

## The Organic Choice

From John

We've spent a lot of time over the past few weeks talking about ourselves, which is not particularly enjoyable for us and want to shift the conversation back to a much more comfortable topic; farming. At [Gardens of Eagan](#) a few Saturdays back there was a group of ag-school students touring the farm. We received a very sad letter from one of the students a few days later. Most of the student seemed to think the farm was a bit of a joke, that organic farming is inefficient and a hoax coming on the heels of the controversial and now infamous Stanford Study. Being trained in conventional thinking they believe in the untruths like 'it will take twice as much land to feed the world if we farm organically' and 'it is only for the rich.' The student was so discouraged that he wondered if he was in the wrong program and should consider dropping out of school because of how his classmates made him feel about organic farming. I would like to take on some of these issues, especially in light of organic farmers being put on the defensive by the 'gotcha' reporting in the media as of late. We must first take on the notion that industrial agriculture is the only way that we can feed the world. Currently, only about 30% of the global food supply is produced on industrial farms, the other 70% is produced by roughly 2 billion small scale farmers and fisherman. We have more than enough good farmland globally to feed billions more people than inhabit the planet today. Hunger exists today not because of a lack of production but because of waste, distribution issues and global poverty. We produce enough food globally to feed everyone, the problem is that inefficient distribution and lack of access wastes nearly 50% of the food supply before it makes it to the table. The UN World Food Program has done multiple studies that indicate that the solution to global hunger is not US style industrial production but rather, agro-ecological farming at the community scale in the developing world. Here we would call that local and sustainable. This also gets at one of the biggest criticisms of organic food which is cost. Does organic food cost more up front? Yes but what you pay reflects the true cost of production and distribution. 80 percent of what you will find in the grocery stores has hidden costs that are harder to see because they aren't on the price tag. Most of what is the grocery store is made of either corn or soy. These crops are heavily subsidized by the federal government payments and insurance indemnities. One example is that the federal government gave out nearly \$17 billion for corn syrup, high fructose corn syrup, corn-starch and soy oil while fruit and vegetables received almost nothing. Industrial monoculture farms also receive revenue guaranteed

### ON DECK

Not much else will change from this week except that we should some leeks with a slight chance of Brussels sprouts

insurance from the federal government. A corn and bean grower can buy an insurance policy guaranteeing a minimum price per bushel based on a projected yield per acre. The taxpayers pick up the tab for about 60% of the premiums and the all the payouts beyond the total premiums paid in (likely about \$12 billion this year). A small diverse vegetable farm receives no subsidies and has very few to no options for crop insurance. The Federal Crop Insurance Program creates other unaccounted for costs to the environment. Under previous subsidy programs, farmers had to follow basic conservation programs to receive federal money. They had to have basic protections to conserve soil and water. There are no such provisions under the insurance program, it actually encourages the farming of marginal lands. Under previous programs a farmer would be more inclined leave woodlots, steep slopes, waterways, windbreaks, wetlands and riparian zones intact in order to conserve water and soil. Since insurance pays by the acre, these areas are *guaranteed* revenue so long as they are planted. The tax payers are paying billions of dollars each year to pay farmers to plow up prairies, cut-forests, drain wetlands and plow right up to the water's edge. This is undoing all we have invested since the Dust Bowl and recreating the exact conditions that caused it in the first place. We are also blessed with a world class highway system which allows food to travel great distances in a matter of days. This is why you almost never see a cow in Minnesota but every grocery has plenty of beef or that most of the produce in the store comes from California. This distribution system while terribly inefficient can still remain profitable because it has the backing of the US tax payer and economies of scale. If these producers had to pay the true cost of production one of two things would happen, they would go out of business, or food costs would soar. This hardly is hardly a complete list of the true costs of most of the 'food' in the grocery store, this really just represents some of the ways that the government and tax-payers pay to keep processed foods dirt cheap (at least on the surface). There isn't space here to go into the environmental costs of these production systems, maybe next week. The bottom line is that all produce, organic or otherwise is more expensive per calorie than everything in the middle of the grocery store. However, most of the 'organic premium' does not go to farmers, it goes to the retailers and wholesalers. When you support a CSA you cut out that middle man and you can get certified organic produce at prices competitive with conventional produce at your local grocery store. Now to the flawed Stanford Study. Let's start with a quote from the Columbia Foundation executive director Susan Clark "The

*researchers started with a narrow set of assumptions and arrived at entirely predictable conclusions. Stanford should be ashamed of the lack of expertise about food and farming among the researchers, a low level of academic rigor in the study, its biased conclusions, and lack of transparency about the industry ties of the major researchers on the study. Normally we busy people would simply ignore another useless academic study, but this study was so aggressively spun by the PR masters that it requires a response.”*

