

Genetic Modification Labeling Laws

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Gary E. Marchant, J.D., Ph.D.

Regents' Professor and Lincoln Professor of
Emerging Technologies, Law & Ethics

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GM Foods Labeling

- Mandatory labeling of GM foods was primary focus of U.S. anti-GM activists for past 15 years
 - e.g., Just Label It campaign - petition signed by 1.3 million Americans for mandatory GM labeling
- Many bills and propositions in States to require mandatory labeling of all GM foods



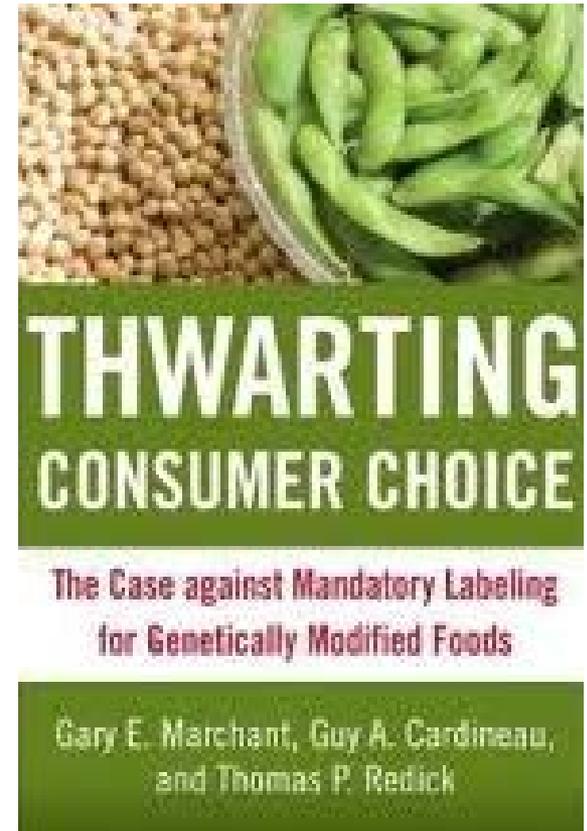
Arguments Advanced in Favor of Mandatory GM Labeling

- Consumer right to know
- Public opinion polls show strong majority support for mandatory disclosure
- Transparency leads to efficient markets and part of responsible business practices
- Labeling would assist epidemiological studies of GM health effects, if any
- Allow for post-market identification and recall of any products with problems
- Support religious beliefs against eating foods altered with prohibited substances



Arguments Advanced Against Mandatory GM Labeling

- Majority of public doesn't want mandatory GM labeling if they have to pay for it
- GM labeling is a “Trojan horse” intended to deny public right to choose GM foods
- Many complexities and burdens associated with mandatory labeling
- Government-mandated GM labels will be interpreted as health “warnings” by public
- Mandating labels to satisfy consumer curiosity violates commercial free speech



Purpose of Labeling: Trojan Horse for Anti-Choice?

- Recent study in EU found that mandatory labeling had virtually eliminated any ability to choose GM foods
 - e.g., In UK, all major supermarket chains have banned all labeled GM products in response to pressure from same groups that lobbied for GM labeling
- Rep. Dennis Kucinich:
 - “I think if we were to come out immediately and say they should be banned, I’m not quite sure if we could get the kind of constituency moving forward at this moment on that issue. I think the issue of labeling could achieve that in the short-term.”
- Andrew Kimbrell, Center for Food Safety
 - “We are going to force them to label this food. If we have it labeled, then we can organize people not to buy it.”
- David Bronner (Dr. Bronner’s Magic Soaps)
 - “A labeling law would be the death of GMOs in the US.”

Scientific Authorities on GMO Labeling

- American Medical Association (2012):
 - *“there is no scientific justification for special labeling of bioengineered foods, as a class, and that voluntary labeling is without value unless it is accompanied by focused consumer education.”*
- American Association for the Advancement of Science (2012) :
 - *“the science is quite clear: crop improvement by the modern molecular techniques of biotechnology is safe” and attempts to mandate labeling are based on misconceptions that “can only serve to mislead and falsely alarm consumers.”*

FDA: Labeling of GM Foods

- “The agency is not aware of any information showing that foods derived by these new methods differ from other foods in any meaningful or uniform way, or that, as a class, foods developed by the new techniques present any different or greater safety concern than foods developed by traditional plant breeding. For this reason, the agency does not believe that the method of development of a new plant variety (including the use of new techniques including recombinant DNA techniques) is normally material information ... and would not usually be required to be disclosed in labeling for the food.”

