <https://www.rbi.com/sustainability/responsible-sourcing/animal-welfares/>

Beef specific policy: Restaurant Brands International (parent company of Burger King, Popeyes and Tim Hortons) states on its website: “In 2020 we engaged industry experts and suppliers to expand our policy related to antibiotics use in beef cattle and dairy cows. Our next step is to develop a strategy and timeline for implementation. By expanding this policy, our goal is to measure and understand the current use of antibiotics in the beef supply chain of each brand, and implement targets to reduce the use of antibiotics important to human medicine* in our supply chain and to end animal care practises that lead to their overuse.”

Monitoring for Antibiotic Use and Third-Party Antibiotics Audits:

None found for Beef.

6. Wendy's

Owned by: The Wendy's Company (NASDAQ: WEN)

Corporate headquarters: 1 Dave Thomas Blvd, Dublin, OH 43017

CEO: Todd A. Penegor

Number of U.S. Locations: 5,852

2019 U.S. Sales: \$9.76 billion

Returned the Survey: Yes

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy:

<https://www.wendys.com/csr-what-we-value/food/responsible-sourcing/animal-welfare/antibiotic-use-policy>

"In 2016, Wendy's set a long-term goal to phase out the routine use of medically important antibiotics within our protein supply chain. Since then, we have been actively working alongside our Wendy's Animal Welfare Council and supplier partners to find ways to meaningfully reduce antibiotic use while still allowing for the treatment of animals when they get sick."

Beef Specific Policy: "By the end of 2030 100% of our U.S. and Canadian beef, chicken and pork will be sourced from suppliers that prohibit the routine use of medically important antibiotics"¹⁰⁰

Monitoring for Antibiotic Use and Third-Party Antibiotics Audits:

"By the end of 2024 Through the Wendy's Animal Care Standards Program, we will map and report on the use of medically important antibiotics and will set targets and strategies to reduce the use of those antibiotics over time within our beef and pork supply chains in the U.S. and Canada."¹⁰¹

7. Domino's

Owned by: Domino's Pizza, Inc. (NASDAQ: DPZ)

Corporate headquarters: 30 Frank Lloyd Wright Dr, Ann Arbor, MI 48105

CEO: Richard E. Allison Jr.

Number of U.S. Locations: 6,126

2019 U.S. Sales: \$7.04 billion

Returned the Survey: No

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy:

<https://biz.dominos.com/about/stewardship/sourcing/>

Beef and Pork: "We intend to transition to pork and beef sourced from animals raised without the routine use of medically-important antibiotics for disease prevention purposes once a sufficient supply of such pork and beef is available in the U.S. market from suppliers who satisfy our food safety, quality, cost and other product standards, and who can demonstrate their ability to reliably source and distribute these products with appropriate business continuity measures."¹⁰²

Monitoring for Antibiotic Use and Third-Party Antibiotics Audits:

None found for Beef.

8. Panera Bread

Owned by: JAB Holding Company

Corporate headquarters: 3630 S Geyer Rd Ste #100, St Louis, MO 63127

CEO: Niren Chaudhary

Number of U.S. Locations: 2,160

2019 U.S. Sales: \$5.89 billion

Returned the Survey: Yes

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy:

<https://www-beta.panerabread.com/content/dam/panerabread/integrated-web-content/documents/animal-welfare-our-beliefs-12-20-2016.pdf>

“We only allow use of non-medically important antibiotics only for disease treatment under the care of a veterinarian.”¹⁰³

Beef Specific Policy: “Panera’s 2019 Animal Welfare Progress Update 99% of our beef 3.9M pounds grass-fed and-finished beef”¹⁰⁴

Monitoring for Antibiotic Use: “While our supplier of fully cooked beef does not report these to us, their raw material supplier does track doses and dates given for every animal. This is reported for each animal through the AU National Vendor Declaration as our product currently is all from Australia.”¹⁰⁵

Third Party Antibiotics Audits:

None reported for Beef

9. Pizza Hut

Owned by: Yum! Brands (NYSE: YUM)

Corporate headquarters: 7100 Corporate Dr, Plano, TX

CEO: Interim President Kevin Hochman

Number of U.S. Locations: 7,306

2019 U.S. Sales: \$5.56 billion

Returned the Survey: No

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy:

Overall Policy:

“Currently, all of our U.S. brands follow U.S. Food and Drug Administration guidelines for antibiotic use in food animals and none of our U.S. brands source from suppliers who use antibiotics to promote growth. Taco Bell U.S. and Pizza Hut U.S. (on chicken for its pizza) have met public commitments to remove antibiotics important to human medicine from our U.S. poultry supply chain.”¹⁰⁶

Beef Specific Policy: None found

Monitoring for Antibiotic Use and Third-Party Antibiotics Audits:

None found for beef.

