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## Let's Talk About: *GM Labeling*

Before the tools of modern plant breeding existed, plant breeders labored several generations to improve plants. This process involved selecting the highest yielding seeds and cross-pollinating them to obtain a plant with the most desirable traits. Modern biotechnology, commonly known as genetic engineering or genetic modification (GM) is a refinement of traditional breeding techniques that allows more efficient plant improvements.<sup>i</sup>

Biotechnology is an essential process to the production of sufficient high quality crops for a rising population. Nevertheless, the high volume of GM products in the market, along with a lack of common understanding of the process of biotechnology, have led to the current debate on whether or not GM products should be labeled in food.

### Illinois Farm Bureau Policy

The Illinois Farm Bureau ("IFB") supports "Voluntary labeling of biotech or non-biotech products when an approved certification process is in place .... and positive labeling of biotech products that is science-based, truthful, and not misleading." In addition, the IFB supports "The science-based labeling policies of U.S. Food and Drug Administration (FDA)."<sup>ii</sup> IFB opposes "Negative labeling of food products as being derived from the use of biotechnology."<sup>iii</sup>

### FDA Policy

FDA's food labeling policy requires a product label if an ingredient "has a significantly different nutritional property; if a new food includes an allergen that consumers would not expect to be present (e.g., a peanut protein in a soybean product); or if a food contains a toxicant beyond acceptable limits."<sup>iv</sup> The FDA also has guidelines regarding voluntary labeling of GM products, that requires statements on the label be truthful and not misleading.

### Pro-GM Labeling Arguments

- *Consumers have a right to know what is in the foods they are purchasing.*
  - ✓ This argument is valid, but implies a willingness by consumers to learn what the labels actually mean. Many consumers are not well-informed on GM products and would interpret a GM label as a warning.<sup>v</sup> Terminology such as "Frankenfoods" is used as an attempt to sway consumers away from consuming GM products, even though "no significant differences between GM and conventional foods have been detected."<sup>vi</sup> While some companies voluntarily label GM foods, there is no scientific reason to mandate labeling. And, industry observers argue there is "no value in doing so unless the labeling is accompanied by focused consumer education."<sup>vii</sup>

- ✓ Scientific evidence indicates that the potential adverse health effects arising from GM foods “are no different than those created by conventional breeding practices for plant, animal, or microbial enhancement, and toxicologists are already aware of these potential effects. It is therefore, important to recognize that the food product itself, rather than the process through which it is made, should be the focus of attention in assessing safety.”<sup>viii</sup>
- ✓ Part of the safety assessment of GM foods includes the ‘substantial equivalence concept.’ This widely accepted process includes extensive studies of chemical composition, nutritional quality, and levels of potentially toxic components in both engineered and conventional foods. Such a process determines if the new plant or animal is significantly different from its non-GMO counterpart that is considered safe for consumption.<sup>ix</sup> If there is a significant difference, it must be so indicated on the product label.
- *Mandatory labeling allows those who do not want to consume GM products to avoid them.*
  - ✓ Those who do not wish to consume GM products already can avoid them by purchasing certified organic products. In addition, the FDA’s voluntary labeling guidelines allow voluntary labeling of products as non-GM (and many have created a niche for themselves by doing so).
  - ✓ Because major biotech crops such as corn, soybeans, and sugar beets are ubiquitous in the food chain, consumers should assume most processed foods contain ingredients from biotech crops if they are not labeled “GMO-free” or organic.”
- *Almost all consumers want GM products to be labeled, according to surveys.*
  - ✓ Many consumers consider the current FDA policy to be enough. Nevertheless, the International Food Information Council (IFIC) has been conducting surveys for years to measure consumer knowledge of and feelings towards biotechnology.
  - ✓ In nearly every poll taken, millions of Americans do say they favor mandatory labeling of genetically engineered products. However, few are familiar with the FDA’s existing policy or the scientific rationale behind its stance. Therefore, IFIC issued a series of polls where respondents were first read a summary of the FDA rule and then asked for their opinion. In those surveys conducted between 1997-2012, a majority of consumers agreed with the FDA’s risk-based approach which does not require mandatory labeling of all GM products.<sup>x</sup>
  - ✓ Another 2012 survey conducted by IFIC asked participants if there was additional information they would like to see on food labels. Of the surveyed population, only 24% responded ‘Yes’ to this question. Of those that responded ‘Yes’ only 3% said biotechnology was the information they would like to see on food labels.<sup>xi</sup>
- *Other countries have some form of mandatory labeling*
  - ✓ Other nations that require labeling of biotechnology products include the European Union, Korea, Australia, and New Zealand.<sup>xii</sup> However, these countries have all seen higher costs for the food industry and have found these policies difficult to enforce.<sup>xiii</sup>
  - ✓ After initially requiring biotech foods to be labeled in 2012, Russia stopped requiring labels in April 2012 because consumers “were being misled”. The Deputy Head of Department of Trade and Consumer Services in Moscow stated that abolishing the labeling law was a result of consumers being misled by the packaging. Consumers purchased non-GM products assuming they had beneficial qualities, even when they might have a higher tendency towards

