

Survey: Public Perception of Genetically Modified Foods  
Johns Hopkins iGEM 2011

Introduction:

The following questions will ask your opinions on genetically modified foods. Genetically modified foods are foods that have been modified by scientists in a laboratory, such as some seeds for crop corn and tomatoes. This does not include foods that are modified through traditional methods such as cross breeding (for example, crossing a corn plant that is drought resistant with a corn plant that produces delicious corn in an effort to get a corn plant that has both qualities). Genetic modification can give foods desired traits such as higher nutritional value, greater size, and better taste. Genetically modified foods include seeds that are used to grow crops and microbes that are used in the food production process such as yeast in bread-making.

Note: 'GM'=Genetically modified (e.g. "GM wheat" means genetically modified grain)

We will be collecting information about you from your responses to this survey. Your taking part in this survey is completely voluntary. Your information will only be seen by researchers at Johns Hopkins. We will try to make sure that the information we collect from you is kept private and used only for this research study. Completing this questionnaire will serve as your consent to take part in this research study.

Questions:

1. How would you describe your view of genetically modified foods?

Favorable  Neutral  Unfavorable

2. Have you ever knowingly eaten a genetically modified food?  Yes  No

3. Genetic modification can be used to add desirable characteristics to food crops. Would you be willing to consume GM foods if the GM foods in question:

a. Could be grown with little or no pesticide?  Yes  No

b. Could be grown with less fertilizer and/or water?  Yes  No

e. Were more nutritious than non GM foods?  Yes  No

4. Would you be willing to eat GM foods if the GM foods in question:

a. Were designed not to breed/cross with other crops?  Yes  No

b. Were developed in your country?  Yes  No

c. Were determined to be safe by scientists?  Yes  No

d. Were determined by the World Health Organization (WHO) and/or United Nation's Food and Agriculture Organization (FAO) to be safe?  Yes  No

e. Were determined by your national food governing body (e.g. the Food and Drug Administration (FDA) for the USA) to be safe?  Yes  No

f. Were determined by your local leader (e.g. Mayor, Village Elder) to be safe?  Yes  No

g. I would never be willing to knowingly consume a GM food.  Yes  No

5. a. GM foods are often used to feed livestock (e.g. chicken, cattle, swine), which are later consumed by humans. How would you rate your view of livestock being fed GM foods?

Favorable  Neutral  Unfavorable

b. Why?

6. a. Do you approve of GM foods being sold in the marketplace?  Yes  No

b. If no, why?

7. How would you compare your view of GM foods imported from another country to GM foods developed in your country?

More favorable  The same  Less favorable

8. a. Food is often not entirely genetically modified. In a given item of food that contains many ingredients, some of these ingredients can be non-GM and others GM. For example in bread, the grain may not be GM while the yeast may be GM.

If you couldn't avoid eating GM foods, would you prefer an option with LESS GM content or ingredients?

Yes  No  The GM content does not matter to me.

b. If you answered yes to the above question, what is the highest amount of GM food by weight that would you tolerate in one food item (e.g. in a loaf of bread)? Please select one of the following options.

- Between 0 and 1% (more than 0%, less than 1%)
- 1-20%
- 21-40%
- 41-60%
- 61-80%
- 81-100%

9. You are at the market buying bread for yourself or your family. Which of the following factors is most important to you when buying bread?

Please rank the following factors in order of importance

(1 = most important, 6 = least important).

- Cost
- Country of origin (where the ingredients came from)
- Nutritional content
- Genetic modification (if you were told which ingredients in the bread are genetically modified)
- Taste
- Availability (whether it will be available year round or not)

10. After seeing every bread item in the market, you find that there are 3 basic kinds of bread being sold and that you will buy only 1 loaf of bread for the family. The cost happens to be equal for each type. Each type looks nearly the same and people you ask tell you that they couldn't find any differences in taste.

From which of the 3 options are you most likely to buy? Please rank from 1 (most likely) to 3 (least likely).

Type 1:

All ingredients grown by a local farmer. No GM ingredients.

Approved by the local leader (e.g. mayor, elder) and food governing body (e.g. the Food and Drug Administration (FDA) in the USA) as safe for consumption.

Rank

### Type 2:

One ingredient, **the yeast (around 1% of the bread by weight)** is GM. All other ingredients are not GM and grown locally.

Approved by the local leader (e.g. mayor, elder) and food governing body (e.g. the Food and Drug Administration (FDA) in the USA) as safe for consumption.

Noted by the local leader and food governing body to meet your vitamins A, C and B9 requirements.

Rank

### Type 3:

One ingredient, **the grain (around 98% of the bread by weight)** is GM. All other ingredients are not GM and grown locally.

Approved by the local leader (e.g. mayor, elder) and food governing body (e.g. the Food and Drug Administration (FDA) in the USA) as safe for consumption.

Noted by the local leader and food governing body to meet your vitamins A, C and B9 requirements.

Rank

14. Company X has just come out with a new brand of bread. It is produced from enriched, genetically modified ingredients, which have high nutritional value, and is relatively inexpensive. This bread could help address malnutrition by providing a rich source of vitamins and minerals. It would also be a quick and convenient way to meet your nutritional requirements for the day. Would you feel comfortable eating the bread?

Yes  No

15. a. After completing this survey, please rate your opinion of GM foods:

More Favorable than before taking the survey  The Same as before taking the survey  Less Favorable than before taking the survey

b. If your opinion changed, why?

1. Gender       Male  Female

2. Current Education level:

- Less than a high school diploma
- High school diploma
- Some college
- Associate Degree
- Bachelor's Degree
- Graduate or Professional