GREENPEACE
Southeast Asia

BLIND FEEDING THAIS WITH GMOs

A report by
Greenpeace Southeast Asia

15 October 2001

www.greenpeacesoutheastasia.org

"I am deeply concerned that there will be long-term harm if we continue to feed the children and the elderly soybeans with foreign proteins or corn with novel toxins. Medical science is clearly not served when FDA relies on the companies who profit from these foods to declare them safe".[1]

- Dr. Martha Herbert, pediatric neurologist
Massachusetts General Hospital in Boston

Introduction

A new round of food analytical tests commissioned by Greenpeace has confirmed the scandalous presence of genetically modified organisms, or GMOs, in a number of food products widely sold in Thailand stores. These products include those manufactured by leading transnational food companies who have earlier pledged to remove the use of GMOs in their food products sold globally.

This is the third round of analytic tests of food products. Earlier this year Greenpeace revealed the results of tests, which showed the presence of GMOs in 7 common food products, and 5 baby food products bought from supermarkets in Bangkok.

Greenpeace has also asked food companies about their policy on GMO food. Most of the food companies declare that they are not using GMOs in their food products. These companies also provided Greenpeace with international laboratory testing results and other documents showing that the ingredients used in their food products are not from GMO origin.
Nestle and Procter & Gamble (Pringle's) have not sent any statements about whether or not they are trying to avoid using GMOs.

Greenpeace is continuously monitoring and commissioning analytical tests of food products on sale in Thailand. Greenpeace has contacted food manufacturers which products have tested GMO positive but also other food manufacturers and inquired about their policy regarding the use of GMOs in their food products. For the non-GMO products and manufacturers, Greenpeace has examined company policy on GMOs and reviewed the measures taken to avoid GMOs. Greenpeace has also assessed food manufacturers' attitude towards consumers' rights to have non-GMO food and the right to know what is in their food. Greenpeace compiled all this information in a "True Food Shopping " list. In the absence of strong mandatory labeling rules, this list which is essentially a green and black list of products serves as a guide to consumers and provides information about which food products contain GMOs. The list also contains information about the policies of various food manufacturers.
See attached "True Food List" containing green, gray and black lists.

Greenpeace assumes that the list of GMO-containing products disclosed in the "True Food List" represented only the tip of the iceberg of GMO contamination in the country's food supply given the huge flows of food products, corn and soya coming into the country as feed stocks and for food processing. The United States is the leading source of GM contamination worldwide considering the large acres of land in that country planted to transgenic corn and soya. Since there is currently no system in the US requiring the separation of GM from non-GM crops, the likelihood of contamination of soya and corn imports from this country is extremely high. .

Recent laboratory analyses commissioned by Greenpeace have revealed the presence of transgenic DNA from genetically modified (GM) foods in a number of food products widely sold in Thailand stores. Baby food is of special concern since infants represent the most vulnerable sectors of society. Their fragile and early stage of development makes them particularly susceptible to risks associated with food intake. While there is still no evidence that GM foods are safe and because babies and children have no capacity to decide for themselves, they must be

protected from unknown and avoidable risks. **From both a public health and ethical standpoint, experimenting with the health of infants is an unacceptable proposition.**

In addition to commissioning the analyses, Greenpeace sent questionnaires to the companies involved requesting information about their policies regarding genetically modified ingredients. Most of the domestic food producers replied to the questionnaires stating that their policy is to avoid GMOs or GM ingredients. On the contrary, transnational corporations which have adopted a policy of not to use GMOs in their products sold in many other countries such as in European countries have remained inactive in Thailand. Many of these big transnational corporation apply different standards on how they respect consumers' right to know and consumers right to have non-GM food in different countries, some of them don't provide information to consumers if they use or don't use GMOs.

Non-GMO Policies of Food Producers.

1. **Foremost Friesland (Thailand) Public Limited,** importer of Frisosoy
After Greenpeace revealed that products of Foremost were tested positive for GMO, the company has thus taken action immediately and declared that
"It's our policy to only supply products that are not based on any GMO-technology, nor that contain ingredients based on GMO-technology."

