## 2012

### UMD Dining Services' Sustainable Food Action Plan



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#### Acknowledgements and Disclaimer

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This document has been developed to serve as a guideline and suggested action plan for the Department of Dining Services Green Dining Program and should be modified and improved at the discretion of the Director of UMD Dining Services and the UMD Sustainable Food Working Group.

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#### **Executive Summary**

The UMD Dining Services Sustainable Food Action Plan provides UMD's Department of Dining Services with a proposal for how to increase sustainable food availability at the University of Maryland, College Park. The action plan also addresses educational and promotional opportunities for the Sustainable Food Working Group, a new group on campus led by Dining Services tasked with managing and implementing the goals of the Sustainable Food Action Plan.

After thorough review and assessment of a variety of definitions of sustainable food, this action plan advocates for a broad definition of sustainability in food for purposes of the baseline assessment and metrics tracking. Food is considered sustainable if it has any of the following attributes: local, fair, ecologically sound, or humane. Local food includes products grown or processed by businesses located and owned within 250 miles from UMD, College Park. This distance was identified and determined based on peer institutional practices. The three additional attributes, defined in detail in this document, are identified by third party certifications (see Appendix A: Common Food-Related Claims and Certifications for more details) or meeting specific criteria outlined by the Real Food Calculator (see Appendix D: Real Food Calculator Criteria and Instructions) or other specifications approved by the Sustainable Food Working Group (for another example, see Appendix F: Sustainable Table General Questions to Ask). Based on the results from the Sustainable Food Baseline Assessment, locally grown, locally processed, ecologically sound, and humane food purchases currently make up 10% of Dining Services food expenditures.

Overall, there are four primary objectives for the sustainable food program at UMD Dining Services:

- UMD Dining Services mitigates environmental impact by using local and sustainable food sources
- UMD Dining Services leverages buying power to encourage availability of healthier food choices
- Changes in healthy food availability and promotion increases UMD community health and wellness
- UMD Dining Services promotes community engagement and education about sustainable food issues

Utilizing the dual strategy, program tools, and action plan outlined in this document, UMD Dining Services can reach the following benchmarks, with ongoing consideration of departmental fiscal stewardship responsibilities and quality standards:

- 1-4% annual increase in sustainable foods purchases (meeting the criteria identified for sustainable food categories including local, fair, humane, and ecologically sound) based on financial feasibility and product availability
- Annual, incremental increases in sourcing from local growers, with special emphasis on Maryland growers
- Annual, incremental increases in sourcing unprocessed, whole foods
- 20% local and sustainable food by 2020

The overall program goals outlined above can be achieved in four phases:

- Phase One (2011-2012): Program initiation
- Phase Two (2013-2014): Capacity building, pilot, and prime-vendor strategy
- Phase Three (2015-2016): Launch and expand direct farm to school program
- Phase Four (2017-2020): Program building, incremental increase, process improvement, and evaluation

A year-by-year action plan can be found in Appendix H: Sustainable Food Action Plan. The Action Plan is organized by thirteen program areas over the four phases outlined above. Program areas are derived from key program tools outlined in this document and include:

- Overall sustainable food procurement objective
- Sustainable food commitment, protocol and plan
- Partnership and collaboration building
- Funding and development
- Technology and reporting
- Procurement and purchasing protocol
- Menu planning and food preparation
- Nutrition and wellness focus
- Grow It, Eat It
- Waste reduction
- Communication
- Staff training and education
- Community outreach and education

#### Introduction

The goal of this project is to assist the University of Maryland (UMD) Department of Dining Services in developing an action plan to increase sustainable food availability at the University of Maryland, College Park. The action plan will also address educational and promotional opportunities for the Sustainable Food Working Group, a new group on campus led by Dining Services tasked with managing and implementing the goals of the Sustainable Food Action Plan. The specific aims of the project are as follows:

- Identify best practices promoting sustainable food in institutional and university settings
- Synthesize current sustainable food purchasing data for UMD Dining Services using the Real Food Calculator
- Develop a Draft Action Plan with annual targets for UMD Dining Services to be reviewed, maintained, and managed by the Sustainable Food Working Group

Food purchasing and consumption plays an important role in both human and environmental health. The Sustainable Food Working Group and the UMD Dining Services Sustainable Food Action Plan will help to minimize negative environmental impacts associated with certain food products by shifting food procurement to more sustainable alternatives. At the same time, this project aims to promote environmentally and nutritionally healthful food options at UMD, while increasing community awareness about food, agriculture, and nutrition. Overall, there are four primary objectives for the sustainable food program at UMD Dining Services:

- UMD Dining Services mitigates environmental impact by using local and sustainable food sources
- UMD Dining Services leverages buying power to encourage availability of healthier food choices
- Changes in healthy food availability and promotion increases UMD community health and wellness
- UMD Dining Services promotes community engagement and education about sustainable food issues

The following methodology was utilized in developing the UMD Dining Services Sustainable Food Action Plan:

- 1. Coursework and academic projects through the Maryland Institute of Applied Environmental Health relating to agriculture, food, environment, and public health
- 2. Attended Johns Hopkins Center for a Livable Future's Mini-Med School Course, an overview of the food system and sustainable agriculture
- 3. Attended key conferences and events to gather institutional best practices related to agriculture, nutrition, public health, and food service
- 4. Successfully completed UMD Extension's Annie's Project, a course focused on agricultural risk management for women in agriculture
- 5. Interviewed and researched other university and institutional programs to provide case studies of successful programs promoting sustainable food
- 6. Organized and developed the UMD Sustainable Food Working Group
- 7. Facilitated UMD Sustainable Food Working Group during initial meetings in the spring 2012 semester
- 8. Created and managed the UMD Green Dining Sustainable Food Internship Program
- 9. Evaluated sustainable food terminology using existing resources such as Real Food Challenge, the Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability Tracking Assessment and Rating System (STARS), and other institutional models
- 10. Synthesized existing data on the current sustainable food purchasing by UMD Dining Services based on the Sustainable Food Baseline Assessment conducted by the UMD Green Dining Sustainable Food Interns
- 11. Analyzed current sustainable food procurement, best practices, and Sustainable Food Working Group feedback
- 12. Initiated grant proposal for Maryland Specialty Crop Grant in collaboration with UMD Extension Marketing Specialist for local fruit and vegetable program development
- 13. Drafted Action Plan for Sustainable Food Working Group to increase sustainable food purchasing

In order to support the development of this action plan, information was compiled from the following conferences and events:

- 2011 Airlie Foundation's Local Food Project at Airlie Conference: The Roles of institutions in the Future of Local Food
- 2011 Annual American Public Health Association National Conference

- 2012 Future Harvest Chesapeake Alliance for Sustainable Agriculture Annual Conference: Farm to Institution Track
- 2012 Annual Maryland Buyer-Grower Event
- 2012 First Annual Johns Hopkins Justice at the University Level Conference
- 2012 MD-H2E Trailblazer Education Series Sustainable Foods Union Hospital of Cecil County
- 2012 MD-H2E Maryland Food Leadership Council Meeting

Additionally, key internal and external stakeholders and experts were consulted and interviewed in the development of the UMD Sustainable Food Action Plan.

| Name                    | Position  | Organization  |
|-------------------------|---|---|
| Mr. Vijay Baharani      | UMD Student & Green Dining<br>Sustainable Food Intern | UMD   |
| Mr. Alex Childs         | UMD Student & Green Dining                            | UMD   |
|                         | Sustainable Food Intern                               |   |
| Ms. Meghan Cohen        | Coordinator   | UMD Center for Health and                             |
|                         |   | Wellbeing   |
| Ms. Elena Dulys-Nusbaum | Sustainability Coordinator                            | Virginia Tech Dining                                  |
| Mr. Tim Galarneau       | UCSC Food Systems Working Group<br>Coordinator        | UCSC CASFS  |
| Mr. John Gray           | Executive Chef  | UMD Dining Services                                   |
| Ms. Janna Howley        | Extension Marketing Specialist                        | UMD Extension   |
| Mr. Shane Hughes        | Owner and grower                                      | Liberty Delight Farms                                 |
| Mr. Dale Johnson        | Farm Management Specialist                            | Agricultural and Resource                             |
|                         |   | Economics   |
| Ms. Joelle Johnson      | Local Initiatives and Procurement<br>Coordinator      | DC Central Kitchen                                    |
| Mr. Stephen Kendall     | Procurement Manager                                   | DC Central Kitchen                                    |
| Mr. Alex Krefetz        | UMD Student, Real Food UMD                            | Real Food UMD   |
|                         | Student Leader  |   |
| Dr. Kim Kroll           | Associate Director                                    | Sustainable Agriculture Research and Education (SARE) |
| Mr. Scott Lupin         | Director  | UMD Office of Sustainability                          |
| Ms. Emily Manley        | Director of Outreach & Development                    | Local Food Hub  |
| Dr. Shirley Micallef    | Assistant Professor                                   | Plant Sciences  |
| Ms. Louise Mitchell     | Sustainable Foods Program Manager                     | MD H2E  |
| Ms. Ginger Myers        | Extension Marketing Specialist                        | UMD Extension   |
| Mr. David Raymond       | Procurement Administrator                             | UMD Dining Services                                   |
| Mr. Tom Reynolds        | Owner and grower                                      | Farmer Tom's  |
| Ms. Gabrielle Rovegno   | UMD Student & Sustainable Food                        | UMD   |
|                         | Working Group member                                  |   |
| Ms. Emily Schmitt       | Coordinator of Fitness Programs                       | UMD Campus Recreation Services                        |
| Mr. Mark Seale          | CEO   | Blue Ridge Produce                                    |

Table 1. Internal and external interviews conducted

| Name                    | Position  | Organization        |
|-------------------------|---|---------------------|
| Ms. Nancy Sechler       | FoodPro Manager   | UMD Dining Services |
| Ms. Kendall Singleton   | Sustainability Coordinator  | UVA Dining          |
| Mr. Greg Thompson       | Assistant Director Facilities   | UMD Dining Services |
| Mr. Mark Toigo          | Owner and grower  | Toigo Orchards      |
| Mr. Jon Traunfeld       | Senior Agent & Director State Master<br>Gardeners   | UMD Extension       |
| Ms. Alexandra Villegas  | CASFS Food Systems Working Group<br>Co-coordinator & UCSC Dining<br>Sustainability Intern | UCSC CASFS          |
| Ms. Colleen Wright-Riva | Director  | UMD Dining Services |

#### What is sustainable food?

According to the Food, Agriculture, Conservation and Trace Act of 1990, sustainable agriculture is "an integrated system of plant and animal production practices, having a site-specific application, that will:

- Satisfy human food and fiber needs;
- Enhance environmental quality and the natural resource base upon which the agricultural economy depends;
- Make the most efficient use of non-renewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls;
- Sustain the economic viability of farm operations; and
- Enhance the quality of life for farmers and society as a whole."

Sustainable food is produced from sustainable agricultural systems and has specific attributes related to the production systems, labor practices, and distance traveled. According to the Real Food Challenge, a national campaign aimed at promoting student activism in support of sustainable food on national campuses, sustainable food can be identified as local, fair, ecologically sound, and humane. The Real Food Challenge advocates for universities to sign the Real Food Campus Commitment (Appendix B) to commit to a shift related to sustainable food purchasing. The Real Food Challenge provides the following definitions for sustainable food:

- Local: These foods can be traced to farms and businesses that are locally owned and operated, within 250 miles of UMD, College Park (See Appendix E for Local Food Map). Sourcing these foods supports the local economy by keeping money in the community and builds community relations. The food travels fewer miles to reach consumers.
- **Fair:** Individuals involved in food production, distribution, preparation--and other parts of the food system—work in safe and fair conditions; receive a living wage; are ensured the right to organize and the right to a grievance process; and have equal opportunity for employment.
- **Humane:** Animals can express natural behavior in a low-stress environment are raised with no hormones or unnecessary medication.
- Ecologically Sound: Farms, businesses, and other operations involved with food production practice environmental stewardship that conserves biodiversity and preserves natural resources, including energy, wildlife, water, air, and soil. Production practices should not use toxic substances and should minimize both direct and indirect petroleum inputs.

There are a myriad of specific food related claims and certifications. Appendix A: Common Food-Related Claims and Certifications provides an overview from the Food Alliance's Guide to Developing a Sustainable Food Purchasing Policy of relevant terminology.

#### Introduction to the University of Maryland Dining Services

The UMD Department of Dining Services provides the UMD campus in College Park with the large majority of its food service options. The program is self-operated and includes a variety of units including three residential dining halls, catering services, concessions, two full service restaurants, and numerous satellite operations. Table 1 provides an overview of UMD Dining Services' program size, styles of services, staff, and organizational responsibilities.

| Program Size                 | <ul> <li>7<sup>th</sup> largest self-op program in the country</li> </ul> |
|------------------------------|---|
|                              | \$52 million total revenue  |
|                              | 34 distinct locations across campus                                       |
|                              | <ul> <li>Approximately 7,700 required dining plans</li> </ul>             |
|                              | <ul> <li>Approximately 1,100 optional dining plans</li> </ul>             |
|                              | <ul> <li>23,000 meals served per day</li> </ul>                           |
| Style of Service Provided    | • 2 a la carte dining halls (residential)                                 |
|                              | • 1 all-vou-care-to-eat dining hall (residential)                         |
|                              | <ul> <li>2 full-service restaurants</li> </ul>                            |
|                              | 6 convenience stores  |
|                              | • 14 cafes  |
|                              | <ul> <li>10 national/regional brands (within food court)</li> </ul>       |
|                              | Athletic event concessions program  |
|                              | <ul> <li>Football and basketball training table meals</li> </ul>          |
|                              | Catering program  |
| Staff Composition            | 78 person management/administrative team                                  |
|                              | • Approximately 1,050 clerical, service, and tech staff                   |
|                              | <ul> <li>Approximately 650 student employees</li> </ul>                   |
|                              | Total employees in 2011- 1,768  |
| Stewardship Responsibilities | Providing high quality, safe, nutritious food in clean facilities         |
|                              | across campus   |
|                              | • Financial commitment to cover all operating costs, contribute to        |
|                              | the University General Fund, and maintain reserves for future             |
|                              | equipment and facility improvements                                       |
|                              | Commitment to student outreach and student involvement                    |
|                              | Commitment to culinary education and nutrition awareness                  |
|                              | • Commitment to support and embrace divisional and university             |
|                              | initiatives   |
|                              | Commitment to creating strong partnerships with academic                  |
|                              | units   |
|                              | Commitment to team excellence through training and team                   |
|                              | building  |

#### Table 2. UMD Dining Services Overview

Dining Services food purchases make up approximately 34% of the department's spending. Figure 1 identifies the breakdown of total spending by the department including operating costs, such as maintenance and labor, as well as financial commitments, such as funds to the University General Fund. Food categories of purchases by the department include meat/seafood, dairy, beverages, produce/prepared vegetables, grocery, frozen/convenience, frozen vegetables, finished baked goods, alcohol, and specialty items.



Figure 1. UMD Dining Services Operating Costs and Financial Commitments

Dining Services' buying philosophy is categorized by the following:

- Use a prime vendor strategy to reduce costs, ensure safe food supply and maintain consistent food quality
- Work to reduce the number of deliveries to campus to provide carbon footprint reductions, staff efficiencies and pedestrian safety
- Increase local purchases whenever possible in order to enjoy freshest products, to impact local economy and to reduce carbon footprint

Dining Services has identified the following key institutional realities and challenges related to local and sustainable food purchasing:

- Prime vendor strategy may be barrier to trying smaller local vendors
- University's liability insurance requirements are often a challenge for small vendors

- Campus' urban location limits product availability
- 23,000 meals plus per day requires a streamlined approach
- Student and campus expectation for low cost options
- Quality of items needed is a challenge for smaller farms
- Seasonality of products in this region is not in alignment with academic calendar
- Culinary team skills and menu production time may be too limited
- Tracking/sourcing new items is time consuming

#### **Case Studies and Best Practices**

Best practices were identified from university dining programs as well as other institutional food services. This section outlines the lessons learned from personal interviews with program leaders from the identified organizations, as well as site visits when possible.

