



GM Foods Are Not Safe

GM foods are not properly tested for human safety.^{1,2} Although human studies are not conducted, adverse findings in animal studies have prompted the American Academy of Environmental Medicine to call for an immediate moratorium on GMOs. They cite problems with reproduction, immunity, digestion, aging, insulin and cholesterol regulation, and organ function. The following is a selection of studies showing health effects.

- Rats fed Bt corn grew slower, suffered liver and kidney problems, and had higher blood levels of certain fats³
- Rats fed Bt corn over three generations suffered liver and kidney damage and altered in blood chemistry⁴
- Mice fed Bt corn showed disturbances in immune system cell populations and biochemical activity⁵
- Mice fed Bt corn over four generations showed progressive abnormal changes in the liver, spleen, and pancreas; major changes in the pattern of gene function in the gut (affecting, for example, cholesterol production, protein production, and breakdown); and reduced fertility⁶
- Sheep fed Bt corn over three generations showed disturbances in the functioning of the digestive system of ewes and in the liver and pancreas of their lambs⁷
- Liver, pancreas and testes functions were disturbed in mice fed GM Roundup Ready (RR) soy^{8,9,10}
- Mice fed GM RR soy over their lifetime showed more acute signs of aging in the liver¹¹
- Rabbits fed GM RR soy showed enzyme function disturbances in the kidney and heart¹²
- A review of 19 rat and mouse studies with BT or RR corn or RR soy shows significant organ disruptions, particularly in livers and kidneys¹³
- GM peas* caused allergic-type reactions in mice¹⁴
- Rats fed GM canola developed enlarged livers, often a sign of toxicity¹⁵
- GM potatoes* fed to rats caused excessive growth of the lining of the gut, similar to a pre-cancerous condition^{16,17}
- Rats fed GM tomatoes developed stomach ulcerations¹⁸

*Experimental food, not commercialized.



The stomach lining of rats fed GM potatoes showed excessive cell growth, a condition that may lead to cancer. Rats also had damaged organs and immune systems.¹⁷

Gene Transfer:

For years, regulators and the biotech industry claimed that horizontal transfer of GM genes into human or animal cells, or gut bacteria, would not occur. Research findings challenge this claim.¹⁹

- GM DNA was detected in the digestive tract of sheep fed GM feed²⁰
- GM DNA in feed is taken up by the animal's organs. Small amounts of GM DNA appear in the milk and meat that people eat^{21,22,23}
- The only human feeding study ever published showed that portions of the Roundup Ready soy transgene transferred into intestinal bacteria and may have continued to function²⁴

The biotech industry claims no one has gotten sick—without supporting data

Biotech advocates often respond to the safety question by asserting that people have been eating GM foods in the United States for 15 years without ill effects. But GM foods are not labeled in the US and consumers are not monitored for health effects. To identify GMOs as a cause of problems, symptoms would have to be fast-acting, acute, and unique (or unusual). One GM food supplement, L-tryptophan, produced an epidemic of a new disease with these very characteristics, yet it took four years to discover and was almost missed.^{25,26}

Numerous health problems have increased in the US since GMOs were introduced. A report by the US Centers for Disease Control shows that food-related illnesses increased 2- to 10-fold in the years between 1994 (just before GM food was commercialized) and 1999.²⁷ Multiple chronic illness rates jumped from 7% in 1996 to 13% in 2004. Increases in food allergies, autism, reproductive and gastrointestinal disorders, and auto immune diseases have all been reported. But without post-market surveillance or human feeding studies, any link to GMOs cannot be proved or disproved.



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