

Sustainable Food Systems at UCLA

Final Report



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I. Executive Summary

Sustainable Food System's aim is to help UCLA Dining reach its goal of 20% sustainable foods by 2020. We achieved this through a UC Food Sourcing & Policy Report and educational initiatives on campus, as well as through the creation of a Buyer's Guide.

Our team worked with UCLA Housing & Hospitality Services (H&HS) Sustainability Analyst Becky Miller and Sustainability Coordinator Robert Gilbert to increase the amount of sustainable foods offered by UCLA Dining & H&HS. We attempted to collect, compile, and analyze food purchasing information from Dining Managers and Sustainability Coordinators at each of the UC campuses, as well as at other universities known for sustainable foods initiatives, such as Yale and Cornell. Each campus produces an annual report on sustainable food purchases and initiatives in accordance with the 2008 sustainable foodservices section added to the University of California *Policy on Sustainable Practices and Guidelines*. However, the format and specificity of the information provided in these reports varies widely from campus to campus. Our stakeholders suggested creating a standardized database facilitating the exchange of practical information, such as vendor lists and prices, across campuses. To this end, we asked representatives at each campus to fill out a questionnaire and spreadsheet regarding their sustainable food purchases. We then analyzed information provided by UC Berkeley, UC Davis, UC Santa Cruz, and UC Santa Barbara in order to provide strategies and models to aid UCLA in increasing sustainable purchases.

Additionally, we focused on educational initiatives among UCLA students living on campus. We hosted a screening of the documentary *FRESH*, directed by Ana Sofia Joanes. We gave students the opportunity to engage in a discussion with two speakers – Derek Steele who directs “100 Seeds of Change” with the Social Justice Institute and Brandon Kristy – to discuss how to integrate sustainable foods into their own lives while living on campus. This event left an impact on the behavior of many students who attended because they learned how unhealthy, inhumane, and unsustainable conventional farming can be. After the event, many attendees mentioned that they never wanted to consume conventionally produced foods again. The purpose of the screening was to introduce students to the issues of conventional farming, offer alternatives, and push them to engage with their Policy Review Board representatives to ask for more sustainable foods in the dining halls. We also created educational tools including an LCD slide and flyers with information and advice on more sustainable living and dining, as well as tabled at various sustainability focused events.

Apart from our work with Dining, we began work on a Buyer's Guide to help students make more informed decisions at local grocery stores. We surveyed students to determine which food items they purchase consistently and where they shop most often. Although still a prototype, our guide includes information about items that our survey identified as staples for many students. The underlying concept of the Buyer's Guide is that by making informed decisions, we as consumers can begin to reshape our food system by “voting with our dollar.” The idea is to provide not just a list of the most sustainable brands, but a comprehensive inventory of all available brands and how they rank according to specific criteria. With this type of information, a student can choose products within their price range that adhere to any specific standards and values they may have regarding food.

II. Overview and Objectives

The current Sustainable Food Systems team serves as a continuation of previous teams with similar focuses. There is a significant need for students who will lead UCLA's transition into a more sustainable campus, especially in regards to UCLA Dining where there is much room for improvement in terms of sustainability. Currently, 4.58% of UCLA Housing & Hospitality Services' food is considered sustainable according to the UC's standards and, as of 2011, spending on sustainable food only constituted 1.76% of their budget (UCLA Foodservices, 2011). However, UCLA has a goal of serving 20% sustainable food by 2020, which is only eight years from now. This is a clear opportunity for students, as UCLA's customers, to use their consumer power to create sustainable change that they want to see. Our team attempts to fill this need for students calling for sustainability.

We began our action research with the goal of having a tangible increase in sustainable food purchases in UCLA's dining halls. After meetings with Rebecca and Robert, we realized this would be a difficult path to pursue. UCLA Dining is reluctant to purchase more sustainable food because of the higher costs associated with it. They do take into account student demand for such food, but they are more likely to make real change if many students express an explicit desire for it. We therefore changed our goals accordingly. After much debate throughout the first quarter, we settled on three projects to pursue: educational outreach to students which included a screening of a documentary on food sustainability, a report on the current status of sustainable dining across the UC system, and Buyer's Guide to help off-campus students buy sustainable food.

The goal of our educational initiatives was not only to educate students about the importance of food sustainability but also to empower them in creating change. We held a screening of *FRESH*, a documentary about the sustainable food movement, and provided information about the Policy Review Board (PRB). The PRB reviews student opinion on various matters, including Dining offerings and uses them to make direct changes in UCLA's Dining Halls. We also discussed ways to eat more sustainably at UCLA. At several different events over Winter and Spring Quarter, including the Nutrition Fair and the Earth Day fair, we shared this same information with attending students. We also used the Sustainable Food Systems Facebook page as a means of distributing information to students.

We pursued our second goal, a report on Food Sourcing and Dining Sustainability at several different UCs, as per our stakeholder Rebecca Miller's suggestion. She instructed us to compile information about other campus's sustainable purchases, Dining systems, and effects on costs. We hoped to determine how UCLA's current Dining sustainability compares to other campuses. We also hoped to deliver useful information to the UCLA Dining demonstrating that it was possible to increase sustainability without increasing costs and how they could do so.

Finally, we began to create a Buyer's Guide primarily for students who live off campus and buy food from local grocers. We wanted to give these students unbiased and well-researched information so they could make informed grocery shopping decisions. Metrics that we found were important to UCLA students included price, various sustainable certifications, and other information about the food providers. We created a survey to identify the most commonly purchased food products. Then we looked at the brands of these items available at the three local grocery stores in Westwood: Ralph's, Trader Joe's, and Whole Foods. We conducted online research and contacted suppliers in order to create a prototype guide with a few products and their information. The guide will be published online on the Sustainable Food Systems website.

III. Significance and Background

Currently over 90% of UCLA's food is conventionally sourced. Conventional farming has serious consequences for human health, the environment, and animal welfare. Pesticides, herbicides, and fungicides associated with this type of farming contaminate water and soil; manifest resistant bacteria, weeds, and fungi; pollute the air; and are characterized by bioaccumulation (increasing concentration within tissue) and biomagnification (increasing concentration with trophic level) (Walker, 2005). This directly affects human health and wildlife as they consume contaminated food and water and inhale toxic, and potentially carcinogenic, chemicals. In addition, the agricultural sector has a large carbon footprint due to fossil fuel consumption, transportation, and methane emissions from cattle and rice production, making up almost one third of global greenhouse gas emissions (UNEP, 2008). As such, purchasing more foods in season, from

local producers can help offset this footprint by reducing the amount of energy required to produce and transport food. In order to offset these environmental impacts, UCLA can do its part by purchasing sustainable foods.

The University of California uses 19 different criteria for sustainable foods (Noh, et al, 2011). Each criterion represents one of the following categories: Local production or processing (within 500 mi.), ethical treatment of workers (e.g. Fair Trade), minimal impact on ecosystems, organic production, animal welfare, and sustainable harvest.

Because UCLA is such a large institution, its sourcing choices can have an immense impact on the local community, and potentially California as a whole. If UCLA were to purchase more sustainable food, it may increase the demand for sustainable agriculture and harvest. For the University, this would create a healthier and more knowledgeable student body, as well as stimulate the local economy. Local sourcing would also ensure food security, a huge concern in today's world with the prevalence of food contamination and rising concerns about resource depletion. Moreover, it would help UCLA Dining Services reach its goal of 20% sustainability within the next 8 years. Part of being a respected institution is serving as a model of progress. In order to accomplish this, we must begin implementing measures to prevent further environmental and social damage from the cultivation and distribution of conventionally grown foods.

IV. Initial Conditions

An important gap in UCLA Housing and Dining's knowledge that both entities are aware of is the source of a large portion of food served on the Hill. UCLA Dining obtains all of its food from a single distributor that discloses vendors, but not producers. As such, much of the food offered on the Hill could well be considered sustainable, but a current lack of transparency makes this knowledge difficult.

When our team first began research in January of this year, UCLA Dining's estimated portion of offered sustainable food was 4.58%. The portion of sustainable foods offered in the Dining Halls consists largely of Cage-Free eggs (79% of sustainable purchases), organic salad bar items (10%), local fruit (5%), organic staples such as tofu and Fair Trade sugar (4%), and organic frozen foods (2%) (see Fig.1).

