



Version 2.2 Operations Section, 2008 Revision

December 2008

Operations - Version 2.2, 2008 Revision

Y - (yes) you are moderately confident that you can attain the credit.

? - (maybe) it will be challenging for this project and you are uncertain of your ability to attain it but you will try.

N - (no) while technically possible, you currently don't expect to try to achieve this credit in this project due to cost or other tradeoffs with project goals.

NA - (not applicable) it is inherently physically unattainable for this particular project regardless of effort due to physical conditions or project scope.

Note: an Excel spreadsheet of this checklist is available for download at www.gghc.org

Integrated Operations & Education 1 Point

Y		NA	Prereq 1	Integrated Operations & Maintenance Process	Required	
Y	?	N	NA	Credit 1	Education: Staff, Patient and Community Environmental Sustainability Education	1

Sustainable Sites Management 9 Points

Y	?	N	NA	Credit 1.1	Site Management: Building Exterior & Hardscape Management Plan	1
Y	?	N	NA	Credit 1.2	Site Management: Integrated Pest Management, Erosion Control & Landscape Management Plan	1
Y	?	N	NA	Credit 2.1	Reduced Site Disturbance: Protect or Restore Open Space or Habitat	1
Y	?	N	NA	Credit 2.2	Reduced Site Disturbance: Structured Parking	1
Y	?	N	NA	Credit 3	Stormwater Management	1
Y	?	N	NA	Credit 4.1	Heat Island Reduction: Non-Roof	1
Y	?	N	NA	Credit 4.2	Heat Island Reduction: Roof	1
Y	?	N	NA	Credit 5.1	Connection to the Natural World: Outdoor Places of Respite	1
Y	?	N	NA	Credit 5.2	Connection to the Natural World: Exterior Access for Patients	1

Transportation Operations 5 Points

Y	?	N	NA	Credit 1.1	Alternative Transportation: Commuting: 10%	1
Y	?	N	NA	Credit 1.2	Alternative Transportation: Commuting: 25%	1
Y	?	N	NA	Credit 1.3	Alternative Transportation: Commuting: 50%	1
Y	?	N	NA	Credit 1.4	Alternative Transportation: Commuting: 75%	1
Y	?	N	NA	Credit 1.5	Alternative Transportation: Allowances	1

Facilities Management 40 Points

Y		NA	Prereq 1	Energy Efficiency Best Management Practices: Planning, Documentation & Opportunity Assessment	Required
Y		NA	Prereq 2	Minimum Building Energy Efficiency Performance	Required
Y		NA	Prereq 3	Refrigerant Management - Ozone Protection	Required
Y		NA	Prereq 4	Minimum Indoor Plumbing Fixture and Fitting Efficiency	Required
Y		NA	Prereq 5	Outdoor Air Introduction & Exhaust Systems	Required
Y		NA	Prereq 6	Environmental Tobacco Smoke (ETS) Control	Required

