

ConsumerReports®

meat on drugs

The overuse of antibiotics in food animals & what supermarkets and consumers can do to stop it



MeatWithoutDrugs.org

About Consumer Reports

Consumer Reports is the world's largest independent product-testing organization. Using its more than 50 labs, Auto Test Center, and survey research center, the nonprofit rates thousands of products and services annually. Founded in 1936, Consumer Reports has more than 8 million subscribers to its magazine, website, and other publications. Its advocacy division, Consumers Union, works for health-care reform, food and product safety, financial reform, and other consumer issues in Washington, D.C., in the states, and in the marketplace.

About This Report

This report represents the work of several divisions of Consumer Reports. The nationally representative survey was written and conducted by the Survey Research department, led by Mark Kotkin, Ph.D. CR's "secret shoppers" went into stores across the nation to see whether meat raised without antibiotics was available to consumers with the guidance of Julie Levine, associate director of Product Intelligence. Price and availability data were analyzed by our Statistics Department, led by Michael Saccucci, Ph.D. Labeling research was overseen by Urvashi Rangan, Ph.D., director of the Consumer Safety and Sustainability Group.

The report was researched and written by Meagen Bohne and Jean Halloran. Ms. Bohne is the Campaign Organizer for Consumers Union on food and product safety issues. Jean Halloran, director of Food Policy Initiatives for Consumers Union, has served on the FDA Food Advisory Committee and the National Research Council (NRC) Board on Agriculture and Natural Resources. She served as a member of the NRC Committee on Drug Use in Food Animals that produced the 1999 NRC report "The Use of Drugs in Food Animals: Benefits and Risks."

The labeling research was made possible in part by a contribution from the Consumer Reports Food Safety and Sustainability Initiative.

ConsumerReports

meat on drugs

CONTENTS

EXECUTIVE SUMMARY

PAGE 02

BACKGROUND

PAGE 05

CONSUMER OPINION

PAGE 08

WHAT SUPERMARKETS OFFER

PAGE 09

Supermarket store
brands and policies

Shopper findings

READING THE LABELS

PAGE 19

RECOMMENDATIONS

PAGE 22

© 2012 Consumer Reports.

This report is intended solely for noncommercial use and may not be used in advertising, promotion, or for any other commercial purpose. You are free to download, copy, and distribute this report for non-commercial purposes only. You may not modify or create derivative works of this report without our prior written consent, or remove any copyright or trademark notices.



Executive Summary

The declining effectiveness of antibiotics has become a major national public health crisis. According to the national Centers for Disease Control and Prevention, 99,000 people died of hospital-acquired infections in 2002, the most recent year for which data are available. According to the Infectious Diseases Society of America, the vast majority of those infections were caused by antibiotic-resistant bacteria. Such “superbugs”—bacteria resistant to one or more antibiotics—are also showing up in food and causing illness and even death. Doctors and scientists have called for much more careful use of antibiotics so that disease-causing organisms don’t become immune to them.

The major user of antibiotics in the United States today is not the medical profession, however, but the meat and poultry business. Some 80 percent of all antibiotics sold in the United States are used not on people but on animals, to make them grow faster or to prevent disease in crowded and unsanitary conditions. Consumers Union, the advocacy arm of Consumer Reports, believes that to preserve antibiotics for treatment of disease in people, use on animals must be drastically reduced or eliminated.

A key question is how this can be accomplished. Many groups and experts have urged the U.S. Food and Drug Administration (FDA) and Congress to ban the use of antibiotics in animal feed. But the pharmaceutical industry and large-scale livestock producers, which benefit economically from their use, have effectively opposed all such proposals for decades.

Supermarkets and consumers, however, have a major say about antibiotic use in animals through their purchasing decisions. Although

antibiotics remain legal to use on food animals, supermarkets can choose not to carry, and consumers can choose not to buy, meat and poultry from animals that are fed antibiotics. The vast majority of all meat and poultry produced in the United States is either sold to consumers in supermarkets and grocery stores or consumed in restaurants and schools and other institutions. (The remainder, about 15 percent, is exported.) The purchasing decisions that supermarkets and consumers make therefore have a profound effect on how food animals are raised.

Consumer Reports has undertaken this report to determine what consumers think about reducing antibiotic use in meat and poultry production, and whether major supermarkets are making products that are raised without antibiotics available to their customers. We polled consumers, contacted companies, and sent shoppers into stores to find out.

The news is encouraging. At least one of the 13 largest supermarket chains in the country, Whole Foods, offers nothing but meat and poultry raised without antibiotics in its meat department. Most other major chains offer some such products. And the prices are not prohibitive—a number of supermarkets are offering chicken without antibiotics at \$1.29 a pound, for example, a price that is competitive with all chicken prices nationally. Other studies suggest that pork raised without antibiotics should cost less than 5 cents a pound extra.

Key findings of Consumer Reports research are:

1. In a recent nationwide poll conducted by the Consumer Reports National Research Center, 86 percent of consumers indicated they thought that meat raised without antibiotics should be available in their local supermarket.

2. Consumer Reports shoppers visited 136 supermarkets in 23 states, including at least five stores belonging to each of the 13 largest (by sales) supermarket chains in the nation, and collected data on more than 1,000 different meat and poultry items making some type of “no antibiotics” claim on a label. The shoppers found wide geographic availability, but big differences among chains and stores in availability of meat and poultry raised without antibiotics. On the one hand, Whole Foods guarantees that all meat and poultry sold in its stores is never treated with antibiotics. Shoppers also found wide selections of meat and poultry raised without antibiotics at Giant, Hannaford, Shaw’s, and Stop & Shop. At the other extreme, shoppers at Sam’s Club, Food 4 Less, Food Lion, and Save-A-Lot stores could not find any meat or poultry indicating it was raised without antibiotics.

3. In the Consumer Reports poll, 24 percent of consumers said meat raised without antibiotics was not available at the supermarket where they usually shop. Of this group, 82 percent said they would buy it if it were available.

4. Meat and poultry raised without antibiotics does not have to be expensive. While prices of such meat and poultry varied considerably depending on store, type of meat (beef, pork, chicken, turkey) and cut, in some cases our shoppers found prices that were actually lower than the national average. For example, while the national average price in March 2012 for chicken breasts was \$3.17 per pound, our shoppers found chicken breasts produced without antibiotics at QFC for \$2.99 per pound and on sale at Whole Foods for \$1.99 per pound. The most expensive product raised without antibiotics that Consumer Reports shoppers spotted was organic ribeye steak for \$19.99 per pound at several Kroger stores. However, much cheaper products were

also widely available. The least expensive no antibiotics products were whole chickens at Publix and Jewel-Osco, and chicken drumsticks at several Trader Joe’s locations, all for \$1.29 per pound.

5. Studies over the last decade have indicated that raising meat and poultry without antibiotics could be accomplished at minimal cost to the consumer—about 5 cents extra per pound for pork and less than a penny per pound extra for chicken. In the Consumer Reports survey, 61 percent of consumers indicated they would pay 5 cents or more extra per pound, and 37 percent indicated they would pay \$1.00 a pound or more extra for meat and poultry raised without antibiotics.

6. Consumer Reports shoppers found a wide array of labels related to antibiotic use, such as “never ever given antibiotics,” “humanely raised on family farms without antibiotics,” “organic,” and “grassfed.” Consumer Reports analyzed the various labels and concluded that most of them are at least somewhat useful to consumers. Consumers can always rely on the “organic” label, since organic rules ban antibiotic use in livestock. In addition, consumers can generally rely on most labels that contain the words “no antibiotics” or “raised without antibiotics” especially if it is “USDA Process Verified” (meaning that the USDA has checked up to see whether the producer is actually doing what it claims).

But Consumer Reports shoppers found a few labels that consumers should not rely upon as indicators that a product has truly had no antibiotics throughout the growing process. They include “natural,” “antibiotic-free,” “no antibiotic residues,” and “no antibiotic growth promotants.” “Natural” means only that the product contains no artificial ingredient or added color and is only minimally processed, according to the USDA. Antibiotics can in fact be used in the raising of “natural” meat and poultry. The terms “antibiotic-free” and “no antibiotic residues” are terms that the USDA does not approve for use on meat and poultry, so their meaning is uncertain, and they should not appear in the marketplace. The label “no antibiotic growth promotants,” also





not USDA-approved, is not helpful because the animal still could have been given antibiotics on a daily basis to prevent disease (just not for growth promotion).

