# **TACD**

TRANS ATLANTIC CONSUMER DIALOGUE

DIALOGUE TRANSATLANTIQUE DES CONSOMMATEURS

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# CONSUMER CONCERNS ABOUT BIOTECHNOLOGY AND GENETICALLY MODIFIED ORGANISMS (GMOS)

(see resolution on Genetically Modified Organisms issued in April 1999 Doc. Food-5-99)

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#### Introduction:

TACD insists that genetically modified organisms (GMOs) should offer real benefits to consumers and not harm health or the environment. Consumers have a fundamental right to know what they are eating, which means that all genetically modified (GM) foods and foods made using genetically engineered ingredients should be labeled.

#### **Consumer health and safety risks:**

The main consumers' concern about GM foods is safety.

Considering the following consumers' concerns, the long term impact of GMOs on human and animal health and the environment should be carefully assessed before their commercial introduction and release into the environment, and monitored and assessed after their release. A

mandatory assessment should also examine the suitability of the GMOs for use in food production prior to marketing. Long term monitoring of the use GM foods should be a legal requirement and efforts are required to develop appropriate mechanisms for doing this.

# Food allergies:

Consumers wish to express concerns about the potential impact of GM foods on people with food allergies. New allergens could be developed unintentionally and known allergens could be transferred from traditional foods into genetically modified variants (e.g. gene from the Brazil nut introduced into the soybean). In addition, new allergies might emerge after genetic material from different organisms has been mixed. Transfers of any known allergens which can cause fatal anaphalactic shock, such as peanuts, should not be permitted. As a general rule, gene transfers from plants known to cause allergy should be avoided. To protect against uncommon or unknown allergen transfers, all genetically modified food should be labeled.

## Antibiotic resistance:

Consumers are concerned that use of antibiotic resistant marker genes could lead to increased antibiotic resistance. In view of the worldwide problem of bacterial antibiotic resistance, consumers stress that the antibiotic resistant marker genes should not be used within genetic modification.

# Toxicity:

Consumers are concerned about the unwanted side-effects of genetic modification which might be the creation of new toxins, or increased levels of toxins in food for example. Use of genetic modification could also result in "natural" toxins in foods appearing in unexpected places. All GM products should be tested for levels of natural toxins and any GMOs with hazardous levels should be prohibited.

# **Nutritional content:**

Consumers are concerned that genetic modification could increase or decrease the nutritional content of food. It could for example, alter protein, starch, vitamin or fatty acid levels. Any products with significantly altered nutritional content should be labeled as to the change. The impact of consumption of such foods must be carefully monitored.

It is important to consider the limitations of an approach based on 'substantial equivalence' and consider whether more robust methods for assessing the unintended consequences of genetic modification are available or could be developed.

# Consumers' right to know and to choose:

#### Right to know:

Genetic modification has important implications in the spheres of health, the environment, ethics, religious beliefs and the economy. TACD believes that consumers have a fundamental right to know what they are eating. Therefore, all GM food including food produced from GM ingredients which do not remain detectable in the final product should be labeled. Consumer concerns relate to the process of GM and not to the end product.

In order to enjoy their right to know about biotechnology and GM foods, consumers want information which includes the full disclosure of all aspects of the safety evaluation of GM foods, as well as the clear and truthful labeling of any approved products that come on to the market.

Consumer attitudes and values relating to GM must be incorporated into the approval and decision-making processes regarding these foods.

Governments should also consider developing an internationally recognized symbol indicating that the product has been produced using genetic modification. This should not only apply to foodstuffs, but also to feeding-stuffs which have been produced using genetic modification.

#### Right to choose:

The choice of whether to eat or not to eat GM foods should remain with consumers, but this right to choose is being undermined by the mixing of GM products (namely soya and maize) with conventional varieties.

Consumers consider that labeling of the final product should depend on the presence of GMOs in the raw materials from which the product is made. Such an accurate and rigorous labeling requires complete traceability of GMOs throughout the entire production, processing and distribution chain.

Therefore, it is fundamental to ensure traceability through the segregation of GM products from traditional products. As long as the manufacturer can not have full knowledge of the genetic status of the ingredients, the consumers' right to be informed and to choose will not be guaranteed.

It is crucial to preserve a non-GM supply for crops. Consumers find the non-segregation unacceptable. When GM crops are cultivated they must be segregated and consumers call on official authorities to play an active role to assist in the establishment of the necessary facilities in this respect. Rigorous and robust controls must be put in place at all subsequent stages of the food chain to ensure this is maintained. For consumers to have a meaningful choice, an alternative to GM must be available. Identity preserved non-GM supplies should ideally be extended to include animal feed and ultimately genetically modified processing aids.

