Fahrenheit agbiotech

The Future of Food

Written and directed by
Deborah Koons Garcia

Lily Films, 2004
89 minutes
DVD and VHS, \$20

Reviewed by Thomas J Hoban

Genetically modified (GM) crops have fallen far short of early expectations in developed markets, and their future acceptance remains uncertain. European opposition has solidified, and studies from Rutgers¹ and others have shown that US consumers are confused and concerned about GM ingredients in their food. Western consumers are increasingly choosing alternatives to 'industrial' foods, as demonstrated by the rapid growth in the market for organic foods. A recent documentary, *The Future of Food*, provides an excellent overview of the key questions raised by consumers as they become aware of GM food. It also is an unabashed attack on the agbiotech industry and its initial products.

The film's writer/director, Deborah Koons Garcia, the widow of Grateful Dead guitarist Jerry Garcia, is a prominent figure in the increasingly vocal antibiotech movement in California. Her film integrates vintage footage (e.g., from the 1973 Asilomar conference) with profiles and personal stories from critics of agbiotech. Agricultural policy expert Charles Benbrook, activist Andrew Kimbrell, and others appear as the film's heroes in a struggle against the release of GM crops into the environment.

The chief villain of the piece is none other than Monsanto, the world's leading producer of GM crops, which is singled out from the rest of the industry. The company's lawsuit against Canadian farmer Percy Schmeiser is roundly criticized, along with the broader issues of gene patenting and corporate control of the food supply. One segment highlights the political connections between Monsanto and the highest levels of US government, including former George W. Bush cabinet members Anne Veneman and John Ashcroft. The film indicts Monsanto for excessive influence over government regulation, by virtue of political appointments of key corporate executives at the highest levels of the US Food and Drug Administration (FDA), Environmental Protection Agency and US Department of Agriculture. Monsanto refused Garcia's requests for interviews for the film.

Some of the most disturbing issues raised involve cracks in the regulatory and scientific foundations on which the agbiotech industry rests. Criticism is aimed at the FDA policy of "substantial equivalence" of GM to non-GM crops. The film argues that we don't know enough about the long-term effects of GM crops on human health and the environment. This will be particularly evident as genetic transformations become more

complex (i.e., stacked genes) and the foods become functionally non-equivalent (i.e., nutraceuticals.) The infamous Starlink and Prodigene incidents are highlighted as instances of regulatory problems. The film makes a case for consumer choice through labeling, industry opposition to which further alienates and confuses consumers. Consumers are already choosing non-GM food by buying more pricey organic products.

The film also surveys the key social, economic and ethical issues associated with GM food crops. As most US consumers have little connection with agriculture or the food production system, Garcia contends that many people do not even realize that GM crops end up in our food supply. Much of the European rejection of GM crops is due to the fact that food is more significant to their culture, so they care more about how their food is produced.

Finally, *The Future of Food* levels important charges against the public land-grant university system, highlighting concerns that have arisen as universities increasingly trade their independence for corporate contributions. Our universities are supposed to ask tough questions, but now there is limited tolerance for dissenting views within the system. The film describes the struggles over tenure between Ignacio Chapela and the University of California, Berkeley, over his outspoken criticism of the university's ties to the biotech industry. Citizens expect universities to serve the public interest; in return, academia is expected to pursue intellectual diversity through a truly objective perspective.

As an alternative to GM crops, Garcia presents the case for less industrialized forms of agriculture, such as organic farming—which now represents the 'gold standard' for many Western consumers. The film also documents a need for locally grown produce to conserve resources, benefit local farmers and ensure better quality, part of a movement known as Community Supported Agriculture.

Those who argue that GM crops are necessary to feed the world should realize that most Western consumers are not convinced. Research demonstrates that people prefer organic food for a wide array of ethical, emotional and environmental reasons². In fact, major food companies have acquired organic brands so they can cater to this upscale market. The agbiotech industry has been warned that food processors and retailers could effectively hamper or even shut down the food biotechnology enterprise if consumer rejection keeps growing.

Though the film unapologetically presents only one side of the issues addressed, Garcia's goal is always clear: to raise consumers' awareness by telling the story of modern, industrial food production and the increasing presence of GM content in our food supply. In the same vein as *Super-size Me* and *Fahrenheit 9/11*, *The Future of Food* draws attention to critical questions about food production that need more public debate.

As someone who has monitored the public debate about biotech for 15 years, I welcome this film. The current Bush administration has let the government regulatory system wither on the vine, making good on the 1992 Bush-Quayle promise to "take the shackles off the industry." Such shortsighted policies are, however, backfiring, as agbiotech increasingly struggles for acceptance by Western consumers.

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1. Hallman, W.K. *et al.* Americans and GM food: knowledge, opinion and interest in 2004 (Food Policy Institute, Cook College, Rutgers-The State University of New Jersey; 2004).
2. Organic shoppers may not be who you think they are. Food Marketing Institute (Washington, DC; 2001).