How is a GMO created?

A piece of DNA from one organism is taken out and placed in another organism's DNA. This will give the second organism the desired trait from the first organism.

How to find reliable information on GMOs?

First, don't believe everything you read on the internet or Facebook. Many times, people are reiterating false information they heard. Since GMOs have become more talked about, there have been many articles published with unreliable information. Some of the best places to look for information are:

1. Scientific websites
2. Websites ending in .gov or .org
3. Scientific journal that has been peer reviewed.
4. ScienceDaily website
5. Science News website
6. NOVA website

What is a GMO?

Questions you all had answered!

1. How do we know what gene does what?
   DNA is made up of a bunch of letters that we can read and through various testing, are able to know what different groupings of letters do.

2. Is this similar to CRISPR?
   Yes! CRISPR is a gene editing tool that can be utilized for genetic modification.

3. Are GMOs ok for humans to eat?
   Yes! Although GMOs are different from the original product, the editing of the DNA has no known effect on humans when consumed.

4. How are we able to determine where the DNA is cut?
   Through various testing scientists can determine where a gene is that needs to be replaced or removed due to the base pair reading of corresponding proteins.

A GMO is an organism that has been genetically modified by humans. The modification can occur for research purposes or in order to make something we already have better or more efficient. Many crops have been genetically modified to produce more or resist pesticides

Common Examples:

1. Creating fruit that doesn't brown as quickly. This is beneficial because when fruit browns it is still edible, but many people throw it out. So, by reducing how fast fruit browns, we can reduce food waste.
2. Insulin is a very important drug for people with type 1 diabetes. In order to get enough insulin for everyone who has diabetes, bacteria are reengineered to make insulin.
3. In some countries, there is a vitamin deficiency in many people due to their food. Scientists were able to reengineer rice to contain vitamin A.
4. Corn that we know today is not what corn used to look like. But due to genetic modification, we now have corn that humans can eat.

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Before After

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Before After