

Hosting a Sustainable Event: Resources

Prepared by the Yale Sustainable Food Project

Table of Contents

What to Think About When You're Hosting

- Overview: A Checklist

- The Food

- The Drink

- The Serving

- The Waste

Options for Sourcing

- Places to Shop in and around New Haven

- Direct Sources for Food and Drink

- Online Sources for Serving Ware

Educational Materials

- Issues

- Sourcing

Hot Topics

- Water: Bottled vs. Tap

- Local vs. Organic

A Glossary of Terms

- Terms

- Symbols

Reference Guides

- Yale Sustainable Food Project Purchasing Guidelines

- CT Grown Crop Availability Calendar

- Yale Catering

What to Think About When You're Hosting

Overview: A Checklist

If you're planning a catered event, Yale Catering will prepare a local and sustainable menu for you with a minimum of effort on your part. Contact Catherine Stebinger (Catherine.stebinger@yale.edu) to investigate this option.

If you're preparing food yourself, it may seem daunting to determine whether a farm, producer, product, practice or company is sustainable, and it's true that this takes attention and care, since the finer points of a farmer's practices and the small text in an ingredient list frequently hold the key.

However, there are a number of quick ways to ensure that you are making sustainable choices. We've provided a checklist of points to consider when making purchasing and serving decisions. If you find that this checklist only whets your appetite, you can find an expanded discussion of these issues afterwards.

Note: if you're hosting an event at Yale, make sure to look at the Sustainable Event Guidelines, available at www.yale.edu/sustainability/sustevents.htm. This list of guidelines, developed by the Office of Sustainability, the Yale Sustainable Food Project, Yale Recycling, and Yale Catering, provides guidelines on all aspects of a sustainable event. Depending on the number of prescribed actions that are incorporated into an event, the event is awarded a gold, silver, or bronze rating. Events achieving a gold, silver, or bronze rating will be highlighted on the Office of Sustainability web site.

What's in season in your area?

- This is the best place to start when you're planning a menu; know what's available before you start thinking about what you will serve or whether you should purchase food locally or from far away, and think about matching your menu to the season. This will probably mean you'll be able to minimize carbon emissions by buying local food, and it often results in a more appealing menu (there's a reason stew seems appealing in February and strawberry tarts seem best in June; it has to do with what our bodies want given the weather as much as it does with what's available in our area.)
- The Connecticut Department of Agriculture puts out a crop availability calendar for the state that shows when particular crops are and are not in season. The crop calendar can be found by following this link:
<http://www.ct.gov/doag/cwp/view.asp?a=1368&q=385580>

What's available that's locally grown or produced?

- When you buy local, you ensure that what you're buying is fresh, and usually know that it was picked when ripe, rather than picked early in order to withstand shipping..
- Buying produce or products locally minimizes the carbon and other greenhouse gas emissions associated with transporting the food from far away.
- Buying local also means that you're supporting the local economy of which you are a part.

Can you find products that are grown using organic and sustainable practices, or made of organic and sustainable ingredients? Some questions to ask producers:

- Do they use natural pest control methods and compost rather than pesticides or chemical fertilizers?
- How do they care for the health of the soil?
- What kind of wages and benefits do their workers receive? Are the workers exposed to toxic pesticides?

Are the people involved in the production of the food treated fairly and given a decent wage?

- The Fair Trade label is a particularly important tool with certain foods such as bananas, tea, coffee, and chocolate. These cannot be sourced locally in New England, but you may not wish to eliminate them entirely from the list of foods you serve. Buying these products from afar makes it hard to learn directly about how they're grown, but the Fair Trade label ensures not only that farmers are treated fairly, but also that they follow environmentally sound agricultural practices.

Do the products you're serving contain natural and recognizable ingredients, rather than highly processed artificial ingredients and additives, or chemical compounds of mysterious origin and function? Does it contain sugar rather than High Fructose Corn Syrup?

Are you using serving ware that is re-usable, biodegradable, or recyclable?

- Reusable products like china are ideal. When they aren't possible, make sure to buy biodegradable paper goods or "plastic" ware (often made from vegetable material) and check that all products are recyclable.

Are there receptacles available for trash, recyclables, and, if desired, compostables?

The Food

Finding foods and products that follow all of the recommendations above can be difficult in New Haven, and often you will find yourself having to prioritize some factors or others. If you begin to feel that you're navigating a complex maze and are unsure how to weigh various options, take a look at the guides below, which will point you in the right direction and help you to develop your own thinking on priorities.

From the Yale Sustainable Food Project's *Making Decisions Table Tent*:

Yale students, in partnership with Yale University Dining Services, helped write the standards that guide the Sustainable Food Project's purchasing decisions. Our "gold standard" for purchasing is food that is grown locally and sustainably. When a local, sustainable option is not available, we choose local food and then work with farmers to build a local, sustainable supply. When an item cannot be grown locally—bananas or coffee, for example—we choose sustainable or certified organic ingredients from elsewhere, and we make sure farmers are treated fairly. Each decision is meant to foster practices that sustain the health of the soil, the environment, communities, and the people producing and eating food.

From the Slow Food International website:

Slow Food is a non-profit, eco-gastronomic organization that was founded in 1989 to counteract fast food and fast life. They offer another good explanation of how to think about what it means to eat sustainably, or in their words, to eat slow food:

“Slow Food is good, clean and fair food. We believe that the food we eat should taste good; that it should be produced in a clean way that does not harm the environment, animal welfare or our health; and that food producers should receive fair compensation for their work.”

For a discussion of the debate on local vs. organic, and on the importance of food-miles, check the *Hot Topics* section.

The Drink

The same principles that apply to choosing food apply to choosing beverages. While coffee and tea cannot be purchased locally on the East Coast of the United States, it can be purchased with the Fair Trade label from farmers who grow organically, and from companies that pay farmers a fair wage.

