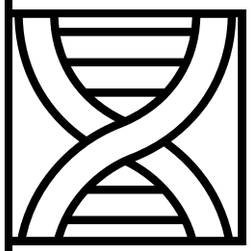
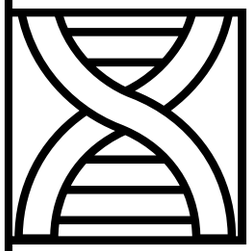
EXHIBIT FARM

Do you know GMOs?

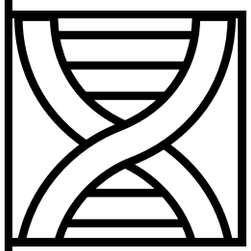
Myth-busting facts about Genetically Modified Organisms.



Ever since the first genetically engineered crop was approved for commercial production in the early 1990s, GM foods have been closely monitored by scientists and researchers. In all this time, they have detected no negative health effects caused by GMOs. (Sources: Harvard University's Science in the News)



Due to their specifically engineered traits, certain genetically modified crops require little to no pesticide use. This decreases agriculture's environmental footprint and helps eliminate the potential health risks that result from using pesticides. (Source: The Food Dialogues)



How to make a GMO

The specific traits we see in plants, animals, and humans are determined by genes, sequences of DNA within the nuclei of the organism's cells. In the past, farmers selectively bred certain plants to promote desirable traits in the species. The late 20th century ushered in a new and more efficient process known as genetic engineering. Through this process, scientists can directly edit the particular gene that they want to change without altering additional traits. This also allows them to introduce genes from other organisms into the plant to produce new desirable traits. For example, scientists took a particular gene from a maize variety that gives that maize high levels of Vitamin A. By inserting this gene into the genetic information of rice seeds, they were able to produce rice plants that have higher Vitamin A levels. They do this by replacing parts of a plant's existing DNA strand with a new DNA strand or by simply removing or inserting strands or strand segments. They insert the new genetic information by either firing the gene into the seed of the plant using a so-called "gene gun" or by allowing a soil bacterium to carry the new gene into the seed. This new variety of Vitamin A rich rice has helped feed impoverished and nutrient-deficient communities. (Sources: Harvard University's Science in the News)