



Sustainable Dining

Colleges and Corporations Take a Fresh Approach to Food

By Charles Arias

Last May, there was quite a celebration at the University of California, Berkeley. It had nothing to do with graduation.

Rather, it was the end of a David vs. Goliath story, in which students successfully convinced the university's Store Operations Board to reject a proposal to build a Panda Express restaurant on campus. The popular fast-food chain, students claimed, clashed with the healthy food image that Berkeley has come to project through various green efforts, from organically grown food used in cafeterias to highly promoted campus recycling and waste composting programs.

Now, in place of Panda Express, Berkeley students plan to open a student food cooperative, a cafe, deli, and grocery store featuring community-based and ecologically sound products, according to Alli Reed, a member of the co-op's steering committee. The facility should be open by January 2010 if all goes as planned. "It's going to be delicious food, it's going to be completely sustainable and affordable, and it's going to be a great place to hang out," Reed says. Optional memberships would require students to volunteer about four hours per month or pay a \$250 annual fee. Members would also receive a shopping discount and be able to vote in all major decisions involving the co-op. "This is more like what we're about," Reed says. "When you think UC Berkeley, you think democracy, you think healthy and earth friendly. You don't think of a fast-food place without a single vegetarian option on its menu."

Berkeley is not alone in its feelings toward on-campus food. Colleges are reworking campus policies on where and how they obtain food for cafeterias and restaurants, and changing the way they run those facilities to make them more environmentally friendly. Meanwhile, food providers are taking their own steps to make sure that their products fit the politically correct mold, and applying sustainable techniques with their own employees.

The emphasis on greener food policies stems from society's stronger embracing of sustainability as a whole, according to Maisie Greenawalt, vice presi-

dent of Bon Appétit Management Co., a Palo Alto, CA-based on-site restaurant company that provides cafe and catering services to corporations, colleges, and universities. "The public is expecting corporations and colleges to be more sustainable in their actions," Greenawalt says. "They are demanding that from the institutions in their communities, and the institutions are responding."

The Way to a Student's Heart

There is no doubt among college students, administrators, and faculty that green is the way to go when it comes to providing food services on campus. Surveys such as the Sustainable Endowments Institute's annual College Sustainability Report Card show an increased emphasis on use of "local" food as part of a university's overall green movement. More than 70 percent of schools devote at least part of their food budgets to buying from local farms or producers, according to Cambridge, MA-based SEI. Nearly two-thirds use fair-trade coffee to some extent, and 40 percent buy from a local dairy. Another 30 percent offer cage-free eggs.

Yale University dining officials can relate. In 2003, the school launched a pilot program in which one of its 14 student dining halls served only meals with all-organic or locally grown products. The pilot was wildly successful, according to Melina Shannon-DePietro, the New Haven, CT-school's sustainable food project director. "It supported a community of local farmers, brought the art of cooking back into the dining hall kitchens, and satisfied students with recipes highlighting local vegetables, grass-fed beef burgers, and brownies made with real butter and organic ingredients," Shannon-DePietro says. The program has since expanded, with sustainable food now accounting for 40 percent of what is served in all dining halls during the week. Thursday evenings, which feature all-sustainable dinners, are becoming increasingly popular, she adds.

At the University of California, Los Angeles, Thursday dinners have gone beyond being sustainable. On Thursday nights, no beef is served, in an effort to teach how environmentally unhealthy beef actually



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Food grown at Yale University's organic gardens is used in meals served at on-campus cafeterias. Nearly 40 percent of all food served there is now organic or locally purchased.

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Robert Gilbert

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Cattle require large amounts of water to raise, and they produce a form of methane that is 23 times more potent than carbon dioxide as a greenhouse gas, Gilbert says. In theory, raising beef contributes twice as much to global warming as the equivalent amount of other meats. Having "Beef-less Thursdays" every week during the spring 2009 quarter reduced beef usage by 1,000 pounds and saved nearly 1.5 million gallons of water, Gilbert says.

On the Go with To-Go Orders

A major strike against the proposed Panda Express deal at Berkeley was the company's lack of biodegradable "to go" ware—a campus requirement, according to Reed. Other schools have made similar moves toward reducing food waste on their respective campuses.