This study has many flaws if for no other reason because of what it leaves out. When considering academic research it is important to consider where the funding comes from. It is known that millions of dollars flow into Stanford's Freeman Spogli Institute (the studies sponsors) from Cargill and Monsanto. One should also consider the study's co-author Dr. Ingram Olkin, who in the 1970's received funding from the Council for Tobacco Research to formulate a statistical algorithm that would make cigarettes appear less dangerous. I am by no means and anti-academic, but I spent enough time in academia to know that objectivity can be a difficult choice when your benefactors want another answer. The thing that rings clear in the study is that it was performed by statisticians, not farmers or even biologists or chemists for that matter. It was a meta-study or a study of (hand-picked) studies. These studies were based solely on vitamin content with little consideration for anything else. It is indeed tricky territory to make the claim that organic food is more nutritious than conventional especially since there are varying definitions of nutritious. What a farmer knows is that vitamin levels are affected first and foremost by ripeness. A tomato conventional or otherwise from California that was picked green, gassed with ethylene and trucked cross-country will never compete with one of our ripe picked tomatoes. There must be rigorous control of harvest time and the growth point of the plant to make sure the produce being compared is at the exact same point in its growth cycle. Otherwise you are comparing apples and oranges, not apples and apples. Another major issue is pesticides; whereby the researchers concluded that organic produce was no safer than conventional because pesticide residue is not harmful. They only compared two factors, is there pesticide residue, yes or no. Despite having an 81% greater chance having pesticide residues on conventional produce they were considered equals. Most organic produce does not have any residues and when it does it is generally in very low concentrations of a reasonably benign substance. Conventional produce not only has chemical residues from much more toxic materials at higher concentrations, it is often stacked. Stacking means that multiple chemicals were mixed and applied together from the same tank. So chemical exposures from conventional produce are not only much more frequent, but much stronger as well. The researchers insist that the pesticides are safe; if this is so then perhaps they should have talked about the roughly 20,000 farm workers that suffer poisoning and illness each year from pesticide exposure. Keeping in mind that most of these illnesses are from acute exposure not the accumulated effects of long-term exposure. The pitch in the study for increased use of GMO's and industrialization of our food system belies the powers behind this study. I would love to have a much longer conversation about the effects of the imposition of our industrial models onto developing societies. We can track the influx of illegal immigration to the passing of NAFTA when we dumped our subsidized corn into Latin America and put millions of peasant farmers out of business. We can talk about the 18,000 Indian farmers a year that committed suicide throughout the 90's because they were pushed into debt trying to grow GMO crops, because their tried and true methods

were torn apart and all the natural systems broke down or having to pay royalties on the varieties they have grown for time immemorial, now patented by American companies. Now please don't think this is a diatribe against capitalism or free markets, our farm is a for-profit company and god-willing we will turn one one day. The point is that what these people are trying to convince us that there is a one size fits all answer, and that answer is that they should control the means of production. In my opinion, the jig is up, RoundUp ready crops have only been commercially available since 1996 and the magic bullet has strayed far from target. There are farmers spraying the aforementioned herbicide at 25 times the recommended rate to try and kill the resistant weeds. The Dow AgroScience solution, just re-engineer the plants genes for 2,4D resistance. If there are any chemists here, you will recognize that as Dichlorophenoxyacetic acid, an important reagent in the Vietnam era defoliant colloquially known as Agent Orange. That's right, Agent Orange coming to a farm field near you. It doesn't sound nice which is exactly why the industry is using all it's might to prevent GMO food from being labeled and ripping organics.

There is a better way help the two billion plus small farmers around the planet do what they have always done. Farming is a local and regional activity, not to be dictated in a corporate board rooms or the chambers of government. Local conditions will dictate the best means of production and the farmers that have worked the land for generation upon generation should be empowered to make decisions for themselves. They know the best varieties, they know how to deal with pest and fertility issues, and they know how to manage water and resources. If there is one area farmers around the world need help it is in distribution and access to markets, markets where they can get a fair price and make a living. They need improved infrastructure allowing them to waste less and sell more. And likewise consumers need better access to real food that is both affordable and nutritious. There are countless examples of what this can look like, even UN studies have showed that agricultural yields in some African nations have doubled since getting off of chemicals and switching back to ecological methods where they 'close the loop' and treat the environment as a friend and ally and reduce the use of purchased inputs to a bare minimum. This represents the empowerment of people, it means food sovereignty. Don't just take my word for it, please visit [La Via Campesina](http://LaViaCampesina.org) and hear the voice of the world's peasants.

There is one metric that almost certainly never shows up in any academic study. That is metric is flavor and the enjoyment of food that comes from the flavors of life's best food. The 'a-ha' moment when you realize what real food tastes like. It might be the first time a potato doesn't taste like dirt, falling in love with cabbage when you always thought you hated cabbage, the first time you realize you never want iceberg lettuce again because lettuce doesn't have to be bitter. It might be a bottle of milk with some delicious cream on top or a cut of beef that is naturally lean and tender because the cow got to live it's life as a cow as a cow should. It might be when you eat some cheap California produce off the grocery store shelf this winter and can barely choke it down later. It doesn't matter how we come about it we all have this moment someday and when we do there is no turning back. When your dinner evolves from sustenance to experience, your body and your taste buds are telling you that Stanford statisticians have yet to formulate an algorithm to explain the joy of eating real and just food. You've made the right choice for so so many reasons.