2. **Heinz Win Chance Ltd.**
"Our company has a clear policy of not using any genetically modified products and has sent out products to be tested. In the future, raw materials used will be more strictly selected and should the labeling law is enforced, we will label our products accordingly."

3. **Malee Sampran Public Co., Ltd**.
"Our company uses non-GMO raw materials and is pleased to provide consumers with further information and to put label on our products as well."

4. **Nutrition House Co., Ltd**.
"Soya flour used in our products is tested GMO-free by DNA tech, Mahidol University."

5. **Ayudthaya Industry Co., Ltd,** distributor of "Soya Bean"
"The company will not import or distribute genetically modified soya bean and will urge the government to enforce labelling policy on imported products so that it would be clear to both consumers as well as distributor."

6. **Mead Johnson**
"We would like to reconfirm Mead-Johnson 's position regarding genetically modified ingredients that our products meet non-GMO status in compliance with the European Union's non-GMO standard.

7. **Useful Foods Co., Ltd.** distributor of Cornae
"The company seeks to purchase and distribute GMO-free products by requesting certificates from other distributors and our trade partners. Should there be any problems, we will switch to other sources of raw materials."

8. **Thai Advance Food (1991) Co., Ltd**. manufacturer of Kaset brand tofu
"We have random tested our products for any genetically modified ingredients and we agree that the labelling law should be in place to notify the consumers of which products contains GMO."

9. **Lactasoy Co., Ltd.**
"Our policy is to use non-GMO raw materials. Raw materials must be certified to be GMO-free. We support consumers' right to know."

10. Thai President Foods Public Co., Ltd, manufacturer of Mama
"We support non-GMO policy by using only domestic raw materials, namely Thai agricultural products including chilies, shallots, garlic, lemon grass and lemon leaves which are GMO free. We also send our products to be tested at DNA Technology Lab."

11. CPC/Aji (Thailand) Ltd. and Unilever – Best Food, manufacturer of Knorr Cup Soup
"We enclose a document from the DNA Technology Lab which certifies that ingredients used in our products as appear in the news are purely GMO-free."

12. Frito-Lay (Thailand) Co., Ltd. manufacturers of Lay and distributor of Lays' Stax
"According to concerns about genetically modified ingredients, our company has always carefully selected GMO-free raw materials. In every purchase order approval, we must be ensured from our trade partners that their raw materials are GMO-free."

13. Yan Wal Yun Co., Ltd.
"We strongly support GMO-free policy. We would test raw materials beforehand by testing samples from supplies before making purchase order and selecting Thai materials which are GMO-free."

14. Wyeth-Ayerst (Thailand) Ltd.
"I hereby certify that all biological ingredients used in the manufacture of infant and Follow-on Formula by Wyeth Nutritional Ireland have been derived from organisms that have not been genetically modified.

15. DUMEX Co.,Ltd.
"We confirm the process of manufacturing Instant Dumex does not involve the addition of genetically modified organisms that are certified by PCR tests.

16. JarnTong Co.,Ltd. manufacturer of "Good Time"
Analytic tests commissioned by Greenpeace earlier in the year found GM ingredients in the product. Subsequently the company has informed Greenpeace that it has a policy to avoid GMO and also which measures they take to prevent GMOs.

"We insist that our policy is to use domestic products to support Thai agriculture and ask suppliers to test their raw materials which proves GMO-free."

17. Abbott Laboratories Ltd.
Greenpeace found GMO contaminated ingredients in the product. Subsequently the company has informed Greenpeace that it has a policy to avoid GMO.

"Our products are GMO-free as according to the U.K.'s labelling law. The policy is to employ GMO-free policy for Thai people as well."

18. New Zealand Dairy Board
"New Zealand Dairy Board confirms that products manufactured after 15 June 2001 does not involve the addition of genetically modified organisms or their ingredients.

