

For the Record

Straight talk about antibiotic use in food-animal production
Volume 3, Issue 3

Sponsored by ALPHARMA Inc. Animal Health
July 2004

INSIGHTS ON THE ISSUE

Organic meat as an alternative to livestock antibiotic use?

If the “booming” (see below) U.S. industry in organic food didn’t invent the issue of antibiotic use in food animals, it has demonstrated no shame in putting it to marketing advantage:

■ The **Keep Antibiotics Working** campaign — launched by a coalition of anti-agriculture, organic and environmental groups to **capitalize on fear** of antibiotic-resistant anthrax attacks after Sept. 11, 2001 — **solicits consumers** to pledge “...to purchase poultry, pork, beef, or fish produced without the routine use of antibiotics, such as those labeled ‘certified organic...’.” Several **participating organizations** steer consumers to organic and **natural food**

‘Whole Foods Market believes truly natural meats taste better, and they help avoid the health risk of developing antibiotic resistance.’

—Margaret Wittenberg, vice president, governmental and public affairs, Whole Foods Market, May 28, 2003

sources as alternatives to conventional agriculture.

■ Texas-based **Whole Foods Market**, whose projected \$3.8 billion in 2004 sales makes it the world’s largest organic-food marketer, widely promoted an **antibiotics-related survey** it commissioned in mid 2003. It found almost three in four of the 1,000 surveyed consumers were unaware of any scientific debate over antibiotic use in food. Yet once the surveyor prompted them with leading statements, six in 10 expressed a “high” desire to purchase organic meat as an alternative. Whole Foods’ promotional material pitches its antibiotic-free meat production as not only healthier, but somehow better tasting than conventionally produced meat.

■ Another survey from mid 2004, commissioned by a **co-op of 633 organic farmers** in 16 states, found two-thirds of consumers said they would freely pay a high price for food produced without “pesticides, antibiotics and hormones.” The co-op’s press releases, however, neglected to remind

editors of one well-proven consumer habit, just reiterated by a study in February’s *American Journal of Agricultural Economics*:

Consumers may say they’re going to buy less meat in the face of food-safety scares, but when the researchers created complex mathematical models that tracked actual historic meat consumption following media coverage of food-safety scares, they showed that consumers only temporarily change buying patterns — typically simply switching between pork, poultry and beef rather than fore-swearing meat altogether — and any purchasing reduction evaporates quickly. Adverse publicity has a statistically significant short-term impact, but an economically miniscule one. Bottom line: Consumers may say they’re concerned over the food safety checks and balances in today’s food system, but they nevertheless continue to demonstrate their confidence with their dollar, by purchasing affordable, dependable — conventionally produced — meat, milk and eggs.

Some market perspectives

Are the **market statistics** often quoted to demonstrate the “phenomenal” market for organic meat and milk really that phenomenal? A little perspective:

■ One of the “fastest growing segments” of U.S. and European agriculture in the last decade, overall organic food sales have grown in this country at about 25 percent per year during that period. For 2001, U.S. organic sales exceeded \$9 billion, according to the International Trade Centre. That means today, for every dollar the food consumer spends, the amount going to organics equals not quite 2 cents.

■ Growth in the number of acres devoted to organics has shown a similar dramatic increase: Organic corn and soybean acreage more than doubled between 1992 and 1997, and again between 1997 and 2001. Certified organic pasture likewise doubled between 1997 and 2001. As of 2002, the overall proportion of U.S. crop and pastureland devoted to certified organics equaled 0.3 percent. That means if the total area of the United States were a single giant farm, the organic field would just about cover three-fourths of the state of Rhode Island.

Also in this issue:

- **Organic meat marketers imply healthier, safer products than those that use antibiotics. Are consumers getting what they’re paying for? Some facts.**
- **How much ‘green eating’ can consumers afford?**

For the record

Organic meat production and opposition to antibiotic use have become linked. Yet some of the promotion about the relative safety and healthfulness of organics doesn’t stand up to a little critical scrutiny.

The fiction and the facts about organic alternatives

For the record

Organic meat, milk and eggs produced without antibiotics are being marketed with a good dose of fiction. Here are a few facts.

Proveysors and other advocates of organic meat, eggs and dairy products have to overlook a stark lack of evidence proving much of what they claim. Here are some facts:

Fiction: Organic meat is safer than that produced by conventional farming.

FACT: Advocates rely on three flawed contentions to argue their antibiotic abstinence makes meat safer:

■ There's less chance of harmful antibiotic residues in the end product.

