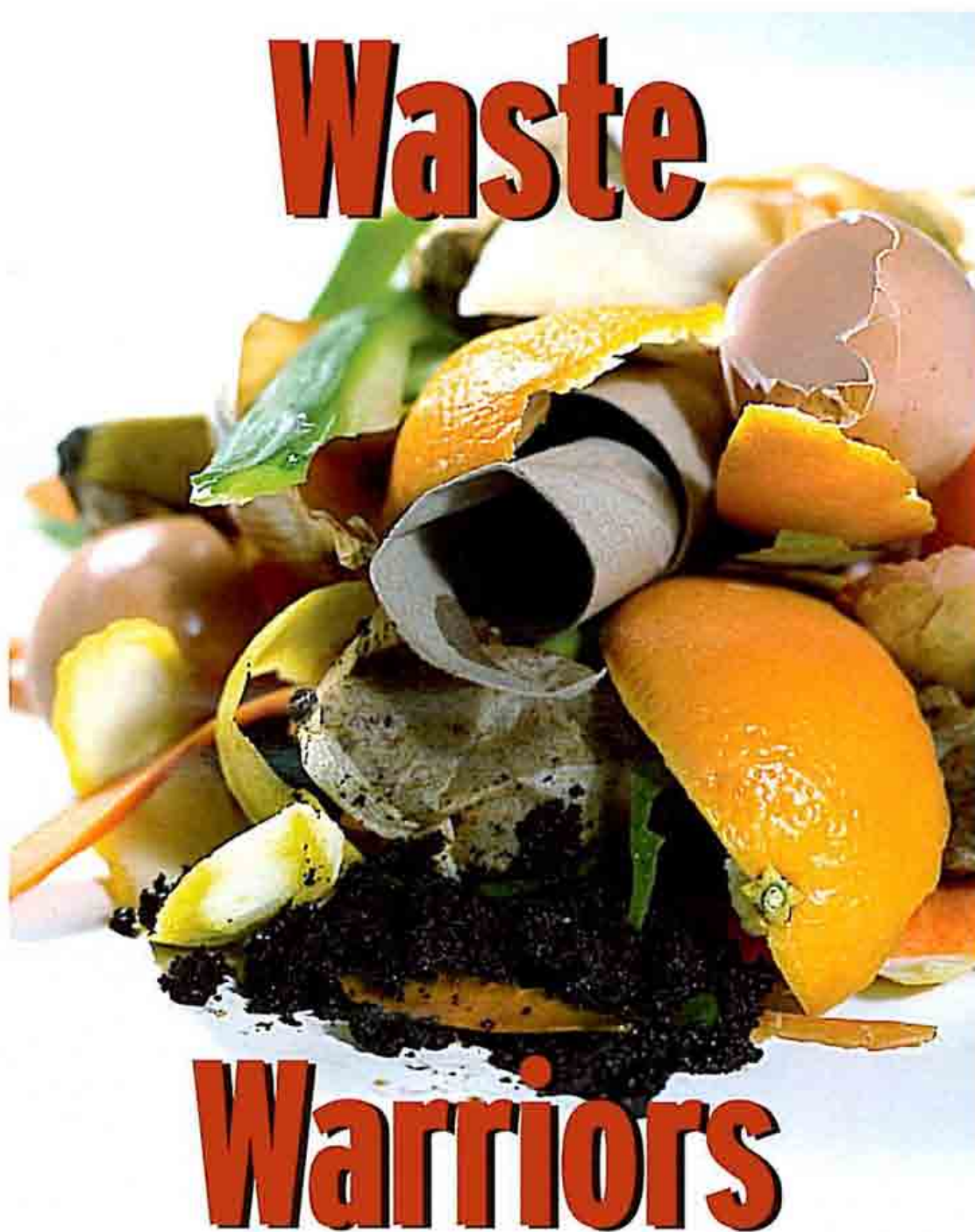


# FOODSERVICE DIRECTOR



**M**uch of noncommercial foodservice's efforts to make their operations more environmentally friendly has centered around issues like recycling and composting. But operators all too often forget to examine ways to reduce the waste they generate in the first place. **MORE ON P. 24**

# Waste Warriors

By reducing pre-consumer waste, operators can strengthen their bottom lines.

by Karen Weisberg

**W**hen asked what waste management efforts they're currently involved in, many operators immediately cite their varied recycling efforts, including a switch to bio-degradable containers, the use of pulpers, warewashers that reduce water usage, and collecting spent fryer oil, to name a few. But recycling of whatever type, although certainly laudable, can really be seen as a second step; the first involves on-site efforts to reduce waste both in the front and back of the house.