GMO product and Corporate Double Standards among Food Companies

It is very clear that some of these transnational corporations are applying unfair practices of discrimination when selling their products between rich and poor countries. While some of them openly declare that they are GM-free globally, like Novartis, they seem to have not seriously implemented the same policy in poorer countries where regulations for the use of GMOs in food products are lax if not altogether nonexistent. Companies like Nestle, and Procter & Gamble (Pringle's) on the other hand operate according to the regulations of the country or region they

are in. This means that they can make efforts to eliminate GM ingredients in their products when regulations in certain countries require it and will continue to feed the public with GM food in the absence of such regulations:

Gerber *(rice with fruits):*

Gerber is a subsidiary of ***Novartis***, one of the first companies that made a declaration for a global GM-free policy. New test result found Gerber's product "Rice with Fruits" to contain ingredients from GM Roundup Ready Soya. This product is sold in Thai supermarkets. In the past Novartis repeatedly declared it would not use GMOs in its food products. On 11 June 1999, Novartis Consumer Health head Martin Stefani wrote in a letter to Greenpeace " Our consumers can be sure that our baby food does not contain any GMOs or parts derived thereof." This was reiterated by Novartis US spokesperson Al Piergallini who was quoted in the Wall Street Journal Europe of 30 July 1999 as follows: "I want our mothers to be comfortable". In a letter to Greenpeace dated 2 August 2000, Novartis declared it would not use anymore GMOs in its food products worldwide. This September Greenpeace exposed that Gerber products sold in the Philippines contain ingredients from GM soya. On 26th September, Novartis International responded by confirming the test results: "the small amounts of soy in these products were in part genetically enhanced" and declaring that "Novartis consumer Health is now seeking alternative sources of the ingredient for the Philippines." In Thailand, Novartis sells Gerber products. Novartis/ Gerber has not yet responded to the letter sent by Greenpeace asking about their policy on GMO use in their food products sold in Thailand. Their products manufactured in Thailand tested positive with very high levels of GM Roundup ready soya. Gerber is one of the largest selling brands of baby foods in the country. As such, the company has a responsibility to take the lead in assuring parents that the food they purchase for their children is safe. Other baby food companies and much of the food industry in general would likely follow the lead of this iconic Western company. Novartis, as a leading producer of baby food, must be especially sensitive to the impression it gives when it fails to provide information about the food it produces. A transnational corporation that have a rigorous system in place in some parts of the world to ensure that their baby food and other food products are not using GM ingredient, should be able to apply the same standards in Thailand -- not to apply the same thorough standards is unacceptable.

In a last minute communication with Greenpeace Southeast Asia prior to the release of the black list on October 15, Novartis sent a letter saying they *"Novartis Consumer Health (HCK) puts great importance on consumer preferences. Since 1999, NCK has been taking practical steps around the world to avoid the use of genetically modified ingredients in our infant and baby nutrition products."* Greenpeace says it welcomes this statement from Novartis/Gerber that it is applying its global policy of being GMO-free but urged the company to look into the high level of contamination of one of its most popular rice cereals for babies.

On October 12, 2001 Novartis head office "Novartis Consumer Health (HCK) puts great importance on consumer preferences. Since 1999, NCK has been taking practical steps around the world to avoid the use of genetically modified ingredients in our infant and baby nutrition products."

Nestle Baby Cerelac:

Nestle is one of the biggest global food conglomerates and produces an extremely wide array of food items. Once an aggressive promoter of GM food, and a member of the European pro-GM lobby group, Europa Bio, Nestle has now refrained from using GM ingredients in its products sold in Western Europe. But in Thailand, analytic tests commissioned by Greenpeace (13th June 2001) revealed that Nestle's Cerelac (Mixed Vegetable) which was manufactured in Thailand, tested positive for GMO contamination. Consumers in Thailand calling up the Nestle hotline have been told that Nestle uses Thai soya and therefore their products should be non-GM. In September the

company admitted that they use GM ingredients in their products. However, despite inadequate evidence of safety, the company continues to assure the public that their products are safe. Nestle has eliminated GM ingredients in places where there are strict GMO regulations such as in Europe. They also promised to do so in Hong Kong although they have yet to fulfill that promise.

