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THE WAY WE LIVE NOW

## Mass Natural

By MICHAEL POLLAN

"Elitist" is just about the nastiest name you can call someone, or something, in America these days, a finely-honed term of derision in the culture wars, and "elitist" has stuck to [organic food](#) in this country like balsamic vinegar to mâche. Thirty years ago the rap on organic was a little different: back then the stuff was derided as hippie food, crunchy granola and bricklike brown bread for the unshaved set (male and female division). So for organic to be tagged as elitist may count as progress. But you knew it was over for [John Kerry](#) in the farm belt when his wife, Teresa, helpfully suggested to Missouri farmers that they go organic. Eating organic has been fixed in the collective imagination as an upper-middle-class luxury, a blue-state affectation as easy to mock as Volvos or lattes. On the cultural spectrum, organic stands at the far opposite extreme from Nascar or Wal-Mart.

But all this is about to change, now that Wal-Mart itself, the nation's largest grocer, has decided to take organic food seriously. (Nascar is not quite there yet.) Beginning later this year, Wal-Mart plans to roll out a complete selection of organic foods — food certified by the U.S.D.A. to have been grown without synthetic pesticides or fertilizers — in its nearly 4,000 stores. Just as significant, the company says it will price all this organic food at an eye-poppingly tiny premium over its already-cheap conventional food: the organic Cocoa Puffs and Oreos will cost only 10 percent more than the conventional kind. Organic food will soon be available to the tens of millions of Americans who now cannot afford it — indeed, who have little or no idea what the term even means. Organic food, which represents merely 2.5 percent of America's half-trillion-dollar food economy, is about to go mainstream. At a stroke, the argument that it is elitist will crumble.

This is good news indeed, for the American consumer and the American land. Or perhaps I should say for some of the American land and a great deal more of the land in places like Mexico and China, for Wal-Mart is bound to hasten the globalization of organic food. (Ten percent of organic food is imported today.) Like every other commodity that global corporations lay their hands on, organic food will henceforth come from wherever in the world it can be produced most cheaply. It is about to go the way of sneakers and MP3 players, becoming yet another rootless commodity circulating in the global economy.

Oh, but wait. . . I meant to talk about all the good that will come of Wal-Mart's commitment to organic. Sorry about that. When you're talking about global capitalism, it can be hard to separate the good news from the bad. Because of its scale and efficiency and notorious ruthlessness, Wal-Mart will force down the price of organics, and that is a good thing for all the consumers who can't afford to spend more for food than they already do. Wal-Mart will also educate the millions of Americans who don't yet know exactly what organic food is or precisely how it differs from conventionally grown food.

The vast expansion of organic farmland it will take to feed Wal-Mart's new appetite is also an

unambiguous good for the world's environment, since it will result in substantially less pesticide and chemical fertilizer being applied to the land — somewhere. Whatever you think about the prospect of organic Coca-Cola, when it comes, and come it surely will, tens of thousands of acres of the world's cornfields — enough to make all that organic high-fructose corn syrup — will no longer receive an annual shower of pesticides like Atrazine. O.K., you're probably registering a flicker of cognitive dissonance at the conjunction of the words "organic" and "high-fructose corn syrup," but keep your eye for a moment on that Atrazine.

Atrazine is a powerful herbicide applied to 70 percent of America's cornfields. Traces of the chemical routinely turn up in American streams and wells and even in the rain; the F.D.A. also finds residues of Atrazine in our food.

So what? Well, the chemical, which was recently banned by the [European Union](#), is a suspected carcinogen and endocrine disruptor that has been linked to low sperm counts among farmers. A couple of years ago, a U.C. Berkeley herpetologist named Tyrone Hayes, while doing research on behalf of Syngenta, Atrazine's manufacturer, found that even at concentrations as low as 0.1 part per billion, the herbicide will chemically emasculate a male frog, causing its gonads to produce eggs — in effect, turning males into hermaphrodites. Atrazine is often present in American waterways at much higher concentrations than 0.1 part per billion. But American regulators generally won't ban a pesticide until the bodies, or cancer cases, begin to pile up — until, that is, scientists can prove the link between the suspect molecule and illness in humans or ecological catastrophe. So Atrazine is, at least in the American food system, deemed innocent until proved guilty — a standard of proof extremely difficult to achieve, since it awaits the results of chemical testing on humans that we, rightly, don't perform.

I don't know about you, but as the father of an adolescent boy, I sort of like the idea of keeping such a molecule out of my son's diet, even if the scientists and nutritionists say they still don't have proof that organic food is any safer or healthier. I also like that growing food organically doesn't pollute the rivers and water table with nitrates from synthetic fertilizer or expose farm workers to toxic pesticides. And the fact that animals raised organically don't receive antibiotics or synthetic growth hormones. Sounds like a better agriculture to me — and Wal-Mart has just put the force of its great many supermarkets behind it.

But before you pour yourself a celebratory glass of Wal-Mart organic milk, you might want to ask a few questions about how the company plans to achieve its laudable goals. Assuming that it's possible at all, how exactly would Wal-Mart get the price of organic food down to a level just 10 percent higher than that of its everyday food? To do so would virtually guarantee that Wal-Mart's version of cheap organic food is not sustainable, at least not in any meaningful sense of that word. To index the price of organic to the price of conventional is to give up, right from the start, on the idea, once enshrined in the organic movement, that food should be priced not high or low but responsibly. As the organic movement has long maintained, cheap industrial food is cheap only because the real costs of producing it are not reflected in the price at the checkout. Rather, those costs are charged to the environment, in the form of soil depletion and pollution (industrial agriculture is now our biggest polluter); to the public purse, in the form of subsidies to conventional commodity farmers; to the public health, in the form of an epidemic of diabetes and obesity that is expected to cost the economy more than \$100 billion per year; and to the welfare of

the farm- and food-factory workers, not to mention the well-being of the animals we eat. As Wendell Berry once wrote, the motto of our conventional food system — at the center of which stands Wal-Mart, the biggest purveyor of cheap food in America — should be: Cheap at any price!