#### **University Dining Programs**

University dining programs around the country are evaluating how they can expand their sustainable purchasing and increase their environmental programs, such as recycling, composting, energy efficiencies and others. Highlighted in this report are the University of California Santa Cruz (UCSC), University of Virginia (UVA), and Virginia Polytechnic Institute and State University (Virginia Tech) selected for key best practices identified, as well as program similarities. For example, UCSC Dining and Virginia Tech Dining are both self-operated and of similar size to UMD Dining Services. The University of Virginia, while operated by the food service contractor Aramark, shares the region with UMD Dining Services. Both Virginia Tech and UVA are beginning their sustainable food programs, while UCSC has been recognized as a national leader for its institutional sustainable food strategy.

#### University of California, Santa Cruz (UCSC): Exemplary Farm to College Program

Beginning in 2003, UCSC's has developed a robust and innovative Farm to College Program. Dining at UCSC became self-operated in 2008 and serves approximately 24,000 meals daily between five dining halls. The size and operational structure of the UCSC Dining Program are similar to that of UMD Dining Services, including the use of the FoodPro System for data management. Of course, there are key differences in geographic region and campus culture that set UCSC apart from UMD. In order to understand the details of the UCSC program, interviews were conducted with Mr. Tim Galarneau, the UCSC Food Systems Working Group Coordinator, as well as Ms. Alexandra Villegas, the Center for Agroecology and Sustainable Food Systems (CASFS) Food Systems Working Group Co-coordinator and UCSC Dining Sustainability Intern. Based on these interviews, the following areas were identified as UCSC best practices: program funding through Measure 43, the UCSC campus Food Systems Working Group, sustainable food purchasing guidelines, collaboration with a consortium of organic growers (Monterey Bay Organic Farmers Consortium), and educational opportunities (both academic and experiential) from the campus farm and dining halls.

#### Measure 43: Sustainable Food Health and Wellness Fee

In the spring of 2010, UC Santa Cruz undergraduate students voted to institute a new student fee to fund Measure 43, the Sustainable Food, Health and Wellness Initiative. The measure passed with a 69%

majority. The fee generates more than \$100,000 a year, administered by CASFS in conjunction with student and faculty representatives on the UCSC Campus Food Systems Working Group. These funds support the Farm to College program and include paid internship opportunities for students as well as learning journeys and educational programs.

#### Food Systems Working Group

The Food Systems Working Group at UCSC was initiated in 2003 to define, support, increase sustainable food at UCSC and is an official committee on the UCSC campus. The group includes the Director of Dining, Dining Services buyer, faculty from three departments, two graduate students, and between five and seven undergraduate students. The Working Group operates with a \$24,000 budget annually and includes monthly meeting as Working Group and bi-monthly meetings as task groups. The group is responsible for promoting and connecting with student activities and managing the experiential learning program titled Food System Learning Journeys.

#### Sustainable Food Purchasing Guidelines

UCSC Purchasing Preferences (UC Santa Cruz Campus Food System Working Group, 2004) including the following specifications:

- **Buy local:** local food is grown within a 250-mile radius of Santa Cruz. Priority is given to growers closest to Santa Cruz.
- **Buy certified organic:** the United States Department of Agriculture (USDA) has established a uniform set of standards to which all organic produce must conform. Organic food grown in the United States must be certified by a third-party agency accredited by the USDA
- **Buy humanely produced animal products:** humanely produced animal products are cage free, range fed, and anti-biotic free.
- **Buy direct:** cultivating closer relationships between producer and consumer helps to eliminate middlefolk, deliver more income at the farm level, and empower producers.
- **Buy certified fair trade:** certified fair trade products are produced according to an established set of social criteria.
- Buy worker supportive food products: worker supportive products are purchased from socially just operations that incorporate one or more of the following into their employment practices:

   a) pay a living wage to farmworkers, defined as union or prevailing wage; b) provide benefits to their workers, such as medical insurance, on-site housing, year-round employment, childcare, c) actively seek to build the capacity of their workers through provision of education, training and opportunities for advancement.

USCS published samples of their Guidelines for Purchase of Dining Hall Food and has been instrumental in developing and piloting the Real Food Challenge.

#### **Collaboration with a Consortium of Growers**

In order to increase access to local, seasonal, and organic products, UCSC partnered with local growers, non-profit organizations, and other community partners to aggregate local food for the University's dining halls. The Monterey Bay Organic Farmer's Consortium and the Agriculture and Land-Based Training Association enable local, organic growers to contract with UCSC. The Monterey Bay Organic Farmers Consortium includes seven farms that supply the UCSC campus with produce. Not only do the participating farms sell produce to UCSC, they also collaborate with CASFS on organic farming and food system research.

#### **Student Educational Opportunities**

Educational programs offered at UCSC include academic and non-academic opportunities. CASFS Academic Programs, coursework, and for-credit internships engage students academically in the work of their Food Systems Program. Additionally, CASFS offers Campus Food System Learning Journeys bringing students out of the classrooms to learn about farming, distributing, cooking, consuming, and composting food. Journeys are offered each quarter and cover topics such as: agriculture and land production, distribution and processing, cooking and consumption, and waste reduction and composting. Learning Journey examples include a bike tour of local farms, a visit to a local farm to learn about goat cheese making, a canning workshop, and learning about integrating spices with local produce for farm fresh cooking. Additionally, Dining at UCSC offers weekly events such as Farm Fridays and Meatless Mondays promoting and educating the campus about related topics.

#### University of Virginia: Partnering with Local Food Aggregators

UVA Dining is operated by Aramark, which is currently working on developing corporate sustainability guidelines for their franchises. UVA's Green Dining Program developed a "Sustainability Bulls Eye" highlighting local and seasonal, organic, fair trade, and humane products. Notably, UVA is collaborating with two area food aggregators, the Local Food Hub and Blue Ridge Produce, to enhance their local, seasonal procurement. In order to understand the details of the UVA program and collaboration with area food hubs, interviews were conducted with Ms. Kendall Singleton, UVA Dining's Sustainability Coordinator, Ms. Emily Manley, Director of Outreach & Development for the Local Food Hub, and Mr. Mark Seale, CEO of Blue Ridge Produce. Site visits were also conducted at UVA, the Local Food Hub, and Blue Ridge Produce.

#### **Collaboration with Area's Local Food Aggregators**

As identified by the UCSC program and their work with Monterey Bay Organic Farmer's Consortium, it is challenging for large institutions to work with small and mid-sized local farmers. Recently, food hubs have been gaining attention from the USDA and many food and agriculture research and advocacy groups. According to Agriculture Deputy Secretary Kathleen Merrigan, food hubs are innovative business models emerging across the country specifically to provide infrastructure support to farmers. According to the USDA's working definition, a food hub is a centrally located facility with a business management structure facilitating the aggregation, storage, processing, distribution, and/or marketing of locally/regionally produced food products (USDA-AMS, 2012). Examples of area food aggregators can be found in Appendix H: List of Food Aggregators.

The Local Food Hub, based in Charlottesville, Virginia, is a nonprofit organization formed to provide services to local Virginia farmers. Basic services provided by the Local Food Hub include aggregation of local produce, sales, marketing and distribution assistance, access wholesale institutional and other large markets, on-farm services including farm visits, educational workshops and consulting, mobile library, coaching for wholesale market. The Local Food Hub includes a network of 70 farms

approximately 100 miles (or less) from Charlottesville working with over 120 buyers including schools, hospitals, distributors, groceries, restaurants, buying clubs, and universities. The Local Food Hub's core crops include 14 staples such as apples, and potatoes; they also offer seasonal highlights such as eggplant and asparagus. The Local Food Hub is able to provide the farmer's stories to buyers and other key marketing and educational materials.

Another regional food aggregator working with UVA is Blue Ridge Produce. Blue Ridge Produce specializes in locally-grown fresh-market fruits and vegetables, both organically and conventionally grown on small- to medium-sized diversified farms. Blue Ridge Produce aggregates fruits and vegetables grown locally, state-wide and regionally and markets them to wholesale buyers in Washington, DC and throughout the region. Blue Ridge Produce will also own and manage greenhouse production and organic agricultural production on its property.

#### Virginia Tech: Grow Your Own

Like UMD and UCSC, Virginia Tech Dining is self-operated dining service with a comparable size student population. Virginia Tech offers a specific dining project dedicated to sustainable foods, called the Farms & Fields Project. Additionally, Virginia Tech Dining Services operates the Garden at Kentland Farm, providing the dining halls with hyper-local produce. In order to understand the details of the Virginia Tech program, an interview was conducting with Ms. Elena Dulys-Nusbaum, Virginia Tech Dining's Sustainability Coordinator.

#### **Dining Services Garden at Kentland Farm**

Initiated in 2009 as a small herb plot, Virginia Tech's Dining Services Garden at Kentland Farm is a 2.25 acre fruit and vegetable garden. In 2010, the garden grew approximately 23,000 pounds of sustainablymanaged produce. Then, in 2011, the garden increased its production to over 44,600 pounds. The Garden is managed by students, with the support of the Sustainability Coordinator and collaboration with the College of Agriculture and Life Sciences and Department of Horticulture. Virginia Tech Dining is also exploring food preservation as a key component to expanding locally-grown food. Dining Services' Southgate Food Processing Center has partnered with the Department of Food Science and Technology to expand food preservation capacity. Lastly, Virginia Tech Dining developed the Farms & Fields Project, a venue in their Owens Food Court. This venue is dedicated to providing seasonal, local, organic, and sustainable food. The Farms & Fields Project and Dining Services Garden are cornerstones of the Virginia Tech sustainable food program.

#### Lessons Learned from Other Institutions

Universities are not alone is the exploration of sustainable food options; food service in a diverse range of institutions are exploring how to expand environmental programs and offer locally sourced and sustainable foods. Maryland Hospitals for a Healthy Environment (MDH2E) and DC Central Kitchen were selected as case studies because they share the identified local region with UMD-CP and utilize diverse and successful methods to expand local food sourcing. Additional resources, such as Maryland Department of Agriculture's Farm to School Program, were identified as additional programs for collaboration and sharing best-practice.

#### MDH2E (Maryland Hospitals)

MDH2E is a technical assistance and networking initiative that promotes environmental sustainability in health care. Network participants include hospitals, clinics, nursing homes, research laboratories, and other ancillary health care providers in Maryland. Information about the MDH2E program was obtained through interviews with Ms. Ginger Myers, UMD Extension Marketing Specialist, and participation in the 2012 MDH2E Trailblazer Education Series Sustainable Foods Union Hospital of Cecil County and 2012 MDH2E Maryland Food Leadership Council Meeting.

MDH2E initiated the Healthy Food in Health Care Program in Maryland as part of a national campaign by Health Care Without Harm to support hospitals and other health care facilities in providing healthier, local and sustainably produced foods to patients, employees, visitors and surrounding community members. This campaign also supports health care facilities in implementing environmentally sustainable initiatives in hospital food service (MD H2E, 2012).

#### Healthy Food in Health Care Pledge

Hospitals in the United States bought \$3.3 billion worth of food in 2004 (Beery & Vallianatos, 2004). Cumulatively, these expenditures rank the industry as the nation's third largest institutional purchaser of food items behind K-12 schools and colleges/universities (Beery & Vallianatos, 2004). The Healthy Food in Health Care program utilizes this purchasing power, along with the expertise of the health care sector, to promote the development of a more sustainable food system. In order to participate in the Healthy Food in Health Care Program, healthcare institutions sign the Healthy Food in Health Care Pledge (see Appendix C: Healthy Food in Health Care Pledge), a framework that outlines steps to be taken by the health care industry to improve the health of patients, communities and the environment (Health Care Without Harm, 2012). Twenty hospitals in Maryland and one in Washington, DC have signed the Healthy Food in Health Care Pledge to provide healthier foods and implement sustainability initiatives (MD H2E, 2012). Setting goals using the Healthy Food Pledge and the MD Buy Local Challenge have enabled the programs at area hospitals to gain momentum for their initiatives.

#### **Balanced Menus Challenge and Meat Reduction**

On average, Americans eat about 33% more meat than is recommended by the USDA (Health Care Without Harm, 2012). According to Health Care Without Harm, a reduction in the overall amount of meat served in hospital facilities provides important health and environmental benefits. The Balanced Menus Challenge is a voluntary commitment by health care institutions to reduce their meat procurement by 20% in 12 months (Health Care Without Harm, 2012). By accepting the challenge, hospitals are provided access to the Balanced Menus Toolkit with key strategies to reduce overall meat served and use the savings to purchasing local and sustainable meat and poultry products.

Meat reduction strategies identified by MDH2E include:

- Reducing portion sizes of meat and poultry servings
- Gradually adopt recipes that move meat away from center of plate, such as stir-fries, stews, kabobs, etc.

- Switch to whole food vegetarian meals, using vegetables, whole grains, legumes, nuts, etc.
- Reduce higher cost cuts of meat and phase in economical cuts of meat
- Reduce higher-cost, pre-cooked, or processed meat
- Purchase whole animal purchase and make full use of it, including bones for soup stock

According to MDH2E, menu changes should not be drastic. Rather, gradual changes can be implemented with a focus on education and marketing to customers. For example, implementation can begin with as little as one menu item. Customers should be educated about the shift, the special should be promoted ahead of time, a limited amount of the new item should be available and promoted at the point of sale, and customer surveys should be implemented to received and gauge feedback. New items can be phased in monthly or once a week, and can be tried as specials before permanent changes are made.

#### **Chef Training**

In October, 2011, MDH2E hosted a training program titled Chefs and Cooks Training for Health Care and Other Institutions, as part of its Healthy Food in Health Care and Local Foods to Local Hospitals initiatives. MDH2E received funding from the USDA Federal State Marketing Improvement Program and the Blaustein Fund in September 2010 to provide technical assistance and support to Maryland and DC hospitals and other institutions to implement local sustainable meat and poultry purchasing initiatives at their facilities. The chef and cook training included an overview of large-scale meat and poultry production, nutritional benefits of pasture raised meat and poultry, overview of cuts of beef and pork, and training on value cuts of poultry, fabrication of whole chicken, and bone broth technique. This type of training provides a sense of empowerment to participants while it helps to build skills. Additionally, training and promotion of scratch cooking highlights the chef and their culinary team, further building morale and teamwork.

Based on the experience of participating hospitals, sourcing locally has been labor intensive but the transition has been done without an increase in FTE. Rather, there has been an enhancement of team work and changes in the staff dynamic to promote productivity and engagement in the program. Overall, hospital strategies have included the reduction of processed foods, replacement with whole foods, and increase of scratch cooking. When purchasing food items, a product is evaluated for the presence of chemicals, whether or not it is processed, and its nutritional and health value. If it does not meet the criteria, then it is removed and replaced on the menu. Reducing portions and portion control have helped hospitals to manage cost and provide benefits from the health perspective. After implementation of the MDH2E program, Union Hospital in Cecil County, MD, serving 2,000 meals per day, is now sourcing 44% of their food locally. After two years of the program, Union Hospital's program is budget neutral.