Mr. Michael O. Garrett, Executive Vice President of Nestle (ACC) S.A. said while visiting Thailand this September that Nestle has not established any policy to avoid GM ingredients for its product, Nestle Cerelac. Nestle will continue to use GMOs in their products in compliance with regulations issued. This means as long there are no strong legislation in Thailand requiring at least mandatory labeling, Nestle is likely to continue using GMOs in its food products without even to label these products**.** This obviously means Nestle is applying different standards for Thai consumers and European consumers.

Greenpeace strongly believes that Thai consumers should get the same respect and the same treatment as in other parts of the world. However, this inquiry has shown that multinational companies are treating consumers differently. Non-GM food, which is offered to consumers in Western Europe, is not given to Thai people. Thai people are treated as second-class consumers by these multinational companies.

Greenpeace will continue to monitor and test for the presence of GM ingredients in different products.

Pringles Potato Crisps:

Procter and Gamble has not responded to Greenpeace inquiries about its GM food policy in several countries but has assured Greenpeace in Belgium that they do not use GM ingredients. In response to a consumer request in the UK they have also confirmed that Pringles is made without GM ingredients. Greenpeace found the finished product imported from United States by Procter & Gamble manufacturing (Thailand) Co., Ltd. to Thailand to be GMO positive. This corporation has not taken any measures to avoid the import or production of GM products for Thai consumers at all. While in Japan, Procter and Gamble has been recalling about 800,000 units of its “Pringles” potato chips as some had been found to contain unapproved GM potatoes.[2]

Vienna Pork:

CP Interfood Co., Ltd., subsidiary of Charoen Pokphan Group, whose intention is to be a major food producer for consumers all over the world. A new round of test result found Vienna Pork product of CP Interfood to be GMO positive. CP’s principal lines of business had all been agro-industry related -- animal feed, poultry, swine, prawn and fish farming, agricultural chemicals, pharmaceuticals, insecticides, fertilizers, farm machinery and equipment, hybrid seeds, crop farming operations and processed foods - the International Business Trading Group had foreseen the necessity of opening up a trading network of 14 overseas offices in North America, Latin America, Western Europe, Africa, the Middle East and Asia, with the aim of promoting exports of its core food products in both basic and value-added form to these markets.[3]

All of CP subsidiary companies still do not have a clear policy to avoid the use of GMO raw material. The analytic results clearly show the presence of GM ingredient and raises concerns about the standards, quality and safety of CP products. This is also a major obstacle to being one of the leading food producers worldwide,

Nissin Cup Noodle spicy duck flavor:

Nissin promised Japanese consumers that they wouldn’t use GM ingredients. Fortunately too for Thai consumers, after Greenpeace exposed that Nissin product contained GM ingredients, Nissin head office in Japan announced that they would avoid using GMO ingredient by the end of this

year (2001). It would however be more beneficial for the company to eliminate its GM contaminated cup noodles sold in supermarkets now and replace them with GM free ones.

Goldroast instant cereal beverage with vanilla flavor Manufactured by Goldroast Food, Songkla, Thailand. New round of test result found that the product tested positive for GM ingredient. Goldroast as of date has not responded to inquiries by Greenpeace South East Asia concerning its use of GM food.

Health and Environmental Implications

Genetic engineering of food is an inherently risky process. The long-term effects of releasing GMOs into the environment and into people's diets remain unknown for the most part. Possible effects of GMOs include the triggering of unexpected allergies and development of antibiotic resistance in humans, genetic contamination of seeds and crops and the possible wiping out of certain species.

It cannot be excluded that genetically altered plants involve possible health risks. The random insertion of a foreign gene may disrupt the tightly controlled network of DNA in an organism. The gene could, for example, alter chemical reactions within the cell or disturb cell functions. This could lead to instability, the creation of new toxins or allergens, and changes in nutritional value.