Oregon Measure 27 (Nov. 2002)

- First state-wide referendum to require mandatory labeling of all GM foods
- FDA Commissioner letter: “[M]andatory labeling to disclose that a product was produced through genetic engineering does not promote the public health in that it fails to provide material facts concerning the safety or nutritional aspects of food and may be misleading to consumers.”

Oregon Measure 27 (2002)		
Result	Votes	Percentage
 No	886,806	70.5%
Yes	371,851	29.5%

California Prop 37 – Nov. 2012

- Would require labeling on raw or processed food offered for sale to consumers if the food is made from plants or animals with genetic material changed in specified ways.
- Prohibited labeling or advertising such food as "natural."

California Proposition 37		
Result	Votes	Percentage
 No	6,442,371	51.4%
Yes	6,088,714	48.6%

Washington State – Nov. 2013

Label GMO Foods



Yes on I-522

Hi gary.marchant@asu.edu.
Sign in with Facebook, Twitter or email.
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WE HAVE THE RIGHT TO AN INFORMED CHOICE

***IT'S OUR RIGHT
TO KNOW***

WHAT'S IN OUR FOOD

LABELITWA.ORG



Initiative 522		
Result	Votes	Percentage
✘ No	895,557	51.09%
Yes	857,511	48.91%

Colorado Proposition 105 (2014)



Colorado Proposition 105		
Result	Votes	Percentage
✘ No	1,317,288	65.47%
Yes	694,738	34.53%



Oregon Measure 92 (2014)

- Closest vote yet
- Measure lost by just 837 votes on recount

Oregon Measure 92		
Result	Votes	Percentage
<input checked="" type="checkbox"/> No	753,574	50.03%
Yes	752,737	49.97%

