

PURE FOOD CAMPAIGN

An International Boycott of Genetically Engineered Foods

September 17, 1993

Mr. Alfred Velluci
42 Porter St
Cambridge, MA 02141-1013

Dear Mr. Velluci,

On August 4, 1993, the City Council of Chicago unanimously passed (50-0) a new ordinance, the first of its kind in the country, which requires that grocery stores and restaurants display signs identifying genetically engineered foods. We are asking that you join the effort to protect consumers' right to know about genetically engineered foods by introducing similar legislation in your city.

The language of this ordinance, which we have enclosed, requires that signs stating "This Food Has Been Genetically Engineered" be prominently displayed whenever a food purveyor offers genetically engineered foods for sale. The ordinance carries fines of up to \$500 for violations of this requirement.

Food and drug companies are on the verge of bringing hundreds of genetically engineered foods to market. Current federal policy on genetically engineered foods allow most of these novel foods to be sold untested and unlabeled. No registry of genetically engineered foods will be kept to allow easy tracking of foods that cause health problems.

Genetically engineered foods are different from conventionally produced foods in that they contain genetic material from dissimilar plants, animals, viruses and bacteria -- or contain synthetically produced genetic material -- to confer certain characteristics desirable to the food producer. Examples of genetically engineered foods currently being developed are tomatoes with flounder genes, corn with firefly genes, potatoes with waxmoth genes, even pork and trout with human genes. The National Wildlife Federation estimates that 98 percent of genetically engineered foods have been created to facilitate production and processing of the food. Only 2 percent have been altered for improved nutrition or taste.

Genetically engineered foods raise a number of very serious questions regarding human health, environmental safety and ethical implications. Genetically engineered foods may introduce unexpected allergens, may increase levels of toxins and may lower the nutritional value of foods. The deliberate or accidental release of genetically altered organisms into the environment may lead to forms of "biological pollution" which have never been experienced before and which we are unprepared to handle. The moral and ethical implications of eating genetically engineered foods raise serious problems for vegetarians and members of religious orders for whom eating animal or human genes is prohibited.

The U.S. Food and Drug Administration's 1992 policy allowing untested and unlabeled genetically engineered foods on the market pays very little regard to the consumer's right to know about such radically altered foods. Consumers will be the

unwilling guinea pigs for this unproven technology. This policy stands despite letters to the FDA from over 3,000 concerned consumers expressing outrage at the prospect of eating unlabeled genetically engineered foods as well as a recent Department of Agriculture survey which found that 85% of U.S. consumers thought it was "very important" to have labels on genetically altered foods.

Until the federal government takes responsibility for protecting consumers, we are urging responsible city councilors to take matters into their own hands on the local level. On the heels of the important Chicago ordinance, we are encouraging similar legislation to be introduced in cities across the U.S.

The enclosed package of materials includes the Chicago ordinance, language that was written for similar legislation in New York City, as well as supporting documents about labeling ordinances and genetically engineered foods.

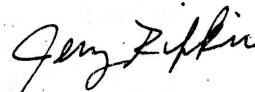
While the Chicago ordinance is an historic first step, the language in the New York bill includes an important provision which protects the local retailer by requiring that manufacturers and distributors notify merchants on the retail level that they are receiving genetically engineered foods. We feel very strongly that it is the responsibility of food manufacturers to provide the initial information about genetically altered foods which must then be passed all the way down to the consumer.

Please review these materials closely and contact us with any questions. As a local lawmaker, you can make a vital contribution to the effort to keep consumers informed about these new, unproven genetically engineered foods. We will be happy to provide background information on the issue. We will also gladly lend public support through our network of 25,000 activists, food store owners and managers, restaurant owners and chefs, and farmers who oppose unlabeled genetically engineered foods.

Please contact Dan Barry or Joe Mendelson for further information (202-775-1132 or 202-466-2823).

Thank you in advance for taking the lead on this important consumer and environmental issue.

Your's for Pure Food



Jeremy Rifkin
President

p.s. Please get in touch with us right away if you want to introduce similar legislation in your city (we have enclosed a reply card for your convenience). Since we are building a national movement of local labeling initiatives, we would like to keep track of your progress on the local level. Thank you.



SUBSTITUTE
ORDINANCE
AS AMENDED

WHEREAS, new methods of genetically modifying plants are being used to develop new varieties that are being used as foods; and

WHEREAS, these methods, which include recombinant DNA techniques and cell fusion techniques, have made possible modifications that would not have been possible using traditional breeding methods; and

WHEREAS, while these modifications are generally beneficial, the new techniques that make them possible may yield effects that are not desirable, such as a reduction in nutritional value or the creation of allergens; and

WHEREAS, although genetically engineered food products currently available have not been shown to cause any health risk, it is important to let consumers know when such food products are offered for sale; now, therefore,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHICAGO:

SECTION 1. The Municipal Code of Chicago is hereby amended by adding a new Section 4-276-285 as follows:

4-276-285. (a) As used in this section, "genetically engineered foods" means any

food product that is or contains material that has been genetically engineered through such techniques as recombinant DNA techniques, cell fusion, or somaclonal variation.

(b) Whenever a food purveyor establishment displays for sale to the general public genetically engineered foods, the establishment shall post and maintain in a prominent location near the display a sign that meets the requirements of this Section. The sign shall state the following: "THIS FOOD PRODUCT HAS BEEN GENETICALLY ENGINEERED." The Commissioner of Consumer Services may promulgate rules regulating the size, placement and size of the type applicable to signs required by this Section.

(c) Any person who owns or controls an establishment that is in violation of this Section shall be subject to a fine of not less than \$25 and not more than \$100 for a first offense; not less than \$100 and not more than \$250 for a second offense; and not less than \$250 and not more than \$500 for a third or subsequent offense. Each day that such violation occurs shall constitute a separate offense.

SECTION 2. This ordinance shall take effect 60 days after its passage and publication.

Document No. 50 93- 1336

PASSED by the City Council of the City of Chicago and deposited in the office of the City Clerk of said City.	
AUG 04 1993	
City Clerk	City of Chicago



Cafe Bio-Tech

CARTE DU JOUR

≡ *Appetizer* ≡

Spiced Potatoes with Waxmoth Gene

Juice of Tomatoes with Flounder Gene

≡ *Entree* ≡

Blackened Catfish with Trout Gene

Pork Chops with Human Gene

Scalloped Potatoes with Chicken Gene

Combread with Firefly Gene

≡ *Dessert* ≡

Rice Pudding with Pea Gene

≡ *Beverage* ≡

Milk with Genetically Engineered
Bovine Growth Hormone (BGH)

All of the cross-species genetic transfers listed on this menu
have already been developed and field tested.

**New York City Department of Consumer Affairs Proposal:
local legislation requiring disclosure of genetically engineered food.**

The New York City Department of Consumer Affairs and the Law Department have drafted a local bill requiring disclosure of genetically engineered food so consumers can know just what they are buying. We will announce this bill next Tuesday, March 9. A background summary follows:

- Genetically engineered food is different from conventional food since it's been altered to contain material from dissimilar plants, animals, viruses, bacteria--as well as synthetic genetic material--to make it tolerant to pesticides or last longer on the shelf, for example.
- Consumers with allergies, as well as people who follow religious dietary laws, have a right to know what's in the food they eat, especially when it looks the same as conventional food.
- Genetically engineered food may put unexpected allergens into food, increase the toxin levels in food, and lower the nutritional value of food, among other undesirable results.
- The current federal policy, announced last year by Vice President Dan Quayle and his Council on Competitiveness, allows most of this brave new food to be sold untested, unlabeled, and without record-keeping that would keep track of any ill effects from eating it.
- We hope the Clinton Administration will reconsider this policy soon, since the first products may hit store shelves later this year. But unless and until the policy changes, New York City needs a bill of its own.
- The bill requires sellers of genetically engineered foods and "food organisms" to disclose that the food is genetically engineered. Food organisms are seeds, saplings, and plants that may grow into or produce food for human consumption.
- The bill requires 1) manufacturers and distributors of genetically engineered food to mark their delivery tickets and invoices with the words "genetically engineered," the source(s) of the gene(s), and the purpose of the genetic engineering (e.g. to extend shelf life); and 2) retailers to pass the above information along to consumers on signs.
- The bill allows food stores to "pass the buck" to manufacturers, where it will stop, if the required information is not provided to them.

A LOCAL LAW

3

To amend the administrative code of the city of New York, in relation to the sale of genetically engineered food and genetically engineered food organisms

Be it enacted by the Council as follows:

Section 1. Chapter 5 of title 20 of the administrative code of the city of New York is amended by adding a new subchapter 13 to read as follows:

SUBCHAPTER 13

SALE OF GENETICALLY ENGINEERED FOOD AND GENETICALLY ENGINEERED FOOD ORGANISMS

§ 20-760 Definitions. Whenever used in this subchapter, the following terms shall have the following meanings:

1. "Genetically engineered food" shall mean any substance for human consumption containing any genetic material from another species or any genetic material assembled in vitro, which genetic material is introduced into the substance by non-sexual means as the result of a current or previous application of a recombinant deoxyribonucleic acid (rDNA) technique or other similar technique for genetic manipulation capable of combining or introducing genetic material from dissimilar organisms, and any substance containing any such genetically engineered food or part thereof as an ingredient.

2. "Food organism" shall mean any developmental stage of any living organism, including seeds thereof, any part of which organism, including the mature fruit, is intended for human consumption.

3. "Genetically engineered food organism" shall mean any food organism that contains any genetic material from another species or any genetic material assembled in vitro, which genetic material is introduced into the organism by non-sexual means as the result of a current or previous application of a recombinant deoxyribonucleic acid (rDNA) technique or other similar technique

for genetic manipulation capable of combining or introducing genetic material from dissimilar organisms.

4. "Genetic material" shall mean deoxyribonucleic acid (DNA) or ribonucleic acid (RNA).

5. "Manufacturer" shall mean any person who owns, leases, operates, controls or supervises a plant, farm or any other facility at which food for human consumption or food organisms are produced.

6. "Distributor" shall mean any person who sells or transports or causes the sale or transportation of food for human consumption or food organisms at any point between any manufacturer and any retail store.

7. "Retail Store" shall mean any establishment at which food or food organisms are sold or offered for sale for off-premises consumption, and shall not include restaurants.

8. "Retailer" shall mean any person who owns, leases, operates, controls, or supervises a retail store.

§ 20-761 Sale of genetically engineered food and genetically engineered food organisms. a. (1) No manufacturer or distributor shall sell any genetically engineered food or genetically engineered food organisms unless the delivery tickets and invoices for such food or food organisms are correctly marked with (a) the words "genetically engineered," (b) the source of the genetic material either by the common or usual name of the source organism for genetic material transferred from another species, or by the term "synthetic genetic material" for genetic material assembled in vitro, and (c) the purpose or intended effect of producing the food or food organisms using the application of a genetic engineering technique.