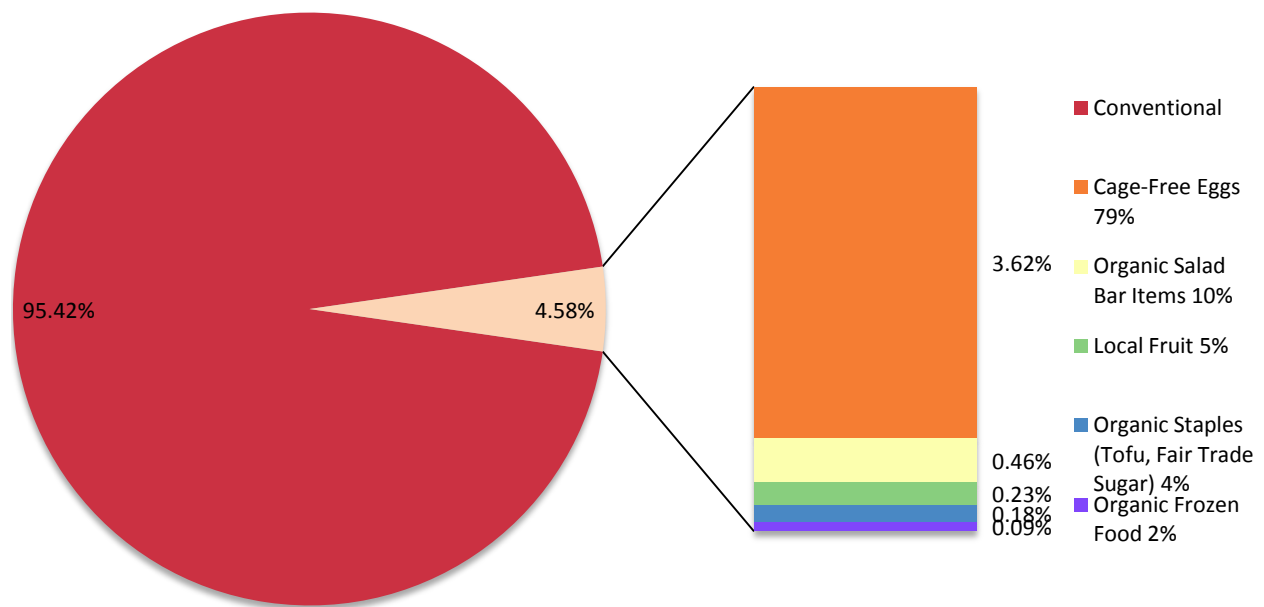


Figure 1 Sustainable Foods Offered in UCLA's Dining Halls as of May, 2012.
 Dark red portion of chart represents *Conventional* purchases until otherwise elucidated.
 Light red portion represents total sustainable food purchases.

Further impeding the achievement of the UC's sustainability goals is Dining's strong commitment to customer service. UCLA Dining puts student satisfaction over all else – something all UCLA students can attest to – whether or not this means increasing sustainable foods purchases. If many students ask specifically for more sustainable food, Dining will work harder to make it available to them. However, we found that many students living on campus were unaware of many of the environmental, ethical, and health-related consequences of a conventional food system. Furthermore, many students were found to be unaware of the various ways in which they could make their voices heard to Dining. Consequently, our team decided to focus largely on raising awareness of the far-reaching benefits of a sustainable food system, as well as how they as individuals could demonstrate their own efficacy in making change.

UCLA on-campus housing currently serves over 5 million meals each year. Such a large number of students requires sizeable food purchases and an even larger amount of capital to finance them. This, coupled with expanding residence hall construction, means that successful budgeting and student customer satisfaction require careful planning and

budgeting. Furthermore, Housing and Dining are non-profit organizations seeking only to serve on-campus residents; in other words, all profits made from meal plan sales go directly to paying for food purchases and operations costs. As such, budgeting, as well as sustainability, is Dining and Housing's most pertinent issue. Our team therefore decided to direct the remainder of our research into how other UCs have been able to increase sustainable food purchases while maintaining relatively low costs.

V. Research Methodology

UC Food Sourcing & Policy Report

Our team focused much of our efforts seeking information from other UC and non-UC campuses concerning food purchasing and policies. This research was prompted by our stakeholders who informed us it would be useful for them to have a report that not only described the *per plate cost*, number of patrons, and strategies for bringing more sustainable food to their respective campuses, but also in starting a dialogue between UCLA and other campuses that should be continued by the next SFS team. Ideally, the entire UC system will develop policies that help facilitate the purchasing and preparing of more sustainable food.

We assigned ourselves different campuses (all UC campuses, Cal Poly San Luis Obispo, Cornell, and Yale) and then began research by familiarizing ourselves with their Dining services through online research. From there, we got in touch with Sustainability or Dining representatives at each campus to ask more detailed questions that our stakeholders were most interested in. We received great support and were able to collaborate with UC Berkeley, UC Santa Cruz, UC Santa Barbara, and UC Davis. We faced challenges in finding the most helpful people to contact at some universities and receiving little interest from others.

We analyzed responses, especially in regards to vendors of sustainable foods that UCLA Housing can potentially use, rises – or lack thereof – in *per plate* costs, pricing of specific food items, and specific sustainable initiatives campuses have used to offset costs of food purchasing. Our report will be presented to our stakeholders at the conclusion of this quarter.

Educational Initiatives

Documentary Screening: FRESH

The SFS team held a documentary screening on the hill of *FRESH*, a film about the consequences of industrialized agriculture and the opportunities embedded in the shift to a more local, smaller scale production system that would rely on family and community farms and reduced farm inputs as opposed to the current large-scale, pesticide- and fertilizer-dependent system. We used funding to support the cost of the permit to screen the film as well as for snacks for the audience. We used a quiz at the end to gauge the audience's receptiveness to the movie and their gained knowledge on topics discussed in the film.

The screening was a part of our educational campaign to spread awareness about food-related issues and the complicated nature of our current food system. Following the screening, we had representatives from E3, The Student Food Collective, The Policy Review Board on the Hill (represented by Molly, a member of SFS), and the Student Victory Garden (represented by Alyssa, a member of SFS) share information about their respective organizations/projects and provide the audience with ideas of ways they can get involved in food-related initiatives currently happening on the UCLA campus. Additionally, we had speakers from Zeitgeist and the Social Justice Learning Institute come to talk about their missions and how it relates to food systems and social movements. Overall, we were very pleased with the turnout and level of engagement and receptiveness of the audience (of about 25-30 people).

Dining Survey, Event Tabling, Ecological Footprint of Meat, Facebook

Our team also created a series of 12 questions to be used in Dining's quarterly survey on student opinion on the quality of food and service offered (See *Appendix A*). Our questions were created to gauge student opinion, awareness, and enthusiasm for sustainable foods, as well as if they would be willing to pay more per meal plan for more sustainable foods. Unfortunately, our questions did not make it into the survey this year, but they will be used in the survey Fall quarter of 2012.

We also tabled at various on-campus events, including the Office of Residential Life's Nutrition Fair, E3's Earth Day Fair, and E3's Sustainable Foods Panel. At the events we spoke to students about the purpose and methods of our research, as well as disseminated surveys. We created pamphlets and posters to display relevant and easy-to-understand information (See *Appendices B, C, & D*).

SFS did additional research on the carbon, water, and ecological footprints of each burger patty offered in the Dining Halls. We compiled all of our information onto one document that H&HS will be able to use in the future to determine how awareness of environmental, health, and ethical impacts can influence consumer behavior (See *Appendix E*). Ideally, the study would happen over the course of 3 weeks. The first week would be spent collecting baseline, or control, data. During Week 2, a sign with environmental and ethical information would be displayed at the burger station and during Week 3, a sign with more in depth information would be displayed. The results of each week could then be compared to determine if there is a correlation between awareness and reduced consumption of meat. Another interesting study would compare these results with those from another Dining Hall with signs displaying nutritional and health information to determine which factor is more important to students. A potential confounding factor may be that students who have seen one sign may visit a Dining Hall with the other sign, but choose a patty based on the first sign.

Finally, our team updated SFS's Facebook page and posted relevant news articles, event invitations, survey invitations, and updates about our progress. The Facebook page can be found by searching "Sustainable Food Systems at UCLA" on Facebook.

Food Buyer's Guide

Though this project is separate from our main research, our team agreed to commit to a collaborative effort to research select food items sold in local grocery stores. We first created a survey and disseminated it to UCLA students (See *Appendix F*). Based on our results, we found that most students frequently bought eggs, milk, bananas, and bread. We also found that many students were interested in knowing more about the sustainability of various brand choices available and that the main barrier to making more sustainable

purchases was a lack of awareness. Finally, we found that most students shop at one of three local grocers: Ralph's, Trader Joe's, or Whole Foods. This is unsurprising as these stores are the closest to campus.

Our action research consisted of field research surveying products available at the aforementioned stores. We then researched company profiles online and calling the companies ourselves in an effort to become more familiar with the company's sourcing of ingredients, manufacturing and processing. We used company's public websites as well as third party organizations' websites, such as the Cornucopia Institute and the Organic Consumers Association. The Food Buyer's Guide will be compiled based on the analysis of all observations and research.

VI. *Data Analysis*

UC Food Sourcing Policy Report

Following is an analysis of the results of our responses from several UC Campuses.

One of UCLA's challenges is that it has the greatest patron count of all the campuses surveyed (see Fig. 2). Any changes must be scaled to meet the large dining system.

