

# nature biotechnology

## An incredible fudge

**Although a US law mandating disclosure of GM ingredients provides food companies with a way out of the labeling rabbit hole, appeasing the anti-GM movement will likely backfire.**

It has been called “the Munich agreement of food labeling,” a “capitulation to the organic lobby” and a “scam for scaring consumers.” It has also been called a “triumph for transparency and the right-to-know,” a “win-win agreement for every family in every US state” and a welcome end to “confusion in the marketplace.” The recently passed National Bioengineered Food Disclosure Standard (S.764) is a pragmatic victory in the fight to preempt the organic lobby’s concerted campaign to purge genetically modified (GM) ingredients from the US market through flawed state food labeling initiatives. But it is a pyrrhic victory: it codifies into US law a nonsensical category that discriminates one particular food production technology from all others. Codification not only legitimizes unscientific anti-GM prejudice, but also saddles US consumers with higher food bills.

Food companies have worried about facing a tangled thicket of US state GM labeling laws ever since California put Proposition 37 on the ballot in 2012. Although that statute was ultimately beaten in a costly fight, in 2013 Connecticut and Maine did pass laws requiring GM labeling. A year later, Vermont became the first state to pass legislation unilaterally implementing GM labels.

When Vermont’s Act 120 came into force on July 1, chaos ensued in grocery stores. 3,000 unlabeled (and therefore illegal) products were pulled from shelves, food manufacturers scrambled to replace GM ingredients and necessities like infant formula hit shortages.

Enter federal bill S.764. The legislation, sponsored by US Senate Agriculture committee chair Pat Roberts and Michigan senator Debbie Stabenow was carried by large margins of 63–30 and 306–117 votes in the Senate and House, respectively. Once signed into law on July 29 by President Barack Obama, the mandatory national labeling standard for GM food forestalled Vermont and other state labeling laws that had threatened to fragment the market.

The new law calls for bioengineered foods to be labeled by on-package symbols, on-package wording (including a 1-800 number) or electronic labels (like a QR code for a phone) linked to detailed food-content information online. These ‘smart labels’ are touted as an important innovation providing new real estate to inform consumers. Some say that providing extra context about bioengineered ingredients may educate consumers and de-stigmatize GM foods.

The ‘marketing’ program will be overseen by the US Department of Agriculture (USDA) under the auspices of the Agricultural Marketing Service (AMS), similar to the USDA’s organic accreditation standard. Except for meat, dairy and egg products, any bioengineered/GM food containing genetic material “that has been modified through *in vitro* recombinant deoxyribonucleic acid (DNA) techniques” or “for which the modification could not be otherwise obtained through conventional breeding or found in nature” will require a USDA label.

Before the law is enacted in 2018, AMS must define in detail which foods fall within S.764’s scope. USDA’s most recent statements to

Congress do not make it clear whether foodstuffs devoid of genetic material (e.g., canola oil) or resulting from “certain gene editing techniques” fall within the law’s scope. If enactment follows that track, S.764 ought to become an object of ridicule: it will be a law that not only picks on GM food without any evidence of risk or harm to consumers but also does so whether or not the food contains any recombinant DNA. Just because European regulators have practiced similar unfounded madness for years doesn’t mean the United States should follow.

Other details have yet to be hammered out: how will intermediaries and manufacturers throughout the entire supply chain be audited and checked to ensure compliance with product segregation; what should be the threshold level of GM material above which a food will be designated GM; how should testing be conducted? Minor details, perhaps, but costly ones.

And it is taxpayers and companies that will be paying. The US Congressional Budget Office estimates that the costs for a company to obtain certification could amount to ~\$1 million per year. Producers that have already obtained USDA organic accreditation will automatically obtain the ‘non-GMO’ (‘GM organism’) label. The law also provides exemptions for smaller companies (exact details have yet to be disclosed) as well as restaurants and cottage food businesses.

Big food companies greeted S.764 as if they had dodged a bullet. Not only do national brands no longer face an increasingly chaotic patchwork of flawed state labeling initiatives, but the new label also satisfies consumers’ ‘right to know’. Seed and agbiotech suppliers went along because the alternative was to be dumped by big food—as happened in Europe when mandatory labeling was introduced there. The United States now marches with the rest of the planet, in lockstep lunacy.

Meanwhile, some anti-GMO activists have greeted the law with glee. The Institute for Responsible Technology’s Jeffrey Smith writes: “Labeling GMOs was never the end goal for us. It was a tactic. Labels make it easier for shoppers to make healthier non-GMO choices. When enough people avoid GMOs, food companies rush to eliminate them.” All true, of course, apart from “healthier.”

So a strident, single-issue lobby group has got its way yet again. Having capitulated to the demands of anti-GM zealots and the organic lobby at the legislative level, we must now prepare for a new battle—activists’ dogma-based assault on data-led USDA regulation.

The tragedy is that consumers don’t know what’s coming. The majority who don’t care about GM status will now have to pay the price for the minority who do. Not a big deal for people who already pay a premium for organic food. But for Americans who struggle to meet their weekly food bills, even small price increases could break their budgets. Who in Washington is listening to them?