

The background of the slide features a large, faint watermark of the Rutgers University seal. The seal is circular with a sunburst in the center and the words "RUTGERS THE STATE UNIVERSITY OF NEW JERSEY" around the perimeter.

RUTGERS

THE STATE UNIVERSITY
OF NEW JERSEY

Consumer Decisions about GMOs

William K. Hallman, PhD.

Professor/Chair

Department of Human Ecology

Rutgers University

Key point 1

Whether the promise of agricultural biotechnology can be fulfilled depends as much upon consumers' perceptions and acceptance of GM products as it does on the ability to create them.

Key point 2

Much of the American public knows little or nothing about GMOs



2013 Rutgers Survey

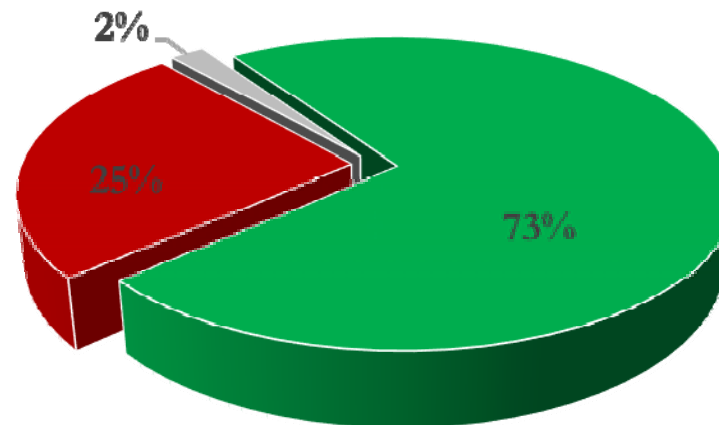
Survey Particulars

- Conducted using the GfK online survey panel
- 1148 respondents
- October 23-27, 2013
- Margin of error +/- 3.1%
- Data weighted to project to the US population

Selected Survey Results

Awareness of the Existence of GM Foods

- *Before this survey, were you aware that genetically modified foods existed?*
 - 25% say no



■ Yes ■ No ■ Refused

Heard or Read?

- *How much have you heard or read about genetically modified foods?*
 - A great deal 4%
 - A fair amount 13%
 - Some 33%
 - Very little 29%
 - *Nothing at all* 19%
 - Refused 2%

50%



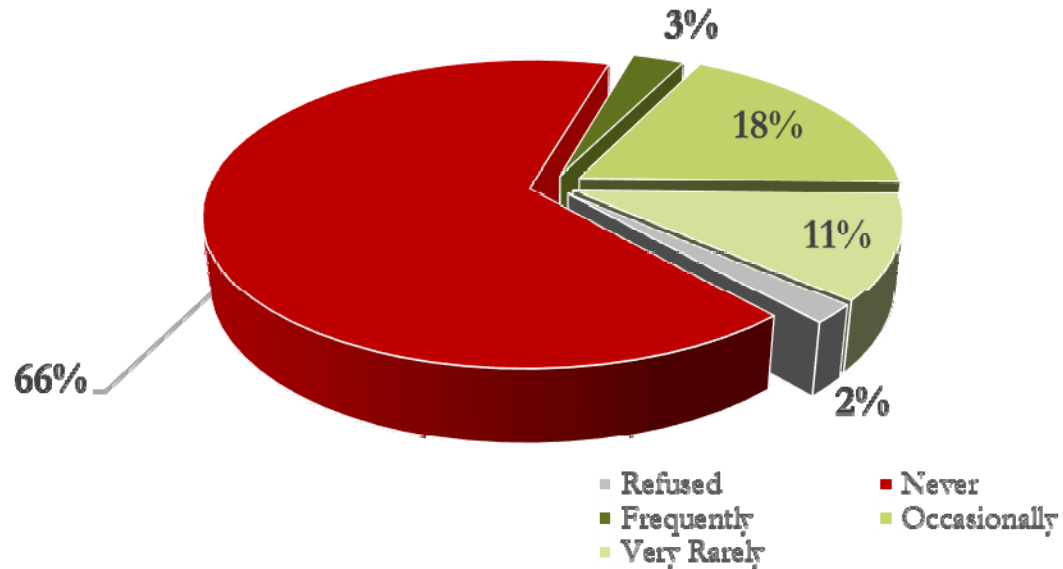
How Much Do You Know?

