

# For the Record

Straight talk about antibiotic use in food animal production presented by ALPHARMA Inc., Animal Health

## ABANDONING FARM ANTIBIOTICS ONLY MAKES SUSTAINABILITY UNSUSTAINABLE

Whether it's Wal-Mart announcing plans to spend half a billion dollars a year saving energy or single-store community grocers scrambling to source local eggs and tomatoes, "sustainability" has become all the [retailing rage](#).

But sustainability's double edge is its stubborn resistance to definition. Much like that classical definition of pornography, we can't describe it, but we know it when we see it.

### SAY AGAIN?

The result, say studies by marketing consulting firm [The Hartman Group](#), is that nearly half your customers have absolutely no idea what you mean by the term. Little wonder then that marketers have fallen over themselves inventing any kind of shorthand that can instantly code the abstract concept of sustainability into an easy to find product trait—from computer-assisted refrigeration

to stingy packaging to ending the use of antibiotics to produce healthy meat, milk and eggs. Because no scientific studies can back claims that "antibiotic-free" food is [either safer or healthier](#), marketers have fallen back on the claim that it fosters sustainable agriculture.

### A GRIM, SUSTAINABLE FUTURE

But how? Leaving aside antibiotics' proven ability to save the life and health of animals, use of antibiotics immediately preserves 4 to 5 percent of all the feed it takes to produce animal protein, according to the most conservative estimates. Using antibiotics does not increase demand for natural resources; using antibiotics [preserves](#) natural resources.

In that regard, selling "raised without antibiotics" meat as more environmentally friendly lays bare the dilemma the entire



Sustaining yesterday's vision of animal production will require a few stark reality checks.

organics movement faces. Despite its promise to make farming more sustainable, organic production threatens precisely the opposite.

Here's why. Sustainability is an equation containing both numerator and denominator. In the zero-sum sustainability game, you can save the planet by reducing the amount of inputs, but only by simultaneously reducing the amount that comes out the system's other side. Organic advocates who paint a romantic picture of agriculture using up only the amount of natural resources it did a century ago leave out the flip side of that picture: An agriculture that can only feed people at the level it did a hundred years ago.

Even organics proponents quietly concede that grim reality. Former *Ecologist* editor Simon Fairlie, for instance, calculated in *The Land* journal that for his home United Kingdom to [survive on all-organic](#) meat and dairy, consumption would have to fall back to near post-WWII levels, a period following the worst privation in the nation's modern history. In this country, according to modeling by the [Food and Agriculture Policy Research Institute](#), ending use of modern insecticides, hormones, low-level antibiotics and other inputs [would cut beef supplies](#) by 18 percent and raise retail prices by 13 percent.

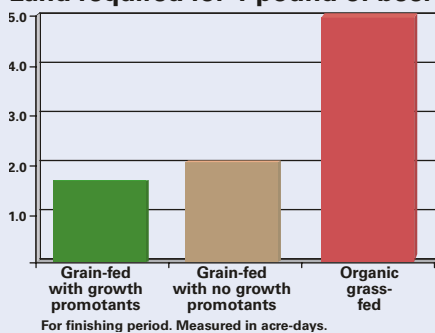
Is abandoning antibiotics key to sustainable agriculture? No. And in the vision of most sustainability advocates, neither are your high-margin meat, milk and egg staples. But consumers demand these foods. Antibiotics only make their production more sustainable, not less.

## THE UNDER-APPRECIATED GREEN SIDE OF TECHNOLOGY

Research demonstrates that technology like antibiotics actually helps sustain the environment by improving the efficiency of resources devoted to production:

■ Using an economic model from Iowa State, a [March study](#) calculated the land needed to finish a pound of beef on grain using growth promotants, compared to using only grain or using only grass with no growth promotants. The results show growth promotants decrease land demands by two thirds.

### Land required for 1 pound of beef



In addition, the same study showed, grain feeding combined with growth promotants also reduces greenhouse gases (excluding nitrous oxides) per pound of beef by 40 percent compared to organic grass feeding.

