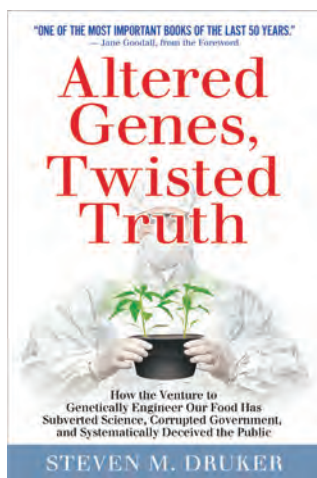


Altered Genes, Twisted Truth

HOW THE VENTURE TO GENETICALLY ENGINEER FOOD HAS SUBVERTED SCIENCE, CORRUPTED GOVERNMENT, AND SYSTEMATICALLY DECEIVED THE PUBLIC



Steven M. Druker
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The subtitle of *Altered Genes, Twisted Truth* is a summary of its contents—"How the venture to genetically engineer our food has subverted science, corrupted government, and systematically deceived the public." Steven Druker is a public interest attorney with a background in the history and philosophy of science, human development, and ethics. Like many of us, Mr. Druker did not set out to become an activist—

he just wanted to learn the truth about genetically engineered (GE) foods. But the search for truth led him to start the Alliance for Bio-Integrity, to sue the Food and Drug Administration (FDA) for its failure to require labeling of GE foods, and, ultimately, to write a book informed by volumes of files released during the discovery portion of the lawsuit.

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The first ten of the 14 chapters are arranged institutionally. They demonstrate how various institutions—from the scientific establishment to various federal agencies to the media to risk assessors—have failed to inform the public and protect it from the dangers of GE foods. Throughout the book, the author's arguments are supported by case histories—including L-tryptophan and the FlavrSavr tomato—as well as other research and documentation.

In the beginning of Chapter 4, the book shows how proponents of GE food sought to overwhelm the public's impression of the unnaturalness of GE food with a counterimpression that genetic engineering is just a minor extension of conventional breeding. That claim would continue to be a major strategy. It is refuted, however, by the rest of the chapter, which serves as a primer on GE techniques.

The early chapters provide an institutional and political history of the development of GE foods and GE crops. As I read the account, I return with the recurring question, "Yes, I remember this problem. How did that go away?" I've learned here that what happened was a conspiracy among corporate interests, regulators, and especially scientists to hide the truth.

As a scientist with an organization that relies on science daily, I am particularly disturbed by that "especially scientists" part. Mr. Druker says that in focusing on companies like Monsanto as solely responsible for the problems their products pose, people "overlook the reality that these corporations could not have commercialized any GE foods if the scientific establishment (and especially the molecular biologists) had not prepared the way by systematically deluding the government and the public about the basic facts. . . . Further, it is important to realize that the endeavor to avoid regulation of genetic engineering pre-dated the modern biotechnology industry. When more than a hundred biologists convened at Asilomar in February 1975 in an effort to maintain control over how their research with recombinant DNA technology would be supervised, and to deter the involvement of outside regulatory agencies, no companies employing that technology even existed. . . . [M]ost of the early biotech companies were . . . launched by molecular biologists and venture capitalists, and major chemical companies like Monsanto and DuPont did not significantly enter the picture until much later. . . . Moreover, that initial lobbying endeavor was primarily conducted by university scientists, universities, and other scientific institutions." So, perhaps the scariest outcome of the GE revolution is the damage it has done to science, which results in the power that chemical companies can exert over universities to prevent independent research into the impacts of pesticides.

The promotion of GE foods—especially GE crops—depends largely on the myth of the benefits of those crops. This myth is refuted by an examination of the development of insect resistance to Bt through the use of Bt corn and the development of resistance to glyphosate and other herbicides to which crops have been engineered to be tolerant. The final chapter makes the case for abandoning the genetic engineering venture by refuting claims of benefits in view of the success of agroecological/sustainable methods like organic agriculture.

As Jane Goodall says in the Foreword, *Altered Genes, Twisted Truth* goes "a long way toward dispelling the confusion and delusion that have been created regarding the genetic engineering process and the foods it produces."