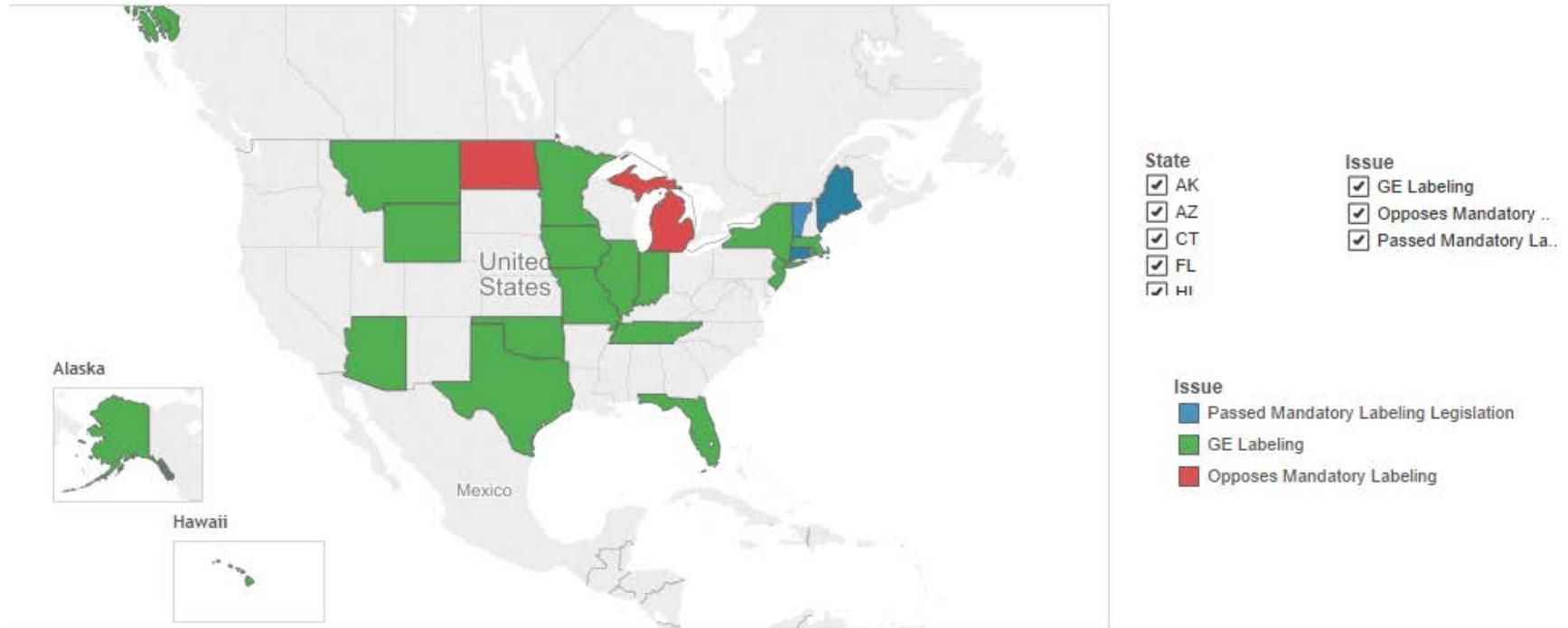


**LABEL GENETICALLY
ENGINEERED FOODS**



State Legislative Adoption of GM Labeling Requirements

GE Labeling Bills 2015



- Connecticut and Maine have adopted GM labeling laws with “triggers”
 - only take effect if four other NE states adopt labeling laws

- Vermont’s mandatory GM labeling bill to take effect July 2016

Lawsuit challenges Vermont's GMO labeling law

Nancy Remsen, The Burlington (Vt.) Free Press 8:58 p.m. EDT June 12, 2014



(Photo: Glenn Russell, The Burlington (Vt.) Free Press)

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BURLINGTON, Vt. -- Four national organizations whose members would be affected by Vermont's new labeling law for genetically engineered foods [filed a lawsuit Thursday in federal court](#) challenging the measure's constitutionality.

"Vermont's mandatory GMO labeling law — Act 120 — is a costly and misguided measure that will set the nation on a path toward a 50-state patchwork of GMO labeling policies that do nothing to advance the health and safety of consumers," the Grocery Manufacturers Association said in a statement about the lawsuit.

The state Legislature passed the labeling law in April, and Gov. Peter Shumlin signed the bill in May. The labeling requirements would take effect July 1, 2016.

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- Federal district court denied preliminary injunction on April 27, 2015, finding that plaintiffs unlikely to prevail on merits or would suffer irreparable harm
- Second Circuit Court of Appeals heard oral argument on Oct. 8, 2015; no opinion ever issued

THESE COMPANIES:



WILL NOW LABEL GMOs

LIKE THIS!



what's inside...					PER PACK
CALORIES	TOTAL FAT	SAT. FAT	SUGARS	SODIUM	
250	13g	5g	25g	25mg	
13% DV	20% DV	25% DV	*	1% DV	

GDA'S ARE BASED ON A 2,000 CALORIE DIET. *NO DV DEFINED.

Congress Finally Acts:

National Bioengineered Food Disclosure Standard

- In late July 2016, just after Vermont mandatory GM labeling requirement took effect, Congress finally adopts legislation for a national policy on GM labeling
- S.764 - “National Bioengineered Food Disclosure Standard” (Part of National Sea Grant College Program Act of 2016)
 - Passed by Senate on July 7, 2016 by vote of 63-30-7
 - Passed by House on July 14, 2016 by vote of 306-117-10
 - Signed by President Obama on July 29, 2016
- Requires national mandatory GM labeling standard by July 2018; preempts all state GM labeling laws
- Delegates responsibility for finalizing and implementing standard to USDA (not FDA)



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Tell Your Favorite Organic Brands: Exit the Organic 'Traitors' Association!



September 13, 2016

Organic Consumers Association

by Katherine Paul

[All About Organics](#), [Genetic Engineering](#)

"This is one celebration you don't want to miss!"

That's the message leaders of the Organic Trade Association (aka the Organic "Traitors" Association) sent to their members recently, in an email inviting them to the OTA's 2016 Leadership Awards Celebration at Expo East.

Here's one thing that OCA and organic consumers will not be celebrating—the fact that the OTA's "Organic Elite" conspired with Sens. Debbie Stabenow (D-Mich.) and Pat Roberts (R-Kan.) to overturn Vermont's mandatory GMO labeling law, and ensure that food companies will never be required to reveal GMO ingredients with clear, on-package labels off of products that contain GMOs.