Many genetically engineered plants contain genes from bacteria, viruses and other organisms, which have never been part of the human diet. No information exists about their allergenic properties; the allergenic potential of such exotic, introduced gene products are uncertain, unpredictable and untestable.

In addition many of the genetically engineered crops, which are already being grown on a commercial scale, contain genes, which provide resistance to antibiotics used for the treatment of diseases in both humans and animals. These genes are unnecessary to the development of the GM plants themselves and could severely undermine the effective treatment of diseases if the antibiotic resistance is transferred to bacteria, which are harmful to human and animal health.

Allergic reactions

The British Medical Association (BMA), which represents over 115,000 doctors, released a report in May 1999 calling for a moratorium on the introduction of GM crops into the environment and food chain. Among other concerns, the BMA noted the potential for altered plants to add to the spread of antibiotic resistance, to lead to new and untraceable allergies, and to contain toxic by-products. The report suggests that precautionary action should be taken "for the foreseeable future...until the health and environmental impact of genetically modified organisms are fully assessed...."[4]

All foods contain proteins, the basic building materials of a cell. For people who are unable to tolerate proteins found in certain foods, eating even trace amounts of these foods causes allergic reactions ranging from minor discomfort to serious illness or even death.

In genetic engineering, genes are transferred from one organism to another. This gene transfer results in the production of new proteins. If a new protein happens to be one that causes an allergic reaction, food that was previously safe for a person to eat may then become unsafe for that same person.

A seed company called Pioneer Hi-Bred International engineered a soybean with a gene from a brazil nut in the hope that it would improve the soybean's protein content. Researchers at the University of Nebraska tested these soybeans on samples of blood serum taken from people who

were allergic to Brazil nuts. The tests indicated that if these people had eaten the soybeans, they would have suffered an allergic reaction that could have been fatal [5].

Because most genes being introduced into GM plants come from sources which have never been part of the human diet, such as bacteria, and viruses, there is no way of knowing whether or not the products of these genes will cause allergic reactions. Some people could develop a sensitivity to a GM food gradually after being exposed to it over time; others might have an acute allergic reaction after eating a minute amount**. Unfortunately, the absence of a strong labeling system for GMOs in food effectively undermines any attempt to monitor effects of GM foods. If allergies do develop, it will be extremely difficult to trace them to their source.**

Development of Antibiotic Resistance and Unintended Toxicity

In 1998, the US Food and Drugs Administration (FDA) proposed a policy for industry regarding the use of antibiotic resistance genes in transgenic plants. In the engineering process used for genetically modifying plants, scientists need a way to determine whether the gene insertion procedure is successful. Antibiotic resistance genes are used as a "marker" to help determine the success of the gene insertion*.*

In its guidance to the industry, the FDA begins with the premise that " the likelihood of transfer of an antibiotic resistance marker from plants to microorganisms in the gut or in the environment is remote and would not add to existing levels of resistance in bacterial populations in any meaningful way."[6]

Yet in an article in La Recherché several months before the FDA's proposal was announced, the chief expert on antibiotics from the French Pasteur Institute noted the likelihood for antibiotic resistance to transfer from altered plants in the environment, and the potential for such transfer in the digestive tract. In "Transgenic Plants and Antibiotics," Dr. Patrice Courvalin states, "We must remember that the opportunities for genetic exchange between living organisms in nature are immense. The intensive cultivation of plants carrying a resistance gene does result in the presence, in higher numbers, of this gene in nature, thereby creating the conditions for its evolution and dissemination."[7]

Other scientists have raised the concern that Roundup Ready soybeans may have altered levels of phytoestrogens.[8]

Inadequacy of Safety Tests

Many people became aware of GM food for the first time in 1996 when soybeans grown in the US were genetically engineered by Monsanto to be resistant to their best-selling herbicide Round-up. Over 40% of the US soybean harvest is exported. When the first consignment of GM soya arrived in Europe, it was already mixed in with the conventional harvest[9]. The American Soybean Association rejected calls to segregate the GM soya on the basis that it was 'substantially equivalent' to ordinary soya.