- *How much do you know about genetically modified foods?*
 - A great deal 2%
 - A fair amount 11%
 - Some 32%
 - Very little 32%
 - *Nothing at all* 21%
 - Refused 2%

55%

Frequency of Discussion of GM Foods?

- *How often have you discussed GM foods?*
 - 3% Frequently
 - 18% Occasionally
 - 11% Very Rarely
 - 66% Never



GM Foods in Stores Now?

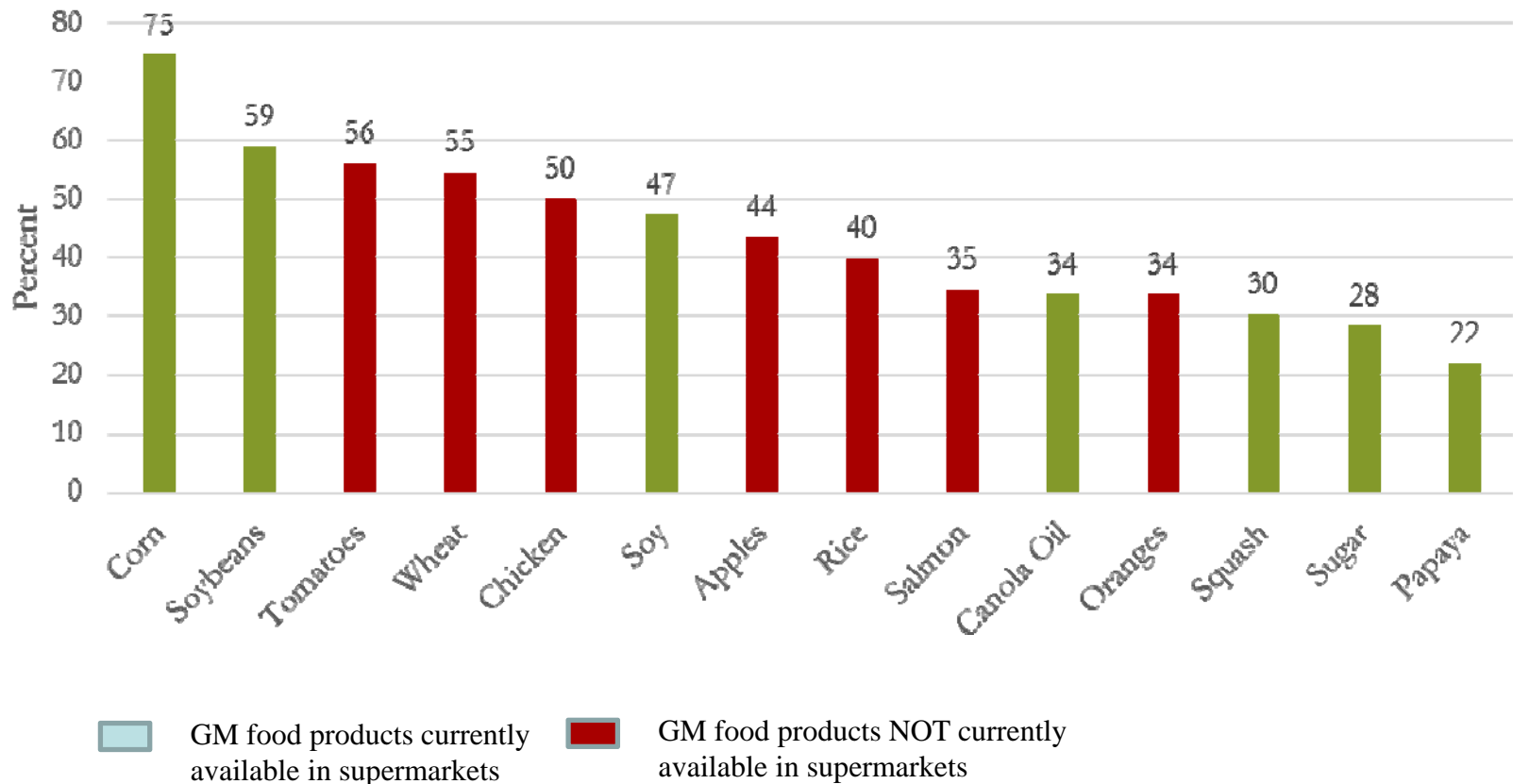
- *As far as you know, are there any foods containing genetically modified ingredients in supermarkets right now?*
 - Yes 43%
 - No 4%
 - Don't know 51%
 - Refused 2%