Y	?	N	NA	Credit 1.1	Optimize Energy Efficiency Performance: Energy Star score of 67 or EUI of 17% (Required per FM Prereq 2)	1
Y	?	N	NA	Credit 1.2	Optimize Energy Efficiency Performance: Energy Star score of 69 or EUI of 19% (Required per FM Prereq 2)	1
Y	?	N	NA	Credit 1.3	Optimize Energy Efficiency Performance: Energy Star score of 71 or EUI of 21% better than average	1
Y	?	N	NA	Credit 1.4	Optimize Energy Efficiency Performance: Energy Star score of 73 or EUI of 23% better than average	1
Y	?	N	NA	Credit 1.5	Optimize Energy Efficiency Performance: Energy Star score of 75 or EUI of 25% better than average	1
Y	?	N	NA	Credit 1.6	Optimize Energy Efficiency Performance: Energy Star score of 77 or EUI of 27% better than average	1
Y	?	N	NA	Credit 1.7	Optimize Energy Efficiency Performance: Energy Star score of 79 or EUI of 29% better than average	1
Y	?	N	NA	Credit 1.8	Optimize Energy Efficiency Performance: Energy Star score of 81 or EUI of 31% better than average	1
Y	?	N	NA	Credit 1.9	Optimize Energy Efficiency Performance: Energy Star score of 83 or EUI of 33% better than average	1
Y	?	N	NA	Credit 1.10	Optimize Energy Efficiency Performance: Energy Star score of 85 or EUI of 35% better than average	1
Y	?	N	NA	Credit 1.11	Optimize Energy Efficiency Performance: Energy Star score of 87 or EUI of 37% better than average	1
Y	?	N	NA	Credit 1.12	Optimize Energy Efficiency Performance: Energy Star score of 89 or EUI of 39% better than average	1
Y	?	N	NA	Credit 1.13	Optimize Energy Efficiency Performance: Energy Star score of 91 or EUI of 41% better than average	1
Y	?	N	NA	Credit 1.14	Optimize Energy Efficiency Performance: Energy Star score of 93 or EUI of 43% better than average	1
Y	?	N	NA	Credit 1.15	Optimize Energy Efficiency Performance: Energy Star score of 95+ or EUI of 45% better than average	1
Y	?	N	NA	Credit 2.1	Potable Water Use Reduction: Total Building Reduction: Reduce 10%	1
Y	?	N	NA	Credit 2.2	Potable Water Use Reduction: Total Building Reduction: Reduce 20%	1
Y	?	N	NA	Credit 2.3	Potable Water Use Reduction: Total Building Reduction: Reduce 30%	1
Y	?	N	NA	Credit 2.4	Potable Water Use Reduction: Total Building Reduction: Reduce 40%	1
Y	?	N	NA	Credit 2.5	Potable Water Use Reduction: Total Building Reduction: Reduce 50%	1
Y	?	N	NA	Credit 2.6	Potable Water Use Reduction: Water Efficient Landscaping	1

Y	?	N	NA	Credit 2.7	Potable Water Use Reduction: Cooling Tower: Chemical Management	1
Y	?	N	NA	Credit 2.8	Potable Water Use Reduction: Cooling Tower: Non-Potable Water Source Use	1
Y	?	N	NA	Credit 3.1	Existing Building Commissioning: Investigation & Analysis	1
Y	?	N	NA	Credit 3.2	Existing Building Commissioning: Implementation	1
Y	?	N	NA	Credit 3.3	Existing Building Commissioning: Ongoing Commissioning	1
Y	?	N	NA	Credit 4.1	Building Operations & Maintenance: Staff Education	1
Y	?	N	NA	Credit 4.2	Building Operations & Maintenance: Building Systems Maintenance	1
Y	?	N	NA	Credit 4.3	Building Operations & Maintenance: Building Systems Monitoring	1
Y	?	N	NA	Credit 5.1	Performance Measurement: System-Level Energy Metering: 40%	1
Y	?	N	NA	Credit 5.2	Performance Measurement: System-Level Energy Metering: 80%	1
Y	?	N	NA	Credit 5.3	Performance Measurement: Enhanced Water Metering	1
Y	?	N	NA	Credit 5.4	Performance Measurement: Emissions Reduction Reporting	1
Y	?	N	NA	Credit 6	IAQ Management: Maintaining Indoor Air Quality	1
Y	?	N	NA	Credit 7.1	On-Site & Off-Site Renewable Energy: 1% on or 25% off	1
Y	?	N	NA	Credit 7.2	On-Site & Off-Site Renewable Energy: 3% on or 50% off	1
Y	?	N	NA	Credit 7.3	On-Site & Off-Site Renewable Energy: 5% on or 75% off	1
Y	?	N	NA	Credit 7.4	On-Site & Off-Site Renewable Energy: 10% on or 100% off	1
Y	?	N	NA	Credit 8	Refrigerant Management	1
Y	?	N	NA	Credit 9	Light Pollution Reduction	1

Chemical Management**8 Points**

Y		NA	Prereq 1	Polychlorinated Biphenyl (PCB) Removal and Asbestos-Containing Materials (ACM) Management	Required
Y		NA	Prereq 2	Chemical Management Policy and Audit	Required
Y		NA	Prereq 3	Community Contaminant Reduction: Leaks & Spills	Required