At Bucknell University, a Parkhurst Dining Services account in Lewisburg, PA, the food-service department has been working closely with the university's engineering group to convert waste from the dishroom pulper into methane and carbon dioxide to be used as a heat source and as fuel. But when it came to tackling the more prosaic issue of reducing plate waste, John Cummins, general manager of resident dining, met with strong student resistance.

**Portion control:** "When Parkhurst arrived on campus in July 2005, we noticed an extreme amount of waste in the dishroom," he recalls. "All dining rooms were self-serve and students' eyes are typically bigger than their stomachs; they have a desire to try everything. We took our primary service area, Parkside Diner, which serves home-style food such as entrees, starch, veggies and carved meat, and we made it into a served area. That defined portion control and dramatically cut down on plate waste. With self-serve, people were taking two or three portions of a couple of different entrees. In other areas, we offer a lot of demo cooking and that, in itself, is portion controlled."



But when Cummins announced the end of self-service, students complained. "They felt it was a big deal, so I needed to explain the situation to them," Cummins recalls. "I wrote two letters to students and told them I was going to do it. I wasn't backing down. I told them I wanted them to communicate with the service personnel and also told them they 'deserved' to be served, considering how much they were paying for the program. Plus, I talked to them about the astronomical amount of waste. That was very important to us. The savings on plate waste [would be] enough to employ four full-time servers."

**At Bucknell University, self-service has been replaced by attended stations or demonstration cooking. By implementing these portion control methods, plate waste has been reduced greatly.**

**Raising student awareness:** The College of Wooster (OH) has been ahead of the curve in its recycling efforts, going so far as to convert its diesel fuel catering van to run on used fryer oil. Overall, the percentage of materials recycled on campus has increased from 23% to 43%, thanks to the concerted efforts of Chuck Wagers, director of hospitality services. As co-chair of the college's environmental task force, he continually aims to de-

crease any negative environmental impact his department might cause.

In terms of plate waste on this 1,800-student campus, Wagers keeps a sharp eye on his all-you-can-eat locations.

"We work with the Wooster Volunteer Network, a group of environmentally concerned students, when they run a Wasted Food Weigh-In three or four times a year," he explains. "They set up inside our largest dishroom and solicit student volunteers to help collect all uneaten food from the trash during one dinner meal. Then they publicize the results in order to raise student awareness."

Wagers credits them with limited success, thus far. An initial weigh-in for the semester collected about 250 pounds from meals served to about 1,300 students, or less than four ounces per person. It's evident that it doesn't take much per person to equal a lot of waste in total. "By the next weigh-in—about six weeks later—it might be reduced by 30 or 40 pounds, but behavior change may not be permanent," Wagers says. "Ideally, the program should be run monthly as reinforcement. Students like knowledge. They want to know what they're eating, where it comes from and what's being wasted. If we teach them that their behavior has a direct impact on food consumption and food costs, it could have a positive effect, especially on the environment. I find students fall into several categories. Some are impassioned in respect to the environment and they're a growing minority. But most students say, 'I'm hungry—I just want to eat.'"

**As-needed prep:** In the back of the house, Wagers utilizes a computerized forecasting program to help predict

how much food will need to be prepared. Then, by constantly batch cooking throughout the meal period, he proactively avoids the production of waste. "Plus, we have a safety and sanitation coordinator on staff," he says. "One of his objectives is to reinforce proper cooling, reheating and freezing times as well as temperature holding, so we can avoid waste and any kind of foodborne illness."

Batch cooking is made easier with a back-up of thousands of pre-made portions to draw upon, Wagers points out. "For instance," he notes, "we'll be in the first two or three weeks of August preparing food we'll serve September through November. Many people do this in a cook-chill facility, but we have a large freezer storage area. So, for example, we may have 3,000 servings of lasagna on hand, which we menu twice in a four-week cycle. It's fresh frozen product and we'll serve 400 to 500 portions per meal, which we'll pull out as needed."

**Cut waste, cut cost:** At 450-bed University of Washington Medical Center in Seattle, Walter Thurnhofer, director of food and nutrition services, also has begun to address the issue of waste. Not only is waste an environmental concern, but reducing it may be a way to cut costs, always a top-of-mind concern in the healthcare arena. "We had consultants in from Seattle who told us that if we could pull out everything that was potentially compostable—including plates, trimmings, leftover food, etc.—it would be about 400 tons annually at \$38 a ton charge to us, versus the 600 tons of trash my department currently generates at a cost of about \$120 per ton to dispose of in the normal waste stream. So that's considerably less," he reports.

