

ISSUE PAPER

CRYING FOWL: MAJOR GROCERS STUMBLE IN PROMOTING ANTIBIOTIC STEWARDSHIP IN RETAIL CHICKEN

SUMMARY

Across the country, scientists, physicians, and public health advocates have been sounding the alarm over rising rates of antibiotic resistance, one of the major public health crises of our time. According to the Centers for Disease Control and Prevention, each year at least 23,000 people in the United States lose their lives to antibiotic-resistant infections and an additional two million are sickened. Prominent health organizations such as the World Health Organization (WHO), the Infectious Disease Society of America, and the American Academy of Pediatrics agree that overuse of antibiotics in poultry and livestock production, in addition to human medicine, is a major contributor to antibiotic resistance.

While the federal government, including the U.S. Food and Drug Administration (FDA), has been slow to curb the routine use of antibiotics, consumers have been driving change by voting with their wallets. Consumers visit supermarkets 1.5 times per week, exerting enormous purchasing power over what these stores carry. So, when consumers buy more meat and poultry raised without the routine use of antibiotics, and demand these better meat choices, they exert powerful influence on the marketplace. And it is in the chicken industry that we have seen the fastest response to consumer demand.

A significant number of chicken producers and fast-food chains have made public commitments in the past two years, pledging to phase out the routine use of antibiotics that are important for human medicine ("medically important antibiotics") in raising chickens. Thanks to these commitments, several types of chicken products are now

available to consumers concerned about routine antibiotic use:

- U.S. Department of Agriculture (USDA) Certified Organic;
- chicken labeled "raised without antibiotics" (RWA), which is sometimes USDA process verified; and
- unlabeled chicken from producers that have committed to or have already transitioned away from routine use, while allowing use when animals are sick.

NRDC considers all three options representative of responsible antibiotic practices or a commitment to implement such practices.

Grocery retailers are the middlemen who bring meat products to consumers. Their product selections grant consumer access to meats raised without routine antibiotic use. Retailers can either spur improved antibiotic stewardship by producers or reward continued routine use.

- a "Raised without antibiotics" (RWA) is used as a broad term that includes other labels, such as "No antibiotics ever" and No antibiotics added," indicating that antibiotics were not administered to chickens.
- b Both USDA Certified Organic and USDA process-verified RWA chicken brands reflect antibiotic use claims that have been verified by an independent third party.

The authors are grateful for the helpful comments of Laura Rogers (Antibiotic Resistance Action Center), Steve Roach (Food Animal Concerns Trust), Kathy Lawrence (School Food Focus) and Vanessa Zajfen (School Food Focus) as well as from Miriam Rotkin-Ellman (NRDC) and Valerie Baron (NRDC).

We evaluated the five largest grocery retailers in North America on their offerings of chicken brands from producers with responsible antibiotic practices and their public commitments around antibiotic use. We also examined their signage and informational materials directing consumers' attention to chicken raised without the routine use of antibiotics, as well as the extent to which suppliers' claims regarding antibiotic use were verified by an independent third party.^b Specifically, the retailers we surveyed were Costco, Publix, Walmart, Albertsons/Safeway, and Kroger. Overall, unfortunately, we found that all five retailers have failed to provide leadership in promoting responsible antibiotic practices in their supply chains.

KEY FINDINGS

- All five grocery retailers offered at least one brand choice reflective of responsible antibiotic use practices, and most offered several such choices. In many cases, these offerings reflected the majority of the brand choices for the locations and period covered by the survey. For instance, 90 percent of the brand choices at the Walmart stores we surveyed were from producers that report using fewer antibiotics. While this is a step in the right direction, retailers are still falling short in significant ways.
- None of the major retailers had publicly committed to eliminating routine antibiotic use in their chicken supply chains. While some retailers have policies, they are not strong enough. None of the five retailers we surveyed had an antibiotics policy for their chicken (or other meat) that includes a time-bound commitment to phase out routine use of antibiotics in their chicken supply chains. While responsibly raised chicken brands were available on their shelves, the lack of corporate policies means that many retailers may be selling larger volumes of chicken raised with routine antibiotic use. The lack of an explicit commitment also means retailers may not be providing brand choices that reflect responsible antibiotic practices at all locations, and they may not be stocking them all the time.

- While most grocery stores surveyed offered RWA or USDA Certified Organic chicken, they often lacked signage to direct consumers to these offerings. The absence of signage makes it less likely that consumers will find the products or even notice that they are there. Publix stood out for its signage at every surveyed location.
- The proportion of brand choices with verified claims about antibiotic use varied widely from grocer to grocer (20 to 50 percent). Third-party certification of responsible antibiotic use claims provides independent assurance of claimed practices and builds consumer confidence. Generally, grocers with the most brand choices had a smaller fraction of brand choices with verified responsible antibiotic use claims. For example, Publix offered a total of 17 different brand choices in the two cities we surveyed, but only three brand choices had third-party-verified antibiotic use claims. At the same time, Costco generally offered two brand choices at every store location, including one option whose antibiotic use claims were verified.

RECOMMENDATIONS

To promote more responsible use of antibiotics in their chicken supply chains, retailers should:

- Develop responsible antibiotic use policies and communicate those policies to consumers.
- Improve signage to draw consumers' attention to chicken products that make claims about responsible antibiotic use, i.e., USDA Certified Organic or RWA products.
- Encourage producers to work with the USDA to develop new designations that reflect responsible practices but are not USDA Certified Organic or USDA process-verified RWA.
- Work with producers to push for third-party certification or verification of responsible antibiotic use claims.

