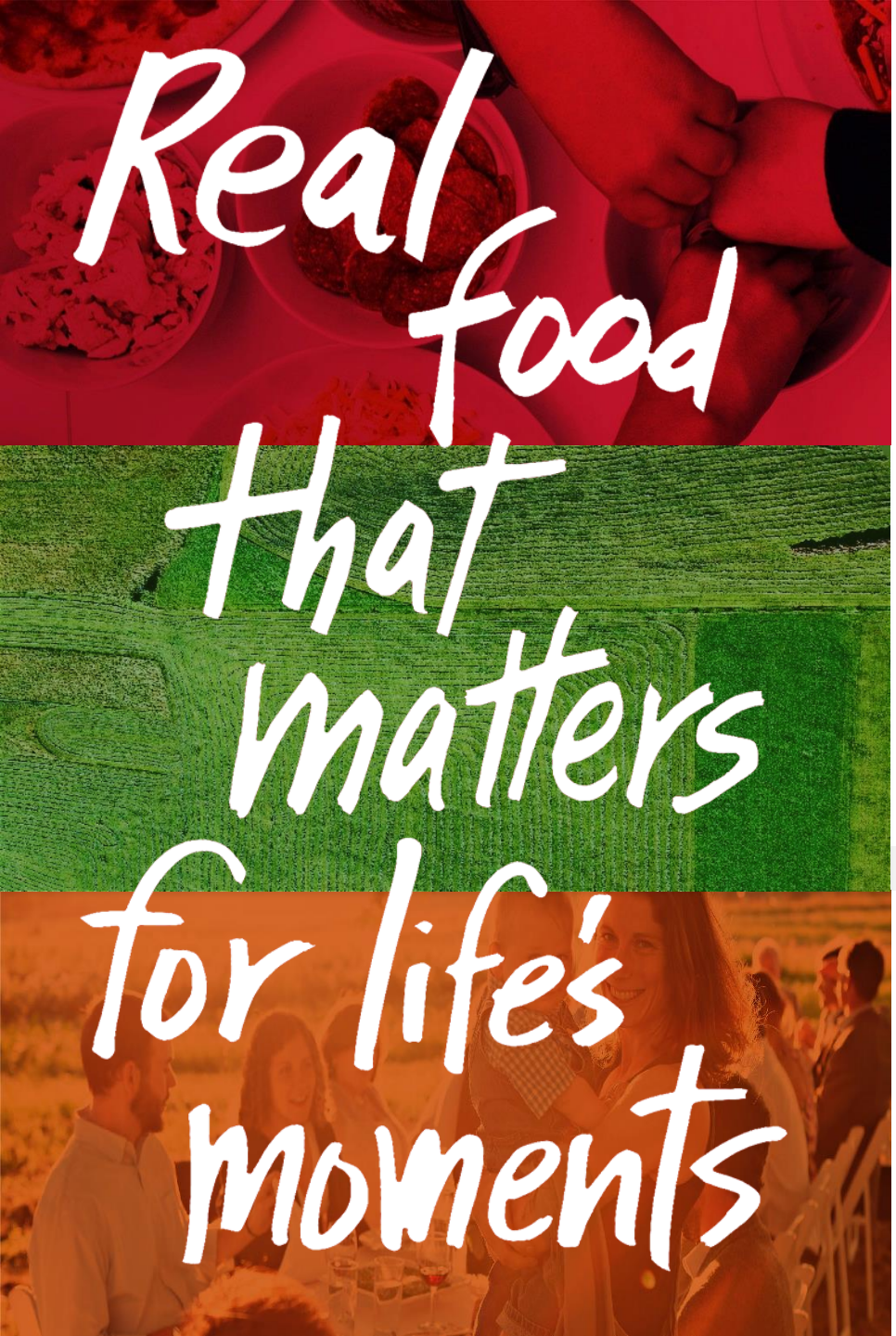
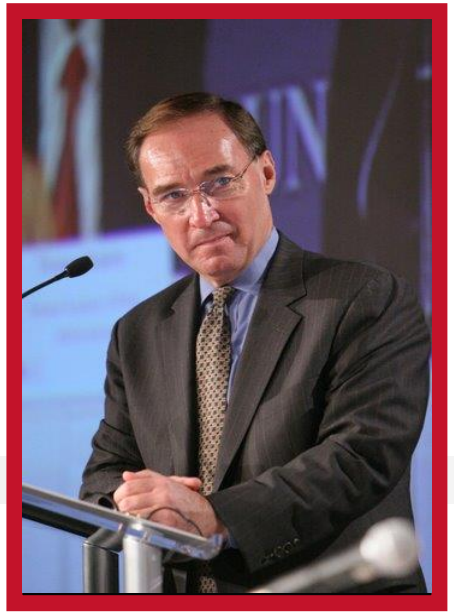