57%



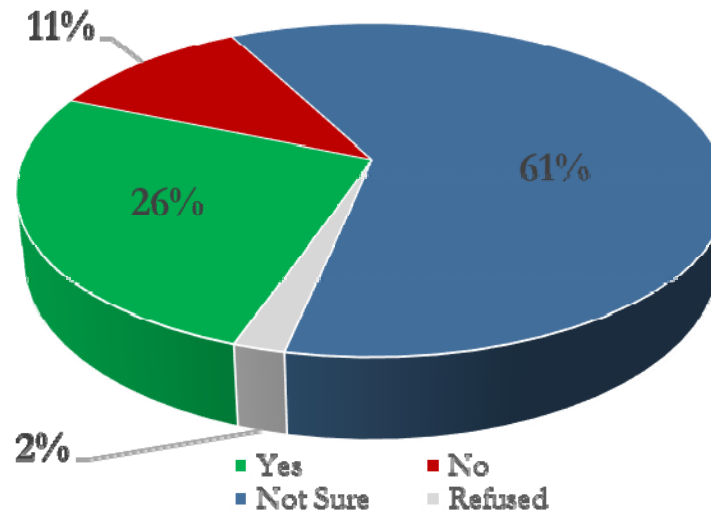
Perceived Availability of GM Foods

Percent of 491 Consumers who said GM foods are available in U.S. Supermarkets



Ever Eaten GM Foods?

- *As far as you know, have you ever eaten any food containing genetically modified ingredients?*
 - Only 26% say yes



Key point 3

Most Americans have heard, read, and talked little about GM foods.

Most don't know foods with GM ingredients are sold in US supermarkets.

Many of the foods people think are GM are not.

