

FAQs

1. What is biotechnology?

The term 'biotechnology' refers to any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for a specific use. Biotechnology, in the form of traditional fermentation techniques, has been used for decades to make bread, cheese or beer. It has also been the basis of traditional animal and plant breeding techniques, such as hybridization and the selection of plants and animals with specific characteristics to create, for example, crops which produce higher yields of grain.

2. What is biosafety?

Biosafety is a term used to describe efforts to reduce and eliminate any risks resulting from biotechnology and its products. For the purposes of the Biosafety Protocol, this is based on the precautionary approach, whereby the lack of full scientific certainty should not be used as an excuse to postpone action when there is a threat of serious or irreversible damage.

3. What is a Living Modified Organism (LMO)?

A Living Modified Organism (LMO) is any living organism that possesses a novel combination of genetic material obtained through the use of modern biotechnology. Common LMOs include agricultural crops that have been genetically modified for greater productivity or for resistance to pests or diseases. Examples of modified crops include tomatoes, corn, cotton and soybeans.

4. What are LMO products?

LMOs form the basis of a range of products and agricultural commodities. Processed products containing dead modified organisms or non-living GMO components include certain vaccines, drugs, food additives and many processed, canned and preserved foods. They can also include corn and soybean derivatives used in many foods and non-foods, corn starch used for cardboard and adhesives, fuel ethanol for gasoline, vitamins, vaccines and pharmaceuticals as well as yeast-based foods such as beer and bread.

5. What are some potential benefits of biotechnology?

Genetic engineering promises advances in medicine, agriculture and other fields. These include new medical treatments and vaccines, new industrial products and improved fibres and fuels. Proponents of the technology argue that biotechnology has the potential to lead to increases in food security, decreased pressure on land use and sustainable yield increase in marginal lands or inhospitable environments as well as reduced use of water and agrochemicals in agriculture.

6. What are some potential risks of biotechnology?

Some of the concerns regarding biotechnology include adverse effects on biological diversity and risks to human health. Other areas of concern are unintended changes in the competitiveness, virulence or other characteristics of the target species; adverse impacts on non-target species (such as beneficial insects) and ecosystems as well as weediness in genetically modified crops (where a plant becomes more invasive than the original, perhaps by transferring its genes to wild relatives). However, it should be noted that, once properly used, there is no scientific evidence that modern biotechnology has proven to be hazardous to humans or the environment.

7. Why do we need an international biosafety agreement?

While advances in biotechnology have great potential for significant improvements in human wellbeing, they must be developed and used with adequate safety measures for the environment and human health.

8. What is the exact name of the Biosafety Protocol?

The full name of the Biosafety Protocol is "The Cartagena Protocol on Biosafety to the Convention on Biological Diversity".

9. What is the objective of the Protocol?

The objective of the Protocol is to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology. As of 2105, it is the means by which over 168 countries will establish minimum standards for regulating the products of modern biotechnology, with special emphasis on the import and export of these products.