“Grassfed” labels, usually found on beef, can also be useful, but require close scrutiny. If they are coupled with the “organic” label, consumers can be sure the cow was raised without antibiotics. If “grassfed” appears alone, however, antibiotics might have been given. “American Grassfed” and “Food Alliance Grassfed” labels also indicate that in addition to having been raised on grass, the animal in question received no antibiotics, but those products are available in very few stores.

Consumers Union recommends that all supermarkets move toward offering only meat and poultry raised without antibiotics, to be a part of solving a major national health crisis. We also urge consumers to buy these products wherever they can find them.

Background

Antibiotic resistance has become a major health crisis in the United States. “Superbugs”—bacteria that are immune to one or more antibiotics—are on the increase. According to the national Centers for Disease Control and Prevention, some 99,000 people died in 2002, the most recent year for which data are available, from hospital-acquired infections.¹ According to the Infectious Diseases Society of America, the vast majority of these infections were due to antibiotic-resistant pathogens.² In 2005, more than 18,000 deaths were attributed to a superbug called Methicillin-Resistant *Staphylococcus aureus* (MRSA).³ Fifty years ago, such infections were easily treated with antibiotics.⁴

A primary cause of the increase in resistance is the misuse and overuse of antibiotics in both human medicine and livestock production.⁵ However, according to an analysis of FDA data by the Center for Science in the Public Interest, 80 percent of all antibiotics sold in the United States are used on animals.⁶ Farmers regularly administer low dosages of antibiotics to accelerate growth or to prevent animals from getting sick due to unsanitary and crowded living conditions on factory farms. Because antibiotics are so widely present on the farm, eventually most of the bugs that are vulnerable to the antibiotics are killed off, and only a very small handful of superbugs, ones immune to one or more antibiotics, remain. The superbugs then flourish and spread. The problem of antibiotic resistance cannot be overcome without addressing the huge quantities of antibiotics used on livestock. The superbugs that are immune to antibiotics on the farm exchange genetic material with bacteria elsewhere, leading to antibiotic resistance in hospitals and communities.⁷

Antibiotic resistance is not just a general public health problem. It can affect the individual consumer who gets sick from food. Foodborne

illness sickens an estimated 48 million people in the U.S. each year, causing 128,000 hospitalizations and 3,000 deaths, according to the CDC⁸. If a person is sickened by preparing or eating raw or undercooked chicken contaminated with a disease-causing bug such as salmonella, that salmonella is likely to be a superbug, able to withstand one or more antibiotics. When Consumer Reports tested chicken for a January 2010 report, we found that two-thirds of our chicken samples were contaminated with salmonella or campylobacter, another bug that can make people sick, or both, and that more than 60 percent of those organisms were resistant to one or more antibiotics.⁹

Information on how many people actually get sick from superbugs in food is hard to come by since it is not systematically collected by any agency. But the Center for Science in the Public Interest has searched the scientific literature and documented 38 outbreaks between 1973 and 2011 that involved resistant bacteria. Almost half of those (17 of the 38) occurred since 2000.¹⁰

One of the largest recalls ever involving meat contaminated with an antibiotic-resistant bug occurred in 2011, when Cargill announced that it was recalling 36 million pounds of ground turkey, all produced at a plant in Springdale, Ark.¹¹ CDC, which was tracking the illnesses for months, eventually linked 136 cases, including one death, to the ground turkey, which carried *Salmonella* resistant to ampicillin, streptomycin, tetracycline, and gentamicin.¹²

The problem of antibiotic resistance is not new. Alexander Fleming, who discovered penicillin and received the Nobel Prize for that accomplishment, warned in 1945 that misuse of penicillin could result in resistant bacteria.¹³ By 1977 the problem was sufficiently well documented that the FDA proposed withdrawing approval for use of penicillin and tetracyclines in animal feed.¹⁴





However, before the FDA could act, Congress required the FDA to conduct further studies. The agency contracted with the National Academy of Sciences (NAS) to complete a study. Then, in 1980, when the NAS study was done, Congress required more study.¹⁵

Since then, the combined political power of the factory farming and pharmaceutical industries has effectively thwarted any legislative or regulatory action, and this stranglehold shows no sign of breaking. Despite this, several members of Congress are continuing to push for federal action. In 2007, Representative Louise Slaughter, a microbiologist by training, introduced the Preservation of Antibiotics for Medical Treatment Act (PAMTA) into the House, a bill that would prohibit the use of medically important antibiotics in livestock production.¹⁶ Senator Dianne Feinstein introduced a similar bill last year in the Senate.¹⁷ But as of mid-2012 neither had passed.¹⁸

In 2010, the FDA said, “In light of the risk that antimicrobial resistance poses to public health, FDA believes that the use of medically important antimicrobial drugs in food producing animals for production purposes ... represents an injudicious use of these important drugs” and promised further action.¹⁹ However, by the spring of 2012, the FDA had not done much more than call on drug companies to voluntarily stop selling antibiotics for growth-promotion purposes in animals.²⁰ Whether companies will comply remains to be seen.

It is therefore somewhat surprising that the cost of ending the use of antibiotics for growth promotion and disease prevention in livestock would be relatively small in terms of consumer prices. We already have farming systems that do not use antibiotics. All USDA Organic meat and poultry must be produced without use of antibiotics at any point in the animal’s lifetime. Antibiotic use for growth promotion was banned in animal feed in Sweden in the 1980s,²¹ in Denmark in the 1990s,²² and in the rest of the European Union in 2006.²³ In the U.S., Perdue states that all its chickens are produced without antibiotics for growth-promotion

purposes although the company does not rule out antibiotic use “as directed by our company’s team of veterinarians.”²⁴

One can therefore compare the cost of producing meat in systems that do not use growth promoters with the cost of conventional meat production in the United States.

A 2001 study funded in part by the National Pork Producers Council found that based on the Swedish experience, if antibiotics were no longer added to feed for hogs in the U.S., the cost of producing a 250-pound hog would most likely rise by \$5.24.²⁵ The increased cost to the consumer would be around 5 cents per pound. Given average pork consumption, that amounts to \$2.75 per person per year. Subsequent studies came to similar conclusions.²⁶

The consumer-price impact of raising chicken without antibiotics in feed or water (though allowing for use to treat individual sick chickens) is even smaller. In fact, a 2010 USDA study found that 44 percent of U.S. chicken producers had, by 2006, already phased out use of antibiotics for growth promotion and disease prevention.²⁷ A chicken grower gets a very modest 5 cents a pound for the chicken he or she produces. Those who did not use antibiotics as of 2006 were paid a fraction of a cent more than those who used the drugs (5.11 cents versus 4.89 cents). A 2007 study that compared data from 1998 to 2001 on some Perdue chicken facilities that did and did not use antibiotics in feed found that the antibiotic users actually had higher costs, by almost a penny per chicken, than those who did not use antibiotics.²⁸ Based on those studies, the cost to the consumer of eliminating antibiotics for disease prevention and growth promotion in chicken should be negligible.

According to those studies, there are also benefits to the animals in reducing antibiotic use, because to keep the animals healthy without a continuous supply of drugs, producers need to take proactive steps. For example, they will probably need to delay weaning of piglets by a week and switch to “all in all out” production

systems that allow them to clean a facility thoroughly after a batch of animals is raised to a certain weight.²⁹

Small as these costs are to consumers, this is still a big profit center for the pharmaceutical industry. Sales of animal health products to agricultural operations were estimated to total \$3.3 billion a year in 1995.³⁰ That might help explain why drug companies have opposed any ban on use of antibiotics in livestock.