For bottled drinks, consider both the practices and location of the company that produces the drink, as well as the ingredients in the drink itself. Using a small, family-owned, or local company can help to support the local economy and reduce transportation associated environmental costs with pre-packaged products just as with fresh meat and produce. Many environmentally responsible companies will use biodiesel in their vehicles, practice water saving techniques, or buy renewable energy certificates to offset the carbon emitted by their factories. Most companies that follow environmentally responsible practices will detail them on their website, so it is worth checking there before making purchases.

The number of unrecognizable ingredients in the ingredient list of a bottled drink is a good indicator of whether or not it is all-natural—the fewer of these additives, the better. When you check ingredients, beware in particular of High Fructose Corn Syrup (HFCS). Most sodas and many iced teas and carbonated juice drinks contain large amounts of HFCS. Between the 1950s and 2000, the per capita consumption of added sugars in the United States went up by 39%. Most of that added sugar is now in the form of High Fructose Corn Syrup, which many studies consider partially responsible for the obesity epidemic in this country. When checking the ingredients of fruit drinks, note also what percentage of the juice is of the flavor on the label—the more actual grapefruit juice and the less “filler” white grape juice in a grapefruit drink, the more like grapefruit it will taste.

For more information on high fructose corn syrup, see the articles in the following links:

- 1) <http://sfgate.com/cgi-bin/article.cgi?f=/chronicle/archive/2004/02/18/FDGS24VKMH1.DTL>
- 2) <http://www.washingtonpost.com/ac2/wp-dyn/A8003-2003Mar10?language=printer>

The Serveware

The best option for serving is to use china. The only resources involved here are water and time, and the time you'll spend washing it is well worth the savings in waste.

If using china is not an option, or if you prefer a more casual feel, consider making the food you serve finger food, which you can generally serve on a napkin rather than a plate. You can serve food on large platters or wooden cutting boards, provide cloth or recycled napkins, and minimize waste.

If you wish to serve something like ice cream that requires bowls and utensils, but cannot use china and silverware, look for biodegradable products that are made of plant material and will decompose quickly in a compost heap or landfill.

See *Options for Sourcing* for a list of sources for these products.

The Waste

If your food is good and you use a minimum of servingware, you shouldn't have too much waste at the end of an event. For the waste you do have, be sure to provide recycling bins as well as trash cans, especially if you are serving drinks in bottles. If you have the capacity to compost, food waste and biodegradable napkins or plate ware can be composted.

Options for Sourcing

Caterers

Yale Catering

Yale Catering offers an array of services, and can assist in the planning and/or production of a sustainable event. The Senior Catering Manager, Catherine Stebinger, is an excellent resource. Contact her at catherine.stebinger@yale.edu or at 203-432-0457 for more information or to plan a menu.

Places to Shop

New Haven Farmers' Markets

In July of 2004, CitySeed launched City Farmers' Market in Wooster Square with the mission of "engag[ing] the community in growing an equitable, local food system that promotes economic development, community development and sustainable agriculture." Since then, the organization has started three additional markets around New Haven, some running from July through October, others from May through December. These farmers' markets connect local farmers directly with residents of New Haven, and provide some of the best meat, dairy, and produce around. Among the foods you can find at market are: breads, cheeses, milk, yogurt, eggs, meat, seafood, maple syrup, fruit, and all kinds of seasonal vegetables, including salad greens. For information about all market locations and the vendors at each market, visit www.cityseed.org. Two of the more popular markets are below:

Wooster Square

May through November: Saturdays, 9am – 1pm

Winter Market: once a month on Saturdays, 10am – 1 pm

Downtown

Church street at the Green

May through November: Wednesdays, 11am – 4pm

Edge of the Woods

379 Whalley Avenue

(203) 787-1055

Edge of the Woods is New Haven's largest organic foods store. They have a bakery, deli, and juice bar, in addition to grocery items including produce and bulk foods. Some items to look for in particular are: Green and Black's chocolate (organic, fair trade, excellent chocolate), Equal Exchange coffee (fair trade), and local milk, vegetables, fruits, and tofu. Note that Edge of the Woods does not sell any meat or meat products.

Nica's Market

603 Orange Street

(203)-787-5919

Nica's is a small, family-owned Italian market. They sell Beaver Brook aged cheeses and milk (see below), Calabro mozzarella and ricotta, made locally in East Haven, Chabaso bread (see below), and some local produce. Generally speaking, Nica's is a better place to go for bread and cheese than Edge of the Woods—Edge of the Woods is better for produce, grocery items, and chocolate and coffee.

Chestnut Fine Foods

1012 State Street
203-782-6767

Chestnut Fine Foods is a good source for cheese; they sell Cato Corner Farm cheese as well as many other artisanal American cheeses. They also make their own bread and baked goods, and sell prepared salads and sandwiches.

Caseus

93 Whitney Avenue
203.624.3373

Caseus has diverse cheeses, breads, olives, chocolates, locally-made goods, and antibiotic/hormone-free meats. They make up cheese and charcuterie platters on request, and their staff is extremely knowledgeable and enthusiastic.

