

As Chipotle struggles with poisoning crisis, it's under fire for GMO and sustainability claims

"For more than 15 years, we've been working hard to change the way people think about and eat fast food," Chipotle Co-CEO and founder Steve Ells [told Fortune](#) earlier this year.

Well, Ells nailed that one.

In it's latest gambit to dig its way out of its health and public confidence crisis, in what it calls a "day after" promise on its "food with integrity" page, Chipotle doubles down its commitment to a 'local and sustainable sourcing' policy. [Screen Shot 2015-12-18 at 11.47.44 AM](#)

"We're committed," Chipotle [writes](#):

To sourcing the very best ingredients we can find and preparing them by hand... We're committed because we understand the connection between how food is raised and prepared, and how it tastes. We do it for farmers, animals, the environment ... We care deeply about where our ingredients come from. While industrial farming practices have evolved to maximize profits and production, we make an extra effort to partner with farmers, ranchers, and other suppliers whose practices emphasize quality and responsibility.

Chipotle appears to be gambling that the journalists will again take the company's claims at face value. It's a bed bet. A review suggests that its practices are not local, sustainable or necessarily responsible. Here is a reality check.

Food poisoning with integrity

The microbial outbreaks at Chipotle restaurants around the country, sickening [more than 350 people](#) in at least nine states so far, have led some scientists, writers and other observers to wonder about the company's priorities. While the outbreaks have continued, including 100 Boston College students and a Seattle restaurant closed for health violations (and [nine others slapped](#) with unsatisfactory ratings), they're wondering if the company's focus on where its food came from is the wrong one.

[EColiOutbreakMap](#)

Most of the *Salmonella*, norovirus and *E. coli* outbreaks have [no known source](#) (although the Minnesota outbreaks from *Salmonella* came from tomatoes). But Chipotle's focus on another source of its food—from crops and animals that were raised without any contact with genetic engineering — is largely based on incorrect scientific information, misleading statements by anti-GMO groups, and a mistaken assumption that a "naturally bred" ingredient suggests safety and quality and is somehow less likely to result in the use of pesticides.

As a [headline in Vox](#) puts it,

Was Chipotle too busy avoiding the fake dangers of GMOs to focus on actual food safety?

Chipotle and GMOs

In 2013, the restaurant chain announced that it would serve only food that did not come from genetically modified sources. The reason? According to the [company's website](#):

While some studies have shown GMOs to be safe, most of this research was funded by companies that sell GMO seeds and did not evaluate long-term effects. More independent studies are needed.

To back this up, Chipotle cites a review that's been a favorite of anti-GMO, pro-organic industry activists. It ignored the statements by more than 270 independent organizations that have publicly stated that GM foods are as safe or safer, and are often grown more sustainably, than organic or conventional foods — including the European Commission and the National Academy of Scientists — and instead cited a paper by ENSSER, short for the European Network of Scientists for Social and Environmental Responsibility, which is a self-avowed [ideological opponent](#) of biotechnology with the discredited research of Gilles-Éric Séralini, a founder of ENSSER, as its scientific sentinel:

In October 2013 a group of about 300 scientists from around the world signed a statement rejecting the claim that there is a scientific consensus on the safety of GMOs for human consumption. These scientists would like to see more research conducted, and they'd like more of the research to be conducted by independent third parties, not the companies marketing GMO crops themselves.

The company also cites another study, this by [Charles Benbrook](#), who recently was forced out of his position at Washington State University (an adjunct professorship funded by the organic food industry).

One recent study by researchers at Washington State University estimated that between 1996 and 2011, pesticide and herbicide use increased by more than 400 million pounds as a result of GMO cultivation. This and other evidence suggests that GMO crops are fueling an escalating arms race with weeds and insects.

The study helped reinforce the mistaken belief — uncritically embraced by Chipotle for crass marketing purposes — that the use of GMOs has resulted in an increase in the use of chemical inputs, when an [independent meta-study](#) indicates that GMO use has resulted in an average 37 percent reduction in the use of pesticides.

Finally, the company mis-characterizes [the findings of](#) the International Agency for Research on Cancer

(IARC, and not directly the World Health Organization, as claimed by Chipotle and others) study on glyphosate, which is an herbicide used to grow corn, soy and other crops engineered to resist the chemical:

The World Health Organization recently designated Glyphosate as “probably carcinogenic to humans”. The use of glyphosate is extremely widespread. More than 9 percent of the landmass of the continental United States is planted with crops genetically modified for glyphosate resistance. Given the concerns surrounding these types of GMOs and the chemicals associated with them, we felt it was particularly important to seek out non-GMO ingredients when possible.

Resisting soy for resistant sunflower

What about Chipotle’s claim that “We partner with farms that prioritize the long-term health of their land”? Well, sort of.

The company [came under fire](#) when it [had to admit](#) that animals that it sourced probably came from cows that consumed GMO feed, and the beverages it served “in our restaurants contain genetically modified ingredients, including those containing corn syrup, which is almost always made from GMO corn.”

But its most transparently cynical move was its decision to change what oil it used in its food preparations. As part of its “commitment” to “prioritize” the environment and eschew GMO ingredients, Chipotle announced it would stop using soy oil, which in this country is mostly made using GM soy, and instead switch to sunflower oil, which is not genetically modified. As NPR [has noted](#):

As an example of the ways that GMOs can damage the environment, Chipotle points to the problems caused by herbicide-tolerant GMO crops and how they encourage farmers to use a single herbicide, usually [glyphosate](#), or Roundup. This, in turn, has led to the emergence of herbicide-resistant weeds, which Chipotle calls “superweeds.”

