

# How Much Will Labeling Genetically Engineered Foods *Really* Cost?



FACT SHEET • JANUARY 2015

**S** ince the first genetically engineered (GMO) crops were introduced in the United States in the 1990s, consumers have not been able to tell whether they are eating these controversial new ingredients. And whenever the subject of mandatory labeling of GMO foods comes up, the food industry claims that labeling will be prohibitively expensive.

But the industry's most frequently repeated claims about the cost of labeling are based on cherry-picked economic analyses and extreme scenarios. The biggest food companies and agribusinesses are worried that consumers will be wary of "scary-sounding" GMO labels.<sup>1</sup> But if GMO products are as safe and natural as these companies claim, then why not let consumers decide what they want to buy?

# *Food Industry Claim:* GMO labeling is unnecessary.

Consumers deserve the right to know what's in the food that they are providing for their families. Not only is GMO labeling required in other countries, but the U.S. public has been clamoring for it for years. A 2010 Thomson Reuters survey of consumers found 93 percent in support of GMO labeling.<sup>2</sup> And 91 percent of voters polled in a 2012 Mellman Group study favored having the U.S. Food and Drug Administration (FDA)



require labels on GMO foods or foods containing GMO ingredients; of those, 81 percent "strongly favored" the labeling proposal.<sup>3</sup> A 2013 New York Times poll found that 93 percent of respondents were in favor of a mandatory label for genetically engineered food.<sup>4</sup>

With labeling, consumers would be able to find out the differences in how various foods were produced and decide for themselves what those differences mean. Whether or not someone chooses to read a label is entirely their choice, but people deserve the right to know what they are buying, eating and feeding to their families. Food companies always seem to find room on the label to make a marketing claim — such as "new and improved" or "all-natural" — to try to convince us to buy, but somehow they cannot find any space if they are required to tell us a fact about the process by which the item was produced.

A label stating that a product is genetically engineered will not mislead customers; it would simply provide the facts about the food they are eating.

## *Food Industry Claim:* GMO labeling means higher food costs.

Opponents of some labeling proposals claim that mandatory GMO food labeling would increase food costs "for the average family by \$600 per year."<sup>5</sup> These kinds of claims are often based on analyses done by labeling opponents in the food industry and are far from objective examinations of the facts.

It is not very surprising that a study with those kinds of figures was commissioned by the Grocery Manufacturers Association. According to a recent GMA report that has not been made public, the cost of labeling would end up being as much as \$825 more per family every year.<sup>6</sup> Yet a look at the literature on mandatory food labeling reveals that a much lower cost is likely.

An impartial consulting firm did a study in 2001 for the U.K. Food Standards Agency and found that GMO labeling would increase a household's annual food spending by only 0.01 to 0.17 percent — a very small figure ranging from an increase of \$.33 to \$5.58 in 2010 real U.S. dollars (inflation-adjusted) annually.<sup>7</sup> The GMA's estimate of \$825 would be 13 percent of the 2010 average annual household food expenditure in the United States — about 150 times more than the U.K. Food Standards Agency's forecasted increase in household food spending.<sup>8</sup> A study commissioned by Consumers Union reviewed research on mandatory GMO labeling and estimated that the median annual cost of labeling per person is \$2.30,<sup>9</sup> less than a penny a day. The GMA report grossly overestimates the impact that labeling would have on food costs for consumers.

It is worth looking at some of the costs that could be incurred with mandatory labeling. Labeling would require segregating seeds according to GMO content throughout the food chain, which is already done with many identity-preserved crops. Farmers are already segregating crops to prevent cross-contamination in fields, although some cases of GMO contamination do still occur. Labeling requirements would not necessarily require farmers to incur any extra costs while keeping seeds separated at the field level.<sup>10</sup> Depending on the markets where the seeds or grains are sold, grain handlers and seed companies do testing to ensure the purity of the seeds that they sell or distribute. There are already segregation methods in place today for crop and seed export to countries with GMO labeling requirements, such as European Union countries, Japan and China.<sup>11</sup> Once labeling is required in the United States, these practices would have to be expanded, but an entirely new system would not have to be developed.