#### DC Central Kitchen

DC Central Kitchen is a nonprofit organization focused on meal distribution and culinary job training. Each day, DC Central Kitchen distributes 5,000 meals at little or no cost to 100 DC homeless shelters, transitional homes, and nonprofit organizations. Additionally, DC Central Kitchen recently expanded to include a School Food Program, providing 4,200 meals to 2,000 students in DC schools every day. DC Central Kitchen offers a powerful and inspiring mission: to use food as a tool to strengthen bodies, empower minds, and build communities. Information and details about DC Central Kitchen's program were obtained through interviews with Mr. Stephen Kendall, Procurement Manager, and Ms. Joelle Johnson, Local Initiatives and Procurement Coordinator, as well as participation in the Future Harvest Chesapeake Alliance for Sustainable Agriculture Annual Conference and the First Annual Johns Hopkins Justice at the University Level Conference which both hosted Mr. Mike Curtin, Chief Executive Officer of DC Central Kitchen, as the keynote speaker. Twenty-five percent of the food DC Central Kitchen uses to prepare meals for their School Food Program comes locally, including products such as apples, beef, greens, potatoes, lettuce, peaches, pears, and berries.

#### **Buying Seconds**

An innovative method DC Central Kitchen utilized to purchase local, sustainable produce within their limited budget is by partnering with farmers and buying produce seconds, or slightly bruised, damaged, or unconventionally sized/shaped fruits and vegetables. Due to the specifications of produce distributors and grocery stories to purchase fruits and vegetables that are consistent size, shape, and color, produce grown or harvested that does not meet those specifications are challenging for farmers to sell. DC Central Kitchen, however, does not need set such rigorous visual specifications for their produce, since most of it is immediately processed and prepared for meals distributed to local institutions. Therefore, DC Central Kitchen is able to help farmers by creating a market for produce that was likely to be discarded, and at the same time is able to purchase local produce within their budget.

#### **Food Preservation and Scratch Cooking**

DC Central Kitchen, like the MDH2E Program, promotes the use of scratch cooking methods in order to take advantage of seasonal, local produce. In addition to preparing meals from whole foods on site, DC Central Kitchen has expanded its ability to take advantage of local produce all year, through food preservation. Tomatoes, apples, and collard greens are all purchased in bulk while in season. When the produce is fresh, it is prepared into sauce or flash frozen to be used in meal preparation all year, despite the change in season.

#### UMD Dining Services Sustainable Food Baseline Assessment

#### Green Dining Program Overview

The Green Dining Program emerged from UMD Dining Services leadership team's ongoing commitment to environmental stewardship. The department has consistently been involved in expanding and supporting waste reduction and diversion initiatives, energy efficiencies, and material re-use. From 2009 through 2011, departmental sustainability initiatives centered on waste reduction programs, eliminating Styrofoam from disposable products, increasing local food procurement, and initiating campus composting. In 2011, the department reorganized and created the Green Dining Program and Office, including a Sustainability Coordinator to develop, manage, and promote Green Dining initiatives. Priorities for 2011-2013 include increasing reusable to-go packaging, streamlining and expanding composting and waste management strategies, collaborating with the student-led Food Recovery Network, and working with the students of Real Food UMD.

UMD Dining Services committed to work with a Real Food UMD, a student-led advocacy group at the UMD-CP campus, to evaluate and strategize approaches for increasing sustainable food procurement and communication at on-campus eating facilities. This collaboration has included the creation of the Sustainable Food Working Group as well as student internships to assess Dining Services food procurement data.

#### Sustainable Food Working Group

The Sustainable Food Working Group was formed by Dining Services to examine ways to increase sustainable food options at UMD-CP. In addition, the group will promote education, awareness and dialogue through a collaborative process of input, planning, and action implementation.

The Working Group is comprised of:

- Representatives from UMD Dining Services, including the Director, Sustainability Coordinator, and Procurement Office,
- Representatives from concerned student groups, including a member of the RHA's Dining Student Advisory Board,
- A representative from the UMD Office of Sustainability,
- A representative from the Wellness Coalition,
- Key faculty members with relevant expertise including:
  - o Agriculture and natural resources
  - o Food safety
  - Agricultural economics
- And a representative from the UMD Extension Service.

The goals of the Sustainable Food Working Group are:

- 1. Evaluate the Real Food Campus Commitment, Real Food Calculator, and ASHEE STARS metrics systems.
- 2. Initiate the Baseline Campus Food Survey, as outlined by Real Food Challenge.
- 3. Determine method for achieving gains related to sustainable food, while being mindful of budget and operating constraints.
- 4. Develop a sustainable food protocol that includes discussion about the value priorities related to sustainable food.
- 5. Develop sustainable food action plan with annual benchmarks.
- 6. Develop communications approach for sharing outcomes, goals, and ongoing initiatives with campus community (and beyond).
- 7. Annual review, reporting, and process improvement to achieve goals outlined in action plan.

#### Sustainable Food Green Dining Internship

In addition to the creation of the Sustainable Food Working Group, the first year of the Green Dining Sustainable Food Program included the development of two Green Dining Sustainable Food Internships. Sustainable Food Interns were assigned with initiating and completing the Real Food Calculator in support of the Dining Services Sustainable Food Working Group. The interns work with the Dining Services Sustainability Coordinator to review Dining Services purchasing records and learn more about where the food served on campus comes from. These data were compiled and presented to the Sustainable Food Working Group. The internship positions worked collaboratively with the Real Food Challenge, a nation-wide effort to increase sustainable dining services at all universities in the country.

#### Student-led Sustainable Food Baseline Assessment

The Green Dining Sustainable Food Interns conducted the first Sustainable Food Baseline Assessment using the Real Food Calculator Assessment Tool, Dining Services food procurement data from the fall 2011 semester, and internet-based research. The Baseline Assessment was competed and presented to the Sustainable Food Working Group during their monthly meeting on April 4, 2012. An overview of the Sustainable Food Baseline Assessment is provided here.

#### Methodology

The Sustainable Food Baseline Assessment was conducted using the Real Food Calculator, an assessment tool developed by the Real Food Challenge. See Appendix D Real Food Calculator Criteria and Instructions for the details provided by the Real Food Challenge. Criteria identified by the Real Food Challenge include local, fair, ecologically sound, and humane. Definitions were derived from the Real Food Calculator and include the following:

- Local: These foods can be traced to farms and businesses that are locally owned and operated, within 250 miles of UMD-CP (See Appendix E for Local Food Map). Sourcing these foods supports the local economy by keeping money in the community and builds community relations. The food travels fewer miles to reach consumers.
- **Fair:** Individuals involved in food production, distribution, preparation--and other parts of the food system—work in safe and fair conditions; receive a living wage; are ensured the right to organize and the right to a grievance process; and have equal opportunity for employment.
- **Humane:** Animals can express natural behavior in a low-stress environment and are raised with no hormones or unnecessary medication.
- Ecologically Sound: Farms, businesses, and other operations involved with food production practice environmental stewardship that conserves biodiversity and preserves natural resources, including energy, wildlife, water, air, and soil. Production practices should not use toxic substances and should minimize both direct and indirect petroleum inputs.

Due to discrepancies identified with assessments of the local category, the final Sustainable Food Baseline Assessment divided the "local" category into two sub-groups: locally grown and locally processed.

• Locally Grown: These foods can be traced to nearby that are locally owned and operated. Foods are from products that were grown or raised locally.

• Locally Processed: New category added by the Sustainable Food Green Dining Interns, includes manufactures that process food products locally (regardless of where ingredients are sourced from). These businesses are locally owned and operated.

Food procurement data, totaling more than \$3.6 million of food expenditures, were provided by Dining Services Procurement Administrator with the following specifications:

- Food Purchasing, Fall 2011 Semester
- Prime vendors, plus select local manufacturers
  - o US Foods
  - o Coastal Sunbelt
  - o Local manufacturers identified by Dining Service's Procurement Administrator
- Five major units
  - South Campus Dining Hall
  - o North Campus Diner
  - o 251 North
  - o Commissary
  - o Catering

Using internet-based research, manufacturers identified from the data-set were categorized in a student-developed Manufacturers Database. The Manufacturers Database includes general information, notes and follow-up questions, as well as details regarding the categories of interest:

- Local
  - Processed locally? (Y/N)
  - Grown locally? (Y/N)
  - Color Rating (G, Y, R)
- Ecologically Sound
  - Organic? (Y/N)
  - 3rd Party Verified (Y/N)
  - Color Rating (G, Y, R)
- Humane
  - Grassfed? (Y/N)
  - Roam outdoors? (Y/N)
  - No Antibiotics? (Y/N)
  - No Hormones? (Y/N)
  - 3rd Party Certified? (Y/N)
  - Color Rating (G, Y, R)

During the assessment, it was identified that details about the Fair category could not be obtained using the internet-based research tools. Therefore, the fair category was excluded from the initial baseline assessment.

#### Results

The Sustainable Food Baseline Assessment revealed the estimated totals of food purchased by Dining Services by three of the four Real Food Categories, described above. The following manufacturers were

researched and identified during the baseline assessment according to the categories described in the Real Food Challenge's Real Food Calculator.

| Category                        | Percent of total food dollars |
|---------------------------------|-------------------------------|
| Fair                            | NA                            |
| Humane                          | 1.00%                         |
| Ecologically Sound              | 0.24%                         |
| Locally Grown                   | 3.93%                         |
| Locally Processed               | 8.74%                         |
| Total Local & Sustainable Food* | 10%                           |

\*Total includes purchases from manufacturers identified as humane, ecologically sound, locally grown, or locally processed, without double-counting or duplication.

Based on the results from the Sustainable Food Baseline Assessment, the total locally grown, locally processed, ecologically sound, and humane food purchases make up 10% of Dining Services food expenditures.

#### Discussion

This Sustainable Food Baseline Assessment is the first time that Dining Services' procurement data have been analyzed to quantify the total amount of sustainable food purchased by the department. Notably, this assessment was conducted by UMD students in collaboration with the UMD Dining Services Green Dining Program and the Real Food Challenge. This assessment enables the Sustainable Food Working Group and Dining Services to begin to identify goals and objectives related to the Sustainable Food Program.

There are a number of limitations that are important to identify when evaluating the Sustainable Food Baseline Assessment. First, the dataset under review was not comprehensive of all the department's food purchases. The data included approximately 50% of food procurement for the fall 2011 semester. Excluded from the dataset were Dining Services units including concessions, convenient stores, foodcourt vendors (Taco Bell, Chick-fil-A, etc.), and full service restaurants. Additionally, the focus of the study was on the prime vendors, Coastal Sunbelt and US Food Service, as well as other notable local food products identified by the Dining Services Procurement Administrator. Other vendors and manufacturers were excluded from the study.

A second challenge of the study was that the primary produce distributor, Coastal Sunbelt, was unable to provide a comprehensive list of all local produce purchased by UMD Dining Services during the period under review. Due to the vast aggregation of produce by Coastal Sunbelt, and the corresponding numbers of farms and sources of product, the volume of local produce was not easy to validate or quantify. The only produce items that could be verified as local were mushroom purchases from Pennsylvania. In the future, Dining Services will work with Coastal Sunbelt to expand the dataset and gain additional data and transparency regarding the original source of produce purchased.

Another critical challenge included variations and difficulties in assessing the Real Food categories. For example, among different institutions, the term local is quantified in different ways. Based on these differences some institutions count products that contain ingredients that are grown over long distanced but are processed locally. Other institutions count products that are processed locally by companies that are owned by large, multinational corporations. Another category that was difficult to quantify was fair. Fair Trade Certification (see Appendix A for definition) pertains to products such as coffee, hot chocolate, tea, candy, chocolate, sweeteners, fruit, rice and grains. However, without the certification, it was unclear how to measure fair labor practices for the manufacturers under review. In addition to the limitations with specific definitions, there were also variations in approaches to quantifying the total percentage sustainable food purchased by Dining Services. One method, suggested by the Real Food Challenge was that products could only be counted if they met two or more Real Food Challenge attributes, resulting in a total of 0.01% sustainable food. Another method, excluding items that were not locally grown, resulted in a total of 5.16% sustainable food.

It is recommended that Dining Services uses a more broad term of local; including all foods can be traced to farms and businesses that are locally owned and operated, within 250 miles of UMD, College Park. This enables the department to continue to emphasize Maryland owned businesses that might process food products locally, but the ingredients in those food products come from a variety of locations. Including locally grown as well as locally processed products in the overall assessment aligns Dining Services' metrics with many peer institutions.

Lastly, the assessment was limited to web-based research. In the future, Sustainable Food Interns will work to expand the Manufacturer Database by conducting verification through personal interviews with manufacturers. Follow-ups and site visits will enable students to ask the questions they identified during the initial assessment and more carefully identify sustainable practices among manufacturers. Students have identified questions for each of the manufacturers researched. In addition, resources such as the Yale Sustainable Food Project Purchasing Guidelines and Sustainable Table Questions to Ask (see Appendix F: Sustainable Table General Questions to Ask) can be utilized to improve the assessment with product specific questions and issues to address. The baseline assessment will also be expanded to include specific evaluations at the product category level. Expanding the method of review and research and adding more details to the assessment will further help the department in understanding its sustainable food purchases and how to increase them.

The Sustainable Food Baseline Assessment tools will be used for annual reporting of sustainable food purchasing by the Department of Dining Services in order to track program achievements and benchmarks. The annual assessments will be conducted by Sustainable Food Green Dining Interns and will be delivered to the Director of Dining Services and the Sustainable Food Working Group.

#### Building a Sustainable Food Program at UMD Dining Services

This section outlines a framework for UMD Dining Services to develop a robust sustainable food program, utilizing the best practices and lessons learned from other institutions as well as the results of the Sustainable Food Baseline Assessment. First, overarching goals and the overall strategy will be

outlined and described. Then, key program tools that can be leveraged in program development will be summarized. Lastly, the framework and tools will be applied to a year-by-year proposed action plan, found in detail in Appendix K.

#### **Overall Targets**

Utilizing the dual strategy and program tools outlined in the following section, UMD Dining Services will work to reach the following benchmarks, with ongoing consideration of departmental fiscal stewardship responsibilities and quality standards:

- 1-4% annual increase in sustainable food purchases (meeting the criteria identified for sustainable food categories including local, fair, humane, and ecologically sound) based on financial feasibility and product availability
- Annual, incremental increases in sourcing from local growers, with special emphasis on Maryland growers
- Annual, incremental increases in sourcing of unprocessed, whole foods
- 20% local and sustainable food by 2020

#### Program Overview: Dual Strategy

Due to the scale of the Dining Services program at UMD-CP as well as the department's commitment to a prime vendor strategy, it is important for Dining Services to approach the expansion of sustainable and local food with a dual approach. The primary and initial focus for the department should be to maximize its local and sustainable food program utilizing existing contracts and prime vendors, including US Food Service and Coastal Sunbelt. A secondary strategy, a direct farm to school program, should be developed focusing on community engagement, supporting Maryland produces, and building program capacity. The following section will outline each of these strategies.

#### Prime Vendor Strategy: Focus on expanding program reach and maximizing existing infrastructure and technology

With over 23,000 meals served each day in a fast-paced and urban environment, UMD Dining Services must rely on a prime vendor strategy to most efficiently, economically, and safely source food products for its diverse campus food services. Currently, the two prime food vendors under contract with UMD Dining Services are US Food Service and Coastal Sunbelt. Both US Food Service and Coastal Sunbelt have been responding to customer demands for increased transparency and reporting regarding sustainable and local foods available. For example, US Food Service now provides customers access to an ad hoc local report, listing manufacturers within 300 miles of the food service operation, and lists these data on their online reporting tools. Similarly, Coastal Sunbelt started to provide a Local Market Report (see Appendix G Sample Local Market Report) to highlight local product available from their suppliers.