Some livestock producers also oppose a ban. Some may find it much easier to control the spread of disease in dense growing facilities by giving low doses of antibiotics at all times, rather than engaging in frequent clean-outs and the other extra efforts needed to keep animals healthy without drugs. The livestock industry also argues that antibiotic use in animals does no harm. The pork industry recently took out an ad in *Roll Call*, a newspaper whose main audience is members of Congress and their staffs, that stated since antibiotics have been used in livestock for about 50 years, “if there was going to be an epidemic of resistance related to antibiotic use in agriculture, it would have occurred by now.”³¹

However, significant studies of the issue, including a 1988 Institute of Medicine study, “Human Health Risks with the Subtherapeutic Use of Penicillin or Tetracyclines in Animal Feed,”³² and the 1999 National Research Council study “The Use of Drugs in Food Animals: Benefits and Risks,”³³ have concluded that there is a connection between antibiotic use in animals and the loss of effectiveness of these drugs in human medicine. The pork industry even argues that antibiotic use helps make food safe.³⁴ But new studies that have found superbugs in food—MRSA in pork³⁵ as well as the recent outbreak of salmonella resistant to four different antibiotics, found in ground turkey, which sent more than 100 people to the hospital and caused one death³⁶—argue otherwise.

Consumers, and the supermarket chains that sell us our meat and poultry, have a choice. As of 2010, the average American bought and ate

about 200 pounds of meat and poultry a year.³⁷ If supermarkets no longer stocked meat and poultry grown with antibiotics, antibiotic use in livestock production would drop drastically.

At least one large chain, Whole Foods, has already taken this important step. Consumers can shop there confident that any meat or poultry that they buy was raised without antibiotics. In most other stores, consumers can find at least some no-antibiotics meat. Consumers, and the supermarkets they shop at, can fight superbugs and be part of the solution. Together, they can help solve the problem of antibiotic resistance that has eluded government regulators for more than four decades.



Consumer Opinion

To gauge consumer perspective on this issue, the Consumer Reports National Research Center designed a telephone survey to assess consumer concerns and behaviors regarding antibiotics in animal feed. In March 2012, the survey was administered to a nationally representative sample of 1,000 U.S. residents demographically and geographically representative of the U.S. population. Half of the respondents were female, and the median age was 46.

Key findings of the survey included:

- A majority of respondents (86%) agreed that customers should be able to buy meat and poultry raised without antibiotics at their local supermarkets.
- Fifty-seven percent of respondents reported that meat raised without antibiotics is available in the meat section where they usually shop. Of those who do not have it in their local meat section, 82% said they would buy it if it were available.
- More than 60% of respondents stated that they would be willing to pay at least five cents a pound more for meat raised without antibiotics. Over a third (37%) would pay a dollar or more extra per pound.
- The majority of respondents (see table) were extremely or very concerned about issues related to the use of antibiotics in animal feed, including the potential creation of “superbugs” due to overuse of antibiotics, unsanitary and crowded conditions for livestock, human consumption of antibiotic residue, and environmental effects due to agricultural runoff containing antibiotics.
- Respondents were less concerned that limits on the use of antibiotics could cause price increases. Only 44% of all respondents were highly concerned about that issue.

To read the complete findings of our survey click here: <http://notinmyfood.org/document/antibiotics-in-animal-feed>

Widespread use of antibiotics...

% Very/Extremely Concerned

| | |
|---|-----|
| ...creating new superbugs that cause illnesses that antibiotics cannot cure | 72% |
| ...in livestock feed, allowing them to be raised in crowded and unsanitary conditions | 67% |
| ...leaving residues in the meat for human consumption | 65% |
| ...in feed leading to antibiotics polluting the environment through agricultural runoff | 61% |

What Supermarkets Offer

To find out what no-antibiotics meat and poultry products supermarkets are offering to consumers, we looked at company websites, contacted supermarket chains directly, and sent “secret shoppers” into the stores.

Supermarket Store Brands and Policies

We attempted to contact the 13 largest grocery retailers in the U.S. (by total sales)³⁸ to inquire about any public policies they have regarding the use of antibiotics in livestock and to find out about any store brands of raw beef, pork, chicken, or turkey products their stores carry that were raised without antibiotics (including organic meat). We wrote to the companies in February and March 2012 and asked them to respond within four weeks. We made attempts to follow up with all companies multiple times to ensure that our letter had reached the right person or department and to confirm our deadline. We received responses from six of the 13 companies addressing some or all of our questions: Ahold, Costco, Kroger, Safeway, Trader Joe’s, and Whole Foods.

We checked company websites in search of information on policies and products as well, and compared what we found to what shoppers found in the field.

Store Brands

Most supermarkets have their own brands, exclusive to the chain, which generally offer good value and in which they often take special pride. We wondered whether chains would have store brands of meat and poultry that are organic or otherwise raised without antibiotics. We found that most of the supermarket chains have at least one store brand of “no antibiotics” meat or poultry (See Table 1).

The exceptions appear to be Wal-Mart and Meijer. Wal-Mart confirmed by e-mail that its Great Value store brand line does not include a no-antibiotics meat or poultry offering. Meijer did not respond to our requests for information, but our research on its website and our shopper research found no evidence that it has a line of no-antibiotics store-brand meat. But both chains carry other brands of meat and poultry raised without antibiotics, as do many of the other stores we surveyed (see Table 2).



TABLE 1: Store-Brand Meat and Poultry Products Raised Without Antibiotics for the 13 Largest (by Sales) Grocery Retailers

| Company | Subsidiaries/ Chains Owned | Store-brand meat without antibiotics or organic |
|--------------------------------------|---|--|
| Ahold USA | Giant, Martin's, Peapod, Stop & Shop | Yes (<i>Nature's Promise</i>) |
| Costco | Costco | Yes (<i>Kirkland</i>) |
| Delhaize | Bloom, Bottom Dollar, Food Lion, Hannaford, Harveys, Sweetbay | Yes (<i>Nature's Place</i>) |
| Great Atlantic & Pacific Tea Company | A&P, Food Basics, Food Emporium, Pathmark, SuperFresh, Waldbaum's | Yes (<i>Green Way</i>) |
| H-E-B | Central Market, H-E-B, H-E-B Plus | Yes (<i>H-E-B Natural</i>) |
| Kroger | Baker's, City Market, Dillons, Food 4 Less, Foods Co., Fred Meyer, Fry's, Gerbes, JayC, King Soopers, Kroger, Owen's, Pay Less, QFC, Ralphs, Scott's, Smith's | Yes (Transitioning to <i>Simple Truth</i> brand, currently called <i>Private Selection</i>) |
| Meijer | Meijer | No |
| Safeway | Carrs, Dominick's, Genuardi's, Pavilions, Randalls, Safeway, Tom Thumb, Vons | Yes (<i>Open Nature</i> and <i>O Organics</i>) |
| Supervalu | Acme, Albertsons, Cub, Farm Fresh, Hornbacher's, Jewel-Osco, Lucky, Save-A-Lot, Shaw's/Star Market, Shop 'n Save, Shoppers | Yes (<i>Wild Harvest Natural</i>) |
| Publix | Publix | Yes (<i>GreenWise</i>) |
| Trader Joe's | Trader Joe's | Yes (<i>Trader Joe's All Natural</i> and <i>Trader Joe's Organic</i>) |
| Wal-Mart | Sam's Club, Walmart | No |
| Whole Foods | Whole Foods | Yes |

SOURCES: COMPANY RESPONSES, COMPANY WEBSITES, AND SHOPPER FINDINGS.

Company Policies

Of the 13 companies we looked at, four—Whole Foods, Trader Joe's, Ahold, and Safeway—indicated to us their store policies regarding the use of antibiotics in livestock production. We were unable to locate policies for any other companies on their websites.

Whole Foods

Whole Foods has an excellent, comprehensive policy to sell only meat and poultry raised without antibiotics. The Whole Foods website states, "Our standards prohibit animal by-products in the animal's feed and both antibiotics and added hormones." The company partners with the Global Animal Partnership, a nonprofit third-party certification program, to verify claims about animal welfare practices made on Whole Foods meat, including its statements about antibiotics. The Global Animal Partnership uses a Five Step Animal Welfare Rating Standard to denote the quality of life of the chickens, pigs, and cows raised for meat.

Whole Foods' policy is strict. Its no-antibiotics stance includes ionophores, a class of antibiotics that is not used by humans but is sometimes given to animals by meat producers who claim not to use antibiotics. The policy also extends to ractopamine, a drug used for growth promotion in livestock that is common in the U.S. but banned in many other countries.