(2) All manufacturers, distributors and retailers who have purchased genetically engineered food or genetically engineered food organisms shall maintain for a period of two years after the date of purchase all delivery tickets and invoices relating to the purchase of such food or food organisms. Such delivery tickets and invoices shall be made available for inspection by the commissioner during reasonable business hours.

of consumer affairs. Such commissioner, after due notice and an opportunity for a hearing, shall be authorized to impose the civil penalties prescribed by section 20-762 of this subchapter.

b. As an alternative to enforcement pursuant to subdivision a of this section, a violation of any provision of this subchapter or any rules promulgated thereunder may be enforced pursuant to the provisions of subdivisions c, d, and e of section 20-703 and section 20-704 of subchapter one of this chapter.

c. It shall be an affirmative defense in any action or proceeding against a distributor or retailer for a violation of section 20-761 of this subchapter that the person from whom the distributor or retailer purchased the genetically engineered food or genetically engineered food organism did not provide notice on the delivery tickets and invoices of the information described in paragraph one of subdivision a of section 20-761 of this subchapter.

§ 20-764 Rules. The commissioner shall have the authority to promulgate such rules as the commissioner shall deem necessary to effectuate the purposes of this subchapter.

§2. If any provision of this local law or the application thereof shall for any reason be adjudged by any court of competent jurisdiction to be invalid or unconstitutional, such judgment shall not affect, impair or invalidate the remainder thereof but shall be confined in its operation to the provision thereof directly involved in the controversy in which such judgment shall have been rendered.

§3. This local law shall take effect 60 days after its enactment into law, provided that on or after the date of enactment of this local law the department of consumer affairs may promulgate any rules necessary for the implementation of the provisions of this local law and may take any other action necessary for the administration of this local law.

b. No retailer shall sell, offer for sale or expose for sale any genetically engineered food or genetically engineered food organisms unless: (1) such food or food organisms are displayed separately from other food which is not genetically engineered; and (2) such retailer posts a plain, clear and conspicuous sign at the point of display of such food or food organisms correctly marked with (a) the words "genetically engineered," (b) the source of the genetic material either by the common or usual name of the source organism for genetic material transferred from another species, or by the term "synthetic genetic material" for genetic material assembled in vitro, and (c) the purpose or intended effect of producing the food or food organisms using the application of a genetic engineering technique.

§ 20-762 Violations. a. A violation of any provision of this subchapter or any rules promulgated thereunder shall be deemed to be a deceptive trade practice under section 20-701 of subchapter one of this chapter.

b. Notwithstanding any penalty provided for in subdivisions a and b of section 20-703 of subchapter one of this chapter, any person who violates the provisions of this subchapter or any rules promulgated thereunder shall be liable for a civil penalty of not more than five hundred dollars per violation. For purposes of this subchapter, each failure to comply with the provisions of this subchapter with respect to a particular type of genetically engineered food or genetically engineered food organism shall constitute a separate violation.

c. In the case of a violation based upon continued failure to comply with any of the provisions of this subchapter or any rules promulgated thereunder, each day of the continuance of such failure shall be treated as a separate violation.

§ 20-763 Enforcement. a. A proceeding to recover any civil penalty authorized to be imposed pursuant to section 20-762 of this subchapter may be commenced by the service of a notice of violation which shall be returnable to the commissioner

Administration did not regulate this dietary supplement; it was not labeled as "genetically engineered."

Environmental Concerns

There are also serious environmental issues. The release of genetically engineered organisms into the environment could lead to the dangerous biological pollution of native plant and animal species. The threat of these novel organisms has been compared to the introduction into the environment of other "exotics" like Dutch Elm Disease, Chestnut Blight, kudzu vine or zebra mollusks. Though many genetically engineered organisms are likely to be safe, if even a small minority become hazardous the consequences could be catastrophic to a species or an ecosystem.

Religious and Ethical Concerns

The failure of the FDA to label genetically engineered foods means that persons who follow religious dietary restrictions will be unable to ensure compliance with their beliefs. The genes from prohibited foods could be engineered into other foods. Without labeling, there will be no way of knowing if the fruit or vegetable or other food being eaten contains genetic material whose consumption violates religious restrictions.

There is a significant additional ethical concern about genetically engineered food. In a poll taken for the United States Department of Agriculture in July, 1992, a majority of Americans felt that placing genes from one species into another is unethical. Ninety percent of Americans oppose transferring genes from humans into animals. Seventy-five percent oppose splicing genes from animals into plants. Seventy percent are against

gene transfers from animals into other animals, and fifty percent from plants into plants. Eighty-five percent thought it was "very important" that all genetically engineered foods be labeled. These Americans should have the choice to avoid eating foods that offend their religious and ethical beliefs.

THE PURE FOOD CAMPAIGN

In response to the advent of these new products of biotechnology, the Pure Food Campaign has launched an international campaign to boycott genetically engineered food.

We are working with America's and Europe's finest chefs, organic food producers, food suppliers and wholesalers, religious leaders, networks of people with severe food allergies, consumer groups and others to halt the spread of untested and unlabeled genetically engineered foods.

Within the United States, the Pure Food Campaign is urging Americans to contact the Food and Drug Administration to demand:


- mandatory premarket safety testing of all genetically engineered foods;
- mandatory labeling of the entire contents of all genetically engineered foods;
- mandatory premarket notification by all manufacturers of genetically engineered foods, including registration with the FDA prior to marketing, so that the foods can be traced if illnesses or other problems arise.

The Pure Food Campaign is working with local city councils to introduce legislation requiring labeling of all genetically engineered foods. On August 4, 1993, Chicago became the first city to mandate labeling of all genetically engineered foods. New York City has a similar bill pending.

FACT SHEET

ON

GENETICALLY ENGINEERED FOODS



What are Genetically Engineered Foods?

August 1993

Genetic engineering, a revolutionary new technology that is fundamentally different from traditional plant breeding and hybridization, can combine genetic material from dissimilar species. Animal genes and even human genes can be inserted into plants or other animals, creating unimagined "transgenic" foods. For the first time, scientists and engineers are permanently altering the genetic code of the living organisms we use for food.

Hundreds of untested genetically engineered foods are scheduled to enter the consumer marketplace in the coming months and years.

Numerous companies -- including Monsanto, Upjohn, Calgene and Frito-Lay -- are using the new gene splicing technology to produce novel strains of fruits, vegetables, poultry, fish and livestock. Human genes have been added to pigs in order to create leaner meat, and to fish in order to increase their size. Fish genes have been added to tomatoes to reduce freezing damage. Chicken genes have been spliced into potatoes to increase disease resistance. Artificial Bovine Growth Hormone (BGH) has been engineered to force cows to produce up to 25% more milk. In the near future, genetically engineered foods may contain genetic material from hundreds of unrelated species of insects, animals, bacteria and plants.

The Quayle-FDA Policy

On May 26, 1992, the U.S. Food and Drug Administration (FDA) and Vice President Quayle's Competitiveness Council announced the federal government's new policy for many genetically engineered foods. The policy will not treat

genetically engineered foods differently from natural or traditionally bred foods. The policy will not require mandatory labeling, nor will it require safety testing of these novel foods. In fact, the government will not even compile a comprehensive list of which foods have been genetically engineered. The FDA acknowledges there are serious questions about these new foods, but still has elected to allow the biotechnology industry to proceed unregulated.

If this policy is allowed to stand, within months American consumers will be purchasing genetically engineered food in their stores and restaurants without having any knowledge that they are doing so. The Quayle-FDA policy allows consumers absolutely no power to choose whether they and their families will consume these novel, biotechnology food products.

Health Concerns

There are central health concerns about genetically engineered foods. The new genes which have been added to the plants or animals could affect other genes and create foods which are toxic or highly allergenic. Additionally, taking a gene from one organism which causes allergic response, such as the peanut, and putting it into another plant or animal could lead to a transference of the allergic response to the new food.

There have already been tragic health problems from a genetically engineered product. Thirty-one deaths and over 1,500 serious illnesses have been attributed to a genetically engineered amino acid, L-tryptophan. The Food and Drug

(CONTINUED)

San Francisco Chronicle

BUSINESS EXTRA

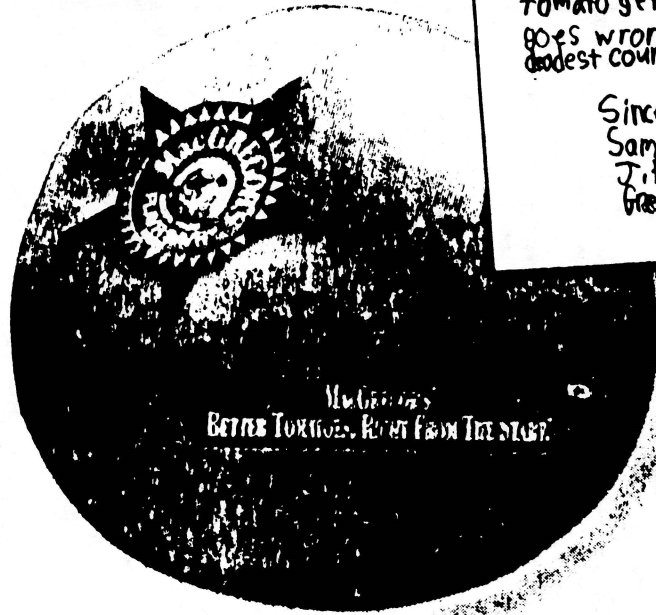


TOMATO'S OPPONENTS SEE RED

Calgene's bio-engineered Flavr Savr tomato will be labeled, and will undergo a complete review by the Food and Drug Administration. Even so, the Pure Food Campaign, led by biotech opponent Jeremy Rifkin, is organizing a boycott, and the FDA's acceptance of such foods has stirred the fears of consumers, including some schoolchildren.

Dear F.D.A. Chief Kessler
I found out about the mutated tomato and I think what your doing is inappropriate. You know how we were called the richest country in the world. If the tomato gets out and something goes wrong we'll be called the poorest country in the world.

Sincerely,
Sam Stein
J.F. Kennedy School
Great Neck, N.Y.



CHRONICLE GRAPHIC

FDA May Change Policy On Bio-Engineered Foods

Agency to decide whether labels are required

BY ALEX BARNUM

Chronicle Staff Writer

The U.S. Food and Drug Administration is taking a new look at the most controversial aspect of its year-old policy on genetically engineered foods: whether such products should be labeled.

In doing so, the agency for the first time is considering labeling foods based not on safety and nutritional considerations, but on whether consumers have a "right to know" how foods are produced.

Spurred by the Clinton administration, the FDA has invited a new round of public comment on whether bio-engineered foods should be labeled. It also has directed its lawyers to consider whether the agency can make a legal case for labeling on a "right-to-know" basis.

Separately, it is also considering whether to require labeling of milk from cows that are treated with a bio-engineered drug that stimulates milk production.

Under its biotech foods policy announced last May, the FDA does not re-

quire labeling of genetically engineered foods, except when gene splicing introduces a new substance that could cause an allergy or change a food's nutritional value.

Scientists overwhelmingly agree that there is nothing inherently risky about bio-engineered foods. And defenders of the FDA policy believe that labeling would set a bad precedent, requiring producers to supply information that is essentially irrelevant to nutrition and health.

Moreover, they argue it would create a host of practical problems that could put an inglorious end to some promising products and decades of research.

But critics of the FDA policy argue that consumers have legitimate reasons for wanting to know whether a food is genetically engineered. And they are seizing on the biotech foods debate as an opportunity to force the FDA to change the way it labels foods.

Food labels should "give consumers a choice of the kind of food supply they sup-

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BIOTECH: FDA May Change Policy on Labeling New Foods

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port," says Joan Gussow, a nutrition professor at Columbia University and a consumer representative on the FDA's food advisory panel. "Consumers have indicated very strongly that they want that choice."

