



Physicians and Scientists for Responsible Application of Science and Technology (PSRAST)

Major conclusions about the safety of genetically engineered foods

Summary of the key points

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If you know very little about genetic engineering we suggest you to read this first: [What is genetic engineering?](#) [EL] A brief and simple explanation of genes and genetic engineering.

- Genetic engineering represents an *intervention with unprecedented depth and power*. Radical artificial alterations of the code of life, the genetic makeup, can be created. Such changes may have very complex consequences on the properties of the organism.

Therefore it is most important that science has very good knowledge about how genes function before GE products are released.

Our impartial evaluation has found that the radically opposite situation is the case.

- Once released into nature the genetically engineered organisms and *their altered genes cannot be recalled*. They may spread widely and uncontrollably century after century, yes indefinitely. Scientists have warned for a number of potential hazards, some of which may be serious.

Therefore it is most important to ascertain beyond reasonable doubt that such altered organisms don't cause environmental harm.

Our impartial evaluation has found that this requirement has not at all been fulfilled, see also [footnote](#).

- Genetic engineering may cause the creation of *unexpected harmful substances*. This includes poisons, mutagens (substances causing genetic changes that may be harmful) and carcinogens (substances causing cancer).

Therefore it is most important to ascertain beyond reasonable doubt that GE-foods are not harmful.

Our impartial evaluation has found that this requirement is far from fulfilled for any of the foods on the market.

- World leading experts have arrived at a consensus that *genes are not carriers of isolated traits* and that the effect of a gene is dependent on its environment.

This has shattered the very fundament of Genetic Engineering that is based on the "one-gene-one-trait" doctrine and that a gene will have the same effect in all environments (that is in different species). This being false, it now is evident that genetic engineering has no scientific basis. As the effect of a gene transferred to a foreign species is inherently unpredictable, such gene transfer will inevitably remain unsafe.

In spite of all this, GE foods have been approved and released on all continents. This represents a serious failure of the national and international regulatory agencies to fulfil their responsibility for environmental safety and food safety. The reasons for this are undue political and corporational interventions including a problematically widespread dependence of science on corporate sponsorship.

You may be perplexed to read this and may doubt it. If so, it may be the first time that you encounter an impartial account. This is not surprising as powerful corporations have invested many millions in flooding the media with biotech propaganda, often disguised as apparently impartial feature stories by hired leading journalists in TV, newspapers or journals. Or you may have heard of endorsing statements by scientists who pretend to be objective, but who are, in reality, serving the biotech corporations.

By studying this site you will understand that the points above are supported by scientific facts.

Further reading

- ***If you are a newcomer, we suggest you go to the [Site Guide](#).*** It contains the links below and other important links. It will take you through the various aspects of this issue in a comfortable way.
 - If you believe that science knows what it is doing when genes are engineered, read: **["Is our knowledge sufficient for safe use biotechnology?"](#)** [EL]
 - If you believe the environmental and health safety effects of GE food have been carefully investigated, read: **["Is there sufficient scientific knowledge to ensure safe commercial exploitation of genetically engineered foods?"](#)** [EL]
 - If you believe that GE foods on the market have been tested in a proper way, take a look here: **[Inadequate safety assessment of GE foods](#)** [EL] An "at a glance" summary.
 - If you want to know what foods may be genetically engineered, read: **["What GE foods are on the market?"](#)** [EL]
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Footnote

For this reason the commercial application of genetic engineering of any organism for non-contained usage is unjustifiable. It is an unscientific experimentation with unpredictable and potentially hazardous and irreversible outcomes. This includes genetic engineering of *plants, trees, bacteria, insects and animals*. [Back](#).

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