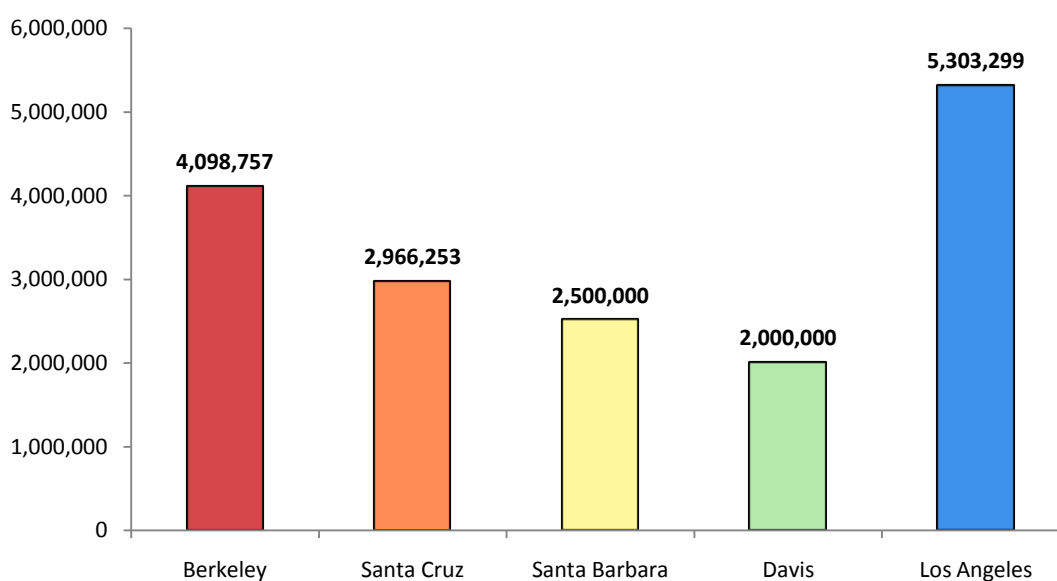


Figure 2 Annual Patron count by UC Campus

Since UC campuses require on-campus students to purchase a meal plan and since on-campus Dining Halls are generally closed to the public, this is more a measure of meals served per year than individual patrons.

For most campuses, increasing sustainable food purchases did not significantly change the per plate cost (see Fig. 3).

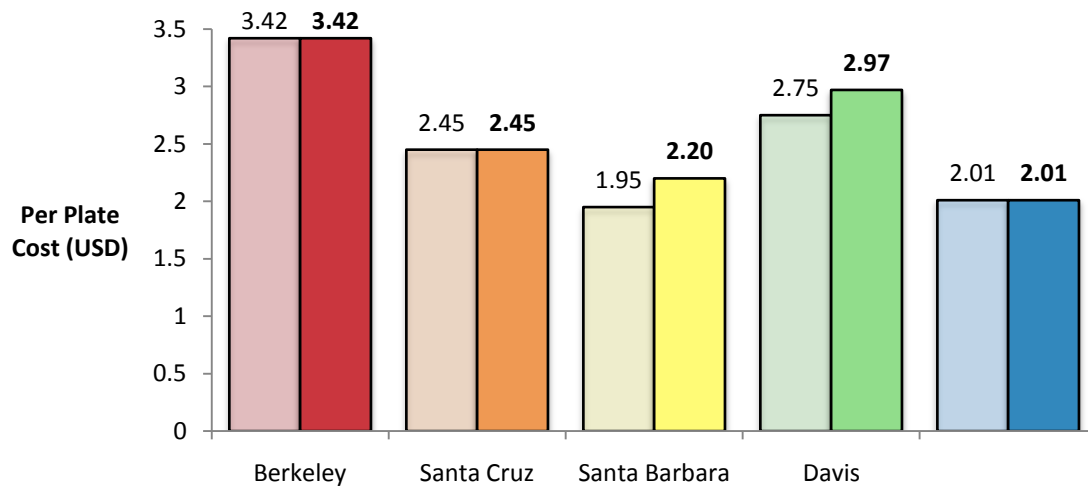
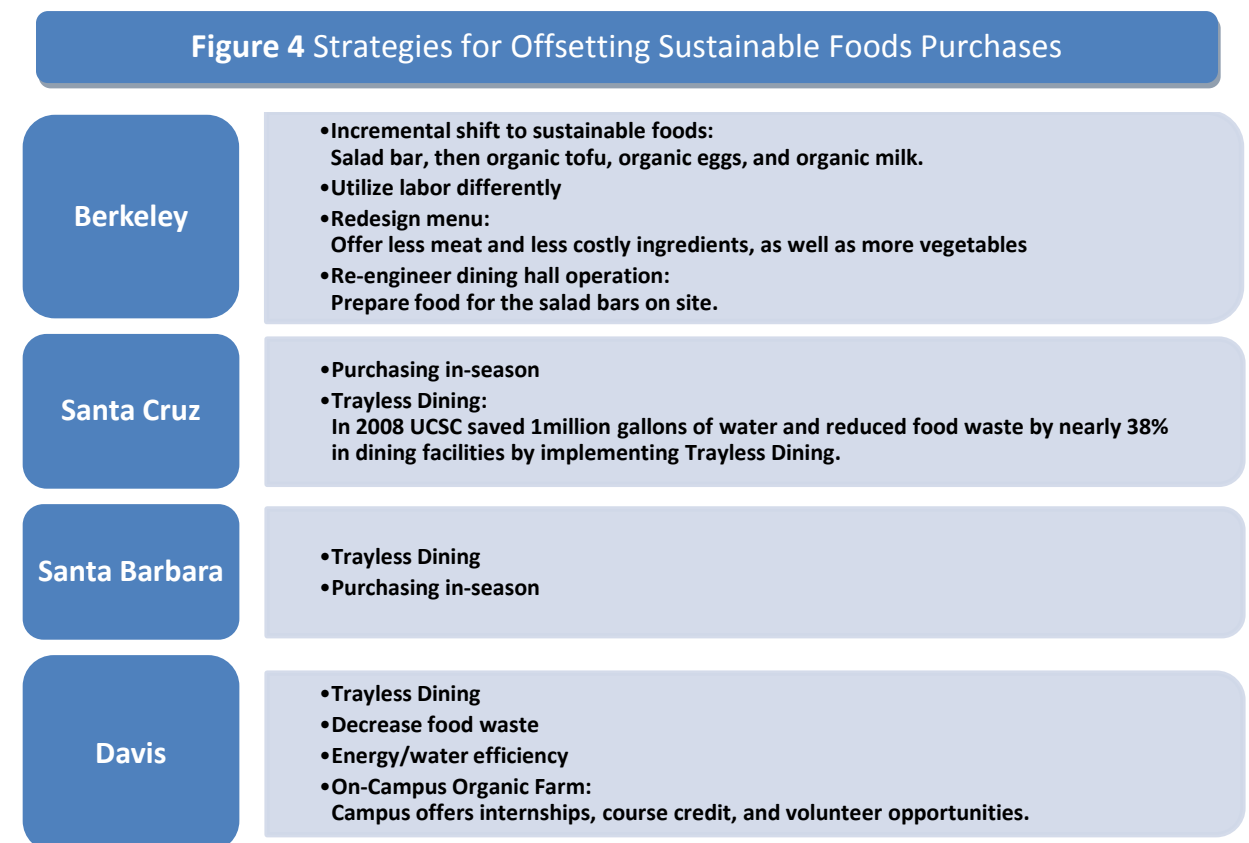


Figure 3 Per Plate Cost Before and After Increased Sustainable Food Spending

Many campuses volunteered information about how they offset the higher spending on purchases of sustainable foods. Figure 4 shows these initiatives.



Santa Cruz, Santa Barbara, and Davis all cited the transition to trayless dining as part of their success in minimizing increases in the per plate cost. Both Santa Cruz and Santa Barbara also stated that buying sustainably grown produce in season was significantly less expensive than some conventional produce purchased out of season. Berkeley's suggestion to re-engineer dining hall operation by preparing some food on site is apparently difficult at UCLA because of limited kitchen space. Decreasing food waste and improving energy or water efficiency – as Davis has done – would be helpful, but the exact methods of achieving this are not clear as of yet.

Perhaps the most promising and easily achieved of the above strategies is redesigning menus to include less meat and processed foods, as well as more vegetables. This would reduce food spending, make meals more healthy, and could potentially provide more options for vegetarians. The greatest barrier to this step is student taste preferences. Growing produce on site is also a promising strategy as UCLA currently has 2 gardens on campus. However, operations would need to be significantly scaled up to meet produce demand in the Dining Halls.

The most common sustainable purchases are “staples” and produce, both fruits and vegetables (see Fig. 5). Categories in which UCLA does not currently purchase sustainable foods, but which at least three other campuses do include are Beef, Seafood, Bakery items, Coffee, Tea, and Cereals. Additionally, sustainable milk at UCLA is locally purchased, but does not necessarily meet any other sustainability criteria whereas Berkeley and Davis's milk (both purchase Clover brand) is organic in addition to being local.

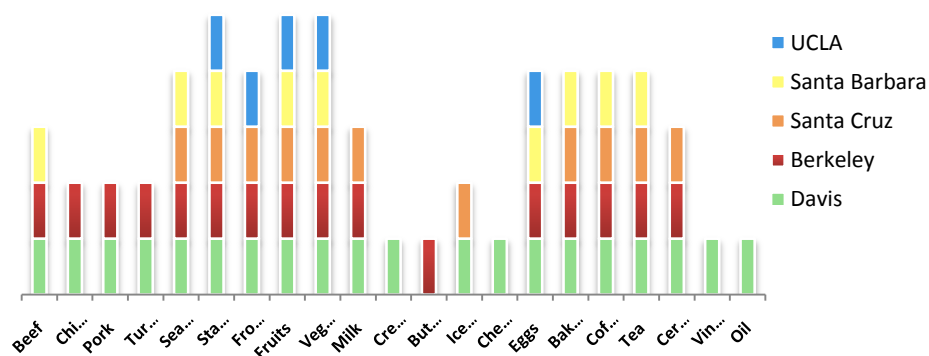


Figure 5 Specific Categories of Sustainable Purchases
Campuses that purchase a specific sustainable food item are designated by a colored box, regardless of the amount they purchase.

