



## GMO Quick Facts

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### Insulin is a GMO Product

GMO insulin was the first GMO product released to the public. In 1982, this insulin became available for diabetics. This method of producing insulin replaced the traditional method of obtaining insulin from cattle and pigs, which sometimes caused allergic reactions.

*Did you know...*

### Golden Rice

Golden Rice is a variety of rice that was genetically modified to produce beta carotene, which is metabolized into Vitamin A when consumed. It was developed to address Vitamin deficiency epidemics worldwide. Although golden rice is underused in many places due to societal barriers and adoption of other nutritional supports, nutritional GMOs may still be part of a solution for global malnutrition.



*Did you know...*

### The Difference between Organic and GMO

There are trade-offs between various farming methods. Organic food is produced by a specific method of farming with requirements outlined by the USDA's Organic Certification Program. Organic food can only be grown using products and materials derived from natural sources and cannot use synthetic/man-made materials. Organic farming still uses fertilizers and pesticides, but they are from natural sources such as animal manure. One certified organic requirement states that organic produce cannot be grown using GMO seeds. Conventionally grown crops can use GMO or non-GMO seeds or varieties. As of 2019, there are 11 commercially available GMO crops in the US.

### GMO Technology Saved the Papaya Industry

Due to a fatal plant virus in 1992, the Hawaiian papaya crop would have been wiped out if it wasn't for scientists who created a disease-resistance papaya plant using GMO technology.





*“MSU Extension supports consumer choice in the marketplace. We work with food production systems to meet consumer preference and demand. Additionally, MSU Extension provides Michigan residents with science-based research addressing the issues and challenges they may face, providing that information in a way that can be readily adapted into their lives and businesses.”*

*Ron Bates, Director - Agriculture, Agri-Business Institute 2019*

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