Not all chickens are raised equally

Of all the antibiotics sold in the United States that are important for human medicine, approximately 70 percent are sold for poultry and livestock use. These antibiotics are similar to or the same as the antibiotics that patients receive from their doctors, and their overuse in animal agriculture as well as in human medicine has led to hardto-treat, antibiotic-resistant infections that threaten human health. Many of these drugs are approved to help animals survive the stressful, overcrowded, or unsanitary living conditions found in industrial livestock operations.² When antibiotics are given to chickens, pigs, and cattle routinely, the drugs kill off susceptible bacteria, leaving the resistant bacteria to survive, multiply, and spread.3 These antibiotic-resistant bacteria can then travel into the general population via poultry and livestock products, farmworkers, or contaminated air, water, and soil. Antibiotic-resistant bacteria can also pass on their resistance to other species of bacteria that can infect people and make us sick, resulting in longer illnesses and more expensive treatments.⁵ Also, as antibiotics begin to fail, patients undergoing procedures like surgeries and chemotherapy will be increasingly at risk of contracting untreatable infections. According to Thomas Frieden, director of the Centers for Disease Control and Prevention (CDC), "[A]ntibiotic resistance may be the single most important infectious disease threat of our time."6 The CDC has stated that "much of antibiotic use in animals is unnecessary and inappropriate and makes everyone less safe."7

Reducing antibiotic use is critical to stemming the tide of resistance. Consumers are increasingly asking for meat raised without the routine use of antibiotics, from both fastfood chains and grocery retailers.8 U.S. consumers trek to the supermarket 1.5 times per week, on average. When they start demanding and buying more meat and poultry raised without the routine use of antibiotics, consumers exert a powerful influence on the marketplace. Major producers from the chicken industry have led the transition away from the routine use of antibiotics, probably because chickens have shorter life cycles than other meat animals (and likely fewer chances to contract infections). 10,11,12 Large chicken producers such as Perdue, Tyson, and Foster Farms have all committed to phasing out the routine use of medically important antibiotics (see Table A4). Similarly, a growing number of major fast-food restaurant chains have pledged to purchase chicken raised without the use of medically important antibiotics, including McDonalds, Subway, Wendy's, and Chick-fil-A.13 These commitments demonstrate that chickens can be raised and sourced on a large scale without the routine use of antibiotics.



OUR SURVEY

In the spring of 2016, NRDC surveyed retail chicken products offered by the five largest North American grocery retailers: Walmart, Kroger, Costco, Albertsons/Safeway, and Publix.14 Combined, these retailers represent more than 50 percent of the market in North America. 15 This survey provides a snapshot of the chicken brand choices found on their grocery store shelves. Our survey covered Charlotte, Chicago, Houston, Jacksonville, Los Angeles, and Philadelphia, each of which has a population of at least 700,000.16

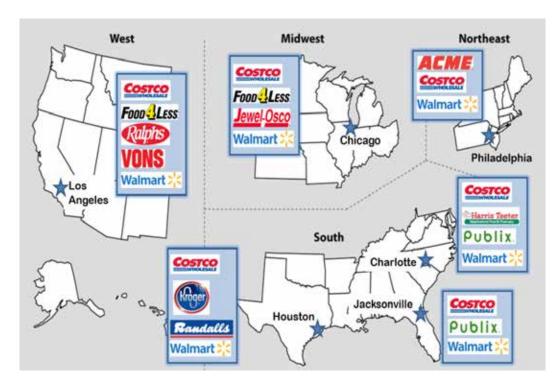
To ensure broad representation in the survey sample, we set the following criteria for our choice of cities:

- 1. At least three of the five retailers had to be located within the metropolitan area (defined as 15 miles from the city center) and had to have multiple stores (for each retailer).
- 2. Each of the four census regions of the United States had to be represented by at least one city.
- 3. Each retailer had to be present in at least two of the six cities surveyed.

The retailers we visited in each city are shown in Figure 1. We aimed to maximize the population served by the five retailers in the areas surveyed, resulting in more survey activity in the South census region. NRDC visited regional stores owned by each of these companies; in some cases, as shown in Figure 1, the regional store had a name that differed from that of its major grocery retailer. We surveyed up to three locations per retailer in each city.

We photographed all unique chicken brand choices available in the store as well as any signage directing consumers to chicken raised without the routine use of antibiotics, including USDA Certified Organic and RWA options. 17 To identify the producer, we relied on brand information or the processing plant number associated with the package. 18 In many cases, private-label packaging or alternative brand labels masked the actual producer, which we identified through the associated processing plant information. In a small number of cases, we could not identify the chicken producer due to missing processing plant information on the package, and we did not include those products in our scoring. We conducted supplemental web research to identify grocery retailers' antibiotic use policies and related statements. We received few responses to letters sent to retailers and producers reflected in the survey, and those that we did receive did not provide relevant new information. Table 1 describes the point system we used to grade each retailer's antibiotic stewardship performance. Scoring results are listed in Table 2. Additional details, including regional retailer scores, are provided in Appendices 1 and 2.

FIGURE 1: MAP AND TABLE OF RETAILERS VISITED IN EACH OF THE SIX MAJOR METROPOLITAN AREAS



Company	Regional retailers visited
Albertsons/ Safeway	Jewel-Osco Randalls VONS
Costco	Costco
Kroger	FOOD LESS. Harris Toeter Ralphs
Publix	Publix.
Walmart	Walmart 🔆

Major retailers are providing little leadership to promote antibiotic stewardship

As is evident from Table 2, none of the five retailers have made a strong public commitment to eliminate the routine use of antibiotics from their chicken supply chains. None have published a policy that adopts specific goals to phase out the use of antibiotics, either for their own private labels of chicken or for other brands they carry. A Costco representative, for example, has stated to the media that

the company is working to eliminate medically important antibiotics from its chicken supply chains, but those statements have not translated to a time-bound commitment to do so on the company's website.20

This overall finding stands in stark contrast to several large chicken producers, including Tyson, Perdue, and Foster Farms, that over the past two years have transitioned or have pledged to transition away from routine use of