What Chipotle did not tell credulous consumers is that the sunflower oil that replaced soy oil has shown to be more resistant to herbicides, not less — resulting in the use of even more chemical inputs than GMO soy. Sunflower oil has been [bred](#) using conventional breeding techniques to resist an herbicide called an ALS inhibitor. Anti-GMO campaigners—and that now includes Chipotle — somehow fashion that genetic modification breeding process to be more “natural” than precision genetic modification.

Here’s the rub. As NPR and other commentators and scientists have noted, the weeds that plague sunflower plants, like GMO soy plants, have also become weed resistant; it’s a very real fact of modern farming: weeds eventually develop resistance to herbicides. The problem is actually worse with plants resistant to ALS inhibitors than to those developed to be resistant to glyphosate. There are about 30 weeds that resist glyphosate; ALS inhibitors, used on sunflowers, are plagued by more than 150 types of resistant weeds, according to an analysis by Andrew Kniss, plant scientist at the University of Wyoming. In other words, if Chipotle was truly trying to protect the environment by moving away from herbicide

resistant crops as it claims, it made a cynical and unsustainable choice in turning to sunflower oil.

Further underscoring Chipotle's contradictory standards, the company is fine about using dextrose and corn syrup in [sweetened beverages](#), which it acknowledges are "made from GMO corn." There are a large number of ingredients that are produced using genetically modified microorganisms, including Vitamins B and C, the artificial sweetener aspartame, xanthan gum and a number of preservatives — some of which are found in various Chipotle products.

Running from rennet

Another ingredient that Chipotle uses, and claims is "natural," is rennet, an enzyme used to make cheese. Infuriating some animal welfare advocates, anti-GMO activists have not been upfront about the fact that organic, non-GM rennet is obtained from the intestines of slaughtered calves. As the [Genetic Literacy Project has noted](#), the rennet extracted from the stomach linings is usually a mixture of chymosin, pepsin (another enzyme) and other proteins. Because of the worldwide shortage of "natural" rennet, scientists genetically engineered a version. They figured out how to transfer a single gene from bovine cells that codes for chymosin into microbes, giving microbes the ability to produce chymosin. Today, more than 90 percent of the hard cheeses made in the United States, and in much of the West, use the genetically engineered protein made from GE yeast and bacteria.

For that reason, the [Non-GMO Project](#) will [not offer its seal](#) to any cheese made with fermentation-produced chymosin (FPC): "If a cheese has our seal on it, the consumer can be assured that it does not have [bioengineered] chymosin," notes that certification agency. FPC rennet is also [not allowed](#) in organic cheese based on the certification rules in the United States, Europe and Canada.

So of course Chipotle, committed to not using GMO ingredients because of its claims there are inherent dangers associated with genetic engineering, doesn't use FPC rennet?

Well, no; organic rennet would be too expensive, so Chipotle uses the cheaper, GMO version — and then tries to spin its expedient choice. In a Twitter exchange, Chipotle told University of Florida scientist Kevin Folta that it uses FPC, which the [company](#) went through contortions on its website to claim,

...is a vegetarian rennet that is classified as non-GMO by the EU and all existing U.S. state GMO labeling laws. While this enzyme is non-GMO, it is produced by bacteria that have been genetically modified... During the production process, the enzyme used to make cheese is completely separated from these organisms and does not contain any GMO material. The bacteria are classified as "processing aids" because they are not used as ingredients to make cheese. For this reason, cheese made with FPC enzyme does not contain any GMO material.

So let's get Chipotle's GMO policy straight: It rejects soy oil, because it is made from GMO soy, even though the oil does not contain any GMO material. Yet it uses corn syrup and cheese and artificial sweeteners and vitamins made from GMOs because they do not contain any GMO material, even though the ingredients [made by those processes](#) are not genetically modified any less than FPC rennet is.

Chipotle has breathed new life into the word “hypocrisy” when it comes to the debate over food, safety and GMOs.

Local sourcing?

And then there is Chipotle's claims that it is more sustainable because it uses 'locally sourced' ingredients. In fact, Chipotle chief financial officer John Hartung said during a recent call with analysts that the fast-food chain sources only about 10% of its ingredients within a few hundred miles of its restaurants. While Chipotle is clearly deceiving gullible customers with its marketing claims, that 10% figure is actually a good thing, say food experts.

“When you go local, oftentimes these are very small farmers,” Ron Cegnar, president of Lexington, Ky.-based supply chain company CEO Partners, told [Nation's Restaurant News](#). “They may not have the treatment facilities on the water. Livestock may be getting into watering systems. They may not have the staff to do inspections. Plus you have a lot more points of supply. Instead of just three national suppliers, you have multiple local suppliers. So your risk probability goes up.”

[via Nation's Restaurant News](#)

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[via Nation's Restaurant News](#)

Meanwhile, there are ongoing, science-based [health concerns](#) about the amount of salt, sugar and refined flour in our diets, and the fast-food industry is certainly one of the world's largest contributors of those ingredients to our diet. Chipotle's by no means unique among restaurants and other processed food retailers for that, and it is by no means the first to experience microbial outbreaks. But it would appear that their dream of being uniquely GMO-free has been usurped by uniqueness of another kind.

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