In order to maximize existing contractual relationships, Dining Services should utilize prime vendors as a cornerstone to the sustainable food program. The following steps will enable UMD Dining Services to expand its sustainable food program through the use of prime vendors' services.

• Build capacity to purchase local and sustainable food from existing prime vendors by communicating program goals to vendors and work to identify available sustainable food

purchasing options, and automatically give preferential status to sustainable food products where price-competitive.

- Utilize prime vendor reporting capabilities to identify existing local and sustainable product availability by using existing reports, identifying limitations of those reporting tools, and working with vendor to improve reporting.
- Engage with vendors to identify additional local farms and producers with the assistance of collaborators such as the UMD Extension's Marketing Specialists as well as area food aggregators (see Appendix H: List of Food Aggregators for suggested collaborators).
- **Require prime vendors to track and report** sustainable and local food purchased, as directed by the Director of Dining Services and the Sustainable Food Working Group.

#### Direct Farm to School: Focus on community engagement, supporting Maryland farmers, and building program capacity

In addition to maximizing the prime vendor strategy, UMD Dining Services should also begin to develop a direct farm to school program, focusing on community engagement, supporting Maryland farmers, and building program capacity. Development of a direct farm to school program will enhance education and engagement opportunities for staff, students, and the UMD community through training programs, farm visits, and personal relationships with area farmers. Additionally, a direct farm to school program will provide specialized support to Maryland farmers through direct sourcing and contract-growing arrangements. Lastly, the direct farm to school program will enhance the overall program's capacity through marketing, special events, and on-campus garden projects.

In order to maximize the benefits and success of the overall sustainable food program, Dining Services should develop and implement a direct farm to school program. The following steps will enable UMD Dining Services to create a farm to school program:

- **Collaborate with UMD College of Agriculture and Natural Resources**, specifically UMD Extension Marketing Specialists, to develop plan, identify Maryland producers, and implement direct farm to school program.
- Host Farm to School events each semester such as seasonal meals at residential dining halls, alumni dinners, guest speakers, farmer visits, and farm tours.
- **Participate in Maryland Department of Agriculture's Buy Local Challenge** and other key local food events to build relationships with area farmers, peer institutions, and key agricultural professionals and educators.
- Offer local and seasonal items at smaller dining units such as catering and full-service restaurants Mulligan's and Adele's.
- **Contract directly with producers and/or a producer's cooperative** to grow specifically for UMD Dining Services. Building on relationships established early in the program, work to establish contract-growing agreements with producers, in which the price and quantity of the product that will be purchased are arranged with the local producer before the season starts.

• Support development of on- or near- campus farming and gardening initiatives with the potential of serving hyper-local products in on campus dining units. Work collaboratively with other stakeholders such as UMD College of Agriculture and Natural Resources and Office of Sustainability to develop strategies for these programs.

#### **Key Program Tools**

UMD Dining Services has identified key challenges to implementing a sustainable food program. These obstacles include: barriers for small and mid-sized vendors such as the prime vendor strategy and UMD's liability insurance requirements, demand for low cost by students and campus, seasonality of products in region not in alignment with academic calendar, limitations of culinary team skills and menu production, and time required for tracking and sourcing new items.

Despite these challenges, UMD Dining Services also has unique opportunities that will enable the successful development of a robust sustainable food program. Some of these opportunities include: self-operated dining service structure, size and diversity of operation, volume of food served, and placement within Maryland's land-grant University. In order to take advantage of these strategic characteristics, and mitigate the known obstacles, there are important tools UMD Dining Services should utilize to succeed in developing its sustainable food program. This section highlights and outlines these tools.

#### Interdepartmental and Local Collaboration

Dining Services has the opportunity to rely on the wealth of expertise within the UMD system and collaborate with other agricultural professionals in Maryland to advance its sustainable food program. Partnering with UMD Extension Marketing Specialists, the Maryland Department of Agriculture, and local food aggregators is essential to the success of the program. These agricultural professionals can assist existing or interested growers by providing necessary tools to manage diverse issues such as food safety, GAP certification, product aggregation, liability insurance, and product distribution. Staff and faculty in the diverse departments of the UMD College of Agriculture and Natural Resources, including UMD Extension, offer invaluable skills and networks to build relationships with Maryland's agricultural community.

The Office of Sustainability and the UMD Wellness Coalition are two additional campus departments that could serve as critical partners in advancing the sustainable food program. The Office of Sustainability and UMD Wellness Coalition are currently partnering with UMD Dining Services to support development of campus gardens and initiating an on-campus producer-only farmer's market. Collaboration between the three campus groups should be expanded to maximize the potential and success of the sustainable food program.

#### **External Funding**

After thorough review of ongoing sustainable food initiatives, it is clear that external funding is required to successfully initiate a new program. New program costs include staff hours to research and implement program, marketing and communications materials, education and staff training, student engagement and programming, and funds to offset initial increases in food cost. In order to cover initial program costs, Dining Services should collaborate with UMD departmental partners and other local partners, as outlined above, to secure start-up funding for developing programs. Examples of potential funding opportunities include:

- Maryland Specialty Crop Grant: UMD Dining Services and UMD Extension can team together to conduct a Feasibility Study and Pilot Project for MD Fruits and Vegetables at UMD Dining Services. The grant could include funding for engagement events such as alumni and student dinners, hosting farmer meetings, and evaluation and review of Maryland fruit and vegetable pilot initiatives.
- **Southern Maryland Infrastructure Grant:** UMD Dining Services and UMD Extension can partner to develop projects to help expand Southern Maryland agricultural infrastructure and provide educational opportunities to UMD students and staff.
- Federal State Marketing Improvement Program: This USDA grant provides matching funds to assist in exploring new market opportunities for U.S. food and agricultural products. UMD Dining Services and UMD Extension can partner to expand local fruit and vegetable programs and/or local meat and poultry programs. MDH2E utilized this grant to fund outreach, education and networking, technical support, campaigns and programs, and resources and tools.
- UMD Sustainability Fund: The University Sustainability Fund is supported by the Student Sustainability Fee and provides funding for projects that promote social, economic and environmental sustainability and positively impact the student experience at the University of Maryland. The Fund is administered through a student-majority subcommittee of the University Sustainability Council. UMD Dining Services has partnered with a number of student groups to receive funding for projects on campus including the UMD Community Rooftop Garden. UMD Dining Services could continue this tradition, and utilize the UMD Sustainability Fund to offset costs associated with specific initiatives in the new sustainable food program.

#### **Technology and Procurement Procedures**

Streamlined and effective use of technology and clear reporting and procurement procedures are essential to the success of the sustainable food program. UMD Dining Services already has many of the necessary tools for procurement and reporting and has the opportunity to work with partners and vendors to improve and expand capabilities as needed. In order to maximize the effective use of existing tools, Dining Services should:

- Initiate data clean-up and streamlining in existing databases, with specific emphasis on FoodPro System.
- **Provide IT system upgrades and training** to staff best and most efficiently utilize available IT systems. For example, FoodPro Product Release 2.3 includes mechanisms for tracking purchasing details and managing locally grown and sustainable products. Additionally, FoodPro reports should migrate to an electronic reporting output format.
- **Develop clear data entry and reporting protocols** for use with department's IT systems and provide updates and training to staff.
- **Collaborate with vendors** to ensure accuracy of data, adequate tracking, and thorough reporting are provided to support the sustainable food program.
- **Develop and update ordering procedures** to successfully execute departmental sustainable food purchasing goals.
- **Close the ordering guides** to centralize the selection of local and sustainable items when products are available and simplify product ordering for departmental units.
- **Build staff capacity** by providing training and clear guidelines related to data entry, reporting, product ordering, and food purchasing.
- Audit units and provide positive and negative reinforcement for compliance related to sustainable food purchasing objectives.

#### Meal Planning and Food Preparation

Training and information on seasonality and whole food preparation can expand culinary expertise and equip the Dining Services culinary team to prepare exciting foods with the sustainable food program. Seasonality of Maryland's fruits and vegetables are outlined in Appendix I. Note that through storage and season extension, the seasonality provided in these tables from the Maryland Department of Agriculture can be extended to include additional months of the year.

As the sustainable food program expands, the culinary team can continue to expand their knowledge and creativity in food preparation, adapted to new items and adjusting menus seasonally. Whole food purchases, such as a whole cow for special meals, spotlights the culinary team's expertise, local beef production, and the variety of cuts available. Additionally, there can be a highlight and focus on the use of existing food-preparation areas in existing facilities. Existing resources, infrastructure, and staff talent should be maximized. As cost, staff-time, storage, and processing equipment allow, the culinary team can be creative in from-scratch cooking methods, including preparation of stocks, sauces, and other items.

#### Nutrition and Wellness Focus

The sustainable food program offers Dining Services a unique opportunity to partner with campus wellness programs to expand the nutritional and wellness focus for the department. Existing initiatives and programs can be expanded and utilized to enhance the department's wellness program. Expanded availability and targeted placement of healthy food options can help promote nutrition and wellness for customers, as well as create opportunities for the new sustainable food program. According to one study, "limited availability of healthy foods within the dining hall" was the most common reason why students said they did not choose healthful foods in the dining hall (Peterson, et al., 2010). Additionally, in the same study, increased awareness of healthy foods appears to prompt students to report improved overall eating behaviors (Peterson, et al., 2010). Therefore, availability and placement of healthy food options should be reviewed and modified in order to promote healthy eating behaviors.

- **Review the menu** using the nutritional tools available, such as FoodPro, and evaluate food offerings based on nutritional content.
- **Reduce portion size and offer half-sized portions.** Potential reductions in portion size can cut costs, reduce food waste, and promote health based on the Dietary Guidelines for Americans 2010.
- **Spotlight healthful food items** or introduce new offerings to substitute for items with little nutritional value in dining halls.
- Evaluate the "change the plate" recommendations from the Healthy Food in Health Care's Balanced Menus Challenge, reducing meat and increasing availability of fresh fruits and vegetables.
- **Encourage dietetic interns** to develop menu concepts and assist the department in its promotion of health and wellness.
- Partner with existing wellness-focused campus partners including:
  - The Center for Health and Wellbeing (CHWB) Terp Wellness Hut: The Terp Wellness Hut rotates around UMDCP campus promoting wellness. This resource will be utilized with a focus on healthy eating behaviors during the intervention.
  - **CHWB Diet Analysis and Nutrition Drop-In Hours:** The CHWB Diet Analysis includes individualized sessions analyzing and assessing individuals' diets using a two-day diet record, recording what an individual eats for two days. At the appointment, the CHWB

staff review the results and make suggestions for positive changes to improve individual diet. During the CHWB Nutrition Drop-In Hours the dietitian is available to informally answer nutrition-related questions.

• **University Health Center Nutritional Counseling:** The dietitian on staff at the University Health Center is available for one-on-one session which will assess an individual's nutritional status and help implement change to improve health through healthier eating.

#### **Reduce Food Waste**

UMD Dining Services has already implemented a robust and innovative waste-reduction and wasteseparation program, reducing the amount of landfill waste generated by Dining Services operations drastically. Components of the program include the EAT-INitiative, cook-to-order food preparation, single-stream recycling, both pre-consumer and post-consumer composting, phase out of Styrofoam disposable products, and introduction of reusable carryout containers. Additionally, Dining Services collaborates with the student-led Food Recovery Network, collecting unused food from the dining halls and concessions and donating the food to those in need in Washington, D.C. As part of the sustainable food program, Dining Services should continue to expand these programs to continue to reduce food waste and promote composting.

Dining Services should evaluate portion size based on customer waste and on caloric and nutritional value. According to the USDA, research shows that people tend to consume more calories when larger portion sizes are served (DHHS, 2010). Food service staff should receive training to provide smaller portion sizes by default when serving food items. Students should be permitted to request more food, but smaller default food servings will promote more healthful eating behavior. Potential reductions in portion size can cut costs, reduce food waste, and promote health based on the Dietary Guidelines for Americans 2010.

#### Grow It, Eat It: On-Campus Gardens

Dining Services currently partners with student groups and other campus collaborators, such as the Office of Sustainability, to initiate and support on-campus vegetable gardening. On-campus gardening initiatives allow Dining Services to enhance community building and educational opportunities for staff, faculty, and students. Dining Services should continue to expand its collaboration with on-campus gardens such as the Rooftop Community Garden, Public Health Garden, St. Mary's Garden, and Sheridan Street Garden.

Additionally, these programs can be highlighted through the UMD Extension Grow It, Eat It program. Grow It, Eat It is a program support by the UMD Extension staff to help and encourage Marylanders to improve health and save money by growing fresh vegetables, fruits, and herbs using sustainable practices. The vision of the program is to encourage one million Maryland food gardeners producing their own affordable, healthy food.

While on-campus gardens cannot provide enough volume of produce to be effectively utilized in the dining halls, there are opportunities for use of hyper-local produce (ie produce grown on campus) such as use of campus-grown herbs in dining halls or catered events.

#### **Training and Education**

Training and education are critical to the success of the sustainable food program. Training and education to begin with the Dining Services Leadership Team, expand to the Department's staff, and

then, through partnership with collaborating UMD departments, extent to student education and outreach.

- Leadership Team: The Dining Services Leadership Team should be provided tools to effectively manage the new sustainable food program in their operations. These include discussions and presentations of best practices and ideas from peer institutions, as well as reports and metrics from their units and the overall department. The Leadership Team should work together with the Director of Dining Services and the Sustainable Food Working Group to advance program goals in their departmental units.
- Staff Training: Training should be provided to all staff regarding the program goals and objectives, and overall mission of the program. Additionally, staff should receive ongoing training relating to their job assignments. For example, IT staff should be trained on system updates and new reporting protocols; chefs and cooks should receive training to effectively utilize local and seasonal products; staff processing orders should receive training relating to new purchasing guidelines.
- **Student Outreach and Education:** Through collaborations with other UMD departmental units and the Sustainable Food Working Group, academic and non-academic education should be available to students to learn about the food system and sustainable food. For example, Farm to Table dinners with speakers and guest panels can help engage students in the program.

#### Communication

When sustainable and local food options are available, the Dining Services Marketing and Communications team should be utilized to promote and communicate the products by:

- Providing units with marketing materials
- Developing signage and identifiers at point of purchase for local and sustainable food option
- Building marketing programs educating and highlighting program initiatives utilizing table tents, posters, and other communication materials
- Updating and further developing Green Dining website
- Building social media presence and/or blog to engage community in developments of the program

Studies have shown that short-term, multifaceted point-of-selection marketing of healthful foods in university dining halls may be beneficial for improving college students' perceptions and selections of targeted healthful foods and may improve overall eating behaviors of college students (Peterson, et al., 2010). Therefore, point-of-selection information should be expanded to include not only the menu labeling icons (vegetarian, low-fat, etc.) but also details about products and nutritional tips at the point-of-selection and purchase.

Marketing programs such as Maryland's Best, Southern Maryland Meats, and others can be leveraged in developing marketing materials. Details and information about participating farms provided by vendors should be utilized. Additionally, the department should expand use of the nutritional kiosks in order to provide details to customers about products, including state of origin, where relevant.

Internal communications should be improved to provide the department, including the leadership team, management team, and staff when appropriate, updates about the program including program benchmarks, challenges, successes, and other information.