TABLE 1: SCORING INDICATORS				
Category	Criteria	How points were awarded	Maximum Points	
Policy	*Commitment to phase out routine use of antibiotics described on major retailer website AND *Timeline to phase out routine use of antibiotics described on major retailer website	10 points for a commitment (5 point given for strong statements that suggest a retailer is moving in this direction, but do not constitute an official policy), 10 additional points for a timeline	20 points	
Consumer education at point of purchase	*Retailer (in all cities where present) had at least one store with signage or informational materials that highlighted USDA certified organic, RWA, or no routine antibiotic use chicken options for consumers OR *Retailer had, in a majority of cities where present, at least one store with signage or informational materials that directed consumer towards USDA certified organic, RWA, or no routine antibiotic use chicken options	5 point for consumer education in all cities, 2.5 points for consumer education in a majority of cities	5 points	
Brand score antibiotic use	*Brand of chicken is USDA certified organic, RWA, or produced by a producer with a commitment to phase out routine use of antibiotics	Received points based on % brands that met criteria	20 points	
Brand score certification	*Label or website of producer indicates 3rd party certification of antibiotic use claims	Received points based on % brands that met criteria	10 points	
			55 Points	

TABLE 2: RESULTS OF SURVEY AND RESEARCH FOR FIVE MAJOR RETAILERS ¹⁹							
Major retailer	Policy score (20 points)	Consumer education score (5 points)	Brand score (antibiotic use) (20 points)	Brand score (certification) (10 points)	Raw score (55 points maximum)	Percent	Grade
Walmart *	0	0	18	2.9	20.9	38%	D
Albertsons SAFEWAY	0	2.5	15.8	3.2	21.5	39%	D
Publix.	0	5	14.2	1.8	21	38%	D
Kröger	0	2.5	13.4	2.5	18.4	33%	D
COSTCO WHOLESALE	5	0	12.4	4.6	22	40%	D

antibiotics. Fast-food companies have been following suit, as evidenced by public commitments and the annual "Chain Reaction" scorecard on antibiotic use policies and practices of major fast-food chains, published by a coalition of environmental, public health, and consumer advocacy groups.21

Consumers receive little direction toward brand choices that reflect responsible antibiotic use practices

Most grocery stores surveyed had very little signage informing consumers about the brand choices from producers with strong public commitments to responsible use of antibiotics, even though many stores offered RWA and USDA Certified Organic chicken brands. Only Publix had signage in all of the surveyed stores (see Table A3). As for brand choices from producers that are at least committed to phasing out the routine use of antibiotics important to human medicine (but not RWA or USDA Certified Organic), there is no way for consumers to identify these products. This is likely because producers have not developed USDA-approved claims for these chicken products and because retailers have not developed their own internal sourcing policies regarding routine antibiotic use. If chicken products do not communicate how they are different from conventional products, consumers are unlikely to find or choose them.²²

Walmart stores had a strong selection of chicken brand choices from producers with antibiotic stewardship commitments

Walmart had the largest proportion of chicken brand choices sourced from producers with responsible antibiotic use commitments, with brand sourcing primarily from Perdue and Tyson for its "conventional" chicken offerings (see Table A2 below), despite the fact that Walmart allows for routine use of these drugs in its antibiotics policy.²³ Both Perdue and Tyson have committed to phasing out routine antibiotic use in their chicken production, although neither had third-party certification for these claims on surveyed conventional chicken packages.^{24,25} While the grocery retailer does not have a strong antibiotics policy, Walmart has called for greater transparency, including annual public reporting of antibiotic use by its suppliers, which might influence the industry in a positive direction.²⁶ Interestingly, both Perdue and Tyson have been providing regular updates to the public around their antibiotic use, although it is unclear if these disclosures are related to Walmart's public statements on this topic.²⁷

UNMASKING RETAILER PRIVATE LABELS

Retailers have great influence over the chicken production practices for their own store brand. Our investigation found little evidence that grocery chains are using this influence to offer chicken produced with fewer antibiotics. Instead, we found that retailers' privatelabel brands are generally not sourced from producers with strong antibiotic policies (see Table 3). This represents a lost opportunity for retailers to promote more responsible antibiotic use.²⁸

TABLE 3: CHIC	KEN SUPPLIERS BEHIN VEY	D PRIVATE LAB	EL BRANDS IN
Retailer	Private labels	Chicken supplier from retailer survey	USDA certified organic, raised without antibiotics, chicken from producer that is phasing out routine use, or conventional
COSTCO	KIRKLAND	Pilgrim's Pride	Conventional
	simple	Perdue	Raised without antibiotics
	truth	Tyson	Raised without antibiotics
	where tryin organic	Perdue	USDA certified organic
Kroger	HERITAGE	Sanderson Farms	Conventional
	Palnhe	Randall Foods	Conventional
	Tayris	Foster Farms	No routine use
	Harris Teeter	Sanderson Farms	Conventional
		Tip Top Poultry	Conventional
Publix.	Publis	Pilgrim's Pride	Conventional
	GreenWise.	Pilgrim's Pride	Raised without antibiotics
		Sanderson Farms	Conventional
	Signature Farm	Foster Farms	No routine use
Albertsons' SAFEWAY		Pilgrim's Pride	Conventional
	ORGANICS	Foster Farms	USDA certified organic
	OPEN	Foster Farms	Raised without antibiotics
	Cancaster	Mountaire Farms	Conventional
Walmart :	None	None	None

Retailers offer USDA Certified Organic or RWA chicken on grocery shelves, but third-party verification is needed to ensure transparency and accountability and to build consumer trust

All surveyed locations offered a USDA Certified Organic or RWA option (except Chicago Food 4 Less stores, part of the Kroger group). We found that in some stores, a majority of the chicken brand choices on the shelf were from producers with antibiotic stewardship commitments, indicating that consumers at those stores are selecting from producers with strong antibiotic use commitments; however, thirdparty certification of antibiotic use claims was, more often than not, absent (see Table A2 below). RWA and similar claims do not require third-party verification. As a result, consumers are often left on their own to judge the veracity of antibiotic use claims. Some producers, like Perdue, however, have voluntarily adopted a third-party verification from the USDA for their RWA chicken production, which helps build consumer trust (see Table A2). Also, in our survey, no retailer offering chicken brand choices from a producer that had committed to phase out routine use of antibiotics made these products easily identifiable. Consumers are increasingly aware of and want to support responsible antibiotic use, and third-party verification has strong potential to build consumer confidence. 29,30