One reason often cited for labeling genetically engineered foods is that vegetarians or members of certain religious groups may object on ethical grounds to eating vegetables that have an animal gene in them.

"If genetic material from the animal kingdom is introduced into vegetables, my religious beliefs would prevent me from consuming it," Robert Hughes, who is a Buddhist, wrote the FDA last summer. The San Francisco resident was one of thousands of consumers who wrote the FDA with objections to its policy.

Another reason for labeling, critics say, is that consumers may be opposed to a use of biotechnology for economic or social reasons. Such is the case with bovine growth hormone, or BGH, a bio-engineered hormone that can increase milk production by 10 percent to 25 percent when it is injected into cows.

BGH has languished in the FDA for years. Now, the agency seems close to making a decision on whether to approve the product; this month, it convened a meeting of its food and veterinary advisory panels to consider whether milk from BGH-injected cows should be labeled.

Although consumer groups argue that BGH could cause health hazards — such as the potential for increased antibiotic residues in milk — extensive studies and reviews by scientists and doctors, including advisory panels at the FDA and the National Institutes of Health, have found the product safe.

The more-pointed criticisms of BGH are social and economic. Studies show that large dairy farms are more likely to benefit from BGH than smaller farms, and that large farms would increase production and drive small, family-owned farms out of business.

What's more, opponents of BGH say, the last thing the American food supply needs is more milk. Through a Byzantine system of price supports, the federal government pays farmers for surplus milk.

"BGH is a totally unnecessary product," said Marion Nestle, chairwoman of New York University's nutrition department and a consumer representative on the FDA's food advisory panel. "The only beneficiaries are the manufacturers and large farms. There's no particular benefit to consumers."

Nestle and other critics say that while biotechnology could solve major environmental and food problems, the industry has done a poor job of directing the technology to socially useful projects. Only if products are labeled will consumers be able to approve or disapprove a particular use of biotechnology.

But defenders of the FDA's hands-off policy on labeling argue that a change in the policy would create a host of practical problems that would be devastating to the industry and thwart development of products that would benefit consumers and the environment, such as pest-resistant crops.

Genetically engineered whole foods such as fruits and tomatoes could be labeled easily enough, but fruits and vegetables that end up

Labeling would create problems for grain processors

as ingredients in other products, as well as grains like wheat and corn, would present a problem.

If bio-engineered wheat and corn have to be labeled, large processors that collect grains from many different farms might have to set up a system to separate bio-engineered grains from others. As a result, many companies might drop efforts to apply biotechnology to such crops.

For example, the logistical problems could short-circuit the development of new breeds of corn that have natural resistance to fungi. These new fungus-resistant breeds would eliminate the need for chemical fungicides, which are among the most dangerous to humans.

Millions of dollars and decades of research will be lost if labeling is required, says Susanne Huttner, director of the University of California's biotechnology program. "Some of the very best research tools will be excluded from agriculture, where there are certainly many serious needs."

One possible solution to the labeling problem is what is being called "reverse" labeling. The concept has gained growing support among policy experts outside Washington at such places as the Center for Biotechnology Policy and Ethics at Texas A&M University.

The idea is that instead of requiring labels on bio-engineered foods, food producers would establish a system for labeling their products as not having come from genetic engineering, much as organic foods are labeled as free of pesticides.

A "reverse" labeling system would require the oversight of an independent board to verify that a product was "biotech-free." Supporters of the concept say such oversight would be best achieved by an industry-financed organization rather than the FDA.

Such a strategy would take advantage of the democracy of the marketplace, supporters say. It would allow consumers to vote with their pocketbooks on whether they approve of genetically engineered products, without forcing a wholesale change in the FDA's labeling policy.

If enough consumers rejected milk from BGH-treated cows, for example, presumably farmers and dairy cooperatives would respond by limiting or completely halting their use of the hormone.

"There needs to be some way that people can avoid having to eat" gene-spliced foods, says Paul Thompson, director of the Texas A&M center. He calls the "reverse" labeling plan a way of protecting consumers' rights "without using a warning label" from the FDA. "What I envision is essentially a niche market" comparable to organics, Thompson says.

Battle Heats Up Over Biotech Foods

FDA decision stirs up consumer fears of 'Frankenfoods'

BY ALEX BARNUM

Chronicle Staff Writer

To second-graders at the John F. Kennedy School in Great Neck, N.Y., Dr. David Kessler seemed to be the bogeyman.

Last year, after the commissioner of the U.S. Food and Drug Administration announced the government's policy giving a green light to genetically engineered foods, he got 20 letters from the class pleading with him not to poison the nation's food supply.

"I don't want to die and my family doesn't either," wrote a girl. "I am 8 years old and really want to live."

"You know how we're called the richest country in the world," wrote a boy. "If the tomato gets out and something goes wrong, we'll be called the poorest country in the world." He was referring to a bio-engineered tomato developed by Davis-based Calgene Inc.

Even though the scientific community — including nutritionists and food scientists — overwhelmingly agrees that there is nothing inherently risky about genetically engineered foods, the idea of such products often stirs deep fears among consumers.

The children at the Kennedy School were urged on by a teacher — Annette Berson — who was herself concerned about the prospect of bio-engineered foods. But their reaction is not much different from the reactions of thousands of other consumers.

Berson says the class discussed the FDA policy as it was described

in an article in the New York Post, and the children "were very upset." She added: "I'm trying to make the children think at a young age. I think that makes learning more fun."

Each of the pupils got a letter of reply from Dr. Kessler, carefully explaining the rationale for the FDA's biotech-foods policy.

The FDA received 3,300 letters in all in the three months following the announcement of its policy last May. The FDA stated that it would not require labeling of bio-engineered foods except in unusual instances, and that it would not require advance notification of the introduction of new products.

Although one would expect opponents to express their opinions more copiously than supporters, the responses were overwhelmingly negative. Ninety percent of them came from angry consumers who pleaded with the FDA for a more stringent policy.

While consumers have generally welcomed biotech drugs and vaccines, an array of opponents have raised objections to bio-engineered foods. Some have dubbed them "Frankenfoods." A biotech opponent, Jeremy Rifkin, has vowed to lead a boycott with his Pure Food Campaign.

If there is nothing inherently risky about genetically engineered foods, why do they evoke such an emotional response?

Experts cite a variety of factors: the sanctity of food; a lack of understanding of modern biology; distrust of industry, science and the regulatory system, and the anxiety aroused by a new technol-

ogy that changes the way people view the world.

"Biotechnology is a button that seems to trigger all of those things at once," says Paul Thompson, director of the Center for Biotechnology Policy and Ethics at Texas A&M University. "It's able to encapsulate a whole range of concerns that people have."

Biotechnology food products, Thompson says, are undermining our view of the world — of what is natural and what isn't. A tomato that has been implanted with an Arctic flounder gene to make it frost-resistant may taste like a tomato and smell like a tomato, but is it one?

"To some extent, science is telling us those categories are false," Thompson says. This "may appear to threaten the basic fabric of the world and how we live our lives. The sense of a natural order is really being challenged by the new biology."

The debate over biotech foods has exposed a major rift between the scientific community and the rest of society, Thompson says. Scientific developments have far outpaced the ability of consumers to keep up, and consumers resent the idea that important decisions — like what kinds of food people eat — are being left up to science and industry.

BIOTECH: FDA May Change Policy on Labeling New Foods

From Page C1

port," says Joan Gussow, a nutrition professor at Columbia University and a consumer representative on the FDA's food advisory panel. "Consumers have indicated very strongly that they want that choice."

One reason often cited for labeling genetically engineered foods is that vegetarians or members of certain religious groups may object on ethical grounds to eating vegetables that have an animal gene in them.

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BGH has languished in the FDA for years. Now, the agency seems close to making a decision on whether to approve the product; this month, it convened a meeting of its food and veterinary advisory panels to consider whether milk from BGH-injected cows should be labeled.

Although consumer groups argue that BGH could cause health hazards—such as the potential for increased antibiotic residues in milk—extensive studies and reviews by scientists and doctors, including advisory panels at the FDA and the National Institutes of Health, have found the product safe.

The more-pointed criticisms of BGH are social and economic. Studies show that large dairy farms are more likely to benefit from BGH than smaller farms, and that large farms would increase production and drive small, family-owned farms out of business.

What's more, opponents of BGH say, the last thing the American food supply needs is more milk. Through a Byzantine system of price supports, the federal government pays farmers for surplus milk.

"BGH is a totally unnecessary product," said Marion Nestle, chairwoman of New York University's nutrition department and a consumer representative on the FDA's food advisory panel. "The only beneficiaries are the manufacturers and large farms. There's no particular benefit to consumers."

Nestle and other critics say that while biotechnology could solve major environmental and food problems, the industry has done a poor job of directing the technology to socially useful projects. Only if products are labeled will consumers be able to approve or disapprove a particular use of biotechnology.

But defenders of the FDA's hands-off policy on labeling argue that a change in the policy would create a host of practical problems that would be devastating to the industry and thwart development of products that would benefit consumers and the environment, such as pest-resistant crops.

Genetically engineered whole foods such as fruits and tomatoes could be labeled easily enough, but fruits and vegetables that end up

Labeling would create problems for grain processors

as ingredients in other products, as well as grains like wheat and corn, would present a problem.

If bio-engineered wheat and corn have to be labeled, large processors that collect grains from many different farms might have to set up a system to separate bio-engineered grains from others. As a result, many companies might drop efforts to apply biotechnology to such crops.

For example, the logistical problems could short-circuit the development of new breeds of corn that have natural resistance to fungi. These new fungus-resistant breeds would eliminate the need for chemical fungicides, which are among the most dangerous to humans.

Millions of dollars and decades of research will be lost if labeling is required, says Susanne Huttner, director of the University of California's biotechnology program. "Some of the very best research tools will be excluded from agriculture, where there are certainly many serious needs."

One possible solution to the labeling problem is what is being called "reverse" labeling. The concept has gained growing support among policy experts outside Washington at such places as the Center for Biotechnology Policy and Ethics at Texas A&M University.

The idea is that instead of requiring labels on bio-engineered foods, food producers would establish a system for labeling their products as not having come from genetic engineering, much as organic foods are labeled as free of pesticides.

Battle Heats Up Over Biotech Foods FDA decision stirs up consumer fears of 'Frankenfoods'

BY ALEX BARNUM

Chronicle Staff Writer

To second-graders at the John F. Kennedy School in Great Neck, N.Y., Dr. David Kessler seemed to be the bogeyman.

Last year, after the commissioner of the U.S. Food and Drug Administration announced the government's policy giving a green light to genetically engineered foods, he got 20 letters from the class pleading with him not to poison the nation's food supply.

"I don't want to die and my family doesn't either," wrote a girl. "I am 8 years old and really want to live."

"You know how we're called the richest country in the world," wrote a boy. "If the tomato gets out and something goes wrong, we'll be called the dearest country in the world." He was referring to a bio-engineered tomato developed by Davis-based Calgene Inc.

Even though the scientific community—including nutritionists and food scientists—overwhelmingly agrees that there is nothing inherently risky about genetically engineered foods, the idea of such products often stirs deep fears among consumers.

The children at the Kennedy School were urged on by a teacher—Annette Berson—who was herself concerned about the prospect of bio-engineered foods. But their reaction is not much different from the reactions of thousands of other consumers.