When dealing with budgetary constraints, obtaining the most product for your dollar is crucial. We looked at how each campus's portion of sustainable purchases (of total food purchases) compared to its cost per plate. Figure 6 shows each on the same graph while Figure 7 shows each campus's purchasing efficiency, which we define as:

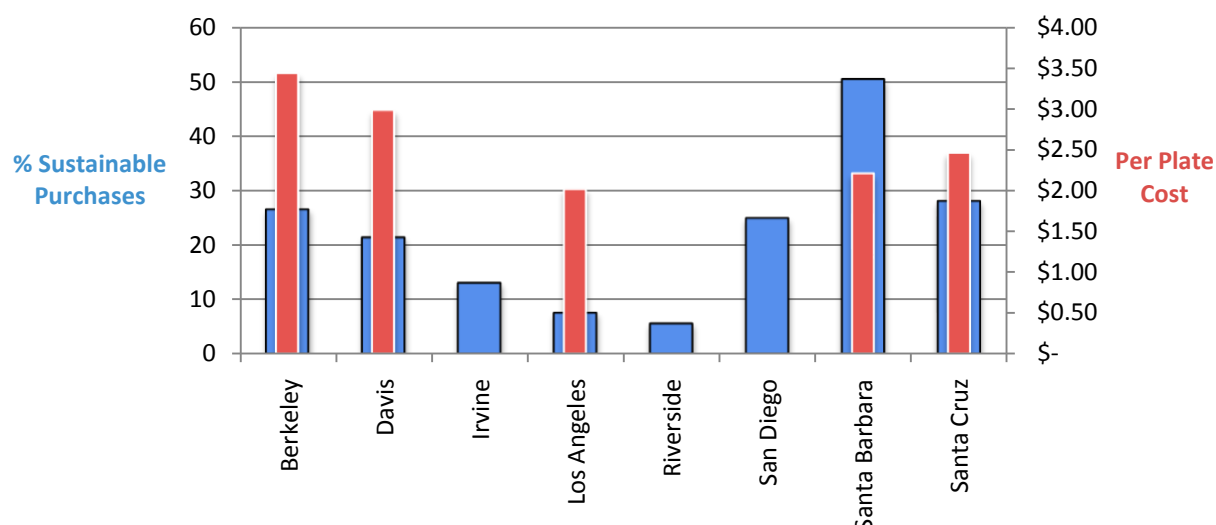
$$\text{purchasing efficiency} = \frac{\% \text{ sustainable food purchases}}{\text{USD of per plate cost}}.$$


Figure 6 Percentage Sustainable Purchases and Per Plate Cost
We did not obtain per plate cost information for Irvine, Riverside, or San Diego campuses.

Figure 7 illustrates the percentage of sustainability achieved per dollar of per plate cost at each campus. UCLA is currently achieving the least efficient spending in terms of sustainable purchases.

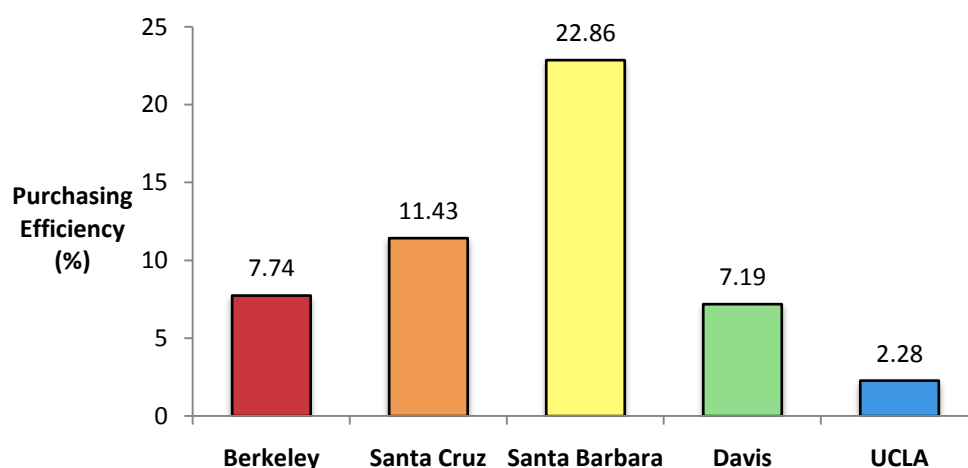


Figure 7 Efficiency of Sustainable Purchasing (Portion of Sustainable Purchases per USD of Per Plate Cost)

While no campus has yet reached an efficiency higher than 25%, Santa Barbara has achieved the highest reported efficiency of 23% at a per plate cost of \$2.20, only \$0.19 higher than UCLA's. As such Santa Barbara's preferred strategies for offsetting costs are worth a more in depth look.

A much more in depth analysis of our results is available in our UC Food Sourcing & Policy Report that was presented to our stakeholders. It will be made available on the Sustainable Food Systems @ UCLA's website.

Food Buyer's Guide

The next five figures (10-14) are the based on the number of responses for each answer. We received just over 30 responses. Figure 8 shows all the foods that two or more respondents said they always have in the kitchen. These results guided our decision to focus research on milk, eggs, bread, and bananas. We chose bananas over rice and pasta because we wanted to include some kind of produce in our guide. We chose bananas over apples due to the smaller amount of variability in vendor of bananas compared to apples.

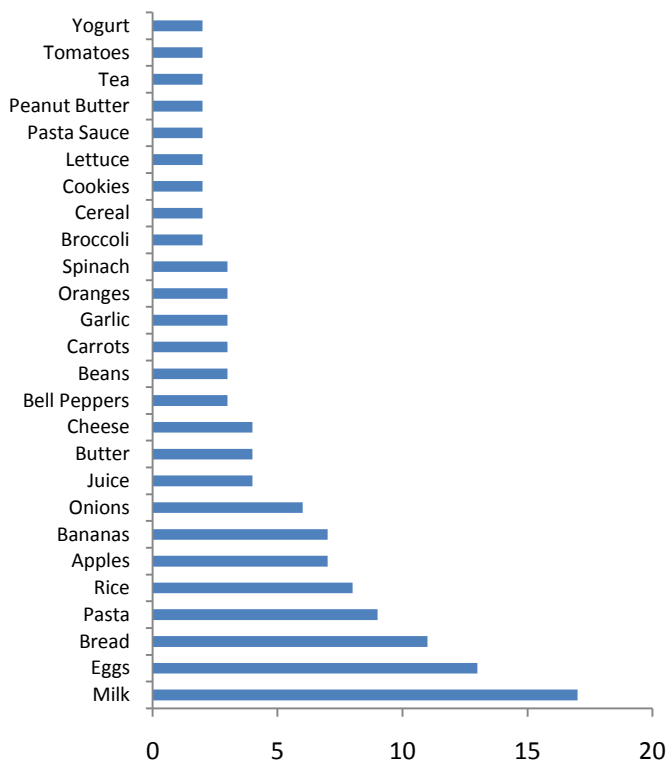


Figure 10 UCLA Student Food Staples

The x-axis is measured in number of respondents who stated the food type was a staple.

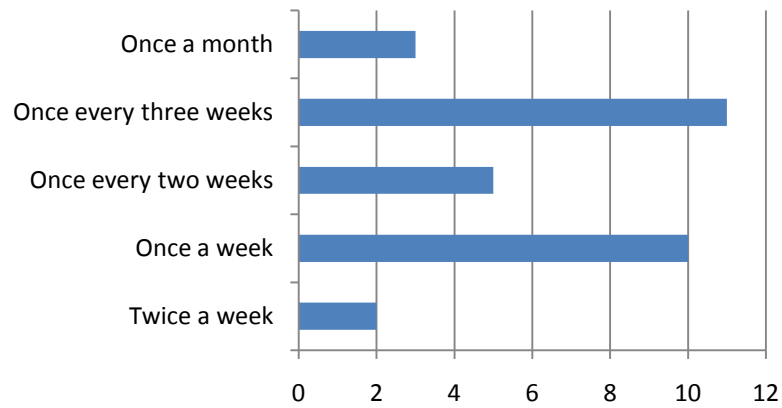


Figure 12 How Often do You Go Grocery Shopping?

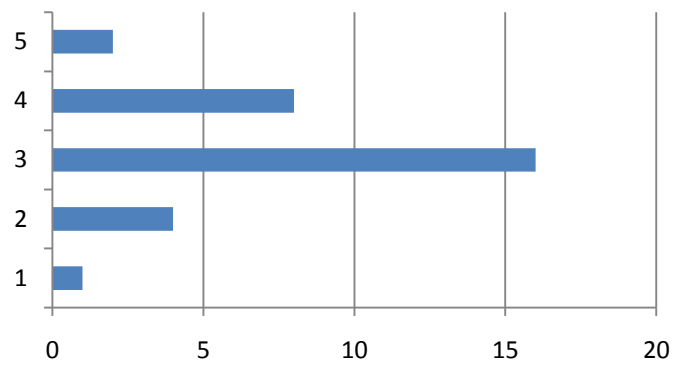


Figure 13 How informed do you feel your grocery shopping decisions are?