Campbell's



The Case for Federal Labeling Standards for GMOs

Kelly D. Johnston
Vice President – Government Affairs
Campbell Soup Company

GMO Labeling: First, What is a "GMO?"

- "…plants developed through a process in which a copy of a desired gene or section of genetic material from one plant or organism is placed into another plant to achieve a desired trait, such as resistance to an insect or improving the ripening process in order to better meet a customer's market need."

  -- U.S. Farmers & Ranchers Alliance

How Crops Are Genetically Modified

Traditional Breeding

Crossing plants and selecting offspring

Almost All Crops

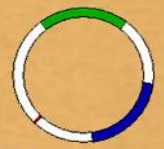
Mutagenesis

Exposing crops to chemicals or radiation

RNA Interference

Switching off selected genes with RNA

Transgenics

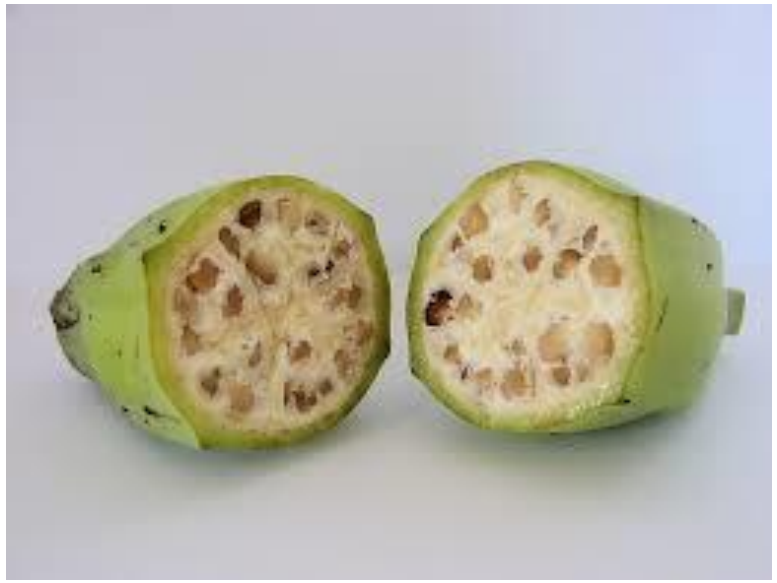


Inserting selected genes using recombinant DNA methods

Number of Genes Affected

10K - >300K	? No way to assess	1- 2	1 - 4
Desired gene(s) inserted with other genetic material. No safety testing requirements.	Random changes in genome, usually unpredictable. No safety testing requirements.	Targeted gene(s) switched off or 'silenced'. Safety testing required.	Desired gene(s) inserted only at known locations. Safety testing required.

What Do Historic Non-GMO Plants Look Like?



BIOTECH

8 Common Crops Commercially Available Use Biotech Seeds, reducing crop loss to insect and plant diseases as well as drought and other environmental conditions.

ARE THESE GMO?

Purple cauliflower
DOES NOT get its color because it's genetically modified. It's through conventional breeding.