In 2008, the University of Florida at Gainesville, in partnership with food services company Aramark, introduced a reusable to-go container program to help reduce the 158,000 disposable units that end up in the school's trash each year. Three dining venues on campus allow students to effectively borrow up to two containers at a time for a \$7 deposit, according to Aramark Communications Director Karen Cutler. The deposit is refunded at the end of the school year if all containers have been returned.

The dishwasher-safe containers go through the same cleaning process as dinnerware used inside the campus dining halls. "It's a great example of elevating convenience while reducing waste," Cutler says. Several other Aramark customer campuses, including Baylor University in Waco, TX; the University of North Carolina-Chapel Hill; Peace College in



Colleges such as Duke University are getting rid of serving trays in an effort to reduce food waste, conserve water, reduce soap use, and save money.

Raleigh, NC; and Salem College in Winston-Salem, NC, also joined the program in 2008-09. "We plan to expand the program further this fall," Cutler adds.

Last Days of the Tray

Popularity of to-go containers is likely to rise, in part because many schools are getting rid of a traditional companion to student meals: the serving tray. Cutler estimates that up to 65 percent of Aramark's 500-plus campus partners are now trayless; a move supported by almost 80 percent of students at 300 institutions nationwide, according to a 2008 Aramark study.

Aramark notes that trayless dining reduces an institution's environmental footprint by decreasing waste and conserving natural resources. But going trayless has social, health, and financial benefits as well. According to a second recent Aramark study, food waste quantities decreased by up to 1.8 ounces per person per meal when trays were removed from dining facilities—a 25 percent to 30 percent reduction in food waste per person—because students carry less food and are more likely to eat what they take. The research indicates why "now is the time for higher education administrators to implement trayless dining at their institutions," the company notes.

Colleges are listening. In the past year, more than five dozen schools have sent plastic trays the way of the typewriter. Almost half of the schools tracked by SEI have curtailed use of trays, while others have gone part way with special promotions such as "trayless Tuesdays." The Association for the Advancement of Sustainability in Higher Education predicts that at least half of all universities in the U.S. will remove trays from dining services by 2014.

Williams College in Williamstown, MA, estimates that it is saving 14,000 gallons of water annually by eliminating trays at one of its four dining halls. The action meant 147,000 fewer trays went through the wash cycle. Both totals should climb exponentially with the removal of trays from all dining halls this fall, according to school officials.

The change has generally gone over well with students. A survey of a trayless pilot program at UCLA's Hedrick Residential Restaurant revealed mostly positive responses, with 70 percent of those surveyed saying they were satisfied with the experience, compared to 13 percent who were not. More than 80 percent of the diners were happy with the water and cleaning chemical conservation expected from the program, and 70 percent were satisfied with the potential for food waste reduction and increased room at tables due to lack of trays. Two-thirds of respondents said the change would not influence their choice to dine at the restaurant.



FOOD, INC.

UCLA is still considering expanding the program to all campus eating facilities. Based on the initial reaction, the switch should be well-received, according to a report by the school's sustainability committee. "However, to overcome concerns and perceived impositions of carrying dishes without trays, it will be important to show customers how the conservation measures are working, as well as provide them with tips on managing multiple dishes without trays," the report notes. "Considering the strong responses to the conservation aspects of the program, demonstrating these savings may assuage any perceived impositions."

Educating the Masses on Mess (Halls)

Of course, simply changing the menu or buying differently produced foods does little good if students are not aware of why it is being done. "Schools teach in the classroom. They also teach through their operations," says Yale's Shannon-DePietro. "Our ethics are manifested in our everyday actions—and in the operations of a university. More and more schools are taking up the responsibility, the calling, to operate in a way that is consistent with their ethics, and to help change the world for the better."

Shannon-DePietro notes an increased demand for coursework on food and agriculture at Yale. "There are now around 40 courses related to food and agriculture and somewhere around 700 students were enrolled in these courses last fall," she says. "Courses are across disciplines, from history to psychology to women's studies—a veritable food studies department."