Y	?	N	NA	Credit 1.1	Indoor Chemical Contaminant Reduction: Sanitary Sewer	1
Y	?	N	NA	Credit 1.2	Indoor Chemical Contaminant Reduction: Hand Hygiene Products	1
Y	?	N	NA	Credit 1.3	Indoor Chemical Contaminant Reduction: Sterilization	1
Y	?	N	NA	Credit 1.4	Indoor Chemical Contaminant Reduction: High Level Disinfection	1
Y	?	N	NA	Credit 1.5	Indoor Chemical Contaminant Reduction: Laboratory	1
Y	?	N	NA	Credit 1.6	Indoor Chemical Contaminant Reduction: Radiology	1
Y	?	N	NA	Credit 2.1	Pharmaceutical Minimization, Management & Disposal: Characterization, Policy & Program	1
Y	?	N	NA	Credit 2.2	Pharmaceutical Minimization, Management & Disposal: Minimization, Best Management Practices	1

Waste Management**6 Points**

Y		NA	Prereq 1	Waste Management Plan	Required
Y		NA	Prereq 2	Waste Generation Profile & Measurement	Required
Y		NA	Prereq 3	Solid Waste Land Disposal	Required

Y	?	N	NA	Credit 1.1	Solid Waste & Material Management: Waste Prevention and Reduction: 15% diversion or 25 lb/adjusted patient bed	1
Y	?	N	NA	Credit 1.2	Solid Waste & Material Management: Waste Prevention and Reduction: 35% diversion or 20 lb/adjusted patient bed	1
Y	?	N	NA	Credit 1.3	Solid Waste & Material Management: Waste Prevention and Reduction: 50% diversion or 15 lb/adjusted patient bed	1
Y	?	N	NA	Credit 1.4	Solid Waste & Material Management: Recycling & Reuse of Facility Alterations & Additions	1
Y	?	N	NA	Credit 2.1	Regulated Medical Waste Reduction: <10% Total Waste Stream	1
Y	?	N	NA	Credit 2.2	Regulated Medical Waste Reduction: Minimize incineration	1

Environmental Services**8 Points**

Y	?	N	NA	Credit 1.1	Environmentally Preferable Cleaning: Policy Development	1
Y	?	N	NA	Credit 1.2	Environmentally Preferable Cleaning: Policy Development: Commitment to Phase In Implementation	1
Y	?	N	NA	Credit 1.3	Environmentally Preferable Cleaning: Products & Materials: Cleaners, 5 categories	1
Y	?	N	NA	Credit 1.4	Environmentally Preferable Cleaning: Products & Materials: Cleaners, 10 categories	1
Y	?	N	NA	Credit 1.5	Environmentally Preferable Cleaning: Products & Materials: Disposable Products	1
Y	?	N	NA	Credit 1.6	Environmentally Preferable Cleaning: Equipment	1
Y	?	N	NA	Credit 2	Entryway Systems	1
Y	?	N	NA	Credit 3	Indoor Integrated Pest Management	1