Whole Foods sent us this statement confirming its policy:

"We prohibit the use of antibiotics for all of our meat, regardless of whether there is a 5-Step standard for the species or not. There are no exceptions. We prohibit both sub-therapeutic and therapeutic antibiotics. If an animal becomes ill or is injured, we require that the animal is treated and then removed from the Whole Foods Market meat supply. We require records of all medication used so we can be assured our producers are following our standards."

Trader Joe's

Trader Joe's also has a policy on antibiotics and meat, although it is not as encompassing as Whole Foods'. Trader Joe's organic products exclude antibiotics, as is required by USDA regulations. In addition, its "all natural" products also prohibit antibiotics—something that is not required by the government. Trader Joe's also says that it uses independent auditors to verify compliance with its policies, a very good step. It described its policy as follows:


"We not only require our suppliers to abide by governmental regulation but also our own strict standards. Trader Joe's branded raw meat and poultry products labeled 'all natural' or organic must not contain antibiotics in the hatchery, farm, feed, or water at any stage of broiler production for our products. Feed must also be provided by a designated FDA licensed feed mill. Finished feed samples are collected for antibiotics and pesticide residue analysis and evaluated by third party independent labs. Independent third party audits are also conducted to verify an antibiotic free system from hatchery, farm, feed mill and end product. We will not continue doing business with vendors who are not in compliance with these policies."

Safeway

Safeway has a policy on antibiotics and meat that emphasizes compliance with existing law. Safeway's organic store brand excludes antibiotics, as required by the USDA. However, its Open Nature brand excludes antibiotics as well, and animals produced for the Safeway Rancher's Reserve Beef Program can only get antibiotics twice. Safeway provided the following statement on its policy:

"Safeway Inc. is committed to providing safe, wholesome food products and part of that commitment is in support of the responsible use of antibiotics as a health management tool for use with livestock to prevent and treat disease. The use of antibiotics is heavily regulated by the US Food and Drug administration (FDA) and the





US Department of Agriculture (USDA). Safeway is in support of FDA approved product use in livestock production and supports the FDA's recommended withdrawal time and random residue testing conducted by USDA through the National Antimicrobial Resistance Monitoring System. Antibiotics are administered under the guidance of certified veterinarians or trained personnel who follow regulations set forth by the Animal Medicinal Drug Use Clarification Act and comply with the Judicious Use Guidelines established by the American Veterinary Medical Association. Withholding medicine from sick animals is inhumane and does not comply with our Animal Welfare program however; animals produced for Safeway's Rancher's Reserve Beef Program will be removed from the program if antibiotic treatment is administered more than twice in an animal's life-span."

Ahold USA

Ahold provided a very brief statement of its policy on antibiotics and meat, and did not indicate any special limitations about what is sold in its stores. Ahold does offer the Nature's Promise store brand, which prohibits use of antibiotics. The company said:

"The policy that governs product offerings is to give customers a selection across our major categories and to allow consumers to make informed choices. The clear communication of product attributes is part of our policy."

Shopper Findings

To get more in-depth information about the availability of meat raised without antibiotics at the 13 largest supermarket chains, in March and April 2012 we deployed a Consumer Reports team of "secret shoppers" to survey store meat departments. We wanted to know what products a consumer might find on a typical shopping day, and whether or not their findings were consistent with what the companies told us.

Shoppers were instructed to look for any raw beef, pork, chicken, or turkey product that had a claim about antibiotics or was labeled organic. Shoppers noted the brand, type, and cut of meat, price, and exact wording on the package about antibiotics for each product they reported.

Our 36 shoppers visited 136 grocery stores in 23 states. They reported back on more than 1,000 raw meat and poultry products that carried a claim about antibiotics or were labeled organic. (These products shall be referred to as "no antibiotics" products for the remainder of this report.) States and the number of stores visited were: Arizona (5), California (9), Florida (12), Georgia (2), Idaho (1), Illinois (5), Indiana (3), Maine (1), Massachusetts (11), Maryland (3), Michigan (5), Minnesota (3), North Carolina (4), New Hampshire (3), New York (12), Ohio (4), Oregon (3), Pennsylvania (7), Tennessee (4), Texas (21), Virginia (7), Washington (10), and the District of Columbia (1).

Shoppers visited at least five stores of each of the 13 major supermarket chains. Some companies own many regional subsidiary chains. Our shoppers were able to survey many, but not all, of those stores. Shopper findings represent a snapshot of offerings on the day shoppers visited a particular store and may not be indicative of products offered on other days or at other store branches.

Geographic Availability

The shoppers' experiences varied widely, from stores with entire sections devoted to meat raised without antibiotics to stores that had none. In general, however, meat and poultry raised without antibiotics were available to some degree almost everywhere. Such meat was available in every state we surveyed and in 72 of the 78 cities in which our shoppers surveyed stores.

Chain and Store Availability

Chains and stores varied widely, however, in availability of “no antibiotics” meat and poultry. Of the 136 stores visited, 119 offered at least one beef, chicken, turkey, or pork product in its meat department that had a “no antibiotics” claim of some sort on the package. Seventeen stores had none.

Our shoppers found the widest variety of products at five chains. The broadest range of offerings was at Whole Foods, where everything in the meat section is raised without antibiotics. In addition, all four types of meat and poultry surveyed—beef, pork, chicken, and turkey—were found at Giant, Hannaford, Shaw’s, and Stop & Shop. Two of the chains, Giant and Stop&Shop, are subsidiaries of the Netherlands-based multinational company Ahold. Hannaford is a subsidiary of Delhaize, and Shaw’s is a subsidiary of Supervalu.

Trader Joe’s and Publix markets offered a good selection of chicken, beef, and turkey products without antibiotics, although neither offered any such pork products. However, those companies offered the highest average number of different cuts of meat products (drumsticks, breasts, chops, etc.) per store that were raised without antibiotics.

At the other end of the spectrum, our shoppers found no offerings of organic or other “no antibiotics” meat at four chains: Sam’s Club, owned by Wal-Mart (6 stores surveyed); Food Lion, owned by Delhaize (3 stores surveyed); SaveALot, owned by Supervalu (3 stores surveyed); and Food4Less, owned by Kroger (1 store surveyed). In addition, several chains were inconsistent with their offerings—some of their store locations sold “no antibiotics” products while other locations did not. Those chains were Albertsons (Supervalu), HEB, and Tom Thumb (Safeway).



TABLE 2: Average Number and Type of “No Antibiotics” Meat and Poultry Products Offered at the 13 Largest Supermarket Chains and Subsidiaries

| Company | Subsidiaries/Chains Owned | Number of Stores Surveyed | Number Different Products Found | Average Number Products/Store | Parent Co. Avg. Products/Store | Chicken | Turkey | Beef | Pork |
|---|---------------------------|---------------------------|---------------------------------|-------------------------------|--------------------------------|---------|--------|------|------|
| Ahold USA | | | | | 13.2 | | | | |
| | Giant | 5 | 68 | 13.6 | | X | X | X | X |
| | Stop & Shop | 6 | 77 | 12.8 | | X | X | X | X |
| Costco | Costco | 12 | 65 | 5.4 | 5.4 | X | X | X | |
| Delhaize | | | | | 8.4 | | | | |
| | Food Lion | 3 | 0 | 0 | | | | | |
| | Hannaford | 4 | 64 | 16 | | X | X | X | X |
| | Sweetbay | 1 | 3 | 3 | | X | | | |
| Great Atlantic & Pacific Tea Co. | | | | | 4 | | | | |
| | A&P | 2 | 11 | 5.5 | | X | X | X | |
| | Food Emporium | 1 | 6 | 6 | | X | X | X | |
| | Pathmark | 2 | 3 | 1.5 | | X | | | |
| H-E-B | H-E-B | 6 | 46 | 7.7 | 7.7 | X | | X | X |
| Kroger | | | | | 9.9 | | | | |
| | Food 4 Less | 1 | 0 | 0 | | | | | |
| | Fred Meyer | 4 | 48 | 12 | | X | | X | X |
| | Fry's | 1 | 1 | 1 | | | | X | |
| | Kroger | 7 | 66 | 9.4 | | X | | X | X |
| | QFC | 2 | 30 | 15 | | X | | X | X |
| | Ralph's | 1 | 13 | 13 | | X | | X | X |
| Meijer | Meijer | 5 | 25 | 5 | 5 | | | X | |
| Publix | Publix | 6 | 98 | 16.3 | 16.3 | X | X | X | |
| Safeway | | | | | 4.1 | | | | |
| | Dominick's Finer Foods | 1 | 9 | 9 | | X | | | X |
| | Pavilions | 1 | 2 | 2 | | | | X | X |
| | Randalls | 4 | 18 | 4.5 | | X | | | X |
| | Safeway | 7 | 35 | 5 | | X | * | X | X |
| | Tom Thumb | 2 | 1 | 0.5 | | | | | X |
| | Vons | 1 | 1 | 1 | | X | | | |
| Supervalu | | | | | 4.4 | | | | |
| | Albertsons | 7 | 19 | 2.7 | | X | | X | |
| | Cub | 1 | 3 | 3 | | | | X | |
| | Jewel-Osco | 1 | 4 | 4 | | X | | X | |
| | Save-A-Lot | 3 | 0 | 0 | | | | | |
| | Shaw's | 4 | 48 | 12 | | X | X | X | X |
| | Shop 'n Save | 1 | 4 | 4 | | X | | | |
| | Shoppers | 1 | 5 | 5 | | X | | X | |
| Trader Joe's | Trader Joe's | 11 | 191 | 17.4 | 17.4 | X | X | X | |
| Walmart | | | | | 4.1 | | | | |
| | Sam's Club | 6 | 0 | 0 | | | | | |
| | Walmart | 11 | 69 | 6.3 | | X | X | | |
| Whole Foods | Whole Foods | 5 | ** | ** | ** | X | X | X | X |