OTA has over 8000 members—which means the brands you give your money to are probably dues-paying members of the OTA. [Click here to find out](#)—then pick 4 or 5 of your favorite



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NBFDS Implementation Timeline

- July 29, 2016 – statute enacted
- June 28, 2017 - USDA/ARS publishes “30 Questions” request for comments
- August 25, 2017 – comment period on 30 Questions closed
- September 2017 – mandated study on digital and electronic notification made public
- Fall, 2017 – USDA to published proposed rule
- July 29, 2018 – final standard must be published



United States Department of Agriculture
Agricultural Marketing Service

Published on *Agricultural Marketing Service* (<http://www.ams.usda.gov>)

[Home](#) > Proposed Rule Questions Under Consideration

Proposed Rule Questions Under Consideration ^[1]

The National Bioengineered Food Disclosure Standard was enacted on July 29, 2016. AMS has two years to establish a national standard and the procedures necessary for implementation. Below are 30 questions considered by interested stakeholders. USDA will use this input in drafting a proposed rule. The period for input closed on August 25, 2017. There will also be an opportunity for interested parties to comment on the proposed rule during the rulemaking process.

Input related to the questions below should be sent to GMOlabeling@ams.usda.gov ^[2]

1. What terms should AMS consider interchangeable with 'bioengineering'? (Sec. 291(1))

Context: The disclosure standard would be a mechanism to inform consumers about their food. AMS is considering the advantages and disadvantages of allowing the use of other terms to provide for disclosure.

2. Which breeding techniques should AMS consider as conventional breeding? (Sec. 291(1)(B))

Context: AMS is considering what would be defined as modifications that could otherwise be obtained through conventional breeding because these modifications would be exempt from mandatory disclosure.

3. Which modifications should AMS consider to be found in nature? (Sec. 291(1)(B))

Scope

- §291(1) - requires labeling of “bioengineered” food – defined as a food—

“(A) that contains genetic material that has been modified through in vitro recombinant deoxyribonucleic acid (DNA) techniques; and

“(B) for which the modification could not otherwise be obtained through conventional breeding or found in nature.”

- Question: Does this include foods created by gene editing, RNAi, etc?

USDA Position (2016)

Please explain whether the GMO Labeling Law provides authority to the USDA to require labeling of food products that contain genetically modified material, which result from gene editing techniques?

Section 291(1) of the Senate bill provides authority to include food in the national disclosure program, including products of certain gene editing techniques. This would include novel gene editing techniques such as CRISPR when they are used to produce plants or seeds with traits that could not be created with conventional breeding techniques. In addition, the definition provides authority to include RNAi techniques that have been used on products such as the non-browning apple and potato.

Letter from USDA General Counsel Jeffrey Prieto to
Senator Debbie Stabenow, July 1, 2016

My Predictions re: Gene Editing

- **No Label**

- Small deletion or insertions (indels) (e.g. loss of function mutations) are not “bioengineered foods”
- Occur naturally and with mutagenesis (“conventional”)
- USDA Jan 2017 NPRM would exempt simple deletions from regulation

- **Label**

- Insertion of a transgene using gene editing
- Hard to distinguish from transgenic crops

- **???**

- Use of template for homology dependent repair to make small editing changes

Format of Label

- §293(a) - disclosure can be “a text, symbol, or electronic or digital link, but excluding Internet website Uniform Resource Locators not embedded in the link, with the disclosure option to be selected by the food manufacturer”
- §293(c)(1) – “Not later than 1 year after the date of enactment of this subtitle, the Secretary shall conduct a study to identify potential technological challenges that may impact whether consumers would have access to the bioengineering disclosure through electronic or digital disclosure methods.”

Study on Technological Challenges

§293©(3): “The study conducted under paragraph (1) shall consider whether consumer access to the bioengineering disclosure through electronic or digital disclosure methods under this subtitle would be affected by the following factors:

“(A) The availability of wireless Internet or cellular networks.

“(B) The availability of landline telephones in stores.

“(C) Challenges facing small retailers and rural retailers.

“(D) The efforts that retailers and other entities have taken to address potential technology and infrastructure challenges.

“(E) The costs and benefits of installing in retail stores electronic or digital link scanners or other evolving technology that provide bioengineering disclosure information.”

Additional Disclosure Options

§293(c)(4) —“If the Secretary determines in the study conducted under paragraph (1) that consumers, while shopping, would not have sufficient access to the bioengineering disclosure through electronic or digital disclosure methods, the Secretary, after consultation with food retailers and manufacturers, shall provide additional and comparable options to access the bioengineering disclosure.”



BRIEF

USDA sued to release QR code study for GMO labeling

AUTHOR

Megan Poinski
@meganpoinski

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Dive Brief:

- The Center for Food Safety [filed a lawsuit](#) against the U.S. Department of Agriculture that demands the immediate public release of a study that explores challenges of using electronic and digital disclosures — such as QR codes — for federally mandated labeling of GMO ingredients, according to a [statement from the group](#).