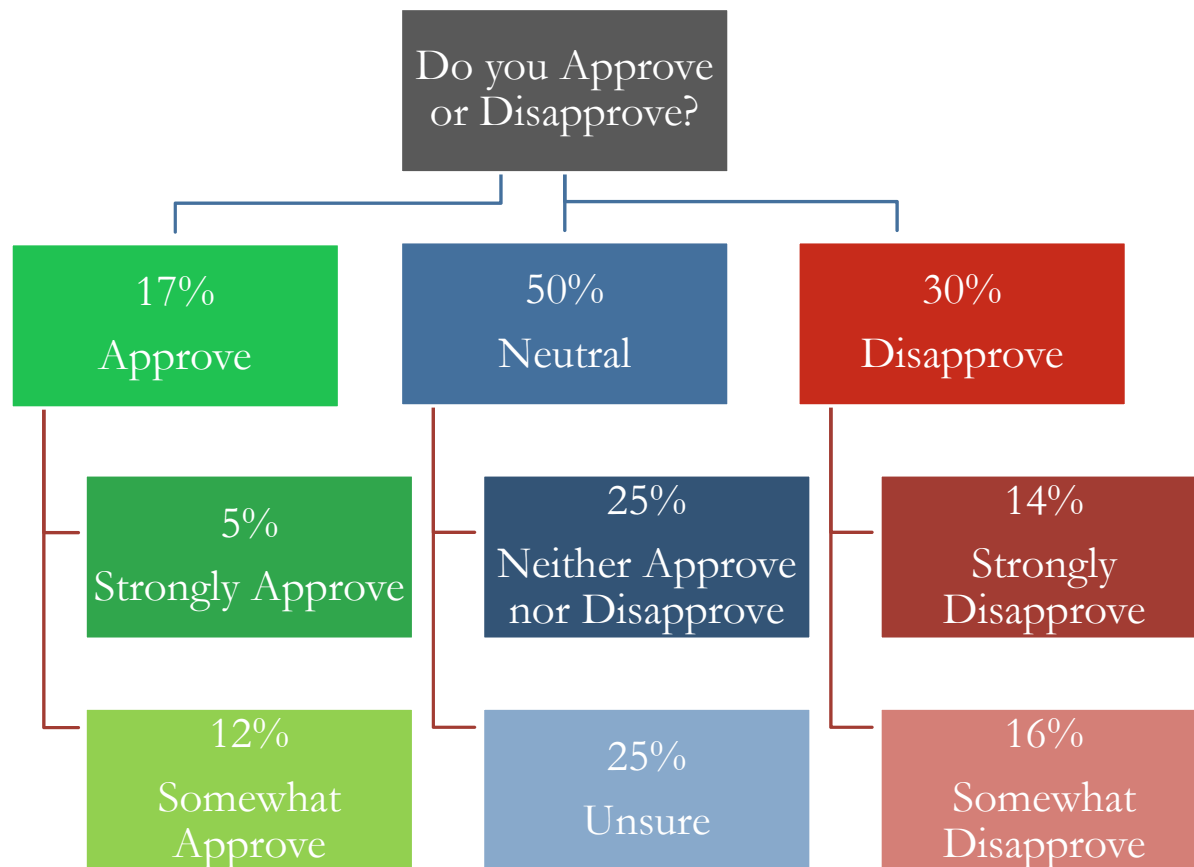
Most don't know they are eating foods with GM ingredients.