* SAFEWAY'S RESPONSE TO OUR INQUIRY NOTED THAT THE COMPANY OFFERS ORGANIC TURKEYS SEASONALLY.

** ALL MEAT AND POULTRY SOLD AT WHOLE FOODS ARE RAISED WITHOUT ANTIBIOTICS.

Types of Meat and Poultry

The Consumer Reports shoppers noted 1,158 individual meat and poultry products for sale that made some sort of claim about no antibiotics or were labeled organic in the 136 stores they visited (referred to in this report as “no antibiotics” products). Shoppers noted all beef, chicken, turkey, and pork products with “no antibiotics” labels except at the five Whole Foods stores. At Whole Foods, due to the wide variety of offerings, shoppers made note only of certain cuts. More than 200 of the products noted, or around 20 percent, were USDA organic products, which must by definition be raised without antibiotics (this is usually noted on the label). Most of the products available, however, were not organic but had other labels indicating they were raised without antibiotics—the shoppers noted more than 900 such products.

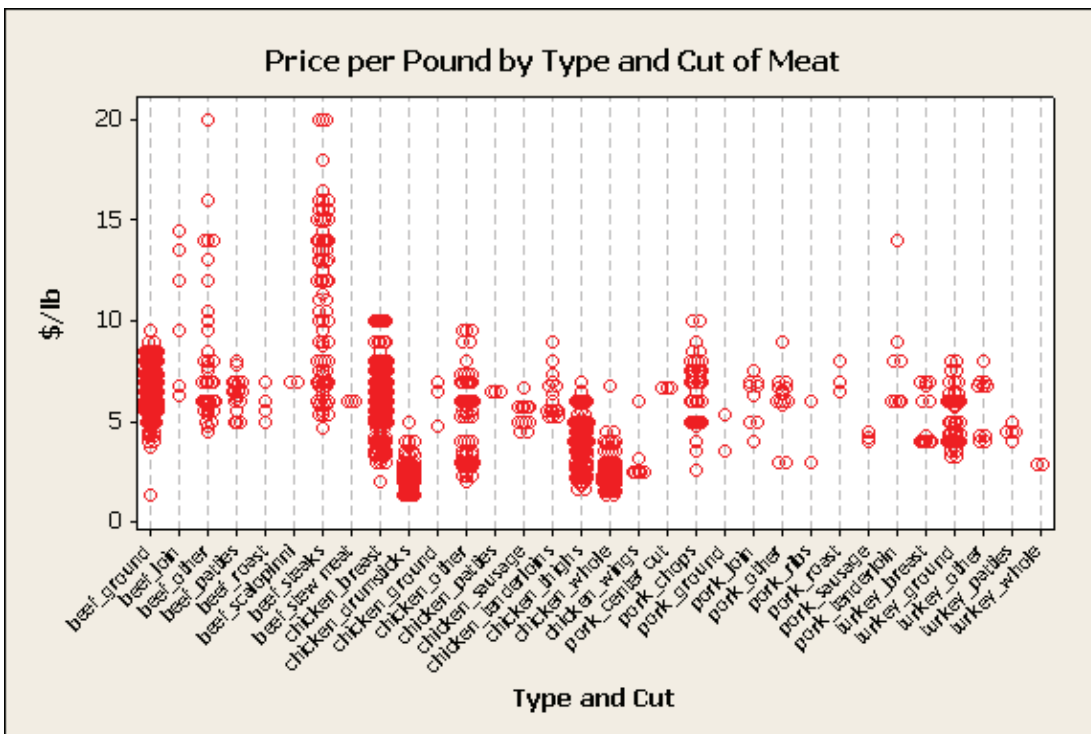
Chicken was by far the “no antibiotics” product most frequently encountered by our shoppers. Of the 1,158 “no antibiotics” products, more than half were chicken. Beef accounted for about

a quarter of the total. Pork and turkey raised without antibiotics were found less often in the stores; shoppers found about 85 of each.

Prices of “No Antibiotics” Products

The Consumer Reports shoppers gathered data on the prices of “no antibiotics” products, including organic meat and poultry, at the 119 stores that carried them. Based on this data, it appears that “no antibiotics” meat and poultry is not as costly as many might assume. While shoppers found beef products priced up to \$19.99 per pound for organic steak, virtually all of the “no antibiotics” chicken, turkey, and pork products found in the stores were priced under \$10 per pound. Such chicken could be had at three chains—Trader Joe’s, Jewel-Osco, and Publix—for as little as \$1.29 per pound. Moderately priced “no antibiotics” products (under \$5 per pound) were available at almost every chain that carried such meat.

FIGURE 1: Prices of “No Antibiotics” Meat and Poultry Products at Surveyed Stores



EACH CIRCLE REPRESENTS ONE SAMPLE OF MEAT, WITH A LABEL THAT MAKES A CLAIM ABOUT NO ANTIBIOTICS, FOUND IN OUR SHOPPER SURVEY. SHOPPERS VISITED 136 STORES AND FOUND 1158 PRODUCTS. OVERLAPPING CIRCLES APPEAR AS SOLID BARS

The average price of various types of organic and “no antibiotics” meat and poultry in the 13 chains was generally higher than the national average prices of the same type of meat as compiled by the U.S. Department of Labor Bureau of Labor Statistics (BLS). However, for all the cuts of chicken and pork we looked at, at least some stores’ prices were equal to or lower than the average cost of the cut as determined by the BLS. For example, while the average price of whole chicken in March 2012 was \$1.40 per pound, our shoppers found “no antibiotics” and organic whole chicken for prices ranging from \$1.29 to \$6.79 per pound. And while the average cost of pork chops was \$3.50 per pound, our shoppers found “no antibiotics” and organic pork chops from \$2.59 to \$9.99 per pound.

In the case of ground beef, all “no antibiotics” and organic products noted by shoppers were above average in price, although some were close to average.

As there are more producers of meat and poultry raised without antibiotics, it is possible that the prices of such products in many stores may ultimately not differ in a major way from current average meat prices. Organic products may remain somewhat more expensive since they must comply with a broad range of environmental standards. But as noted earlier, studies of production facilities have estimated that pork can be produced without antibiotics for approximately 5 cents per pound more than pork grown using antibiotics, and chicken can be produced without using antibiotics for just a fraction of a cent per chicken additional. The cost data from the stores surveyed—which found some prices close to, and in a number of cases lower than, current average prices—bore this out.