Food Service

17 Points

Y	?	N	NA	Credit 1.1	Sustainable Food Policy & Plan	1
Y	?	N	NA	Credit 1.2	Food Nutrition	1
Y	?	N	NA	Credit 2	Sustainable Food Education & Promotion	1
Y	?	N	NA	Credit 3.1	Local, Sustainably Produced Food Purchasing: 15%	1
Y	?	N	NA	Credit 3.2	Local, Sustainably Produced Food Purchasing: 25%	1
Y	?	N	NA	Credit 3.3	Local, Sustainably Produced Food Purchasing: 50%	1
Y	?	N	NA	Credit 4.1	Reusable & Non-Reusable Products: Reusable Food Service Ware	1
Y	?	N	NA	Credit 4.2	Reusable & Non-Reusable Products: Non-Reusable Food Service Ware & Take Out Containers	1
Y	?	N	NA	Credit 4.3	Reusable & Non-Reusable Products: Non-Food Service Ware Items	1
Y	?	N	NA	Credit 4.4	Reusable & Non-Reusable Products: Bottled Water Elimination & Public Drinking Water Access	1
Y	?	N	NA	Credit 5	Hospital Supported Agriculture: Food & Farm Linkages	1
Y	?	N	NA	Credit 6.1	Food Waste Reduction, Donation & Composting	1
Y	?	N	NA	Credit 6.2	Food Services Recycling	1
Y	?	N	NA	Credit 7.1	Food Vendors: Achieve 1 category	1
Y	?	N	NA	Credit 7.2	Food Vendors: Achieve 2 categories	1
Y	?	N	NA	Credit 8.1	Chemical Management for Food Services: Cleaning Products	1
Y	?	N	NA	Credit 8.2	Chemical Management for Food Services: Cutlery and Food Preparation Equipment	1

Environmentally Preferable Purchasing

20 Points

Y			NA	Prereq 1	Mercury Reduction	Required
Y			NA	Prereq 2	Electronic Assets Environmental Management Plan	Required

Y	?	N	NA	Credit 1	Solid Waste Reduction in Purchasing	1
Y	?	N	NA	Credit 2.1	Toxic Chemical Reduction in Purchasing: Policy/Structure Development	1
Y	?	N	NA	Credit 2.2	Toxic Chemical Reduction in Purchasing: Implementation	1
Y	?	N	NA	Credit 3.1	Toxic Chemical Reduction: Facility Maintenance, Alterations & Additions: 10%	1
Y	?	N	NA	Credit 3.2	Toxic Chemical Reduction: Facility Maintenance, Alterations & Additions: 20%	1
Y	?	N	NA	Credit 3.3	Toxic Chemical Reduction: Facility Maintenance, Alterations & Additions: 30%	1
Y	?	N	NA	Credit 3.4	Toxic Chemical Reduction: Facility Maintenance, Alterations & Additions: 40%	1
Y	?	N	NA	Credit 3.5	Toxic Chemical Reduction: Facility Maintenance, Alterations & Additions: 50%	1
Y	?	N	NA	Credit 3.6	Toxic Chemical Reduction: Furniture & Medical Furnishings	1
Y	?	N	NA	Credit 4.1	Sustainably Sourced Materials & Products: Facility Alterations & Additions: 10%	1
Y	?	N	NA	Credit 4.2	Sustainably Sourced Materials & Products: Facility Alterations & Additions: 20%	1
Y	?	N	NA	Credit 4.3	Sustainably Sourced Materials & Products: Facility Alterations & Additions: 30%	1
Y	?	N	NA	Credit 4.4	Sustainably Sourced Materials & Products: Facility Alterations & Additions: 40%	1
Y	?	N	NA	Credit 4.5	Sustainably Sourced Materials & Products: Facility Alterations & Additions: 50%	1
Y	?	N	NA	Credit 5.1	Electronics Purchasing & End of Life Management: End of Life Management	1
Y	?	N	NA	Credit 5.2	Electronics Purchasing & End of Life Management: Office & Commercial Electronic Equipment Purchasing	1
Y	?	N	NA	Credit 5.3	Electronics Purchasing & End of Life Management: Medical Equipment Purchasing	1
Y	?	N	NA	Credit 6.1	Office Supplies: Paper and Non-Paper Product	1
Y	?	N	NA	Credit 6.2	Office Supplies: 100% Post-Consumer Recycled Content and Processed Chlorine Free Paper Products	1
Y	?	N	NA	Credit 7	Low Emitting & Fuel Efficient Fleet Vehicles	1

Innovation in Operation

7 Points

Y	?	N		Credit 1.1	Innovation in Operations	1
Y	?	N		Credit 1.2	Innovation in Operations	1
Y	?	N		Credit 1.3	Innovation in Operations	1
Y	?	N		Credit 1.4	Innovation in Operations	1
Y	?	N		Credit 2.1	Documenting Sustainable Operations Cost Impacts: Overall Operating Costs	1
Y	?	N		Credit 2.2	Documenting Sustainable Operations Cost Impacts: Absenteeism & Health Care Cost Impacts	1
Y	?	N		Credit 3	Research Initiatives	1

Operations Project Total

121 Points

Food Service

1 point

FS Credit 1.1**Sustainable Food Policy & Plan****Intent**

Create, promote and implement sustainable food purchasing policies and plans that support human and ecological health.