10. Chipotle

Owned by: Chipotle Mexican Grill, Inc. (NYSE: CMG)

Corporate headquarters: 610 Newport Center Drive, Suite 1300, Newport Beach, CA 926601401 Wynkoop St #500 Denver, CO 80202

CEO: Brian Niccol

Number of U.S. Locations: 2,584

2019 U.S. Sales: \$5.51 billion

Returned the Survey: Yes

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy:

Overall policy:

“Chipotle is dedicated to the avoidance of antibiotics for prophylactic, or preventative, use. We do not allow sub-therapeutic antibiotic use for any animals in our meat supply chain.”¹⁰⁷

Beef specific policy: “In 2020, 100% of our chicken and beef came from suppliers meeting the No Antibiotics Ever standard.”¹⁰⁸

Monitoring for Antibiotic Use and Third-Party Antibiotics Audits:

Chipotle conducts a combination of internal and third-party audits to confirm compliance with No Antibiotics Ever policy. For beef, this requires suppliers to monitor antibiotic use to ensure that meat from treated animals is not supplied to Chipotle.¹⁰⁹

11. Sonic

Owned by: Inspire Brands (NASDAQ: SONC)

Corporate headquarters: 300 Johnny Bench Dr, Oklahoma City, OK 73104

CEO: J. Clifford Hudson

Number of U.S. Locations: 3,526

2019 U.S. Sales: \$4.69 billion

Returned the Survey: No

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy: <https://corporate.sonicdrivein.com/animal-welfare/>.

Overall Policy:

“Effective January 2017, poultry suppliers should only administer antimicrobial drugs to animals for the prevention, control and treatment of disease. Animals will be treated when necessary for animal welfare. Use of antibiotics that are medically important to humans, for the sole purpose of growth promotion is strictly prohibited.”¹¹⁰

Author’s note: Sonic’s current antibiotic use standard essentially reiterates current FDA guidelines, and is not considered to be a meaningful antibiotic use policy.

Beef specific policy: None found

Monitoring for Antibiotic Use and Third-Party Antibiotics Audits:

None found.

12. Olive Garden

Owned by: Darden Restaurants, Inc. (NASDAQ: DRI)

Corporate headquarters: 1000 Darden Center Dr, Orlando, FL 32837

CEO: Dan Kiernan

Number of U.S. Locations: 866

2018 U.S. Sales: \$4.29 billion

Returned the Survey: No

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy: <https://darden.com/citizenship/plate/sourcing>

Overall Policy:

“Darden requires its suppliers to comply with the FDA guidelines which recommend that antibiotics that are important in human medicine no longer be used with farm animals for growth purposes, and shared-class antibiotics (i.e., those used both humans and animals) only be used to treat, prevent and control disease in farm animals under the supervision of a veterinarian.”¹¹¹

Author's note: Olive Garden's current antibiotic use standard essentially reiterates current FDA guidelines, and is not considered to be a meaningful antibiotic use policy.

Beef specific policy: None found

Monitoring for Antibiotic Use and Third-Party Antibiotics Audits:

None found

13. Applebee's

Owned by: Dine Brands Global (NYSE: DIN)

Corporate headquarters: 450 N Brand Blvd, Glendale, CA 91203

CEO: John Peyton

Number of U.S. Locations: 1,665

2019 U.S. Sales: \$4.09 billion

Returned the Survey: Yes

Author's note: Dine Brand Global responded jointly for both of its brands Applebee's and IHOP so antibiotic information for each chain is the same.

