## Pros and cons of labeling genetically engineered (GE) crops

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# Should GMO-crop derived food have a mandatory label, vs. the common voluntary non-GMO labels (organic, non-GMO)?

#### BE IT ENACTED BY THE PEOPLE OF THE STATE OF OREGON: AN ACT REQUIRING THE LABELING OF GENETICALLY ENGINEERED RAW AND PACKAGED FOOD

#### Section 1. Findings and Declarations

- (1) Oregon consumers have the right to know whether the foods they purchase were produced with genetic engineering so they can make informed purchasing decisions. Labeling is necessary to ensure that Oregon consumers are fully and reliably informed about the products they purchase and consume. Labels provide informed consent and prevent consumer deception. Polls consistently show that the vast majority of the public wants to know if its food was produced with genetic engineering, for a variety of reasons.
- (2) For multiple health, personal, economic, environmental, religious, and cultural reasons, the State of Oregon finds that food produced with genetic engineering should be labeled as such, as evidenced by the following.
- (3) In the United States, there is currently no federal or Oregon State requirement that genetically engineered foods be labeled. In contrast, sixty-four countries, including Japan, South Korea, China, Australia, Russia, India, the European Union member states, and other key U.S. trading partners, already have laws mandating disclosure of genetically engineered foods on food labels. In 2011, Codex Alimentarius, the food standards organization of the United Nations, stated that governments are free to decide on whether and how to label foods produced with genetic engineering.
- (4) The U.S. Food and Drug Administration (FDA) does not require or conduct safety studies of genetically engineered foods. Instead, any safety consultations are voluntary, and genetically engineered food developers may decide what information to mayide to the scenary. Market

USDA Organic



#### Labeling summary - Oregon

- Anything with 0.9% GMO product must be labeled prominently
- No identity of quantity or kind of GMO, crop it came from, or if a gene or protein is present vs. absent (e.g., sugar and oil also labeled)
- Restaurant, cafeteria food exempted, as is dairy and meat from animals fed GMO grains/feed (~2/3 of food eaten)
- Government must monitor to assure compliance
- Only Vermont has a similar active labeling law, on hold due to lawsuit from major food companies, but others under consideration in other states

#### Pros vs. cons of mandatory GMO labels

- Pro viewpoints
  - Right to know, period
  - Tool to track problems
  - Ethics (keep animal DNA out of food of vegetarians)
  - Many other countries are doing it
  - Reduce GMOs in food supply to protect against chemical use, toxins from herbicide and insect resistant crops that are widespread
  - Reduce power, prominence of large ag companies in food and farming

Adapted from: http://www.ext.colostate.edu/pubs/foodnut/09371.html

#### Pros vs. cons of mandatory GMO labels

- Con viewpoints
  - Method is what is regulated but safe as other breeding according to FDA, National Academy of Sciences
  - GE already intensively regulated/scrutinized already by US government, far more than conventional crops
  - We have a labeling law already in place (FDA) for changes that matter ("material" changes to nutrition, safety get a label, whether positive or negative)
  - Organic already GMO-free and widely available to consumers who wish to choose non-GMO
  - No health benefits from poor tracking, exemptions

Adapted from: http://www.ext.colostate.edu/pubs/foodnut/09371.html

#### Pros vs. cons of mandatory GMO labels

- Con viewpoints
  - A prominent and mandatory label, as required in the Oregon ballot measure, has been shown in scientific studies to mislead/scare/stigmatize consumers (viewed as warning label)
    - Improved products also stigmatized, kept from market
  - Labeling increases cost of food for all consumers (estimates vary, but some estimates are very high). This is unethical because it hits the poor hardest
  - Reduces choice by loss of GMO products, as has been observed in Europe (food system cannot infrastructure cannot support GMO and non-GMO options for most foods), companies often avoid danger to their brand

Adapted from: <u>http://www.ext.colostate.edu/pubs/foodnut/o9371.html</u>

Those who fund and write labeling ballot measures are interested in removing GMO technology IS LABELING REALLY ABOUT OUR "RIGHT TO KNOW"

"We are going to force them to label this food. If we have it labeled, then we can organize people not to buy it."

—Andrew Kimbrell, Executive Director, Center for Food Safety

"Personally, I believe GM foods must be banned entirely, but labeling is the most efficient way to achieve this. Since 85% of the public will refuse to buy foods they know to be genetically modified, this will effectively eliminate them from the market just the way it was done in Europe."



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IS LABELING REALLY ABOUT

avoiding GMOs, you contribute to the tipping point of con rcing them out of our food supply."

—Jeffrey Smith, Founder, Institute for Responsible Technology

-Vandana Shiva, environmental activi

The burning question for us all then becomes how—and how quickly—can we move healthy, organic products from a 4.2% market niche, to the dominant for in American food and farming? The first step is to change our labeling laws.\*

### The largest organization of scientists in the USA and the world – AAAS – does not support labels

"Legally mandating such a label can only serve to mislead and falsely alarm consumers"

#### Statement by the AAAS Board of Directors On Labeling of Genetically Modified Foods

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE 20 October 2012

There are several current efforts to require labeling of foods containing products derived from genetically modified crop plants, commonly known as GM crops or GMOs. These efforts are not driven by evidence that GM foods are actually dangerous. Indeed, the science is quite clear: crop improvement by the modern molecular techniques of biotechnology is safe. Rather, these initiatives are driven by a variety conclusion: consuming foods containing ingredients derived from GM crops is no riskier than consuming the same foods containing ingredients from crop plants modified by conventional plant improvement techniques.

Civilization rests on people's ability to modify plants to make them more suitable as food, feed and fiber plants and all of these modificaadded, the protein must be shown to be neither toxic nor allergenic. As a result and contrary to popular misconceptions, GM crops are the most extensively tested crops ever added to our food supply. There are occasional claims that feeding GM foods to animals causes aberrations ranging from digestive disorders, to sterility, tumors and premature death. Although such claims are often sensationalized and receive a

Approved by the AAAS Board of Directors on 20 October 2012



## The NY Times, Oregonian and most other mainstream news organizations have not supported labeling measures

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# GMO food-labeling mandate would only sow confusion

Backers claim labels on GMO products will prevent consumer confusion, but the exact opposite is likely to be true

Backers of an initiative that would require labels for food produced using genetic engineering turned in more than 155,000 signatures this week, virtually guaranteeing a spot on the November ballot, Similar initiatives having failed in California in 2012 and in Washington in 2013, it's now Oregon's turn on the label-it movement's West Coast swing, With any luck, voters here

Editorial will do justice to the state animal, the beaver, commonly known as nature's engineer.



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