Direct Sources for Food and Drink

Beaver Brook Farm (cheese, milk, sausage)

Sankow family
139 Beaver Brook Road
Lyme, CT 06371
1-800-501-9665

Beaver Brook farm is a family-owned, 175-acre farm in the Pleasant Valley section of Lyme, CT, home to 600 sheep, and some cows and lambs. All of their animals are raised on pasture, without hormones or antibiotics. They make fantastic aged cheeses for reasonable prices—5lb wheels are a perfect centerpiece for a cheese and fruit platter. They also make lamb sausage. See their website for contact information: www.beaverbrookfarm.com

High Hill Orchard (apples, pears, cider)

Wayne Young
170 Fleming Road
Meriden, CT
(203) 294-0276

High Hill Orchard is a 25-acre orchard that has been in Wayne Young's family for three generations. Wayne practices Integrated Pest Management, which means that he takes an ecological approach to pest control, using an array of complementary methods: natural predators and biological controls, various physical techniques, and pesticides as a last resort. (It is worth noting that it is virtually impossible to grow stone fruits organically in the northeast, due to rainfall and humidity patterns.) Wayne grows apples and pears, and makes great cider. He sells a large percentage of his crop to Yale every year, to be served in the residential college dining halls. He also operated a winter CSA. For more information, contact Wayne at the above number.

Chabaso Bakery (bread and baked goods)

360 James Street
New Haven, CT 06513

Chabaso bakery, owned by Charlie Negaro, is located in Fair Haven on James Street. You can buy their bread and baked good on Chapel Street at Atticus Café, owned by Chabaso, at their factory

outlet on James Street, or at a host of other markets in New Haven. Chabaso's artisanal breads have no preservatives, use unbleached, unbromated flour, and are designated kosher. Their breads have been voted "Best Bread in Connecticut" for two straight years. For more information about the types of bread they offer, see www.chabaso.com

Other farms

(These all sell at various New Haven farmers' markets; see www.cityseed.org to read more about them)

Beltane Farm (goat cheese)
59 Taylor Bridge Road
Lebanon, CT
860)887-4709

Northfordy Farm (produce, eggs, turkey, chicken)
53 Lanes Pond Rd.
Northford, CT 06472
203-484-9570

Starlight Gardens (salad greens all year)
45 Fowler Road
Durham, CT
860-463-0166.

Urban Oaks (vegetables all year)
225 Oak Street
New Britain, CT 06051-1225
860-223-6200

Four Mile River Farm (beef, pork, eggs)
South Lyme
www.fourmileriverfarm.com

Sources for Serving Ware

Corporate Express

If you are hosting an event at Yale, you can procure biodegradable serving ware from Corporate Express through Sciquest (<http://www.yale.edu/procurement/eprocurement/>), Yale's eProcurement interface, which is the easiest method for departments and offices looking to purchase supplies, and Yale's Purchasing department has negotiated great deals on these products so that the Yale community can save money by going this route.

Eastern Bag and Paper

If you are hosting an event at Yale, you can procure biodegradable serving ware from Eastern Bag and Paper through Sciquest (<http://www.yale.edu/procurement/eprocurement/>), Yale's eProcurement interface, which is the easiest method for departments and offices looking to purchase supplies, and Yale's Purchasing department has negotiated great deals on these products so that the Yale community can save money by going this route.

World Centric Fair Trade/Eco online Store

World Centric's eco-products include sugar cane fiber, compostable tableware including plates, cups, and bowls, biodegradable bioplastics including cutlery, and post consumer waste recycled paper products including napkins and paper towels. They sell their products in quantities of 50 or 1000. Their website includes a great deal of detailed information on their products.

www.worldcentric.org/store

Green Starfish Inc.

Green Starfish sells 100% biodegradable and 100% compostable products, including plates, bowls, cups and straws. Green Starfish is designed to sell to food service companies, so they sell products only in large quantities—by the 500 to 1000 pieces.

www.gogreenstarfish.com

Educational Materials

The Issues

When you're hosting a sustainable event, you can take it as an opportunity to educate your guests as well as to entertain them. One way to do this is to make use of the table tents we print for Yale's dining halls. Many of our tents are issue based, while some focus on local farmers or particular foods. A list of the titles of pertinent tents follows. For a copy of any of these, contact Anastatia Curley at anastatia.curley@yale.edu.

- 1) Making Decisions
- 2) Sustainability
- 3) Sustaining Health
- 4) Carbon & Energy
- 5) World Sustenance
- 6) Eat Dirt (explains the need to care for the health of the soil)
- 7) Farmers' Market
- 8) Wayne's Apples (about Wayne Young whose farm is High Hill in Meriden)
- 9) Old Maids Farm (about George Purtil, whose farm is Old Maids Farm in Glastonbury)

Sourcing Information

If you have used any of the direct sources listed above, you might share the full information about them from this document or get a copy of one of the appropriate table tents listed above.

Hot Topics

Water: Bottled vs. Tap

In recent months, Americans have begun to think critically about their water habits and to question the bottled water industry. Suddenly, the environmental and economic costs of drinking bottled water are on peoples' minds, and cities, restaurants, and individuals across the country are choosing to drink from the tap instead. Many articles have recently been published on this topic. Here are copies of a few from *The New York Times*:

The New York Times, August 12, 2007

Water, Water Everywhere, but Guilt by the Bottleful

By Alex Williams

ON a recent family vacation in Cape Cod, Jenny Pollack, 40, a novelist and public relations associate from Brooklyn, did something she knew she would come to regret. She did it on the spur of the moment. She did it because she felt desperate. Besides, the giant illuminated Dasani vending machine was just standing there, like a beacon. So, with her reusable plastic Nalgene bottles dry and her son Charlie working up a thirst in an indoor playground, she broke down and bought a bottle of water. To most people it would be a simple act of self-refreshment, but to Ms. Pollack it was also a minor offense against the planet — think of all the oil used to package, transport and refrigerate that water.

“Something about it felt like a betrayal,” said Ms. Pollack, who otherwise does not consider herself an ardent environmentalist. She said she decided to stop buying water after hearing friends talk about the impact of America’s bottled water habit. And now she is doing what she can to spread the word. “I’ve pretty much said to every single one of my friends, ‘Can I tell you my spiel about bottled water?’ ” How unlikely, that at the peak of a sweltering summer, people on playgrounds, in parks, and on beaches are suddenly wondering if an ice-cold bottle of fresh water might be a bad thing.

