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# Hungry for Change on the Cal Poly Campus

*Rebecca Peters*

Have you ever woken up feeling nauseous or dizzy? Or gone to bed after a long night kneeling in front of the "porcelain throne"? I am not referring to what may happen after a long night of drinking, but rather what some students may experience after a meal at Vista Grande or Metro Station, two Cal Poly campus-dining halls. So what's the problem? Cal Poly is not alone-- annually, 76 million people get food poisoning in America (*Food, Inc.*). There are many culprits, but badly made food is a major cause. In 2002, the company ConAgra recalled 19 million pounds of ground beef because it was suspected of contamination (*Food, Inc.*). During the 1970s, as filmmaker Robert Kenner found out for his film *Food, Inc*, the top five beef companies controlled 25% of the market; now the top five controls more than 80% of all beef produced in the United States. The runoff from slaughterhouses contaminates vegetables as well; in 2006 the dangerous bacteria E. coli infiltrated spinach, resulting in hundreds of hospitalizations ("Update"). However, there is a simple solution to these travesties. Farming using organic methods can reduce food related illness and utilize a more sustainable approach to food production. Organic farming is a better method for food production than conventional, mass manufactured food, and Cal Poly should supply mostly or all organic food to its students.

So what is organic, anyway? The definition provided by USDA states that organic means "using materials and practices to enhance the balance of natural systems and integrate parts of the farming system into an ecological whole" (Pollan). This definition is not thorough enough because it allows the preponderance of the "industrial organic" phenomenon environmental journalist Michael Pollan refers to throughout his book, *The Omnivore's Dilemma*. Food grown halfway around the world and ripened with ethylene gas can be considered organic by the USDA definition. Instead, organic farming

should be a holistic approach to local small-scale food production, with ecologically balanced agricultural principles and without the employment of chemicals, pesticides, or antibiotics.

Understanding organic origins and history is vital to realizing organic values. Only after World War II were chemicals such as ammonium nitrate fertilizer, organophosphate nerve gas, and genetically modified organisms introduced for farming "efficiency," as Dr. Kathleen Delate, a Professor of Horticulture at Iowa State University puts it. The use of these chemicals produces significant economic benefits but not without environmental and social detriments. A strong backlash resulted from the use of these chemicals. The 1970s gave birth to the environmental decade and the "know your farmer, know your food" movement. The uniformity, conformity, and cheapness of these new food production methods led to unintended consequences (Delate).

Opponents of organic methods would argue that there is nothing wrong with systematically producing a lot of inexpensive food on a little bit of land. In fact, some, such as the inventor of synthetic fertilizers, Norman Borlaug, would go so far as to say that organic methods will never be able to "feed the world." These are invalid arguments. Overproduced, subsidized perennial industrial agriculture is not currently helping world hunger. If anything, industrial agriculture exacerbates it by putting rural farmers out of business with cheap food. The cost of such cheap food is hidden in the massive costs to the environment and human health (Borlaug).

Current mass food production is not a resilient or sustainable means of food manufacturing. Organic farming practices, on the other hand, allow flexibility and can hardily maintain production in times of economic stress. Organic methods such as crop rotation, diversity, and responsible waste treatment mitigate environmental impacts. Mass production methods depend on concentrated animal feeding organizations (CAFOs), antibiotics, synthetic fertilizers, pesticides, and using genetically modified monoculture crops, all while using massive amounts of petroleum (Weber).

Perhaps the greatest distinction between organic and mass food production lies in the way animals are raised for meat and dairy. Even by the loose USDA organic standards, livestock must be fed 100 percent organic feed with no growth promoters or antibiotics. Mass manufactured meat is a whole other story. Meat is produced by assembly lines to keep up with current consumption rates, which exceeds 200 pounds of meat per person per year (*Food, Inc*). How can these astronomical rates be sustained? By mechanizing the process to where food is made in a factory, not grown on a farm. Animals—cows, pigs, chickens, and even fish—are fed corn in the commercial production model because it results in exponentially fast growth and drives down the price of meat. Chickens grown with this method, for example, grow so fast that their bones and muscles cannot keep up with the weight gain. In fact, compared to the 1970s, chickens now are raised and slaugh-

tered in half the time at twice the size (*Food, Inc*). Allen Trenkle, a ruminant nutrition expert at Iowa State University interviewed for the *Food, Inc* film, has spent the past twenty years gathering evidence that corn cannot be sufficiently digested by cows. This leads to acid resistant strains of E. coli bacteria, which are extremely harmful to humans when ingested. The CAFO method of livestock production increases the likelihood of a bacterial outbreak because the animals are crammed in close quarters, standing knee deep in ordure. According to Ben Hardin of the USDA, up to twenty-eight percent of cattle entering processing plants may carry E. coli strains that cause food poisoning in humans.

