

الأغذية المحورة وراثياً

GM FOODS



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**The Regulations of Genetically modified foods
In the Kingdom of Saudi Arabia**

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Introduction

- **During the last two decades various international big companies applied studies on genetically modified crops especially on those with financial revenue; using the technology of DNA, to obtain agricultural products that can resist epidemics, diseases and pests and also to have as much as possible of those crops. Due to that the land used to grow GMOs crops expanded from 1.6 million hectare in 1996 to 67.7 million hectares in 2003. Most of the crops produced by using biotechnology are Soya beans, corn, cotton, tomatoes, wheat.**

- **The last statistics of 2002 showed that the United States of America use 63% of its land to develop crops by using biotechnology while Argentina 21%, Canada 6.6%, China 2.8% and Australia, South Africa, Romania, Mexico and Bulgaria combined together use only 1% of their land on crops developed by biotechnology.**

➤ **Despite the positive results of using biotechnology (DNA technology) to develop crops that resist diseases, epidemics and pests, there are still some countries who are concerned about the negative results of using biotechnology such as the potential danger on the safety and health of the consumer, and in the long run the disastrous effects of biotechnology on the environment. For this reason many scientists insist on the importance of forming regulations that control the use of this technology.**

➤ This paper will focus on the Regulations of the genetically modified foods in the Kingdom of Saudi Arabia, and the importance of those legislation to protect consumer health and safety.

First: International Agreements :

➤ **TBT Agreement :**

- Article 2.2 of the TBT Agreement states that " members shall ensure that technical regulations are not prepared, adopted or applied with a view to or with the effect of creating unnecessary obstacles to international trade. For this purpose, technical regulations shall not be more trade restrictive than necessary to fulfill a legitimate objective, taking account of the risks non- fulfilment would create. Such legitimate objectives are, inter alia: national security requirements., the prevention of deceptive practices., protection of human health or safety, animal or plant life or health, or the environment. In assessing such risks, relevant elements of considerations are, inter alia: available scientific and technical information, related processing technology or intended end-uses of products"

➤ **Codex Alimentarius Commission :**

- **The result of the Codex Alimentarius Commission in its 28th UN sponsored meeting held during the period 9-12 May 2000 in Ottawa Canada, and the following meetings held in 2002 and 2004, stressed on the countries' right to determine their own controls governing the importation of genetically modified foods, and to mark them in a manner that would so indicate. whereas most of the countries support the labelling scheme for genetically modified foods, and the debate is still on to form an international standard for genetically modified foods.**

➤ **The International Convention on Plant Protection :**

- This agreement encourages scientific researches for risk factors and international co-ordination and determining the high light that should be followed in assessment or education or forming standards for genetically modified organisms.

The Montreal Convention and Cartagena Protocol on Biosafety :

- **the Conference of the parties to the Convention on Biological Diversity adopted a supplementary agreement to the convention known as the Cartagena Protocol on Biosafety on 29 January 2000. The protocol seeks to protect biological diversity from the potential risks posed by living modified organisms resulting from modern biotechnology.**
- **It establishes an advanced informed agreement (AIA) procedure for ensuring that countries are provided with the information necessary to make informed decisions before agreeing the import of such organisms into their territory.**
- **The protocol also contains reference to a precautionary approach and reaffirms the precaution language in principle 15 of the Rio Declaration on environment and development. The protocol also establishes a Biosafety Clearing-House to facilitate the exchange of information living modified organisms and to assist countries in the implementation of the protocol.**

Second: International Level

➤ The United States of America:

- There is no legislation in the United States of America, which differentiates between conventionally produced products and those produced by the use of biotechnology, if the difference between the two products is not substantial or that the genetically modified product has not caused any other effects.**

➤ **The European Union (EU) :**

- **The EU decision No. 220/1990 obligates to identify genetically modified foods with a description label different from those used on conventionally produced products. This Decision was updated in 1997 to include adding all description data on the foodstuff-label.**
- **Also the new EU decision No. 49/2000, which obligates to put an identification label on genetically modified feeds starting from 2003.**
- **As for the animal products, which are produced from animals fed with genetically modified feeds, such as eggs, meat, dairy products. Ext. there is no law that governs importing or trading or consuming such products, and the unintended GM material should not exceeds 0.9%.**