Since 1997, the University of North Carolina at Chapel Hill has offered an honors course on the importance of sustainable food. "Eats 101" is now one of the most popular classes on campus, according to course instructor Jim Ferguson. Students review local restaurants on their sustainable tactics, prepare and attend class dinners, and even study table manners for various cultures. They also attend periodic field trips to see working examples of sustainable agriculture and food production. Required class readings include student-posted e-mail discussions reflecting upon the most recent sustainability workshop.

Not surprisingly, students must write a research paper dealing with food and culture as related to a current class topic. Ferguson says the course is "a workshop engaging a family of questions centered on sustainability—how we define it, how we measure it, and how we make ethical and thoughtful decisions about its implementation."

The course has proven so popular that this fall the school has added a fourth hour of credit, designed

to "tackle sustainability in every possible way," Ferguson says. He and Ariel Wilson, the school's first food studies major, are co-running the course. "It's not [just] about the weekly meals, but rather what happens at them," Ferguson adds. "Over 15 weeks, a group of (usually) strangers becomes a community which is 'sustained' by the preparation and sharing of food on a regular basis. More than this, though, as we move into a focused consideration of sustainability we are inevitably engaging with policy, health, and resource issues."

Yale Dining took a more direct approach to sustainability education by placing folded "table tent" cards on dining hall tables. The cards include news and information about sustainable foods written by students, according to Shannon-DePietro. The school has also developed a weekly speaker series and workshops on food, which take place during the academic year. "The variety of events gives students many ways to connect to our work," Shannon-DePietro says. "We have hosted cheese and bread-making workshops, for example, and brought to campus important voices ranging from Will Allen, chief executive officer of (nonprofit community food systems promoter) Growing Power Inc., to Whole Foods Market Chief Executive Office John Mackey."

Meanwhile, the University of New Hampshire in Durham inaugurated its new EcoGastronomy dual major—the first at any U.S. university—with the help of 14 students from the University of Gastronomic Sciences in Pollenzo, Italy. The students spent the summer living on the Durham campus to learn about the science of food and eating, ecotourism, and advertising. This fall, a group of UNH students are spending the semester at Gastronomic Sciences to study history of cuisine, food communication, and food business economics.

The exchange program is a fair match, according to both sides. "Today's hospitality students are interested in food and sustainability and how it connects with the local, regional, and global food systems," says Dan Winans, faculty coordinator of the dual major and an adjunct professor in hospitality management at UNH.

Carlo Catani, director of the University of Gastronomic Sciences, agrees. "This link to the EcoGastronomy program gives our students the benefit of UNH's strengths in sustainability, nutrition, and ecology," he says.

Big Changes for Big Business

Colleges are not the only ones going sustainable with their food lines. Major corporate employers are overhauling cafeteria fare in favor of healthier foods and programs that cut environmental waste. Companies



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Robert Kenner

Soylent Greens (and Beef)

When faced with a cafeteria meal that they can't quite recognize, everyone from high school students to office workers will give it the classic, generic name: "Mystery Meat."

Robert Kenner's new film, *Food, Inc.*, attempts to solve that mystery, and the way food in general is produced in corporate America. If you believe the reviews, Kenner does such a good job that once you see the documentary, you may never again eat anything you didn't personally grow or raise in your own yard.

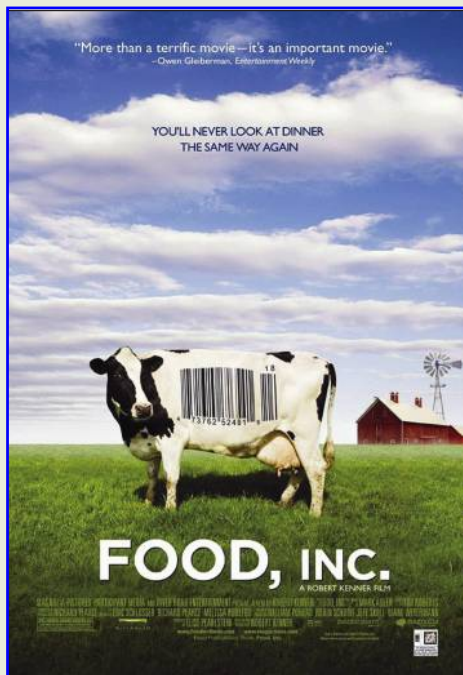
As Kenner describes it, big business food is a bad scene: "Our nation's food supply is now controlled by a handful of corporations that often put profit ahead of consumer health, the livelihood of the American farmer, the safety of workers, and our own environment," he says. "Sure, we have bigger-breasted chickens, the perfect pork chop, herbicide-resistant soybean seeds, even tomatoes that won't go bad. But we also have new strains of E. coli, the harmful bacteria that causes illness for an estimated 73,000 Americans annually, and we are riddled with obesity and an epidemic level of diabetes."