Food processors and manufacturers would have to make sure that there is proper segregation in crop storage and cleaning of equipment,<sup>12</sup> but as long as labeling is maintained throughout the process this should be straightforward. Manufacturers can reduce the costs of actually changing their labels by waiting until their inventory of labels is low and making the change before reordering packaging materials, or coordinating the required labeling change with a scheduled labeling change. According to an FDA Labeling Cost Model, "the pricing for graphic design services does not differ substantially if additional changes are made because of a regulatory requirement at the same time as a scheduled label change."<sup>13</sup>

# *Food Industry Claim:* GMO labeling means more bureaucracy and taxpayer costs.

For decades, the food industry has opposed any new food labeling requirements, including nutrition labels and ingredient listings. One of their favorite arguments is that new labeling



requirements will drive the growth of government bureaucracy and cost taxpayers money.<sup>14</sup> Mandatory labeling would take monitoring and enforcement, but this does not have to be difficult as long as all players participated in labeling along all steps of the food chain. If GMO labeling is mandatory, federal and state agencies could simply add GMO labeling to the food labeling requirements that they would already be assessing during compliance inspections.

# *Food Industry Claim:* GMO labeling would burden grocers and retailers with mountains of paperwork.

Changing food labeling to reflect the presence of a GMO ingredient wouldn't be any different for grocery stores than stocking a product that has changed its ingredients or added a nutritional-benefit claim to the package. At the retail level, the costs for pre-packaged foods will be very small, because the labels will have been added long before the food gets to the store. For foods that the store handles (such as produce or some meat that is repackaged on site), retailers will have to be sure that GMO and non-GMO products are kept separately and labeled as such, not unlike what they do to provide country-of-origin information or even pricing information. The bulk of the labeling costs will be incurred at the processing and manufacturing stage, with grocery stores having small additional costs.<sup>15</sup>

### *Food Industry Claim:* It is not the responsibility of the states to create food labeling requirements.

States often lead the way when the federal government is too slow, too gridlocked or too weak to take action. Long before the United States enacted a mandatory Country of Origin Labeling (COOL) policy, eight states required this labeling on their own.<sup>16</sup> Some states have also led the way in enacting renewable energy standards and mandates, as funding for federal initiatives has declined.<sup>17</sup> California has been building its renewable energy program since 1998, and by 2009, 12 percent of the state's electricity came from renewable sources, almost three times the national percentage of renewable energy use.<sup>18</sup> It is more than reasonable that states are once again taking the lead on the issue of labeling GMO food, where the federal government has failed to do its job.

# *Food Industry Claim:* GMO labeling conflicts with science.

One common refrain from opponents of GMO labeling is that giving consumers information on how their food was produced is in conflict with "good science." Yet the science that the food industry likes to talk about is far from complete. Although the FDA contends that there is not sufficient scientific evidence to prove that eating GMO foods leads to chronic harm,<sup>19</sup> the agency's process for evaluating the safety of these controversial new foods is completely inadequate.

Companies submit their own safety-testing data, and independent research on GMO foods is limited because biotechnology companies prohibit cultivation for research purposes in the restrictive licensing agreements that control the use of these patented seeds.<sup>20</sup> This has resulted in few independent studies on the effects of GMO foods on health, and those that have been done were performed on rats and mice for short feeding



trials. Some of the independent, peer-reviewed research that has been done on GMO food consumption has revealed troubling health implications including deterioration of liver and kidney function and impaired embryonic development.<sup>21</sup>

The chronic effects of eating GMO foods are still largely unknown. And without labeling of GMO foods, we cannot associate any health problems with people who ate them because we do not know who ate them. Since the FDA has no way to track adverse health effects in people consuming GMO foods, and because there is no requirement that food containing GMO ingredients be labeled,<sup>22</sup> there is no effective way to gather data on health problems that may be happening. Because GMO foods contain novel genetic combinations that do not occur naturally in our food system, the least that consumers deserve is that these foods are labeled with this information in the grocery store.

#### What You Can Do

Go to http://www.foodandwaterwatch.org/food/ genetically-engineered-foods/ to take action and learn more.

