

Are gmos safe

Business



Labels should not be placed on genetically grown food because GMO food is safe. GMO foods are safe because GM organisms are the genetically identical to regular organisms, which are comprised of tens of thousands of proteins, except the GM organism has one or two genes that are switched out by humans either in a lab or through artificial selection. With more than 110 scientists who have been awarded with Nobel prizes, the National Academies of Science, Engineering and Medicine, and Bill Nye all believing in GMOs, I can't see how they are dangerous. First off, the definition of a genetically modified organism is an organism which has been changed by humans to better fit our needs (Green).

The methods with which we modify food can extend out further from scientists working in laboratories. Humans have been modifying food to better fit our needs since the rise of agriculture, with farmers changing their yield so it grew larger, easier, or quicker (Kurzgesagt). Because of this, most foods are not natural forms of themselves, and most people have not eaten the natural forms of most foods. Most foods in America are genetic variations of themselves. 95% of sugar beets, 88% of corn, and 94% of soybeans have all been genetically modified (Green).

This means that humans won't hurt themselves after eating GMOs (National Academies). Good examples from GMOs: 1. Bangladesh eggplant: the eggplant is a valuable crop in Bangladesh. Most commonly, entire fields are wiped out by insects. The farmers would also get sick from exposure to the insecticides used.

Enter a GM eggplant which is resistant to the insects which destroyed the eggplant farms. The farmer's health got better, more eggplants were produced, and the amount of money the farmers made increased.

(Kurzgesagt) 2. Golden Rice: hundreds of thousands of people in developing countries fail to receive enough nutrients, especially vitamin a. A modified type of golden rice was created.

The golden rice was created to have enough vitamin a so that the people in the developing areas would be more healthy (Green). 3. Hawaiian Papaya: in the 1990s, the Hawaiian papaya was threatened with extinction due to a virus called the Ring spot virus. Without the aid from a GM papaya, Hawaii's papaya sales would've plummeted, and the papaya would cease to exist from Hawaii (Kurzgesagt). One of the largest examples of creating genetic crops in America is with a company called Monsanto. In the early 1990s, a company called Monsanto, which sold Roundup, a brand of herbicide, decided to experiment with GM crops so that farmers could spray the plants without fear that their crops would die. After Monsanto released the crop, the farmers saved money because the crops could grow closer together without needing to be spaced out to easily till weeds as well as saving money through less fuel usage. Monsanto also benefitted by having an entire new source of people with which to sell the Roundup herbicide (Green). There are a few downsides to GM foods.

For one, GMOs take a long time to show results. The process behind genetically modifying organisms is a process of hope. The most popular method of modifying an organism starts off with a type of bacteria called agrobacterium which has a unique part of the bacteria's DNA called the <https://assignbuster.com/are-gmos-safe/>

plasmid. The plasmid can travel outside the bacteria's cell and modify the DNA of neighboring plant cells. Naturally, the agrobacterium would use this to make the plant cells grow food for the agrobacterium. Scientists were capable of changing the DNA in the plasmid so that the plasmid would insert the DNA of whatever the scientists wanted into plant cells such as a gene that allowed plants to survive herbicides and pesticides.

This entire process of creating plants with the new pesticide or herbicide gene alone can take around 15 years to fully develop. The entire process of selling or advertising the product to the public is a completely different task which alone could add around the same amount of time (Green). When it comes down to how anyone could deal with GMOs, the one main solution is to just wait. As with most technological advancement, the advancement will get better over time. There has been no evidence of any danger from GMO and more test are definitely going to happen.

If GMOs are dangerous, then either scientists could find a solution or we could give them up completely. Work Cited " Read " Genetically Engineered Crops: Experiences and Prospects" at NAP." National Academies Press: OpenBook. National Academies of Science, Engineering, and Medicine, n. d.

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