TABLE 3: Prices of Five “No Antibiotics” and Organic Products at Stores Visited by CR Shoppers Compared with Average U.S. Price, March 2012 (Bureau of Labor Statistics)

| Product & Cut | National Average Price | “No Antibiotics” Minimum Price | “No Antibiotics” Maximum Price |
|--------------------|------------------------|--------------------------------|--------------------------------|
| Beef, Gound | \$3.66 | \$3.75 | \$9.49 |
| Chicken Breast | \$3.17 | \$1.99 | \$9.99 |
| Chicken Drumsticks | \$1.59 | \$1.29 | \$4.99 |
| Chicken Whole | \$1.40 | \$1.29 | \$6.79 |
| Pork Chops | \$3.50 | \$2.59 | \$9.99 |

SOURCE: [HTTP://WWW.BLS.GOV/RO3/APMW.HTM](http://www.bls.gov/RO3/APMW.HTM) AND SHOPPER VISITS.

Barriers To Offering More Products

We asked grocery retailers about the limitations that prevent their stores from carrying more (or any) meat products raised without antibiotics. Kroger and Safeway pointed to limited availability, along with consumer cost concerns. Safeway also noted that “because consumer demand for natural and organic items is much higher for the premium cuts (e.g., loin cuts) and lower for the remaining portions, the value proposition is often skewed toward higher priced items.”

Trader Joe’s said that the company is “always looking to add to our selection of antibiotic free protein items; however, supply, pricing, and product quality have to fit our standards.”

Costco stated that the overuse of antibiotics in meat production is a concern but that it is not able to say it doesn’t want the use of antibiotics since it doesn’t know enough about the claim.

Employee Confusion

It is perhaps due in part to the dizzying array of products and label claims that grocery store workers, when asked, did not always know where to direct shoppers looking for meat raised without antibiotics or offered answers about label claims that were incorrect.

One shopper who asked about a store’s selection of meat without antibiotics was offered the explanation that “since chickens were small animals as compared to cows, the need for antibiotics in chickens is not as great.” An employee at one store told another shopper that he thought the “all natural” label on their chicken meant no antibiotics were used. Neither of these answers is accurate.

An assistant store manager at one grocery store, when asked by a shopper for meats raised without antibiotics, responded, “Wait, you mean like veggie burgers?”



A woman with blonde hair tied back is looking down at a product label in a grocery store. She is wearing a dark blue t-shirt. The background is slightly blurred, showing shelves and other products in the store.

Reading the Labels

Consumers have a choice. They have the opportunity at many stores to buy meat and poultry that is raised without antibiotics, and thereby help preserve antibiotics for treatment of diseases in people. But doing so requires reading the labels.

Consumer Reports shoppers encountered many different labels related to antibiotics use, and Consumer Reports researchers uncovered a few more. We analyzed them and determined that most of the labels encountered provide meaningful information that consumers can rely on, at least to some degree. A few do not. Two labels to look for: Organic and No Antibiotics Administered. Four to be wary of: Natural, No Antibiotic Growth Promotants, Antibiotic Free, and No Antibiotic Residues.

Labels to Choose

Organic

The “organic” label, widely available in supermarkets, means that many healthful and environmentally sound practices were employed in the production of the food, including no antibiotic use on livestock. The USDA has, in fact, put out hundreds of pages of “do’s” and “don’ts” that organic producers must follow to label their food as USDA organic. In addition, adherence to organic rules must be verified by an independent organic certifier via an on-site visit.

Consumers can therefore have a very high level of trust that any meat and poultry labeled “USDA Organic” has never been given any antibiotics at any stage of production.

No Antibiotics Administered (and its Many Variations)

The “no antibiotics administered” label also appears on meat and poultry in many supermarkets, and shows up in many variations. Consumer Reports shoppers in fact found more than 20 different labels about non-use of antibiotics in the stores they visited, including “raised without antibiotics,” “never ever given antibiotics,” and “humanely raised on family farms without antibiotics” (see box “What’s in a Name?”).

In general, consumers can rely on “no antibiotics administered” and similar labels, especially if they are accompanied by a “USDA Process Verified” shield. Any label that appears on meat and poultry is required to be approved by the USDA Food Safety and Inspection Service (FSIS), although we did find a few that had not been approved (see below). If a company wants to say “No Antibiotics Administered” on its package, the USDA requires that the company submit an affidavit substantiating that. The USDA told Consumer Reports that the producer must also indicate that it does not use ionophores, another growth-promoting, bug-killing drug, and that the drugs are not being used at any stage in the animal’s life, including in the egg in the case of chickens. Variations on the wording are permitted but must be individually approved.

Once a company gets approval, however, the USDA does not routinely check up to see whether the company is actually avoiding antibiotic use as it claims. Nor is there any requirement that producers employ an independent certifier to verify on site that the claim is accurate. Companies can pay to have the USDA Agricultural Marketing

Service verify the claim, in which case they can earn the right to put “USDA Process Verified” on the label. A company can also employ private certifiers to check up. Whole Foods indicates on its website that it employs an independent certifier, the Global Animal Partnership.

Bottom line: Consumers can have a high level of trust in a “no antibiotics administered” or equivalent label if it is “USDA Process Verified” or it is backed up by another independent certifier. Other “no antibiotics” labels may also be meaningful, but consumers cannot be completely certain that such claims are 100 percent guaranteed without any outside verification by a certifier. Consumers may have to check on the supermarket’s website to see whether the store’s claims are verified by an outside entity.

Labels Not Meaningful with Regard to Antibiotic Use

Natural

The “natural” label appears on many products in many stores. Consumers may think it is the same as organic, or perhaps even better. Unfortunately, that is not the case. It can be unnatural in many ways, including being raised with antibiotics.

The “natural” label in fact has nothing to do with how an animal was raised. The USDA requires only that no coloring or artificial ingredients are added to the final meat or poultry product and that it be “minimally processed” (although salt water can be added). “Natural” meat or poultry products can definitely be given antibiotics in their feed or water while being raised—and can also be raised in confined spaces with thousands of other animals, given hormones and other drugs, fed animal by-products and subjected to many other unnatural practices.

No Antibiotics, with an asterisk

One other label that caused us concern was Naturewell “No Antibiotics*” with a footnote “*as verified by 120 day affidavit” found on Naturewell Natural Beef, sold at Meijer stores. Puzzled about the footnote, we went to Naturewell’s website,³⁹ where on a Frequently Asked Questions page we found the following:

What does the statement on your label, “As verified by 120 day affidavit” mean?

It is a common practice in the industry to ensure compliance with program protocols through legal affidavits. ...

Naturewell is a 120-day withdraw program that delivers beef free of antibiotics and added hormones. Naturewell achieves this by prohibiting antibiotic and added hormone use during the final 120 days of feeding, ensuring ample time for any traces to be 100% metabolized out of the animal.

In other words, this beef is only “No Antibiotics” for the last four months of its life. Since Naturewell indicates that the cattle are generally slaughtered between 18 and 24 months, that leaves 14 to 20 months in which the animals can get antibiotics. We asked the USDA whether this label was approved, and it responded as follows:

“Producers/Companies are allowed to make the claim ‘raised without antibiotics 120 days prior to finish’ without any further explanation. This tells the consumer that the animals may have received antibiotics prior to 120 days ... before slaughter.”

We’re concerned, however, that consumers could be confused by this label, especially if they didn’t have access to the fine print on the company website while making their purchase at the meat counter.

Grassfed

Shoppers found “grassfed” claims in a number of supermarkets, mainly on organic beef products. Organic grassfed, and two grassfed labels that are not yet widely available in supermarkets, certified by the Food Alliance and the American Grassfed Association, ensure the meat was raised without antibiotics.

USDA requires a meat product that has a “grassfed” label to come from an animal that was fed only grass, but antibiotics can have been given as well. An additional “organic” or verified “no antibiotics administered” label ensures no antibiotic use.



What's In A Name?

OUR SHOPPERS FOUND MANY VARIATIONS IN LABELS ON RAW MEAT AND POULTRY REGARDING THE USE OF ANTIBIOTICS. MOST OF THEM ARE USEFUL GUIDES TO PURCHASING, BUT SEVERAL ARE NOT.