The film makes it a point to note that major food producers Monsanto, Tyson, Perdue, and Smithfield all declined to participate in *Food, Inc.* Many restaurants, such as McDonald's—already vilified in 2004's "Super Size Me"—also chose to stay on the sidelines.

At least one restaurant chain did the opposite. Chipotle Mexican Grill Inc., which has spent a decade trying to establish a sustainable supply chain, happily stepped into the fray by sponsoring free screenings of the film in 32 cities nationwide. Chipotle also distributed promotional pieces for the film in its restaurants and will include a bonus feature about the company's commitment to sustainable agriculture when the DVD is released later this year, according to Chipotle Communications Director Chris Arnold.

Kenner calls Chipotle "a great example of a company that's on the right track to improving our food system." The chain serves more than 60 million pounds of naturally raised meat annually, more than any other restaurant company, including all of its pork and chicken, and more than 60 percent of its beef. Thirty-five percent of its beans are organically grown; locally grown produce is used when available. And all dairy products come from cows that are free of synthetic hormone rBGH.

"We're unique in that we've learned how to serve more expensive, sustainably raised ingredients, but in a way that remains affordable to the average customer," says Steve Ells, Chipotle chairperson and chief executive officer. "At the same time, we are able to produce attractive financial results for our shareholders. That is a difficult balance to strike."



are cooking with trans-fat-free oils, adding more fruit and vegetables to the salad bar, even swapping out higher-calorie foods from vending machines for low-cal items.

Employees often are the ones who encourage environmental friendliness, as was the case with Atlanta-based Cox Enterprises. Although the communications and automotive services giant had been eco-friendly for many years, in 2007 it took its sustainability strategies up a notch with the launch of its "Cox Conserves" program. Cox Conserves calls for the company to conserve resources, embrace renewable forms of energy, and reduce greenhouse gas emissions by 20 percent by 2017. The program also encourages Cox's 77,000 employees nationwide to engage in eco-friendly practices, according to Mike Mannheimer, the company's vice president of supply chain services and chief procurement officer.

One of the employees' suggestions: Halt the use of Styrofoam food and beverage containers in favor of a greener alternative. The company now uses hot plates and bowls made from sugar, and cups and salad plates made from corn, both of which disintegrate in composting or landfill conditions in up to 60 days, Mannheimer says. The company also sells hot beverage containers made entirely from corn plastic, and sport bottles made from 100 percent recycled plastic. Employees who buy these bottles get a 10 percent discount each time they buy coffee and fountain drinks.

Bottled water was also replaced with the filtered variety at all company-sponsored meetings and events, due to the plastic bottle's century-long life-span in a landfill, Mannheimer adds. "At Cox, it's important for us to select environmental projects that are good for the environment and the type of payback they provide," he says. "It's important for us to listen to suggestions from our employees and provide programs that make them proud to work (here)."

Kraft Foods, the world's second-largest food company, relies on employee-led volunteer groups or "green teams" to help integrate sustainability at facilities throughout the world. Such groups brainstorm sustainability opportunities, such as increasing recycling rates, reducing paper waste in offices, managing building grounds more sustainably, and swapping out cafeteria or break room serving ware with product that are kinder to the environment, according to Mike Miller, director of marketing services for Kraft Foodservice in Glenview, IL. "Green Teams raise sustainability awareness with fellow employees, share success stories with other teams and build grassroots support for the company's larger sustainability efforts," Miller says.