A room service program is slated to be rolled out in early September, and Thurnhofer says waste management will be one of the benefits. "Now, there's waste from trays that are sent [to patients] whose diets may have been changed or to patients who have been discharged and we weren't informed," he says. "Also, we produce 300 trays an hour now and, since you can't run out of anything, on every single tray line there's a bit of extra of a lot of items and most of them get thrown away, 365 days a year. We estimate 50 trays a day are wasted for legitimate reasons."

Because room service is a made-to-order system, Thurnhofer expects to save approximately \$200,000 annually—that's 19% of his patient food budget—with the elimination of wasted trays. Part of that savings will accrue from the



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anticipated decline in the demand for floor stocks for patient snacks. "We don't expect to need much since we'll be sending room service throughout the day. So it's fairly aggressive, but we believe it's doable," he contends.

**Hostess model:** Plate waste reduction can be effected in a standard, call-in room service model, but it can also be achieved as a byproduct of a hostess program, according to Joanne Shearer, RD. As team leader, food and nutrition services, at 55-bed Avera Heart Hospital of South Dakota in Sioux Falls, she asked a group of recent former patients which style of service they preferred. As a result of the survey, Shearer now has a hostess visit each patient with a restaurant-style menu in hand and record their selections.

Hostesses then call in the orders using a cell phone.

"We were at 90% satisfaction, but with the restaurant-style menu and the hostess program, we're now at 97%," Shearer says. "The most significant improvement was the reduction of plate waste by 40% with this style of service, because they're ordering exactly what they want. Our simple outcome measurement demonstrating the effectiveness of our program was to determine what percentage of patients consume more than half their meal."

**Tracking waste:** Some contract companies have begun testing a commercially available tracking system to measure how much waste is being generated in their foodservice accounts and where it is coming from. Bon Appetit Management Co. recently implemented the program, called the ValueWaste Tracker, at four higher education locations, including Hamilton College in Clinton, NY.

Waste management at Hamilton, where approximately 1,800 students dine daily, wasn't a major focus, chef Reuben Haag admits. However, 12 weeks into the program, Haag says he has discovered waste coming from unexpected places.

Two trackers are in use in one building at Hamilton, one in the basement kitchen, the other upstairs in the serving area. Haag has learned that almost one-third of the waste comes out of the servery, with each of the stations contributing their own discarded items.

"The volume and dollar amounts may show that your bread is molding on the racks, or the amount of batch cooking versus the flow of customers in and out isn't a fit, or there's often excess salad dressing sent to catering events," he says. "When you see the *Continued on pg. 26*

## COVER STORY



*Continued from pg. 25*

data and track it in charts, you can see where the money really goes. We've been able to figure out there are some days—especially Mondays—when we produce more waste. On Mondays, we have a considerably greater volume of waste since we're working on more food for our higher volume of breakfast business that day."

All of the crusts of bread from the deli and mangled pies from the dessert station are discarded; at the sushi station, if rice goes beyond time to serve according to HACCP (Hazard Analysis Critical Control Point) parameters, it's discarded. Similarly, at the pizza station, if items are sitting too long, they're weighed and discarded, and so on. But many items don't get thrown out; they're weighed, chilled and sent to the food bank; it's the same with overproduction of entrees. "The system helps you see the history of overproduction so you can refine the volume," Haag points out. "Before, there was no formal tracking here and most of the time you see waste, but you don't really 'see' it when you're there all the time. After a while, you have to start paying attention to why it's there, how did it get there and how much money does that represent?"

**Batched accuracy:** Now Haag is becoming more aggressive with batch cooking parameters and is trying to gauge more accurately the amount of food needed through the service period relative to the true customer flow. "We're open almost all day and depending on class schedules or the weather, volumes change," he explains.



Floor stock waste at UWMC is expected to decline this fall when room service debuts.

"I can see [with this system] the volume for last Tuesday, when it rained, so the next rainy Tuesday [of this semester] we can adjust production."

Haag notes that everyone on the production staff is involved and motivated, whether through incentive prizes, verbal recognition or simply understanding the role they play in achieving the goal of reducing waste. But he's careful to let workers know that generating waste and weighing in with it is a good thing. "Let's say, for example, that Trevor produced a ton of waste, but in truth he was doing a good job. He was producing a lot of warranted and justified waste and he was diligent in recording it. It's not about who produces the most waste, it's about thanking Trevor for being involved and making the project successful."