To say you can sell organic food for 10 percent more than you sell irresponsibly priced food suggests that you don't really get it — that you plan to bring business-as-usual principles of industrial "efficiency" and "economies of scale" to a system of food production that was supposed to mimic the logic of natural systems rather than that of the factory.

We have already seen what happens when the logic of the factory is applied to organic food production. The industrialization of organic agriculture, which Wal-Mart's involvement will only deepen, has already given us "organic feedlots" — two words that I never thought would find their way into the same clause. To supply the escalating demand for cheap organic milk, agribusiness companies are setting up 5,000-head dairies, often in the desert. These milking cows never touch a blade of grass, instead spending their days standing around a dry-lot "loafing area" munching organic grain — grain that takes a toll on both the animals' health (these ruminants evolved to eat grass, after all) and the nutritional value of their milk. But this is the sort of milk (deficient in beta-carotene and the "good fats" — like omega 3's and C.L.A. — that come from grazing cows on grass) we're going to see a lot more of in the supermarket as long as Wal-Mart determines to keep organic milk cheap.

We're also going to see more organic milk — and organic foods of all kinds — coming from places like New Zealand. The globalization of organic food is already well under way: at Whole Foods you can buy organic asparagus flown in from Argentina, raspberries from Mexico, grass-fed meat from New Zealand. In an era of energy scarcity, the purchase of such products does little to advance the ideal of sustainability that once upon a time animated the organic movement. These foods may contain no pesticides, but they are drenched in petroleum even so.

Whether produced domestically or not, organic meat will increasingly come not from mixed, polyculture farms growing a variety of species (a practice that makes it possible to recycle nutrients between plants and animals) but from ever-bigger Confined Animal Feeding Operations, or CAFO's, which, apart from using organic feed and abjuring antibiotics, are little different from their conventional counterparts. Yes, the federal organic rules say the animals should have "access to the outdoors," but in practice this often means providing them with a tiny exercise yard or, in the case of one organic egg producer in New England, a screened-in concrete "porch" — a view of the outdoors. Herein lies one of the deeper paradoxes of practicing organic agriculture on an industrial scale: big, single-species CAFO's are even more precarious than their conventional cousins, since they can't use antibiotics to keep the thousands of animals living in close confinement indoors from becoming sick. So organic CAFO-hands (to call them farmhands seems overly generous) keep the free ranging to a minimum and then keep their fingers crossed.

Wal-Mart will buy its organic food from whichever producers can produce it most cheaply, and these will not be the sort of farmers you picture when you hear the word "organic." Big supermarkets want to do business only with big farmers growing lots of the same thing, not because big monoculture farms are any more efficient (they aren't) but because it's easier to buy all your carrots from a single megafarm than to contract with hundreds of smaller growers. The "transaction costs" are lower, even when the price and the

quality are the same. This is just one of the many ways in which the logic of industrial capitalism and the logic of biology on a farm come into conflict. At least in the short run, the logic of capitalism usually prevails.

Wal-Mart's push into the organic market won't do much for small organic farmers, that seems plain enough. But it may also spell trouble for the big growers it will favor. Wal-Mart has a reputation for driving down prices by squeezing its suppliers, especially after those suppliers have invested heavily to boost production to feed the Wal-Mart maw. Having done that, the supplier will find itself at Wal-Mart's mercy when the company decides it no longer wants to pay a price that enables the farmer to make a living. When that happens, the notion of responsibly priced food will be sacrificed to the imperatives of survival, and the pressure to cut corners will become irresistible.

Up to now, the federal organic standards have provided a bulwark against that pressure. Yet with the industrialization of organic, these rules are themselves coming under mounting pressure, and forgive my skepticism, but it's hard to believe that the lobbyists from Wal-Mart are going to play a constructive role in defending those standards from efforts to weaken them. Just this past year the Organic Trade Association used lobbyists who do work for Kraft Foods to move a bill through Congress that will make it easier to include synthetic ingredients in products labeled organic.

Organic is just a word, after all, and its definition now lies in the hands of the federal government, which means it is subject to all the usual political and economic forces at play in Washington. Inevitably, the drive to produce organic food cheaply will bring pressure to further weaken the regulations, and some of K Street's finest talent will soon be on the case. A few years ago a chicken producer in Georgia named Fieldale Farms persuaded its congressman to slip a helpful provision into an appropriations bill that would allow growers of organic chicken to substitute conventional chicken feed if the price of organic feed exceeded a certain level. That certainly makes life easier for a chicken producer when the price of organic corn is north of \$5 a bushel, as it is today, and conventional corn south of \$2. But in what sense is a chicken fed on conventional feed still organic? In no sense but the Orwellian one: because the government says it is.

After an outcry from consumers and some wiser heads in the organic industry, this new rule was repealed. The moral of the Fieldale story is that unless consumers and well-meaning organic producers remain vigilant and steadfast, the drive to make the price of organic foods competitive with that of conventional foods will hollow out the word and kill the organic goose, just when her golden eggs are luring so many big players into the water. Let's hope Wal-Mart recognizes that the extraordinary marketing magic of the word "organic" — a power that flows directly from our dissatisfaction with the very-cheap-food economy Wal-Mart has done so much to create — is a lot like the health of an organic chicken living in close confinement with thousands of other chickens in an organic CAFO, munching organic corn: fragile.

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