The fact is no animal drug is approved

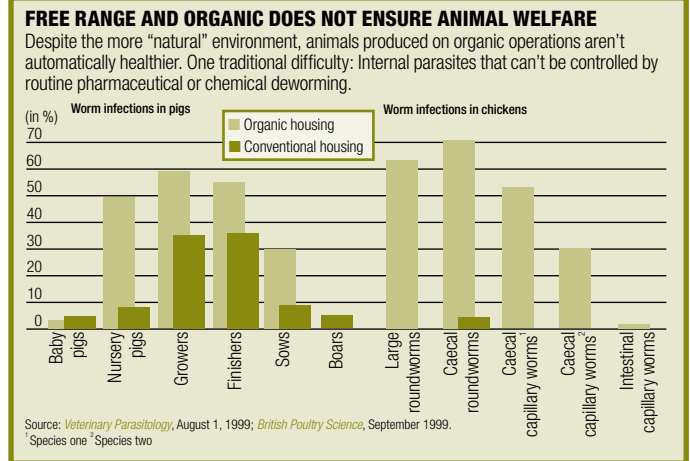
'Katherine DiMatteo, executive director of the Organic Trade Association, says that by eating organically grown food, you're helping the environment and improving your health. But she concedes that, officially, organic certification doesn't mean the food is safer, just that it's produced in a particular way.'

—Kiplinger's Personal Finance Magazine, May, 2001

for use in this country without first passing strict government safety tests to protect human health — and now regulators have added risk of antibacterial resistance to human drugs to that list for all food animal antibiotics. Manufacturers must prove that any minute drug traces that could remain in the final product are so minuscule as to be harmless. Mandatory pre-marketing drug withdrawal periods and surveillance sampling ensure no harmful residues reach consumers. Plus, many antibiotics affect only the gut and therefore never reach the meat.

■ Reduced chance of creating or passing along antibiotic resistant germs from animals to humans. Using antibiotics in farm animals can contribute to antibiotic resistance in some animal organisms. But organic marketers neglect to recognize scant evidence exists showing those resistant organisms can then be passed to humans and cause antibiotic-resistant disease. After more than 40 years of antibiotic use in farming, the theory remains theory, supported only through guilt by association and some statistical modeling.

■ Less stressful, more "natural" pro-



duction keeps animals healthier, and thus less likely to either need antibiotics or to be contaminated with bacteria that could cause food poisoning. Though the happy-animals-are-healthy-animals story makes the marketing department's job easier, the truth is not so storybook.

Studies comparing bacterial contamination don't support organic as superior. While *Cornell studies*, for instance, suggest low-starch diets of organic cattle and sheep might lower the risk of *E. coli* O157:H7 infection, *studies are split* regarding the amount and severity of mastitis in dairy cows on organic vs. conventional farms. Meanwhile, a 2001 European report concluded that organic production can be expected to actually increase *Salmonella* contamination in eggs, poultry and pork; *research likewise demonstrates* free-range poultry have a higher

risk of being infected with *Campylobacter* than conventionally housed poultry. Studies show holding down bacterial colonization of poultry by using antibiotics lowers the risk of contamination at processing. And *several studies show* outdoor production of pigs, laying hens, and sheep — without benefit of deworming products — leads to heavier parasite infections.

No wonder then that a comprehensive review of British conventional vs. organic agriculture — although written to argue in favor of widespread adoption of organic production — nevertheless succinctly concludes: "Based on our current limited scientific knowledge, it appears that the widely held view of the public that organic foods are safer and healthier than conventional foods is incorrect for the great majority of consumers."

'Of all the environmental and health benefits of organic food production, perhaps the most important is the refusal by organic poultry and livestock farmers to use antibiotics...'

—Boston Globe Editorial, Sept. 24, 2002

Fiction: Even if it's not healthier for them, today's consumers are so appalled by "factory farming," they'll pay a price premium to be assured the meat they eat comes from more "natural" farming.

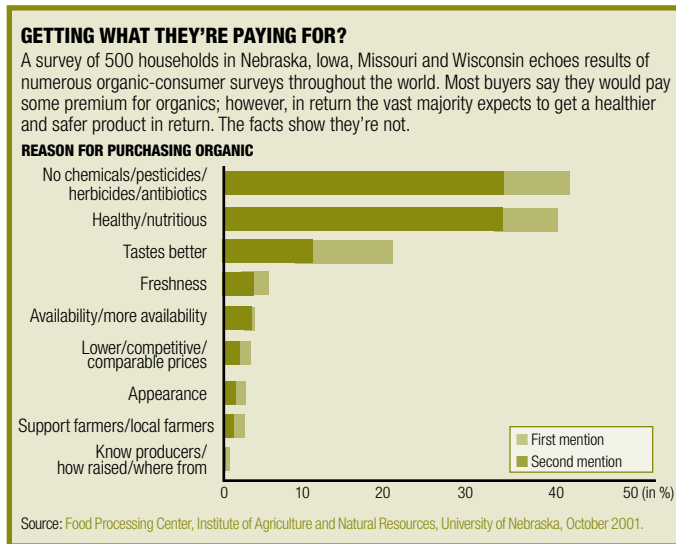
FACT: Though it's a pretty sentiment, the fact is even consumers themselves don't tell organic marketers that.