Health Issues

Shifts in the U.S. food system over the last century are compromising human and ecological health. While total farm acreage has declined, farm size has increased and is more focused on concentrated monocropping. This contributes to declining diversity of food crops necessary to fulfill human nutritional needs, while also leading to a loss of biodiversity. In the U.S., the typical food item now travels from 1,500 to 2,400 miles from farm to plate. This long travel distance disconnects growers from consumers, increases opportunities for food contamination and nutrient loss.

Routine use of antibiotics in animal agriculture has been shown to increase antibiotic resistance among bacteria that cause human infections. Pesticide drift, field dust, waste burning, toxic gases from degrading manure, and diesel exhaust from transporting food long distances are all factors related to food production that contribute to asthma, cardiovascular disease and lung cancer. Commercial fertilizers and pesticides contaminate surface- and ground-water in many locales. Large-scale animal feedlot operations contribute to water pollution with biologically active hormones, nitrates and other breakdown products of untreated animal waste. Calorie-rich, nutrient-poor diets contribute to obesity, diabetes, cancer, and a variety of degenerative diseases. By moving toward a healthier and more sustainable food system, health care can help alleviate human health problems associated with inadequate or inappropriate nutrition, antibiotic resistance, air and water contamination, and global health issues such as climate change.

Credit Goals

Develop a Sustainable Food Policy with the following minimum components:

- Strategies for execution aligned with Food Service Credits 2-7 (e.g., working with current or alternative suppliers, giving purchasing preference to certified and local foods (defined for the purposes of this credit as sourced from within a 200-mile radius), developing an on-site farmers market, holding seminars).
- Goals indicating what metrics will be tracked and how success will be defined.
- Action plan establishing expectations of everyone involved in implementation (e.g., both in-house and contracted food service staff).
- Evaluation plan that specifies a means and process for evaluating effectiveness and for making adjustments to the plan when necessary.

AND

FS Credit 1.1 continued

Sustainable Food Policy & Plan

Develop and implement a Sustainable Food Plan according to one of the following options:

OPTION 1

- Identify support from key stakeholders as indicated through involvement or sign-off.
- Adopt and implement a food policy vision statement that links desired outcomes and values of the program to the institution's broader mission by addressing key issues in the food system affecting the health of individuals, communities and the environment, including:
 - Antibiotic Resistance
 - Air and Water Pollution
 - Worker Health and Safety

OR

OPTION 2

- Adopt and implement Health Care Without Harm's Healthy Food in Health Care Pledge.

FS Credit 1.1 continued

Sustainable Food Policy & Plan

Suggested Documentation

- Develop and annually review a written sustainable food policy and plan in accordance with Credit Goals.
- Compile and annually update evidence that the policy and plan have undergone an internal approval process by both food service and institutional leadership.

