Are there further concerns about genetic engineering and nature?

GEOs are patented (owned and controlled) by huge corporations. We believe that the genetic code, which has evolved over billions of years, should remain the shared, common heritage of us all. As trees and other plant life, fish and other animals, and insects and microbes are genetically engineered for shortterm profit, the fundamental blueprints of the natural world are changed forever. More attention needs to be given to ethical and societal values and the rights of indigenous people. Public input is urgently needed.

Take Action !!

Citizens throughout the world are asking for a moratorium on transgenic foods and a ban on the patenting of life forms.

☐ There is need for mandatory labeling. Contact your legislators.

☐ Vote three times a day with your dollar. Purchase food grown organically and when possible, locally.

☐ Start Genetic Engineering Committees within your local groups.

☐ Write and disseminate newsletter articles for your local groups.

☐ Write letters to the editor for your local newspaper.

☐ Organize a speaker's presentation/rally.

☐ Pass out this pamphlet, i.e. at meetings and in front of grocery stores.

☐ Call producers (use toll-free numbers); tell them you will not purchase their foods if they come from a genetically engineered source.

☐ Help with Sierra Club's campaign targeting Kraft! Kraft is the #1 packaged food company in the US with over 7,000 products. Write to Irene Rosenfeld, CEO Kraft Foods, Inc. 3 Lakes Drive, Northfield IL 60093.

Talking/writing points:
For our health and the environment, I'm asking you to move to genetically engineered (GE) free production. Transgenic crops, crops which have been genetically manipulated with viral, bacterial, and animal genes, pose risks and shouldn't be in our food supply until better tested and clearly labeled. Dairy products made with milk from cows injected with the genetically engineered bovine growth hormone (r-BGH) may promote cancers of the breast, colon and prostate.

Written by Sierra Club's Genetic Engineering Committee, July/2001 – revised 2007.
(May be reproduced if no changes are made)

To learn more about Sierra Club's positions on genetic engineering, log on to www.sierraclub.org/biotech

Oppose Monsanto's GE Wheat! at www.sierraclub.org/biotech/amberwaves

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GE FOOD: JUST SHUT UP AND EAT IT ???

There's international consumer backlash against a new form of pollution: genes from viruses, bacteria and animals being spliced into food crops. While the U.S. is promoting genetically engineered foods, many nations throughout the world have been enacting laws and policies that restrict the use of genetically engineered products in their foods and fields and to demand labeling. Our government says, Just shut up and eat it!

What is genetic engineering?

Genetic engineering is a radical technology involving the manipulation of genes. Scientists can transfer genes from one species to another totally unrelated species. For example, genes from an animal can be transferred to a plant, to make a new life form. This technology allows scientists to bypass the natural barriers which protect the genetic integrity of species. Genetic engineering goes far beyond conventional breeding and hybridization.

What is being gene-spliced into foods?

Genes from bacteria (including those for antibiotic resistance), viruses, insects, nuts, fish, and animals are presently spliced into common food crops or are on the way. Presently, 2/3 of processed foods are made with a genetically engineered organism (GEO).

How will my health be affected by genetically engineered food?

There is no requirement for long term testing and therefore, much is unknown. Plants are complex and introducing new genes may result in unanticipated changes. New toxins and allergens, changes in nutritional benefits, and spread of antibiotic resistance may occur.

How can I choose to avoid eating genetically engineered foods (GEFs)?

No laws exist to label genetically engineered foods, so there is no right-to-know or freedom of choice. No foods grown organically have been genetically engineered. Purchasing organic food is an excellent way to avoid consuming GEFs.

What are the ecological consequences?

Species have been evolving over millions of years. The ecological impact from the spread of genetic contamination is largely unknown. Pollen can be carried by wind and bees over a range of distances. Farm to farm spread of transgenes (genetically engineered genes) can be widespread. Transgenes can spread to wild relatives and these genes can become established in nature.

Genes conferring resistance to weedkillers are becoming "promiscuous" and spreading to surrounding weeds, making those weeds invulnerable to some herbicides. Pest resistance can also spread into nature. The resulting plants might have the ability to outcompete native species in the environment and destroy natural biological systems.

Many crops are engineered with the Bt toxin, in order to resist infestation from insects. Yet root exudates from these plants release the toxin into the soil, where it retains its activity long after its release. This stimulates major changes in soil biota that could affect nutrient cycling processes and reduce soil fertility.

The Bt toxin is also lethal to nontarget organisms, such as Monarch butterflies, lacewings and ladybird beetles. Lacewings and ladybug beetles play an important role in maintaining the equilibrium of insect populations. But the issue is broader than whether Bt toxin produced by genetically modified crops imperils Monarch butterflies. The real issue is that a strategy to establish expression of an insecticidal compound in large-scale crop monocultures and thus expose a homogeneous subecosystem continuously to the toxin can cause irreparable damage to natural habitats, forever.

How might organic farming be affected?

The entire future of organic farming could be threatened. Pollen can transfer genetically engineered genes into previously organic crops. It is also is expected that Bt, the natural insecticide used in organic farming, will loose its effectiveness.

What is the "Terminator" technology?

This technology makes crops sterile. It's a global threat to the food supply and violates farmers' rights to save seeds. The U.S. Department of Agriculture shares the patent, so our taxpaying dollars are supporting this!

Are genetically engineered foods needed to feed the world?

No. Hunger does not have to do with lack of food or the capacity to grow it. People go hungry when they don't have land on which to grow food or the money to buy it.

African delegates to the United Nations, in 1998, stated, "We....strongly object that the image of the poor and hungry from our countries is being used by giant multinational corporations to push a technology that is neither safe, environmentally friendly, nor economically beneficial to us. We do not believe that such companies or gene technologies will help our farmers to produce the food that is needed in the 21st century. On the contrary, we think it will destroy the diversity, the local knowledge and the sustainable agricultural systems that our farmers have developed for millennia and that it will thus undermine our capacity to feed ourselves."