#### Year-by-year Action Plan

The overall program goals outlined above can be achieved in four phases:

- Phase One (2011-2012): Program initiation
- Phase Two (2013-2014): Capacity building, pilot, and prime-vendor strategy
- Phase Three (2015-2016): Launch and expand direct farm to school program
- Phase Four (2016-2020): Program building, incremental increase, process improvement, and evaluation

The year-by-year action plan can be found in Appendix H: Sustainable Food Action Plan. The Action Plan is organized by thirteen program areas over the four phases outlined above. Program areas are derived from the key program tools described in the previous section and include:

- Overall sustainable food procurement objective
- Sustainable food commitment, protocol and plan
- Partnership and collaboration building
- Funding and development
- Technology and reporting
- Procurement and purchasing protocol
- Menu planning and food preparation
- Nutrition and wellness focus
- Waste reduction and diversion
- Grow It, Eat It
- Communication
- Staff training and education
- Community outreach and education

#### Conclusion

UMD Dining Services is poised to be a leader among peer institutions in the East-Coast in developing a sustainable food program. Utilizing the tools and resources outlined in this assessment, Dining Services can overcome program challenges and obstacles and achieve 20% local and sustainable food by 2020, with special emphasis on purchases from Maryland producers and expanding whole foods purchases and preparation.

This document has been developed to serve as a guideline and suggested action plan for the department's program and should be modified and improved at the discretion of the UMD Director of Dining Services and the UMD Sustainable Food Working Group.

#### References

- American College Health Association. (2011). Spring 2011 Reference Group Executive Summary. Available online: http://www.achancha.org/docs/ACHA-NCHA-II\_ReferenceGroup\_ExecutiveSummary\_Spring2011.pdf
- Beery , M. & Vallianatos , M. (2004). Farm to Hospital: Promoting Health and Supporting Local Agriculture. Center for Food and Justice Urban and Environmental Policy Institute Occidental College. Available online: http://departments.oxy.edu/uepi/cfj/publications/farm\_to\_hospital.pdf
- Centers for Disease Control and Prevention. (1997). Youth Risk Behavior Surveillance: National College Health Risk Behavior Survey—United States, 1995. *MMWR Morb Mortal Wkly Rep., 46*(SS-6), 1– 10.
- CLF. (2012). Center for a Livable Future Online. Available online: http://www.jhsph.edu/clf/
- Cohen, L., Larijani, S., Aboelata, M., & Mikkelsen, L. (2004). Cultivating Common Group: Linking Health and Sustainable Agriculture. A Report by the Prevention Institute. Available online: http://www.noharm.org/lib/downloads/food/Cultivating\_Common\_Ground.pdf
- Community Food Security Coalition. (2012). Farm to College. Available online: http://www.farmtocollege.org./home
- Drewnowski, A., & Darmon, N. (2005). Food choices and diet costs: an economic analysis. Journal of Nutrition, 135, 900-904.
- Eat'n Park Hospitality Group. (2012). Farm Source Program. Available online: http://www.eatnpark.com/menu\_farmsource.asp
- Food, Agriculture, Conservation, and Trade Act of 1990 (FACTA), Public Law 101-624, Title XVI, Subtitle
   A, Section 1603 (Government Printing Office, Washington, DC, 1990) NAL Call # KF1692.A31
   1990.
- Food Alliance. (2012). Sustainable Food Purchasing Policy Examples: Purchasing Policies and Plans. Available online: http://www.sustainablefoodpolicy.org/example-policies-and-plans
- French, A. (2003). Pricing effects on food choices. Journal of Nutrition, 133, 841S-843S.
- Gretchen Swanson Center for Nutrition. (2012). Available online: http://centerfornutrition.org/
- Harvie, J. (2006). Redefining Healthy Food: An Ecological Health Approach to Food Production, Distribution, and Procurement. Available online: http://www.noharm.org/lib/downloads/food/Redefining\_Healthy\_Food.pdf
- Health Care Without Harm. (2012). Issues: Healthy Food Systems. Available online: http://www.healthyfoodinhealthcare.org/index.php

- Health Care Without Harm. (2012). Healthy Food in Health Care A Pledge for Fresh, Local, Sustainable Food. Available online: http://www.noharm.org/lib/downloads/food/Healthy\_Food\_in\_Health\_Care.pdf
- Horrigan, L., Lawrence, R.S., & Walker P. (2002). How Sustainable Agriculture Can Address the Environmental and Human Health Harms of Industrial Agriculture. Environ Health Perspect 110:445-456. http://dx.doi.org/10.1289/ehp.02110445
- Institute for Agriculture and Trade Policy. (2012). Healthy Food Action Online. Available online: http://www.healthyfoodaction.org/
- Intergovernmental Panel on Climate Change. (2007). Climate Change 2007: Synthesis Report. Cambridge University Press, New York, NY.
- Kim, B., & Neff, R. (2009). Measurement and communication of greenhouse gas emissions from U.S. food consumption via carbon calculators. Ecological Economics: doi:10.1016/j.ecolecon.2009.08.017
- MD H2E. (2012). Maryland Hospitals for a Healthy Environment: Sustainable Food. Available online: http://mdh2e.org/sustainable-foods/
- Mikkelsen, L. & Chehimi, S. (2007). The links between the neighborhood food environment and childhood nutrition. Robert Wood Johnson Foundation Online. Available at: http://www.rwjf.org/files/research/foodenvironment.pdf
- Peterson, S., Duncan, D.P., Null, D.B., Roth, S.L., Gill, L. (2010). Positive changes in perceptions and selections of healthful foods by college students after a short-term point-of-selection intervention at a dining hall. *Journal of American College Health, 58*(5), 425-431.
- Sallis, J. F., & Glanz, K. (2006) The role of built environments in physical activity, eating, and obesity in childhood. The Future of Children, 16(1), 89-108.
- Schaefer Center for Public Policy. (2012). Maryland Policy Choices 2012 Public Opinion and Policy Choices. Available online: http://scpp.ubalt.edu/pdfs/FallPolicyChoices%202012%20Color%20FINAL%20REPORT.pdf
- Southern Maryland Agricultural Development Commission. (2012). Maryland Buy Local Challenge. Available online: http://www.buy-local-challenge.com/index.asp
- Spahn, J.M., Essery, E.V., Obbagy, J.E., Altman, J.M., & Nelson, M.E. (2011). Fast food restaurants and their relationship to body weight: A review of the evidence. Presentation at APHA Wednesday, November 2, 2011: 10:30 AM.
- Starshine, Casey. (2010). Local, Sustainable Meat Purchasing in Health Care Institutions: A Preliminary Look at Existing Models and Pilot Programs. Available online: http://mdh2e.org/wp-

content/uploads/2010/12/Report-on-Local-Sustainable-Meat-Purchasing-by-Casey-Starshine-MS-RN1.pdf

- Universities at Shady Grove. (2011). Chefs and Cooks Training for Health Care and Other Institutions Friday, October 14, 2011. Available online: http://mdh2e.org/wpcontent/uploads/2012/01/Chef-Training-Resource-Guide-FINAL.pdf
- UC Santa Cruz Campus Food System Working Group. (2004). Guidelines for Purchase of Dining Hall Food. Available online: foodalliance.org/sustainablefoodpolicy/ucsc/ucsc-guidelines.doc
- University of Virginia Dining. (2012). Green Dining at UVA. Available online: http://www.campusdish.com/en-US/CSMA/Virginia/Sustainability/
- U.S. Department of Agriculture, Agricultural Marketing Services. (2012). Food Hubs: Building Stronger Infrastructure for Small and Mid-Size Producers. Available online: http://www.ams.usda.gov/AMSv1.0/foodhubs
- U.S. Department of Agriculture- Economic Research Service. (2012). USDA Food Atlas. Available online: http://www.ers.usda.gov/foodatlas/atlas/
- U.S. Department of Agriculture and U.S. Department of Health and Human Services. (2010). Dietary Guidelines for Americans, 2010. 7th Edition, Washington, DC: U.S. Government Printing Office, December 2010. Available online: http://www.cnpp.usda.gov/dietaryguidelines.htm
- U.S. Department of Health and Human Services (2011). Healthy People 2020. Available online: http://www.healthypeople.gov/2020/default.aspx

#### **Appendix A: Common Food-Related Claims and Certifications**

#### From the Food Alliance's A Guide to Developing a Sustainable Food Purchasing

#### **Antibiotic Claims**

The USDA has prohibited use of the term "Antibiotic Free" as a label claim for meats and poultry, but allows "Raised Without Antibiotics" or "No Antibiotics Administered." These claims imply that no antibiotics were administered to the animal at any point during its life. If an animal becomes sick and requires treatment, it should be segregated from other animals and sold as a conventional meat product. There is often no independent verification of these antibiotic claims.

#### **Beyond Organic**

This term is used informally to describe farms with management practices that go beyond the minimum requirements of the USDA organic standards. The term is not regulated and has no standard industry definition, making it very difficult to evaluate as a claim. Ask suppliers using the term to describe in more detail what they mean by it. There is no independent verification of this claim.

#### Cage Free

This is a first party claim that poultry were raised without cages. This does not guarantee that birds were raised with access to the outdoors or on pasture. Birds may have been raised in large flocks in commercial confinement facilities with open floor plans. There is often no independent verification of "Cage Free" claims.

#### **Certified Humane**

The Certified Humane Raised & Handled Label is a consumer certification and labeling program which indicates that egg, dairy, meat or poultry products have been produced with the welfare of the farm animal in mind. Farm animal treatment standards include: Allow animals to engage in their natural behaviors; Raise animals with sufficient space, shelter and gentle handling to limit stress; Make sure they have ample fresh water and a healthy diet without added antibiotics or hormones. Producers also must comply with local, state and federal environmental standards. Processors must comply with the American Meat Institute Standards, a higher standard for slaughtering farm animals than the Federal Humane Slaughter Act. www.certifiedhumane.com

#### **Fair Trade Certified**

Fair Trade standards aim to ensure that farmers in developing nations receive a fair price for their product, and have direct trade relations with buyers and access to credit. They encourage sustainable farming practices, and discourage the use of child labor and certain pesticides. To bear the label, products must be grown by small-scale, democratically organized producers. Fair Trade Certified products include coffee, hot chocolate, tea, candy, chocolate, sweeteners, fruit, rice and grains. TransFair USA is the third-party certifier of Fair Trade goods in the US. It is one of twenty members of Fairtrade Labeling Organizations International, the umbrella organization that sets the certification standards. www.transfairusa.org

#### **Food Alliance Certified**

Food Alliance is a nonprofit organization that operates a third-party certification program for socially and environmentally responsible agricultural practices. Food Alliance certification distinguishes farmers and ranchers who: Provide safe and fair working conditions; Ensure healthy and humane care for livestock; Do not use hormones or nontherapeutic antibiotics; Do not produce genetically modified crops or livestock; Reduce pesticide use and toxicity; Conserve soil and water resources; Protect and enhance wildlife habitat; and, Demonstrate continuous improvement. Food Alliance certification distinguishes food processors, manufacturers and distributors who: Source Food Alliance Certified ingredients; Ensure quality control and food safety; Do not use artificial flavors, colors or preservatives; Provide safe and fair working conditions; Reduce use of toxic and hazardous materials; Conserve energy and water; Manage solid waste responsibly; and, Demonstrate continuous improvement. www.foodalliance.org

#### Free Range

Free Range and related terms are popular label claims for poultry and eggs, and sometimes seen on other meats. Free range is regulated by the USDA for use on poultry only (not eggs), which requires that birds be given access to the outdoors for an undetermined period each day. In practice, the "Free Range" claim does not guarantee that the animal actually spent any period of time outdoors, only that access was available. Birds may have been raised in large flocks in commercial confinement facilities with open floor plans. There is often no independent verification of "Free Range" claims.

#### **Genetically Modified Organism (GMO) Claims**

With growing consumer concern for genetically modified crops and livestock entering the food supply chain, a number of companies have begun to assert "GMO-Free" and related claims. In many cases, there is no independent verification of "GMO-Free" claims. Some certification programs, such as Organic and Food Alliance, prohibit genetically modified ingredients in certified foods and have corresponding inspection protocols. However, laboratory test may be necessary to provide maximum surety there has been no cross-contamination of products.

#### Grassfed

As defined by the American Grassfed Association, this claims means that animals live on pasture, consume a natural forage diet, and do not receive hormone or antibiotic treatments. However, the USDA, in a standard published for comment in 2006, has defined "grassfed" to only mean animals that consume a diet of grasses and silage. The USDA standard does not prohibit confinement or hormone and antibiotic treatments. Suppliers should be clear which standard they claim to meet. There is currently no independent verification of this claim under either standard. Note that "Grassfed" claims are sometimes qualified with supplemental "Grain Finished" claims. This combination describes the conventional industrial livestock feeding model, and invalidates the "Grassfed" claim.

#### **Hormone Claims**

The USDA has prohibited use of the term "Hormone Free," but meats can be labeled "No Hormones Administered" meaning that the animals in question did not receive hormone injections or feed supplements. Claims are also frequently asserted that milk products are "rBGH-Free" and/or "rBST-Free." (rBGH and rBST are hormone supplements given to dairy cows to increase milk production.) Federal law prohibits the use of hormones in hogs and poultry, so hormone claims for chicken or pork should be considered misleading. There is often no independent verification of hormone claims.

#### **Integrated Pest Management**

Integrated Pest Management (IPM) is an approach to pest management that employs a variety of farming practices (such as encouraging beneficial insects) to avoid and mitigate pest problems. IPM programs use information on the life cycles of pests and their interaction with the environment, in combination with available pest control strategies, to manage pest damage by the most economical

means, and with the least possible hazard to people, property, and the environment. IPM rarely appears independently in product related claims, but is a basis for pest management standards under certification programs such as Food Alliance and Protected Harvest.

#### **Local Claims**

Local is most often defined as food grown within a particular geographic area or within a specific distance from the point of consumer purchase. Defined this way, the claim is frequently linked to "food miles" as a proximate measure for environmental impact. Another way to consider "local," however, is food which comes from an identifiable community, which is grown and marketed by mid-sized and smaller producers, producer cooperatives, and producer-owned businesses. This definition speaks more to public interest in preserving family-scale agriculture, and in strengthening local and regional economies. Regardless of emphasis, local claims are most often asserted in direct marketing contexts. Local by itself does not guarantee that the food was produced to any social or environmental standard, or under any particular ownership structure. There is often no independent verification of local claims.

#### **Marine Stewardship Council**

The Marine Stewardship Council (MSC) is a non-profit organization that promotes responsible fishing practices. The MSC label assures buyers that products come from a well managed fishery and have not contributed to overfishing. The three principles of the MSC certification standard are: 1) *The condition of the fish stocks* (examines if there are enough fish to ensure that the fishery is sustainable); *The impact of the fishery on the marine environment* (examines the effect that fishing has on the immediate marine environment including other non-target fish species, marine mammals and seabirds); 3) *The fishery management systems* (evaluates the rules and procedures that are in place, as well as how they are implemented, to maintain a sustainable fishery and to ensure that the impact on the marine environment is minimized). www.msc.org

#### Monterey Bay Aquarium Seafood Watch Guide

The Seafood Watch guide is designed to raise consumer awareness about the importance of buying seafood from sustainable sources. The guide recommends which seafood to buy or avoid, helping consumers to become advocates for environmentally friendly seafood. Recommendations are based on peer-reviewed research and government agency reports. Seafood Watch is associated with the Seafood Choices Alliance which, along with other seafood awareness campaigns, provides seafood purveyors with recommendations on seafood choices. www.mbayaq.org/cr/seafoodwatch.asp

#### Natural

USDA guidelines state that "Natural" meat and poultry products can only undergo minimal processing and cannot contain artificial colors, artificial flavors, preservatives, or other artificial ingredients. "Natural" is used with similar meaning with other food products as well. Beyond this limited definition, "natural" should be considered a meaningless claim. The term does not offer any information about the social or environmental impact of the product. It does not guarantee that livestock were humanely raised, or not treated with hormones and antibiotics. It does not guarantee that crops were raised according to any standard. There is typically no independent verification of "natural" claims.

