Modified

GMOS AND THE THREAT TO OUR FOOD, OUR LAND, OUR FUTURE

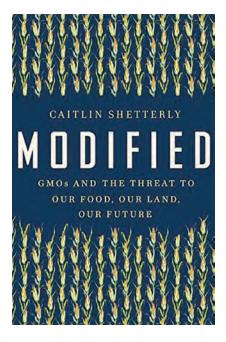
Caitlin Shetterly, New York: G.P. Putnam's Sons, 2015, 341pp.

his personal journey for the author, wife, and mother captures the escalating controversy over genetically engineered (also called genetically modified (GMO), or transgenic) food, the adverse impact on those who eat, grow, and study it, and the environment. The author, Caitlin Shetterly, set out to write a primer "for all those parents, out there who didn't understand (like I didn't) what the hell this GMO discussion was all about." She was actually drawn into this investigation, talking with doctors, researchers, farmers, and regulators, because of her own autoimmune disease.

Ms. Shetterly was diagnosed with eosinphlia, an immune system disorder that

increases the body's production of eosinophils (white cells) in response to allergens, drugs, or parasites. The symptoms, "rash, arthritis, arthralgia, and other systemic symptoms," were diagnosed by her doctor, who had come to believe that the cause is GMO corn. According to the doctor, "[S]ome people might be developing a kind of chronic allergic response that was caused not by the corn itself, but instead by the proteins created by both the enterotoxins, bred into the corn to make it pest-resistant, and the proteins created from making it "Roundup Ready" (or impervious to the herbicide glyphosate marketed by Monsanto as Roundup)." Her symptoms subsided when she eliminated GMO corn from her diet.

In writing about the food system, the author describes a web of corporate influence, chemical and GMO contamination, intrigue, and intimidation of independent scientific researchers that have all the markings of a thriller. The growth of the GMO market, ineffective government oversight, secrecy of food ingredients, and broadscale contamination parallels the growth of the pesticide industry. Both claim to offer the promise of safe, highly productive, economical food production. The GMO story paints a picture of industry and government betrayal of their assurance to those who grow and consume food. It is explained in the author's journey and the farmers and researchers she speaks with along the way, intricately



woven into industrial agriculture's chemical dependency on technology not fully studied for its effects on human health and the environment, involuntary genetic and chemical trespass on property and body, causing widespread contamination. As the author points out, you cannot see GMOs, just like you cannot see pesticides, in your food and the industry has spent tens of millions of dollars fighting state ballot initiatives and laws to make sure that consumers in the U.S. do not get clear information on GMO ingredients or pesticide use at the point of purchase.

Last fall, The New York Times published an expose, Doubts About the Promised Bounty of Genetically Modified Crops, which affirmed what scientists, attacked by industry and government, had been writing about since the 1990's—"genetic

modification in the United States and Canada has not accelerated increases in crop yields or led to an overall reduction in the use of chemical pesticides."

The author writes about the intrusion of GMOs and pesticides into the agricultural landscape as having devastating effects on biodiversity, including pollinators. She unravels the history of European labeling of GMO products, and the story of Oaxaca, Mexico's efforts to maintain the diversity and purity of its corn. You cannot finish reading this book without being troubled by corporate influence and deception associated with one of our most intimate acts, eating food, including efforts to ruin the reputation of respected scientists and pressuring a prestigious science journal to retract a pivotal peer reviewed article.

The author writes, "When you learn of the connection between Big Ag and Big Pharma you might wonder what Big Pharma has to gain from an allergy and autoimmune epidemic caused by pesticides and/or GMOs." An lowa corn farmer, expounding on the virtues of GMOs during the author's road trip through the nation's heartland, discloses in the end that his brother's "dire health problems" and son's "allergy" are linked to GMOs. His family is now buying organic when they can.