Typical efforts include a 50 percent increase in year-on-year purchases of Rainforest Alliance-certified



coffee beans in 2008—a 12-fold increase from 2004 totals—to where eight of Kraft’s coffee brands in Europe and North America now carry the Rainforest Alliance certification seal, Miller notes.

The company has also developed the Packaging Eco-Calculator, which enables packaging developers to assess the environmental impact of the systems they create. “The tool measures information like the total amount of packaging used, how much post-consumer material can be used, energy used to create the packaging materials, amount of CO₂ generated as the materials are created and formed, and how well the package fits the product physically,” Miller says. The device will help Kraft reach its goal of eliminating 150 million pounds of packaging materials from the company’s supply chain by 2011, he adds.

“Packaging is one of the first and last experiences customers have with our products,” Miller says. “Our decisions about packaging sources, design, and disposal have a direct impact on how our consumers interact with our packaging, from cart to can.” (For a related story on Kraft Foods, see page 204.)

Nothing’s a Waste

The concept of composting—turning waste products into a reusable material such as fertilizer—is not new in college terms; some schools have been using a form of it since the late 1980s. But in recent years, food composting has become an “in” thing, according to SEI. The institute estimates that food composting programs exist at 55 percent of colleges; another 46 percent of schools report composting landscape waste.

Many universities prefer the “do it yourself in a can” approach, which takes months. But St. John’s University in Queens, NY, took a faster trek last May by acquiring an A500 Rocket model food composter, an onsite in-vessel unit that treats up to 80 gallons of food waste per week and transforms it into com-



post in 14 days, according to Frank Cantelmo, Ph.D., faculty advisor for St. John’s Earth Club. St. John’s is the first U.S. university to invest in The Rocket, which has been used throughout the United Kingdom for about two years. Student members of the Earth Club operate the unit, which expands their sustainability educational experience while helping to “green” the campus, Cantelmo notes. In addition, the work helps the university review the efficacy of food composting on campus.

“This is the last piece of the recycling puzzle,” says Gerardo Soto, managing director of the North American Trading House LLC in Tarrytown, NY, distributor of The Rocket composter. “Once you are able to recycle food waste, you can achieve zero waste.”

Not to be left out, corporations are also into composting. Cox Communications Rhode Island, a subsidiary of Cox Enterprises, created a composting program that turns food waste into fertilizer for company landscapers, according to Mannheimier. The program recycles three-quarters of the company’s discarded materials, he says.

Kraft has its own waste recycling projects, including a pair of waste-to-energy efforts conducted at Philadelphia brand cream cheese plants in New York state that now produce enough alternative energy to heat more than 2,600 homes in the Northeast, Miller says. “We’re using bio-methane from on-site waste treatment systems to replace 30 percent of each plant’s annual natural gas purchases in a year,” he says. “By doing so, we’re also reducing the associated CO₂ emissions that are part of transporting waste and discharging cleaner wastewater from our on-site treatment systems.”

Such efforts are examples of easy ways corporations can make a difference when it comes to the environment, executives note. “As more companies do the right thing, ‘green’ standards will become a more common practice in the food service industry,” Mannheimier says. “We believe that this trend has already gathered momentum and will become widespread within the next three to five years.”

Service with a Sustainable Style

The green movement has been felt by the nation’s food service management firms as well. In the past five years, Bon Appétit Management has watched the concept of using sustainable foods go from radi-



Kraft’s new Easyprep pouch for products such as Kraft Mayo, Miracle Whip, and salad dressings cut packaging waste by 95 percent when compared to a rigid gallon container.