In the last few months, bottled water — generally considered a benign, even beneficial, product — has been increasingly portrayed as an environmental villain by city leaders, activist groups and the media. The argument centers not on water, but oil. It takes 1.5 million barrels a year just to make the plastic water bottles Americans use, according to the Earth Policy Institute in Washington, plus countless barrels to transport it from as far as Fiji and refrigerate it.

The issue took a major stride into mainstream dialogue earlier this summer, after the mayors of San Francisco, Salt Lake City, Minneapolis and New York began urging people to opt for tap water instead of bottled. This added momentum to efforts by environmental groups like Corporate Accountability International and Food & Water Watch, which have been lobbying citizens to dump the bottle; environmental organizations had banded together in several states to pressure governments to extend bottle bills to include bottled water. Several prominent restaurateurs, like Alice Waters of Chez Panisse in Berkeley, Calif., made much-publicized moves to drop bottled water from their menus. And so people who had come to consider bottled water a great convenience, or even a mark of good taste, are now casting guilty glances at their frosty drinks.

Daphne Domingo Johnson, a life coach who also works for a nonprofit organization in Seattle, said she used to keep a case of bottled water “in my trunk for all times, just because I know the importance of water.” Ms. Johnson, 35, said she thought of reusable plastic Nalgene bottles —

recently reborn as urban status symbols — as “just for backpackers or athletes.” Now, after reading news reports about the debate over bottled water, Ms. Johnson said, the rare bottles she buys feel “like a guilty pleasure.” She helped mount an anti bottled water campaign at work, posting fliers trumpeting environmental reasons why people should drink tap water instead of the free Crystal Geysir her employer provides.

She is not alone. In interviews last week with dozens of people on sun-baked streets around the country, former and current bottled water devotees showed a new awareness of the issue’s complexities. Some have already changed their ways.

Melissa Frawley, 38, a banker in Atlanta, said she recently broke her Evian habit after news reports altered her thinking. Environmentalism, she concluded, “is sometimes an inconvenience to us all, but it is something I think we all need to do.” Others who had not changed their habits were nevertheless feeling a new sense of guilt. Barry Eskandani, 31, an administrative assistant in San Francisco who considers himself a connoisseur of water brands, said that lately his fellow Bay Area residents act as if “you just killed their puppy” if you dare throw a bottle in the garbage.

Bottled water has now overtaken coffee and milk in sales nationally, and is catching up with beer. To some, it’s an affordable luxury. To others, a healthy alternative to sugary drinks. Regardless, many consider it a staple. Over the last 15 years, the bottled water industry has been astonishingly successful in turning a product that once seemed an indulgence into a daily companion. Savvy marketers even managed to recast this mundane product as a talisman of sexiness — Jennifer Aniston is the new face of Glacéau SmartWater. But the fickleness of fashion may be tilting against the industry.

In preparation for New York Fashion Week this September, Aveda has an agreement with several design labels, including 3.1 Phillip Lim, Rodarte, Temperley London, Thakoon and Marc Bouwer to use recycled aluminum bottles for the water served to models and stylists backstage.

Word is spreading. An editorial on Aug. 1 in *The New York Times*, “In Praise of Tap Water,” argued against bottled water on the ground that “this country has some of the best public water supplies in the world.” The piece was high on the list of the most e-mailed articles for several days.

And the industry is feeling the heat. Last week, the International Bottled Water Association took out full-page newspaper advertisements urging consumers to recycle, not abandon, their bottles and arguing that “when we drink any beverage, it’s likely to come out of a bottle or a can.” Some interviewed last week agreed with that viewpoint.

“There are two separate issues — one is water, the other is plastic bottles,” said Paul Pentel, a physician in Minneapolis. “We have been trying to steer people away from the liquid candy — juices, pop and everything else,” he added. “From that standpoint, water is good, and I’m very hesitant to demonize bottled water.”

Indeed, some people wonder why environmentalists have singled out bottled water, and not dish detergent or Wiffle Ball bats. Jessica Retan, a 22-year-old nanny who lives in Harlem, was sipping from a bottle of Poland Spring in Central Park on a hot Saturday. The waste issue, she said, is “concerning, but there’s Coke, shampoo — a lot of things in addition to water that are bottled in plastic. So I’m curious, why just focus on bottled water?”

Gigi Kellett of Corporate Accountability International’s Think Outside the Bottle campaign said environmental efforts targeting bottled water are a good starting point because water “is something that people can have access to right out of the taps...It’s a way to protect the environment and protect your pocketbook,” she said, adding that most empty bottles end up not in recycling bins but in the garbage.

All that discarded plastic also bothers Barbara Kancelbaum, a freelance writer in Park Slope.

"It's not like the bottles that carry water are worse than bottles carrying Pepsi," said Ms. Kancelbaum, 42, who was so moved by the sight of overflowing garbage cans in Prospect Park that she posted an anti bottled water message on an online bulletin board for local mothers. "The problem is that the water industry has exploded, so that there are many, many more bottles being used than there were before....The solution," she said, "is not to buy other kinds of drinks. The solution is to bring your own water." But even the noblest of intentions can wilt in the heat.

Dave Byers, 65, from Silver Spring, Md., discussed the issue with his wife, Pat, on the steps of the [Metropolitan Museum of Art](#) on a 90-degree Saturday. "I think it should be banned, actually," he said of bottled water. As he spoke, he and his wife shared a bottle of Poland Spring. They said they felt bad about it, but it was hot. And they could not find a drinking fountain. "Water is so ubiquitous," he said, glancing at the bottle. "It seems a little dumb to walk around with a bottle of this."

