

No science-based reason to justify mandatory GMO labeling, study concludes

Are there science-based reasons that justify mandatory labeling of genetically engineered foods? Mandatory GMO labeling has been at the forefront of several activist campaigns, claiming that people want to know and have the right to know what is in their food. Currently, at least twenty-five states other than Vermont are considering or have considered legislation to require GE labeling.

An analysis of the scientific, legal and economic ramifications of mandatory GMO labeling by the Council for Agricultural Science and Technology (CAST) released earlier this week concludes “no.” CAST is a nonprofit organization with individual student, company, nonprofit and associate society members that assembles, interprets and communicates credible science-based information using volunteer scientific experts as authors and reviewers. That information is then [made freely available](#) to legislators, regulators, policymakers, media, the private sector and the public.

“Mandating process-based food labeling is a very complex topic with nuanced marketing, economic and trade implications depending upon how the labeling laws are written and how the market responds,” [said](#) Alison Van Eenennaam, geneticist and Cooperative Extension specialist in animal genomics and biotechnology at the University of California, Davis, and lead author of the paper. Co-authors on the paper are Bruce Chassy, a food science professor emeritus at the University of Illinois at Urbana-Champaign; Nicholas Kalaitzandonakes, an economics professor at the University of Missouri, Columbia; and lawyer Thomas Redick from Global Environmental Ethics Counsel, LLC.

The new report responds to what the authors called “seemingly contradictory” studies on labeling, some of which are funded by groups who are stakeholders in the debate. “Independent objective information on the scientific issues and the possible legal and economic consequences of mandatory GE food labels need to be provided to legislators and consumers...to help move the national discussion from contentious claims to a more fact-based and informed dialog,” the authors [wrote](#).

Calls for mandatory GMO labeling ultimately [boil down](#) to distrust that GE foods are safe. The authors emphasized that genetically engineered foods are assessed for safety before they reach markets. In the past twenty years, the Food and Drug Administration has “found that all 148 transgenic gene/crop combinations evaluated by the agency ... are equivalent to their conventional counterparts.” They cited similar findings from Japanese regulators, the European Commission, the US National Academy of Sciences, and other independent research studies conducted by scientists around the world.

The authors also examined the current food labeling system in the United States. Food labeling is regulated at the federal level by the FDA, which requires labels on products that “demonstrably pose novel hazards that might affect safety or have significant unexpected differences in composition.” The authors noted that voluntary process-based labeling for consumers who wish to avoid GE already exists in the form of the organic label and third-party certification programs such as verification from the Non-GMO project.

The researchers evaluated the potential legal and economic issues that could arise as a result of

mandatory labeling laws. They suggested that state-based labeling laws could be challenged for violating First Amendment protection of “commercial speech” and conflicting with preemptive federal authority, since current labeling authority is federal. The state-based labeling laws could also violate interstate commerce laws. Nationally, a mandatory labeling law could have international trade implications as the World Trade Organization currently frowns on process-based labels that do not relate to food safety.

The report did not provide estimates for the costs of mandatory labeling, but predicted that costs could vary widely depending on how food manufacturers respond. The least expensive option for companies would be to simply label their products and keep product formulas. But if they choose to remove GE ingredients from their products to avoid labeling, then the impact on food prices would be substantial. In other countries, removing GE ingredients has largely been the case following the introduction of mandatory GE labeling.

In the case of price hikes in food, the authors looked at how consumers would be impacted. Given the exemptions on foods consumed in restaurants, cafeterias and schools, the authors concluded that the proposed labeling schemes would have a greater impact on low-income households. The authors found that low-income households spend a larger portion of their income on food, and of that portion, two out of three dollars are spent at the grocery store for food cooked and consumed at home. Whereas high-income individuals spend more at restaurants and eateries, which would be exempt from the labeling laws and largely not affected.

Based on their findings, the Council for Agricultural Science and Technology recommended that the federal government wait to enact a mandatory GMO labeling law until the legal and economic issues have been fully vetted. “Bottom line, we need better communication regarding the scientific issues and the possible legal and economic consequences of mandatory GMO food labels,” said Van Eenennaam.

Read the full report: [The Potential Impacts of Mandatory Labeling for Genetically Engineered Food in the United States](#) (PDF)

Additional Resources:

- [“Points to Consider: Flawed and False Arguments for Mandatory GM Food Labels,”](#) Information Technology and Innovation Future
- [“Vermont’s GMO labeling law could face legal challenges on three grounds,”](#) Washington Post
- [“As FDA rejects mandatory GMO labeling, some ‘green’ groups advocate vandalism,”](#) Genetic Literacy Project