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Mike Miller

Sustainable Odds and Ends

As universities, corporations, and even food-related businesses incorporate sustainability into their food management policies, makers of accessory products are taking steps to ensure they literally aren't left off the menu. Here are a few cafeteria must-haves that are converting to green status:

- The drinking straw.** Originally as nature-friendly as you could get—the earliest drinking straws were made from natural rye grass, then out of paper in the late 1800s—the beverage container's best counterpart has consisted primarily of not-so-Earth-friendly polypropylene or polystyrene plastics since the early 20th century. Used (and discarded) in the billions each year at restaurants, fast-food chains, school cafeterias, public gatherings, and homes, straws are undergoing an evolution, and to some extent, devolution, as people get back to basics when drinking. Recently developed options include corn plastic straws that decompose under commercial composting conditions in 45 to 60 days; reusable glass and bamboo straws; and even the return of the paper straw (www.ardvarkstraws.com). And if water is your beverage of choice, check out the AquaSafeStraw (www.aquasafestraw.com), a personal filtration device originally designed for campers and global travelers. But the pocket-sized, reusable unit also works well for removing taste and impurities from everyday drinking water. Each one filters up to 500 liters (132 gallons) of water, saving the environment, your health, and your pocketbook.
- Beer.** You might already think of them as sustainable suds—beer is made from hops, yeast, grain and water—but beer making itself is not very efficient. It takes up to eight gallons of water to make a single gallon of beer, and brewing also wastes a good deal of grain. Breweries large and small are making efforts toward more-sustainable production and distribution. Chicago-based MillerCoors, America's second-largest beer maker, has implemented a nearly 4-to-1 water-to-beer ratio, now reuses or recycles 98 percent of all brewery waste, and reduced usage of aluminum in its cans by 10.4 million pounds annually with a slight reduction in can diameter size. At the other extreme, Chico, CA-based microbrewery Sierra Nevada Brewing Co. uses one of the country's largest private solar and fuel cell installations to power its operations, and also recycles virtually everything, including using in-house byproduct methane to fuel boilers, and re-processing and purifying its own wastewater.
- Tea.** If you've ever wondered how those ground tea leaves ended up inside the little brewing bags, the mystery is over. Lipton has contracted with National Geographic's Web site to create a micro-site that tells everything you wanted to know about tea making, including sustainability, and the social and economic aspects of the tea-growing and harvesting process. The new site coincides with the company's efforts to have all of its teas Rainforest Alliance-certified by 2015, according to Lipton Tea Brand Director Christie Durkin. The custom content will be available at www.nationalgeographic.com/lipton and www.lipton.com, and also distributed on various National Geographic platforms, including the National Geographic Channel, Facebook, Twitter, and customized Nat Geo Mobile iPhone game applications.



cal to mandatory, according to Greenawalt. "When we started marketing the service back in 2004, the schools responded with great interest, but the corporations weren't very focused on it," she says. "Today, we don't get a single Request for Proposal that doesn't have questions about sustainability. Everybody is using that as a partial decision-maker to decide who to contract with for food service."

Typical questions include whether the Bon Appétit uses sustainable seafood (yes), cage-free eggs (yes), and organically or locally grown food (yes), according to Greenawalt. Keeping up with such demands has meant careful screening of menus, which sometimes results in disgruntled or surprised customers when a favorite item is gone. "We've had a lot of interesting conversations," Greenawalt says. "All of a sudden, farmed salmon was off the menu, and you can't get fresh salmon all year round. Chilean sea bass—a favorite for catering—was also gone. We had to tell people they couldn't have it, and here's why. It turned into a good opportunity for us to educate our customers."

Generally, the menu changes have gone over well. "The great majority says, 'This is the way I eat at home, and I'm so happy to see it reflected in my workplace or where my child is going to school,'" Greenawalt says. "Or they're happy to learn that beef was a high-carbon food, and, 'Thanks for telling me. Now I know how I can eat in a more environmentally friendly way.'"

The key to providing food that is more sustainable—and the biggest change companies and colleges often have to make within their dining services—is learning to transition from using processed foods to fresh, Greenawalt adds. "If you don't have a culinary team that can cook from scratch in your kitchen, then you can't use fresh local produce, and you can't suggest recipes to make them lower in carbon," she says. "If you can't ensure that you're always serving sustainable seafood, you're giving purchasing power right back to the manufacturer of the processed product."

But businesses and colleges are coming around, she notes. "There's a more-nuanced understanding of sustainable foods," Greenawalt says. "They're not yet saying they want everything to be organic, but there is an understanding that local food isn't automatically organic; that USDA-certified isn't automatically organic. It's a real awakening."