■ Other studies have shown antibiotics in pork production help improve the pig's [use of phosphorus](#), reducing the amount of that potential pollutant farmers must dispose of on fields.

■ A [2003 Cornell study](#) calculated that if the United States banned beef feedlots from using one particular class of antibiotics known as ionophores, as Europe did, the estimated amount of waste nitrogen going into the environment would increase by almost 11,000 tons annually. Feeding those antibiotics to all lactating U.S. dairy cows would cut another estimated 74,000 tons of nitrogen wasted per year. They also decrease production of the greenhouse gas methane by an estimated 25 percent.

## THE SUSTAINABILITY CHALLENGE

We hear much about global population growth. But the real threat to sustainability reaches deeper, according to farm policy authority **Robert L. Thompson**, PhD. Broad-based economic expansion across the globe in the coming decades will empower hundreds of millions of poor people with the purchasing power to upgrade the quality of their diets. That means they will want more meat, milk and eggs.

The combination of population growth and that income growth means the world will have to find a way to double its food production over the next 40 years. The last time the world roughly doubled its food staple production was during the so-called Green Revolution starting in the 1960s.

Despite criticism, the Green Revolution's high-technology farming saved vast areas of natural resources. Had no new technology been introduced after 1961, one estimate says, feeding the world would have required putting an additional 8.6 billion acres into food production — almost 1.5 times all of North America. Instead, total agricultural use increased just 8 percent. We face no less a challenge in the future, Dr. Thompson argues.

"If we double food production by doubling the number of hectares [we farm], it would create massive environmental damage...with large-scale destruction of forests, wildlife habitat and biodiversity," he warns.

## COSTS UP..AND CLIMBING

As the cost of basic foods continues to climb, it's unlikely consumers will remain patient with foods carrying built-in inefficiency premiums, like antibiotic-free.

	2007 price increase	2008 price increase
Meat	↑ 3.8%	↑ 2-3%
Poultry & Fish	↑ 7.4%	↑ 2-3%
Dairy	↑ 29.2%	↑ 0-1%
Eggs	↑ 3.8%	↑ 3-4%
Fruits & Vegetables	↑ 3.1%	↑ 2-3%
Sugar & Sweets		

2008 figures are estimated. Source: USDA

## INSIDE THIS ISSUE

### Why food retailers may want to reconsider the real sustainability of "raised without antibiotics"

- ❑ The grim secret about antibiotic-free and organic food production the sustainability advocates don't talk about.
- ❑ Modern food technology doesn't decrease sustainability. By increasing the efficiency of the resources we use, it actually helps preserve the long-term sustainability of the environment. See some examples inside.

April 2008

*For the Record* is a regular publication designed to present facts to balance today's debate over the use of safe, effective, economical methods farmers use to produce your milk, meat and eggs.

Read past issues or link to more information on this issue at [www.AntibioticTruths.com](http://www.AntibioticTruths.com)

## For the Record

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### retailer FAQs about sustainability and the role of technology like antibiotics

**Q** We're being told that **food retailers** must improve the image of the U.S. food chain as being "sustainable." But you say selling organic and "raised without antibiotic" meat, milk and eggs puts us at risk. Why?

**A** The problem is one that marketing consultant Harvey Hartman correctly sees as a question of "authenticity." Today's consumers are not in search of food that's healthy and sustainable so much as they are food they feel connected to—food that is *real*. Research shows that selling food as "antibiotic-free" has real potential to call your authenticity into question:

- All milk is tested to ensure it is antibiotic free. If it's not, it doesn't enter the food chain.
- Any drug used legally in animals must undergo stringent testing to ensure it's safe at levels many times higher than used.
- Using technology like antibiotics helps sustain the environment by requiring less land be planted to crops to feed livestock. The fact is, selling food as safer or greener because it's raised without antibiotics risks being seen not as supporting true sustainability, but as mere phony "greenwashing."

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