Canada :

- **The regulations in Canada oblige manufacturers to put a label on all kinds of food to ensure their safety as whether they cause allergy or any changes in the nutritional value of the food.**
- **The manufacturers have the right to put a label on the products to show whether they contain genetically modified organisms or not as long as the information on the label is true and not misleading.**

➤ **Russia :**

- In 2/6/2004 the Russian health authorities had issued a decision that producers of food products which contain more than 0.9% of unintended genetically modified material should place a label indicating that the product is genetically modified.

➤ **Australia & New Zealand :**

- The Australian and New Zealand Food Administration (ANZFA) had developed standards for genetically modified foods that differ from those conventionally produced, also the foodstuff-label should indicate that the product is genetically modified if the unintended genetically modified materials exceeds 1%.

➤ **Japan :**

- in April 2001 the Japanese Ministry of Agriculture, Forsts and Fishreis issued regulations that oblige manufacturers to place a label on food that contain 5% of unintended genetically modified material.

➤ **South Korea :**

- on March 2000 the Korean government had developed a label for genetically modified foods that will be operational in 2001., also the Korean Food & Drug Administration obliges food manufacturers to place a label on genetically modified food if the unintended genetically modified material reaches 3% or more.

➤ **China :**

- In 2003 the Chinese government obliges manufacturers to place a label on genetically modified foods, and the threshold for unintended genetically modified material is 0 %.

➤ **Argentina**

- The labelling scheme is not applicable in Argentina.

➤ **Brazil :**

- The Brazilian health authorities issued a legislation obliging manufacturers to place a label on genetically modified foods, and the threshold for unintended genetically modified material is 1%.

➤ **Taiwan :**

- The Taiwan health authorities issued a legislation obliging manufacturers to place a label on genetically modified food, and the threshold for unintended genetically modified material is 5%.

Third: Regulations in Saudi Arabia

- Considering the ongoing debate concerning the safety and security of the use of the genetically modified foods, as well as those controls and guidelines governing permission to export and import genetically modified foodstuffs through the use of modern biotechnology and making such foodstuffs available on the market for human consumption with due consideration of potential risks the use thereof may have on human life.**
- And based on the Kingdom conviction on the right for consumers to know beforehand, the nature, contents and components of products available on the market and to know whether such components thereof are conventional or genetically modified by modern biotechnology, thus ensuring their right to choose.,**

The Ministerial Decision No. 1666 dated 15/9/1421H
(10/12/2000) resolves the following

- 1. To place a label on genetically modified food products by the use of biotechnology. Information contained on the labels shall be legible and readable, in both Arabic and, English. Writing shall be in color other than that of the label.**
- 2. Genetically modified products by the use of biotechnology, to be imported into the Kingdom of Saudi Arabia, shall be allowed for consumption and use in their own producing countries. Officially authenticated certificates shall be presented to this effect.**

- 3. All genetically modified foodstuffs (allowed to be imported into the Kingdom) shall be in accordance with morally and legally established rules in the Kingdom of Saudi Arabia. Furthermore, they shall be in conformity with Saudi duly approved standards.**
- 4. Importation of foods made of genetically modified animal products by the use of biotechnology is hereby banned.**
- 5. The afore-mentioned controls and requirements shall apply to all genetically modified plant products, whether imported into the Kingdom or locally produced within twelve months from the date of this Decision. Once the said period has elapsed, products not meeting the above-mentioned requirements shall not be allowed to enter the Kingdom of Saudi Arabia.**

The Ministry of Agriculture regulations for GM products

**Decision No. 88631 dated 4/12/1423H
governing the control of entry for agricultural
products into the Kingdom.**

GM seeds & seedling not permit to export to KSA.

