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**GENETICALLY MODIFIED ORGANISMS AND PRODUCTS (GMOS). GENETIC ENGINEERING*****Ibrohimov Abu Bakir Siddiq Dilshodbek Ugli****Andijan State Medical Institute Faculty Of Pharmacy 5th Year Student, Uzbekistan***ABOUT ARTICLE****Key words:** Genetically modified organisms  
GMOs, genetic engineering, DNA genome.**Received:** 07.05.2023**Accepted:** 12.05.2023**Published:** 17.05.2023**Abstract:** This article provides information that genetically modified organisms and products-that is, GMOs and genetic engineering-can not only protect products from environmental influences, but also improve our health.**INTRODUCTION**

Their development began at the same time as the release of food products from GMOs in the World Food Market. Currently, a large proportion of GMOs from plants on the market, as mentioned above, are distinguished from the original variety of the plant by the presence in the genome of recombinant DNA - a gene encoding protein synthesis and DNA sequences that determine a new feature. This regulates the functioning of the gene, as well as the new protein itself. Newly modified protein and recombinant DNA can be considered as targets for GMO detection in food.

Chemical methods for analyzing GMO products. If, as a result of genetic modification, the chemical composition of a food product has changed, chemical research methods can be used to determine it-chromatography, spectrophotometry, spectrophlorometry, etc., which determine the established changes in the chemical composition of the product. Thus, genetically modified soy lines g94-1, G94-19, G168 have a modified fatty acid content, whose comparative analysis showed an increase in oleic acid in a genetically modified shade (83.8%) compared to its traditional counterpart. 23,1%). The use of gas chromatography in this case makes it possible to determine the genetic modification of soy even in products that do not contain DNA and protein, for example, refined soy oil.

New protein analysis. The presence of a new protein in the product makes it possible to use immunological methods to detect GMOs. Performing them allows you to identify a specific protein that is the simplest, has a relatively low cost and has a new property. Currently, test systems have been developed that can be used to determine the amount of protein modified in products such as soy protein isolates and concentrates and soy flour. However, in the analysis of food products in which raw materials are subjected to important technological processing (high temperature, acidic environment, enzymatic processing, etc.) in the production process, immunological analysis can give unsustainable or poorly reproducible results. to protein denaturation. For example, when examining sausages and confectionery, baby food, food and biologically active food additives, the enzyme immunoassay cannot be taken.

The ability to detect protein is limited by the degree of its composition in the product. Thus, most genetically modified crops in the World Food Market have a modified protein level below 0.06% in plant parts used for food, making it difficult to transfer enzyme immunoassay. With this in mind, in most countries, the main methods for determining GMI in products are methods based on recombinant DNA recognition, such as the polymerase chain reaction (PZR) method.

DNA is more stable than protein and less destroyed in the process of technological or culinary processing of food products, which makes it possible to identify GMOs in them.

As mentioned above, when creating a transgenic plant, a genetic construct is introduced into the genome, which consists not only of a gene that identifies a new character, but also of DNA sequences that regulate the functioning of the gene. For these purposes, the PCR method with markers is used for DNA sequences (genes) that identify a new character. The results of the analysis make it possible to determine the variety of genetically modified plant used in the production of the product under analysis.

In Russia, in 2000, the PCR method was approved by the Ministry of health of the Russian Federation as the main method for determining the GM of plant origin in food products. The sensitivity of this method allows you to determine the GMI in the product, even if its content does not exceed 0.9%. This approach is consistent with WHO recommendations adopted in most countries of the world community.

In 2003, it was approved and entered into force by resolution N2 402 of the Russian state standard. National standard of the Russian Federation of December 29, 2003 GOST R 52173-2003 "raw materials and food products. The method of determining GMOs of plant origin, which confirmed this method of determining GM in food products.

At the same time, the national standard of the Russian Federation GOST R 52174-2003 "Biological Safety. Raw materials and food products. A method to identify genetically modified sources (GMIS) of a plant using a biological microchip based on PCR and containing previous stages. The difference is only in the final stage, which involves hybridization in a biological microchip instead of electrophoresis.

Determination of the respiratory rate the owner of the dog (Sobakovodstvo) must be able to determine the respiratory rate of the animal, which is important both for the diagnosis of the disease and for the treatment of respiratory complications. The rate of respiration can be determined by counting the number of breaths or exhalations.

Definitions animal psychologists consider fear to be a kind of emotional reaction of the body, or, in short, one of the emotions. Emotions in the most general sense are called a special class of psychic processes and states, which are reflected directly in the form of experience.

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