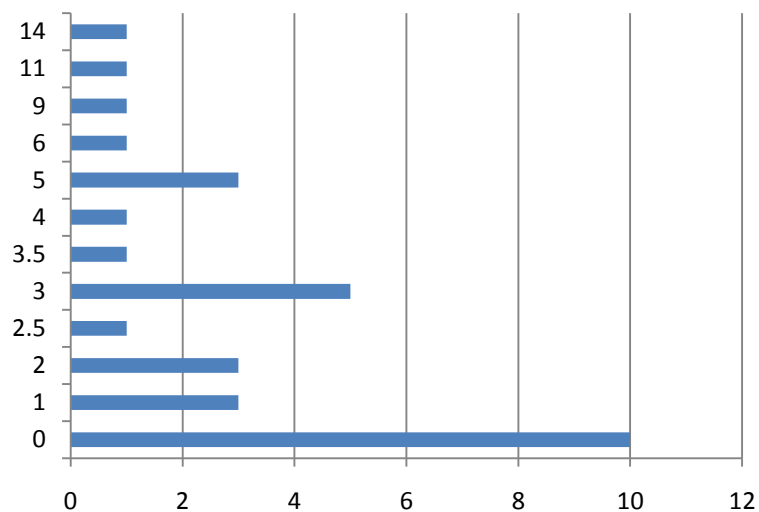


Figure 14 How many meals do you eat per week that are pre-made?

VII. Key Findings

UC Food Sourcing & Policy Report

While only four campuses – Berkeley, Davis, Santa Barbara, and Santa Cruz – responded, our survey and spreadsheet have yielded information that can guide UCLA H&HS and Dining managers in meeting the UC sustainable foods goal for 2020. It is also important to note that the campuses that did respond were those whose information our stakeholders thought would be most useful. Once again, a more in depth analysis is available in our UC Food Sourcing & Policy Report.

Strategies for Offsetting Cost of Sustainable Foods: Redesigning Menus

In order to offset the costs of increasing sustainable food purchases, many campuses have implemented initiatives to cut costs elsewhere. Fortunately, these initiatives have tended to be associated with positive sustainable externalities including increased resource use efficiency, increased efficiency of labor distribution, and sustainable food sourcing. As such, increasing sustainable food purchases can have a positive feedback effect by encouraging other sustainable investments that will hopefully lead to future savings.

Offsetting strategies offered by other campuses can be grouped into 8 categories:

- (1) Implementing Trayless Dining
- (2) Decreasing food waste
- (3) Re-designing menus to contain less meat and processed food
- (4) Re-engineering dining hall operations to include more on-site food preparation
- (5) Buying produce in season
- (6) Increasing energy and water efficiency
- (7) Utilizing labor differently
- (8) Increasing sustainable foods purchases incrementally

We have done further research on strategies that seemed the most promising in terms of delivering monetary savings and increases in efficiency.

Trayless Dining

Santa Cruz, Santa Barbara, and Davis campuses all cited the transition to Trayless Dining as part of their success in minimizing increases in their per plate cost. There is some disagreement among UCLA H&HS staff about the actual savings Trayless Dining might

bring. Water is relatively inexpensive in Southern California, so increasing water use efficiency would likely save a negligible amount of money, despite rising concerns about California's prolonged drought. However, several studies have been conducted demonstrating that going Trayless can significantly reduce food waste, and thus possibly the scale of food sourcing. In 2008 UC Santa Cruz Dining diverted 18 tons (2,000 lbs.) of food waste from the landfill by removing trays from its Dining Halls (UCSC Dining, 2008). UC Davis Dining Services reduced food waste by almost 30%, leading to monetary savings not only from water use reduction, but also from reduced detergent and energy costs (UC Davis, 2008). UC Santa Barbara has reduced food waste by 54%, reducing food costs and enabling them to "purchase more sustainable fish, sustainable and organic produce, and other food items," (UC Santa Barbara, 2009). Food savings were so large on Santa Barbara's campus that they were able to implement 100% Fair Trade Coffee and Cage-Free, Certified Humane Eggs according to Sustainability Coordinator Bonnie Crouse.

Purchasing Seasonal Local Foods

Both Santa Cruz and Santa Barbara campuses also stated that buying sustainably grown produce in season was significantly less expensive than some conventional produce purchased out of season. This is not always a feasible option for large Dining systems as peak production seasons, when prices significantly decrease, are generally relatively short compared to growing seasons (CAFF, 2009). Many peak seasons also tend to fall in summer, when the number of UCLA students living on campus falls dramatically. However, more research into UCLA's specific food sources is necessary to determine the actual potential savings of increasing peak-seasonal local food purchases. The CAFF suggests seasonal salad bars or fruit bars as beginning strategies for sourcing seasonal and local produce as they require little preparation and can serve as enticing options that will not only increase awareness, but will likely be tastier than out-of-season produce (CAFF, 2009). Bonnie Crouse from UC Santa Barbara also stated that purchasing seasonal and local produce pesticide-free produce was often much less expensive than purchasing USDA Certified Organic Produce.

Redesigning Menus

Perhaps the most promising and easily achieved of the above strategies is redesigning menus to include less meat and processed foods, as well as more vegetables. UC Berkeley, a campus that ensures 75% of entrees are vegetarian, has seen significantly increased cost effectiveness due to menu redesign. Meat and pre-prepared foods are generally more expensive than produce and raw ingredients so including less of them would reduce food spending, make meals healthier, and could potentially provide more options for vegetarians. The greatest barrier to menu-redesign is student taste preference. There are many entities on UCLA's campus that could help promote a diet characterized by less meat and more produce including the Student Welfare Committee, the Health & Wellness Initiative, and nutritional campaigns initiated by H&HS themselves. Sustainability is not only environmentally focused, but human-centered as well. Healthy students will tend to live longer, happier, and more productive lives, further contributing to the UCLA Community.

Sustainable Foods Vendors

Another limitation identified by our stakeholders is that many vendors selling sustainable foods are not equipped to supply an entity as large as a university campus. Therefore, vendor lists from other UC campuses provide potentially viable sourcing options for UCLA. Of the campuses that completed our survey, three (Berkeley, Davis, and Santa Barbara) provided vendor lists. As two of these campuses are located in Northern California, their vendors are not local to UCLA, but may still be potentially useful. Santa Barbara's campus, on the other hand, is less than 100 miles away from UCLA. As such, UCSB's vendor list can provide a list of potential food sources for UCLA Dining.

Food categories that all four other campuses source sustainably, but that UCLA does not are Dairy, Seafood, Bakery, and Coffee/Tea. Berkeley and Davis also purchase sustainable Meat products (Beef, chicken, pork, and turkey). Below are the vendors listed for the categories noted. Further feasibility research is suggested for bolded vendors.

Meat

- UC Santa Barbara purchases meat from **Ideal Meat**, located in Northridge, less than 15 miles from UCLA's campus. They also purchase meat, as well as other food items from **Jordano's**, a distribution center in Santa Barbara that offers a variety of sustainably sourced food products, including Ideal Meat products, and serves Los Angeles County. Their product catalog can be found here: <http://www.jordanos.com/JFS/index.php?id=73>.
- UCSB also purchases Grass-fed beef and Pasture-raised chicken from **Dey Dey's Best Farm Fresh**. Dey Dey's offers discounts for bulk purchases, but is a smaller farm and, as such, may not be able to supply a large amount of meat to UCLA. Their website can be found here: <http://www.bestbeefever.com/>.
- UC Berkeley purchases beef from **Niman Ranch**, which offers sustainably and humanely raised beef, pork, lamb, poultry, and eggs. In the LA area, Premier Meat Company distributes Niman Ranch products. Their website is <http://www.premiermeats.com/>.
 - Berkeley purchases free-range turkey raised on family ranches from **Diestel Farms**. Diestel Farms' turkey is available in many stores throughout the LA area. Their website and store locator can be accessed at http://www.diestelturkey.com/store_locator_la.htm.
- UC Davis purchases beef patties from Fulton, a meat processing and distribution subsidiary of Sysco Corporation. They have received Food Alliance certification, but it is unclear specifically what sustainability criteria they meet. This should be investigated further.

Dairy Products

- UC Santa Barbara purchases cheese, ice cream, and other dairy products from **Challenge Dairy**, located in Dublin, Ca. They offer a variety of organic products and can supply to large entities such as UCLA Dining. Their website can be accessed at: <http://www.challengedairy.com/>.
- Both UC Berkeley and UC Davis purchase **Clover Organic milk**. UC Davis also purchases a wide range of other Clover dairy products such as sour cream, kefir, and cheese. Clover dairy is produced in Sonoma County, north of San Francisco, so it would not qualify as local for UCLA. However, it is organic and humanely produced on family farms. It is available at Whole Foods stores around Los Angeles, including in Westwood, but it is not clear from the website whether or not they are equipped to supply a university campus here.

