The Business and Cultural Acceptance Case for 

Trayless Dining 

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The increase in social consciousness and environmental stewardship on college campuses has spurred an array of new and innovative sustainability programs. One particularly creative initiative that has gained attention over the past few years is trayless dining.

A significant number of colleges and universities have switched to trayless dining and, in most instances, tangible benefits were realized. However, cultural acceptance hurdles and a lack of conclusive quantifiable data still prevent many institutions from embracing the trayless initiative.

ARAMARK Higher Education has recently completed two major studies to truly assess not only the sustainability business case for removing trays, but also to address the historical cultural barriers to widespread adoption. The results, we believe, present a comprehensive assessment and argument for higher education administrators to implement trayless dining in higher education. The findings of these studies present a sound business case for removing trays and clearly indicate that dining customers are ready to accept widespread adoption.

**An ARAMARK study of 186,000 meals at 25 colleges and universities found a 25 percent to 30 percent reduction in food waste per person on trayless days.**
Reasons for Considering Tray Removal

In an effort to support their stewardship and/or carbon-neutrality aspirations, colleges and universities are looking for ways to substantially minimize their waste, conserve natural resources and provide a more sustainable solution. Removing trays from the dining venue is one such action that promotes an immediate and tangible benefit in support of environmental stewardship.

Trayless dining reduces an institution’s environmental footprint. It decreases waste, conserves natural resources (namely, energy and water) and reduces the introduction of polluting detergents, rinses and drying agents into the water table. Economically, it reduces the cost of these same inputs (energy, water, cleaning agents), as well as the fees associated with waste removal. Socially, trayless dining can provide education and awareness about environmental issues, while also potentially reinforcing a healthy lifestyle. Collectively, it is a true Triple Bottom Line initiative, further supporting campus sustainability.

Environmental
- Conserves energy by eliminating the need to heat water for tray washing.
- Reduces dependence on fossil fuels.
- Saves one-third to one-half gallon of water per tray.
- Reduces chemicals, detergents and drying agents used to wash trays.
- Decreases discharge into landfills, incinerators and wastewater treatment facilities.
- Lessens the ecological footprint.

Social Awareness
- Supports education and awareness of environmental issues.
- Reinforces institutions’ sustainability initiatives.
- Encourages students to participate in a “green” initiative that has both a personal and community impact.
- Reinforces sustainability awareness on a daily basis.

Economic
- Saves on cost of water and energy.
- Saves on cost of detergents and rinse/drying agents.
- Eliminates cost of trays.
- Reduces food-waste removal costs.
Business Case for Tray Removal

Colleges and universities that have implemented or tested trayless dining report a variety of economic, social and environmental benefits. Yet, the most consistently reported benefit is reduction in food waste.

To strengthen the case for trayless dining, ARAMARK conducted an in-depth, nationwide study to measure the difference in food waste resulting from tray removal. This study measured food waste from more than 186,000 meals served at 25 institutions during various periods in the 2008 academic year. Researchers collected food waste data per person and compared measurements on days with and without trays.

The results were impressive. Over the test period, the 25 institutions collectively generated 11,505 fewer pounds of waste on days when trays had been removed. On average, ARAMARK reports food waste quantity was reduced by 1.2 ounces to 1.8 ounces per person per meal when trays were removed from dining venues. This represents a 25 percent to 30 percent reduction in per-person waste on trayless days.

Moreover, colleges and universities are finding that trayless dining contributes to their sustainability initiatives by elevating awareness, saving energy and conserving natural resources — all while conserving limited financial resources.

Other Benefits

The study also sought to understand the amount of water and energy savings resulting from tray removal. Water consumption savings are difficult to generalize due to many variables, such as differences in dishwashing systems, water-flow rates and operating practice. However, ARAMARK determined that on average, a tray conservatively requires one-third to one-half gallon of water to wash. Energy consumption and cost savings per tray could not be confidently determined because of the many variables, such as regional and local utility rates, institutional fuel mix and operating practices.
Cultural Shift in Accepting Tray Removal

Despite the compelling economic and environmental arguments for trayless dining, many institutions are still hesitant to remove trays. The barrier is usually cultural. Dining trays have been a part of student (and adult) consciousness since the time a student first walked through a school lunch line. Many administrators believe removing trays would be received negatively by their customers. They believe customers would be inconvenienced, complaints would increase and the administration would be criticized for its actions.

However, in the spring of 2008, ARAMARK also conducted a nationwide survey among campus constituents to gauge their support toward tray removal. The survey included more than 92,000 students, faculty and staff at 300 institutions across North America. The results counter the conventional wisdom that states students and campus constituents would reject the permanent removal of trays.