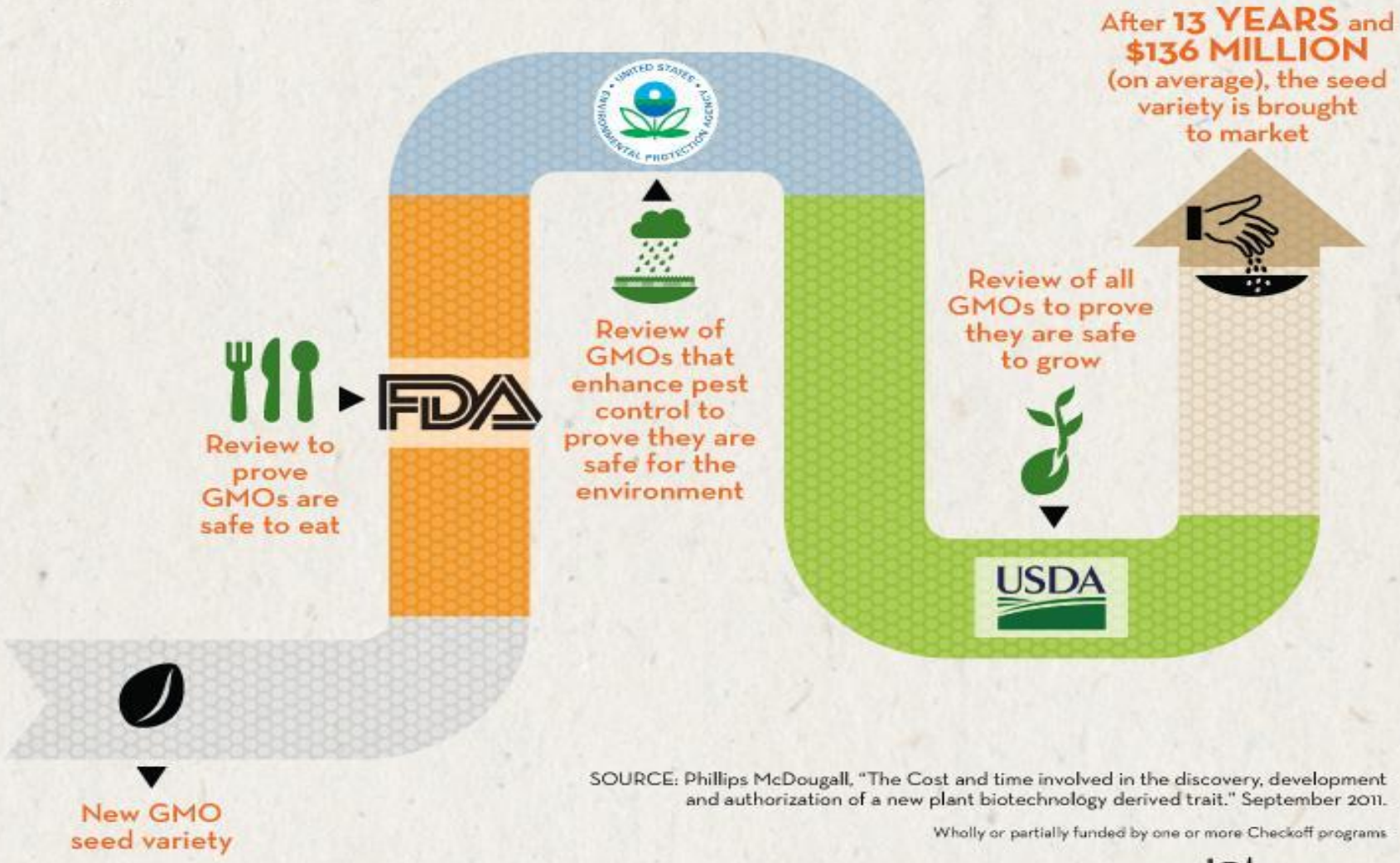
Seedless Watermelon
DOES NOT lose its seeds because it's genetically modified. It's through conventional breeding.

Purple potatoes
DO NOT get their color because they're genetically modified. It's through conventional breeding.

HOW A GM SEED GETS TO MARKET

No other type of new seed that comes to market from other breeding methods goes through regulatory approval, including the thousands of conventional and organic seeds developed from mutagenesis*. Only GMOs are required to be reviewed. Even before the new seed goes through the review process, years of testing and research take place.