Seafood

- UC Santa Barbara purchases seafood from **Kanaloa Seafood** in Santa Barbara. Kanaloa offers sustainably sourced fish and shellfish and have been certified by the International Organization for Standardization (ISO). Kanaloa's product listing can be found here: <http://www.kanaloaseafood.com/products-pagefis/>. UCSB also purchases seafood from Central Coast Seafood, located in Atascadero, Ca., which offers a variety of sustainably sourced fish.
- Berkeley purchases seafood from Race Street Foods, located in San Jose, CA. Race Street is Marine Stewardship Council certified and they adhere to the Monterey Bay Aquarium's seafood watch list. Unfortunately, they do not serve Southern California.

- UC Santa Cruz purchases seafood (85% of which is on the Monterey Bay Aquarium's Seafood Watch Green or Yellow List) from **Performance Foodservice**–Ledyard, located in Santa Cruz, CA. Performance Foodservice also has a Los Angeles location. This should be investigated further to determine whether specific products meet sustainability criteria.

Bakery

- UC Santa Barbara purchases baking products from Bakemark/Westco in Pico Rivera and bread and bagels from Bimbo Old Country in Malibu. There is limited public information concerning the sustainability of either company, but further research is warranted. UCSB also purchases handmade bread from Ethnic Breads, a local bakery for the campus. Finally, UCSB prepares some baked goods, including donuts, on site.
- Much of UC Berkeley's bread qualifies as sustainable because it is locally produced and would therefore not be considered sustainable if UCLA were to purchase from the same vendors. However, they buy sliced bread from **Alvarado Street Bakery**, which is located in Northern California but ships all over the state and already ships bread to the Whole Foods in Westwood as well as to Native Foods Cafe. The bread is organic and the company is run as a co-op, so it fulfills two UC Sustainability criteria.
- UC Santa Cruz stated that they purchase organic bread through **United Natural Foods, Inc. (UNFI)** at a lower cost than available non-organic brands. UNFI is a national distributor and offers many other sustainable foods in addition to bread.

Coffee and Tea

Because The Coffee Bean & Tea Leaf provides their products to UCLA at such steep discounts, it is unlikely that UCLA will be able to purchase organic or Fair Trade coffee and tea. The Coffee Bean & Tea Leaf does state that they purchase shade-grown coffee, but they have not been certified by a third party.

- UC Berkeley purchases organic, Fair Trade coffee from **Peerless Coffee & Tea**, located in San Francisco. They ship nationally. ASUCLA Coffee shops also purchase organic, Fair Trade coffee from Peerless so they may be easier to negotiate price discounts with. Their wholesale services information is available at http://www.peerlesscoffee.com/wholesale_services.asp. UC Berkeley also purchases organic teas from **Peet's Coffee & Tea**, which has a Westwood location.
- UC Davis purchases Fair Trade Certified Café Estima Blend from **Starbucks**, which has Westwood locations.
- UC Santa Barbara did not give us information about Fair Trade coffee sourcing. More research is recommended.

VIII. Recommendations

Recommendations for Stakeholders: Menu Redesign and Further Vendor Research

We hope that our stakeholders share our findings with Dining Services to facilitate more sustainable food sourcing at UCLA. We encourage Dining to consider all the

aforementioned strategies, but in particular that of redesigning menus to include less meat and processed food, as well as implementing Trayless Dining and conducting further research in local seasonal food sourcing. These options would reduce food spending, environmental impact, and make meals healthier for students. Because Menu Redesign doesn't require increased spending (in fact if implemented effectively it would save money), additional space, or employee training, it would be a relatively easy way for Dining to get started. Trayless Dining may require a prolonged version of ESLP's Waste Watchers' experiment conducted a couple years ago in order to present a more precise estimate of the potential food and associated monetary savings of removing trays. Growing produce on site is also a promising strategy as UCLA currently has 2 gardens on campus. However, operations would need to be significantly scaled up to meet produce demand in the Dining Halls.

Additionally, we hope that Dining will investigate the vendors from which other campuses purchase sustainable foods. In particular, Ideal Meat, Jordano's, Niman Ranch, Challenge Dairy, Clover Organic, Kanaloa Seafood, UNFI, and Alvarado Street Bakery, seem promising. We would also suggest that H&HS further investigate their own sources for seasonal purchasing feasibility.

An indirect finding of our survey is a set of sustainability tracking methods that other campuses use to measure their progress. UCLA, like many of the other UCs, has already joined the Real Food Challenge. However, our campus's membership is only at the first level: "connected to the network." Getting more involved could be a great way to guide UCLA Dining. UC Berkeley has partnered with Community Alliance with Family Farmers' "Buy Fresh, Buy Local" program. The CAFF's website (<http://caff.org/>) has tools for finding local foods in your area and works with school districts to source local foods in schools. Davis, Irvine, Merced, Riverside, Santa Barbara, and Santa Cruz all use Sustainability Tracking, Assessment & Rating System (STARS) to assess their sustainability initiatives. This tool goes beyond sustainable foods, but could be useful to Dining because it does include food.

We would also suggest a reconsideration of the connotations of the term "local" in the UC Sustainability Goals. According to the UC, local merely means produced within 500 miles of consumption. However, this may not necessarily mean much in the way of

sustainability. There are many farms within 500 miles of UCLA's campus whose practices would be considered anything but sustainable when it comes to health, environmental impact, worker treatment, and animal welfare. If UCLA is to truly increase sustainable purchases, next year's team, as well as Housing and Dining, should create their own sustainability goals that go beyond those minimum standards set by the UC.

Future Action Research

The most pertinent research that next year's team can focus on is determining where UCLA's specific food items are produced and processed. Ms. Miller's intern is currently researching this, but the scale and seasonal variability of food purchasing make this task more appropriate for multiple researchers. Next year's team could be an important contributor to such an undertaking. We have already seen that food-sourcing research can be successful as Ms. Miller's intern recently found out that all of UCLA's milk is purchased from producers that qualify as local by UC standards. Knowledge of our sources can help Housing and Dining focus on making sustainable purchases where they are most needed. Our current UC Food Sourcing Report provides a solid background for such a project by identifying where other universities have been able to increase sustainable purchasing, as well as offset costs through sustainability initiatives.

We were only able to collect responses for the Food Sourcing & Policy Report from a few campuses. Those campuses that did contribute were inconsistent in the quantity, quality, and organization of the information provided. If they begin early, next year's team could try to develop relationships with members of each campus to keep an open dialogue until a more complete set of information is available for comparison. It would also be interesting to learn how campuses outside the UC system approach sustainability in their dining halls. We were not able to connect with spokespeople at any non-UC campuses.

With the information we collected this year and the information that a future team could hopefully gather, the next step would be to find vendors from whom UCLA could viably purchase food. We have attempted to begin this review process in the preceding section. Considerations include whether specific vendors ship to the Los Angeles area, whether they can meet our campus' demand, and how expensive it would be to switch to their products.

We would also suggest that next year's team develop closer relationships with on-campus groups, professors, and faculty with vested interest in sustainable foods initiatives. While they do not particularly focus on UCLA Dining's sustainability, E3 and the Student Food Collective (SFC) are two student-led groups that may be able to provide new sources for sustainable food purchases in the future. E3 maintains an on-campus garden that, while small, may be able to provide fresh, organic, and extremely local produce, especially salad bar items. The SFC is also attempting to start a student-run on-campus food cooperative that, if successful, may also be able to provide other sustainable food goods. Cooperation with either group will not only increase Dining's sustainability, but also give back to students who may not be living on the Hill. Next year's team would also benefit from closer relationships with on-campus Dining and Kitchen staff. Specifically, Chef Roger of FEAST is very interested in sustainable foods and is currently in charge of maintaining Dining's herb garden. He may be instrumental in helping push many of SFS's initiatives forward.

Other external organizations may also be helpful to next year's team. We would suggest continuing communication with representatives of external organizations including Derek Steele of the Social Justice Learning Institute (SJLI). The SJLI currently manages an organic community garden in Inglewood that will soon provide healthy produce to Inglewood's elementary schools, while also teaching students how to produce and prepare their own food. Such a program can serve as a model for incorporating on-campus garden produce into Dining hall offerings. We would also suggest establishing close relationships with representatives of the LA Food Policy Council whose campaign, Good Food LA, focuses on creating a sustainable food system in Los Angeles. A member of the council and coordinator for a similar initiative called the Food Commons, Larry Yee has expressed interest in working with ESFP and may be able to provide advice, as well as connections to other sustainable foods initiatives and possible suppliers.

The direction of our project at the beginning was very different from what we ended up focusing on. We originally hoped to implement direct changes to the dining hall to make the food more sustainable. However, we soon learned that in order for any action to take place, we needed to mobilize the students to express a desire for change. In order to do this, we focused our energy on educating the students on the hill and researching other

University's initiatives to offset the costs. For next year, the SFS team would be best off picking up where we left off. They could begin by ensuring the survey we created is submitted in for the Dining Survey to measure student opinion on sustainable products in the dining halls. Our group was hoping to have the results from this survey to provide suggestions as to what purchases UCLA Dining could look into, which would simultaneously foster a healthy response from the students.