Key point 4

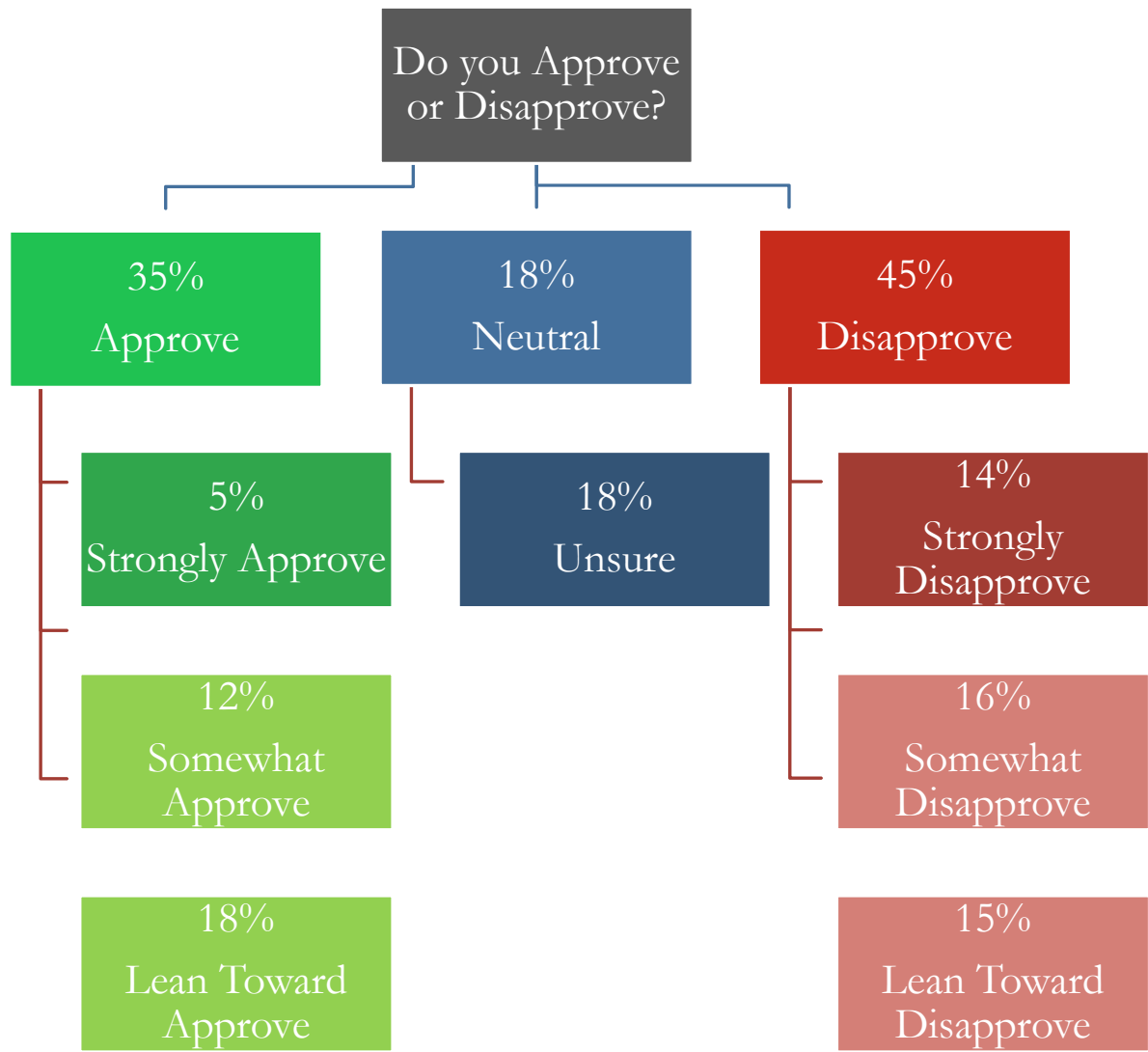
Being uninformed doesn't stand in the way of having an *opinion*.

Or expressing it.

Approval of GM - Plants



Approval of GM - Plants



Key point 5

Relatively uninformed opinions are
“uncrystallized”

These opinions are:

- Not well thought through

- Not strongly held

- Subject to change

- Influenced by the wording of questions

Key point 6

The psychology of decision-making involves both cognition and affect

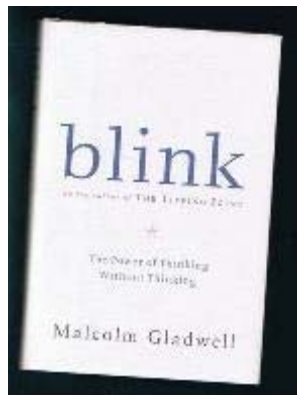
Cognition and Affect

- Many psychologists (and especially economists) who incorporate affect into their theories of risk and decisions believe that affect is the byproduct of cognition.
 - People evaluate the information they are given, which leads to an overall affective reaction (i.e. fear, anger, dread, outrage).



Cognition and Affect

- However, research suggests that people have a remarkably poor understanding of what influences their perceptions and behaviors.
 - They can't say
 - Why they feel the way they do.
 - Why they made a particular choice.
 - Why they act the way they do.



<http://www.colbertnation.com/the-colbert-report-videos/24039/october-17-2005/the-word---truthiness>

Affect Can Come First

- Affect can also drive future cognition.
 - First impressions matter.
 - “Curb appeal”
 - Cyclical thinking
 - I like it because it is good, and it is good because I like it.



