

Frequently Asked Questions

What is Zilmax?

Zilmax® (zilpaterol hydrochloride) is a Food and Drug Administration (FDA)-approved feed supplement. It helps cattle convert what they eat into more lean beef^{1,2,3} that is consistently flavorful, tender and juicy.^{4,5} With Zilmax, farmers can raise more beef from fewer cattle – and that helps keep beef supplies plentiful and affordable.^{1,6}

Who benefits from the use of this feed supplement?

We all do. Zilmax helps farmers provide beef that is:

- Flavorful, tender and juicy^{4,5}
- An affordable choice for you and your family⁶
- Raised using fewer natural resources⁷

Is the beef from cattle fed this supplement safe to eat?

Yes. It's safe to eat the beef from cattle fed Zilmax. More than 30 years of research and development, as well as rigorous testing, support the safety of Zilmax. The FDA reviewed this research and concluded that beef from cattle fed Zilmax is safe.¹

Is it used in other countries?

Yes. Zilmax is approved for use in most of the major beef producing countries. Its first use dates back 20 years.

Is the quality and taste of the beef the same?

Yes. Consumers like you sampled and enjoyed steaks from cattle fed Zilmax in the largest grilled steak taste-test study ever. The results show that consumers rated beef from cattle fed Zilmax as flavorful, tender and juicy⁴ – the same when compared to beef from cattle that were *not* fed Zilmax.

Can I expect a difference in tenderness?

No. Most consumers participating in taste panels could not detect a difference between steaks from cattle fed Zilmax and steaks from cattle not fed Zilmax.⁴

Is Zilmax safe for cattle?

Yes. The FDA, Canadian Food Inspection Authority and other international scientific authorities have approved Zilmax as a safe and effective feed supplement for cattle¹ when used according to product label directions and in conjunction with sound animal husbandry practices.

Why is Zilmax off the market?

Despite years of safe use, a question was recently raised about animal well-being. While we are confident in Zilmax and its safety, we felt it was the right thing to voluntarily suspend sales in the United States and Canada while we address this question.

How much research has been done on cattle safety?

More than 65 animal safety and well-being studies – evaluating 182,555 cattle – confirm Zilmax has no negative effect on animal well-being.^{1,8-18}

Which experts evaluated the well-being of cattle?

Animal scientists from the U.S. Department of Agriculture (USDA) and seven independent universities evaluated Zilmax's impact on the key indicators of animal well-being:

- USDA-ARS Livestock Issues Research Unit
- Colorado State University
- Kansas State University
- New Mexico State University
- Oklahoma State University
- Texas Tech University
- University of Nebraska-Lincoln
- West Texas A&M University

How is the environment impacted?

Zilmax helps farmers conserve our natural resources⁷ because it provides more beef with fewer cattle. Fewer cattle = less waste, and less use of energy, land and water.¹⁹

Why is Zilmax banned in 160 countries?

It's not. A small group of countries, including those in the E.U., put laws in place against the use of beta-agonists and other innovative animal agricultural solutions prior to Zilmax coming to market.

Zilmax and other new beta-agonists have been thoroughly tested by regulatory agencies in multiple countries. These rigorous, thorough tests

found Zilmax to be safe for cattle, and the beef from cattle fed Zilmax safe to eat.¹

There have been millions and millions of meals served featuring beef from animals fed Zilmax and not a single food safety incident. Going forward, it will be difficult to produce enough animal protein for our growing global population without the use of innovative solutions that preserve natural resources while increasing the amount of meat available. We are hopeful that additional reviews of the data, and the growing demand for protein, will result in the E.U. and other markets becoming more receptive to these sustainable, tested and proven-safe, solutions.

References

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- ¹³Merck Animal Health, Research on file, Report #2014-7: The effects of technology use in feedlot production systems on health parameters of finishing steers.
- ¹⁴Merck Animal Health, Research on file, Report #2014-9: The effects of Zilmax on the general well-being of feedlot cattle.
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For more information, go to www.zilmax.com.

IMPORTANT SAFETY INFORMATION

Zilmax has a withdrawal period 3 days prior to slaughter. Not for use in animals intended for breeding. Do not allow horses or other equines access to feed containing zilpaterol. Do not use in veal calves. Not to be fed to cattle in excess of 90 mg zilpaterol/head/day in complete feed. If pen consumption of complete feed exceeds 26.5 lb/head/day (90% dry matter basis), zilpaterol should not be fed in complete feed. For complete safety information, refer to product label and Zilmax website.