#### Organic

In order to be labeled "organic" products must meet the federal organic standards as determined by a USDA-approved certifying agency. Organic foods cannot be grown using synthetic fertilizers, chemicals, or sewage sludge; cannot be genetically modified; and cannot be irradiated. Organic meat and poultry must be fed only organically-grown feed (without any animal byproducts) and cannot be treated with

hormones or antibiotics. In order to bear the USDA "Certified Organic" seal, a product must contain 95 to 100 percent organic ingredients. Products that contain more than 70 percent, but less than 94 percent organic ingredients can be labeled "Made with Organic Ingredients," but cannot use the USDA "Certified-Organic" seal. Organic ingredients can be listed on the packaging of products that are not entirely organic. www.ams.usda.gov/NOP/indexNet.htm

#### **Pastured or Pasture-Raised**

This claim indicates the animal was raised outdoors on a pasture, and implies that it ate primarily grasses and other naturally occurring foods commonly found in pastures. In fact, feeding practices may vary. There is typically no independent verification of "pastured" claims. (See also "Grassfed" above.)

#### **Protected Harvest certified**

Protected Harvest is a non-profit organization that independently certifies farmers for ecologically based practices in nine different management categories: Field scouting, Information sources, Pest management decisions, Field management decisions, Weed management, Insect management, Disease management, Soil and water quality, and Storage management. In order to qualify for certification, growers must stay below an established total number of "Toxicity Units" per acre and avoid use of certain high-risk pesticides. Chain-of-custody audits are implemented to ensure the integrity of Protected Harvest's certification. www.protectedharvest.org

#### **Rainforest Alliance Certified**

The Rainforest Alliance works to conserve biodiversity and ensure sustainable livelihoods by transforming land-use practices, business practices and consumer behavior. The Rainforest Alliance Certified seal is found on coffee, cocoa, chocolate, bananas, orange juice, guava, pineapple, passion fruit, plantains, macademia nuts and other tropical products. On certified farms, rainforest is conserved, workers are treated fairly, soil and water quality are not compromised, waste is managed efficiently, chemical use is dramatically reduced and relations with surrounding communities are strong. www.rainforest-alliance.org/index.cfm

#### **Transitional Organic**

Currently, the USDA does not allow a "transitional organic" label claim. However, suppliers may informally assert a "transitional organic" claim to describe food produced using organic methods on farms that are in the 3-year transition period required for organic certification. There is no independent verification of "transitional organic" claims, and no guarantee that these farms will ultimately qualify for organic certification.

#### **Vegetarian Diet**

This is a first-party claim that livestock were not fed any animal by-products. With the appearance of "mad cow disease," which is transmitted through animal by-products added to cattle feed, vegetarian diet are increasing. The claim does not indicate that animals were fed a natural forage diet. Animals may have been fed corn or other grains, agricultural byproducts or food processing wastes (such as potato peels). Animals may also have received antibiotics or other feed supplements. There is often no independent verification of vegetarian diet claims.

Additional information on these and other labeling claims can be found at:

- Consumers Union Guide to Environmental Claims: www.eco-labels.org
- Sustainable Table: www.sustainabletable.org/shop/understanding/

#### Appendix B: Real Food Campus Commitment Sample REAL FOOD

#### **Real Food Campus Commitment**

We, the undersigned representatives of \_\_\_\_\_\_, are committed to improving our nation's food system to prevent adverse health, social, economic and ecological outcomes.

We believe colleges and universities must exercise leadership in our communities and throughout society by modeling ways to support ecologically sustainable, humane and socially equitable food systems.

We further recognize that investing in the use of local/regional, ecologically sustainable, humane and fair foods benefits not only the daily lives of current students, but the recruitment and retention of new students; fosters university-community relations by supporting the livelihoods of family farmers and food chain workers; and places our institution in alignment with leading colleges and universities across the country.

#### Accordingly, we commit our institution to taking the following steps in pursuit of 'real food' on campus:

- 1. Commit to annually increasing procurement of 'real food'-defined as local/community-based, fair, ecologically sound, and/or humane by the *Real Food Calculator*—so as to meet or exceed 20% of food purchases by 2020
- 2. Commit to establishing a transparent reporting system, including the *Real Food Calculator*, to assess food procurement and commit to compiling these assessment results in an *annual progress report*
- 3. Commit to forming a *food systems working group* (comprised of students, staff, faculty, food service managers, food service workers and relevant local stakeholders) responsible for developing and coordinating the implementation of an official *real food policy* and *multi-year action plan*
- 4. Commit to making the *real food policy, multi-year action plan* and *annual progress reports* publicly available online and through the Real Food Challenge
- 5. Commit to increasing awareness about ecologically sustainable, humane and socially equitable food systems on campus through co-curricular activities, cafeteria-based education and other appropriate means

#### Upon signing the Commitment, we further commit to the following tasks:

- 1. Within 1 month, complete the Baseline Campus Food Survey
- 2. Within 3 months, confirm with relevant parties that all contracts with distributors, food service providers and oncampus vendors will be amended in future RFP or renewal processes to align with the new *real food policy* and *multiyear action plan*
- 3. Within 6 months, initiate a student-led assessment of campus food procurement using the Real Food Calculator
- 4. Within 12 months, adopt a comprehensive *real food policy* and begin executing a *multi-year action plan* with annual benchmarks
- 5. Within 12 months, produce one substantive communications piece covering the ongoing real food commitment efforts

In recognition of the need to build support for this effort among college and university administrators across the United States, we will encourage our colleagues at peer institutions to join this effort and adopt the Real Food Campus Commitment.

Signed,

President / Chancellor Signature

Secondary Signatory Signature

Title

HALLENG

Title

Partner Student Organization(s)

Date

#### **Appendix C: Healthy Food in Health Care Pledge**

#### Healthy Food in Health Care Pledge

This Healthy Food in Health Care Pledge is a framework that outlines steps to be taken by the health care industry to improve the health of patients, communities and the environment.

As a responsible provider of health care services, we are committed to the health of our patients, our staff and the local and global community. We are aware that food production and distribution methods can have adverse impacts on public environmental health. As a result, we recognize that for the consumers who eat it, the workers who produce it and the ecosystems that sustain us, healthy food must be defined not only by nutritional quality, but equally by a food system that is economically viable, environmentally sustainable, and supportive of human dignity and justice. We are committed to the goal of providing local, nutritious and sustainable food.

Specifically, we are committed to the following healthy food in health care measures for our institution. We pledge to:

Increase our offering of fruit and vegetables, nutritionally dense and minimally processed, unrefined foods and reduce unhealthy (trans and saturated) fats and sweetened foods.

**Implement** a stepwise program to identify and adopt sustainable food procurement. Begin where fewer barriers exist and immediate steps can be taken, such as the adoption of rBGH free milk, fair trade coffee, or selections of organic and/or local fresh produce in the cafeteria.

Work with local farmers, community-based organizations and food suppliers to increase the availability of fresh, locally-produced food.

**Encourage** our vendors and/or food management companies to supply us with food that is produced in systems that, among other attributes, eliminate the use of toxic pesticides, prohibit the use of hormones and non-therapeutic antibiotics, support farmer and farm worker health and welfare, and use ecologically protective and restorative agriculture. **Communicate** to our Group Purchasing Organizations our interest in foods whose source and production practices (i.e. protect biodiversity, antibiotic and hormone use, local, pesticide use, etc) are identified, so that we may have informed consent and choice about the foods we purchase.

**Develop** a program to promote and source from producers and processors which uphold the dignity of family, farmers, workers and their communities and support sustainable and humane agriculture systems.

Educate and communicate within our system and with our patients and community about our nutritious, socially just and ecologically sustainable healthy food practices and procedures.

**Minimize** and beneficially reuse food waste and support the use of food packaging and products that are ecologically protective.

Report annually on implementation of this Pledge.

| Name:  | Title: |       |
|--|--------|-------|
| On behalf of (indicate your department, facility or system): |        |       |
| Address:   |        |       |
| City:  | State: | Zip:  |
| Phone:   | Email: |       |
| Signature:   |        | Date: |

O Please send me a clean copy of the pledge with signature line only. We would like to have it framed and displayed.

To submit your pledge this form should be faxed or mailed to Health Care Without Harm: HCWH • Healthy Food in Health Care Pledge • 12355 Sunrise Valley Drive, Suite 680 • Reston, VA 20191 Phone: 703-860-9790 • Fax: 703-860-9795 • www.NoHarm.org



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Most of the claims and certifications listed above are discussed further in Appendix A.

|                          | DOCAL AND COMPUTED BASED  |
|--------------------------|---|
| These food<br>keeping mo | ls can be traced to nearby farms and businesses that are locally owned and operated. Sourcing these foods supports the local economy<br>oney in the community and builds community relations. The food travels fewer miles to reach consumers. The food is seasonal, and wh<br>it is fresh, it often has a higher nutrient content.   |
| Green                    | There isn't one definition of local and community-based that works for every region, which is why the guide includes the mileage estimat food shed, and a number of standards that help determine the producer's community impact. Production within a 150-mile radius is a popular and measurable method of defining local [CITATION NEEDED]. Purchasing processed foods from community-based businesses al supports the local community, especially if a large part of ingredients used (50%) are also local and community-based. Processed items include baked goods, coffee, meat, and canned or frozen produce. For more discussion, see "Local Claims" in Appendix A below. |
| Yellow                   | In some regions, food grown up to 250 miles away from an institution can still support the local community. This also applies to processe food: using locally owned businesses for processing supports a local economy, even if the ingredients were purchased from a distant location. Large corporations with facilities near your institution are rarely community-owned and operated [CITATION NEEDED], but this varies across institutions.  |
| Red                      | Food that is grown or processed more than 250 miles away does not support a local community to as great an extent as food grown or processed within 250 miles. Purchasers and consumers are distanced from producers and processors and have difficulty verifying busine practices [CITATION NEEDED].   |
|                          | Fair  |
| Individua<br>living wa   | als involved in food production, distribution, preparationand other parts of the food system—work in safe and fair conditions; receive a<br>age; are ensured the right to organize and the right to a grievance process; and have equal opportunity for employment. Fair food builds<br>community capacity and ensures and promotes socially just practices in the food system.   |
|                          |   |

|        | community capacity and ensures and promotes socially just practices in the food system.  |
|--------|--|
| Green  | The certifications listed are verified by a 3 <sup>rd</sup> party and have extensive requirements that are specifically designed ensure that the product was produced in a socially and economically just manor. If a farm or business is not certified through one of the independent parties listed, it can still have excellent fair labor practices, like those listed in this section. Research must be done to verify whether farms and businesses have and abide by these practices.  |
| Yellow | While both certifications listed here have high standards for other real food attributes (e.g. Food Alliance's certification requirements for ecologically sound production), their standards fall short of excellent for socially and economically just practices. Products that carry these certifications still qualify as real food, but their certification is not as thorough with regard to fair practices as products that qualify in the green section. Though a cooperatives and unions can help ensure better working conditions, conditions might still be poor, so use caution. |

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|                            | In particular, verify whether any cooperative is jointly owned by several producers in a region, or if employees cooperatively own and  |
|----------------------------|---|
|                            | manage the farm of pushess. To quainy as fair, the farm of pushess must operate as the fatter. Social responsibility policies might be stated, but not thoroughly executed and respected, so use caution.   |
| Red                        | Unfortunately, these labor practices still exist today. Other unjust labor practices not listed here are also pervasive. As with all the attributes, only products from farms and businesses that meet standards in the yellow and green sections count as fair.                            |
|                            |   |
|                            | Ecologically Sound  |
| Farms, busii               | lesses, and other operations involved with food production practice environmental stewardship that conserves biodiversity and   |
| preserves n<br>both direct | itural resources, including energy, wildlife, water, air, and soil. Production practices should not use toxic substances and should minimize<br>and indirect petroleum inputs.  |
| Green                      | A 3rd party whose certification standards are the most thorough with specific regard to ecologically sound production practices verifies<br>these claims. These contifications produce that the product we produced/content in an occlorically sound money.                                 |
|                            | Configurations: Trade constructions that and outper product was produced values.<br>Configurations: Trade constructions that and construct product for configuration configurations consistentian in  |
|                            | certifications instantier nave good—but not excenent—standards for ecologically sound production. Source certifications specialize in other Real Food Attributes (e.g. Fair Trade Certification), while others indicate next-best choices (e.g. Seafood Watch Guide "Good                   |
| Yellow                     | Alternatives"). Claims of "Beyond Organic", "Transitional Organic", and "Shade Grown" are not verified by a 3 <sup>rd</sup> party, so use caution. See  |
|                            | Appendix A below for further discussion.  |
| Red                        | Claims of "Natural" or "GM Free/ GMO Free" are not 3 <sup>rd</sup> party certified and are not enough to ensure that the product was produced in an<br>ecologically sound manor. Examples of products that clearly violate ecologically sound production (e.g. seafood on the Seafood Watch |
|                            | Guide's "Avoid" list) are also listed here.   |
|                            |   |
|                            | Humane  |
|                            | Animals can express natural behavior in a low-stress environment are raised with no hormones or unnecessary medication.   |
| Green                      | The certifications listed are verified by a third party and ensure that the animal was raised humanely. For producers who are not certified, the claim "pasture-raised" can indicate humane practices. This claim must be verified through your research.                                   |
|                            | American Grassfed Association (AGA) Grassfed standards ensure that animals are treated humanely, however the claim is not verified by a   |
| Yellow                     | 3 <sup>rd</sup> party so use caution. The certification is given by the AGA to members of the AGA. The other claims listed are not verified by a 3 <sup>rd</sup>  |
|                            | party, so use caution. See Appendix A below for further discussion. ***Need something about USDA standards for eggs here!   |
| Red                        | These claims are not enough to ensure that the animal was raised humanely. See Appendix A below for discussions of most.  |
|                            |   |
| Health Cond                | These ingredients are harmful to human health. Any product containing any of these ingredients cannot count as real food, even if it meets criteria in the green or vellow sections under any attribute.  |
|                            |   |

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# HOW TO USE THE REAL FOOD CALCULATOR

The Real Food Calculator is designed to determine how "real" an institution's food is. Though designed for colleges and universities, this tool can be used by any institution, such as a hospital, corporation, or municipality. If you have any questions not answered by this document, please contact Nina Mukherji (nina@realfoodchallenge.org), Tim Galarneau (<u>tgalarne@ucsc.edu)</u>, or Anim Steel (<u>asteel@thefoodproject.org</u>)

For the purpose of this calculator, we have divided "real food" into 4 attributes: local, fair, ecologically sound, and humane. Local and fair refer to who produced the food, and ecologically sound and humane refer to how the food was produced.

## INSTRUCTIONS

In order to use the calculator, you will need to know certain information about the food the institution purchases. First, you will need to know how need to know who produced the food and how it was produced. This information can be found either by a certification that the food carries, or by much money is spent in each of the 10 different food categories, such as baked goods, meat, and produce in the past fiscal year. Second, you will asking the distributor or farmer.

The Real Food Calculator is an excel spreadsheet with 5 tabs. The first one, titled "Worksheet" is where all the data is entered. Once the dollar amounts are filled in, the spreadsheet automatically fills in the percentages and generates the tables and graphs which are located on the tabs labeled "Tables," "Graph (1)," and "Graph (2)."

# ENTERING DATA INTO THE WORKSHEET

column (local, fair, ecologically sound, humane), enter the total dollar amount that was spent on food that qualifies for each attribute. Food items organic, then you would enter \$700 in the local and ecologically sound columns for produce. In the conventional column, enter the dollar amount In the "Total" column, enter the total dollar amount that was spent in each food category in the past fiscal year. For each Real Food Attribute may qualify for more than one attribute. For example, an institution might purchase \$1,000 total of produce. If \$700 of it was both local and spent on food that doesn't qualify for any Real Food Attributes.