There is the risk that consumers will infer wrongly that unlabelled foods do not contain products from GM sources. Traceability should be ensured throughout the food chain, based on documentation, so that the original source can be identified. Therefore, sensitive and reliable test methods should be developed and validated to confirm whether or not a product has been genetically modified. A threshold must be agreed by US and EU governments that allows for unintentional contamination of Identity Preserved non-GM supplies. Such a threshold must be kept to an absolute minimum and should be reviewed with the intention of further reduction as

experience of control methods develops.

Consumers should not be asked to pay more for non-GM food, since they have not asked for it. Much more than traceability of non-GM ingredients, segregation and traceability of GM crops and ingredients should be the rule.

Traceability is essential for safety reasons as well as for ensuring choice - it is essential that action can be taken should a food safety problem arise in the future.

# **Environmental and Ecological Consequences:**

The long-term consequences of releasing transgenic species into the environment are difficult to predict, particularly if they start crossbreeding with other species. The scientific methodologies to carry out comprehensive environmental risk assessments are not yet available, and there are still some uncertainties about the real consequences on the environment and human health.

Therefore, consumers call for a strict long term impact of GMOs on the environment to be carefully assessed before their release, and monitored and assessed after their release. In making decisions on release, the Precautionary Principle should be paramount.

# Ethics:

As mentioned above genetic modification can raise ethical and moral concerns for consumers, particularly those with strong religious beliefs. It is important to ensure that these concerns are taken into account when genetically modified foods are assessed and decisions are made as to whether they should be approved.

Animal health and welfare is also an issue that causes concern for some consumers given the potential for genetic modification to be applied to animals. For example, genes coding for growth hormones have been introduced in animals like pigs or salmon, in order to replace growth hormone implants or growth promoters in animal feed. As long as the use of growth hormones in meat is not unanimously considered as safe by scientists, the Precautionary Principle should prevail and this technique should not be permitted.

#### Recommendations:

- 1. TACD calls for the establishment of a system of mandatory human health evaluation that will screen all foods produced using genetic engineering including GM food processing aids and prevent commercialization of any GM products that contain hazardous levels of natural toxins, reduced levels of important nutrients, or a known common allergen that can cause anaphaltic shock in a sensitive individual, or that causes any other significant health problem. International agreement should be reached on a suitable approach and the TACD considers that the Codex ad-hoc Intergovernmental Task Force on Biotechnology is the most appropriate place for this to take place. Such a system should be based on the principles of openness and transparency, and should enable effective public participation throughout the risk analysis process. (see TACD recommendations on risk analysis and the Precautionary Principle.)
- 2. TACD calls for the development of strong methods for assessing GM foods, which unlike 'substantial equivalence' can help to give a clearer idea of the potential unintended

consequences of genetic modification.'

- 3. TACD stresses the need to conduct consumer research to gain a clearer understanding of consumer attitudes towards the potential for future uses of biotechnology and the measures required if their acceptability is to be ensured.
- 4. TACD calls for the setting of a strong system of environmental safety evaluation that will screen GMOs and prevent release of any products that will have negative environmental effects, such as increasing toxic pollution, reducing the effectiveness of natural pesticides, harming wildlife or natural enemies of plants or animal pests, reducing biodiversity, increasing the vigor of weeds or insect pests, altering the genetic makeup of non-engineered living things, or disturbing important ecological balances. Such a system should include a requirement for long-term monitoring.
- 5. TACD calls for a ban on antibiotic resistance genes in genetically modified crops
- 6. TACD requires labeling of all GM food sold in Europe and the US, including ingredients of processed food, and food where GM ingredients have been used in production even if they are no longer detectable in the final product. Labeling of animal feed that contains GM ingredients should also be required.
- 7. TACD stresses the need to establish a system of government to government notification that is shipment-specific when GMOs are shipped in international commerce.
- 8. TACD calls for the establishment of strict rules for corporate liability and mandatory insurance for companies that want to release GMOs into the environment.
- 9. TACD underlines the importance of developing common standards for ensuring identity preserved supplies of non-GM ingredients should be developed so that consumers can have confidence that they are consistent. Mechanisms should be developed for monitoring the long-term consequences of consumption of genetically modified foods and ingredients.