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## **GMO AND HUMAN HEALTH**

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У статті розглянуто проблеми впливу ГМО організмів на здоров'я людини, визначено негативні наслідки використання генетично-модифікованих організмів та побічні ефекти їх впливу на здоров'я людини.

The problems of GMO organisms effect on human health have been considered in the article, negative consequences of the use of genetically modified organisms have been identified as well as their side effects on human health.

The main problem raised in the article is that whether the GMO has a direct impact on human health and to what extent these products are safe.

The *purpose* of this article is to define all the negative aspects of the impact of GMOs on human health, what genetically modified organisms are and what are the risks of their use.

You don't have to look hard to find genetically modified food on supermarket shelves: More than 85 percent of the corn and soya grown in the United States comes from seeds, DNA of which has been recreated for increasing higher yields, and these two crops play major role in countless processed foodstuffs from soda and salad dressing to bread. Advocates consider, that genetically modified (GM) foods allow farmers to produce more foodstuffs with fewer chemicals: that means cleaner environment and cheaper groceries for all of us. But the question still remains: what impact do GMOs have on our health?[1]

We shall consider only some main after-effects they cause.

#### Allergy is a negative phenomenon №1

Components, that are planted with the gene for corn, soy and other products cause allergies in humans. They accumulate over the years, so they negatively affect not only the state of the "owner", who has harmful food, but also on his offspring.

Genetically engineered products are brought together with food into the human body. They do not go out, but are accumulated. As a result of manipulation within the body they are revealed in various allergic reactions.

In the case under consideration, when tons of sausages, candies, obtained by chemical injection of gene components, are being consumed by humans, then the reaction of the body, which is accustomed to everything natural, will not slow itself down. To avoid the unpleasant consequences, associated with the use of harmful food, customers are recommended to study the composition of suspicious goods.

## *Cancer is a negative phenomenon* №2

Wheat, which is the main component of bread is a victim of genetic engineering. To prevent the grain from destroying pests, scientists "implant" a gene that makes the plant resistant to them. It is beneficial to agricultural producers. Important data were obtained as the result of investigation on the problem how such products affect people. The experiment was carried out with rodents. They were fed by grain, containing modification gene. As a result, it was noted that hemoglobin fell in rats as well as erythrocytes and immunity decreased.

People, who are related to medicine, know, that a good functioning of the immune system "eats" cancer cells, when they appear. Modifications change blood quantity, affect the general condition of the body. As a result, tumors are formed, but there is no "antidote". Hence the number of cancer patients has increased recently.

To protect yourself from an unpleasant disease, people need to control what they eat; not be attracted by beautiful and attractive the boxes, shining on shelves in shops, but choose hooked carrots, small potatoes, stained with dirt, as they can hardly contain the "achievements" of genetic engineering [2].

## Resistance to antibiotics - a negative phenomenon $N_{2}$ 3

Organisms being grown with the achievements of genetics penetrate inside the human body and begin to carry out a "revolution". Bacteria, provoking angina, pneumonia, bronchitis and other inflammatory diseases with which antibiotics fight, "shift to the side of GMOs". Substances are transformed and become resistant to drug components.

Scientists have confirmed the risk of exposure to substances according to the theory of antibiotic therapy. If it continues this way, we will have to look for new methods of treatment.

In *conclusion* it should be mentioned, that up till now there is no agreement between experts on the problem. Some say GMO foods are not harmful. Others say they are harmful. Still others, who are probably right, say it is not known for sure, whether they are harmful, though we do know, that according to the data of US Food and Drug Administration (FDA) the acceptable level of glyphosate in foodstuffs has doubled. This fact presupposes, that what is considered that the herbicide used on a large percentage of GM crops is harmful to the soil, crops, being resistant to other synthetic pesticides. People who prefer to eat non-GMO diets in accordance with their doctors recommendations have improved their health [3].

## References

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