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy: <https://www.dinebrands.com/en/social-responsibility/animal-welfare>

Overall Policy:

“We support animal production practices that reduce, and, where possible, eliminate the need for antibiotic therapies in food animals by adoption of best practices and /or new practices. Treating sick and injured animals and controlling an identified disease outbreak under veterinary supervision is important and are the only reasons for use of medically important antibiotics. We continue to work with our suppliers so that antibiotics are used judiciously, and their effectiveness maintained.”¹¹²

Beef specific policy: “Supplier progress of the percentage of animals raised without use of medically important antibiotics except for treatment of sick and injured animals or controlling an identified disease outbreak under veterinary supervision: 7% Beef”

Monitoring for Antibiotic Use: “As part of our policy our goal is to develop a tracking tool to more accurately measure supplier antibiotic reduction progress by the end of 2021.”¹¹³

Third Party Antibiotics Audits: “We will require annual third-party auditing and ask our chicken, pork and beef suppliers to track and report to us their antibiotic use for meat supplied to us. We have begun reporting progress as noted below and will continue to do so.”¹¹⁴

14. Panda Express

Owned by: Panda Restaurant Group

Corporate headquarters: 1683 Walnut Grove Avenue, Rosemead, CA 91770

CEO: Andrew Cherng

Number of U.S. Locations: 2,209

2019 U.S. Sales: \$3.95 billion

Returned the Survey: No

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy:

No published policy available. Panda Express serves “chicken raised without antibiotics for select items.”¹¹⁵

Monitoring for Antibiotic Use and Third-Party Antibiotics Audits: Third Party Antibiotics Audits:

None found

15. Arby's

Owned by: Inspire Brands

Corporate headquarters: 1155 Perimeter Center West, 12th Floor, Atlanta, GA 30338

CEO: Jim Taylor

Number of U.S. Locations: 3,359

2019 U.S. Sales: \$3.88 billion

Returned the Survey: No

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy: <https://impact.inspirebrands.com/sustainability/>

Overall Policy: “Our brands also follow all applicable FDA guidelines related to antibiotic use. This includes the judicious use of antibiotics, under the supervision of a veterinarian, to prevent or treat illness in the animals.”¹¹⁶

Author's note: Arby's current antibiotic use standard essentially reiterates current FDA guidelines, and is not considered to be a meaningful antibiotic use policy.

Beef specific policy: None found.

Monitoring for Antibiotic Use and Third-Party Antibiotics Audits:

None found.

16. Little Caesars Pizza

Owned by: Ilitch Holdings, Inc.

Corporate headquarters: 2211 Woodward Ave, Detroit, MI 48201

CEO: David Scrivano

Number of U.S. Locations: 4,237

2019 U.S. Sales: \$3.81 billion

Returned the Survey: No

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy:

No published policy available.

Monitoring for Antibiotic Use and Third-Party Antibiotics Audits: None found

17. Dairy Queen

Owned by: International Dairy Queen, Inc. (owned by Berkshire Hathaway, Inc., NYSE: BRK)

Corporate headquarters: 8000 Tower, Suite 700, 8331 Norman Center Drive, Bloomington, MN 55437

CEO: Troy Bader

Number of U.S. Locations: 4,381

2019 U.S. Sales: \$3.76 billion

Returned the Survey: No

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy:

Dairy Queen refers to antibiotic use on a specific page on Chicken Welfare¹¹⁷ but has no general policy.

Beef Specific policy: None found.

Monitoring for Antibiotic Use and Third-Party Antibiotics Audits:

None found.

18. Buffalo Wild Wings

Owned by: Inspire Brands

Corporate headquarters: 5500 Wayzata Blvd #1600, Minneapolis, MN 55416

CEO: Lyle Tick

Number of U.S. Locations: 1,206

2019 U.S. Sales: \$3.67 billion

Returned the Survey: No

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy: <https://impact.inspirebrands.com/sustainability/>

Overall Policy: "Our brands also follow all applicable FDA guidelines related to antibiotic use. This includes the judicious use of antibiotics, under the supervision of a veterinarian, to prevent or treat illness in the animals."¹⁸

Author's note: Buffalo Wild Wings current antibiotic use standard essentially reiterates current FDA guidelines, and is not considered to be a meaningful antibiotic use policy.

Beef specific policy: None found.

Monitoring for Antibiotic Use and Third-Party Antibiotics Audits:

None found.