Catherine Donaldson-Evans, Amy Goetzman, Kate Hammer, Carol Pogash, Rachel Pomerance and Paula Schwartz contributed reporting.

The New York Times (Editorial Desk), August 1, 2007
In praise of tap water.

On the streets of New York or Denver or San Mateo this summer, it seems the telltale cap of a water bottle is sticking out of every other satchel. Americans are increasingly thirsty for what is billed as the healthiest, and often most expensive, water on the grocery shelf. But this country has some of the best public water supplies in the world. Instead of consuming four billion gallons of water a year in individual-sized bottles, we need to start thinking about what all those bottles are doing to the planet's health.

Here are the hard, dry facts: Yes, drinking water is a good thing, far better than buying soft drinks, or liquid candy, as nutritionists like to call it. And almost all municipal water in America is so good that nobody needs to import a single bottle from Italy or France or the Fiji Islands. Meanwhile, if you choose to get your recommended eight glasses a day from bottled water, you could spend up to \$1,400 annually. The same amount of tap water would cost about 49 cents.

Next, there's the environment. Water bottles, like other containers, are made from natural gas and petroleum. The Earth Policy Institute in Washington has estimated that it takes about 1.5 million barrels of oil to make the water bottles Americans use each year. That could fuel 100,000 cars a year instead. And, only about 23 percent of those bottles are recycled, in part because water bottles are often not included in local redemption plans that accept beer and soda cans. Add in the substantial amount of fuel used in transporting water, which is extremely heavy, and the impact on the environment is anything but refreshing.

Tap water may now be the equal of bottled water, but that could change. The more the wealthy opt out of drinking tap water, the less political support there will be for investing in maintaining America's public water supply. That would be a serious loss. Access to cheap, clean water is basic to the nation's health.

Some local governments have begun to fight back. Earlier this summer, San Francisco Mayor Gavin Newsom prohibited his city's departments and agencies from buying bottled water, noting that San Francisco water is "some of the most pristine on the planet." Salt Lake City has issued a similar decree, and New York City recently began an advertising campaign that touted its water as "clean," "zero sugar" and even "stain free."

The real change, though, will come when millions of ordinary consumers realize that they can save money, and save the planet, by turning in their water bottles and turning on the tap.

The New York Times (Week in Review Desk), July 15, 2007

A Battle Between the Bottle and the Faucet

By Bill Marsh.

THOSE eight daily glasses of water you're supposed to drink for good health? They will cost you \$0.00135 -- about 49 cents a year -- if you take it from a New York City tap. Or, city officials suggest, you could spend 2,900 times as much, roughly \$1,400 yearly, by drinking bottled water. For the extra money, they say, you get the added responsibility for piling on to the nation's waste heap and encouraging more of the industrial emissions that are heating up the planet.

But trends in American thirst quenching favor the 2,900-fold premium, as the overflowing trash cans of Central Park attest. In fact, bottled water is growing at the expense of every other beverage category except sports drinks. It has overtaken coffee and milk, and it is closing in on beer. Tap, if trends continue, would be next.

Now New York City officials -- like the mayors of Minneapolis, Salt Lake City and San Francisco -- are campaigning to get people to reverse course and open their faucets instead of their wallets. The city Health Department, mindful of high obesity rates, says water is more healthful than many other, sugar-filled drinks. The city's Department of Environmental Protection touts its low environmental impact. Both note that it's practically free (leaving aside those New Yorkers for whom paying extra is a lifestyle choice).

New York's water is the envy of municipalities everywhere. It is one of just five major American systems whose water is so good it needs little or no filtration, saving energy and chemicals. (The others are Boston, Portland, Ore., San Francisco and Seattle.) The system is self-sustaining from rainwater stored in reservoirs. Gravity takes it downhill to the city, where pumps are unnecessary in all but a few neighborhoods. New York water is quite pure, requiring little chlorine, and low in minerals, giving it a clean taste. Sounds like an ad for bottled water.

But beverage industry representatives say their version is not just about health and taste -- its plastic container, scorned by environmentalists, is actually a plus for consumers. "The tap water quality is fine in most of the United States," said John D. Sicher Jr., editor and publisher at Beverage Digest, a trade publication. "The issue is convenience and shifting consumer preference. It's not so easy, walking down Third Avenue on a hot day, to get a glass of tap water."

Bottled water has profited from the sagging image of soft drinks, a category in decline for nearly a decade (but still the most consumed of beverages, by far). Preferences evolve -- could it be tap's turn? "Through education and motivation you can get people to change their habits," said Emily Lloyd, commissioner of the Department of Environmental Protection, citing smoking, recycling and wearing seat belts. Convenience comes in different forms, she added: "It's easy to fill a bottle of water and stick it in your backpack."

With surveys showing climate change a growing concern, officials and advocates say they hope people will consider the implications of billions of bottles. "More than 90 percent of the environmental impacts from a plastic bottle happen before the consumer opens it," said Dr. Allen Hershkowitz, a senior scientist at the Natural Resources Defense Council. Oil for plastic, oil for shipping, oil for refrigeration -- and in the end, most of the effort goes to landfills.

"The bottle is going to have to change," he said, noting research in plastics made from plants. "I'm seeing more interest in this than any time in 30 years."

Local vs. Organic

The debate over which is more sustainable, buying local or buying organic, has never been concluded, nor will it ever be. When you have to choose one over the other, pay attention to the particulars of the situation rather than adhering rigidly to a preference for organic foods or local ones.

Sometimes, buying local, non-organic apples may be better—if you know how the farmer grows them—but sometimes, buying organic salad greens from across the country might be the more sustainable choice.

“It depends” may always be the best answer to the question “local or organic?” Ultimately, the more you know about the food we eat—where it comes from, how it was grown, how far it traveled to get to us, and how much energy was expended in the process—the better able you will be to make sound choices.

