

THE CASE FOR LABELING GENETICALLY ENGINEERED FOODS

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Prep for 2015 Session



What Are Genetically Engineered Foods?

Genetic engineering (also called GMO, genetically modified organism) is biotechnology whereby genes from one species are inserted into the DNA of an unrelated species. A GE food is a plant or meat product that has had its DNA artificially altered by this process, in a laboratory, by genes from unrelated plants, animals, viruses, or bacteria in ways that can't occur without human intervention in nature. [ii]

For example, some corn plants have been genetically engineered to produce a bacterial toxin (*Bt* pesticide) in their cells that makes them poisonous

to the corn borer pest. Genetic engineering is different from conventional plant breeding (like a hybrid tomato or seedless grapes), which can occur in nature. GE crops are relatively new to the food system, introduced com-

**We Should All Have the Right To Know
What's In Our Food**



Label GMOs Now!

GE Food Policies:

- ◆ 64 Nations have banned or restricted GE foods; the USA is not one of them.
- ◆ China bans GE foods for their Army.
- ◆ Russia bans GE food imports.
- ◆ Vermont, Maine, and Connecticut have passed GE food labeling laws
- ◆ 29 States across the USA are working on GE food labeling laws.

Why do so many people want to know if their food is genetically engineered?

Across California and around the world, people choose to avoid GE foods for environmental, health, economic, religious and ethical reasons.

The public overwhelmingly supports labeling genetically engineered foods. A recent New York Times poll shows 93% of people want GE foods to be labeled. [xxii]

64 Nations restrict, require labeling or ban GE food. China has banned GE for their Army. Russia has banned the import of GE food and crops.

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GE crops increase the use of pesticides:

- ◆ Virtually 100% of GE crops are designed to either contain a pesticide or survive repeated applications of herbicides. [iii]
- ◆ They are designed for use with specific pesticides, produced by the same corporations that own these seeds.
- ◆ Herbicide-resistant GE crops — the large majority of GE crops currently planted — require increased the use of weed-killing pesticides/herbicides by hundreds of millions of pounds per year, according to USDA data.[iv]
- ◆ These chemicals are poisoning our air, water, soil and our bodies.[v]
- ◆ Monsanto’s RoundUp Ready seeds have led to a massive increase in the use of Roundup (glyphosate). RoundUp-resistant *superweeds* now plague farmers across the country. [vi]
- ◆ Because they are losing the battle with RoundUp superweeds, Monsanto and Dow are launching a new pesticide arms race. They are seeking USDA approval of new seeds engineered for use with more toxic, antiquated, previously banned herbicides like 2,4-D., a component of Agent Orange.[vii]

Concerns about health impacts, particularly for children:



The jury is out on the safety of GE foods. More than 275 scientists and doctors have signed a statement that “*there is no scientific consensus on GMO safety*”, pointing out that safety claims made by biotech companies are often misleading and inaccurate.[viii]

We don’t know whether GE foods are safe because the biotech industry has suppressed or restricted independent scientific research. [ix] Most available studies are sponsored in whole or in part by the pesticide/seed industry; the producers of these crops. U.S. FDA and EPA do not require independent studies verifying

safety of GE food.[x]

Independent studies as well as industry studies [xi] highlight possible links between GE foods and adverse health impacts, including allergies, immune system disorders and organ toxicity, particularly kidney and liver problems.[xii][xiii]

The potential impacts on children are particularly concerning, since infants and young children are more sensitive to toxins.[xiv]

Concerns about who controls our food system:

- ◆ The “Big 6” pesticide companies (BASF, Bayer, Dow, DuPont, Monsanto and Syngenta) dominate the global pesticide and GE seed markets. These corporations wield unprecedented control over our food and farming.[xv]
- ◆ Despite decades of research, billions of dollars, and over 16 years of commercialization, genetic engineering has failed deliver on its promises of increased yields or reduced pesticide use.[xvi]
- ◆ Monsanto alone controls 80% of corn seeds and 93% of soybean seeds in the U.S. market.[xvii] GE crops designed to go with chemicals are key to the pesticide industry’s sales and marketing strategies.
- ◆ The Big 6 have spent millions blocking attempts to label GE foods in the U.S. But whether or not these companies agree, we have the right to know what’s in our food and how it’s grown.



Labeling = No Cost to Consumers

Economics

- ◆ Food companies claim that food prices will soar when they must label their products - it hasn't happened yet. They currently label GMOs in 64 countries, without passing any costs on to consumers.
- ◆ Food companies like Kellogg's already label their GMO products in Europe but they won't label them here in America.
- ◆ California's major trading partners, such as Japan and Korea, require labels on GE foods and some will not accept GE food imports. The discovery of unexplained GE wheat in 2013 in Oregon threatened \$8 billion of U.S. wheat export market." [xviii]
- ◆ Tracking GE crops in our food supply makes sense from an economic perspective.
- ◆ Organic farmers across California are concerned about contamination of their fields by GE crops.[xix] Labeling is a key tool to keep track of GE crops and protect organic farmers — which is why over 2,000 organic farmers in CA support GE food labeling.