HIGHLY USEFUL LABELS (MEANINGFUL AND VERIFIED)

ORGANIC

NO ANTIBIOTICS ADMINISTERED/ USDA PROCESS VERIFIED

USEFUL LABELS (MEANINGFUL BUT MAY NOT BE VERIFIED)

NO ANTIBIOTICS

NO ANTIBIOTICS EVER

NO ADDED ANTIBIOTICS

NO ANTIBIOTICS ADMINISTERED

NO ADDED ANTIBIOTICS EVER

NO ANTIBIOTICS EVER ADMINISTERED

NO ANTIBIOTICS ADDED

NEVER ANY ANTIBIOTICS ADMINISTERED

NEVER GIVEN ANTIBIOTICS

NEVER EVER ADMINISTERED ANTIBIOTICS

NEVER EVER GIVEN ANTIBIOTICS

HUMANELY RAISED WITHOUT ANTIBIOTICS

HUMANELY RAISED ON FAMILY FARMS WITHOUT ANTIBIOTICS

GROWN WITHOUT ANTIBIOTICS

GROWN WITHOUT THE USE OF ANTIBIOTICS

RAISED WITHOUT ANTIBIOTICS

RAISED WITHOUT ADDED ANTIBIOTICS

NOT USEFUL WITH REGARD TO ANTIBIOTIC USE

NATURAL

NO ANTIBIOTICS* AS VERIFIED BY 120-DAY AFFIDAVIT

UNAPPROVED LABELS

NO ANTIBIOTIC GROWTH PROMOTANTS

ANTIBIOTIC FREE

NO ANTIBIOTIC RESIDUES

Labels Unapproved by the USDA

Antibiotic Free

One label that the USDA specifically states that it never authorizes is “antibiotic-free.” It therefore has no clear or consistent meaning in the marketplace and in fact should not appear on meat or poultry.

Given that the USDA never authorizes the “antibiotic-free” claim, we were surprised that several of our shoppers reported seeing an “Antibiotic Free” label on Ranger chicken at QFC and Trader Joe’s stores during their surveys. They also spotted that label at a Publix meat counter in front of some steaks. We have reported this to the USDA and asked it to investigate. In the meantime consumers should be aware that there is no USDA definition of “antibiotic-free,” and it is not approved by the USDA.

No Antibiotic Residues

Our researchers found a “no antibiotic residues” label on pork products in some stores. When we asked the USDA about it, it said the claim has not been approved.

This label is potentially very confusing. Antibiotics can be heavily used in the growing process for pigs and chickens, but must be withdrawn for a period of days or weeks prior to slaughter, so that residue levels are below FDA tolerance thresholds. Technically, meat could be free of antibiotic residue despite the earlier use of antibiotics. Consumers should be aware that this is not a USDA-approved label and should not appear in the marketplace.

No Antibiotic Growth Promotants

Another problematic label that our shoppers encountered is “No antibiotic growth promotants.” Since antibiotics can be used for growth promotion, disease prevention, and treatment of sick animals, it is difficult to know whether antibiotics were used. This label appeared on

pork products under the Farmland brand in Fred Meyer, QFC, and Ralphs stores (owned by Kroger). Farmland does not provide any explanation on its website of what it means.⁴⁰ When we asked the USDA about it, it said this claim has not been approved. Therefore it should not appear in the marketplace.

“No antibiotic growth promotants” could still mean large quantities of antibiotics are used in the feed and water given pigs if the stated purpose was to prevent disease (the main use in crowded growing facilities). When Consumer Reports checked with Farmland, the company indicated that it indeed used antibiotics for disease prevention. A consumer might think that the product was raised without any antibiotics, when that was in fact not the case.

Although a customer service representative told Consumer Reports that this was an approved label, when we checked, the USDA said that “No antibiotic growth promotants” was not an authorized label. We asked the agency to investigate this label as well.





Recommendations

Consumers Union, the public policy and advocacy arm of Consumer Reports, recommends the following actions for consumers, grocery retailers, the meat and pharmaceutical industries, Congress, and government agencies, to end the use of antibiotics in livestock production except for the treatment of sick animals.

For Consumers

Our findings show that consumers often have access to meat raised without antibiotics in many of their local supermarket chains, and those who don't would like the option. Consumers can make a significant contribution to ending use of antibiotics on animals by shopping at stores that carry meat without antibiotics and buying those products. If a store doesn't offer any of these products (or doesn't carry a preferred type or cut of meat) consumers should request that it do so. A quick conversation with the store manager, or even staff member in the meat department, can go a long way toward changing the store's practices.

Prices for these products are generally higher than conventional meat, especially if they are organic, but there are often more affordable cuts, such as chicken thighs, drumsticks, or whole birds, for shoppers on a budget. Even replacing just one conventionally raised cut of meat with one that was raised without antibiotics on each shopping trip (or even once per month) will help start moving the production system in the right direction.

Consumers must also be diligent label readers. In particular, consumers can have a high level of trust that organic meat and poultry, and meat labeled "no antibiotics" backed by "USDA Process Verified" or another independent certification, are products from animals that were not raised on these drugs. However, consumers should not rely on products with a "Natural" label—that

term refers only to treatment of the end product and does not say anything about how an animal was raised. Help with deciphering the many other labels found in supermarkets appears in the "Reading the Labels" section of this report.

For Grocery Retailers

Supermarkets have an opportunity—indeed, an obligation—to be a part of the solution in the face of this growing public health crisis. As the link between livestock producers and consumers, grocery retailers have the capacity to turn the tide on the overuse of antibiotics by requiring that their suppliers avoid these drugs for both growth promotion and disease prevention in food animals. Supermarket chains should make "no antibiotic use on any meat and poultry sold in our stores" company policy.

Recognizing that this transition will not happen overnight, grocery retailers should begin to have conversations with meat suppliers to determine their policies for using antibiotics in raising livestock and urge them to begin phasing out this practice. Beginning with their store brands, retailers should set timetables for transitioning entirely to meat raised without antibiotics.

For Congress

While consumer pressure may be a more immediate catalyst for moving livestock producers away from using antibiotics, a long-term and more permanent legislative or regulatory solution would be ideal. A bill that has been introduced in Congress, the Preservation of Antibiotics for Medical Treatment Act (PAMTA), would prohibit the use of medically important antibiotics in livestock production (except when treating sick animals) and thereby protect the efficacy of these drugs for human use. In light of the public health implications of

losing the efficacy for people of these critical drugs, Congress should pass this legislation immediately.

For the Food and Drug Administration (FDA)

The FDA recognized decades ago the inherent problem with the overuse of antibiotics in livestock production. After years of inaction, the agency in early 2012 issued new guidelines for the livestock and pharmaceutical industries requesting the “judicious use” of antibiotics in animals. However, these guidelines are merely voluntary, and while they attempt to discourage the use of antibiotics for growth promotion in animals, they continue to support the widespread use of these drugs for disease prevention (albeit under the guidance of a veterinarian, which is a step in the right direction). The FDA states it will review these guidelines again in three years to gauge progress and take additional action if needed.

The FDA should strengthen these guidelines and establish a mandatory ban on the use of antibiotics in animal production except to treat sick animals.

For the U.S. Department of Agriculture (USDA)

Consumers who want to buy meat raised without antibiotics should be able to feel secure that the labels on those products are meaningful (i.e. that there is a definition for them) and that their truthfulness is verified by someone. Our shoppers found several instances of labels that could mislead consumers to believe they were buying meat from animals that were not given antibiotics, when in fact that is not necessarily the case. And although the USDA is supposed to approve all labels on meat and poultry packages prior to use, our shoppers and researchers found several unapproved labels in the marketplace.

The USDA should improve its supervision of labels related to antibiotic use in several ways.

The USDA/FSIS currently conducts its reviews behind closed doors and does not disclose what specific labels it has authorized or which companies have been authorized to use them. The USDA should post on its website all authorized labels, the products they are authorized for, and the label definition, to help consumers understand the labels.

The USDA should establish one approved phrasing for such labels, such as “no antibiotics ever used,” and restrict all labels to that usage. That would significantly reduce consumer confusion.

The USDA should establish a formal standard defining this label (the USDA indicated to Consumer Reports that it does not allow use of ionophores and prohibits antibiotic use at any stage of an animal's life, if meat is to carry a “no antibiotics” label, but the full definition is not published on its website). This would help both companies and consumers understand label requirements and facilitate better enforcement.

The USDA should check up on “no antibiotics” labels to verify their truthfulness, and take action against labels that do not conform to its established definitions.