Berson says the class discussed the FDA policy as it was described

in an article in the New York Post, and the children "were very upset." She added: "I'm trying to make the children think at a young age. I think that makes learning more fun."

Each of the pupils got a letter of reply from Dr. Kessler, carefully explaining the rationale for the FDA's biotech-foods policy.

The FDA received 3,900 letters in all in the three months following the announcement of its policy last May. The FDA stated that it would not require labeling of bio-engineered foods except in unusual instances, and that it would not require advance notification of the introduction of new products.

Although one would expect opponents to express their opinions more copiously than supporters, the responses were overwhelmingly negative. Ninety percent of them came from angry consumers who pleaded with the FDA for a more stringent policy.

While consumers have generally welcomed biotech drugs and vaccines, an array of opponents have raised objections to bio-engineered foods. Some have dubbed them "Frankenfoods." A biotech opponent, Jeremy Rifkin, has vowed to lead a boycott with his Pure Food Campaign.

If there is nothing inherently risky about genetically engineered foods, why do they evoke such an emotional response?

Experts cite a variety of factors: the sanctity of food; a lack of understanding of modern biology; distrust of industry, science and the regulatory system, and the anxiety aroused by a new technol-

A "reverse" labeling system would require the oversight of an independent board to verify that a product was "biotech-free." Supporters of the concept say such oversight would be best achieved by an industry-financed organization rather than the FDA.

Such a strategy would take advantage of the democracy of the marketplace, supporters say. It would allow consumers to vote with their pocketbooks on whether they approve of genetically engineered products, without forcing a wholesale change in the FDA's labeling policy.

If enough consumers rejected milk from BGH-treated cows, for example, presumably farmers and dairy cooperatives would respond by limiting or completely halting their use of the hormone.

"There needs to be some way that people can avoid having to eat" gene-spliced foods, says Paul Thompson, director of the Texas A&M center. He calls the "reverse" labeling plan a way of protecting consumers' rights "without using a warning label" from the FDA. "What I envision is essentially a niche market" comparable to organics, Thompson says.

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"Biotechnology is a button that seems to trigger all of those things at once," says Paul Thompson, director of the Center for Biotechnology Policy and Ethics at Texas A&M University. "It's able to encapsulate a whole range of concerns that people have."

Biotechnology food products, Thompson says, are undermining our view of the world—of what is natural and what isn't. A tomato that has been implanted with an Arctic flounder gene to make it frost-resistant may taste like a tomato and smell like a tomato, but is it one?

"To some extent, science is telling us those categories are false," Thompson says. This "may appear to threaten the basic fabric of the world and how we live our lives. The sense of a natural order is really being challenged by the new biology."

The debate over biotech foods has exposed a major rift between the scientific community and the rest of society, Thompson says. Scientific developments have far outpaced the ability of consumers to keep up, and consumers resent the idea that important decisions—like what kinds of food people eat—are being left up to science and industry.

FOR IMMEDIATE RELEASE
March 9, 1993

CONTACT:
Linda Sachs
Pat Cohen
212/487-4270

**CITY PROPOSES FIRST-OF-KIND LAW ON POSTING
OF GENETICALLY ENGINEERED FOOD**

Commissioner Green Says Consumers Deserve To Know If They're Eating "Brave New Foods" That Could Adversely Affect Those With Allergies or Religious Diets. Genetic Engineering Means Insect Genes in Potatoes and Virus Genes in Fruit.

New Yorkers won't become "guinea pigs" for the biotechnology industry under city legislation proposed today by the Dinkins Administration to require that genetically altered foods be conspicuously posted when sold at retail. The proposed New York City law -- the first of its kind in the country -- would require genetically engineered foods to be displayed separately and identified by a clear and conspicuous sign.

"Unless and until the Food and Drug Administration does its job, this food disclosure legislation is the first and only line of defense New Yorkers have against these potentially unsafe foods," said Commissioner Mark Green. "Consumers have a right to know which foods are genetically engineered so they can make informed choices for themselves."

Michael Hansen, a Consumers Union scientist who joined Green at a press conference to announce the legislation, said: "Consumers Union strongly supports New York City's plan to require posting of all genetically engineered food and urges speedy enactment by the City Council. The public is not being adequately protected by the FDA which has essentially put industry on the 'honor system'. People with food allergies are particularly at risk. But everyone could be affected by increased toxin levels and decreased nutritional value that might appear in these foods."

In May 1992, former Vice-President Quayle's Competitiveness

-more-

Council and the U.S. Food and Drug Administration (FDA) proposed that in most cases genetically engineered foods not be treated differently than traditionally cross-bred or natural foods. Specifically, such food could be sold without labels, without prior safety testing and without any record keeping.

Until now, foods were altered through various methods whereby desirable characteristics were produced by cross-breeding crops or livestock with the same or similar species. Now, scientists are synthesizing new genes or taking genes from bacteria, viruses, animals or plants and placing them in fruits, vegetables and grains to create crops with particular characteristics a company may deem desirable. For example, Calgene will soon be marketing a tomato that resists rotting longer than natural tomatoes as a result of an added synthetic gene. Other companies are experimenting with producing cotton plants that can withstand the toxic effects of massive applications of herbicide, potatoes that resist bruising and crops that can withstand frost or that are toxic to pests.

According to Green, the FDA's proposed 1992 policy has numerous problems because genetically altering food may: 1) put allergens into foods where allergic consumers least expect them; 2) produce unexpected results such as increasing to unsafe levels the amounts of naturally occurring toxins in food; 3) introduce into people's diets genetically encoded substances from viruses and bacteria that have never before been consumed by humans and may not be safe; 4) lower nutritional value; and 5) cause people who observe dietary restrictions on meat for religious or ethical reasons to unknowingly consume animal genes in their fruits and vegetables.

"When it comes to a new, unproven technology that enters our bodies, the burden of proof should be on the technology, not on consumers as potential guinea pigs," said Commissioner Green.

An estimated one to two percent of the population at large, and four to six percent of small children, have food allergies.

Food that is normally safe for an allergy-sufferer could become dangerous if it has been genetically altered with proteins from a food to which they are allergic.

"This proposed city law will protect the 150,000 New Yorkers with food allergies when they buy food to prepare at home," said Green, "but what about other Americans, including our President, who have allergies?"

Company and university scientists are also developing genetically altered potatoes, corn, squash, soybeans, walnuts, cucumbers, cantaloupe, papaya, plums, rapeseed and rice. The companies involved include: Monsanto; DuPont; Ciba-Geigy; Upjohn and Frito-Lay. The National Wildlife Federation Biotechnology Policy Center has calculated that 98 percent of the genetically engineered food products are altered to facilitate production and processing. Two percent are engineered solely for direct consumer benefit -- improved nutrition or taste. Industry analysts agree that genetically engineered foods are on the verge of large scale commercialization.

The organizations that favor pre-market safety testing of genetically altered foods and federally mandated labeling include: the Environmental Defense Fund; the National Wildlife Federation; the Consumers Union; Public Voice for Food and Health Policy; and the Foundation on Economic Trends' Pure Food Campaign. A recent U.S. Department of Agriculture survey of 1,228 Americans found that 85 percent thought it was "very important" to have the label indicate whether that food was produced using biotechnology.

One week after the FDA proposed its no-testing, no-labeling policy, 20 top New York City chefs gathered at the Water Club and called for a boycott of genetically engineered foods.

In November 1992, the New York City Council passed a resolution expressing its concern that the health of New Yorkers and all Americans might be jeopardized and their religious principles compromised by the marketing of untested, unlabeled

genetically engineered food. The Council resolution called on the FDA to "further study the need for safety testing of genetically engineered foods and food products before they reach the market and to promulgate regulations requiring the labeling of genetically engineered foods and food products."

Under the proposed New York City law, a sign must be posted where genetically engineered food is sold marked with the words "Genetically Engineered". The sign must also state: a) the source organism of the genetic material or "synthetic genetic material" for genes created *in vitro*; and b) the purpose or intended effect of the genetic alteration. Manufacturers and distributors would be prohibited from selling genetically engineered food in New York City unless delivery tickets and invoices were marked with this same information.

#

10/93



San Francisco Chronicle

BUSINESS EXTRA

TOMATO'S OPPONENTS SEE RED

Calgene's bio-engineered Flavr Savr tomato will be labeled, and will undergo a complete review by the Food and Drug Administration. Even so, the Pure Food Campaign, led by biotech opponent Jeremy Rifkin, is organizing a boycott, and the FDA's acceptance of such foods has stirred the fears of consumers, including some schoolchildren.

Dear F.D.A. Chief Kessler
I found out about the mutated tomato and I think what your doing is inappropriate. You know how we were called the richest contry in the world. If the tomato gets out and something goes wrong we'll be called the poorest country in the world.

Sincerely,
Sam Stein
J.F. Kennedy School
Great Neck, N.Y.



CHRONICLE GRAPHIC

FDA May Change Policy On Bio-Engineered Foods Agency to decide whether labels are required

BY ALEX BARNUM

Chronicle Staff Writer

The U.S. Food and Drug Administration is taking a new look at the most controversial aspect of its year-old policy on genetically engineered foods: whether such products should be labeled.

In doing so, the agency for the first time is considering labeling foods based not on safety and nutritional considerations, but on whether consumers have a "right to know" how foods are produced.

Spurred by the Clinton administration, the FDA has invited a new round of public comment on whether bio-engineered foods should be labeled. It also has directed its lawyers to consider whether the agency can make a legal case for labeling on a "right-to-know" basis.

Separately, it is also considering whether to require labeling of milk from cows that are treated with a bio-engineered drug that stimulates milk production.

Under its biotech foods policy announced last May, the FDA does not re-

quire labeling of genetically engineered foods, except when gene splicing introduces a new substance that could cause an allergy or change a food's nutritional value.

Scientists overwhelmingly agree that there is nothing inherently risky about bio-engineered foods. And defenders of the FDA policy believe that labeling would set a bad precedent, requiring producers to supply information that is essentially irrelevant to nutrition and health.

Moreover, they argue it would create a host of practical problems that could put an inglorious end to some promising products and decades of research.

But critics of the FDA policy argue that consumers have legitimate reasons for wanting to know whether a food is genetically engineered. And they are seizing on the biotech foods debate as an opportunity to force the FDA to change the way it labels foods.

Food labels should "give consumers a choice of the kind of food supply they sup-

BIOTECH: FDA May Change Policy on Labeling New Foods

From Page C1

port," says Joan Gussow, a nutrition professor at Columbia University and a consumer representative on the FDA's food advisory panel. "Consumers have indicated very strongly that they want that choice."

One reason often cited for labeling genetically engineered foods is that vegetarians or members of certain religious groups may object on ethical grounds to eating vegetables that have an animal gene in them.

"If genetic material from the animal kingdom is introduced into vegetables, my religious beliefs would prevent me from consuming it," Robert Hughes, who is a Buddhist, wrote the FDA last summer. The San Francisco resident was one of thousands of consumers who wrote the FDA with objections to its policy.

Another reason for labeling, critics say, is that consumers may be opposed to a use of biotechnology for economic or social reasons. Such is the case with bovine growth hormone, or BGH, a bio-engineered hormone that can increase milk production by 10 percent to 25 percent when it is injected into cows.

BGH has languished in the FDA for years. Now, the agency seems close to making a decision on whether to approve the product; this month, it convened a meeting of its food and veterinary advisory panels to consider whether milk from BGH-injected cows should be labeled.