The theory of 'substantial equivalence' has been at the root of international guidelines and testing of GM food. According to this principle, selected chemical characteristics are compared between a GM product and any variety within the same species. If the two are grossly similar, the GM product does not need to be rigorously tested on the assumption that it is no more dangerous than the non-GM equivalent.

From a scientific standpoint, the use of 'substantial equivalence' as a basis for risk assessment is seriously flawed, and cannot be depended on as a criterion for food safety.[10]
Genetically engineered food may contain unexpected new molecules that could be toxic or cause allergic reactions. A product could not only be 'substantially equivalent', but even be identical with its natural counterpart in all respects bar the presence of a single harmful compound.

GM foods already on the market in the US include corn, soybeans, potatoes, squash, tomatoes, chicory and papaya. None of these foods have been subject to long-term safety studies or the kind of rigorous toxicological assessment that is applied to pharmaceuticals. Pharmaceuticals undergo up to 15 years of clinical trials which are still limited in their ability to assess unexpected problems; when pharmaceuticals are put on the market, 3% of them need to be withdrawn due to serious side effects.

Baby food will always be of special concern since infants probably represent the most vulnerable sectors of society. Their fragile and early stage of development makes them particularly susceptible to risks associated with food intake. While there is still no evidence that GE foods are safe and because babies and children have no capacity to decide for themselves, they must be protected from unknown and avoidable risks. **From both a public health and ethical standpoint, experimenting with the health of infants is an unacceptable proposition.**

Lack of Government commitment to protect its people from GMOs.

The Thai Food and Drug Administration (FDA) under the authority of the Ministry of Health, is the agency tasked to draft the labeling regulation to protect the rights and welfare of Thai consumers especially the right to be able to choose GMO products or non-GMO products. One of its most important tasks is to caution against long-term threats to consumers' health. Greenpeace; however, is concerned that the very loose draft labeling regulation is an inappropriate response to public as well as manufacturers' clamor for them to know what is in their food and what exact materials are suitable for their processes. It should be pointed out that there presently are two major problems that lead to this inappropriate way of controlling an imprecise technology. On one hand, the Thai FDA is trying to avoid its major responsibility, and on the other, several departments involved and are responsible for controlling the material at the source have not been coordinating well with FDA. These two factors are clear indicators of inefficiency in facing the risks and problems associated with GMOs.

Other Governments Take Responsible Action

While nobody knows for certain what the long term effects of eating or growing genetically engineered (GE food) are, GE food is already causing widespread public concern around the world. Earlier this year over 2000 Brazilian women protested at a supermarket that was discovered to be selling GE food.

In many of the world's largest food markets such as Europe, Japan, and Brazil, supermarkets have cleared genetically engineered food from their shelves, and global food companies have removed GE ingredients from their products. Leading pig and poultry producers have also promised not to feed their animals GE feed. Many governments have taken a precautionary approach on the issue and have instituted bans on the planting of genetically engineered crops, while nations such as Saudi Arabia, Japan, and Brazil have turned away shipments of GE contaminated commodities from their shores. All food producers should follow the lead of dozens of supermarket chains, restaurants and global food manufacturers, which are declaring their intention to avoid genetically engineered food in their products. These foods offer no benefits to consumers, yet it is consumers and their children and families who bear the risks.

Many countries around the world have laws to require labeling of GE products – Europe, Japan, Korea, New Zealand, Australia, Saudi Arabia, Russia, Poland, Czech Republic, Israel, and Taiwan are just some of the places where GE labelling laws exist or are being implemented [11]. In Italy, a presidential decree from March 31, 1999 stated that food products for infants or children "must not contain pesticide residuals greater than 0.01 mg/kg or genetically modified ingredients." In the United Kingdom, local authorities from Kent, Surrey, Oxfordshire, North Tyneside, Southampton and London's Lambeth have banned GE foods from their schools. Here in

Thailand, in the absence of clear cut guidelines governing the use of GMOs, consumers are continuously being kept in the dark.