*Deliberately engineered DNA mutations



SOURCE: Phillips McDougall, "The Cost and time involved in the discovery, development and authorization of a new plant biotechnology derived trait." September 2011.

Wholly or partially funded by one or more Checkoff programs

U.S. Farmers & Ranchers Alliance

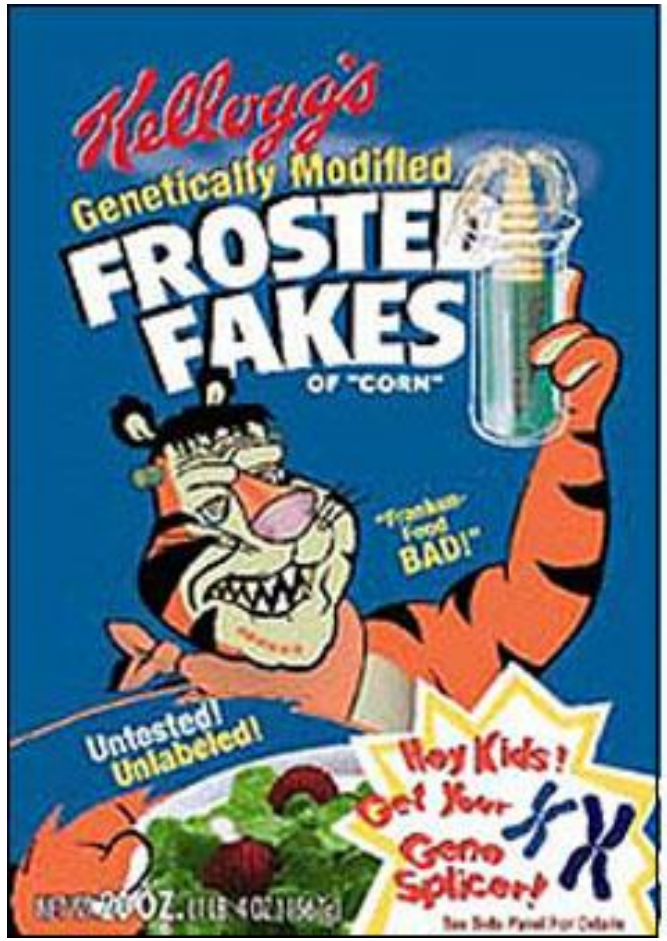
www.FoodDialogues.com

Current Federal GMO Labeling "Policy"

- **Current "law"**
  - 1992 FDA Policy: Labeling required only if food is materially different (introduction of allergen, change in nutrition, etc.)
  - FDA reviews premarket safety assessments on a "voluntary" basis
  - No preemption of state labeling laws related to GMO foods
- **Current FDA Policy**
  - "FDA has no basis for concluding that bioengineered foods differ from other foods in any meaningful or uniform way, or that, as a class, foods developed by the new techniques present any different or greater safety concern than foods developed by traditional plant breeding."

Arguments For GMO Labels

- **"64 countries require labels; why not us?"**
  - *27 countries grow GM crops*
  - *Laws all differ and have large loopholes*
  - *GM crops not available in many countries*
- **"GMOs are bad for the environment"**
  - *Over 370 million pounds reduction in pesticide applications from 1996-2009*
- **"GMOs are not needed to feed the world"**
  - *UN's FAO: food production needs to increase 60% by 2050 with 15% less arable land since '82*



© Greenpeace

“But 94% of Americans Want GMO Labels!”

- **IFIC 2014 Technology Survey (http://www.foodinsight.org)**

- What foods or ingredients have you avoided? [OPEN END] Of those that are avoiding (n=543) Total sample (n=1000)

– Sugar/Carbs	55%	30%
– Sugar	45%	25%
– Carbs	37%	20%
– Fats/oils/cholesterol	26%	14%
– Animal products	25%	14%
– Snack foods/fast foods/soda	20%	11%
– Salt/sodium	18%	10%
– Artificial/additives	6%	3%
– Processed/refined foods	2%	1%
– **Biotech**	**2%**	**1%**

Few Consumers Concerned About Food Biotech

What, if anything, are you concerned about when it comes to food safety? [OPEN END] (n=1000)

- Disease/Contamination 18%
- Handling/Preparation 18%
- Preservatives/Chemicals 12% Agricultural production 10%
- Packaging/Labeling 9%
- Health/Nutrition 7%
- **Biotech 7%**
- Food source 6%
- Processed foods 3%
- Other 3%

KNOW G.M.O.?