Furthermore, next year's group could look into placing the sign for the Burger Experiment we were hoping to conduct in Covell Dining Hall. This experiment consisted of placing a couple of sheets of information on top of the burger station for students to learn about the energy use, carbon emissions, and water used for each type of burger patty. Additionally, we were hoping to have worked with dining's Registered Dietitian so she could provide the health benefits or risks for each patty.

Given Dining's strong focus on customer satisfaction, working to expose students to sustainable foods (organic, etc. as well as meals that contain little or no meat/processed foods) and surveying their responses to taste tests of certain food items would be beneficial. Due to lack of time, we were unable to conduct this experiment. If students were able to compare the taste of an organic food item versus a conventional one – and discover the health and environmental benefits of the former – they would most likely be more inclined to advocate for sustainable food, provided that Dining Services was readily accessible. To this end, another important project would be to make communication between Dining Services and the student body more direct.

If they are interested, we also hope that next year's team will continue the Buyer's Guide Project. Some ideas we had but were not able to pursue due to time constraints were: (1) a mobile app that allows students to scan products for information while at the store and (2) a website with a simple way to search for information and/or rank various brands, but also links to all of our research sources so that students can do their own research and double check our information. We would also ideally include many more products.

IX. Conclusion

UCLA is a vast community of intellectuals who work towards putting the university at the forefront of cutting edge research and we will continue to demonstrate this with our commitment to the environment. UCLA has embarked upon its journey towards 20% sustainability by 2020 and we believe our recommendations and suggestions for future projects will assist UCLA in reaching that goal. Unfortunately, having such a large university as ours is not always easy to work with; we luckily have some of the most intelligent young minds in our nation who just need access to information about sustainability. And with that push, these students will come to realize that having sustainable and organic foods offered in their dining halls will not only reduce our impact on our environment, but will better their lives too by promoting a healthier and more ethical lifestyle.

As a result of our projects this quarter, we have not only provided H&HS a base of information necessary to increase sustainable food purchases at relatively low costs, but we have also provided UCLA students with interesting and exciting opportunities for living a more sustainable life while attending college. Many students have claimed that they do not have access to sustainable foods because they eat mainly in on-campus Dining Halls, but we encouraged them to seek out their PRB members, as well as produced a Buyer's guide to encourage more informed grocery decisions. We hope that our work will assist future Action Research Sustainable Food Systems teams to continue supporting UCLA in achieving the highest caliber of healthy, sustainable living as possible

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XI. Appendices

A. Dining Survey Questions

SFS Survey

The University of California has agreed to increase the amount of sustainable food purchases and provisions to 20% or more by 2020. This will include **USDA Organic, Fair Trade, Locally Grown, Grass-fed (beef), Humanely-raised, Marine Stewardship Council certified, and Cage-free** food products, as well as other products that meet measureable sustainable criteria.

1. Do you have a meal plan or eat at the dining halls?
 - a. Yes
 - b. No
2. What criteria do you consider when choosing food? (Should we make this a scale?)
 - a. Taste
 - b. Nutrition content
 - c. Fat or sugar content
 - d. Sodium content
 - e. Is it organic, Fair Trade, or meet other another sustainable criteria?
 - f. Diet (Vegetarian, Vegan, lactose-intolerant, etc.)
 - g. Was it locally grown?
 - h. Were the workers who produced it treated fairly?
3. Which of the following would make you more inclined to reduce your meat or animal product consumption?
 - a. Health benefits (e.g. less fat content)
 - b. Environmental Impact (e.g. less land used for grazing, air and water pollution)
 - c. Ethics (e.g. antibiotic use, hormone injections, general animal welfare)
 - d. Lower cost
4. Which of the following criteria would make you more inclined to eat more sustainably produced foods?
 - a. Taste
 - b. Nutrition Content
 - c. Less use of pesticides
 - d. Less use of growth hormones or antibiotics
 - e. Less environmental impact (land degradation, air and water pollution)
 - f. Humanely raised animals
 - g. Locally grown
 - h. Workers who produced it are paid fair wages and are treated ethically.
5. What is your current level of understanding of the impacts of sustainable foods in relation to conventionally produced foods?
 - a. Rate 1-10.
6. Currently 4.6% of all food served in the dining halls is meets the UC's criteria for sustainable foods and over 80% of this comes from cage-free eggs, while the remaining 20% comes from tofu and various salad bar options. **How satisfied are you with the proportion of sustainable to non-sustainable foods available to you in UCLA's restaurants and dining halls?**
 - a. Rate from 1-10.

7. How satisfied are you with the types of available sustainable food options at UCLA's dining halls (eggs, tofu, a few salad bar options)?
 - a. Rate from 1-10.
8. How would the availability of sustainable food influence your decision to eat a restaurant or dining hall?
 - a. It would make me more likely to eat there.
 - b. It would not affect my decision.
 - c. It would make me less likely to eat there.
9. Which types of sustainable foods are you most interested in seeing at the restaurants and dining halls? (Check all that apply.)
 - a. Organic **salad bar options**
 - b. Organic **fruit**
 - c. Organic **vegetable dishes** (sides and entrees)
 - d. Organic **grains** (bread, pasta)
 - e. Organic **dairy products**
 - f. Organic, humanely-raised, or grass-fed **beef** or **pork**
 - g. Organic, humanely-raised, or grain-fed **poultry**
 - h. **Less meat overall**
 - i. Sustainably-sourced **seafood**
 - j. Fair Trade or Rainforest Alliance Certified **Coffee** or **Tea**
 - k. Fair Trade **Produce** (e.g. bananas)
 - l. **Local options** (within 500 mi., preferably within 200 mi.)
10. How much more a year would you be willing to pay for more sustainable dining options?
11. What, if any, are your reservations about having more sustainable food options available in UCLA restaurants and dining halls?
 - a. Price
 - b. Taste
 - c. Nutrition Content
 - d. Less Options
 - e. Other: Please specify.
12. Going tray-less at dining halls saves water and energy that would be wasted washing them and one dining hall is currently 100% tray-less. **How would tray-less dining affect your decision to eat a restaurant or dining hall?**
 - a. It would make me more likely to eat there.
 - b. It would not affect my decision.
 - c. It would make me less likely to eat there.

DO YOU WANT TO SEE MORE SUSTAINABLE FOODS IN UCLA'S DINING HALLS? MAKE YOUR VOICE HEARD!

TEXT THE DINING HALL

1. Text your message to: **55744**
2. Begin your message with **"TXTCC"**
3. Tell UCLA Dining that you would like more sustainable food!

Sample text: "Txtcc I would like to see organic fruit in the dining hall. It's healthier and better for the environment!"

CONTACT UCLA HOUSING

TWITTER:

[**twitter.com/#!/UCLAHousingSvc**](https://twitter.com/UCLAHousingSvc)

FACEBOOK:

[**www.facebook.com/UCLAHousingServices**](https://www.facebook.com/UCLAHousingServices)

THE POLICY REVIEW BOARD:

1. **Contact your floor's EVP (External Vice President) and tell him/her you want more sustainable food in the dining halls.**
2. **Your EVP will relay your message to your building's RC IVP (Residential Community Internal Vice President).**
3. **He/she will take your comments to the Policy Review Board, which has a strong influence on dining policies.**

C. Organics Pamphlet for Earth Day Fair

 <p>Buy Local Buy Organic</p>	
<p>UCLA Sustainable Food Systems Action Research Team</p>	<h2>Why Organic?</h2>
	<p>Your questions answered.</p> <p>Pesticides have allowed for present-day agricultural productivity, but at the same time, they have triggered issues and concerns. The use of synthetic chemicals, fertilizers, hormones, sewage sludge and genetically modified organisms in conventional farming is continuously being studied and has become a growing area of concern for many consumers who are contemplating the benefits of conventional farming given the threats to human health, the community and the environment.</p> 
<p>According to the USDA... "Organic crops are raised without using most conventional pesticides, petroleum-based fertilizers, or sewage sludge-based fertilizers. Animal raised on an organic operation must be fed organic feed and given access to the outdoors. They are given no antibiotics or growth hormones... regulations prohibit the use of genetic engineering..."</p>	<p>Source: www.ams.usda.gov/pesticides</p>



Health Effects

What are the potential health effects of pesticides?

According to the EPA:

The health effects of pesticides depend on the type of pesticide...

- Some, such as the organophosphates and carbamates, affect the **nervous system**
- Others may **irritate the skin or eyes**
- Some pesticides may be **carcinogens** (potential to cause human cancer)
- Others may affect the **hormone or endocrine system** in the body

How do pesticides enter the body?

- **Food**
 - Most of the foods we eat have been grown with the use of pesticides. Therefore, pesticide residues may be present inside or on the surfaces of these foods; pesticide residues also collect in fat (ex. in poultry or fish)
- **Drinking Water**
 - Some pesticides that are applied to farmland or other land structures can make their way in small amounts to ground water or surface water systems that feed drinking water supplies
- **Home and Personal Use**
 - Pesticides are sometimes used in and around the home to control insects, weeds, mold, mildew, bacteria, lawn and garden pests and may also be used as insect repellants which are directly applied to the skin or clothing
- **Worker Exposure**
 - Pesticide applicators, vegetable and fruit pickers and others who work around pesticides can be exposed due to the nature of their jobs; the EPA evaluates occupational exposure through a separate program and all pesticides registered by EPA have been shown to be safe when used properly.