Numerous studies, both U.S. and European, prove that consumers still buy organic because they think

they're getting a safer and more nutritious product — particularly true, according to focused group interview research, for consumers buying food for children.

Although some evidence does

Fiction: Even if the decision isn't rational, consumers are so frightened by antibiotic resistance, *E. coli*, BSE, and other food scares that they're turning to organics "in droves."



suggest organic marketers, particularly in Europe, are making progress in convincing people to overlook weak health claims and pay a premium strictly to protect the environment, the majority of consumers still buy because they think they're getting a healthier food. In fact, English research found that even when consumers cite animal welfare as a

'...the meat of animals fed unnatural foods... may be as bad for us as it is for the creatures, who require antibiotics to survive such a diet. ...research suggests animals raised on the range are not only happier, but their meat is less likely to clog our arteries.'

—Vancouver Sun, Oct. 12, 2002

reason to buy organic or free-range, in the majority of cases they're simply using animal welfare as an indirect barometer for food safety and nutrition — which they consider more important.

If producers don't jump on the bandwagon and give consumers what they say they want by at least limiting antibiotic use, we'll lose markets.

FACT: Granted, it may be tempting to grease the squeaky wheel and eliminate antibiotic use to appease apparent consumer preference.

But there's a fatal flaw in that logic: Consumers may tell surveyors they'll shell out more than 25 percent extra to buy organics, but studies of their actual buying habits find they seldom follow through and actually buy.

"Although many consumers have expressed interest in organic food," notes British food economist Aikaterini Makatouni, "the food choices of relatively few people have been affected. ...expressed interest in organic food does not play a significant role in organic food purchase."

The most reliable predictors of tomorrow's food choice—if you judge by what consumers do and not what they say—remain a.) what the consumer bought yesterday and b.) the relative price. In that regard, adding to the cost of producing meat, milk and eggs—to the tune of \$2 billion for the U.S. pork industry alone minus antibiotics — is actu-

ally working against supplying what the consumer votes for with her pocketbook: A dependable supply of cheap food.

In addition, recent European research suggests that higher relative price charged for organics isn't caused just by higher costs of production. Marketers take a basic level price markup on organic fruit and vegetable products that's 36 percent higher than conventional products' markup. That additional markup, the researchers suggested, demonstrates the marketing chain has to burden the consumer with increased marketing and packaging costs in order to sell them on the shadow value of going organic.

Fiction: Even if there's no real additional value in organics, consumers should still have the freedom to choose.

FACT: True, with one important exception. Organic farming is now subsidized by the European Union and the governments of several countries, which have set goals for organic adoption. USDA, by setting standards for organic production, similarly gives an official air of blessing.

Such official backing—coupled with legislative action to limit antibiotic use—threatens to remove producers' access to important production tools like antibiotics. If that continues, the organic-food movement actually begins to narrow—not expand—consumers' choices in food. And when all consumers, including those least able to afford the luxury price, are required to go organic by the dictates of the government and large food suppliers, what started 30 years ago as an expensive indulgence for upper-income consumers becomes what Elizabeth Whelan, author of *The 100% Natural, Purely Organic, Cholesterol-Free, Megavitamin, Low-Carbohydrate Nutrition Hoax*, calls an "elitist and arrogant approach to buying food."

For the record

Government sanction and legislative action that elevate expensive organic food to preferential status doesn't increase the consumer's freedom of choice in food. It limits it.

'Sales of organic meat products are projected to surge as consumers fear for food safety. Organic beef is... seen by consumers to be safer to eat than non-organic beef.'

—Organic Monitor press release, Dec. 30, 2003

Coming in the next issue of *For the Record*

Ammunition to fight back: Facts to help you counter the assertions by opponents of antibiotic use in food production, and where to find more information when you need it.

For the Record

For the Record, sponsored by a grant from ALPHARMA, is designed to help unite the industry and provide a unified, rational message on behalf of producers whose freedom to use safe, effective, economical production methods is at stake. Working together, we can set the record straight on antibiotics. Questions or comments? Contact Steve Kopperud, at skopperud@poldir.com. Want to read past issues or link to more information on this issue? Visit us online at www.alpharma.com/ahd/For_The_Record

REAL-WORLD PERSPECTIVE ON THE ISSUE

Let's start with some realities of food production

Should we attack mothers for wanting the most effective antibiotics to protect their kids from diseases? Of course not.