WHOLE FOODS EXHIBITS LEADERSHIP IN ALL CATEGORIES

Although not included in this survey, Whole Foods would have earned top scores in all categories. Whole Foods sells only chicken raised without antibiotics.31 This policy applies to all chicken, beef, swine, and turkey products, making an in-store survey unnecessary. Whole Foods consumers can easily understand the antibiotic use practices associated with their purchase. Whole Foods' antibiotics claims are certified by the Global Animal Partnership (GAP).32 In contrast, the five major retailers evaluated in our survey rely largely on their consumers to determine and evaluate the antibiotic use practices for the chicken sold in their stores, except when chicken is labeled USDA Certified Organic or RWA. Our survey found that while some stores' chicken offerings were almost entirely sourced from producers exhibiting responsible antibiotic use practices, their consumers were often unaware of this fact. With its policy and certified retail chicken, Whole Foods not only supports progressive producers but empowers its consumers to choose wisely and to support these producers as well.

CERTIFIED RESPONSIBLE ANTIBIOTIC USE: A LABELING OPPORTUNITY FOR RETAIL CHICKEN?

Our survey found that only RWA and USDA Certified Organic retail chicken was labeled to highlight antibiotic use claims. However, school meat buyers have a third option: certified responsible antibiotic use (CRAU).33 School Food Focus, which works with school districts across the country, authored the CRAU standard to facilitate school district purchases of chicken from progressive producers that use medically important antibiotics only to treat or control disease associated with a bacterial infection. This practice is equivalent to no routine use of antibiotics. The CRAU certification provides these producers with an opportunity for recognition for responsible antibiotic use. It also allows schools to identify producers that are audited annually by the USDA to verify conformance with the CRAU standard, which is publicly available. Tyson and Perdue sell CRAU certified poultry products to school districts across the country.

We observed that—unless chicken was USDA Certified Organic or RWA-neither retailers nor producers communicated to the consumer their commitments to responsible antibiotic use. CRAU was created to allow buyers from schools to source chicken raised with greater antibiotic stewardship and provide an essential level of transparency and accountability in the school food market. If introduced in the retail space, CRAU-labeled chicken could inform concerned shoppers about producers that have phased out routine use of antibiotics.

CONCLUSION

In the absence of federal action to curb antibiotic use in livestock production, consumers have been driving the move away from routine use. As a result, chicken that is raised without routine use of antibiotics has become more readily available.³⁴ While fast-food chains have integrated their antibiotic use commitments into their marketing and public messaging, retailers have remained silent. Our survey found that retailers do not always give consumers the necessary information to make informed choices. Chicken from producers that are reportedly eliminating routine antibiotic use don't indicate this commitment on the product label and there is no additional signage near the shelf. Also, since many brand choices are not third-party verified, consumers typically have to trust the producer's claim. However, some producers have begun incorporating third-party verification, and we encourage retailers to highlight those producers and others that follow suit. Notably, producers such as Tyson, Perdue, and Foster Farms are reducing routine use of antibiotics in their more affordable, conventional chicken products. Retailers should take note and source conventional chicken under a responsible antibiotic stewardship policy.

In the face of the growing threat of antibiotic resistance, NRDC calls on retailers to make strong commitments to eliminate the routine use of antibiotics from their supply chains. While Walmart is doing better than others in our survey in terms of providing better brand choices, all retailers should make every effort to provide chicken raised without routine use of antibiotics, with verifiable claims, especially under their private labels and in all of their stores. Retailers should also provide transparency and accountability by requiring their suppliers to secure thirdparty verification.

Poultry producers should adopt clear, unambiguous commitments to phase out the routine use of medically important antibiotics. The FDA needs to take strong action to ensure that all livestock and poultry producers are reserving these precious antibiotics to treat sick animals or to control disease outbreaks, instead of using them preemptively to promote faster growth or compensate for overcrowded or dirty living conditions.

Consumers should continue to vote with their wallets and purchase USDA Certified Organic and RWA chicken. Consumers can also reward producers committed to phasing out routine use of antibiotics across their entire production operations.

APPENDIX 1: METHODOLOGY

City/Retailer Selection and Methodology

NRDC conducted an in-store, first-person research survey of five selected grocery companies in six cities spanning all four U.S. census regions. In order of population (based on 2014 U.S. Census data), those cities were Los Angeles; Chicago; Houston; Philadelphia; Jacksonville, Florida; and Charlotte, North Carolina.35

NRDC collected data on the five largest grocery retailers in the United States. These five retailers, representing 50.18 percent of the total retail grocery market in the nation, were Walmart (Los Angeles, Chicago, Houston, Philadelphia, Jacksonville, Charlotte), Kroger (Los Angeles, Chicago, Houston, Charlotte), Costco (Los Angeles, Chicago, Houston, Philadelphia, Jacksonville, Charlotte), Albertsons/Safeway (Los Angeles, Chicago, Houston, Philadelphia), and Publix (Jacksonville, Charlotte).

The above cities and retailer selections met the following two criteria: (1) Presence of large U.S. retailers-all major retailers had to be present in at least two of the six cities selected; and (2) Balanced representation-cities selected were the most populous metropolitan areas in the nation that also had at least three of the top five large retailers, with multiple stores present within 15 miles of the city center.³⁶

DATA COLLECTION

NRDC staff traveled to each of the six selected cities for image collection at retailer locations. For each city, NRDC staff selected up to a maximum of three random locations that were within a 15-mile radius of the city center. To ensure the randomness of store locations, all stores surveyed were randomly selected using a website that randomizes the order of items on a list (Random.org). NRDC staff then entered the selected stores and took representative photographs of all unique brand choices sold in the store. A unique brand choice was defined as every different combination of brand and antibiotic use claim among available fresh chicken products. NRDC staff documented their store visits as follows: First, an image was taken prior to store entry to document the store location. A photograph of the store's meat section was then taken from a wide-angle distance, to gain an initial understanding of in-store signage pertaining to claims of "natural," "organic," etc. Photographs were taken such that each unique brand, processing plant number, or combination was documented. Processing plant numbers for poultry could be identified with the prefix P or E. Any education materials available, including in-store signage, were collected from the stores or photographed (see Figures A2 and A3, below). Visits took place between March 16 and March 31, 2016. Table A1 includes an overview of store locations and dates for the site visits. NRDC sent letters requesting additional information to all surveyed retailers on April 21, 2016, and all surveyed producers on June 9, 2016, well in advance of publication of this report. Figure Al shows a representative letter that was sent to retailers and producers. Individual letters included minor variations.