Source: EPA: pesticides.supportportal.com



What steps can I take to reduce my exposure to pesticide residues?

Washing, peeling, and trimming fruits and vegetables often will help reduce or remove pesticide residues.

Buying organic will significantly reduce your pesticide load, but can sometimes cost 40-50% more than conventionally grown produce. Here are some tips to reduce pesticide consumption while staying more within your budget:

- Choose low-fat organic or grass-fed *milk and meat* (as toxins tend to accumulate in animal fat)
- *Steam leafy greens* (cooking vastly reduces pesticides and *E. Coli* and retains most nutrients)
- *Buy local* (regional farms serving local markets can skip the harsh chemicals that are used on crops intended for distant markets)
- *Buy frozen organic* (flash-freezing locks in nutrients; frozen products can sometimes cost less than fresh)
- *Choose organic where it counts and know when you can skip it* (see EWG's *Shopper's Guide*)

Did you know...?

According to the EPA, approximately **5.1 billion pounds** of pesticides are used each year in the United States.

Expenses for pesticides totaled over **\$10 billion** in 2010.

Sources:
epa.gov/pesticides/factsheets/security
ers.usda.gov/data/farmincome/finfidata.htm

The Environmental Working Group has developed a *Shopper's Guide to Pesticides*, which ranks pesticide contamination for 53 popular fruits and vegetables based on an analysis of 51,000 tests for pesticides on these foods, conducted from 2000 to 2009 by the U.S. Department of Agriculture and the federal Food and Drug Administration. Nearly all the studies on which the guide is based tested produce after it had been rinsed or peeled.

Contamination was measured in 6 different ways:

- Percent of samples tested with detectable pesticides
- Percent of samples with two or more pesticides
- Average number of pesticides found on a single sample
- Average amount (level in parts per million) of all pesticides found
- Maximum number of pesticides found on a single sample
- Total number of pesticides found on the commodity

Sources: (EWG) ewg.org/foodnews/methodology; (NRDC) nrdc.org/living/shoppingwise

4 things YOU can do to eat more sustainably on campus



1

Buy fair trade coffee!

All on-campus cafés serve fair trade coffee--you just have to ask!
You can get a **fair trade latte**, too. Almost any coffee drink can be made fair trade.

2

Bring a mug!

At on-campus cafes, you can purchase one of 2 refillable mugs (plastic coffee tumbler or ceramic mug) and receive a **discount** on coffee and soda when you use it!
Or, bring your own mug from home for a slightly smaller discount.



3

Challenge yourself to Meatless Mondays!

Eating less meat is good for you, and good for the environment.

The idea is simple--just **don't eat meat on Mondays**

Or, just eat some meals vegetarian. You don't have to go all the way to make a difference



4

Make your Voice Heard!

Let on-campus eateries know that you want to see them offering more sustainable options!

4 things YOU can do to eat more sustainably on campus

1

Go trayless in the dining halls!

Studies have shown you will **waste less** food if you go trayless and you will help **save water** by dirtying fewer dishes



2

Get the portion right

In the dining halls, don't be afraid to **ask for a bigger or a smaller portion**.

Dining staff is happy to serve you just the right amount so you don't throw away food or have to come back and use another plate



3

Swipes for the Homeless

Avoid lines and guilt at the end of the quarter and **donate your leftover swipes** through Swipes for the Homeless

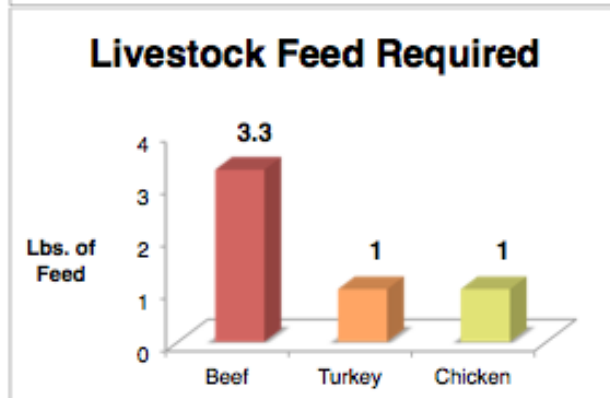
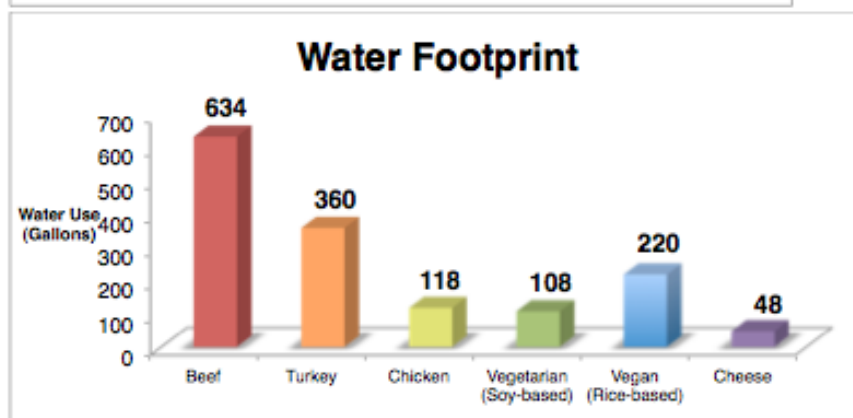
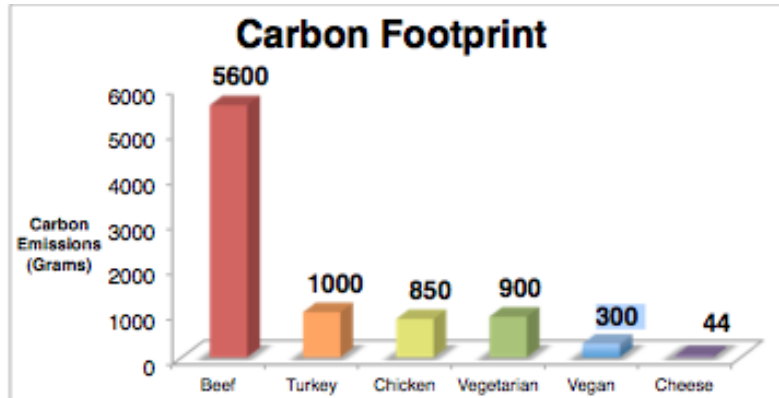


4

Make your Voice Heard!

Let the dining managers know you want to see more sustainable food in UCLA's dining halls.

E. Ecological Footprint of Burger Patties



Environmental Impacts of Livestock Raising:

Manure and other wastes are responsible for emitting 37% of global methane, a gas with over 70 times more global warming potential than carbon dioxide, and 64% of the world's ammonia, a chemical responsible for acid rain, ozone depletion, and air, soil, and water pollution.

Over 33% of the world's total arable land is dedicated to livestock feed production.

Clearing land for grazing often leads to deforestation, soil erosion, biodiversity losses, and an overall reduction in the quality of the land.

Over 10% of public lands have experienced desertification and 66% are significantly degraded due to overgrazing.

Over 70% of cattle and poultry are produced in industrialized systems and experience inhumane treatment in the form of physical abuse, confined living conditions that lead to the spread of disease, and daily injections of hormones and antibiotics that actually increase bacterial resistance to antibiotics.

F. Buyer's Guide Survey Questions

1. What are 5 items you consider staples (**items** you almost always have in your kitchen)?
2. As a rough percentage, how often do you shop at each of the following (either fill in the blank with percentage or have drop down with 0, 25, 50, 75, 100)
 - Ralph's
 - Trader Joe's
 - Whole Foods
 - Other
3. Which of the following do you consider when you choose which store to shop at or which brand to buy? (could also have them rank these) (**check all that apply**)
 - Price of product
 - Familiarity (have you, a family member, or a friend purchased this product in the past?)
 - Proximity of store
 - Flavor or quality of food
 - Environmental impact of food production and transportation
 - Environmental impact of packaging
 - Impact on your personal health
 - Animal welfare
 - Treatment of workers and social justice
4. When considering the issues above, which of the following labels do you look for?
 - Locally produced (where food originated when information is available)
 - Seasonality
 - USDA Organic
 - Oregon Tilth Organic
 - Fair Trade certification
 - Shade Grown
 - Rainforest Alliance
 - Cage Free or Free Range
 - Pesticide free
 - Non-GMO
 - Antibiotic or hormone free
 - USDA Grass-fed
 - Other
5. How often do you go to the grocery store to buy food?
 - Once a week
 - Twice a week
 - Once every 2 weeks
 - Once every 3 weeks
 - Once a month
6. On average, how much do you spend on groceries per trip?

- Under \$25.
- \$25-50
- \$50-75.
- \$75-100.
- Over \$100.

7. How many meals per week do you eat pre-made food (frozen, boxed, microwavable)?

8. On average, how long do you spend preparing your meals?

9. How intentional or informed do you feel your shopping decisions are?

- Scale 1-10 (1=least informed/intentional, 10=most informed/intentional).