As you begin to consider these issues, here are some articles that might guide your thinking.

The New York Times, August 6, 2007

Food That Travels Well

By James E. McWilliams - Op-Ed Contributor

Austin, Tex.

The term “food miles” — how far food has traveled before you buy it — has entered the enlightened lexicon. Environmental groups, especially in Europe, are pushing for labels that show how far food has traveled to get to the market, and books like Barbara Kingsolver’s “Animal, Vegetable, Miracle: A Year of Food Life” contemplate the damage wrought by trucking, shipping and flying food from distant parts of the globe.

There are many good reasons for eating local — freshness, purity, taste, community cohesion and preserving open space — but none of these benefits compares to the much-touted claim that eating local reduces fossil fuel consumption. In this respect eating local joins recycling, biking to work and driving a hybrid as a realistic way that we can, as individuals, shrink our carbon footprint and be good stewards of the environment.

On its face, the connection between lowering food miles and decreasing greenhouse gas emissions is a no-brainer. In Iowa, the typical carrot has traveled 1,600 miles from California, a potato 1,200 miles from Idaho and a chuck roast 600 miles from Colorado. Seventy-five percent of the apples sold in New York City come from the West Coast or overseas, the writer Bill McKibben says, even though the state produces far more apples than city residents consume. These examples just scratch the surface of the problem. In light of this market redundancy, the only reasonable reaction, it seems, is to count food miles the way a dieter counts calories.

But is reducing food miles necessarily good for the environment? Researchers at Lincoln University in New Zealand, no doubt responding to Europe’s push for “food miles labeling,” recently published a study challenging the premise that more food miles automatically mean greater fossil fuel consumption. Other scientific studies have undertaken similar investigations. According to this peer-reviewed research, compelling evidence suggests that there is more — or less — to food miles than meets the eye.

It all depends on how you wield the carbon calculator. Instead of measuring a product's carbon footprint through food miles alone, the Lincoln University scientists expanded their equations to include other energy-consuming aspects of production — what economists call “factor inputs and externalities” — like water use, harvesting techniques, fertilizer outlays, renewable energy applications, means of transportation (and the kind of fuel used), the amount of carbon dioxide absorbed during photosynthesis, disposal of packaging, storage procedures and dozens of other cultivation inputs.

Incorporating these measurements into their assessments, scientists reached surprising conclusions. Most notably, they found that lamb raised on New Zealand's clover-choked pastures and shipped 11,000 miles by boat to Britain produced 1,520 pounds of carbon dioxide emissions per ton while British lamb produced 6,280 pounds of carbon dioxide per ton, in part because poorer British pastures force farmers to use feed. In other words, it is four times more energy-efficient for Londoners to buy lamb imported from the other side of the world than to buy it from a producer in their backyard. Similar figures were found for dairy products and fruit.

These life-cycle measurements are causing environmentalists worldwide to rethink the logic of food miles. New Zealand's most prominent environmental research organization, Landcare Research-Manaaki Whenua, explains that localism “is not always the most environmentally sound solution if more emissions are generated at other stages of the product life cycle than during transport.” The British government's 2006 Food Industry Sustainability Strategy similarly seeks to consider the environmental costs “across the life cycle of the produce,” not just in transportation.

“Eat local” advocates — a passionate cohort of which I am one — are bound to interpret these findings as a threat. We shouldn't. Not only do life cycle analyses offer genuine opportunities for environmentally efficient food production, but they also address several problems inherent in the eat-local philosophy.

Consider the most conspicuous ones: it is impossible for most of the world to feed itself a diverse and healthy diet through exclusively local food production — food will always have to travel; asking people to move to more fertile regions is sensible but alienating and unrealistic; consumers living in developed nations will, for better or worse, always demand choices beyond what the season has to offer.

Given these problems, wouldn't it make more sense to stop obsessing over food miles and work to strengthen comparative geographical advantages? And what if we did this while streamlining transportation services according to fuel-efficient standards? Shouldn't we create development incentives for regional nodes of food production that can provide sustainable produce for the less sustainable parts of the nation and the world as a whole? Might it be more logical to conceptualize a hub-and-spoke system of food production and distribution, with the hubs in a food system's naturally fertile hot spots and the spokes, which travel through the arid zones, connecting them while using hybrid engines and alternative sources of energy?

As concerned consumers and environmentalists, we must be prepared to seriously entertain these questions. We must also be prepared to accept that buying local is not necessarily beneficial for the environment. As much as this claim violates one of our most sacred assumptions, life cycle assessments offer far more valuable measurements to gauge the environmental impact of eating. While there will always be good reasons to encourage the growth of sustainable local food systems, we must also allow them to develop in tandem with what could be their equally sustainable global counterparts. We must accept the fact, in short, that distance is not the enemy of awareness.

James E. McWilliams is the author of "A Revolution in Eating: How the Quest for Food Shaped America" and a contributing writer for The Texas Observer.

Grist, 16 Aug 2007

The Eat-Local Backlash: If buying locally isn't the answer, then what is?

By Tom Philpott

Attention farmers' market shoppers: Put that heirloom tomato down and rush to the nearest supermarket. By seeking local food, you're wantonly spewing carbon into the atmosphere.

That's the message of a budding backlash against the eat-local movement. The Economist fired a shotgun-style opening salvo last December, peppering what it called the "ethical foods movement" with a broad-spectrum critique. Among the claims: organic agriculture consumes more energy than conventional, and food bought from nearby sources often creates more greenhouse-gas emissions than food hauled in from long distances.

More recently, in a New York Times op-ed piece, the historian James E. McWilliams sought to debunk the idea that choosing locally produced food automatically decreases one's carbon footprint. He warns that efforts to reduce "food-miles" -- the distance between farm and plate -- might actually support higher carbon emissions at the source. And in Britain, a debate over whether to withdraw organic certification from African imports based on their transportation impact has spurred coverage of the issue as well.

