



# Genetically Engineered and Irradiated Foods: The FDA's Twin Failures

The decisions to legalize genetically engineered and irradiated food are prime examples of how the U.S. Food and Drug Administration has allowed corporate America to dictate what consumers eat, rather than protecting public health.

In neither case did the FDA demonstrate that these foods are safe for human consumption. On the contrary, the FDA ignored extensive research showing that irradiated food contains birth defectand cancer-causing chemicals. For genetically modified organisms (GMOs), the agency did not require any safety testing whatsoever.

To compound these flaws, the FDA failed to consider the impact that eating GMOs and irradiated foods could have on the human diet. The agency wrongly assumed that neither would comprise a large portion of our food intake. However, upwards of 60 percent of our food contains GMOs. And with the pending approval of irradiation for ready-to-eat foods such as frozen dinners and luncheon meats, more than half of our food supply could legally be irradiated.

The FDA operates under a federal mandate to ensure the safety of new foods and the technologies that are used to produce them. Instead, in these two instances, the agency has bowed to pressure from multinational agribusiness corporations that are striving to cut costs and increase profits under the guise of improving food safety.

## Following the FDA's Fumbles

Both genetic engineering and irradiation are considered "additives" under the 1958 Food Additives Amendment to the Food, Drug and Cosmetic Act. This federal law requires companies seeking to introduce a new food additive to first gain approval from the FDA.

Before granting approval, the FDA is required to establish "a reasonable certainty in the minds of competent scientists that the substance is not harmful under the intended conditions of use." However, it is widely acknowledged that it is impossible to be absolutely certain that any substance is absolutely harmless.

Moreover, the FDA must establish a 100-fold safety factor before legalizing an additive. This means the agency must determine the highest level of exposure to which animals are unharmed, and then divide that level by 100. Disregarding its own rules, the agency never established a safety factor for irradiated food or GMOs.

Furthermore, the agency's own guidelines, "Toxicological Principles for the Safety Assessment of Direct Food Additives and Color Additives Used in Food," describe in explicit detail a battery of toxicity tests that must be conducted on proposed food additives. In yet another failure, the agency did not follow these principles before legalizing GMOs and irradiated food.

While hundreds of studies have been conducted on irradiated food, FDA officials claim only seven of the selected 441 studies they analyzed were "properly conducted, fully adequate by 1980 toxicological standards, and able to stand alone in support of safety." With the shaky assurance of just seven studies, which have subsequently been shown to be inadequate, the FDA approved irradiated food for public consumption.

The FDA gave the green light to GMOs by bestowing them the status of Generally Recognized As Safe (GRAS). Translation: The agency did not require any testing of GMOs before approving their sale to the American public. Companies can volunteer the results of their studies to the FDA, but the agency is not obliged to establish the

safety of genetically modified foods.

As for irradiated foods, the good news is that specific approvals must be granted for each type of food proposed for irradiation. The bad news is that the FDA has granted approvals—without following its own safety rules—for beef, pork, poultry, fruit, vegetables, mushrooms, juice, eggs, sprouting seeds and spices.

#### **FDA** Misinformation

Although the FDA and the U.S. Department of Agriculture currently require irradiated food to be labeled as such, the food industry is leading a campaign to allow the use of the misleading and meaningless euphemisms "cold pasteurized" and "electronically pasteurized." Although consumers have rejected these phrases as deceptive and sneaky, the FDA has yet to rule them out.

The FDA does not allow companies to claim their products are "GMO free" unless they can verify that the products do not contain any GMO components, a complicated feat. And, as genetically engineered foods are not labeled as such in the U.S., there is no way for consumers to be informed of exactly what they are eating.

#### FDA Guesswork

In preparation for its first major approval of irradiated food, the FDA stated in 1980 that it never expected irradiated foods to comprise more than 10 percent of the American diet. However, having approved the irradiation of many staple items, the FDA is permitting a large portion of our food supply to be irradiated. This amount will grow to more than half of our food supply if the agency legalizes irradiation for ready-to-eat foods, which the National Food Processors Association estimates to comprise 37 percent of the typical American's diet.

Since genetically engineered corn comprises more than 60 percent of all corn grown in the U.S., GMO products can be found in everything from cereals and breads, to veggie burgers. Between the heavy-handed influence of the biotech industry on government, the threat of genetically modified pollen drifting across crops, and the lack of labeling for genetically engineered food, all of our food could contain GMOs and we would be none the wiser.

### The Corporate Hoax

As a thinly veiled public-relations ploy, the irradiation industry is marketing itself as a solution

to world hunger. Like other inappropriate hightech solutions proposed in the past, this is an industry pipe dream.

Irradiation destroys a large proportion of the nutrients in food, a problem that is compounded as food sits out its increased shelf life. Cooking escalates the problem further still. The end result is empty-calorie food that could actually increase nutritional deficiencies. This is hardly a recipe for feeding the world.

Furthermore, irradiating food will further industrialize and consolidate the world's food production, distribution and marketing industries. Rather than growing their own food, farmers in developing countries will plant mono-culture cash crops that devastate the ecology and provide them with no food of their own and little money with which to buy any.

Genetically engineered crops do not stand to feed the world either, as they typically produce lower yields than traditionally bred plants. And as many genetically engineered plants require more pesticides, soil fertility and the success of future crops are compromised. Rather than feeding the world, GMOs make farmers slaves to the biotech seed and pesticide industries.

Moreover, b oth genetically engineered and irradiated foods are more expensive in economic and environmental terms than traditionally grown foods. In all regards, they pose a nightmare to sustainable development and economic stability.

The world hunger crisis not a problem of food production, but rather a problem of food access. The spread of genetically engineered and irradiated food would widen the gap between rich and poor by increasing the disproportionate distribution of the world's wealth, and the indiscriminate exploitation of the world's resources.

The close cooperation of the FDA and large corporations on the issues of genetically modified and irradiated food endangers the health of the American public. Moreover, due to the power and influence of the U.S. government and corporate America, their endorsement of these inappropriate technologies could spell disaster for the health and prosperity of the entire world.



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