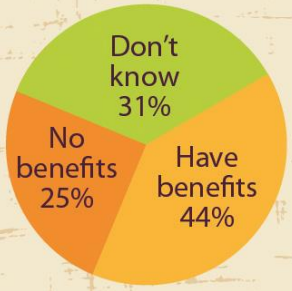
Many grocery shoppers are unconcerned or unclear about bioengineered ingredients, and most won't pay more for products made without them, according to a study from The NPD Group.

2 out of 3
primary grocery shoppers won't pay more for non-G.M.O. foods.

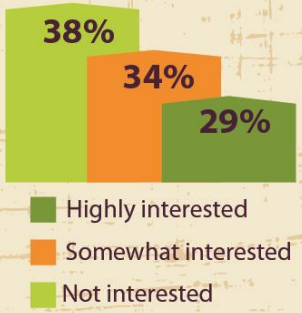
1 out of 2
specialty store shoppers will pay more for non-G.M.O. foods.

4 out of 10
primary grocery shoppers feel they mostly buy non-G.M.O. foods.

What benefits do you see from G.M.O.s?
percent of primary grocery shoppers



How interested are you in learning more about G.M.O.s?
percent of primary grocery shoppers



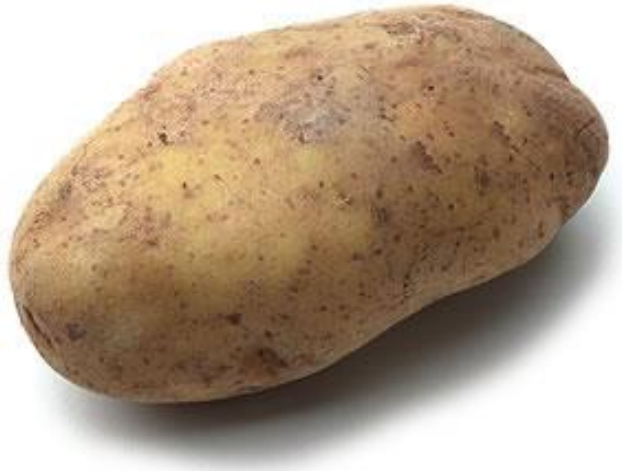
SOURCE: THE NPD GROUP | FOODBUSINESSNEWS.NET

Arguments Against State GMO Labels

- State law labeling requirements differ; most food distributed in interstate commerce
- Most state laws provide broad exemptions from labeling. Where's "the right to know?"
- Cornell University study: would raise average household grocery bills by $500 per year; costs gov't to regulate
- Misleads consumers that something is different or bad with the product

Have GMO Foods Ever Been Found Harmful?

- **Not through RNA Interference or Transgenics, but *traditional breeding***
- **The Case of the Poison Potato**
  - *In the late 1960s, researchers from the US Department of Agriculture, Penn State University, and the Wise Potato Chip Company teamed up breed a very special potato, which they named the Lenape. More than 30 years later, one of their colleagues still thought fondly of that spud. "Lenape was [wonderful]," Penn State scientist Herb Cole told journalist Nancy Marie Brown in 2003. "It chipped golden."*
- **Unfortunately, it was also toxic.**