Context for Decision Making

- Biotechnology is:
 - An abstract concept for many
 - Not high on the issue agenda for most people
 - Not something about which people have been forced to make *personal* decisions

Key point 7

Affect plays an important role in public perceptions of GMOs

Basis for Opinions

- *Would you say your opinion of genetically modified foods is based on a general feeling or specific issues?*
 - General feeling – 50%
 - Both – 34%
 - Specific issues – 15%

Key point 8

Even the best science can be overwhelmed by people's worst fears.

- 1117
- 239
-
-
-
-
-

BUSINESS

KFC Sues Chinese Companies Over Alleged Eight-Legged Chicken Rumors

Restaurant says three companies 'misleading the consumer' on Internet



A pedestrian walks past a KFC restaurant in Qiqihar city, northeast China in this November 2014 photo. KFC said it is suing three companies in China for allegedly spreading rumors about the quality of its food—including that its chickens have eight legs. PHOTO: JUMA FREED

By LAURIE BURKOTT

June 1, 2015 9:45 a.m. ET

15 COMMENTS



© Snopes
Internet hoax: KFC said one of the best-known fake rumors was that chickens used by the company are genetically modified and have six wings and eight legs (computer generated image)

Decisions About The Veracity of Claims / “Facts”

Beliefs about GM Agriculture



Key point 9

People learn about many risks through implicit comparisons, suggesting superiority

- Advertising claims can introduce “risks” that people have never heard of before

Great cheese comes from happy cows!