Although consumer groups argue that BGH could cause health hazards — such as the potential for increased antibiotic residues in milk — extensive studies and reviews by scientists and doctors, including advisory panels at the FDA and the National Institutes of Health, have found the product safe.

The more-pointed criticisms of BGH are social and economic. Studies show that large dairy farms are more likely to benefit from BGH than smaller farms, and that large farms would increase production and drive small, family-owned farms out of business.

What's more, opponents of BGH say, the last thing the American food supply needs is more milk. Through a Byzantine system of price supports, the federal government pays farmers for surplus milk.

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FDA decision stirs up consumer fears of 'Frankenfoods'

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*City
Council*

RECEIVED BY
OFFICE OF CITY CLERK

10/1 OCT 4 AM 11:52
CAMBRIDGE MA.
Mayor Emeritus Alfred Vellucci
42 Porter Street
Cambridge, MA 02141

A RESOLUTION BY AL VELLUCCI

TO THE HONORABLE MEMBERS OF THE CAMBRIDGE CITY COUNCIL:

Whereas, on August 4, 1993, the City Council of Chicago unanimously passed (150-0) a new ordinance, (U.S.A.) which requires that grocery stores and restaurants display signs identifying genetically engineered foods

and

Whereas, food and drug companies are on the verge of bringing hundreds of genetically engineered foods to market, current federal policy on genetically engineered foods allow most of their Novel foods to be sold untested and unlabeled, no registry of genetically engineered foods will be kept to allow tracking of foods that cause health problems.

and

Whereas, genetically engineered foods are different from conventionally produced foods in that they contain genetic material from similar plants, animals, viruses and bacteria --- or contain synthetically produced genetic material ---to confer certain characteristics desirable to the food producer. Examples of genetically engineered foods currently being developed are tomatoes with flounder genes, corn with firefly genes, potatoes with waxmoth genes, even pork and trout with human genes. The National Wildlife Federation estimates that 98 percent of genetically engineered food have been created to facilitate production and processing of the food. Only 2 percent have been altered for improved nutrition or taste.

and

Whereas, genetically engineered foods raise a number of very serious questions regarding human health, environmental safety and ethical implications. Genetically engineered foods may introduce unexpected allergens, may increase levels of toxins and may lower the nutritional values of foods. The deliberate or accidental release of genetically altered organisms into the environment may lead to biological pollution which have never been experienced before and which we are unprepared

Page 2

October 3, 1994

to handle. The moral and ethical implications of eating genetically engineered foods raise serious problems for vegetarians and members of religious orders for whom eating animal or human genes is prohibited.

and

Whereas, the U.S. Food and Drug Administration's 1992 policy allowing untested and unlabeled genetically engineered foods on the market pays very little regard to the consumer's right to know about such radically altered foods. Consumers will be the unwilling guinea pigs for this unproven technology.

and

Whereas, this policy stands despite letters from over 3,000 concerned consumers expressing outrage at the prospect of eating unlabeled genetically engineered foods as well as a recent Department of Agriculture survey found that 85% of U.S. consumers thought it was "very important" to have labels on genetically altered foods.

and

Be It Resolved:

That until the federal government takes responsibility for protecting consumers, I Alfred Vellucci, 42 Porter Street, Cambridge, a bonafide citizen of Cambridge urge our honorable City Councilors to take matters into their own hands on the local level. This policy stands despite letters to the F.D.A. from 3,000 concerned consumers expressing outrage at the prospect of eating unlabeled genetically altered foods.

and

Be It Resolved:

Until the federal government takes responsibility for protecting consumers, I as a Cambridge bonafide citizen, I urge our responsible City Councilors to take matters into their hands at the local level on the heels of the Chicago Ordinance.

Thank You.
Alfred Vellucci



Consent Comm. # 18

Comm. from Mayor Emeritus Alfred Vellucci
regarding genetically engineered foods.

In City Council,

October 17, 1994

*Referred to the
Ordinance
Committee &
Health
Commissioner
10/20/94 - copy sent to
Health Commissioner &
Ordinance Committee*

city
Council

18

Mayor Emeritus Alfred Vellucci
42 Porter Street
Cambridge, MA 02141

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PURE FOOD CAMPAIGN

An International Boycott of Genetically Engineered Foods

September 17, 1993

Mr. Alfred Velluci
42 Porter St
Cambridge, MA 02141-1013

Dear Mr. Velluci,

On August 4, 1993, the City Council of Chicago unanimously passed (50-0) a new ordinance, the first of its kind in the country, which requires that grocery stores and restaurants display signs identifying genetically engineered foods. We are asking that you join the effort to protect consumers' right to know about genetically engineered foods by introducing similar legislation in your city.

The language of this ordinance, which we have enclosed, requires that signs stating "This Food Has Been Genetically Engineered" be prominently displayed whenever a food purveyor offers genetically engineered foods for sale. The ordinance carries fines of up to \$500 for violations of this requirement.

Food and drug companies are on the verge of bringing hundreds of genetically engineered foods to market. Current federal policy on genetically engineered foods allow most of these novel foods to be sold untested and unlabeled. No registry of genetically engineered foods will be kept to allow easy tracking of foods that cause health problems.

Genetically engineered foods are different from conventionally produced foods in that they contain genetic material from dissimilar plants, animals, viruses and bacteria -- or contain synthetically produced genetic material -- to confer certain characteristics desirable to the food producer. Examples of genetically engineered foods currently being developed are tomatoes with flounder genes, corn with firefly genes, potatoes with waxmoth genes, even pork and trout with human genes. The National Wildlife Federation estimates that 98 percent of genetically engineered foods have been created to facilitate production and processing of the food. Only 2 percent have been altered for improved nutrition or taste.

Genetically engineered foods raise a number of very serious questions regarding human health, environmental safety and ethical implications. Genetically engineered foods may introduce unexpected allergens, may increase levels of toxins and may lower the nutritional value of foods. The deliberate or accidental release of genetically altered organisms into the environment may lead to forms of "biological pollution" which have never been experienced before and which we are unprepared to handle. The moral and ethical implications of eating genetically engineered foods raise serious problems for vegetarians and members of religious orders for whom eating animal or human genes is prohibited.

The U.S. Food and Drug Administration's 1992 policy allowing untested and unlabeled genetically engineered foods on the market pays very little regard to the consumer's right to know about such radically altered foods. Consumers will be the

unwilling guinea pigs for this unproven technology. This policy stands despite letters to the FDA from over 3,000 concerned consumers expressing outrage at the prospect of eating unlabeled genetically engineered foods as well as a recent Department of Agriculture survey which found that 85% of U.S. consumers thought it was "very important" to have labels on genetically altered foods.

Until the federal government takes responsibility for protecting consumers, we are urging responsible city councilors to take matters into their own hands on the local level. On the heels of the important Chicago ordinance, we are encouraging similar legislation to be introduced in cities across the U.S.

The enclosed package of materials includes the Chicago ordinance, language that was written for similar legislation in New York City, as well as supporting documents about labeling ordinances and genetically engineered foods.

While the Chicago ordinance is an historic first step, the language in the New York bill includes an important provision which protects the local retailer by requiring that manufacturers and distributors notify merchants on the retail level that they are receiving genetically engineered foods. We feel very strongly that it is the responsibility of food manufacturers to provide the initial information about genetically altered foods which must then be passed all the way down to the consumer.

Please review these materials closely and contact us with any questions. As a local lawmaker, you can make a vital contribution to the effort to keep consumers informed about these new, unproven genetically engineered foods. We will be happy to provide background information on the issue. We will also gladly lend public support through our network of 25,000 activists, food store owners and managers, restaurant owners and chefs, and farmers who oppose unlabeled genetically engineered foods.

Please contact Dan Barry or Joe Mendelson for further information (202-775-1132 or 202-466-2823).

Thank you in advance for taking the lead on this important consumer and environmental issue.

Your's for Pure Food



Jeremy Rifkin
President

p.s. Please get in touch with us right away if you want to introduce similar legislation in your city (we have enclosed a reply card for your convenience). Since we are building a national movement of local labeling initiatives, we would like to keep track of your progress on the local level. Thank you.

SUBSTITUTE
ORDINANCE
AS AMENDED

WHEREAS, new methods of genetically modifying plants are being used to develop new varieties that are being used as foods; and

WHEREAS, these methods, which include recombinant DNA techniques and cell fusion techniques, have made possible modifications that would not have been possible using traditional breeding methods; and

WHEREAS, while these modifications are generally beneficial, the new techniques that make them possible may yield effects that are not desirable, such as a reduction in nutritional value or the creation of allergens; and

WHEREAS, although genetically engineered food products currently available have not been shown to cause any health risk, it is important to let consumers know when such food products are offered for sale; now, therefore,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHICAGO:

SECTION 1. The Municipal Code of Chicago is hereby amended by adding a new Section 4-276-285 as follows:

4-276-285. (a) As used in this section, "genetically engineered foods" means any

food product that is or contains material that has been genetically engineered through such techniques as recombinant DNA techniques, cell fusion, or somaclonal variation.

(b) Whenever a food purveyor establishment displays for sale to the general public genetically engineered foods, the establishment shall post and maintain in a prominent location near the display a sign that meets the requirements of this Section. The sign shall state the following: "THIS FOOD PRODUCT HAS BEEN GENETICALLY ENGINEERED." The Commissioner of Consumer Services may promulgate rules regulating the size, placement and size of the type applicable to signs required by this Section.

(c) Any person who owns or controls an establishment that is in violation of this Section shall be subject to a fine of not less than \$25 and not more than \$100 for a first offense; not less than \$100 and not more than \$250 for a second offense; and not less than \$250 and not more than \$500 for a third or subsequent offense. Each day that such violation occurs shall constitute a separate offense.

SECTION 2. This ordinance shall take effect 60 days after its passage and publication.

Document No. _____

SO 93-1336

PASSED by the City Council of the City of Chicago and deposited in the office of the City Clerk of said City.	
AUG 4 1993	
City Clerk	City of Chicago

**New York City Department of Consumer Affairs Proposal:
local legislation requiring disclosure of genetically engineered food.**

The New York City Department of Consumer Affairs and the Law Department have drafted a local bill requiring disclosure of genetically engineered food so consumers can know just what they are buying. We will announce this bill next Tuesday, March 9. A background summary follows:

- Genetically engineered food is different from conventional food since it's been altered to contain material from dissimilar plants, animals, viruses, bacteria--as well as synthetic genetic material--to make it tolerant to pesticides or last longer on the shelf, for example.
- Consumers with allergies, as well as people who follow religious dietary laws, have a right to know what's in the food they eat, especially when it looks the same as conventional food.
- Genetically engineered food may put unexpected allergens into food, increase the toxin levels in food, and lower the nutritional value of food, among other undesirable results.
- The current federal policy, announced last year by Vice President Dan Quayle and his Council on Competitiveness, allows most of this brave new food to be sold untested, unlabeled, and without record-keeping that would keep track of any ill effects from eating it.
- We hope the Clinton Administration will reconsider this policy soon, since the first products may hit store shelves later this year. But unless and until the policy changes, New York City needs a bill of its own.
- The bill requires sellers of genetically engineered foods and "food organisms" to disclose that the food is genetically engineered. Food organisms are seeds, saplings, and plants that may grow into or produce food for human consumption.
- The bill requires 1) manufacturers and distributors of genetically engineered food to mark their delivery tickets and invoices with the words "genetically engineered," the source(s) of the gene(s), and the purpose of the genetic engineering (e.g. to extend shelf life); and 2) retailers to pass the above information along to consumers or signs.
- The bill allows food stores to "pass the buck" to manufacturers, where it will stop, if the required information is not provided to them.