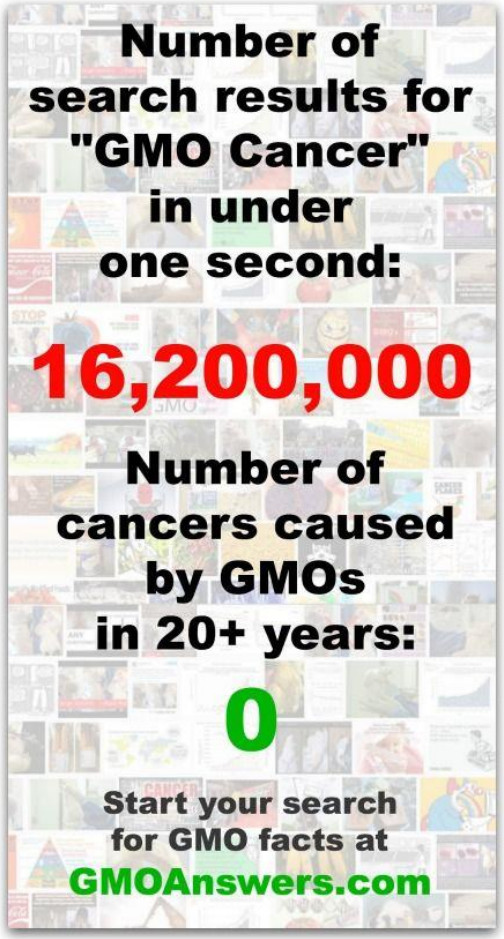


Why is GM Labeling An Urgent Issue?

- **Vermont's mandatory labeling law takes effect July 2016**
  - **"Produced with Genetic Engineering"**
  - **"May be Produced with. . ."**
  - **"Partially Produced with. . ."**

- **New Technologies Are On The Way**
  - **Arctic Apple (prevents "browning")**
  - **GMO Wheat (disease & drought resistant)**
  - **Aqua Bounty Salmon (faster growing)**
  - ***And not just the U.S. (China)***

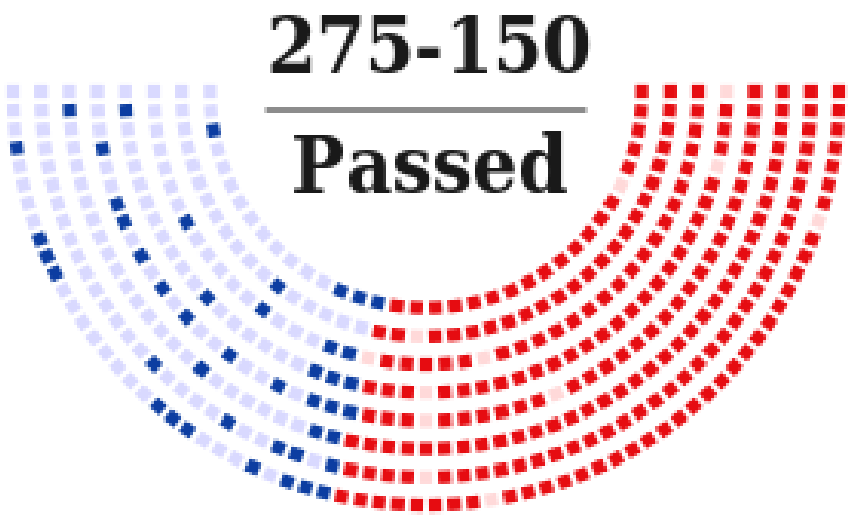
What We Advocate



- We agree: <u>You have a right to know.</u> New "Smart Label" program launched
- GMOs are regulated and proven safe
- We need a <u>single national labeling standard</u>, not 50 different ones
- We're working to make information you want available in a responsible way:
- http://www.whatsinmyfood.com/

What's in the Federal Legislation?

- **HR 1599, Safe and Accurate Food Labeling Act: PASSED U.S. HOUSE**
  - Express preemption for labeling for foods genetically modified through DNA transfer (transgenic GMOs)
  - Establishes new "Non GMO" voluntary labeling program through USDA
  - Directs FDA to define "natural" for food product claims



Food Biotech Resources

- FoodDialogues.com (U.S. Farmers & Ranchers Alliance)
- GeneticLiteracyProject.com
- GMOAnswers.com
- FactsAboutGMOs.com
- Innovationfiles.org (Dr. Val Giddings, “Our Biofuture”)
- Biofortified.Org