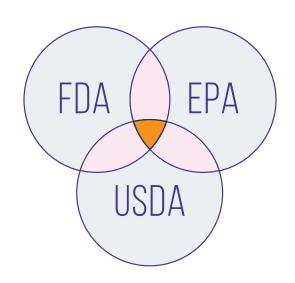
FEED YOUR MIND

HOW GMOs ARE REGULATED FOR FOOD AND PLANT SAFETY IN THE UNITED STATES

Three federal agencies within the U.S. government work together to regulate most GMOs. "GMO" (genetically modified organism) has become the common term consumers and popular media use to describe a plant, animal, or microorganism that has had its genetic material (DNA) altered through a process called genetic engineering. The U.S. Food and Drug Administration (FDA), U.S. Environmental Protection Agency (EPA), and U.S. Department of Agriculture (USDA) ensure that GMOs are safe for human, plant, and animal health. These agencies also monitor the impact of GMOs on the environment.

The <u>Coordinated Framework for the</u>
<u>Regulation of Biotechnology</u>,¹ established in 1986, describes how the agencies work together to regulate GMOs.



U.S. Food and Drug Administration

FDA regulates most human and animal food, including GMO foods. In doing so, FDA makes sure that foods that are GMOs or have GMO ingredients meet the same strict safety standards as all other foods. FDA sets and enforces food safety standards that those who produce, process, store, ship, or sell food must follow, no matter how the foods are created.

U.S. Environmental Protection Agency

EPA² is responsible for protecting human health and the environment, which includes regulating pesticides. EPA regulates the safety of the substances that protect GMO plants, referred to as plant-incorporated protectants (PIPs)³ that are in some GMO plants to make them resistant to insects and disease. EPA also monitors all other types of pesticides that are used on crops, including on GMO and non-GMO crops.

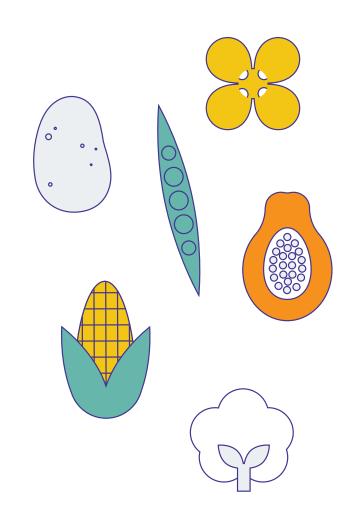
U.S. Department of Agriculture

The <u>USDA Animal and Plant Health Inspection</u>
<u>Service (APHIS)</u>⁴ protects agriculture in the
United States against pests and disease. APHIS
sets regulations to make sure GMO plants
are not harmful to other plants, and USDA's
<u>Biotechnology Regulatory Services</u>⁵ implements
these regulations.

Ensuring GMOs are safe

Many federal agencies play an important role in ensuring the safety of GMOs. As described in the Coordinated Framework for the Regulation of Biotechnology, FDA works closely with EPA and USDA to ensure the safety of GMO foods and plants. Collaboration and coordination among these agencies help make sure food developers understand the importance of a safe food supply and the rules they need to follow when creating new plants through genetic engineering.

FDA's voluntary Plant Biotechnology Consultation Program⁷ evaluates the safety of food from new GMOs before they enter the market. This program allows developers to work with FDA on a product-by-product basis.





How the Plant Biotechnology Consultation Program works

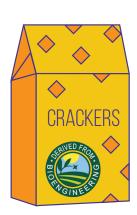
The Plant Biotechnology Consultation Program is a voluntary program with four key steps:

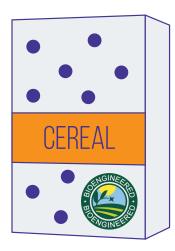
- GMO plant developer meets with FDA about a potential new product for use in human and animal food.
- GMO developer submits food safety assessment data and information to FDA.
- FDA evaluates the data and information and resolves any issues with the developer.
- Consultation is complete once FDA has no more questions about the safety of the human and animal food made from the new GMO plant variety. Completed consultations are all made public.⁸

How to tell if you are eating GMOs

Starting in January 2022, certain types of GMOs will require a disclosure that lets you know the food you are eating (or ingredients in the food

you are eating) is a bioengineered food. Bioengineered food is the term that Congress used to describe certain types of GMOs when they passed the National Bioengineered Food Disclosure Standard.9 The Standard establishes requirements for labeling foods that humans eat that are or may be bioengineered and defines bioengineered foods¹⁰ as those that contain detectable genetic material that has been modified through certain lab techniques and cannot be created through conventional breeding or found in nature. The Standard requires that by 2022, food makers, importers, and certain retailers label foods that are bioengineered or have bioengineered ingredients. At that time, foods sold in the United States that meet the definition of bioengineered food must have information on their packaging using one of the approved methods,11 including text on the package that says "bioengineered food," the bioengineered food symbol, or directions for using your phone to find the disclosure. For more information visit www.ams.usda.gov/be.





Get more information about GMOs at www.fda.gov/feedyourmind.





Sources:

1https://www.usda.gov/topics/biotechnology/how-federal-government-regulates-biotech-plants

²https://www.epa.gov

³https://www.epa.gov/regulation-biotechnology-under-tsca-and-fifra/overview-plant-incorporated-protectants

⁴https://www.aphis.usda.gov/aphis/home

⁵https://www.aphis.usda.gov/aphis/ourfocus/biotechnology

⁶https://www.usda.gov/topics/biotechnology/how-federal-government-regulates-biotech-plants

⁷https://www.fda.gov/food/food-new-plant-varieties/how-fda-regulates-food-genetically-engineered-plants

8 https://www.fda.gov/food/submissions-bioengineered-new-plant-varieties/final-biotechnology-consultations

⁹https://www.ams.usda.gov/rules-regulations/be

¹⁰https://www.ams.usda.gov/rules-regulations/be/bioengineered-foods-list

¹¹https://www.ams.usda.gov/rules-regulations/be/consumers