Dennis T. Avery
Senior Fellow,
Hudson Institute

As antibiotic resistance broadens, we must meet the public's legitimate demands for antibiotics — within the limits of good sense: We can't prescribe antibiotics for non-bacterial ailments. We must insist the patients finish their prescriptions, so all the bacteria are killed.

Ultimately, we will need to clear out some of those government hurdles — and actually encourage the pharmaceutical industry to invest in discovering new antibiotics. (What a wild concept!) What we should not do is forbid the agricultural use of antibiotics and thus subject the nation's livestock and poultry to unnecessary disease and suffering.

Western Europe has effectively demonstrated that banning antibiotics from agriculture does nothing to combat antibiotic resistance in humans. Sweden and Denmark have shown that they can use lots less low-level antibiotics not very important to humans in livestock and poultry feed. But the same real-world experiment has seen a sharp increase in the use of antibiotics that are important to humans — for treating the sick birds and animals that result from ending the preventive treatment.

What we must not do is let diminished effectiveness of human antibiotics

become a red herring permitting anti-technology advocates to introduce purposeful inefficiency into modern agriculture. Efficient technology, including antibiotics and confinement feeding, is the only way in which we have been able to improve the overall diet of humanity, even while conserving wildlands.

Animal rights activists and misguided physicians are both pushing the First World in that wrong-headed direction. The doctors want to get off the hook for overprescribing antibiotics. The animal rights activists claim the birds and animals will be "happier" roaming the outdoors.

The "happiness" is a dubious issue, since the birds and animals are all communal in their natures. They like others of their kind around them. Mostly, they want company, food, water, safety and comfort. They get all of these in feedlots, poultry and hog houses.

Our society would not long permit the number of poultry and

hogs necessary to feed the world to roam free, as the activists want. The death losses are too high in poultry, and the hogs cause too much soil erosion.

Let's ask the environmental activists how much additional wild-life habitat the United States should clear so the domestic poultry, hogs and cattle can have playgrounds.

Let's start with the reality that the United States has 60 million sows, and produces 100 million or so market hogs per year. At four hogs per acre, that could take something close to 40 million acres of hog wallows — or 18 Yellowstone National Parks. Then there are the chickens, turkeys, feedlot cattle, feedlot dairies. . .

The world has 15 billion chickens, 1 billion hogs, and 1.5 billion cattle, and more every day. How much land should they "enjoy?"

Gosh, maybe those low-level antibiotics produce some public good after all.

Can they afford to eat green?

CONVENTIONAL

ORGANIC

Breakfast

Eggs, 1 doz.	\$0.93	Organic free range eggs, 1 doz.	\$3.99
Bacon, 1 lb.	\$3.59	Wellshire Farms Bacon, 1 lb.	\$5.99
2% milk, half gal.	\$1.89	Organic soymilk, half gal.	\$2.79
Folgers Breakfast, 1 lb.	\$2.92	Allegro Breakfast blend, 1 lb.	\$9.99

Lunch

Chicken breast fillet, 1 lb.	\$3.99	Chicken breast fillet, 1 lb.	\$8.99
Vine tomatoes, 1 lb.	\$1.99	Vine tomatoes, 1 lb.	\$4.99
Mixed, bagged		Mixed, bagged	
American salad, 4 oz.	\$1.12	American salad, 4 oz.	\$2.99
Wheat bread, 27 oz.	\$1.61	Whole Foods 100% Wheat, 27 oz.	\$3.49
Bananas, 1 lb.	\$0.49	Organic bananas, 1 lb.	\$0.89

Supper

Select eye of round, 1 lb.	\$4.89	Laura's Lean eye of round, 1 lb.	\$5.99
Tri-color rotini, 12 oz.	\$1.19	Tri-color rotini, 12 oz.	\$1.89
Green bell peppers, 1 lb.	\$1.49	Green bell peppers, 1 lb.	\$2.99
Yellow onions, 1 lb.	\$0.56	Yellow onions, 1 lb.	\$1.29
Vine tomatoes, 1 lb.	\$1.99	Vine tomatoes, 1 lb.	\$4.99
Vinaigrette dressing, 13 oz.	\$2.19	Vinaigrette dressing, 13 oz.	\$3.29
Root beer, 6 12-oz. cans	\$1.90	Root beer, 6 12-oz. cans	\$3.99

Total

\$32.74

Total

\$68.54

Based on unscientific, informal survey of Whole Foods Market and organics sections of conventional supermarkets. Prices vary by region and season.