Greenpeace Demands

It is well past time for our government to show its integrity for solving this problem to ensure the safety of our food supply by requiring independent, long-term environmental and health testing for all genetically engineered foods. Pending that, all companies must be required to label their products containing GMOs and steps must be taken to segregate GE from non-GE commodities used in food processing.

This episode also brings into sharp focus the willful adulteration of food stuff that has become a key feature of efforts by many food processing companies to increase market share and boost profits. Never before has food been so impregnated with foreign and novel substances brought about by genetic engineering. While the scientific verdict on these items is still unknown for the most part, each mouthful converts unwilling consumers as subjects in an experiment with potentially catastrophic results.

Greenpeace reiterates its demands:

To Government:

1. For the Thai FDA to immediately ban the use of GMOs in baby food as promised.[12]
2. For the immediate implementation of a full and strict mandatory labeling system for food and food ingredients containing or derived from genetically modified organisms or GMOs; and

3. For the removal of GM food from the country's food supply by the setting up of segregation systems for crop imports and the approval of enabling GMO legislation based on the precautionary principle.

To Food Companies:

1. For them to label their products containing ingredients currently derived from GE sources; and

2. For them to commit to eliminate GE ingredients in their products and source out non-GE ingredients.

To Food Outlets and Retailers:

1. For them to demand segregation and certification of food products from their suppliers.

---

[1] Statement made after Greenpeace test results in the US confirmed presence of GMOs in baby food http://www.pcc.com/lists/pedtalk.archive/9907/0021.html.
[2] The Nation newspaper 18th July 2001.
[3] http://www.cpthailand.com/group_index_trading.htm
[4] British Medical Association, The Impact of Genetic Modification on Agriculture, Food and Health, May 1999.
[5] Rebecca Goldberg & Gabrielle Tjaden, Are Btk Plants Safe to Eat? (Global Pesticide Campaigner, January 1991).
[6] FDA, "Guidance for Industry: Use of Antibiotic Resistance Marker Genes in Transgenic Plants," 1998, www.fda.gov (docket #98D-0340).
[7] Dr. Patrice Courvalin, "Transgenic Plants and Antibiotics," La Recherche 309, May 1998 (translated by Elisabeth Abergel for the Edmonds Institute).

[8] Marc A. Lappé, Ph.D., Britt Bailey, M.A., Chandra Childress, M.S., & Kenneth D.R. Setchell, Ph.D., "Alterations in Clinically Important Phytoestrogens in Genetically Modified, Herbicide-Tolerant Soybeans" (Pre-publication abstract), Journal of Medicinal Food (Vol 1., no. 4), Maryanne Liebert Publishers); see also Lappé and Bailey, Genetically Engineered Soya: Contaminating the Great Treasure (Center for Ethics and Toxics, 1997).

[9] In a document leaked to Greenpeace, PR firm Burson Marsteller advised EuropaBio (a consortium of biotechnology companies with interests in Europe) to refrain from partaking in any public debate and leave it to " those charged with public trust, politicians and regulators, to assure the public that biotech products are safe." See: Communications Programmes for EuropaBio, Burson Marsteller, January 1997.

[10] Canadian Royal Society Expert Panel Report entitled (2001) "Elements of Precaution: Recommendations for the Regulation of Food Biotechnology in Canada" released Feb. 4/01, An Expert Panel Report on the Future of Food Biotechnology prepared by the Royal Society of Canada at the request of Health Canada Canadian Food Inspection Agency and Environment Canada see:
http://www.rsc.ca/foodbiotechnology/GMreportEN.pdf.
Millstone, E., Brunner, E. & Mayer, S. (1999) Beyond “substantial equivalence”. Nature, 401, 525-526.

[11] Governments worldwide require regulation and labelling of GE foods,” Greenpeace Background Information, International Genetic Engineering Camapign, May 2001.

[12] In June 2001, secretary of FDA has promised the Thai public that they will not allow GMO ingredients to be used in baby food unless somebody is able to prove its safety.