TABLE AI: OVERVIEW OF DATA COLLECTION				
Major retailer/(Regional name, if different)	Store location	Date visited in 2016		
Albertsons + Safeway/(Vons)	1430 S. Fairfax Ave., Los Angeles, CA	March 16		
Albertsons + Safeway/(Vons)	980 National Blvd., Los Angeles, CA	March 16		
Albertsons + Safeway/(Vons)	7311 N. Figueroa St., Los Angeles, CA	March 16		
Costco	2901 Los Feliz Blvd., Los Angeles, CA	March 16		
Costco	1345 N. Montebello Blvd., Montebello, CA	March 17		
Costco	2207 W. Commonwealth Ave., Alhambra, CA	March 16		
Kroger/(Ralphs)	4760 W. Pico Blvd., Los Angeles, CA	March 16		
Kroger/(Ralphs)	5429 Hollywood Blvd., Los Angeles, CA	March 16		
Kroger/(Food 4 Less)	5420 W Sunset Blvd., Los Angeles, CA	March 16		
Walmart	8500 Washington Blvd., Los Angeles, CA	March 16		
Walmart	1827 Walnut Grove, Los Angeles, CA	March 16		
Albertsons + Safeway/(Jewel Osco)	1340 North Canal St., Chicago, IL	March 18		
Albertsons + Safeway/(Jewel Osco)	2550 North Clybourn Ave., Chicago, IL	March 18		
Albertsons + Safeway/(Jewel Osco)	1220 South Ashland Ave., Chicago, IL	March 17		
Costco	1430 South Ashland Ave., Chicago, IL	March 17		
Costco	2500 Harlem Ave., Chicago, IL	March 17		
Costco	2746 North Clybourn Ave., Chicago, IL	March 18		
Kroger/(Food 4 Less)	4620 S. Damen Ave., Chicago, IL	March 18		
Kroger/(Food 4 Less)	7030 S. Ashland Ave., Chicago, IL	March 18		
Kroger/(Food 4 Less)	112 W 87th St., Chicago, IL	March 18		
Walmart	8331 S. Stewart Ave., Chicago, IL	March 18		
Walmart	4720 S. Cottage Grove Ave., Chicago, IL	March 18		
Walmart	570 W. Monroe St., Chicago, IL	March 18		
Costco	2125 Mathews Township Parkway, Charlotte, NC	March 24		
Costco	500 Tyvola Rd., Charlotte, NC	March 24		
Kroger/(Harris Teeter)	8535 Park Rd., Charlotte, NC	March 24		
Kroger/(Harris Teeter)	5030 Park Rd., Charlotte, NC	March 24		
Kroger/(Harris Teeter)	1621 Sardis Crossing Dr., Charlotte, NC	March 24		
Publix	8120 South Tryon, Charlotte, NC	March 24		
Publix	12810 South Tryon, Charlotte, NC	March 24		
Publix	2222 South Blvd., Charlotte, NC	March 23		
Walmart	1830 Galleria Blvd., Charlotte, NC	March 24		
Walmart	3850 East Independence Blvd., Charlotte, NC	March 24		
Walmart	9820 Callabridge Ct., Charlotte, NC	March 23		
Albertsons + Safeway/(Randalls)	2075 Westheimer Rd., Houston, TX	March 31		
Albertsons + Safeway/(Randalls)	5586 Weslayan St., Houston, TX	March 31		

TABLE AI: OVERVIEW OF DATA COLLECTION		
Albertsons + Safeway/(Randalls)	2225 Louisiana St., Houston, TX	March 31
Costco	3836 Richmond Ave., Houston, TX	March 31
Costco	1150 Bunker Hill Rd., Houston, TX	March 31
Kroger	1801 S. Voss Rd., Houston, TX	March 31
Kroger	1035 N. Shepherd Dr., Houston, TX	March 31
Kroger	6322 Telephone Rd., Houston, TX	March 31
Walmart	9700 Hillcroft St., Houston, TX	March 31
Walmart	2727 Dunvale Rd., Houston, TX	March 31
Walmart	10411 N Freeway 45, Houston, TX	March 31
Costco	4901 Gateway Pkwy., Jacksonville, FL	March 21
Publix	2033 Riverside Ave., Jacksonville, FL	March 22
Publix	4495 Roosevelt Blvd., Jacksonville, FL	March 22
Publix	7749 Normandy Blvd., Jacksonville, FL	March 22
Walmart	8011 Merrill Rd., Jacksonville, FL	March 22
Walmart	6855 Wilson Blvd., Jacksonville, FL	March 22
Walmart	8808 Beach Blvd., Jacksonville, FL	March 22
Albertsons + Safeway/(Acme)	309 S. 5th St., Philadelphia, PA	March 30
Albertsons + Safeway/(Acme)	6640 Oxford Ave., Philadelphia, PA	March 30
Albertsons + Safeway/(Acme)	8500 Henry Ave., Philadelphia, PA	March 29
Costco	100 Veterans Way, Warminster, PA	March 29
Costco	201 Allendale Rd., King of Prussia, PA	March 29
Walmart	2200 Wheatsheaf Ln., Philadelphia, PA	March 30
Walmart	1675 S. Christopher Columbus Blvd., Philadelphia, PA	March 30

SCORING

According to current estimates, only about 40 percent of the chicken offered for retail sale nationwide is from a producer that is committed to phasing out routine use of antibiotics (or is USDA Certified Organic or RWA), and many producers are still in transition.³⁷ It is critical that retailers offer many brand choices from suppliers that produce chicken raised with responsible antibiotic use, regardless of whether there is certification for some products or consumer education to direct consumers to better brand choices. Accordingly, we weighed the initial steps of good retailer antibiotics policies and good chicken brand sourcing more heavily (20 points each) in our scoring rubric than consumer education (5 points) and third-party verification of producer antibiotics claims (10 points). As more and more producers meet their goals to phase out routine use of antibiotics and more good brand choices appear on the grocery store shelf, certification and consumer education will take on increased importance. See Table 2 of the main text for the scoring indicators.

