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GMO – Genetically Modified Organism

Creating GM foods involves the splitting of DNA chains (Gene Splicing) in a plant to insert a gene from a strand of DNA of another plant, animal, or virus.

Genes from animals are inserted into the DNA of plants to help them be resistant to temperature changes, and aid longevity of produce for marketing purposes. For example a gene from the Arctic Char called the antifreeze gene has been added to the DNA of tomatoes and other fruit so the fruit could be grown for longer periods in the year.

Bacteria's in the form of viruses are inserted into the DNA chain of plants to make them resistant to pesticides, herbicides, and to kill insects upon contact.

Health Concerns with GM Foods –

- The largest health concern so far is allergies. If someone is allergic to a certain food, for example nuts, they do not know what gene in nuts triggers the allergic reaction. Genes from one food that causes an allergic reaction in someone can now be found in many other foods. For example genes in nuts can now be found in strawberries, broccoli, and so forth.
- Another health concern is that the pesticides used to spray on genetically modified seeds are carcinogenic. GM corn by law has to be registered as an insecticide not a food because each kernel kills insects upon contact.
- Long term health concerns of GMO foods are unknown since they have not been tested for safety and are fairly new (1970's) we do not know the risk they could pose on future generations to come especially since they are altered on a cellular level.

According to the Environmental Working Group, the 12 most pesticide-laden fruits and vegetables are: (in order of toxicity)

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|------------------------|--------------------|
| 1. Strawberries | 7. Celery |
| 2. Bell Peppers | 8. Apples |
| 3. Spinach | 9. Apricots |
| 4. Cherries (USA) | 10. Green Beans |
| 5. Peaches | 11. Grapes (Chile) |
| 6. Cantaloupe (Mexico) | 12. Cucumbers |