Cafe Bio-Tech

CARTE DU JOUR

≡≡≡ *Appetizer* ≡≡≡

Spiced Potatoes with Waxmoth Gene

Juice of Tomatoes with Flounder Gene

≡≡≡ *Entree* ≡≡≡

Blackened Catfish with Trout Gene

Pork Chops with Human Gene

Scalloped Potatoes with Chicken Gene

Cornbread with Firefly Gene

≡≡≡ *Dessert* ≡≡≡

Rice Pudding with Pea Gene

≡≡≡ *Beverage* ≡≡≡

Milk with Genetically Engineered
Bovine Growth Hormone (BGH)

All of the cross-species genetic transfers listed on this menu
have already been developed and field tested.

A LOCAL LAW

3

To amend the administrative code of the city of New York, in relation to the sale of genetically engineered food and genetically engineered food organisms

Be it enacted by the Council as follows:

Section 1. Chapter 5 of title 20 of the administrative code of the city of New York is amended by adding a new subchapter 13 to read as follows:

SUBCHAPTER 13

SALE OF GENETICALLY ENGINEERED FOOD AND GENETICALLY ENGINEERED FOOD ORGANISMS

§ 20-760 Definitions. Whenever used in this subchapter, the following terms shall have the following meanings:

1. "Genetically engineered food" shall mean any substance for human consumption containing any genetic material from another species or any genetic material assembled in vitro, which genetic material is introduced into the substance by non-sexual means as the result of a current or previous application of a recombinant deoxyribonucleic acid (rDNA) technique or other similar technique for genetic manipulation capable of combining or introducing genetic material from dissimilar organisms, and any substance containing any such genetically engineered food or part thereof as an ingredient.

2. "Food organism" shall mean any developmental stage of any living organism, including seeds thereof, any part of which organism, including the mature fruit, is intended for human consumption.

3. "Genetically engineered food organism" shall mean any food organism that contains any genetic material from another species or any genetic material assembled in vitro, which genetic material is introduced into the organism by non-sexual means as the result of a current or previous application of a recombinant deoxyribonucleic acid (rDNA) technique or other similar technique

for genetic manipulation capable of combining or introducing genetic material from dissimilar organisms.

4. "Genetic material" shall mean deoxyribonucleic acid (DNA) or ribonucleic acid (RNA).

5. "Manufacturer" shall mean any person who owns, leases, operates, controls or supervises a plant, farm or any other facility at which food for human consumption or food organisms are produced.

6. "Distributor" shall mean any person who sells or transports or causes the sale or transportation of food for human consumption or food organisms at any point between any manufacturer and any retail store.

7. "Retail Store" shall mean any establishment at which food or food organisms are sold or offered for sale for off-premises consumption, and shall not include restaurants.

8. "Retailer" shall mean any person who owns, leases, operates, controls, or supervises a retail store.

§ 20-761 Sale of genetically engineered food and genetically engineered food organisms. a. (1) No manufacturer or distributor shall sell any genetically engineered food or genetically engineered food organisms unless the delivery tickets and invoices for such food or food organisms are correctly marked with (a) the words "genetically engineered," (b) the source of the genetic material either by the common or usual name of the source organism for genetic material transferred from another species, or by the term "synthetic genetic material" for genetic material assembled in vitro, and (c) the purpose or intended effect of producing the food or food organisms using the application of a genetic engineering technique.

(2) All manufacturers, distributors and retailers who have purchased genetically engineered food or genetically engineered food organisms shall maintain for a period of two years after the date of purchase all delivery tickets and invoices relating to the purchase of such food or food organisms. Such delivery tickets and invoices shall be made available for inspection by the commissioner during reasonable business hours.

b. No retailer shall sell, offer for sale or expose for sale any genetically engineered food or genetically engineered food organisms unless: (1) such food or food organisms are displayed separately from other food which is not genetically engineered; and (2) such retailer posts a plain, clear and conspicuous sign at the point of display of such food or food organisms correctly marked with (a) the words "genetically engineered," (b) the source of the genetic material either by the common or usual name of the source organism for genetic material transferred from another species, or by the term "synthetic genetic material" for genetic material assembled in vitro, and (c) the purpose or intended effect of producing the food or food organisms using the application of a genetic engineering technique.

§ 20-762 Violations. a. A violation of any provision of this subchapter or any rules promulgated thereunder shall be deemed to be a deceptive trade practice under section 20-701 of subchapter one of this chapter.

b. Notwithstanding any penalty provided for in subdivisions a and b of section 20-703 of subchapter one of this chapter, any person who violates the provisions of this subchapter or any rules promulgated thereunder shall be liable for a civil penalty of not more than five hundred dollars per violation. For purposes of this subchapter, each failure to comply with the provisions of this subchapter with respect to a particular type of genetically engineered food or genetically engineered food organism shall constitute a separate violation.

c. In the case of a violation based upon continued failure to comply with any of the provisions of this subchapter or any rules promulgated thereunder, each day of the continuance of such failure shall be treated as a separate violation.

§ 20-763 Enforcement. a. A proceeding to recover any civil penalty authorized to be imposed pursuant to section 20-762 of this subchapter may be commenced by the service of a notice of violation which shall be returnable to the commissioner

of consumer affairs. Such commissioner, after due notice and an opportunity for a hearing, shall be authorized to impose the civil penalties prescribed by section 20-762 of this subchapter.

b. As an alternative to enforcement pursuant to subdivision a of this section, a violation of any provision of this subchapter or any rules promulgated thereunder may be enforced pursuant to the provisions of subdivisions c, d, and e of section 20-703 and section 20-704 of subchapter one of this chapter.

c. It shall be an affirmative defense in any action or proceeding against a distributor or retailer for a violation of section 20-761 of this subchapter that the person from whom the distributor or retailer purchased the genetically engineered food or genetically engineered food organism did not provide notice on the delivery tickets and invoices of the information described in paragraph one of subdivision a of section 20-761 of this subchapter.

§ 20-764 Rules. The commissioner shall have the authority to promulgate such rules as the commissioner shall deem necessary to effectuate the purposes of this subchapter.

§2. If any provision of this local law or the application thereof shall for any reason be adjudged by any court of competent jurisdiction to be invalid or unconstitutional, such judgment shall not affect, impair or invalidate the remainder thereof but shall be confined in its operation to the provision thereof directly involved in the controversy in which such judgment shall have been rendered.

§3. This local law shall take effect 60 days after its enactment into law, provided that on or after the date of enactment of this local law the department of consumer affairs may promulgate any rules necessary for the implementation of the provisions of this local law and may take any other action necessary for the administration of this local law.

FACT SHEET

ON

GENETICALLY ENGINEERED FOODS

August 1993

What are Genetically Engineered Foods?

Genetic engineering, a revolutionary new technology that is fundamentally different from traditional plant breeding and hybridization, can combine genetic material from dissimilar species. Animal genes and even human genes can be inserted into plants or other animals, creating unimagined "transgenic" foods. For the first time, scientists and engineers are permanently altering the genetic code of the living organisms we use for food.

Hundreds of untested genetically engineered foods are scheduled to enter the consumer marketplace in the coming months and years.

Numerous companies -- including Monsanto, Upjohn, Calgene and Frito-Lay -- are using the new gene splicing technology to produce novel strains of fruits, vegetables, poultry, fish and livestock. Human genes have been added to pigs in order to create leaner meat, and to fish in order to increase their size. Fish genes have been added to tomatoes to reduce freezing damage. Chicken genes have been spliced into potatoes to increase disease resistance. Artificial Bovine Growth Hormone (BGH) has been engineered to force cows to produce up to 25% more milk. In the near future, genetically engineered foods may contain genetic material from hundreds of unrelated species of insects, animals, bacteria and plants.

The Quayle-FDA Policy

On May 26, 1992, the U.S. Food and Drug Administration (FDA) and Vice President Quayle's Competitiveness Council announced the federal government's new policy for many genetically engineered foods. The policy will not treat

genetically engineered foods differently from natural or traditionally bred foods. The policy will not require mandatory labeling, nor will it require safety testing of these novel foods. In fact, the government will not even compile a comprehensive list of which foods have been genetically engineered. The FDA acknowledges there are serious questions about these new foods, but still has elected to allow the biotechnology industry to proceed unregulated.

If this policy is allowed to stand, within months American consumers will be purchasing genetically engineered food in their stores and restaurants without having any knowledge that they are doing so. The Quayle-FDA policy allows consumers absolutely no power to choose whether they and their families will consume these novel, biotechnology food products.

Health Concerns

There are central health concerns about genetically engineered foods. The new genes which have been added to the plants or animals could affect other genes and create foods which are toxic or highly allergenic. Additionally, taking a gene from one organism which causes allergic response, such as the peanut, and putting it into another plant or animal could lead to a transference of the allergic response to the new food.

There have already been tragic health problems from a genetically engineered product. Thirty-one deaths and over 1,500 serious illnesses have been attributed to a genetically engineered amino acid, L-tryptophan. The Food and Drug

(CONTINUED)

Administration did not regulate this dietary supplement; it was not labeled as "genetically engineered."

Environmental Concerns

There are also serious environmental issues. The release of genetically engineered organisms into the environment could lead to the dangerous biological pollution of native plant and animal species. The threat of these novel organisms has been compared to the introduction into the environment of other "exotics" like Dutch Elm Disease, Chestnut Blight, kudzu vine or zebra mollusks. Though many genetically engineered organisms are likely to be safe, if even a small minority become hazardous the consequences could be catastrophic to a species or an ecosystem.

Religious and Ethical Concerns

The failure of the FDA to label genetically engineered foods means that persons who follow religious dietary restrictions will be unable to ensure compliance with their beliefs. The genes from prohibited foods could be engineered into other foods. Without labeling, there will be no way of knowing if the fruit or vegetable or other food being eaten contains genetic material whose consumption violates religious restrictions.

There is a significant additional ethical concern about genetically engineered food. In a poll taken for the United States Department of Agriculture in July, 1992, a majority of Americans felt that placing genes from one species into another is unethical. Ninety percent of Americans oppose transferring genes from humans into animals. Seventy-five percent oppose splicing genes from animals into plants. Seventy percent are against

gene transfers from animals into other animals, and fifty percent from plants into plants. Eighty-five percent thought it was "very important" that all genetically engineered foods be labeled. These Americans should have the choice to avoid eating foods that offend their religious and ethical beliefs.

THE PURE FOOD CAMPAIGN

In response to the advent of these new products of biotechnology, the Pure Food Campaign has launched an international campaign to boycott genetically engineered food.

We are working with America's and Europe's finest chefs, organic food producers, food suppliers and wholesalers, religious leaders, networks of people with severe food allergies, consumer groups and others to halt the spread of untested and unlabeled genetically engineered foods.

Within the United States, the Pure Food Campaign is urging Americans to contact the Food and Drug Administration to demand:

- mandatory premarket safety testing of all genetically engineered foods;
- mandatory labeling of the entire contents of all genetically engineered foods;
- mandatory premarket notification by all manufacturers of genetically engineered foods, including registration with the FDA prior to marketing, so that the foods can be traced if illnesses or other problems arise.

