

Tied to our Roots: A Look at Modern Agriculture

The man ahead of me in the check-out line is wild-eyed and grinning. He watches the rolling conveyor belt, the accumulating bill, and the young clerk's hands intently. He pierces the comfortable silence mercilessly in order to talk to himself. "Man-oh-man," he says animatedly, "Just look at how much I'm gettin' fur this price! I'll sure say it's a good deal right here." He has about five fifty-count bags of chicken nuggets, frozen dinners, cheesy potato chips, and some almost radioactive-looking green drink. "How did we get here?" I wonder.

In the big picture of human history, food has towered over our daily lives as well as our group economics and politics. In the aftermath of the green revolution of agriculture and the changes in governmental policies in the 1970s, however, Americans currently spend a lesser portion of their paycheck and their time on food than any society has ever had the luxury to. As a consequence of this freedom, we have lost our attentiveness to food as one of the most basic of necessities for survival on this planet, a topic with which sustainability is of paramount importance. We walk into the grocery store to encounter abundance, an impression of variety, and convenience, complete with little pictures of farmhouses and rolling hills on the packaging to reassure us of its origin. As far as we know, strolling down colorful aisles, the food does come from 1930s-style family farms. We all recognize that low-nutrient fast food is on the rise, and so too, obesity. But few realize the profound transformation that our entire food network has undergone. It has changed more in the past 50 years than over our prior 10,000-year history as farmers rather than foragers. Food products today are processed, seasonless, shipped hundreds if not thousands of miles,

monocultured, filled with non-food chemicals, and dominated by large corporations. With an emphasis on bigger, faster, and cheaper, we have created a construct that degrades the health of the environment, individuals, and local economies.

The intentions behind creating a uniform, chemical, and industrialized system were benevolent. Rising food prices in the early 70s gave us a scare. Cheap and plentiful became the priority, and we succeeded in reaching those ends. Federal farm policy, shifting its focus from supporting prices for farmers to boosting yields of a small handful of commodity crops, pushed farmers to increase subsidized production of otherwise unprofitable crops. Chemical and genetic agricultural technologies blossomed with new processes that solved centuries-old pest problems and lowered production costs. The system resulting from these strategies and consumer votes, however, is proving to effect more problems than it has solved.

We live now in an age where the younger generations, for the first time during periods of such continual and fantastic medical advancements, are predicted to have shorter lifespans than their parents. The state of food in this country is the main culprit. Still, medical doctors, not required to be educated in nutrition, will almost never advocate a complete nutritional plan for overall health or to fight the major plagues of our society that it does affect tremendously – heart disease, diabetes, and cancer. Far too often, a pill becomes the solution where some spinach would have done a better service.

Because of changes in agriculture, our diets have changed, and because of changes in diet, agriculture has changed. Bad calories like packaged rearrangements of corn, the meat most corn is poured into, and sugar are highly subsidized and have skyrocketed in

consumption. Nutrition has been complicated into a mess of razzle-dazzling health claims on packaged foods and slews of tips and tricks that people get lost in. Really, disease preventing and fighting nutrition can be summarized simply with "Eat food. Not too much. Mostly plants," as Michael Pollan eloquently states -- "food" indicating little processing. But regardless of what you elect to eat, if it is out of the mainstream supply even simple produce has less nutritional value than it once did. Depleted soils, genetic engineering funneling nutrients to greater biomass, long-haul shipping, and engineered shelf-lives all decrease nutritional value.

When most people think of environmentalism, plastic shopping bags and gas mileage first come to mind. Agriculture, however, plays an enormous role in the state of the planet, many of the same factors for health being issues for the environment as well. Irrigation alone accounts for nearly 40 percent of the US's daily water use according to a 2005 statistic, not to mention water involved in processing of food. Pesticides and fertilizers are leached out, most dramatically affecting aquatic ecosystems where they commonly cause eutrophication. There is habitat destruction from the vast land use, the threat of collapse due to monoculture, soil erosion and depletion, and more -- all deserving of an essay in and of themselves. One piece of our change in tastes, the increase in meat consumption, weighs most heavily. Naturally, as we raise the trophic level at which we attain calories, efficiency plummets. Meat, mainly because it requires most of the grain we grow to produce, uses more water, land, chemicals, and fossil fuels than vegetarian food. The United Nations reports that the meat industry puts out more greenhouse gasses than all of the cars, trucks, trains, planes, and boats in the world combined.

Food, though we consider it a given in the First World, will have to be given more thought beginning now whether we like it or not. Even if we choose to ignore the outrageous health effects of the system in favor of our lifestyle, the environmental constraints will make change inevitable for my generation. In a world where the products we pick up in the supermarket tell no tale of their sources, it will begin with seeing these connections and the vast network that supports our plastic wrapped, tidily cardboard boxed provisions. Transparency is what we need. Connection to one's local land and community. So far, lack of corporate and governmental foresight has been allowed to flourish. If we leave the matter in the same hands, nothing will change until the most extreme consequences show their faces. With enough consumer and democratic voter action, however, better strategies to feed a booming population are close at hand. I have surmised that we have the information necessary to save the earth's ecosystems and resources; it has just become a matter of people's awareness. There will always be enough will among the aware.

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