Based on percentage scores, we assigned grades to the retailers as follows: A, 81-100; B, 61-80; C, 41-60; D, 21-40; and F, 0-20.



[Date]

CONTACT NAME AND ADDRESS

Dear [CEO],

On behalf of [list organizations], NRDC is writing to ask for your leadership to encourage antibiotic stewardship in the livestock industry, and to ask for an update of your company's current policies regarding antibiotic use in the production of meat and poultry sold in your stores.

We are currently engaged in a nationwide study and "scorecard" focused on the antibiotic use policies guiding sourcing practices of major U.S. grocery retailers, as they relate to medically important antibiotics. NRDC and allied groups recently published a report and scorecard focused on the antibiotic use policies of major fast-food restaurants in the U.S. (see "Chain Reaction: How Top Restaurants Rate on Reducing Use of Antibiotics in Their Meat Supply," attached). The findings were covered by news outlets across the nation, reflecting a large amount of consumer interest around the issue of antibiotic use in food production. In an effort to provide consumers information about antibiotic use in the production of retail meat, this project focuses on the antibiotic stewardship practices of the five largest grocery retailers in the country, including [COMPANY NAME].

According to the Centers for Disease Control and Prevention, the rise of bacteria resistant to commonly relied-upon antibiotics is one of our most pressing public health threats. Each year in the U.S., two million people contract antibiotic-resistant infections and 23,000 die as a result. Due to worsening resistance, future organ transplants, cancer chemotherapy, dialysis, and other medical procedures that rely on effective antibiotics are at risk. While overuse of antibiotics in human medicine is a major contributing factor, the nation's health experts agree that feeding low doses of antibiotics to animals that are not sick also contributes to the rise of antibiotic-resistant bacteria. Increasingly consumers are asking for meat raised without the routine use of these drugs.

Some major food companies are demonstrating leadership to curb this threat. As you are likely aware, Costco announced early last year that it would eliminate routine use of medically important antibiotics in its entire U.S. chicken supply. Last year, McDonald's committed to sourcing chicken raised without medically important antibiotics within two years across their 14,000 U.S. restaurants. Subway, Chick-fil-A, Papa John's, and many others have also committed to strong antibiotics stewardship practices for the chicken they serve.

This study will focus on the antibiotic stewardship policies published by major retailers and their suppliers of fresh meat. We may also review statements, social media communications, and other publicly available antibiotics stewardship commitments [COMPANY NAME] has made. Following the spirit of the Chain Reaction report, we will evaluate the degree to which retailers and meat producers are:

1. Acting now to end the use of medically important antibiotics in the production of chicken (a sector where stewardship is now widely demonstrated), except as necessary to treat birds diagnosed with an illness;



- 2. Defining a time-bound action plan to phase out the routine use of antibiotics (i.e., for growth promotion and disease prevention) across all fresh meat supply chains, including chicken, turkey, beef, and pork (antibiotics should be available to treat animals diagnosed with an illness);
- 3. Adopting third-party audit program and benchmarking results that show progress in meeting the goals described above.

To ensure that we correctly characterize your company's efforts, we hope that by April 22, 2016, you will provide us with any current sourcing policies, goals, product offerings, or other initiatives seeking to promote antibiotic stewardship. We would also very much welcome a direct discussion with you or your staff to understand your efforts and further explain our concerns regarding this issue.

We hope to highlight your positive commitments and to work together to increase the availability of meat and poultry produced without unnecessary antibiotics. Please contact [CONTACT NAME] at [EMAIL AND PHONE] by [WHEN] to determine a time when our team could meet with you to discuss the above.

We appreciate your attention to our concerns.

Respectfully,

Jonathan Kaplan

Director, Food and Agriculture Program

APPENDIX 2: DATA TABLES

TABLE A2: SURVEY DATA ON BRAND SOURCING FOR ALL RETAILER CHICKEN BRANDS (MAXIMUM POINTS FOR "NO ROUTINE USE" OF ANTIBIOTICS IS 20; MAXIMUM POINTS FOR CERTIFICATION IS 10)

Retailer	City	Brand/Producer	No Routine Use	Certification
	Chicago, IL	Signature Farms/Pilgrim's Pride	N	N
		Perdue Perfect/Perdue	Y	Y
		Perdue/Perdue	Y	N
	Houston, TX	Signature Farms/Sanderson Farms	N	N
		Sanderson Farms/Sanderson Farms	N	N
		Open Nature/Foster Farms	Y	N
		O Organics/Foster Farms	Y	Y
Albertsons	Los Angeles, CA	Open Nature/Foster Farms	Y	N
		Foster Farms Simply Raised/Foster Farms	Y	N
		Signature Farms/Foster Farms	Y	N
		Foster Farms/Foster Farms	Y	N
SAFEWAY		Foster Farms Organic/Foster Farms	Y	Y
		Empire Kosher/Empire Kosher	Y	N
		O Organics/Foster Farms	Y	Y
	Philadelphia, PA	Empire Kosher/Empire Kosher	Y	N
		Perdue/Perdue	Y	N
		Lancaster Brand/Mountaire Farms	N	N
		Empire Kosher Organic/Empire Kosher	Y	Y
		Harvestland/Perdue	Y	Y
Final score			15/19 (79% of 20 = 15.8)	6/19 (32% of 10 = 3.2)

