

Modern biotechnology food



Genetic modifiers organism



Genetic modifiers organism (GMO) is an organism, the genotype of which has been accusation EN using the methods of gene Engineer. This definition can for simple plants, animals and microorganisms

The main risks of eating GM foods:

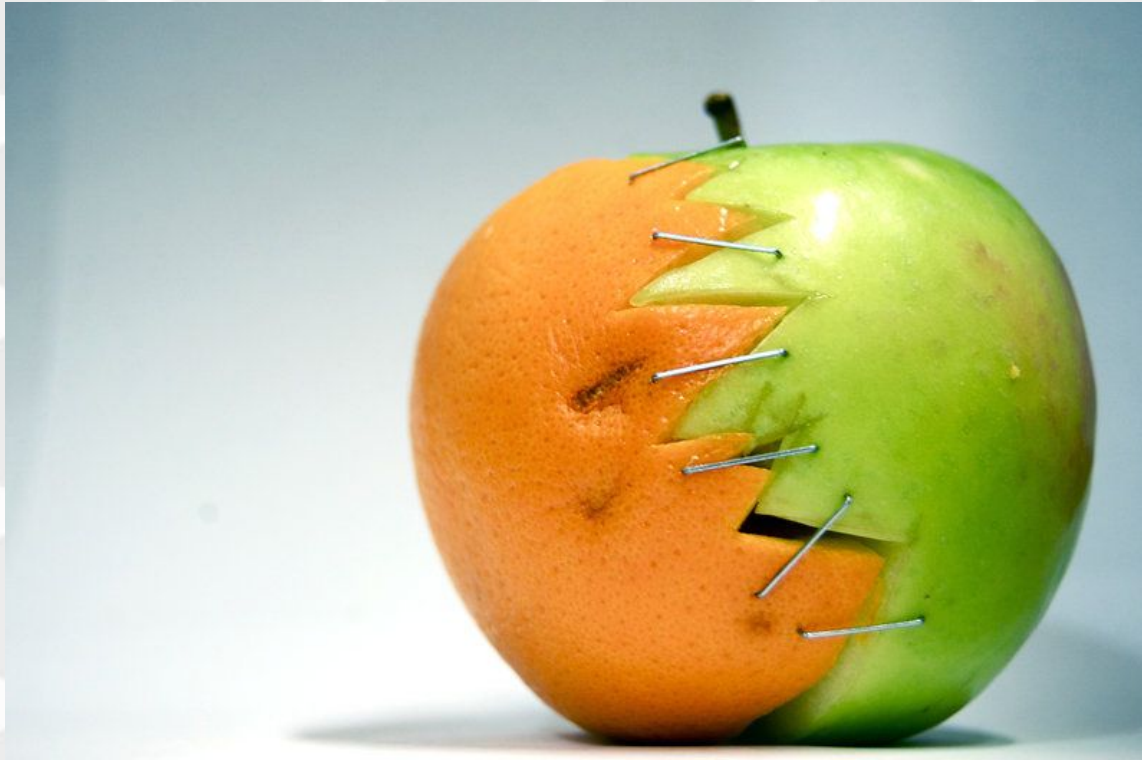
Inhibition of immunity, the possibility of acute violations of the functioning of the body, such as allergic reactions and metabolic disorders, as a result of direct action of transgenic proteins.



Biosafety. The effect of new proteins that produce genes built into the GMO is unknown. The man never used them before and therefore it is unclear whether they are allergens. About 25% of all so-called pathogen-dependent proteins, actively used for the production of GM plants, also have pronounced allergic

In our life we often come across products of food biotechnology production, such as cheeses, bread, alcoholic drinks, yoghurts, which were obtained through the use of enzymes produced by organisms.





Modern food biotechnology nowadays directly influences the creation of new types of products, a reduction in their prime cost, thereby developing the food industry.



Food should be varied and contain proteins, fats, carbohydrates and vitamins. Energy sources - fats and carbohydrates within certain limits are interchangeable, and they can be replaced with proteins, but proteins can not be replaced by anything



The use of food additives, or the introduction of essential amino acids, vitamins, calcium, iron, iodine, bifido- or lactobacillus, dietary fiber, proteins, other essential substances for normal functioning to the human body, allows the storage of products to be prolonged, their consistency to be increased, nutritional value. All this indicates the importance of bacteria in the food industry, increasing demand for them, the demand for organic chemistry in food biotechnology.



The main purpose of biotechnology in the food industry is to participate in traditional methods of cooking bread, wine, alcohol, vinegar, and cheese, which have been known since ancient times.



But in modern biotechnological food production, when compared with old methods, microorganisms with their enzymes are used consciously, more actively and widely.

Technology of food production



Microorganisms are actively used by the food industry for many millennia. They are necessary for the production of bread and bakery, beer, wine, strong spirits, vinegar, fermented milk products, salted fish, cheese and cottage cheese, salted and pickled vegetables, smoked sausage, cocoa, coffee, tea, miso, soy sauce, soy cakes tempe , soy bean curd tofu, etc. They are also a rich source of food additives, enzymes and other substances used in food



Meat can contain:

E124 - dye - a carcinogen, can cause oncological diseases, causes allergic reactions, the cause of hyperactivity of children.

E212, E215, E218, E219, E231, E249- preservatives, carcinogens, cause the formation of cancerous tumors, E231 is harmful to the skin

E450 (pyrophosphates) is a stabilizer, it breaks the balance in the body between phosphorus and calcium, which leads to the deposition of calcium and phosphorus

The bread can contain:



**E530 (magnesium oxide) -stabilizer;
E450 (potassium pyrophosphate) is a
disintegrant, can cause gastric upset,
imbalance of phosphorus and calcium;
E282 - a preservative calcium propionate,
contributes to the development of
cancerous**

Symptoms of GMOs in foods on your table

- 1. The GM products are not spoiled for a long time, so if vegetables or fruits are in perfect shape, they are in the store for a long time and do not change, most likely they are GMOs.**
- 2. If the product is produced in America or the countries of Asia and contains corn, potato starch, soy flour, then it is probably a GMO.**
- 3. If the product is produced in European countries and is labeled "Does not contain GMOs", then most likely it is an environmentally friendly product. But to believe green circles on products with the inscription "without GMO" in connection with this somehow complicated.**
- 4. If the sausage costs cheaply, then most of all it is added soy concentrate, which can be a GM additive.**
- 5. If you or your family has an allergy, it is probably the body's response to the use of GM foods.**

**Thank you for
attention!!!**

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