# IS IT "REAL FOOD" OR NOT?

For a food item to qualify for a Real Food Attribute, it must meet one or more of the criteria listed in the "Green Light" or "Yellow Light" sections in the Real Food Criteria. The criteria listed in the "Green Light" section are generally verified by a 3<sup>rd</sup> party, and easily get a yes. The criteria listed in

| determine if the food item should qualify for that Real Food Attribute.   |
|---|
| CALCULATIONS<br>The "Calculations" tab contains the math used to generate the tables and charts. See Appendix B for a visusl explanation of the calculations used.  |
| <b>UNDERSTANDING THE RESULTS</b><br>The calculator generates several tables and graphs. In these results, Real Food is divided into Real Food A and Real Food B. Real Food A includes<br>food items that qualify for 2 or more Real Food Attributes, while Real Food B includes food that qualifies for just one Real Food Attribute. This<br>distinction is made in an effort to recognize various levels of success. While the items included in Real Food B have room for improvement, it is<br>important to recognize that progress is being made. See Appendix C for a visual example of this principle. |
| FREQUENTLY ASKED QUESTIONS<br>what if I can't figure out where a food item comes from?<br>Sometimes it might be impossible to trace a food item back far enough to know for sure if it qualifies for any Real Food Attributes or not. In this<br>case, assume that it falls into the "Red Light" category.  |
| <b>Do I have to include ALL the food that my institution purchases?</b><br>Without including all food purchases, it is impossible to accurately determine the percentage that is Real Food.   |
| What if I have a certification or situation that is not covered in the Real Food Criteria?<br>We have done our best to ensure that the Real Food Criteria covers as many situations as possible. Of course, there are always individual situations<br>that defy categorization. In this case, use your best judgment to go along with the "spirit" of the criteria. Also, please let us know what your<br>situation is so that we can try to improve the criteria in the future.  |

the "Yellow Light" section are generally not verified by a 3<sup>rd</sup> party, and are open to more uncertainty. More investigation may be needed to

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[5/14/10 DRAFT]

#### **Appendix E: Local Food Map**



#### **Appendix F: Sustainable Table General Questions to Ask**

#### **GENERAL QUESTIONS TO ASK A FARMER**

**ASKING QUESTIONS** is the best way to ensure that you're purchasing sustainably raised, healthy foods, and supporting sustainable farms. Here are some general questions to ask your local farmers. For more in-depth questions, information on why you should be asking them, and the answers you want to hear, download our detailed "Questions to Ask" guides for each type of farm listed below.

#### BEEF

- Are your cows raised on pasture?
- Do you feed your cows anything besides grass and hay?
- How are your cows finished?
  - If cows are finished on grain you should ask: How old are your cows when they're started on grain and how long are they fed grain?
- Are your cows finished in a feedlot? If so, how old are they when they enter the feedlot? Approximately how long are they there? How many other animals are in the feedlot at any given time?
- Are your cows ever given antibiotics?
- Are your cows ever given hormones, steroids or other growth promoters?

#### POULTRY

- · How are your chickens/turkeys raised? On pasture, indoors, confined?
- · How much time do your chickens/turkeys spend outdoors each day?
- What do you feed your chickens/turkeys?
- Are your chickens/turkeys ever given antibiotics?
- · Are they given hormones, steroids or other growth promoters?

#### DAIRY

· Are your cows raised on pasture?

- · Are your cows fed anything besides grass and hay?
- Are your cows ever given rBGH or any other hormone?
- · Are your cows ever given antibiotics?

#### EGGS

- How are your hens raised? On pasture, indoors, caged?
- How much time do the hens spend outdoors each day?
- Are your hens ever force molted?
- What do you feed your hens?
- Are the hens ever given anti-biotics?

#### HOGS

- · How are your hogs raised? On pasture, indoors, with proper bedding?
- Are the hogs born on your farm?
- If yes: Are your sows ever held in a farrowing pen?
- If no: Do you know if your hogs' mothers were held in a farrowing pen?
- How much time do your hogs spend outdoors each day?
- · What do you feed your hogs?
- Are your hogs ever given antibiotics?
- · Are your hogs ever given hormones or feed additives?

#### **VEGETABLES/FRUIT**

- Who grows the fruits and vegetables and where is the farm located?
- How big is the farm?
- Does the farmer use chemical pesticides, herbicides or fertilizers on the crops?
- Is the farm a diversified operation, with many varieties of vegetables and fruits?
- · Does the farm grow any heirloom varieties of fruits or vegetables?
- Are any of the fruits or vegetables genetically engineered varieties?

info@sustainabletable.org



#### **Appendix G: Sample Local Market Report**

#### LOCAL PRODUCE MARKET REPORT March 26th, 2012



#### Maryland

Spr05Bean SproutsSpr11Organic WheatgrassCHS1509oz Goat Cheese LogChs1515lb Sharp CheddarChs1525lb Feta LoafChs1545lb Goat GoudaChs1535 lb Goat CheddarApp544/1 gallon Clear ciderApp5444/1 gallon natural ciderSpr09Alfalfa Sprout 5lbSpr09Alfalfa Sprout 5lbTom681Hydro Tomato

Yung Fa Inc, Columbia, MD Edrich Farms, Randallstown, MD FireFly Farms, Accident, MD Palymra Farms, Hagerstown, MD Caprikorn Farms, Gapland, MD Caprikorn Farms, Gapland, MD McCutcheons, Frederick, MD McCutcheons, Frederick, MD Yung Fa Inc., Columbia, MD Yung Fa Inc., Columbia, MD

#### Pennsylvania

**Mush01 Button Mushroom 10#** Mus09 Crimini Mushroom 5# Mus17 Large White Mushroom 10# Mush19 Medium Mushroom 10# Mus23 Oyster Mushroom 5# Mus27 3" Portabella Cap 5# Mus28 XL Portabella Cap 5# Mus29 4-5" Portabella Cap 5# Mus295 XL Portabella with Stem 5# Mus31 Shiitake Mushroom 3# Egg09 Large Loose Egg 15 DZ Egg10 Large Brown Carton 15 DZ Egg11 Hard Boiled Eggs 20# Egg12 XL Carton 15 DZ Egg15 Medium Eggs 15 DZ Egg18 XL Loose Eggs 15 DZ Egg09 Large Loose Eggs Dai060 Whole Milk 4-1 Gallons Dai061 Skim Milk 4-1 Gallons Dai062 2% Milk 4-1 Gallons Dai080 Heavy Cream 16-1 QT Dai10 Half & Half 16-1 QT Dai12 Buttermilk 16-1 QT Arr02 Hydro Arugula 2# with roots Let23 Hydro Mache 2# with roots Let27 Hydro Mizuna 2# with roots Wat02 Hydro Upland Cress 2# w/roots **POT44** Chipping potato A **POT444** Chipping potato Chef

McDowell Mushroom, Nottingham, PA McDowell Mushroom, Nottingham, PA or Basciani Avondale, PA McDowell Mushroom, Nottingham, PA McDowell Mushroom, Nottingham, PA McDowell Mushroom, Nottingham, PA or Basciani Avondale, PA **Cardile Brothers Mushroom, Avondale, PA** Cardile Brothers Mushroom, Avondale, PA Cardile Brothers Mushroom, Avondale, PA McDowell Mushroom, Nottingham, PA Cardile Brothers Mushroom, Avondale, PA & McDowell Mush Kreider Farms, Manheim, PA Kreider Farms, Manheim, PA Nearby Eggs, Codorus, PA Kreider Farms, Manheim, PA Kreider Farms, Codorus, PA Nearby Eggs, Codorus, PA Kreider Farms, Manheim, PA Lakeville Specialty Produce, Washingtonville, PA Tallman Farms, Tower City, PA Tallman Farms, Tower City, PA

Contact your salesperson or call 410-799-8000 with any questions. Visit our website www.coastalsunbelt.com

#### **Appendix H: List of Food Aggregators**

Below is a list of area food aggregators compiled from United States Department of Agriculture Office of the Chief Scientist, DC Central Kitchen, and interviews outlined in the UMD Dining Services Sustainable Food Action Plan.

#### Aggregators:

- Common Market, Philadelphia, PA: <u>http://www.commonmarketphila.org/</u>
- Green Grocer: <a href="http://www.washingtonsgreengrocer.com/">http://www.washingtonsgreengrocer.com/</a> (Focus is on local/regional produce when in season, but draws from wide area in NJ, PA, MD and VA. Box delivery service farm to consumer model)
- Blue Ridge Produce Company: <u>http://www.blueridgeproduce.net/</u>
- Tuscarora Organic Growers: <u>http://www.tog.coop/</u> (Wholesale cooperative of farmers)
- Healthy Solutions DC Produce Co-op: <u>http://www.producecoop.com/</u>
- Fresh Link: <u>http://www.thefreshlink.com</u> (Limited direct to institution sales in DC, works with restaurants & uses farms in Culpepper, and Orange, VA)
- Eco-Friendly Foods: <u>http://ecofriendly.com/</u> (Slaughters multiple types of meat out of Moneta, VA for sale in DC market)
- Arganica: <u>http://arganica.com/</u> (Farm club)
- Shenandoah Food: <u>http://www.shenandoahfood.com/</u> (Delivery for a range of producers to a variety of buyers)
- LuLu's Local Food: <u>http://luluslocalfood.com/</u> (Online software to coordinate producers who then do group deliveries to buyers)
- South Mountain Veggies: <u>http://smveggies.deliverybizpro.com/home.php</u> (Direct to consumer sales from Frederick, MD)
- Local Food Hub: <u>www.localfoodhub.org</u>
- Groundwork Farms: <u>http://www.groundworkfarms.com</u> (Multi-farm CSA in PA)
- Greensgrow: <u>http://www.greensgrow.org/farm/index.php</u> (Multi-farm CSA)
- Lancaster Farm Fresh: <u>www.lancasterfarmfresh.com</u> (Multi-farm CSA & wholesale delivery in Lancaster PA)
- Horse & Buggy Produce: http://www.horseandbuggyproduce.com/ (Multi-farm CSA)
- Northern Neck Farmer's Market: wholesale distribution for about 35 farmers
- Off the Vine Market: <a href="http://www.offthevinemarket.com/store/pc/home.asp">http://www.offthevinemarket.com/store/pc/home.asp</a> (Online market & multi-farm CSA)
- Appalachian Sustainable Development: <u>www.asdevelop.org</u>

#### Appendix I: Seasonality of Maryland's Fruits and Vegetables

| PRODUCE                  | Apr | May      | Jun | Jul | Aug   | Sep | Oct | Nov | Dec |
|--------------------------|-----|----------|-----|-----|-------|-----|-----|-----|-----|
| Apples                   |     |          |     |     | 6     | 1.  |     | 1   |     |
| Asian Pears              |     |          |     |     | and a | 1   |     |     |     |
| Black Raspberries        |     |          | 240 |     |       |     |     |     |     |
| Blackberries (Thornless) |     |          |     |     | 2     |     |     |     |     |
| Blackberries (Thorns)    |     |          |     | 10  | RA    |     |     |     |     |
| Blueberries              |     |          | CS. | Y   |       |     |     |     |     |
| Cantaloupes              |     |          |     |     | 1     | -   |     |     |     |
| Honeydew                 |     |          |     | 200 |       |     |     |     |     |
| Nectarines               |     |          |     |     |       |     |     |     |     |
| Peaches                  |     |          |     |     |       | 1   |     |     |     |
| Pears                    |     |          |     |     |       |     | 1   |     |     |
| Plums                    |     |          |     |     |       | -   |     |     |     |
| Red Raspberries          |     |          | 2   | 1.5 |       |     |     |     |     |
| Red Raspberries (fall)*  |     |          |     |     | Arr.  |     | 11. | 1   |     |
| Sour Cherries            |     |          | 1   | 1   |       |     |     |     |     |
| Strawberries*            | 61  | Thema et |     |     |       |     |     |     |     |
| Sweet Cherries           |     |          |     |     |       |     |     |     |     |
| Watermelons              |     |          |     |     | A.C   |     |     |     |     |
| Watermelons (Sugarbaby)  |     |          |     | 880 | 1.0   | 100 |     |     |     |

| PRODUCE               | Apr | May   | Jun        | Jul    | Aug     | Sep      | Oct    | Nov  | Dec |
|-----------------------|-----|-------|------------|--------|---------|----------|--------|------|-----|
| Asparagus             | -   | 2     | The second | -      |         |          |        |      |     |
| Beans (Green or Snap) |     |       | 24         | 12     | 1.14    | 20       |        |      |     |
| Beans (Lima)          |     |       |            | >      | Y       | Y        |        |      |     |
| Beets                 |     |       |            | 6      | $-\chi$ | X        |        |      |     |
| Broccoli              |     |       |            |        |         |          | 新建     |      |     |
| Cabbage               |     |       | DA         | Tok.   |         | t.de     |        |      |     |
| Cauliflower           |     | de la |            |        |         | No.      | Y.     |      |     |
| Corn (Sweet)          |     |       |            | 66     | 1111    | <u> </u> |        |      |     |
| Cucumbers             |     |       |            | MY ?   |         | 1        |        |      |     |
| Eggplant              |     |       |            | 1      |         |          |        |      |     |
| Garlie                |     |       | and the    |        | 1       | 1        |        |      |     |
| Kale                  |     |       |            | 19     | 816     | di       | ØY.    |      |     |
| Lettuce               |     |       | -          | 203    |         |          |        |      |     |
| Okra                  |     |       |            | -      | -       |          |        |      |     |
| Peas (Blackeye)       |     |       |            | 1      | Y       |          |        |      |     |
| Peas (Green)          |     |       | - 4        | $\sim$ |         |          |        |      |     |
| Peppers*              |     |       |            |        | 6       |          |        |      |     |
| Potatoes (White)      |     |       |            |        | in al   | E.       | -      |      |     |
| Pumpkins              |     |       |            |        |         |          | 100    |      |     |
| Salad Greens          |     | C. M  |            |        |         |          | Page 1 | 201  |     |
| Spinach               |     |       |            | _      |         |          | 26     |      |     |
| Squash (Summer)       |     |       | H.         | have   | An      | 1 1      |        |      |     |
| Squash (Winter)       |     |       |            | Dest   | Carl's  |          | 6.     |      |     |
| Sweet Potatoes        |     |       |            |        |         |          |        | - 21 |     |
| Turnips               |     |       |            |        |         | 1/2      | 6      |      |     |
| Tomatoes*             |     |       |            | 1      |         | 1        |        |      |     |

#### Appendix J: FoodPro Update: Local and Sustainable Food Tracking

Aurora Information Systems

### FOODPRO® RELEASE 2.3



#### **INSIDE THIS RELEASE:**

| Tracking Purchasing<br>Details | 1 |
|--------------------------------|---|
| Menus on the Web               | 2 |
| Global Recipe                  | 3 |
| Menu Maintenance               | 3 |
| Need Help?                     | 4 |
| Transfer Detail Analysis       | 4 |
| POS Interface                  | 4 |
| Production Reports             | 4 |
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| Catered Events                 | 4 |
| Master Lists                   | 5 |
| Batch Recipe                   | 5 |
| Modify Delivery<br>Information | 5 |
| Technology Update              | 5 |
| News & Information             | 6 |

#### Upcoming FoodPro User Conferences:

- University of California, Santa Cruz: July 24 - 27, 2011
- University of Texas at Austin: 2012

TRACKING PURCHASING DETAILS (MANAGING LOCALLY GROWN OR SUSTAINABLE PRODUCTS)

|  |        |           | 000 | 1 EASTERN PRODUCE, INC'S  |   |
|--|--------|-----------|-----|---|---|
| TOUS ONIONS YELLO                        |        |           |     |   | Recipe Unit LB                            |
| Description                              | RUPU   | VON       | CW  | Description   |   |
| Catch Weight<br>7 LB Bag<br>Large Yellow | 7.000  | 10050001  | Yes | Catch Weight<br>7 LB Bag  | Bid Ending Date Price/Purch Unit Override |
| 10L8<br>10 LB Bag<br>Large Yellow        | 10.000 | 100510LB  |     | Large Tellow  | 06/16/10 2.0000                           |
| 50LB<br>50LB Bag<br>LARGE YELLOW         | 7.000  | 10050001z |     | Recipe UnitPurchase Unit 7,000<br>Vendor Order Number: 10050001 |   |
|  |        |           |     | Catch Weight Flag   |   |
|  |        |           |     | Vendor Category PRODUCE   |   |
|  |        |           |     | Type Regional - Organic   |   |
|  |        |           |     |   |   |
|  |        |           |     | Bource Less than 250 miles                                      |   |
|  |        |           |     | Eco-Label Sustainable   | -   |
|  | Real I |           |     | Save  | Cancel                                    |

The FoodPro 2.3 Release enhances the concept of tracking purchasing details. This means FoodPro can now provide even more detail of an organization's purchasing decisions over a period of time. These changes have affected many programs throughout FoodPro.

