

Project Name: Yale Food Waste Reduction Initiative

Organization Name: Yale Hospitality

Preceptor Names and Contact Information:

- Gerry Remer, Director of Sustainability and Supply Management, geraldine.remer@yale.edu, 203-436-9127
- Alison Walkley, Senior Marketing and Communications Manager, alison.walkley@yale.edu, 203-436-4959
- Azhar Mohammad, Senior Executive Chef, Managing Director Culinary Support Center, azhar.mohammad@yale.edu

Description of the Organization

The mission of Yale Hospitality is to nourish a culture in which the interwoven pleasures of growing, cooking, and sharing food become an integral part of each student’s campus experience and relationships.

That nourishment occurs at many levels. You find it in the wide variety of healthful food choices in Yale’s residential halls and campus cafés; in its sustainable farm field trips for students; and in special events like its Guest Chef and Final Cut programs. As an educational function, you see it in Yale Hospitality’s efforts to expose students to global food traditions and culture, reflecting the welcome that familiar foods can offer to international students and visitors. At a more practical level, Yale Hospitality and its management team have sought to take the school’s traditional dining programs and services to new levels.

Over the past half dozen years it has earned a national reputation for its nutrition and wellness programs, sophisticated catering services and an industry-leading push for sustainability in food sourcing and production, culinary authenticity and quality, and supply chain management. With 23 residential and retail dining operations across the campus, Yale Hospitality and its skilled, long-tenured staff touch the lives of students, employees, and visitors all day long. It strives to ensure that they are served fresh, great-looking, and great-tasting food in a clean, safe, and friendly environment. It also looks to readily accommodate those with special diet needs, and to provide a variety of support services that match the world-class events and programs offered by the University.

Project Description

In 2017, Yale University announced its Yale Sustainability 2025. This plan is organized around a vision of a Yale where “sustainability is seamlessly integrated into the scholarship and operations of the university, contributing to its social, environmental, and financial excellence, and positioning Yale as a local and global leader.” As the main provider of food on campus, Yale Hospitality is embracing this vision and developing a multi-year sustainability strategy. Yale Hospitality takes pride in its role as a sustainability leader among peers, in the food industry and in the region. While many of Yale’s peer institutions frame their food sustainability efforts around sourcing of local and organic ingredients, and offering composting, Yale is taking a more holistic and systemic approach. The forthcoming Yale Hospitality Sustainability Action Plan is structured around three priorities: *food conversations*, where members of the Yale community are empowered and informed about food and its impacts; *research and development*, which supports constant innovation and creativity in our kitchens; and *food waste reduction*.

Reducing food waste has multiple potential health, environmental, social, and economic benefits, including reduced food insecurity; reduced greenhouse gas emissions; reduced waste of water used in producing the wasted food; more efficient use of agricultural land; and reduced costs across the food supply chain – from farm to consumer. Within the topic of food waste, Yale’s commitments are organized into three target areas:

- **Farm “waste.”** Yale is working with producers and distributors to source food items that are less attractive, and therefore not salable. Examples include tomato “seconds” that can be made into salsa, and misshapen pumpkins that can become soup.
- **Waste during production.** Yale adheres to a “nose to tail” and “stalk to leaf” mentality about whole foods. For example, broccoli stems will be used for soups and leaves will be featured in salad bars.
- **Food that has been prepared, but is not eaten.** While we try to be as efficient as possible in preparing meals for our students, it is quite difficult to estimate accurately the volume needed for each dining facility each day. We have systems in place to ensure that much of the unwanted food is donated to area soup kitchens, but any food that has been offered in the serving area is ineligible for redistribution. Included in this challenge is food that students take but do not eat.

This approach to the challenge of wasted food addresses stress points throughout the food system. As Yale develops programming to address this global imperative, we are engaging three major stakeholder groups: the campus community, other institutions in the region, and the food industry. Each of these groups is important in a different way. In demonstrating and communicating about tactics on campus, students will have heightened awareness after they graduate. As we partner with area institutions – including K-12 schools and community colleges – we can share knowledge, as well as resources. And by establishing systems, and documenting successes and lessons learned, we have the opportunity to position Yale as a leader and mentor organization on this important topic.

It is important to note that food waste reduction efforts cannot be solely operational. The *conversations* and *R&D* elements of the Yale Hospitality Sustainability Plan will be essential to the success of this effort, as these commitments will result in informed consumers and innovative menus. The Plan, which is in development with guidance from Yale faculty and professionals, will reflect these three priorities and their interrelation, as well as the role that Yale can play in leading an effort to change how sustainability is measured in food systems and provision.

This project will have three aims:

Aim 1: To assess cutting edge tactics and technologies in the field of food waste reduction, including their health, environmental, social, and economic benefits, as well as possible collaborators locally and in the industry.

To conduct this assessment, students will perform a literature review; identify and interview key informants, including Yale Hospitality staff, food industry representatives across the entire relevant supply chain, staff at other institutions working to address food waste, academics who specialize in food waste reduction, and other relevant experts; conduct a survey of Yale students, if indicated; and conduct relevant quantitative analyses of health, environmental, social, and economic benefits of various tactics and technologies.

Aim 2: Building on Aim 1, to develop a strategic plan aimed at measurable food waste reductions and innovations at each of the systemic points referenced above.

The strategic plan should favor tactics and technologies that have the most health, environmental, social, and economic benefits.

Aim 3: To develop recommendations for next steps, including ideas for convening partners to agree on tactics to deploy and test.

Expected Work-Product and Deliverables

A final report that includes 1) an overview of the process and intent of this project; 2) a section that describes methods for literature reviews, key informant interviews, surveys, quantitative analyses, etc.; 3) results, including analyses of health, environmental, social, and economic benefits of various tactics and technologies; 4) recommendations for specific tactics and technologies, and regional partners; 5) suggestions for stakeholder engagement; and 6) overall conclusions and recommendations about how to reduce food waste in scalable, replicable ways. The report should include a concise, well-structured Executive Summary.

Yale Hospitality will use this report to pilot and deploy the new or enhanced tactics. Success will require personnel time, additional infrastructure, and robust communications and programming.