Study of Electronic or Digital Link Disclosure

A Third-Party Evaluation of Challenges Impacting Access to Bioengineered Food Disclosure

July 2017

<https://www.ams.usda.gov/reports/study-electronic-or-digital-disclosure>

Key Takeaways

- ✓ 53% of US adults say they care about the issue of bioengineered food
- ✓ 77% of Americans own a smartphone and ownership rates are trending upward
- ✓ 93.6% of Americans live in areas with sufficient broadband access to load a bioengineering disclosure through an electronic or digital link
- ✓ Broadband access is currently lowest in rural areas and the Secretary of Agriculture has identified expansion of broadband networks in these regions as a priority
- ✓ 97% of regional chain stores and 100% of national chain stores provide WiFi in store, but only 37% of small retailers provide WiFi to consumers in store

Key Takeaways

- ✓ 62% of interested consumers believe they would be able to access an electronic or digital food disclosure
- ✓ Among the population included in this study, consumers face four primary technological challenges in using electronic or digital links:
 - Digital links are not inherently associated with additional food information
 - Consumers may not have access to equipment capable of scanning digital links
 - The market provides hundreds of scanning apps, many of which are not intuitive to use
 - Consumers may be unable to connect to broadband
- ✓ Technological challenges disproportionately impact low-income earners, rural residents, and Americans over the age of 65
- ✓ Consumers who are uncomfortable using technology or unfamiliar with the issue of bioengineered foods have additional contributing factors that may challenge access

Conclusion

Consumers are navigating a new world of digital engagement. The use of electronic and digital links presents novel opportunities and challenges for consumers seeking to access information on their food purchases. While there are some notable challenges, most consumers would be able to access this information given the proper education and tools to do so.

An ever-changing technological landscape makes it difficult for consumers to recognize the proper means of accessing information. Interested consumers must understand the ways in which information is available to them, especially when that information becomes available through new methods. In working to implement the National Bioengineered Disclosure Standard, USDA and interested groups can work together to make the bioengineering disclosure properly accessible to the American public.

Threshold for Labeling

§293(b)(2) REQUIREMENTS.—A regulation promulgated by the Secretary in carrying out this subtitle shall—

.... “(B) determine the amounts of a bioengineered substance that may be present in food, as appropriate, in order for the food to be a bioengineered food;”

Labeling Complexities: Thresholds for Contamination

- Different jurisdictions have established inconsistent thresholds:
 - EU – 0.9%
 - Australia, New Zealand - 1%
 - Korea – 3%
 - Japan, Taiwan – 5%
 - Vermont – 0.9%
- cf. U.S. regulations allow 1-7% foreign matter (e.g., insects, rodent droppings, etc.) in grains
- Threshold is practically necessary, but undermines rights-based argument of right to know

Highly Processed Foods

- USDA Questions

4. Will AMS require disclosure for food that contains highly refined products, such as oils or sugars derived from bioengineered crops? (Sec. 291(1)(A))

Context: Many processed foods may contain ingredients derived from bioengineered crops, such as highly refined oils or sugars that contain undetectable levels of bioengineered genetic material such that they are indistinguishable from their non-engineered counterparts. AMS is considering whether to require disclosure for foods containing those derived ingredients that may be undetectable as bioengineered.

G.M.O. Labeling Law Could Stir a Revolution

nytimes.com/2016/09/02/opinion/gmo-labeling-law-could-stir-a-revolution.html

By MARK BITTMAN

9/2/2016

Ed Nacional

Big food and its allies spent roughly \$100 million to counter the movement to force the labeling of foods produced with genetically modified organisms. And one could argue that they were successful: President Obama recently signed the weakest labeling law imaginable, and to most of the food movement, this felt like a loss.

But to be optimistic, perhaps rashly so, to me the law looks like a victory wrapped inside a defeat.

The new law mandates that the Department of Agriculture define what constitutes a genetically modified food ingredient and then requires food manufacturers to label products that contain them. Disappointment among labeling proponents stems from the latitude the law gives food companies in how this labeling is done.

Producers may use a text label, a symbol, a toll-free number that consumers can call for more information, or a code that can be scanned with a smartphone to link to a website. The new law tells consumers, "You deserve to know what's in your food, so we're going to tell you," while sending a not-too-subtle message to food companies: "Feel free to make this information as difficult to find as you'd like."



What's Next?



"It says all the chemical ingredients in this food were made by organic free range scientists."