Retailer	City	Brand/Producer	No Routine Use	Certification
Cha	Charlotte, NC	Perdue/Perdue	Y	N
		Publix/Tip Top Poultry	N	N
		Publix/Pilgrim's Pride	N	N
Oubliv		Springer Mountain/Fieldale Farms	Y	N
Publix.		Fresh Hen/Tip Top	N	N
		Publix Greenwise/Pilgrim's Pride	Y	N
		Fieldale Farms/Fieldale Farms	Y	N
		Murray's Organic/Shenandoah Processing	Y	Y
		Perdue Perfect/Perdue	Y	Y

	Jacksonville, FL	Perdue/Perdue	Y	N
		Publix/Pilgrim's Pride	N	N
		Springer Mountain/Fieldale Farms	Y	N
Oubliv		Murrays/MB Consultants	Y	N
Publix.		Publix Greenwise/Pilgrim's Pride	Y	N
		Young and Tender/Fieldale Farms	Y	N
		Perdue Perfect/Perdue	Y	Y
		Publix/Tip Top Poultry	N	N
Final score			12/17 (71% of 20 = 14.2)	3/17 (18% of 10 = 1.8)

Retailer	City	Brand/Producer	No Routine Use	Certification
	Charlotte, NC	unbranded/Tyson	Y	N
		Tyson/Tyson	Y	N
		Gold Leaf/Tyson	Y	N
		Harvestland Organic/Perdue	Y	Y
		Harvestland/Perdue	Y	Y
		Claxton Select/Claxton	N	N
	Chicago, IL	Harvestland/Perdue	Y	Y
		unbranded/Tyson	Y	N
		Tyson/Tyson	Y	N
Malmont N		Gold Leaf/Tyson	Y	N
Walmart 🔆	Houston, TX	Tyson/Tyson	Y	N
		Harvestland/Perdue	Y	Y
		Gold Leaf/Tyson	Y	N
		unbranded/Tyson	Y	N
		Harvestland Organic/Perdue	Y	Y
		Crescent Foods	Y	N
	Jacksonville, FL	unbranded/Tyson	Y	N
		Tyson/Tyson	Y	N
		Perdue/Perdue	Y	N
		Gold Leaf/Tyson	Y	N
		Claxton Select/Claxton Poultry Farms	N	N
		Harvestland/Perdue	Y	Y

	Los Angeles, CA	Harvestland/Perdue	Y	Y
		Harvestland Organic/Perdue	Y	Y
		Tyson/Tyson	Y	N
		unbranded/Tyson	Y	N
Walmart 🔆		Gold Leaf/Tyson	Y	N
	Philadelphia, PA	Perdue/Perdue	Y	N
		unbranded/Amick Farms	N	N
		Harvestland/Perdue	Y	Y
		Crescent Foods/Crescent Foods	Y	N
Final Score			28/31 (90% of 20 = 18)	9/31 (29% of 10 = 2.9)

Retailer	City	Producer/Brand	No Routine Use	Certification
	Charlotte, NC	Kirkland/Pilgrim's Pride	N	N
		Coleman Organic/Perdue	Y	Y
	Chicago, IL	Perdue/Perdue	Y	N
		Kirkland/Pilgrim's Pride	N	N
		Coleman Organic/Perdue	Y	Y
Corre	Houston, TX	Kirkland/Pilgrim's Pride	N	N
WHOLESALE		Coleman Organic/Perdue	Y	Y
	Jacksonville, FL	Coleman Organic/Perdue	Y	Y
		Kirkland/Pilgrim's Pride	N	N
	Los Angeles, CA	Foster Farms/Foster Farms	Y	N
		Foster Farms Organic/Foster Farms	Y	Y
	Philadelphia, PA	Kirkland/Pilgrim's Pride	N	N
		Coleman Organic/Perdue	Y	Y
Final Score			8/13 (62% of 20 = 12.4)	6/13 (46% of 10 = 4.6)

Retailer	City	Producer/Brand	No Routine Use	Certification
	Charlotte, NC	Perdue	Y	N
kroger		Harris Teeter/Sanderson Farms	N	N
		Smart Chicken/Tecumsah Farms	Y	N
		Organic Smart Chicken/Tecumsah Farms	Y	Y
		Harvestland/Perdue	Y	Y
		Perdue Perfect/Perdue	Y	Y
	Chicago, IL	Tyson/Tyson	Y	N
		Heritage Farm/Pilgrim's Pride	N	N

	Houston, TX	Simple Truth Organic/Perdue	Y	Y
Kroger		Heritage Farms/Pilgrim's Pride	N	N
		Simple Truth/Tyson	Y	N
		Pilgrim's Pride/Pilgrim's Pride	N	N
		No label/Tyson	Y	N
	Los Angeles, CA	Sanderson Farms/Sanderson Farms	N	N
		Simple Truth Organic/Perdue	Y	Y
		Foster Farms/Foster Farms	Y	N
		Foster Farms Simply Raised/Foster Farms	Y	N
		Randall Farms/Randall Foods	N	N
		Country Post/Pilgrim's Pride	N	N
		Smart Chicken/Tecumseh Poultry	Y	N
		Organic Smart Chicken/Tecumseh Poultry	Y	Y
		Simple Truth/Perdue	Y	N
		Ralph's Brand/Randall Foods	N	N
		Ralph's Brand/Foster Farms	Y	N
Final Score			16/24 (67% of 20 = 13.4)	6/24 (25% of 10 = 2.5)

TABLE A3: SURVEY DATA ON CONSUMER EDUCATION				
Retailer	Cities where consumer education images present	Number of cities where images present	Number of cities with retailer presence	Points awarded
COST CO	Chicago	9	6	0
	Los Angeles	2		
Kroger	Los Angeles		4	2.5
	Houston	3		
	Charlotte			
Publix.	Charlotte	2	2	5
	Jacksonville	2		
Albertsons: SAFEWAY	Los Angeles Houston	3	4	2.5
	Philadelphia	3		
Walmart :	None	0	6	0