When asked whether they would accept the removal of trays in an effort to reduce waste on campus, 79 percent of respondents indicated “Yes.” The survey revealed that across the campus population, students, faculty and staff overwhelmingly support trayless dining. Furthermore, food-service managers report that conversations with students indicate that they believe trayless dining is a real-time, positive and consistent “green” initiative. These empirical and anecdotal survey results strengthen the business argument for tray removal.

Source: ARAMARK Higher Education DiningStyles™ Spring 2008 Survey Results. Margin of Error: +/- 0.09% at a 95% confidence level.
Communication is Key to Success

With the business and cultural argument for tray removal established, the challenge for any institution is how to ensure a successful implementation. Successful trayless dining programs require a comprehensive communications initiative that educates and informs all campus stakeholders.

Based on successfully implementing trayless dining programs, ARAMARK recommends presenting the case for tray removal to affected parties. This includes not only students, faculty and staff, but also institutional leaders, such as senior administration, student government, campus environmental organizations and faculty senate. Survey results and experience indicate that faculty and staff are least supportive of tray removal efforts. Proper communication to this group is essential.

In many successful introductions, tray removal is first piloted as a trial initiative to demonstrate its positive results. It also helps to gauge students’ and other diners’ support.

Connecting with students was most important at the University of North Carolina at Chapel Hill. Students were quick to embrace trayless dining because the state was experiencing a severe drought. Tours of the dish room provided customers with a first-hand understanding of the food waste and water lost as a result of using trays. Once students were informed about how much water it took to clean each tray, and that they could personally and collectively make a difference, trayless dining gained widespread support.

Pilot trayless days are most successful when they are held during periods of heightened environmental awareness, such as on Campus Sustainability Day or Earth Week, or in association with other organized campus environmental events.

At the University of Florida, much emphasis was placed on educating students prior to the launch of trayless dining. A student organization focused on campus sustainability, Gators for a Sustainable Campus, helped by staffing a table outside the dining hall the week prior to the launch and communicating to customers the reasons for and benefits of tray removal.
Marketing materials were also used at strategic points throughout the dining hall, including the dish-return area and entryway. A more creative approach was also taken by binding the stacks of trays with rope and placing signage on the sides of the stacks that communicated the amounts of food and water wasted.

**Fall Introduction**

For institutions seeking to permanently remove trays, the opportune time to introduce trayless dining is at the beginning of the academic year. Incoming first-year students and transfers enter with no previous history or exposure to trays on campus. For this group, acceptance is immediate. Returning students may have already been exposed to the concept during trial periods in previous years. Collectively, a fall introduction will help to avoid confusion and frustration over tray removal.

Again, educating students on the merits of going trayless is essential. Dining facility managers should be proactive during implementation by making sure staff and floor managers are visible and ready to answer questions. Tables, tents, napkin ads, posters and other communication tools should inform students of the trayless initiative.

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**Best Practices**

**No. 1: Keep trays stored but readily available for people who demand one.**

In any institution, there’s usually some resistance to change from long-standing practices. Although trayless dining has gained widespread acceptance from campus constituencies where it has been implemented, there are always individuals who may be reluctant to convert.

**No. 2: Provide trays for the disabled.**

Many people, because of disability or other physical or medical challenges, require the use of a tray.

**No. 3: Convert staff and employees.**

Food service managers discovered that a prime source of resistance can come from their own dining and kitchen staffs, especially long-time employees. Because trays have always been a part of their operation, changing to trayless is an adjustment for them.

**No. 4: Feedback is important.**

It’s important to conduct surveys before implementing a trayless program to gauge issues and concerns, and equally important to solicit and share feedback with campus stakeholders after implementation.

**No. 5: Create a smooth transition.**

To achieve a smooth transition to trayless, start slowly. Conduct a pilot program (preferably during Earth Day/Week) that is voluntary, and then migrate to mandatory.

**No. 6: Audit.**

Perform waste and energy audits and share the results with students and the campus community.

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“Sometimes the craziest ideas are the ones that lead to the greatest savings and impact. The best part is that when our customers heard the sustainability impact, they bought in and adapted in quick order to the absence of trays.”

— Mick Doxey, Director of Business Services
Grand Valley State University
About ARAMARK Higher Education
ARAMARK Higher Education provides a wide range of food, facility and other support services to approximately 600 colleges and universities in the U.S. ARAMARK offers higher education institutions a single source for dining, facility, conference center, and stadium and arena services. Dining services offered includes: master planning; culinary development and venue design; catering; residential, quick-serve, and express dining concepts. Facility services offered includes: facilities maintenance; custodial; grounds; energy management; capital project management; and building commissioning.

For additional information contact Bruce Alperin, LEED AP Senior Director of Marketing, alperin-bruce@aramark.com Or visit www.aramarkhighered.com.

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