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Burger King wants to combat climate change by helping its cows be a little less gassy

By **Tim Carman**

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(Jeff Chiu/AP)

The name doesn't exactly roll off your tongue. It doesn't do much to stimulate your appetite, either. But if Burger King's latest menu innovation, the Whopper with Reduced Methane Emissions Beef, proves successful, the sandwich could become the next weapon to fight climate change.

But let's not get ahead ourselves: Burger King is just now testing the market with its Cows Menu, which debuted Tuesday at five restaurants, one each in Miami, Austin, Los Angeles, New York and Portland, Ore. The menu features a handful of burgers that will swap out their traditional patty for one made with Reduced Methane Emissions Beef, a product that the chain developed with the help of two groups of scientists. Methane is a greenhouse gas emitted by ruminant animals, such as cows, and scientists say it warms the planet **86 times more than carbon dioxide** over a period of 10 to 20 years.

[Burger King's Impossible Whopper tastes even better than the real thing]

How do cattle produce methane? Well, the gas is a natural byproduct of an enzyme that breaks down food in a cow's digestive system, and it is released primarily through burping, though a very small amount is also produced by flatulence. According to [a report](#) from the Food and Agriculture Organization of the United Nations, livestock as a whole accounts for 14.5 percent of all human-induced greenhouse gas emissions, while beef and milk production alone represents about 9 percent.

Or, if you prefer, here's Burger King's own explanation of the process, as told through a young cowpoke ([Walmart yodeler Mason Ramsey](#)) who moseys out of a cow's keister to sing about methane in a two-minute video produced by the We Believers ad agency in New York:

“When cows fart and burp and splatter,

Well, it ain't no laughing matter.

They're releasing methane every time they do.

And that methane from the rear goes up to the atmosphere,

And pollutes our planet, warming me and you.”

While Burger King may be the first fast-food chain to capitalize on cattle feed designed to lower methane emissions, scientists have been tinkering with the diet of ruminant animals for years, with the same goal of reducing those troublesome gases. Researchers have added [garlic](#), [seaweed](#) and even [tannins](#), among other supplements, to cattle feed, and the results have been very encouraging. They've recorded methane reductions of 50 percent [in dairy cows](#) and 20 percent [in beef cattle](#).

But Burger King relied on a different supplement for its feed. The company worked with [Octavio Alonso Castelán-Ortega](#), a professor with the Autonomous University of the State of Mexico, and his colleagues, who conducted the initial research that showed lemongrass could reduce methane emissions, Fernando Machado, global chief marketing officer for Restaurant Brands

International, the parent company of Burger King, said in an email. Preliminary tests found that adding 100 grams of lemongrass to the feed reduced methane emissions by an average of 33 percent a day during the final three to four months of the cow's life. Ermias Kebreab, a professor with the University of California at Davis, and his team confirmed those initial results, Machado noted.

[After LA's Sqirl cafe sold moldy jam, its owner cited a mycologist to defend it. But he doesn't approve.]

At a time when many suggest that we **reduce our meat consumption for the sake of the environment**, Burger King seems to be saying we can help save the planet and have our Whopper, too.

Its Cows Menu may score PR points for Burger King among environmentally minded diners, but Sara Place, chief sustainability officer for Elanco, an international animal health company, said cattle methane emissions have already been dropping in the United States, thanks to improvements in animal nutrition, genetics and husbandry. "I see these [feed supplement] innovations as essentially adding to that," Place told The Washington Post. She said there's been a 30 percent drop in emissions between 1975 and today, based on Food and Agriculture Organization data.

The reduction in methane emissions in America has "almost been a byproduct of producers getting better for other reasons, right? For economic reasons," Place continued. "Now that we have this focus on greenhouse gas emissions, it's going to just accelerate that curve, if you will, in the interest of trying to reduce emissions further."

To that end, Burger King is already looking to replicate its pilot Cows Menu program in other markets, including Brazil, Mexico and some European countries. Perhaps more important, Burger King executives don't plan to treat their innovation as a company secret. They will share the science with anyone who wants it.

"We believe there is significant potential for Cows Menu to drive wider industry improvement, so we are making our scientific research, learnings and protocol formula publicly available in an open source manner to support this," Machado said in an email.

But BK's lemongrass-infused feed may be of questionable value to some cattle producers, Place said. Beef cattle don't have a single, uniform diet. Some eat grass, some greens, some distillers grains and some wheat middlings.

"That diversity of diets can be a challenge in this space because the rumen itself, the stomach that we're trying to influence ... is teeming with microorganisms. It's a whole ecosystem in itself," Place said. "So you can imagine there's different populations of these microbes that get supported from different diets. That can make the effectiveness of any of these supplements different depending on the diet."

Plus, as with any changes in diet, you have to watch for potentially troublesome side effects. Like a decrease in animal appetite. Or even meat that can smack of garlic or salty seawater. There's no word whether Burger King's new Whopper tastes of lemongrass. For answers to that question, we'll have to turn to customers in Miami, Portland, Los Angeles, New York and Austin, who will serve as America's guinea pigs for Reduced Methane Emissions Beef.

Links to videos:

Silly one:

<https://www.youtube.com/watch?v=x6xDv8RX87A&feature=youtu.be>

Background of science:

<https://www.youtube.com/watch?v=Wk--C-T-vXs>