The focus for many of the changes were to enhance the functionality of the FoodPro Purchasing Module including some of the reporting programs with regard to managing locally grown or sustainable products.

Using all of the tools in this release, operations will be able to determine the value of the amount of "sustainable" or "locally grown" items purchased over a time period that they define. Do not feel limited or constrained by the terms "sustainable" or "locally grown", operations have the ability to define their own meaningful lists (up to 3) of criteria. Alternatively, they will be able to search for and create a Master List of their different brands of products. What Programs have been enhanced? Vendor Bid Maintenance, Master Lists, Modify Delivery Information, Vendor Bid Comparison, Print Vendor Orders, Receiving Report, Invoice Entry, Top Purchases Report

The Vendor Bid Maintenance program has been completely rewritten in VB.NET (Windows-based interface) and has new features. The Master Lists program, Select Query Tool has been enhanced to utilize more fields from Vendor Bids and Vendor Bid Packs. In Modify Delivery Information, users can now associate specific VON's to an order by day. The Top Purchase Report can utilize the new Vendor Bid Packs to generate meaningful reports, like the Top 25 "Locally Grown" products sorted by cost.

The remaining programs have been enhanced to work these new changes and in some cases will simply reflect more information where appropriate. See the FoodPro Help for each of these programs for more information.

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| UMD Dining Services Sustainable Food Action Plan  |   |   |  |   |  |  |  |
|---|---|---|--|---|--|--|--|
|   |   | Phase 2 (2013-2014):  | Phase 3 (2015-2016):   | Phase 4 (2017-2020):  |  |  |  |
|   | Phase 1 (2011-2012): Program  | Capacity building, pilot,   | Launch and expand direct   | Program building, process   |  |  |  |
| Program Area                                      | initiation  | and prime-vendor strategy   | farm to school program   | improvement, & evaluation   |  |  |  |
| Overall sustainable food<br>procurement objective | <ul> <li>Identify baseline</li> </ul>   | <ul> <li>1-4% annual increase</li> <li>Incremental increase in sourcing from Maryland growers</li> <li>Incremental increase sourcing of whole, unprocessed, foods</li> </ul>  | <ul> <li>1-4% annual increase</li> <li>Incremental increase in sourcing from Maryland growers</li> <li>Incremental increase sourcing of whole, unprocessed, foods</li> </ul> | <ul> <li>1-4% annual increase</li> <li>Incremental increase in<br/>sourcing from Maryland<br/>growers</li> <li>Incremental increase sourcing<br/>of whole, unprocessed, foods</li> <li>Achieve 20% local and<br/>sustainable food purchasing<br/>by 2020</li> </ul> |  |  |  |
| Sustainable food commitment,<br>protocol and plan | <ul> <li>Create Sustainable Food Working<br/>Group</li> <li>Create Green Dining Sustainable<br/>Food Internships</li> <li>Develop Draft Sustainable Food<br/>Action Plan</li> <li>Finalize and publish departmental<br/>sustainable food commitment</li> <li>Finalize and publish Sustainable<br/>Food Action Plan</li> </ul> | <ul> <li>Identify food category<br/>specific sustainable food<br/>objectives, such as fruits &amp;<br/>vegetables, poultry, etc.</li> <li>Identify sustainable food<br/>attribute specific objectives<br/>(i.e. fair, humane, local,<br/>ecologically sound)</li> <li>Review and update plan and<br/>protocols as needed</li> </ul> | <ul> <li>Review and update plan<br/>and protocols as needed</li> </ul>   | <ul> <li>Review and update plan and protocols as needed</li> </ul>  |  |  |  |
| Partnership and collaboration<br>building         | <ul> <li>Create Sustainable Food Working<br/>Group</li> <li>Build partnership with Wellness<br/>Coalition</li> <li>Build partnership with Office of<br/>Sustainability</li> <li>Build partnership with UMD<br/>Extension Marketing Specialists</li> </ul>   | <ul> <li>Expand and strengthen<br/>existing partnerships</li> <li>Build partnership with<br/>Maryland Department of<br/>Agriculture</li> </ul>  | <ul> <li>Expand and strengthen<br/>existing partnerships</li> <li>Engage local aggregators<br/>and additional community<br/>partners</li> </ul>                              | <ul> <li>Expand and strengthen<br/>existing partnerships</li> </ul>   |  |  |  |
| Funding and development                           | <ul> <li>Identify and explore external<br/>funding opportunities</li> <li>Apply to key grants (ex. Maryland<br/>Specialty Crop Grant)</li> </ul>  | <ul> <li>External grant applications</li> <li>Sustainability Fund<br/>application</li> <li>Identify cost saving<br/>opportunities to fund<br/>program elements</li> </ul>   | <ul> <li>External grant applications</li> <li>Identify cost saving<br/>opportunities to fund<br/>program elements</li> <li>Identify fundraising<br/>opportunities</li> </ul> | <ul> <li>Continue to identify cost<br/>saving opportunities to fund<br/>program elements</li> <li>Identify and pursue<br/>fundraising opportunities</li> </ul>  |  |  |  |

#### Appendix K: Detailed Annual Sustainable Food Action Plan

|  |  | Dhase 2 (2012 2014).  |   |   |
|--|--|---|---|---|
|  |  | Phase Z (2013-2014):  | Phase 3 (2015-2016):  | Phase 4 (2017-2020):  |
| r                                      | Phase 1 (2011-2012): Program   | Capacity building, pilot,   | Launch and expand direct  | Program building, process   |
| Program Area                           | initiation   | and prime-vendor strategy   | farm to school program  | improvement, & evaluation   |
| •                                      | <ul> <li>Initial Sustainable Food Baseline<br/>Assessment with existing reporting<br/>and tracking capability</li> </ul> | <ul> <li>Work with vendors to<br/>establish effective reports for<br/>product availability</li> <li>Initiate data clean-up and<br/>streamlining in FoodPro</li> <li>Install FoodPro upgrades</li> <li>Develop clear data entry and<br/>reporting protocols</li> <li>Collaborate with vendors to<br/>ensure accuracy of data,<br/>adequate tracking, and<br/>thorough reporting</li> </ul> | <ul> <li>Work with vendors to<br/>establish effective reports<br/>for product availability</li> <li>Continue data cleanup</li> <li>Continue upgrades to<br/>systems as needed</li> <li>Continue collaboration with<br/>vendors</li> </ul> | <ul> <li>Continue upgrades to systems<br/>as needed</li> <li>Continue collaboration with<br/>vendors</li> <li>Utilize reports for program<br/>evaluation</li> </ul> |
| Procurement and purchasing<br>protocol | <ul> <li>Best practices identified</li> <li>Needs assessment</li> </ul>  | <ul> <li>Develop and update ordering<br/>procedures</li> <li>Close the ordering guides to<br/>centralize the selection of<br/>local and sustainable items<br/>when products are available</li> </ul>  | <ul> <li>Audit units for compliance<br/>related to sustainable food<br/>purchasing objectives</li> <li>Provide positive and<br/>negative reinforcement for<br/>compliance</li> </ul>  | Modify procedures and<br>protocol as needed   |
| Menu planning and food preparation     | Concept development  | <ul> <li>Culinary focus on local and<br/>seasonal fruits and<br/>vegetables</li> </ul>  | <ul> <li>Culinary focus on local<br/>poultry and meats</li> </ul>   | <ul> <li>Culinary focus on expanding<br/>local and sustainable menu<br/>options</li> </ul>  |
| Nutrition and wellness focus           | <ul> <li>Build partnerships with existing</li> </ul>   | <ul> <li>Review the menu using the nutritional tools available</li> <li>Evaluate food offerings based on nutritional value</li> <li>Reduce portion size and offer half-sized portions</li> <li>Spotlight healthful food items</li> <li>Introduce new offerings to substitute for items with little nutritional value</li> <li>Encourage dietetic interns to</li> </ul>                    | <ul> <li>Evaluate the "change the<br/>plate" recommendations<br/>from the Healthy Food in<br/>Health Care's Balanced<br/>Menus Challenge, reducing<br/>meat and increasing<br/>availability of fresh fruits</li> </ul>                    | <ul> <li>Program review, evaluation</li> </ul>  |

| UMD Dining Services Sustainable Food Action Plan |  |   |  |   |  |  |
|--|--|---|--|---|--|--|
|  |  | Phase 2 (2013-2014):  | Phase 3 (2015-2016):   | Phase 4 (2017-2020):  |  |  |
|  | Phase 1 (2011-2012): Program   | Capacity building, pilot,   | Launch and expand direct   | Program building, process   |  |  |
| Program Area                                     | initiation   | and prime-vendor strategy   | farm to school program   | improvement, & evaluation   |  |  |
| Waste reduction and diversion                    | <ul> <li>Collaboration with UMD Food<br/>Recovery Network</li> <li>Waste separation process<br/>improvement</li> <li>Implementation of reusable<br/>carryout program</li> <li>Improvement of on-campus food<br/>waste treatment</li> </ul> | <ul> <li>Minimize waste by reducing<br/>portion size and offering<br/>half-portions</li> <li>Expansion of composting<br/>program to satellite units<br/>and full service restaurants</li> <li>Expansion and improvement<br/>of reusable carryout program</li> <li>Expansion and improvement<br/>of pre-consumer composting<br/>program</li> </ul>                           | <ul> <li>Program review, evaluation,<br/>and improvement</li> </ul>  | <ul> <li>Program review, evaluation,<br/>and improvement</li> </ul>   |  |  |
| Grow It, Eat It                                  | <ul> <li>Expansion of campus gardening<br/>initiatives including South Campus<br/>Rooftop Garden and Public Health<br/>Garden</li> <li>South Campus Rooftop Garden<br/>open for community use</li> </ul>                                   | <ul> <li>Expand collaboration with<br/>campus departments and<br/>programs</li> <li>Continued engagement with<br/>students related to on-<br/>campus gardening and<br/>research initiatives</li> </ul>  | <ul> <li>Identify key produce to<br/>incorporate in food<br/>preparation from on-<br/>campus gardens, such as<br/>herbs</li> <li>Continued engagement<br/>with students related to on-<br/>campus gardening and<br/>research initiatives</li> </ul>  | <ul> <li>Program review, evaluation,<br/>and improvement</li> <li>Continued engagement with<br/>students related to on-<br/>campus gardening and<br/>research initiatives</li> </ul>  |  |  |
| Staff training and education                     | <ul> <li>Leadership Team and staff training<br/>relating to composting and waste<br/>diversion initiatives</li> </ul>  | <ul> <li>Leadership Team<br/>collaboration and<br/>development of tools to<br/>effectively manage program</li> <li>IT staff training for system<br/>updates and new reporting<br/>protocols</li> <li>Culinary team training for<br/>effective and creative use of<br/>local and seasonal products</li> <li>Staff training relating new<br/>purchasing guidelines</li> </ul> | <ul> <li>Continue to build staff<br/>capacity by providing<br/>training and clear guidelines<br/>related to data entry,<br/>reporting, product ordering,<br/>food purchasing, food<br/>preparation, food service,<br/>and waste disposal</li> <li>Provide positive and<br/>negative reinforcement<br/>through performance<br/>appraisal process</li> </ul> | <ul> <li>Program review and<br/>evaluation</li> <li>Continue to build staff<br/>capacity by providing training<br/>and clear guidelines related<br/>to data entry, reporting,<br/>product ordering, food<br/>purchasing, food preparation,<br/>food service, and waste<br/>disposal</li> <li>Provide positive and negative<br/>reinforcement through<br/>performance appraisal<br/>process</li> </ul> |  |  |

| UMD Dining Services Sustainable Food Action Plan |  |  |  |   |  |  |  |
|--|--|--|--|---|--|--|--|
|  |  | Phase 2 (2013-2014):   | Phase 3 (2015-2016):   | Phase 4 (2017-2020):  |  |  |  |
|  | Phase 1 (2011-2012): Program   | Capacity building, pilot,  | Launch and expand direct   | Program building, process   |  |  |  |
| Program Area                                     | initiation   | and prime-vendor strategy  | farm to school program   | improvement, & evaluation   |  |  |  |
| Community outreach and education                 | <ul> <li>Develop Green Dining internship<br/>opportunities</li> <li>Develop Green Dining Peer<br/>Education Program</li> </ul>   | <ul> <li>Develop partnerships and<br/>identify collaborators to<br/>develop academic<br/>educational opportunities for<br/>students</li> <li>Identify non-academic<br/>opportunities for community<br/>outreach, such as fieldtrips<br/>and guest lectures</li> <li>Highlight program with<br/>special events, such as farm<br/>to table dinners</li> </ul>  | <ul> <li>Provide and<br/>promote academic<br/>educational opportunities<br/>for students through<br/>partnership and the<br/>Sustainable Food Working<br/>Group</li> <li>Expand and improve<br/>community outreach<br/>programming</li> </ul>  | <ul> <li>Continue to expand, evaluate<br/>and improve academic<br/>educational opportunities for<br/>students</li> <li>Expand and improve<br/>community outreach<br/>programming</li> </ul> |  |  |  |
| Communication                                    | <ul> <li>Provide units with marketing<br/>materials such as table tents and<br/>posters</li> <li>Update and further develop Green<br/>Dining website</li> <li>Build social media presence<br/>and/or blog to engage community</li> <li>Communicate departmental<br/>sustainable food commitment</li> <li>Communicate final Sustainable<br/>Food Action Plan</li> </ul> | <ul> <li>Streamline and improve<br/>internal communications<br/>relating to Green Dining<br/>initiatives</li> <li>Provide units with marketing<br/>materials such as table tents<br/>and posters</li> <li>Develop signage and<br/>identifiers at point of<br/>purchase for local and<br/>sustainable food options</li> <li>Engage and expand social<br/>media and web presence</li> <li>Evaluate and improve<br/>communications and<br/>marketing program</li> </ul> | <ul> <li>Expand use of the<br/>nutritional kiosks in order to<br/>provide details to<br/>customers about products</li> <li>Utilize marketing programs<br/>such as Maryland's Best and<br/>Southern Maryland Meats</li> <li>Engage and expand social<br/>media and web presence</li> <li>Evaluate and improve<br/>communications and<br/>marketing program</li> </ul> | <ul> <li>Evaluate and improve communications and marketing program</li> </ul>   |  |  |  |