19. Jack in the Box

Owned by: Jack in the Box Inc. (NASDAQ: JACK)

Corporate headquarters: 9330 Balboa Ave, San Diego, CA 92123

CEO: Darin Harris

Number of U.S. Locations: 2,243

2019 U.S. Sales: \$3.50 billion

Returned the Survey: No

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy: https://s25.q4cdn.com/507451327/files/doc_downloads/safety/AW-03.15.2021.pdf

Overall Policy: "We encourage continued research into the development of safe and ethical alternatives for the treatment of sick and injured animals, and we look forward to a time when antibiotics important to human medicine can be phased out of the food-supply chain."¹⁹

Monitoring for Antibiotic Use and Third-Party Antibiotics Audits:

None found.

20. IHOP

Owned by: Dine Brands Global, Inc (NYSE: DIN)

Corporate headquarters: 450 N Brand Blvd, 7th Floor, Glendale, CA 91203

CEO: John Peyton

Number of U.S. Locations: 1,710

2019 U.S. Sales: \$3.27 billion

Returned the Survey: Yes

Information concerning meat sourcing as reported in disclosed policies, public statements, publicly available information or correspondence with the authors:

Antibiotics Policy: <https://www.dinebrands.com/en/social-responsibility/animal-welfare>

Author's note: Dine Brand Global responded jointly for both of its brands Applebee's and IHOP so antibiotic information for each chain is the same.

Overall Policy:

"We support animal production practices that reduce, and, where possible, eliminate the need for antibiotic therapies in food animals by adoption of best practices and /or new practices. Treating sick and injured animals and controlling an identified disease outbreak under veterinary supervision is important and are the only reasons for use of medically important antibiotics. We continue to work with our suppliers so that antibiotics are used judiciously, and their effectiveness maintained."¹²⁰

Beef specific policy: "Supplier progress of the percentage of animals raised without use of medically important antibiotics except for treatment of sick and injured animals or controlling an identified disease outbreak under veterinary supervision: 7% Beef"

Monitoring for Antibiotic Use: "As part of our policy our goal is to develop a tracking tool to more accurately measure supplier antibiotic reduction progress by the end of 2021."¹²¹

Third Party Antibiotics Audits: "We will require annual third-party auditing and ask our chicken, pork and beef suppliers to track and report to us their antibiotic use for meat supplied to us. We have begun reporting progress as noted below and will continue to do so."¹²²

Appendix 4: WHO Guidelines on Use of Medically Important Antimicrobials in Food-Producing Animals¹²³

In November 2017, the World Health Organization formally adopted a set of guidelines on the use of medically important antibiotics in livestock and poultry production. The guidelines focus on on-farm practices that can best help to preserve the future efficacy of antibiotics for treating people and animals. Approved WHO guidelines are developed under a strict and fully transparent process; to ensure a strong scientific basis, these guidelines drew upon two separate, peer-reviewed summaries of the scientific literature.¹²⁴

Key recommendations from the guidelines include:

- » Overall reduction in the use of all classes of medically important antimicrobials in food-producing animals.
- » Complete restriction of use of all classes of medically important antimicrobials in food-producing animals for growth promotion.
- » Complete restriction of use of all classes of medically important antimicrobials in food-producing animals for prevention of infectious diseases that have not yet been clinically diagnosed.

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Food Animal Concerns Trust expands safe and humanely raised food options by supporting humane farmers and advocating against antibiotic overuse and harmful drugs in farm animals. Our Humane Farming Program invests in family farmers seeking to raise their animals humanely by providing them with grants, scholarships, and webinars. Our Food Safety Program advocates for stronger corporate and federal policies that eliminate the overuse of antibiotics and veterinary drugs known to be harmful to consumers. Together they expand safe and humane practices on farms across the country.



The Antibiotic Resistance Action Center (ARAC) at the Milken Institute School of Public Health at George Washington University was created to preserve the effectiveness of antibiotics by engaging in research, advocacy, and science-based policy. ARAC is focused on finding out-of-the box solutions to antibiotic resistance, one of the greatest public health threats of our time. Visit us at battlesuperbugs.com and follow us on Twitter, Instagram and Facebook @battlesuperbugs



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