The Pure Food Campaign is working with local city councils to introduce legislation requiring labeling of all genetically engineered foods. On August 4, 1993, Chicago became the first city to mandate labeling of all genetically engineered foods. New York City has a similar bill pending.

BIOTECH: FDA May Change Policy on Labeling New Foods

From Page C1

port," says Joan Gussow, a nutrition professor at Columbia University and a consumer representative on the FDA's food advisory panel. "Consumers have indicated very strongly that they want that choice."

One reason often cited for labeling genetically engineered foods is that vegetarians or members of certain religious groups may object on ethical grounds to eating vegetables that have an animal gene in them.

"If genetic material from the animal kingdom is introduced into vegetables, my religious beliefs would prevent me from consuming it," Robert Hughes, who is a Buddhist, wrote the FDA last summer. The San Francisco resident was one of thousands of consumers who wrote the FDA with objections to its policy.

Another reason for labeling, critics say, is that consumers may be opposed to a use of biotechnology for economic or social reasons. Such is the case with bovine growth hormone, or BGH, a bio-engineered hormone that can increase milk production by 10 percent to 25 percent when it is injected into cows.

BGH has languished in the FDA for years. Now, the agency seems close to making a decision on whether to approve the product; this month, it convened a meeting of its food and veterinary advisory panels to consider whether milk from BGH-injected cows should be labeled.

Although consumer groups argue that BGH could cause health hazards — such as the potential for increased antibiotic residues in milk — extensive studies and reviews by scientists and doctors, including advisory panels at the FDA and the National Institutes of Health, have found the product safe.

The more-pointed criticisms of BGH are social and economic. Studies show that large dairy farms are more likely to benefit from BGH than smaller farms, and that large farms would increase production and drive small, family-owned farms out of business.

What's more, opponents of BGH say, the last thing the American food supply needs is more milk. Through a Byzantine system of price supports, the federal government pays farmers for surplus milk.

"BGH is a totally unnecessary product," said Marion Nestle, chairwoman of New York University's nutrition department and a consumer representative on the FDA's food advisory panel. "The only beneficiaries are the manufacturers and large farms. There's no particular benefit to consumers."

Nestle and other critics say that while biotechnology could solve major environmental and food problems, the industry has done a poor job of directing the technology to socially useful projects. Only if products are labeled will consumers be able to approve or disapprove a particular use of biotechnology.

But defenders of the FDA's hands-off policy on labeling argue that a change in the policy would create a host of practical problems that would be devastating to the industry and thwart development of products that would benefit consumers and the environment, such as pest-resistant crops.

Genetically engineered whole foods such as fruits and tomatoes could be labeled easily enough, but fruits and vegetables that end up

Labeling would create problems for grain processors

as ingredients in other products, as well as grains like wheat and corn, would present a problem.

If bio-engineered wheat and corn have to be labeled, large processors that collect grains from many different farms might have to set up a system to separate bio-engineered grains from others. As a result, many companies might drop efforts to apply biotechnology to such crops.

For example, the logistical problems could short-circuit the development of new breeds of corn that have natural resistance to fungi. These new fungus-resistant breeds would eliminate the need for chemical fungicides, which are among the most dangerous to humans.

Millions of dollars and decades of research will be lost if labeling is required, says Susanne Huttner, director of the University of California's biotechnology program. "Some of the very best research tools will be excluded from agriculture, where there are certainly many serious needs."

One possible solution to the labeling problem is what is being called "reverse" labeling. The concept has gained growing support among policy experts outside Washington at such places as the Center for Biotechnology Policy and Ethics at Texas A&M University.

The idea is that instead of requiring labels on bio-engineered foods, food producers would establish a system for labeling their products as not having come from genetic engineering, much as organic foods are labeled as free of pesticides.

A "reverse" labeling system would require the oversight of an independent board to verify that a product was "biotech-free." Supporters of the concept say such oversight would be best achieved by an industry-financed organization rather than the FDA.

Such a strategy would take advantage of the democracy of the marketplace, supporters say. It would allow consumers to vote with their pocketbooks on whether they approve of genetically engineered products, without forcing a wholesale change in the FDA's labeling policy.

If enough consumers rejected milk from BGH-treated cows, for example, presumably farmers and dairy cooperatives would respond by limiting or completely halting their use of the hormone.

"There needs to be some way that people can avoid having to eat" gene-spliced foods, says Paul Thompson, director of the Texas A&M center. He calls the "reverse" labeling plan a way of protecting consumers' rights "without using a warning label" from the FDA. "What I envision is essentially a niche market" comparable to organics, Thompson says.

Battle Heats Up Over Biotech Foods

FDA decision stirs up consumer fears of 'Frankenfoods'

BY ALEX BARNUM

Chronicle Staff Writer

To second-graders at the John F. Kennedy School in Great Neck, N.Y., Dr. David Kessler seemed to be the bogeyman.

Last year, after the commissioner of the U.S. Food and Drug Administration announced the government's policy giving a green light to genetically engineered foods, he got 20 letters from the class pleading with him not to poison the nation's food supply.

"I don't want to die and my family doesn't either," wrote a girl. "I am 8 years old and really want to live."

"You know how we're called the richest country in the world," wrote a boy. "If the tomato gets out and something goes wrong, we'll be called the dearest country in the world." He was referring to a bio-engineered tomato developed by Davis-based Calgene Inc.

Even though the scientific community — including nutritionists and food scientists — overwhelmingly agrees that there is nothing inherently risky about genetically engineered foods, the idea of such products often stirs deep fears among consumers.

The children at the Kennedy School were urged on by a teacher — Annette Berson — who was herself concerned about the prospect of bio-engineered foods. But their reaction is not much different from the reactions of thousands of other consumers.

Berson says the class discussed the FDA policy as it was described

in an article in the New York Post, and the children "were very upset." She added: "I'm trying to make the children think at a young age. I think that makes learning more fun."

Each of the pupils got a letter of reply from Dr. Kessler, carefully explaining the rationale for the FDA's biotech-foods policy.

The FDA received 3,300 letters in all in the three months following the announcement of its policy last May. The FDA stated that it would not require labeling of bio-engineered foods except in unusual instances, and that it would not require advance notification of the introduction of new products.

Although one would expect opponents to express their opinions more copiously than supporters, the responses were overwhelmingly negative. Ninety percent of them came from angry consumers who pleaded with the FDA for a more stringent policy.

While consumers have generally welcomed biotech drugs and vaccines, an array of opponents have raised objections to bio-engineered foods. Some have dubbed them "Frankenfoods." A biotech opponent, Jeremy Rifkin, has vowed to lead a boycott with his Pure Food Campaign.

If there is nothing inherently risky about genetically engineered foods, why do they evoke such an emotional response?

Experts cite a variety of factors: the sanctity of food; a lack of understanding of modern biology; distrust of industry, science and the regulatory system, and the anxiety aroused by a new technol-

ogy that changes the way people view the world.

"Biotechnology is a button that seems to trigger all of those things at once," says Paul Thompson, director of the Center for Biotechnology Policy and Ethics at Texas A&M University. "It's able to encapsulate a whole range of concerns that people have."

Biotechnology food products, Thompson says, are undermining our view of the world — of what is natural and what isn't. A tomato that has been implanted with an Arctic flounder gene to make it frost-resistant may taste like a tomato and smell like a tomato, but is it one?

"To some extent, science is telling us those categories are false," Thompson says. This "may appear to threaten the basic fabric of the world and how we live our lives. The sense of a natural order is really being challenged by the new biology."

The debate over biotech foods has exposed a major rift between the scientific community and the rest of society, Thompson says. Scientific developments have far outpaced the ability of consumers to keep up, and consumers resent the idea that important decisions — like what kinds of food people eat — are being left up to science and industry.

San Francisco Chronicle

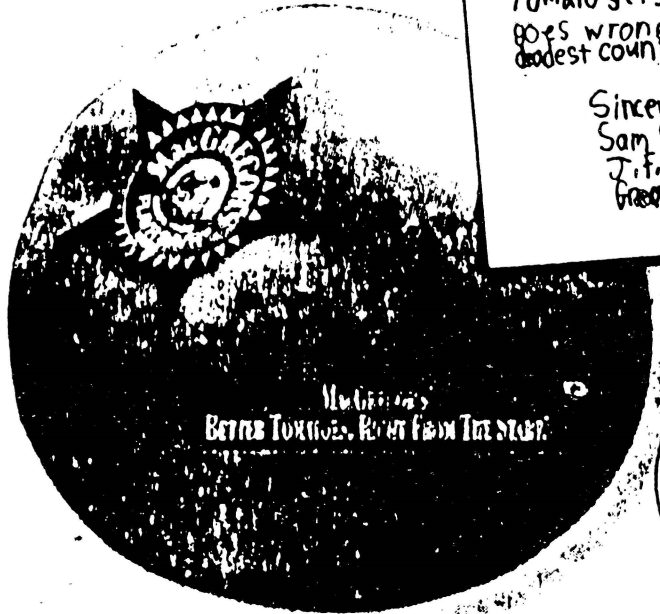
BUSINESS EXTRA

TOMATO'S OPPONENTS SEE RED

Calgene's bio-engineered Flavr Savr tomato will be labeled, and will undergo a complete review by the Food and Drug Administration. Even so, the Pure Food Campaign, led by biotech opponent Jeremy Rifkin, is organizing a boycott, and the FDA's acceptance of such foods has stirred the fears of consumers, including some schoolchildren.

Dear F. D. A Chief Kessler
I found out about the mutated tomato and I think what your doing is inappropriate. You know how we were called the richest country in the world. If the tomato gets out and something goes wrong we'll be called the poorest country in the world.

Sincerely,
Sam Stein
J.F. Kennedy School
Great Neck, N.Y.



CHRONICLE GRAPHIC

FDA May Change Policy On Bio-Engineered Foods

Agency to decide whether labels are required

BY ALEX BARNUM
Chronicle Staff Writer

The U.S. Food and Drug Administration is taking a new look at the most controversial aspect of its year-old policy on genetically engineered foods: whether such products should be labeled.

In doing so, the agency for the first time is considering labeling foods based not on safety and nutritional considerations, but on whether consumers have a "right to know" how foods are produced.

Spurred by the Clinton administration, the FDA has invited a new round of public comment on whether bio-engineered foods should be labeled. It also has directed its lawyers to consider whether the agency can make a legal case for labeling on a "right-to-know" basis.

Separately, it is also considering whether to require labeling of milk from cows that are treated with a bio-engineered drug that stimulates milk production.

Under its biotech foods policy announced last May, the FDA does not re-

quire labeling of genetically engineered foods, except when gene splicing introduces a new substance that could cause an allergy or change a food's nutritional value.

Scientists overwhelmingly agree that there is nothing inherently risky about bio-engineered foods. And defenders of the FDA policy believe that labeling would set a bad precedent, requiring producers to supply information that is essentially irrelevant to nutrition and health.

Moreover, they argue it would create a host of practical problems that could put an inglorious end to some promising products and decades of research.

But critics of the FDA policy argue that consumers have legitimate reasons for wanting to know whether a food is genetically engineered. And they are seizing on the biotech foods debate as an opportunity to force the FDA to change the way it labels foods.