For the Meat and Poultry Industries

Giving cattle, pigs, turkeys, and chickens antibiotics in their food and water to improve their growth and prevent disease has become standard practice, especially at very large feedlots and mass-production facilities. For the sake of preserving these drugs for treatment of sick people, it is imperative for meat and poultry producers to stop treating animals with these drugs prophylactically and for growth promotion. In doing so, they will take a step toward solving the public health problem of antibiotic resistance and decrease the chance of “superbug” infection outbreaks.





The livestock industries in many other countries have already transitioned away from the use of antibiotics in food animals without detriment to production or sales. U.S. meat producers should follow suit.

For the Pharmaceutical Industry

To keep antibiotics effectively working to treat infections, there must be limits on their use for non-essential purposes. As the developers and manufacturers of these drugs, the pharmaceutical industry has a responsibility to limit their use in animals.

The FDA recently called on the drug industry to cease marketing antibiotics for use in animal feed and water for the purpose of growth promotion. Consumers Union fully supports this request. However, we urge the industry to go further and to cease selling antibiotics for disease prevention in animals. Drug companies would never market antibiotics to humans for routine continuous use to prevent disease or promote growth, without a prescription, nor should they continue this practice for animals. We call on the pharmaceutical industry to limit antibiotic sales to the livestock industry solely for therapeutic use on sick animals.

ENDNOTES

- 1 Klevens RM, Edwards JR, Richards CI, Horan TC, Gaynes RP, Pollock DA and DM Cardo. 2007. Estimating Health Care-Associated Infections and Deaths in U.S. Hospitals, 2002. *Public Health Reports*, 122: 160-166. At: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1820440/pdf/phr122000160.pdf>
- 2 Infectious Diseases Society of America (IDSA). 2011. IDSA Policy Paper, Combatting Antimicrobial Resistance: Policy Recommendations to Save Lives, Oxford University Press.
- 3 Klevens, R.M., Morrison, MA, Nadle, J et al. 2007. Invasive methicillin-resistant *Staphylococcus aureus* infections in the United States. *The Journal of the American Medical Association (JAMA)*, 298 (15): 1763-1771
- 4 Pp. 10-11 in Levy, SB. 1992. *The Antibiotic Paradox: how miracle drugs are destroying the miracle*. New York, NY: Plenum Press. 279 pp.
- 5 Dharmarha, V. 2011. A Focus on Antimicrobial Resistance. Food Safety Research Information Office of USDA's National Agricultural Library. At: http://www.motherearthnews.com/uploadedFiles/Blogs/Healthy_People_Healthy_Planet/USDA%20Knows%20of%20Link%20Between%20Factory%20Meat%20and%20MRSA.pdf
- 6 Pg. 8 in DeWaal CS, Roberts C and C Catella. 2012. *Antibiotic Resistance in Foodborne Pathogens: Evidence of the need for a risk management strategy*. Washington, D.C.: Center for Science in the Public Interest. 13 pp. At: <http://cspinet.org/new/pdf/abruptupdate.pdf>
- 7 Gurian-Sherman. D. 2008. *CAFOs Uncovered: The untold costs of confined animal feeding operations*. Cambridge, MA: Union of Concerned Scientists. 86 pp.
- 8 CDC. Estimates of Foodborne Illness in the United States. At: www.cdc.gov/foodborneburden/
- 9 Consumer Reports. 2010. How safe is that chicken? January. Pp. 19-23
- 10 DeWaal, CS et al. 2012. Op cit.
- 11 FSIS. Arkansas Firm Recalls Ground Turkey Products Due to Possible *Salmonella* contamination. FSIS-RC-060-2011. At: http://www.fsis.usda.gov/news/Recall_060_2011_Release/index.asp
- 12 DeWaal, CS et al. 2012. Op cit.
- 13 Pg. 7 in Levy, SB. 1992. *The Antibiotic Paradox: how miracle drugs are destroying the miracle*. New York, NY: Plenum Press. 279 pp.
- 14 Slaughter, L. Slaughter says "It's about time" FDA address the overuse of antibiotics in farm animals. Press release At: http://www.louise.house.gov/index.php?option=com_content&view=article&id=2690:slaughter-says-its-about-time-fda-address-the-overuse-of-antibiotics-in-farm-animals&catid=101:2012-press-releases&Itemid=55
- 15 Sun, M. 1984. Use of antibiotics in animal feed challenged. *Science*, 226(4671): 144-146. At: <http://www.sciencemag.org/content/226/4671/144.extract>
- 16 Simmons, S. 2007. Bipartisan bill curtails routine use of antibiotics in animal feed. *Vermont Journal of Environmental Law*. At: <http://www.vjel.org/news/NEWS100074.html>
- 17 <http://www.feinstein.senate.gov/public/index.cfm/2011/6/feinstein-preserve-effectiveness-of-medically-important-antibiotics>
- 18 At: <http://thomas.loc.gov/cgi-bin/bdquery/D?d112:2:./temp/~bd1jKE:./bss/>
- 19 Ray, DE and HD Schaffer. 2011. Guidance document provides FDA's current thinking on use of antibiotics in food animals. Policy Pennings, March 4, 2011. At: <http://agpolicy.org/weekcol/553.html>
- 20 FDA. 2012. Guidance # 209. The Judicious Use of Medically Important Antimicrobial Drugs in Food-Producing Animals. At: <http://www.fda.gov/downloads/animalveterinary/guidancecompliancencforcement/guidanceforindustry/ucm216936.pdf>
- 21 Hayes DJ, Jensen HH, Backstrom L and J Fabiosa. 2001. Economic impact of a ban on the use of over the counter antibiotics in US swine rations. *International Food and Agribusiness Management Review* 4: 81-97. At: <http://ageconsearch.umn.edu/bitstream/34371/1/04010081.pdf>
- 22 Ibid
- 23 MacDonald JM and S-L Wang. 2011. Foregoing sub-therapeutic antibiotics: the impact of broiler grow-out operations. *Applied Econ Perspectives and Policy*, 33(1): 79-98.
- 24 At: <http://www.perdue.com/faqs.asp>
- 25 Hayes et al. 2001. Op cit.
- 26 McBride WD, Key N and KH Mathews, Jr. 2008. Subtherapeutic antibiotics and productivity in US hog production. *Review of Agricultural Economics*, 30(2): 270-288. At: ddr.nal.usda.gov/bitstream/10113/36676/1/IND44059456.pdf
- 27 MacDonald and Wang. 2011. Op cit.
- 28 Graham JP, Boland JJ and E Silbergeld. 2007. Growth promoting antibiotics in food animal production: an economic analysis. *Public Health Reports*, 122: 79-87. At: http://www.jhsph.edu/sebin/s/a/antibiotics_poultry07.pdf
- 29 McBride et al. 2008. Op cit.
- 30 National Research Council (NRC). 1999. *The Use of Drugs in Food Animals: Benefits and Risks*. Washington, D.C.: National Academy Press.
- 31 National Pork Producers Council (NPPC). 2012. *Roll Call*, 57(135): 11.
- 32 IOM. 1988. *Human Health Risks with the Subtherapeutic Use of Penicillin or tetracyclines in Animal Feed*. Washington, D.C.: National Academy Press.
- 33 NRC. 1999. Op Cit.
- 34 NPPC. 2012. Op cit.
- 35 O'Brien AM, Hanson BM, Farina SA, Wu JY, Simmering JE, Wardyn SE, Forshey BM, Kulick ME, Wallinga DB and TC Smith. 2012. MRSA in conventional and alternative retail pork products. *PLoS One*, 7(1): e30092.
- 36 DeWaal CS et al. 2012. Op cit.
- 37 Meyer S and L Steiner. 2011. *Daily Livestock Report*, 9(22). At: <http://www.dailylivestockreport.com/documents/dlr%202-2-2011.pdf>
- 38 Pg. 22 in Stagnito Media. 2012. *2012 Marketing Guidebook*; Costco 2011 Annual Report, <http://phx.corporate-ir.net/phoenix.zhtml?c=83830&p=irol-reportsannual>
- 39 At: <http://www.naturewellbeef.com/EatWell/No-Antibiotics-or-Added-Hormones>
- 40 <http://www.farmlandfoods.com/products/all-natural-pork.list>