

A look into...

# GENETICALLY MODIFIED FOODS



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## What are Genetically Modified Foods?

Genetically Modified (GM) Foods are foods in which their genes are altered in such a way that does not happen naturally in order to acquire specific traits. Basically, specific genes of interest are taken from one organism (plant, animal or bacteria) and introduced to another organism to produce desirable traits such as plants' resistance to drought, herbicides and pests. Put simply, to create a pest resistant plant, the genes for pest resistance are taken from another organism such as a bacterium and introduced into the DNA of the plant seedling. This seedling then grows into a plant which is resistant to pests.

GM foods are often called genetically modified organisms or GMO's. In addition, there are genetically modified products that are not exclusive to foods, such as medicines (e.g. Insulin, hormones, and antibiotics), vaccines and animal feeds.

## How long have GM foods been in existence?

For hundreds of years, farmers obtained desired traits in crops and animals through selective breeding and natural selection. This is a slow process and can take place over many generations. Today, this process is much shorter and more efficient.

GM foods have been in existence since the 1980's and were first marketed in the USA in the early 1990's. Other countries which produce GM foods include Argentina, Brazil, Canada, India, China, Paraguay and South Africa.

## **Why are GM foods made?**

GM foods are designed to meet the needs of the vast growing human population and is a strategy to increase global food distribution and reduce starvation. They are designed to produce high quality plants and animals with greater yields in a shorter time compared to naturally grown foods. This is intended to lower food prices, making it more affordable for consumers.

In Jamaica, the introduction of crops that can thrive during the dry season and withstand pests and weeds presents a significant benefit to farmers. These resistant crops result in reduced dependence on herbicides and pesticides.

## **Are GM foods safe?**

There has been increasing controversy regarding the impact of GMO's on human health. Some of these concerns include potential long-term health effects and the fate of foreign DNA upon digestion. GM foods have also been suspected as a potential cause of increased allergies and antibiotic resistance. However, the US Food and Drug Administration (FDA) indicates that there is no evidence to support these claims.

GM foods that are available on the market have been rigorously tested and have passed numerous safety assessments, hence, they are unlikely to pose any significant risk to human health. International public health authorities continue to monitor to ensure their safety. Consumers, nevertheless, must have the freedom to decide what they wish to consume.

To learn more about Genetically Modified foods, visit:

[http://www.who.int/topics/food\\_genetically\\_modified/en/](http://www.who.int/topics/food_genetically_modified/en/)