Religious Considerations

- ◆ The largest religious organizations in California support GE food labeling in California, including the **California Council of Churches, Presbyterian Church** and **United Methodists**. "It is immoral that consumers be left in the dark about what is in their food," said the 1.5 million-member California Council of Churches.
- ◆ "The essence of keeping kosher is being conscious of our food choices. We can't make a choice about what we're going to eat if we don't know what's in it," Rabbi Elihu Gevirtz, San Jose Mercury News."[xx]
- ◆ The United Methodists position paper on GE technology:
- ◆ "The risks of genetic technology that can hardly be calculated when breeding animals and plants and the negative ecological and social impact on agriculture make the use of this technology doubtful. We approve of modern methods of breeding that respect the existence of the natural borders of species." [xxi]



"Big Food," pesticide and GE seed corporations — along with the trade associations concerned for their profits — spent more than \$46 million on advertising aimed to confuse voters. xxv]

What will labeling Do To Food Prices?

- ◆ As Arran Stephens, president of Nature's Path, says: "We, as with most manufacturers, are continually updating our packaging. It is a regular cost of doing business, a small one at that, and is already built into our cost structure. Claims that labeling GMOs would significantly increase the price of food for consumers just aren't true."
- ◆ An economic assessment conducted by Joanna Shepherd Bailey, Ph.D., Professor at Emory University School of Law, found that, "The prices for many food products will not change as a result of the Right to Know act." [xxvi]
- ◆ In Washington State, an analysis of food industry labeling found no evidence that requiring genetically engineered foods to be labeled would increase food prices. [xxvii]
- ◆ When GE labeling was introduced in Europe in 1997, "it did not result in increased costs, despite the horrifying (double-digit) prediction of some interests," wrote David Byrne, former European Commissioner for Health and Consumer Protection of the European Parliament.
- ◆ 64 Countries label and/or ban GMOs. All the companies that are fighting labeling in the US, sell their labeled GMO products in these 64 countries, at a substantial profit. No countries noticed price increases at the grocery stores even though claims of huge price increases were threatened. Other countries have maintained affordable and robust markets with labeling. Fully 82% of world's gross domestic product (GDP), or \$43 trillion, comes from countries that have GMO labeling statutes. By contrast, countries [checking to see if this figure includes or excludes the US] without GMO labeling laws constitute only 17% of the world's GDP (\$9.3 trillion).

The California Coalition supporting a GMO Labeling Bill



The bill is supported by Californians for GE Food Labeling coalition, a diverse group of food, farming and health professionals including Biosafety Alliance, CalPIRG, Californians for Pesticide Reform, California State Grange, Center for Food Safety, Consumers Union, Environmental Working Group, Food & Agriculture Caucus of the Democratic Party, Food Democracy Now!, Food & Water Watch, Friends of the Earth, Good Earth Natural Foods, LabelGMOs.org, Moms Advocating Sustainability, Organic Consumers Association, Pesticide Action Network and Pesticide Watch..

Our coalition reaches out to the over 3,000 organizations that support SB 1381. Most of the major health, faith, labor, environmental and consumer groups in California endorse labeling, including California Nurses Association, California Democratic Party, California Labor Federation, United Farm Workers, American Public Health Association, Consumers Union, California Council of Churches, Sierra Club, Whole Foods Market, Natural Resources Defense Council, Consumer Federation of America, Breast Cancer Fund and many others. You can review the full list at: <http://www.carighttoknow.org/endorsements>

If other countries do well with labeling, the United States can, too, and can strive to do it better.

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Sources:

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[iii] According to industry reports, herbicide resistance accounts for 62.4% of GE crop acreage worldwide, insect resistance 16.2% and both traits 21.4%. Percentage of other traits are considered even by industry as too miniscule to measure. ISAAA (2009).

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[v] Schafer, K. and E. Marquez, et al. "A generation in Jeopardy: How pesticides are undermining our children's health & intelligence." *Pesticide Action Network North America*. October 2012.

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[vii] USDA Animal and Plant Health Inspection Service. Draft Environmental Impact Statement for Dow AgroSciences' 2,4-D-Resistant Crops. February 18, 2014.

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[x] See literature reviews of industry studies:

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[xii] de Vendômois, J.S., F. Roullier, D. Cellier, G.E. Séralini. A Comparison of the Effects of Three GM Corn Varieties on Mammalian Health. *Int J Biol Sci* 2009; 5(7):706-726.

[xiii] In a March 2012 letter titled "Reasons for Labeling of Genetically Engineered Foods" addressed to the American Medical Association, Dr. Michael Hansen from Consumers Union cited examples of places where "significant scientific uncertainty" existed in risk analysis of GE foods.

[xiv] Schafer, K. and E. Marquez, et al. "A generation in Jeopardy: How pesticides are undermining our children's health & intelligence." *Pesticide Action Network North America*. October 2012.

[xv] ETC Group. "Putting the Cartel before the Horse ...and Farm, Seeds, Soil, Peasants, etc. Who Will Control Agricultural Inputs, 2013?" *Communiqué Number 111*, September 2013.

[xvi] Gurian-Sherman, D. *Failure to Yield: Evaluating the Performance of Genetically Engineered Crops*. Union of Concerned Scientists, April 2009. species." [v]

[xvii] Food and Water Watch, "Monsanto: A Corporate Profile," April 2013.

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[xxi] Position statement: "New Developments in Genetic Science." The people of the United Methodist Church.

[xxii] Kopicki, A. "Strong support for labeling modified foods." *New York Times*, July 27, 2013.

[xxiii] California Business Roundtable, Pepperdine University, Initiative Survey Series 2012,

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[xxvii] Kai Robertson, for Just Label It. "Why label changes don't affect food prices." September 11, 2013.