What is “Free” is Best

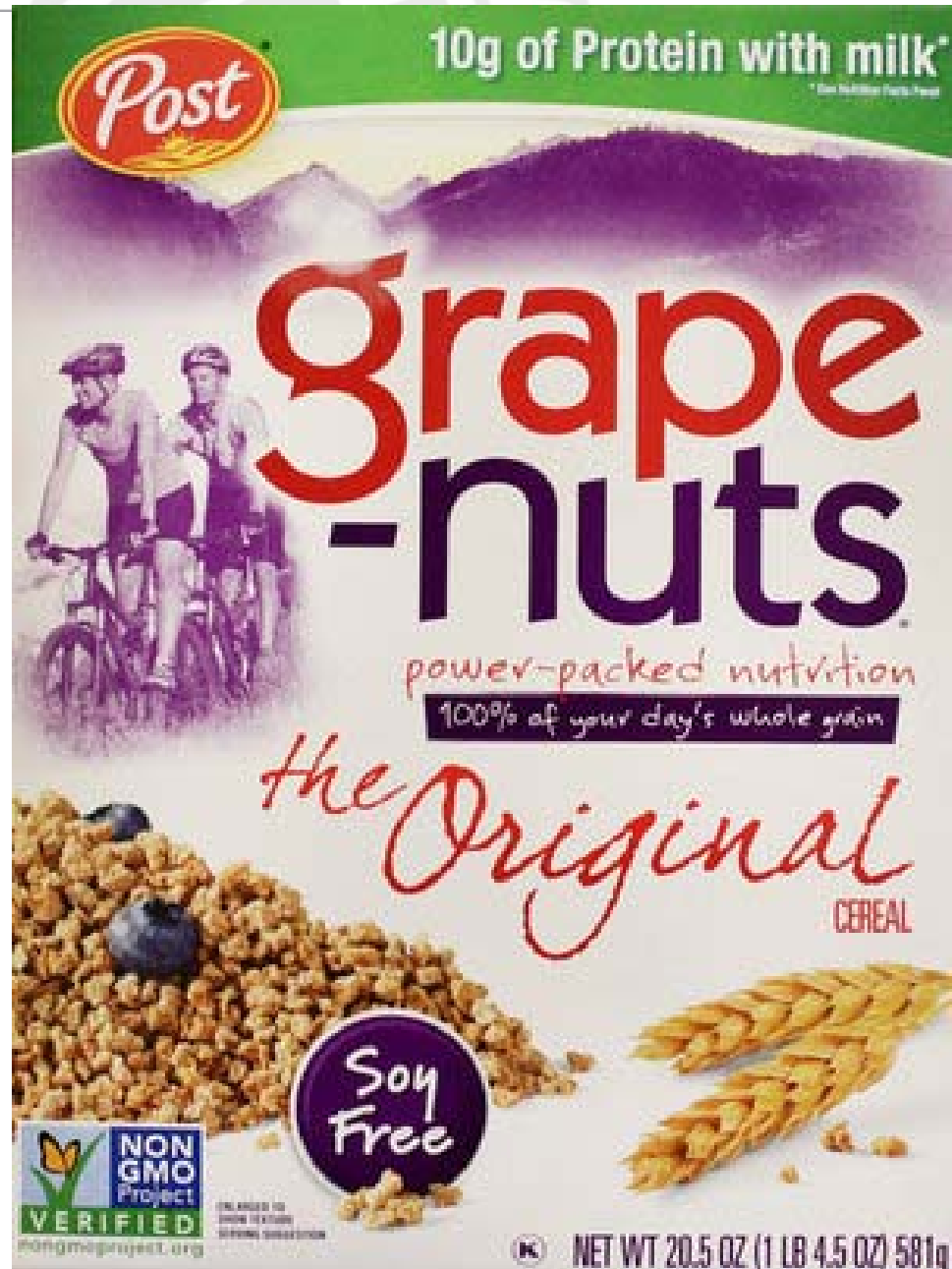


GMO FREE SOYA BEANS
WITH FULL TRACEABILITY AND TESTED BY INDEPENDENT LABS



Key point 10

GMOs are often framed as though they were a “contaminating substance”





WHEN IT COMES TO OUR FOOD, GENETICALLY MODIFIED INGREDIENTS DON'T MAKE THE CUT.

Chipotle is on a never-ending journey to source the highest quality ingredients we can find. Over the years, as we have learned more about GMOs, we've decided that using them in our food doesn't align with that vision. Chipotle was the first national restaurant company to disclose the GMO ingredients in our food, and now we are the first to cook only with non-GMO ingredients.



Hershey's pulls GMO ingredients from best-selling chocolate bars amid backlash against 'Frankenfoods'

- Hershey's Kisses Milk Chocolates and Hershey's Milk Chocolate Bars will start featuring 'simpler ingredients' this year, the company announced
- It comes after pressure from anti-GMO activists, who claim the technology is environmentally suspect and a possible health threat
- Others in the food industry insist the foods are safe and less harmful to the environment, and that the technology boosts food production
- Hershey's says the new ingredients will be more expensive but it is committed to keeping prices the same for consumers

By [LYDIA WARREN FOR DAILYMAIL.COM](#)

PUBLISHED: 10:02 EST, 24 February 2015 | UPDATED: 06:38 EST, 25 February 2015

Similac® Advance® NON-GMO*

NEW!

The first leading infant formula brand labeled Non-GMO*, with the nourishment that you've come to expect from Similac.

Similac Advance NON-GMO also has OptiGRO™, our unique blend of DHA, Lutein, and Vitamin E.

Options in parenting and feeding your baby are good—just like acceptance and support.

Try today exclusively at Target.

[Frequently Asked Questions](#)

*Ingredients not genetically engineered.

BUY NOW



Key point 11

Once people make a decision their opinions become more crystallized

Deciding About Biotechnology

- Once people make a decision
 - They adjust their attitudes and opinions to support that decision
 - They pay attention to confirming information
 - They discount inconsistent information
 - They reinterpret disconfirming information to support their decision
 - They take actions, and make other decisions that support their initial decision

For More Information:

William K. Hallman, PhD
Department of Human Ecology
Rutgers University
New Brunswick, NJ 08901-8520
(848) 932-9227
hallman@aesop.rutgers.edu