**Animal feed (Bulk) must accompanied by health
certificate stating that the product safe and have
been approved in the county of origin for
consumption.**

➤ **SAUDI STANDARD DRAFT No.3002/2005**

SCOPE AND FIELD OF APPLICATION

This Saudi standard is concerned with general requirements for food and feed obtained through certain techniques of genetic modification and food and feed that contain or produced from genetically modified organism (GMO) if the GMO present is higher than 0.9 % .

General Requirements

Food and Feed referred in this standard must not :

Have diverse effects on human health , animal health or the environment.

Differ from the product, which is intended to replace to such an extent that its normal consumption would be nutritionally disadvantageous for humans or animals

A product must be accompanied with certified papers ensuring the following

The designation name of the product and its specification, including the transformation event(s) used .

The characteristic of the genetically modified organism and the vector used, its source and family.

Detailed description of the method of the production and manufacturing.

Methods for detection and their reliability and sampling.

Information about the risk assessment. Non-confidential data should be made available to the public.

The product must be combined with a certificate proving that it is allowed to be consumed in the country it was produced

A product must be accompanied with certified papers ensuring the following

The presence in any food or food ingredients obtained through certain techniques of genetic modification/genetic engineering of an allergen transferred from any of the following foods and ingredients shall always be declared

Cereals containing gluten; i.e., wheat, rye, barley, oats, spelt or their hybridized strains and products of these

Crustacea and fish and the products of these;

Peanuts, soybeans and tree nuts and products of these;

Milk and milk products (lactose included)

Sulphite in concentrations of 10 mg/kg or more

A product must be accompanied with certified papers ensuring the following

The presence of genetically modified substances that are absent in corresponding existing food and food ingredients that could be the subject of dietary restrictions, based on religious objections should not be permitted.

Products which are concerned in this standard must not be used as seeds or other plant propagation .

It is prohibited to import genetically modified date, seeds, other seeds, sapling, plants, to the kingdom of Saudi Arabia

It is prohibited to import any genetically modified animal and their products

All genetically modified fruits, vegetables and grain are not allowed to be used as food.

LABELLING REQUIREMENTS

- **If the product consists of more than one ingredient , the words (genetically modified) or (produced from genetically modified , name of the ingredient ,) shall appear in the list of ingredients in parentheses immediately following the ingredient concerned**
- **If the ingredient is designated by the name of a category, the words (contains genetically modified, name of organism) or (contains , name of ingredient, produced from genetically modified, name of organism) shall appear in the list of ingredients**
- **If there is no list of ingredients , the words (genetically modified) or (produced from genetically modified , name of organism ,) shall appear clearly on the labeling**

A product must be accompanied with certified papers ensuring the following

- **Labeling must not mislead the purchaser as to the characteristics of the food stuff and among other things, in particular, as to its nature, identity, properties, composition, method of production and manufacturing.**

LABELLING REQUIREMENTS

If the food is deferent from its conventional counterpart the labeling shall mention any characteristic or property concerning the following :

composition.

Nutritional value or nutritional effects.

Intended use of food.

Implication for the health of certain section of the population .

LABELLING REQUIREMENTS

- **The label should contain a paradigm to indicate that this product contain or produced from Genetically modified organism, it should be clearly visible in English and Arabic, it should be in appropriate position and in different color (see the attached paradigm)**

LABELLING REQUIREMENTS



**Product
Genetically
Modified**
منتج محور وراثياً

Conclusion

- 1. Due to the debate and difference in opinions between the countries that support the use of biotechnology on producing animal and agricultural products and those countries who refuse to use this technology until the positive and negative aspects of these technology is clarified, therefore, any country has the right to issue rules and regulations that govern the use of this technology as it sees fit to protect its consumer right.**
- 2. The for consumer right to know beforehand, the nature, contents and components by placing labels on food products available in the market.**

- 3. Media education and enlightenment about the advantages and disadvantages of biotechnology, and gives the consumer the right to choose. The right for consumer to know beforehand the nature, contents and components by placing labels on food products available in the market.**
- 4. The application of more long term researches on genetically modified organisms based on risk analysis to assess the safety of using this technology in producing agricultural products.**
- 5. The application of more long term clinical researches to assess the safety of biotechnology on human health.**