TABLE A4: COMMITMENTS OF CHICKEN PRODUCERS THAT HAVE PHASED OUT ROUTINE USE OF ANTIBIOTICS		
Chicken Producer	Commitment	
Foster Farms	According to its website: "Foster Farms is working toward a goal of eliminating the use of all antibiotics that are used in human medicine, except in those instances where the clinical health of a flock is at risk	
	The practices below, prescribed by Foster Farms veterinary staff, protect and preserve the effectiveness of antibiotics, while ensuring the welfare of our chicken flocks:	
	1. Antibiotics will not be used in-ovo, subtherapeutically, or for growth promotion or feed conversion purposes in broiler production.	
	2. Antibiotics may be used to treat chickens that have a documented microbial disease or for disease control only as dictated by a licensed Veterinarian.	
	3. Critically important antibiotics in human medicine will not be used to treat, prevent or control disease."38	
Perdue	According to its website: "Perdue Farms becomes first major chicken company to eliminate routine use of all antibiotics	
	Perdue veterinarians prescribe an antibiotic treatment for about 5% of the company's flocks on average, and the treatment is limited to only what is appropriate to the condition affecting a flock. Those chickens are removed from the no-antibiotics-ever program and sold through other channels."	
Tyson	According to its website: "We've set a goal to eliminate the use of human antibiotics from our broiler chicken production by September 2017 We have a responsibility to treat sick animals and animal well-being will never be compromised. We're working with food industry, government, veterinary, public health and academic communities to accelerate research into disease prevention and antibiotic alternatives." 40	

APPENDIX 3: CONSUMER EDUCATION EXAMPLES

FIGURE A2: PROMOTIONAL MATERIALS ON "ORGANIC" OR "RAISED WITHOUT ANTIBIOTICS" CHICKEN ON GROCERY STORE SHELVES





Why Choose Organic Smart Chicken?

USDA PROCESS VERIFIED - PURE AIR-CHILLED, NO ADDED WATER

Smart Chicken® was the first poultry company in the U.S. to use air-chill technology. Air-chill means no added water—Smart Chicken* contains only natural juices and pure chicken taste.

CERTIFIED ORGANIC & CERTIFIED NON-GMO

Certified organic birds are raised and fed a diet in compliance with the Non-GMO Project standard for avoidance of genetically engineered ingredients.

CERTIFIED HUMANE & FREE RANGE

We follow strict HFAC (Humane Farm Animal Care) standards for humane farm animal treatment and welfare. Certified Organic birds have access to an outdoor range space where they are able to participate in social behaviors.



WWW.SMARTCHICKEN.COM







FIGURE A3: EXAMPLES OF IN-STORE SIGNAGE ABOVE OR NEAR GROCERY STORE SHELVES DIRECTING CONSUMERS TOWARD CHICKEN OPTIONS





APPENDIX 4: COMPANY PROFILES⁴¹

Walmart

Owned by: Walton Family (NYSE:WMT)⁴²

Corporate headquarters: 702 S. W. 8th St., Bentonville, AR 72712

CEO: Doug McMillon

Number of U.S. locations: 5,182

2015 Sales in U.S: \$353 million

Published policy or companywide statements on antibiotic use: http://corporate.walmart.com/ news /newsarchive/2015/05/22/walmart-us-announces-new-animalwelfare-and-antibiotics-positions

Walmart has a published policy and is asking its suppliers to limit use of antibiotics to animals that are sick or at risk according to FDA's Voluntary Guidance for Industry #209, and to publicly report antibiotic use on an annual basis. FDA's Guidance #209 does not set limits regarding routine use of antibiotics for disease prevention; therefore, this policy would not prevent the routine use of antibiotics.

Kroger

Owned by: The Kroger Co. (NYSE:KR)⁴³

Corporate headquarters: 1014 Vine St., Cincinnati, OH

CEO: W. Rodney McMullen

Number of U.S. locations: 3,747

2015 Sales in U.S: \$103 million

Published policy or companywide statements on antibiotic use: http://sustainability.kroger.com/supply-chain-animalwelfare.html

Kroger has no published policy on antibiotic use in its supply chains. In its sustainability report, Kroger has stated that it is committed to evaluate the subtherapeutic use of antibiotics.

Costco

Owned by: Costco Wholesale Corporation (NASDAQ: COST)

Corporate headquarters: 999 Lake Dr., Issaguah, WA 98027

CEO: W. Craig Jelinek

Number of U.S. locations: 476

2015 Sales in U.S: \$83 million

Published policy or companywide statements on antibiotic use: No published policy on company website.

While statements to the media were interpreted as an antibiotic stewardship commitment, no official antibiotic policy has been published on Costco's website. 44 A Costco representative was reported to have said, "We are working towards, and working with our suppliers and the regulatory agencies . . . to see how we can get rid of shared-use antibiotics in animals."45 No timeline was reported.

Albertsons/Safeway

Owned by: Cerberus Capital Management, Kimco Realty Corporation, Klaff Realty, Lubert-Adler Partners, and Schottenstein Stores Corporation (NYSE:ABS)⁴⁶

Corporate headquarters: 250 E. Parkcenter Blvd., Boise, ID 83706

CEO: Robert Miller

Number of U.S. locations: 2,311

2015 Sales in U.S: \$58 million

Published policy or companywide statements on antibiotic use: None

Publix Super Markets

Owned by: Privately held by present and past employees⁴⁷

Corporate headquarters: 3300 Publix Corporate Pkwy., Lakeland, FL 33811

CEO: William E. Crenshaw

Number of U.S. locations: 1,314

2015 Sales in U.S: \$32 million

Published policy or companywide statements on antibiotic use: http://corporate.publix.com/about-publix/publix-faq/ position-statements

Publix has met with its chicken suppliers and discussed the importance of antibiotic stewardship. While the company states that a majority of the chickens in its supply chain do not receive any human antibiotics, the company has made no commitment to phase out routine use of antibiotics. The company continues to source from producers that have remained silent regarding their antibiotic use or have acknowledged their use of antibiotics for disease prevention.48,49

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