**Civic Minds** 

Date: Friday, May 20, 2016

E-Edition Date: Wednesday, May 18, 2016

Article Title: Genetically engineered crops are safe to eat, analysis finds

Section: Main, A2

### Vocabulary:

Look up the definition of *buttress*. Please write the definition and create a new sentence, using your own words.

Both sides Tuesday pointed approvingly to findings that *buttressed* their viewpoint and criticized those that did not.

### **Comprehension Questions**

- According to a comprehensive new analysis by the advisory group the National Academies of Sciences, Engineering and Medicine, what were their findings in terms of genetically engineered crops?
- 2. The report from the influential group, released on Tuesday, comes as the federal government is reviewing how it regulates \_\_\_\_\_\_\_.
- 3. Big packaged food companies such as Campbell Soup and General Mills are starting to label what?
- 4. The report also says that new techniques, like a way to make small genetic changes in plants using genome editing, are blurring the distinction between what?
- 5. What does the report call for?
- 6. Despite its roughly 400 pages, the document is not expected to end the highly polarized dispute over biotech crops, which are often called what?
- 7. The Biotechnology Innovation Organization, which represents whom? How did they feel about the report?
- 8. But Michael Hansen, senior scientist at Consumers Union, which is critical of the crops, pointed to the lack of what?
- 9. This is the latest of several reports on genetically modified crops by the National Academies. Who makes up this group?

# Class Discussion Questions and Essay Prompts:

- What is your prior knowledge about GMO's and how they're produced?
- Does your family tend to buy organic? Why or why not?
- How do you feel about the increase in GMO foods that Americans are consuming?
- Do you feel there is a direct correlation between GMO produce and packaged products and the increase of diseases and cancers? Why or why not?

The committee also looked at the incidence of certain diseases, in some cases comparing rates in North America, where genetically modified crops have been part of the diet since 1996, and Western Europe, where food from biotech crops is not eaten much. It said it found no evidence that the crops had contributed to an increase in the incidence of cancer, obesity, diabetes, kidney disease, autism, celiac disease or food allergies.

Regarding environmental effects, the report says there is no conclusive evidence of a cause-andeffect relationship between GE crops and environmental problems. It says it has not been proved that the increased planting of such crops is indirectly responsible for the decline of the monarch butterfly.

The report says use of the insect-resistant crops has clearly led to a decrease in the spraying of chemical insecticides. Conversely, the use of herbicide-resistant crops might have led to an increase in the spraying of chemical weed killers in some cases. Overuse of glyphosate has spurred the evolution of weeds resistant to that chemical.

- There have been many studies that directly contradict this report on direct links between GMO's
  and health decline in humans. Please find one (and make sure it's from a credible website) and
  share with the rest of the class.
- There have been studies that directly contradict this report on direct links between GMO's and environmental problems. Please find one (and make sure it's from a credible website) and share with the rest of the class.

## **Essay**

The new report was written by a committee of 20, almost all of them from academia. There was no one from crop biotechnology companies like Monsanto or DuPont on the committee, though some members have developed genetically engineered crops and might have been consultants to the companies.

The committee concentrated its review on the genetically engineered crops that account for the vast bulk of such plants grown in the United States. These are corn and cotton containing bacterial genes that make the crops resistant to certain insects; and soybeans, corn and cotton that are resistant to herbicides, particularly glyphosate, the main ingredient in Roundup.

The report says that foods made from such crops do not appear to pose health risks, based on chemical analyses of the foods and on animal feeding studies, though it says many animal studies are too small to provide firm conclusions.

- Do you believe the results of this government-led study? Why or why not?
- Are there gaps in the report? Where?
- What would you want to know if you're consuming GMO products and their overall effect on your health?

## Newspaper-related CBA activity: U.S. Policy

How the United States government interacts with the world affects people across the globe. Analyze and evaluate the causes and effects of US foreign policy on people in the United States and across the world.

- Using The Seattle Times e-edition, find an article from this week that deals with world politics or foreign policy.
- What are the main points of view from someone living in that particular country? How is that "view" similar and different than your own opinion, regarding the specific issue the article is discussing?
- Why is it important to study and learn about foreign policy? How does it help you understand the world we live in, using current issues and events?

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