



Food Safety *Fact Sheet*

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— RACTOPAMINE FACTSHEET — Lean Meat = Mean Meat

UNLIKE THE U.S., China, Russia, Taiwan, and the European Union ban or limit the use of ractopamine, a drug that promotes growth in pigs, cattle, and turkeys. Ractopamine is linked with serious health and behavioral problems in animals, and human studies are limited but evoke concerns. The U.S.'s current position on ractopamine favors agricultural trade over health risks to Americans.



primarily on studies conducted by the drug-maker, Elanco. Many of the studies focused not on human health or animal welfare impacts, but on the most economical rates of administration to raise meat products more quickly. A review of available evidence collected from FDA and the European Food Safety Authority calls FDA's approvals into question, revealing a number of human and animal health concerns.

WHAT IS RACTOPAMINE?

Ractopamine is a controversial drug used widely as an animal feed additive in industrial factory farms that raises significant food safety and animal welfare concerns for U.S. and international consumers. The U.S. meat industry uses ractopamine to accelerate weight gain and promote feed efficiency and leanness in pigs, cattle, and turkeys. The drug mimics stress hormones and increases the rate at which the animals convert feed to muscle.

In 1999, the Food and Drug Administration (FDA) determined that ractopamine was safe and approved it for use in feed for pigs, later approving it for cattle and turkeys as well. Veterinarian oversight, however, is not required for producers to use ractopamine; it is available on an "over-the-counter" basis. Ractopamine is associated with major health problems in food-producing animals, such as "downer" syndrome and severe cardiovascular stress, and has also been linked to heart problems and even poisoning in humans. Most of the 196 countries in the world have banned or restricted ractopamine; only the U.S. and 25 other major meat-producing nations allow its use. A recent report by the research and testing publication Consumer Reports investigating 240 U.S. pork products found that one in five products tested positive for ractopamine residues.ⁱ Ractopamine also negatively affects meat taste and tenderness, providing an inferior quality food product.

As with the vast majority of animal drugs used in the U.S. industrial meat system, FDA's approval for ractopamine relied

Furthermore, the U.S. has an abysmal track record on testing pork, cattle, and turkey products for ractopamine. In 2010 the U.S. conducted absolutely no testing on 22 billion pounds of pork, and only took 712 samples from 26 billion pounds of beef.ⁱⁱ The U.S. has not yet released the results of its tests.

In December 2012, the Center for Food Safety and the Animal Legal Defense Fund filed a petition with FDA calling for immediate action on the use of ractopamine in U.S. meat production.ⁱⁱⁱ The petition urges FDA to conduct comprehensive studies on the long-term effects of human consumption, immediate health impact on animals, and a thorough review of international standards. Since the filing of the petition, international disputes over ractopamine have intensified and a trade war may be on the horizon.

HUMAN HEALTH IMPACTS

Studies on the potential human health effects of ractopamine are extremely limited. The only human study on which the new 2012 "international standard" from Codex is based on examined the effects of ractopamine on six young, healthy men, one of whom dropped out after experiencing adverse health effects. Data from the European Food Safety Authority indicates that ractopamine causes elevated heart rates and heart-pounding sensations in humans.^{iv} Other examples of health problems include information from the Sichuan Pork Trade Chamber of Commerce in China, which estimates that between 1998 and

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2010, 1,700 people were poisoned from eating pork containing ractopamine.^v

ANIMAL HEALTH IMPACTS

Ractopamine has significant known health impacts on animals. Fed to an estimated 60 to 80 percent of pigs in the U.S. meat industry, ractopamine use has resulted in more reports of sickened or dead pigs than any other livestock drug on the market. According to FDA's own calculations, more pigs have been adversely affected by ractopamine than by any other animal drug—more than 160,000.^{vi} Ractopamine's effects include toxicity and other exposure risks, such as behavioral changes and cardiovascular, musculoskeletal, reproductive, and endocrine problems. It is also associated with high stress levels in animals, "downer" or lame animals, hyperactivity, broken limbs, and death.

INTERNATIONAL BAN OF RACTOPAMINE

Based on a lack of available evidence of ractopamine's safety, most countries have taken a cautionary approach to the presence of ractopamine in their national food systems. These other nations' standards are even more protective of human health and animal welfare than Codex. The twenty-seven European Union member states, for example, have banned ractopamine. Taiwan severely restricts it. There has been significant international backlash against Codex's 2012 ractopamine standards, which are only marginally better than the U.S.'s current standards. The reaction shows that Codex is merely one standard; it is far from being a uniform or "gold" standard for food safety, human health, or animal welfare. Russia has announced a ban of imported beef, pork and turkey that is not certified ractopamine-free, and China has announced it will stop importing U.S. pork effective March 1, 2013 unless it is certified ractopamine-free by a third party. The U.S. already has a certified ractopamine-free program in place to sell pork products to the E.U.^{vii} Currently, it is estimated that 160 countries of the 196 in the world ban or restrict ractopamine.