In a sense, these high-profile rebukes are good news: they herald the arrival of the sustainable-food movement as a pop-culture phenomenon. Just as you're not really famous until you've been rumored to be gay or on drugs, a movement hasn't come into its own until it's drawn a formidable entourage of detractors.

A decade ago, few would have thought to analyze the efforts of eat-local zealots. But now, farmers' markets are booming, celebrity chefs are proudly decorating their menus with the names of nearby farms, and a steady stream of best-sellers is urging us to "come home to eat" (to paraphrase the title of Gary Paul Nabhan's popular 2001 book). That surge has earned attention both positive and negative, and landed local-food advocates in a valuable position. By sniffing out easy sloganeering, a movement's critics can help it hone and deepen its analysis -- and reach the next level of acceptance.

Farm-to-Plate Tectonics

So how to respond to these critiques?

First of all, it's important to understand the context in which they come. The sustainable-food movement's achievements have thus far been largely cultural. In other words, despite all the attention from celebrity chefs, best-selling authors, and, ahem, environmental webzine columnists, the vast bulk of food consumed in this country still travels gargantuan distances, consumes unspeakable amounts of fossil fuel in its production and distribution, and leans heavily on poisons and water-polluting artificial fertilizers.

Way back in 1969, the U.S. Department of Defense performed what remains the only comprehensive nationwide study of the average distance food travels from farm to plate. The study's estimate, 1,200 miles, probably falls well short of the current mark.

Why? Because food imports are rising at a stunning pace. According to the USDA, the dollar value of U.S. food imports doubled [Excel] between 1999 and 2006. Over the same period, exports rose nearly as fast. In short, while we "locavores" strive to minimize food-miles, and critics chide us for the effort, food continues to zip across the U.S. borders, gushing in from, and flowing out to, points all across the globe.

And while the sustainable-food movement's power may be causing vapors within the pages of the Economist and the New York Times op-ed page, Wall Street hasn't gotten the memo. In the stock exchanges, shares in agribiz powerhouses Monsanto, Archer Daniels Midland, John Deere, Smithfield, and Tyson are all trading at or near all-time highs. That means that the "smart money" isn't quite as impressed by the rise of buy-local campaigns as commentators on either side of the food-miles debate are. For unsentimental investors, the profit prospects for industrialized agriculture, geared for long-haul distribution, are rosier than ever.

Miles to Go

So food-miles are likely adding up at an accelerating rate, and may well continue to do so. Is that so bad? Not in the eyes of some. McWilliams makes the case that we should forget food-miles and focus instead on lifecycle analysis -- accounting for not just distribution, but also for energy burned in growing food.

This eminently reasonable insight leads him to a startling claim: that locally grown food under certain conditions burns more energy, and leads to higher greenhouse-gas emissions, than food produced thousands of miles away. Echoing The Economist, McWilliams trots out a recent study claiming to show that green-minded U.K. consumers should spurn locally grown lamb in favor of lamb grown in distant New Zealand.

Why? Because according to the study, "lamb raised on New Zealand's clover-choked pastures and shipped 11,000 miles by boat to Britain produced 1,520 pounds of carbon dioxide emissions per ton, while British lamb produced 6,280 pounds of carbon dioxide per ton, in part because poorer British pastures force farmers to use feed."

To McWilliams, the message is clear: U.K. residents should buy more New Zealand lamb, and reject local product. But over on Ethicurean, Small-Mart Revolution author Michael Shuman raises a key point about the study: it compares conventionally grown, feed-reliant U.K. lamb with lamb raised in New Zealand, where all lamb is grown on pasture. But pasture-based organic U.K. lamb exists and is available. Wouldn't buying that be the greener option for U.K. consumers? The study doesn't comment on this option -- perhaps because, as Shuman points out, its authors are funded by New Zealand agribusiness interests that rely on export markets.

Act Locally, Think Regionally

What often arises in the food-miles debate, I think, is a false dichotomy: local vs. long distance. But the most attractive model might be a regional one. McWilliams touches on it, albeit vaguely, with a mention of a "hub-and-spoke system of food production and distribution." Crucially, he clings to the notion that Western consumers can continue to commandeer the globe's bounty perpetually, season be damned. "Consumers living in developed nations will, for better or worse, always demand choices beyond what the season has to offer," he declares confidently, even though such choices have existed all of, say, 40 years. At any rate, what could such a robust regional system look like?

Take North Carolina, where I live and help run a farm. The state stretches nearly 400 miles east to west, encompassing relatively cool Appalachian highlands and blistering-hot eastern lowlands. Orthodox "locavores" in either region commit themselves to various year-round privations: many vegetables wilt (or require heavy irrigation) in the eastern summers, and can't survive cold highland winters. But I like any idea that pushes local-food advocates beyond arbitrary constructions such as "100-mile" diets.

Currently, most supermarkets across the state tap into global production networks that rely on long-haul travel. But ideally, North Carolinians could eat regionally year-round if we organized to leverage these regional differences. What if the west provided the bulk of the state's food production in the summer months, and the east did so in the cold months? To do so with any reasonable amount of environmental responsibility, we'd have to reject the temptation to transport food up and down the mountains in diesel-guzzling, highway-hogging 18-wheelers. Rather, as Rich Pirog of Iowa State University's Leopold Center for Sustainable Agriculture recently told me, "If we want regional food systems to be energy-efficient, we have to reinvest in rail infrastructure."

Pirog, who probably counts as the nation's most rigorous analyst of food-miles, told me that as recently as 1980, trains accounted for fully half of food transport in the United States. By 1997, following a period of low petroleum prices and steady decay of rail systems, just 13 percent of food traveled on trains. Trucks hauled the other 87 percent.