#### **Endnotes**

- No on 37: Coalition Against the Deceptive Food Labeling Scheme. "Questions & Answers About the Food Labeling Proposition." On file and available at http://noprop37.com/uploads/1342545312-Noon37\_QA\_FACT.pdf. Accessed July 26, 2012.
- 2 Thomson Reuters. "National Survey of Healthcare Consumers: Genetically Engineered Food." October 2010 at 3.
- 3 The Mellman Group, Inc. "Support for Mandatory Labeling of Genetically Engineered Foods Is Nearly Unanimous." March 22, 2012.
- 4 Kopicki, Allison. "Strong Support for Labeling Modified Foods." New York Times. July 27, 2013.
- 5 No on 37: Coalition Against the Deceptive Food Labeling Scheme. "Fact Sheet." On file and available at http://noprop37.com/ uploads/1342813362-Noon37FactSheet.pdf. Accessed July 26, 2012.
- 6 Clayton, Chris. "Food Lobby says defeating California measure is highest priority." *Western Livestock Journal*. July 23, 2012.
- 7 Food & Water Watch analysis of data from: National Economic Research Associates. "Economic Appraisal of Options for Extension of Legislation on GM Labelling: A Final Report for the Food Standards Agency." May 2001 at 69 to 70; U.S. Internal Revenue Service. "Yearly Average Currency Exchange Rates." On file and available at http://www.irs.gov/businesses/small/international/ article/0,,id=206089,00.html. Accessed August 9, 2012; U.S. Federal Reserve. "G.5 A Foreign Exchange Rates." Federal Reserve Statistical Release. January 5, 2004. On file and available at http://www. federalreserve.gov/releases/g5a/20040102/; U.S. Bureau of Labor Statistics. "CPI Inflation Calculator." Available at http://www.bls.gov/ data/inflation\_calculator.htm.
- 8 U.S. Bureau of Labor Statistics. "Consumer Expenditures-2010." [News Release]. September 27, 2011. On file and available at http:// www.bls.gov/news.release/pdf/cesan.pdf.
- 9 Dyke, Andrew and Robert Whelan. "GE Foods Labeling Cost Study Findings." EcoNorthwest Report prepared for Consumers Union. September 12, 2014.
- 10 National Economic Research Associates, 2001 at 23.

- 11 Bullock, David S. et al. "The Economics of Non-GMO Segregation and Identity Preservation." Paper for the American Agricultural Economics Association Annual Meeting, Tampa, Florida. July 30 – August 2, 2000 at 18; U.S. Trade Representative. "2011 Report on Technical Barriers to Trade." March 2011 at 49.
- 12 National Economic Research Associates, 2001 at 24.
- 13 Muth, Mary K. et al. Research Triangle Institute. "FDA Labeling Cost Model: Final Report." January 2003 at 4.2.
- 14 No on 37: Coalition Against the Deceptive Food Labeling Scheme. "Fact Sheet." On file and available at http://noprop37.com/ uploads/1342813362-Noon37FactSheet.pdf. Accessed July 26, 2012.
- 15 National Economic Research Associates, 2001 at 24.
- 16 U.S. Government Accountability Office (GAO). "Country-of-Origin Labeling: Opportunities for USDA and Industry to Implement Challenging Aspects of the New Law." Report to Congressional Requesters. (GAO-03-780). August 2003 at 14.
- 17 GAO. "Department of Energy: Key Challenges Remain for Developing and Deploying Advanced Energy Technologies to Meet Future Needs." Report to Congressional Requesters. (GAO-07-106). December 2006 at 6 to 7.
- 18 The California Energy Commission. "History of California's Renewable Energy Programs." On file and available at http://www.energy. ca.gov/renewables/history.html. Accessed August 22, 2012; U.S. Energy Information Administration. "Annual Energy Review 2010." October 2011 at 290.
- 19 GAO. "Genetically Modified Foods: Experts View Regimen of Safety Tests as Adequate, but FDA's Evaluation Process Could Be Enhanced." Report to Congressional Requesters. (GAO-02-566). 2002 at 30.
- 20 Pollack, Andrew. "Crop Scientists Say Biotechnology Seed Companies Are Thwarting Research." *The New York Times*. February 20, 2009.

- de Vendomois, Joel Spiroux et al. "A Comparison of the Effects of 21 Three GM Corn Varieties on Mammalian Health." International Journal of Biological Sciences, vol. 5, iss. 7. 2009 at 716 to 718; Malatesta, Manuela et al. "Ultrastructural Morphometrical and Immunocytochemical Analyses of Hepatocyte Nuclei from Mice Fed on Genetically Modified Soybean." Cell Structure and Function, vol. 27. 2002 at Abstract; Cisterna, B. et al. "Can a genetically-modified organism-containing diet influence embryo development? A preliminary study on pre-implantation mouse embryos." European Journal of Histochemistry. 2008 at 263; Agodi, Antonella et al. "Detection of genetically modified DNA sequences in milk from the Italian market." International Journal of Hygiene and Environmental Health. January 10, 2006 at Abstract; Mesnage, R. et al. "Cytotoxicity on human cells of Cry1Ab and Cry1Ac Bt insecticidal toxins alone or with a glyphosate-based herbicide." Journal of Applied Toxicology. 2012 at Abstract.
- 22 Fernandez-Cornejo, Jorge and Margriet Caswell. U.S. Department of Agriculture, Economic Research Service. "The First Decade of Genetically Engineered Crops in the United States." EIB No. 11. April 2006 at 3.



#### For more information:

WEB: www.foodandwaterwatch.org E-MAIL: info@fwwatch.org PHONE: (202) 683-2500 (DC) • (510) 922-0720 (CA) Copyright © January 2015 Food & Water Watch