IMPACT ON MARKETS

The international debate over ractopamine bans, restrictions and "maximum level residue" standards is heating up. The European Union, China and Russia favor a ban. The U.S. and Canada favor

using ractopamine within certain maximum residue limits. Annually, China's ban on ractopamine will affect approximately \$886 million in U.S. pork products^{viii} and Russia's ban will affect approximately \$500 million.^{ix} The U.S. argues that international bans on ractopamine are not based on scientific reasons, but are based on protectionist approaches to enable China, the E.U., and other countries to obtain greater market share. What the U.S. fails to acknowledge is that other countries are taking the lack of human health and animal welfare studies very seriously; ractopamine has not been conclusively determined as safe for humans and animals.

POTENTIAL SOLUTIONS

BAN RACTOPAMINE: The most efficient solution is to simply ban the use of ractopamine in the U.S. and lessen the need and expense of administering a verification system. With so many countries already setting this precedent, making the well-being of their citizens and farm animals a priority, the U.S. has plenty of reason and prerogative to follow suit.

INDUSTRY BAN: Smithfield, one of the largest U.S. pork producers, has at least one production plant that is 100% ractopamine-free and expects to have its largest plant 100% ractopamine-free by March 1, 2013. These two plants likely service Smithfield's E.U. and Chinese customers. However, Smithfield says that it will continue to produce pork with ractopamine for other customers. This means Americans. It is highly unlikely that relying on voluntary industry bans will resolve the wider problem of ractopamine abuse. The U.S. cannot afford to relegate such high risk drugs to voluntary action.

GROCEER, PRODUCER, AND RESTAURANT BAN: Some U.S. food companies already avoid meat produced with the feed additive, including Chipotle restaurants, producer Niman Ranch, and Whole Foods Markets.^x

WHAT YOU CAN DO: GET INVOLVED!

SIGN THE PETITION at www.centerforfoodsafety.org to the top 10 U.S. pork producers urging them to stop using ractopamine!

BUY ORGANIC PORK PRODUCTS! Certified organic producers are not allowed to use feed additives like ractopamine.

ⁱ Press Release, Consumers Union, Consumer Reports Investigation of Pork Products Finds Potentially Harmful Bacteria Most of Which Show Resistance to Important Antibiotics (Nov. 27, 2012), <http://pressroom.consumersunion.org/pressroom/2012/11/my-entry-4.html>

ⁱⁱ Helena Bottemiller, *Dispute Over Drug in Feed Limiting U.S. Meat Exports*, Food and Environment Reporting Network (Jan. 25, 2012 and updated Mar. 23, 2012), <http://thefern.org/2012/01/dispute-over-drug-in-feed-limiting-u-s-meat-exports/>

ⁱⁱⁱ See Center for Food Safety and Animal Legal Defense Fund's "Citizen Petition Seeking Agency Review of Codex Standards on Ractopamine" filed Dec. 20, 2012 with the FDA available at <http://www.centerforfoodsafety.org/2012/12/20/public-interest-groups-challenge-fda-on-use-of-controversial-animal-growth-drug/>

^{iv} See *Safety Evaluation of Ractopamine, Scientific Opinion of the Panel on Additives and Products or Substances Used in Animal Feed*, 7 Euro. Food Safety Auth. J., at 18 (April 2009).

^v See Martha Rosenberg, *Why Has the FDA Allowed a Drug Marked 'Not Safe for Use in Humans' to be Fed to Livestock Right Before Slaughter?*, AlterNet (Feb. 2, 2010), http://www.alternet.org/story/145503/why_has_the_fda_allowed_a_drug_marked_not_safe_for_use_in_humans_to_be_fed_to_livestock_right_before_slaughter.

^{vi} See FDA response to a Freedom of Information Act request as reported by Helena Bottemiller, *Dispute Over Drug in Feed Limiting U.S. Meat Exports*, Food and Environment Reporting Network (Jan. 25, 2012 and updated Mar. 23, 2012), <http://thefern.org/2012/01/dispute-over-drug-in-feed-limiting-u-s-meat-exports/>

^{vii} See http://www.fsis.usda.gov/regulations/Program_for_Certifying_Pork/index.asp

^{viii} Theopolis Waters, *China Seeks Extra Testing of U.S. Pork Feed Additive*, Reuters (Feb. 19, 2012), <http://www.reuters.com/article/2013/02/19/china-pork-additive-idUSL1N0BJ8N520130219>

^{ix} *Russia Consumer Safety Ban Watchdog Sees Long U.S. Meat Ban*, Reuters (Feb. 11, 2013), <http://www.reuters.com/article/2013/02/11/russia-meat-idUSL5N0BB10220130211>

^x Helena Bottemiller, *Dispute Over Drug in Feed Limiting U.S. Meat Exports*, Food and Environment Reporting Network (Jan. 25, 2012 and updated Mar. 23, 2012), <http://thefern.org/2012/01/dispute-over-drug-in-feed-limiting-u-s-meat-exports/>