



FACTORY FARMS: ANTIBIOTICS IN DISTILLERS GRAINS

BACTERIAL RESISTANCE TO ANTIBIOTICS is a serious public health concern—and the use of antibiotics in animal feed is a primary source of the problem. A startling 30 million pounds of antibiotics are sold annually for animal agriculture, making up 80% of all antibiotics used in the U.S.ⁱ The vast majority of antibiotic use in agriculture is used not to treat sick animals, but to promote weight gain in poultry and livestock, thereby allowing animal farm operations to produce animals for market faster and more cheaply.

Despite increasing evidence that the overuse of non-therapeutic antibiotics in animal feed can lead to resistant bacteria in human infections, the FDA has done little to address the issue. Thus far, the agency charged with protecting public health and our food supply has relied solely on self-regulation by industry, and called only for voluntary reductions in antibiotic use. This is not a long term solution and further jeopardizes medically important antibiotics.

WHAT ARE DISTILLERS GRAINS WITH SOLUBLES (DGS) AND WHAT DO THEY HAVE TO DO WITH ANTIBIOTICS?

In recent years, an additional source of antibiotics in animal feed has been unveiled from an unlikely fuel manufacturing process – corn ethanol production. In the U.S., byproduct of fuel production, distillers grains with solubles (DGS), is repur-

posed as animal feed. Other countries strictly regulate whether fuel byproducts can be feed to animals intended for human consumption. However, in the U.S., despite the ready availability of effective alternatives, ethanol producers still widely use antibiotics to manage bacterial outbreaks in fermentation vats. According to both FDA and corn-industry supported university testing, those same antibiotics remain present in the nutrient-rich leftover corn mash, called distillers grains. This mash is then repurposed and sold wet or dry as livestock feed to cattle, dairy, swine and poultry producers. Therefore, in addition to receiving enormous amounts of antibiotics intentionally added to their feed or drinking water, food-producing animals also receive non-therapeutic doses of antibiotics through DGS.

Livestock farmers rely on DGS as a cheap source of nutrition, and the sale of distillers grains can make up 20 percent of an ethanol plant's revenue stream, yet the health threats are too great to justify the unnecessary use of antibiotics to produce DGS when there are viable alternatives.ⁱⁱ POET, the world's largest ethanol producer, produces in excess of 1.6 billion gallons of ethanol and 9 billion pounds of DGS each year. All 27 of POET's ethanol plants have been antibiotic-free since August 2011, demonstrating its feasibility.ⁱⁱⁱ Still, the vast amount of ethanol from most producers remains laden with antibiotics, with its byproducts sold as livestock feed.

LACK OF REGULATORY OVERSIGHT

Unfortunately, FDA has been slow to take action on antibiotics in distillers grains despite its own evidence indicating it should. Twice—in 2008 and again in 2010—the FDA found antibiotic residues in DGS.^{iv} In defiance of its own findings, FDA has refused to publish the complete 2008 study results. While the agency has announced that it intends to publish draft guidance for industry, more binding action is vital to protect public health. More recently, USDA conducted a study showing a connection between wet distillers grains and higher E. Coli levels in cattle hides and cow manure.^v

FDA does not restrict the marketing or use of antibiotics in ethanol, nor do they limit the sale of DGS containing antibiotic residue. Antibiotics are drugs, and should be regulated as such. This makes FDA's failure to regulate antibiotics in DGS unlawful.

CFS AND IATP LEGAL PETITION

In light of FDA's violation of its own rules, as well as the mounting evidence against antibiotics in animal feed, in March 2013, Center for Food Safety and Institute for Agriculture and Trade Policy (IATP) filed a legal petition with the FDA to stop the use of antibiotics in DGS used as animal feed.^{vi} The legal petition noted that such use in ethanol production is illegal, unnecessary and adds to the catastrophic public health threat from antibiotic-resistant infections in humans. While FDA claims to be addressing the public health threat, it currently does not regulate, monitor, or require reporting of this particular use of antibiotics. The legal petition offers FDA a roadmap to do its job, and asks FDA to immediately ban the use of antibiotics in DGS production, or, alternatively, to regulate them as "new animal drugs" under the Federal Food, Drug and Cosmetic Act. FDA has 180 days to respond to the legal petition.

CONGRESSIONAL ACTION ON ANTIBIOTICS IN ANIMAL AGRICULTURE

While FDA has been slow to act, other policy makers are stepping up to address certain antibiotic uses in animal agriculture. For example, Congresswoman Louise Slaughter (NY-25), the only microbiologist in Congress, has introduced the Preservation of Antibiotics for Medical Treatment Act

(PAMTA).^{vii} The legislation is designed to stop the overuse of antibiotics in animal agriculture—a practice that is accelerating the growth of antibiotic-resistance disease. Within two years of enactment, PAMTA would require the FDA to re-review the approvals it previously issued for animal feed uses of the seven classes of antibiotics that are important to human medicine. Some of these are likely familiar to you: penicillin, tetracycline, macrolide, lincosamide, streptogramin, aminoglycoside, and sulfonamide. Should any of the approvals of antibiotics be found unsafe with regards to resistance, they would be withdrawn.

While PAMTA does not directly target antibiotics in distillers grains, it supports the principle that is the foundation for all antibiotic use in animal agriculture: protecting the viability of antibiotics for treating bacterial infection in humans is absolutely essential. Once bacteria develop resistance to an antibiotic, there is no going back and public health professionals will have lost an irreplaceable treatment tool, with little or no new antibiotics in the pipeline as back-up. Moreover, antibiotic use in ethanol production not is even necessary, as there are readily available and cost-effective alternatives. As such, there is no need to continue to risk the health and safety of the public with unnecessary uses of antibiotics in animal agriculture.

TAKE ACTION TO STOP THE USE OF ANTIBIOTICS IN ANIMAL FEED!

To support our legal petition to stop the use of antibiotics in DGS used as animal feed and urge Congress to pass PAMTA and other legislation to stop the non-therapeutic use of important antibiotics in animal feed,

Visit our website at
www.centerforfoodsafety.org

i Union of Concerned Scientists, (2013) http://www.ucsusa.org/food_and_agriculture/solutions/strengthen-healthy-farm-policy/pamta.html

ii IATP, (2009) "Feuling Resistance." http://www.iatp.org/files/258_2_106420.pdf

iii IATP, (2012) "Bugs in the System." http://www.iatp.org/files/2012_05_02_AntibioticsInEthanolJO_0.pdf

iv National Grain and Feed Association, "FDA Sampling Detects Antibiotic Residues in Ethanol Distillers Products," 61 NGFA NEWSLETTER 1 (2009). <http://grist.files.wordpress.com/2009/05/news1-29-09.pdf>

v "Feeding Wet Distillers Grains Could Spike E. coli Levels." Food Safety News (May 6, 2013) <http://www.foodsafetynews.com/2013/05/feeding-wet-distillers-grains-could-spike-e-coli-levels/#.UYf0zKHn-Uk>

vi Citizen Petition to Prohibit or Enjoin the Use of Antibiotics in the Production of Distillers Grains Sold as Animal Feed for Food Producing Animal (March 2013). http://www.centerforfoodsafety.org/files/2013-03-14-cfs-and-iatp-dgs-petition_70204.pdf

vii H.R. 965, The Preservation of Antibiotics for Medical Treatment Act (PAMTA). http://www.louise.house.gov/index.php?option=com_content&id=1315&Itemid=138