Thus rebuilding regional food networks -- presumably what McWilliams means by "strengthen[ing] comparative geographical advantages" -- requires something that critics of the eat-local movement rarely advocate: reinvestment in food-production and distribution infrastructure designed for something beyond maximizing agribusiness profit. Such a regional conception requires not a rejection of the eat-local ethic, but rather a broadening of it.

Contra industrial-agriculture dogma -- implicitly echoed by McWilliams and other eat-local critics -- we'd still have to relearn the skill of thriving within the physical limits of relatively nearby landscapes. And we'd still have to think seriously about hard questions posed by Wendell Berry: "What will nature permit me to do here without damage to herself or to me? What will nature help me to do here?"

Grist contributing writer Tom Philpott farms and cooks at Maverick Farms, a sustainable-agriculture nonprofit and small farm in the Blue Ridge Mountains of North Carolina.

The New York Times, June 4, 2006
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.

Michael Pollan, a contributing writer for the magazine, is the author, most recently, of "The Omnivore's Dilemma: A Natural History of Four Meals." He also teaches journalism at the University of California at Berkeley.

A Glossary of Terms

Terms

SUSTAINABLE – Sustainable agriculture takes into account the current and future well-being of soil, water, air, and the species affected by farming—especially the human beings doing it, whose economic and physical well-being must be assured. Sustainable practices can be repeated indefinitely without degrading the system of which they are a part.

LOCAL AND SEASONAL EATING – The taste of a tomato or a head of lettuce depends on what variety it is, where and how it was grown, when it was harvested, and how long it took to travel to your plate. Purchasing in-season from farms in the region guarantees ripe, flavorful produce, preserves rural landscapes, and reduces the environmental costs of transportation.

FAIR TRADE – The Fair Trade label guarantees that farmers and their workers receive a fair price for their labor. The Fair Trade price allows farmers to meet production costs, support their families, and protect their farm and the surrounding ecosystem. Fair Trade standards assure that strict labor and environmental guidelines are followed by producers.

ORGANIC – Items can only be labeled organic if they have gone through a USDA certification process. Many farmers practicing sustainable methods do not go through this process. Particularly for small farmers who speak and sell directly to their customers, the time and cost involved in acquiring USDA organic certification does not make economic sense. But the produce these farmers grow is grown organically, often following a more rigorous set of sustainability standards than are required for USDA certification. Certified organic products cannot involve the use of conventional pesticides, petroleum-based fertilizers, or genetic engineering. Organic farming manages soil fertility, pests, and weeds through tillage and cultivation, crop rotation, cover crops, composting, and approved supplements.

GRASS-FED – The label grass-fed guarantees that beef cattle have grazed on grass, rather than being grain-fed on corn. Grass-fed beef is lower in fat, has higher-quality protein, and has more omega-acids than its corn-fed counterpart. Grass-fed beef also has lower ecological and public health costs.

ALL-NATURAL – The label all-natural identifies meats or grocery items that are raised or produced without antibiotics, hormones, and artificial additives. All meats labeled organic are all-natural.

FREE-RANGE – Animals are guaranteed mobility and access to the outdoors. Free-range chickens can be all-natural or organic (meaning that their feed is 100 percent organic, and they are given no antibiotics or hormones). Organic standards require that animals be free-range.

INTEGRATED PEST MANAGEMENT – The National IPM Network defines Integrated Pest Management as “a sustainable approach to managing pests by combining biological, cultural, physical and chemical tools in a way that minimizes economic, health and environmental risks.” The practice includes careful monitoring and the use of a wide variety of methods that include applying natural substances, setting traps, cultivating natural enemies of pests, and, as a last resort, the judicious use of pesticides.

Symbols



Resources

The Yale Sustainable Food Project's Purchasing Guidelines

Vegetable Guidelines

First Tier (ranked in order of preference)

- Connecticut organically – grown
- Connecticut ecologically –grown
- Regional organically – grown
- Regional ecologically – grown
- Connecticut conventionally – grown – small scale operation
- Regional conventionally – grown – small scale operation

Second Tier (ranked in order of preference)

- Connecticut conventionally – grown - medium scale operation
- Regional conventionally – grown - medium scale operation
- US organically – grown – small scale operation
- Connecticut conventionally – grown- large scale operation
- Regional conventionally – grown large scale operation
- US ecologically – grown - small scale operation

Third Tier (ranked in order of preference)

- US organically – grown medium/large scale operation
- North America organically – grown
- US ecologically – grown medium/large – scale operation
- International organically – grown
- US conventionally – grown – small scale operation

Fruit Guidelines

First Tier (ranked in order of preference)

- Connecticut organic
- Connecticut Integrated Pest Management (IPM)
- Regional Organic
- Regional IPM
- Connecticut conventional – small scale operation
- Regional conventional – small scale operation
- Connecticut conventional medium scale operation

Second Tier (ranked in order of preference)

- Regional conventional – medium scale operation
- US organic – small / medium scale operation
- US IPM– small/medium scale operation
- Connecticut conventional – large scale operation
- US organic – large scale operation
- US IPM – Large scale operation
- International organic
- US Conventional

Meat and Poultry Guidelines

First Tier (ranked in order of preference)

- Connecticut free – range / pasture – fed
- Connecticut organic
- Regional Free – range / pasture – fed
- Regional organic
- Regional conventional small – scale

Second Tier (ranked in order of preference)

- US free – range / pasture fed
- US organic – small/medium
- Conventional – small/medium – scale operation
- US organic – large – scale operation
- US conventional – large scale operation

CT Grown Crop Availability Calendar

<http://www.ct.gov/doag/cwp/view.asp?a=1368&q=385580>