There are three ways mass production farms deal with the issue of overcrowding leading to disease: antibiotics, growth hormones, and pesticides. These commercial farming practices have a significant negative impact on human health, especially children. When humans consume contaminated plants or animals, "a build up of toxins can cause brain damage and kidney failure, especially in young and developing children" according to *Protecting the Home We Live In*, an environmental issues journal. Online resource *Green Facts* states that the system of glands that secretes hormones and regulates bodily functions is easily short circuited by synthetic chemicals that mimic or block hormones when they are absorbed into the body ("Scientific Facts"). Hormone disruptors interfere with the processes of the endocrine system, which control the development, reproduction, behavior, and growth of humans ("Scientific Facts"). The effects of hormone disruptors in humans have already been proven to be lethal, and the number of fatalities will continue to rise if these chemicals are used in industrial food processes. In addition, bacteria can build a resistance to antibiotics and lead to mutant strains, such as in the 2006 O157:H7 E. coli outbreak ("Update").

Commercial farming pollutes the water, air, and soil through iniquitous, unsustainable practices including use of pesticides, synthetic fertilizers, and the burning of fossil fuels to transport food. Persistent pesticides can be defined as chemicals that are present for more than 20 years after their initial application, and often contain lead and arsenic ("Monoculture"). "Mass global agriculture depends on synthetic fertilizers," the social justice organization Population Media Center says, but even when infused with growth chemicals, the fertilizer is yielding less ("Rx for Survival"). The huge volumes at which the food is produced in such concentrated areas with the need to ship food incredible distances leads to a dependence on petroleum—some 400,000 gallons per year. Bringing a single steer to slaughter takes 75 gallons of oil (*Food, Inc*). The mass production system is too dependent on fossil fuels and cannot respond to the rapidly changing economic climate. Notably, the price of food went through the roof when gas prices spiked. Alternatively, organic farming practices do not include the use of chemicals, but rather take advantage of biocontrols (using predatory animals to prey on pests), thus keeping the air, water, and soil free of toxins. Organic farming also does not call for vast amounts of oil for transportation due to its small scale and locality (Weber).

So, why should you care? The implications of food issues and their correlation to the environment's stability and human health are arguably the most important issue to be pursued in science, medicine, and politics. "By now it makes little sense to distinguish the health of the individual from that of the environment," Pollan says in an interview with *Organic Gardening* magazine ("Pollan Shoots Down"). The task of reforming food policy must not be underestimated in a world where human health is dependent upon what we eat. Students, as consumers, have a powerful voice. A prime example is when Wal-Mart announced in 2006 the drastic shift in the products it would be offering due to strong customer demand for rBST (a growth hormone) free milk and organic food options.

Cal Poly has been making strides as well, thanks to student demand. Leftover food is composted; plastics and glass are recycled; and there are some vegetarian, non-dairy, and gluten free options (Campus Dining). However, more can be done, and you vote in three ways everyday: breakfast, lunch, and dinner. Cal Poly should set an example for others, as it is one of the largest agricultural schools in the United States. What can you do? Support the Cal Poly organic farm. Buy organic, locally produced foods at the downtown farmers market; the average meal has traveled 1,500 miles before it reaches your dining table (*Food, Inc*). Stand up against the Orwellian, mechanized food production system and hold toothless regulatory agencies like the FDA and USDA responsible for protecting you. You can change the world with every bite. Be hungry for change.

## Bibliography

Borlaug, Norman. "Against Organic Farming," *Marginal Revolution*, http://www.marginalrevolution.com/marginalrevolution/2006/12/against_organic.htm (accessed February 2, 2010).

Delate, Kathleen. "What is Organic Agriculture? History," *Organic Agriculture*, http://extension.agron.iastate.edu/organicag/history.html (accessed February 1, 2010).

*Food, Inc*. DVD. Directed by Robert Kenner. Magnolia Home Entertainment, 2009.

Hardin, Ben. "Research Shows Cattle Are Infected With E. coli Mostly in Summer," *USDA Agricultural Research Service*, http://www.ars.usda.gov/is/pr/2000/000320.htm (accessed February 1, 2010).

"Monoculture." *Encyclopedia Britannica Online*, http://www.britannica.com/EBchecked/topic/9620/agricultural-technology/67784/Monoculture#ref=ref558283 (accessed February 2, 2010).

Pollan, Michael. *The Omnivore's Dilemma: A Natural History of Four Meals*. New York: Penguin, 2007

"Pollan Shoots Down Organic Myths at Grist Event," *Grist: A Beacon in the Smog*, http://www.grist.org/article/2009-10-07-pollan-shoots-down-organic-myths-at-grist-event (accessed February 1, 2010).

"Rx for Survival: A Global Health Challenge," *Population Media Center* (accessed February 24, 2008).

"Scientific Facts on Endocrine Disruptors," *Green Facts: Facts on Health and Environment*, http://www.greenfacts.org/en/endocrine-disruptors/endocrine-disruptors.htm (accessed February 20, 2008).

"Update on Multi-State Outbreak of E. coli O157:H7 Infections From Fresh Spinach, October 6, 2006." *Centers for Disease Control and Prevention*, http://www.cdc.gov/foodborne/ecolispinach/100606.htm (accessed February 1, 2010).

Weber, Karl, editor. *Food, Inc.: How Industrial Food is Making Us Sicker, Fatter and Poorer—and What You Can Do About It*, New York: Public Affairs, 2009.