contamination (e.g. organic fertilizers). Additionally, the government's budget was stretched tight with testing of food samples.<sup>xiv</sup>

- *Genetically modified foods contain allergens*
  - ✓ While some genetically modified foods may contain allergens, such foods are the same that would contain allergens in their non-GM alternatives. Currently there is no information or evidence supporting claims that genetically modified foods cause allergic reactions. The allergenic risks of GM plants are no greater than the risks posed by conventional crops or by plants introduced from other areas of the world.
  - ✓ Allergies occur with many known and even new conventional foods. The kiwi fruit was introduced into U.S. and European markets in the 1960s with no known human allergies. However, today there are people allergic to this fruit.<sup>xv</sup> The risks are the same when it comes to GM and non-GM foods containing allergens.
  - ✓ The FDA requires labeling of genetically modified foods if its nutritional content significantly differs from the original food or if it contains an allergen.<sup>xvi</sup>

## Cost of Labeling

Campaigns seeking mandatory labeling of GM products argue that GM foods are unsafe, contain allergens, and pose health risks to the consumer. Research and three decades of experience do not support these arguments. In addition, these campaigns fail to recognize the impracticalities of labeling. The additional costs associated with labeling GM products go far beyond just printing a new label.

To label correctly, a system of recordkeeping for every step of production would have to be implemented and end-product testing would be required to verify that the product was not genetically engineered. Grocery chain Safeway recently estimated "it would initially cost over \$15 million to identify, confirm and certify its private label products that contain GMOs."<sup>xvii</sup> A recent economic study by Northbridge Environmental Management Consultants determined that prices for consumers would increase by \$350 to \$400 per household annually. This translates to a "nearly 2.7 to 3.1 percent increase in annual food costs due to mandatory labeling legislation."<sup>xviii</sup>

Proponents of labeling also argue that while the government requires ingredient lists and nutrition facts on food labels, it does not allow consumers the opportunity to know other information, such as whether or not it is genetically engineered.<sup>xix</sup>

Keeping in mind that federal labeling requirements are designed to protect consumers by identifying ingredients or allergens proven to cause health issues if overconsumed, requiring the government to label for an identical ingredient that is not harmful seems ludicrous to those who oppose mandatory labeling. More than 400 scientific studies that show foods made with genetically modified ingredients are safe.<sup>xx</sup> From the number of studies conducted, it is clear that GM products have already been declared safe for consumption.<sup>xxi</sup> Labeling such products would not only mislead consumers into thinking these products are unsafe, but would also take focus away from more important facts on labels (including allergens, alcohol warnings, and anything else that is a proven consumer risk).

In July 2015, the U.S. House of Representatives passed a bill that would prevent states and local governments from implementing mandatory GMO food labeling laws. Moreover, USDA

and Congress recently passed voluntary GMO labeling guidelines. A label from the federal government will standardize the labeling process and clarify qualifications for GMO-free foods.

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