Food labels should "give consumers a choice of the kind of food supply they sup-

FOR IMMEDIATE RELEASE
March 9, 1993

CONTACT:
Linda Sachs
Pat Cohen
212/487-4270

**CITY PROPOSES FIRST-OF-KIND LAW ON POSTING
OF GENETICALLY ENGINEERED FOOD**

Commissioner Green Says Consumers Deserve To Know If They're Eating "Brave New Foods" That Could Adversely Affect Those With Allergies or Religious Diets. Genetic Engineering Means Insect Genes in Potatoes and Virus Genes in Fruit.

New Yorkers won't become "guinea pigs" for the biotechnology industry under city legislation proposed today by the Dinkins Administration to require that genetically altered foods be conspicuously posted when sold at retail. The proposed New York City law -- the first of its kind in the country -- would require genetically engineered foods to be displayed separately and identified by a clear and conspicuous sign.

"Unless and until the Food and Drug Administration does its job, this food disclosure legislation is the first and only line of defense New Yorkers have against these potentially unsafe foods," said Commissioner Mark Green. "Consumers have a right to know which foods are genetically engineered so they can make informed choices for themselves."

Michael Hansen, a Consumers Union scientist who joined Green at a press conference to announce the legislation, said: "Consumers Union strongly supports New York City's plan to require posting of all genetically engineered food and urges speedy enactment by the City Council. The public is not being adequately protected by the FDA which has essentially put industry on the 'honor system'. People with food allergies are particularly at risk. But everyone could be affected by increased toxin levels and decreased nutritional value that might appear in these foods."

In May 1992, former Vice-President Quayle's Competitiveness

-more-

Council and the U.S. Food and Drug Administration (FDA) proposed that in most cases genetically engineered foods not be treated differently than traditionally cross-bred or natural foods. Specifically, such food could be sold without labels, without prior safety testing and without any record keeping.

Until now, foods were altered through various methods whereby desirable characteristics were produced by cross-breeding crops or livestock with the same or similar species. Now, scientists are synthesizing new genes or taking genes from bacteria, viruses, animals or plants and placing them in fruits, vegetables and grains to create crops with particular characteristics a company may deem desirable. For example, Calgene will soon be marketing a tomato that resists rotting longer than natural tomatoes as a result of an added synthetic gene. Other companies are experimenting with producing cotton plants that can withstand the toxic effects of massive applications of herbicide, potatoes that resist bruising and crops that can withstand frost or that are toxic to pests.

According to Green, the FDA's proposed 1992 policy has numerous problems because genetically altering food may: 1) put allergens into foods where allergic consumers least expect them; 2) produce unexpected results such as increasing to unsafe levels the amounts of naturally occurring toxins in food; 3) introduce into people's diets genetically encoded substances from viruses and bacteria that have never before been consumed by humans and may not be safe; 4) lower nutritional value; and 5) cause people who observe dietary restrictions on meat for religious or ethical reasons to unknowingly consume animal genes in their fruits and vegetables.

"When it comes to a new, unproven technology that enters our bodies, the burden of proof should be on the technology, not on consumers as potential guinea pigs," said Commissioner Green.

An estimated one to two percent of the population at large, and four to six percent of small children, have food allergies.

Food that is normally safe for an allergy-sufferer could become dangerous if it has been genetically altered with proteins from a food to which they are allergic.

"This proposed city law will protect the 150,000 New Yorkers with food allergies when they buy food to prepare at home," said Green, "but what about other Americans, including our President, who have allergies?"

Company and university scientists are also developing genetically altered potatoes, corn, squash, soybeans, walnuts, cucumbers, cantaloupe, papaya, plums, rapeseed and rice. The companies involved include: Monsanto; DuPont; Ciba-Geigy; Upjohn and Frito-Lay. The National Wildlife Federation Biotechnology Policy Center has calculated that 98 percent of the genetically engineered food products are altered to facilitate production and processing. Two percent are engineered solely for direct consumer benefit -- improved nutrition or taste. Industry analysts agree that genetically engineered foods are on the verge of large scale commercialization.

The organizations that favor pre-market safety testing of genetically altered foods and federally mandated labeling include: the Environmental Defense Fund; the National Wildlife Federation; the Consumers Union; Public Voice for Food and Health Policy; and the Foundation on Economic Trends' Pure Food Campaign. A recent U.S. Department of Agriculture survey of 1,228 Americans found that 85 percent thought it was "very important" to have the label indicate whether that food was produced using biotechnology.

One week after the FDA proposed its no-testing, no-labeling policy, 20 top New York City chefs gathered at the Water Club and called for a boycott of genetically engineered foods.

In November 1992, the New York City Council passed a resolution expressing its concern that the health of New Yorkers and all Americans might be jeopardized and their religious principles compromised by the marketing of untested, unlabeled

genetically engineered food. The Council resolution called on the FDA to "further study the need for safety testing of genetically engineered foods and food products before they reach the market and to promulgate regulations requiring the labeling of genetically engineered foods and food products."

Under the proposed New York City law, a sign must be posted where genetically engineered food is sold marked with the words "Genetically Engineered". The sign must also state: a) the source organism of the genetic material or "synthetic genetic material" for genes created *in vitro*; and b) the purpose or intended effect of the genetic alteration. Manufacturers and distributors would be prohibited from selling genetically engineered food in New York City unless delivery tickets and invoices were marked with this same information.

#

City of Cambridge

The Ordinance Committee held a public hearing on January 19, 1995, beginning at 6:09 p.m. in the Sullivan Chamber for the purpose of considering a proposed amendment to the Municipal Code of the City of Cambridge to require purveyors of genetically engineered food to notify the public that the food has been genetically engineered.

Present at the hearing were Vice Mayor Sheila T. Russell, Chair of the Committee, Councillor Kathleen L. Born, Councillor Michael A. Sullivan, Councillor Katherine Triantafillou, and City Clerk D. Margaret Drury. Also present were Dr. Melvin Chalfen, Commissioner of Health and Hospitals and Mayor Emeritus Alfred E. Vellucci.

Vice Mayor Russell convened the hearing and explained the purpose. She noted that the proposed ordinance was submitted by Mayor Emeritus Alfred E. Vellucci, and she invited him to make a presentation regarding his proposal.

Mayor Emeritus Vellucci drew the attention of the Committee to the fact sheet that he submitted along with his proposal, which sets out on the health concerns about genetically engineered food. Thirty-one deaths and over 1,500 serious injuries have been attributed to a genetically engineered amino acid, L-tryptophan.

Mayor Emeritus Vellucci also noted that the city of Chicago has passed an ordinance to regulate the sale of genetically engineered food, as has New York City.

Mayor Emeritus Vellucci said that the ordinance he is proposing is the ordinance accepted by the city of Chicago. The ordinance would require, among other things, that restaurants to post signs and given notice to customers if they are serving genetically engineered food.

Vice Mayor Russell asked how the restaurant owners would know whether the food they are getting is genetically engineered.

Mayor Emeritus Vellucci said that this is a question for the Health Commissioner. He then distributed a newspaper article about the risks of lead poisoning from drinking water in Boston. He also pointed out that the City of Boston notified residents that there could be a danger and that the water should be tested. He suggested the City of Cambridge do something similar. He voiced special concern with the effect of lead in the water on the elderly.

Councillor Sullivan then requested that Vice Mayor Russell invite Dr. Melvin Chalfen to comment on the proposed ordinance regarding genetically engineered food and the issue of lead in the water. Councillor Sullivan asked Dr. Chalfen whether taking medications presented a particular problem if there is lead and sodium in the water.

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Dr. Chalfen said that the actual amount of sodium is above what the EPA would like but it is far below the levels that cardiologists are concerned about.

Dr. Chalfen added that the lead is a different matter. The problem is in the old pipes that go into some houses. He stated that he is not aware of any specific problems of lead mixing with medications, but he said that he could discuss the issue with cardiologists and give the City Council additional information.

Councillor Sullivan asked about the effects of boiling the water. Dr. Chalfen said that lead probably would not boil off.

Vice Mayor Russell asked Dr. Chalfen to comment on the subject of genetically engineered food. She asked how the restaurant owner would know whether the food he or she was serving had been genetically engineered.

Dr. Chalfen said the restaurant owner would only know if there were labeling requirements for the restaurant's suppliers.

Dr. Chalfen reported that he had that day discussed with representatives of the Massachusetts version of the Federal Drug Administration (FDA) who told him that they believed that the FDA requires testing of combinations of foods to which people with allergies are commonly susceptible. In addition the FDA requires labelling for foods in which nutritional components are altered, e.g., vitamin C in tomato juice.

Dr. Chalfen said that he wants to do more research about the way other places in the country are handling this issue. He said that he doesn't know how the practicalities are handled, because the labeling must start at the place where the food is created. He added that he would like to discuss the issue further with the Health Policy Board and report back to the Committee.

Vice Mayor Russell asked about recent laws requiring more truthful labeling.

Dr. Chalfen said that the FDA has the ability to require labeling in certain instances.

Councillor Born thanked Mayor Vellucci for bringing this issue to the attention of the City Council and noted his role is bringing the issue of the dangers with recombinant DNA technology to the attention of the City in the 1970's.

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Councillor Born asked whether genetic engineering of the tomato involves splicing genes into a plant or seeds. Dr. Chalfen said that hybridization and cross fertilization are common. Genetic engineering is different, in that a specific gene from a completely different species is inserted into the gene of the tomato.

Councillor Born asked whether this is a more precise way of achieving hybridization and crossfertilization.

Dr. Chalfen agreed that this was so.

Councillor Born asked whether genetic engineering is just sometimes fine-tuning. She asked whether there is an important distinction in degree between minor genetic engineering and major engineering, and how the public could know.

Dr. Chalfen said that the public could only know by labeling.

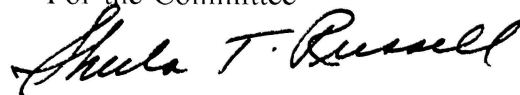
Councillor Sullivan moved referral to Dr. Chalfen and the Health Policy Board for a report back to the Committee. On a voice vote the motion passed unnamously.

Vice Mayor Russell then noted that the city officials working on revisions to the massage ordinance, including Dr. Chalfen, were requesting that the hearing on proposed amendments to the massage ordinance be postponed. She requested that Dr. Chalfen explain the reason for this request.

Dr. Chalfen stated that after discussions with the Law Department and the Commissioner of Inspectional Services; they had agreed on a different approach and needed time to redraft a proposed ordinance reflecting the new direction.

Councillor Triantafillou made a motion for adjournment, and the hearing was adjourned at 6:55 p.m.

For the Committee



Vice Mayor Sheila T. Russell, Chair

0-38

Committee Report #4

A communication was received from D. Margaret Drury, City Clerk, transmitting a report from Vice Mayor Sheila T. Russell, Chair of the Ordinance Committee for a public hearing held on January 19, 1995 at 6:09 p.m. for the purpose of considering an amendment to the Municipal Code of the City of Cambridge to require purveyors of genetically engineered food to notify the public that the food has been genetically engineered.

1/31/95 - Copy sent to
Mr. Chalfer (cc)

12/18/95 - Placed on file
due to end of legislative
session

In City Council January 30, 1995

Report accepted
Referred to the
Health Policy Board &
Commissioner of Health & Hospital
For a report on Vice Mayor Russell