Reference Standard

Healthy Food in Health Care Pledge: <http://www.noharm.org/us/food/pledge>

Potential Strategies and Technologies

- **Credit Synergies:** *Coordinate implementation of this credit with GGHC IO Prerequisite 1: Integrated Operations & Maintenance Process; GGHC SSM Credit 1: Site Management; GGHC SSM Credit 2: Reduced Site Disturbance; GGHC SSM Credit 5: Connection to the Natural World; GGHC WM Prerequisite 1: Waste Management Plan; GGHC WM Prerequisite 2: Waste Generation Profile and Measurement; GGHC ES Credit 1.1-1.2: Environmentally Preferable Cleaning: Policy Development; GGHC ES Credit 3: Indoor Integrated Pest Management; GGHC FS Credit 2: Sustainable Food Education and Promotion; GGHC FS Credit 3: Local, Sustainably Produced Food Purchasing; GGHC FS Credit 4: Reusable & Non-Reusable Products; GGHC FS Credit 5: Hospital Supported Agriculture: Food and Farm Linkages; GGHC FS Credit 6.1: Food Donation and Composting; GGHC FS Credit 6.2: Food Services Recycling; GGHC FS Credit 7: Food Vendors; GGHC FS Credit 8: Chemical Management for Food Services.*
- RFP and Contract language for contractors and suppliers that clearly incorporate the expectations laid out in the policy.
- A sustainable food policy and plan may encompass a wide array of an institution's food-related sustainability initiatives. These may include, but are not limited to, purchasing of sustainable foods, beverages and bio-based service ware, community initiatives supporting food connections, use of reusable service ware, and education and promotion for these efforts. A food policy and plan will guide the activities related to the other points available under the Food Credit.
- Follow best practices for establishing a successful policy as outlined in the Green Guide for Health Care Food Technical Brief (<http://www.gghc.org>).

FS Credit 1.1 continued

Sustainable Food Policy & Plan

Resources

Catholic Health Care West Food and Nutrition Services Vision Statement,
<http://www.foodalliance.org/sustainablefoodpolicy/samples/Catholic%20Healthcare%20West%20Vision%20Statement.pdf>

Jamie Harvie, Michelle Gottlieb, Roberta Anderson, and Marie Kulick, *Green Guide for Health Care Food Technical Brief*, <http://www.gghc.org>

Health Care Without Harm, Healthy Food Workgroup, <http://healthyfoodinhealthcare.org>

Healthy Food in Health Care Pledge: <http://www.noharm.org/us/food/pledge>

Kaiser Permanente's Comprehensive Food Policy (2006),
<http://www.foodalliance.org/sustainablefoodpolicy/kaise/Kaiser%20Permanente%20Comprehensive%20Food%20Policy%202006.pdf>

The Sustainable Food Policy Project, <http://www.sustainablefoodpolicy.org>

1 point

FS Credit 1.2
Food Nutrition**Intent**

Create, promote and implement sustainable food purchasing policies and plans that support human and ecological health.

Health Issues

Major shifts in the U.S. food system over the last century are compromising human and ecological health. While total farm acreage has declined, farm size has increased and is more focused on concentrated monocropping. This contributes to the decline in production of diverse food crops necessary to fulfill human nutritional needs, while also leading to a loss of biodiversity. In the U.S., the typical food item now travels from 1,500 to 2,400 miles from farm to plate. This long travel distance system disconnects the growers from the consumers, and increases opportunities for food contamination and loss of nutrients during transportation. While this industrial food system initially contributed to higher yields, productivity has declined, and serious long-term impacts on human and environmental health have become apparent.

Routine use of antibiotics in animal agriculture has been shown to increase antibiotic resistance among bacteria that cause human infections. Pesticide drift, field dust, waste burning, toxic gases from degrading manure, and diesel exhaust from transporting food long distances are all factors related to food production that contribute to asthma, cardiovascular disease and lung cancer. Commercial fertilizers and pesticides contaminate surface- and ground-water in many locales. Large-scale animal feedlot operations contribute to water pollution with biologically active hormones, nitrates and other breakdown products of untreated animal waste. Calorie-rich, nutrient-poor diets contribute to obesity, diabetes, cancer, and a variety of degenerative diseases. By moving toward a healthier and more sustainable food system, health care can help alleviate human health problems associated with inadequate or inappropriate nutrition, antibiotic resistance, air and water contamination, and global health issues such as climate change.

Credit Goals

- Achieve FS Credit 1.1: Sustainable Food Policy and Plan

AND

- Except for restricted diets, include a minimum of one fresh fruit option at each patient meal. At lunch and dinner, provide a fresh green salad and a minimum of one non-starch fresh vegetable option.
- For patient and cafeteria food service, offer whole grain options for minimum 50% of grains and breads (e.g., whole-wheat bread, whole-grain rolls, brown rice).
- For patient and cafeteria food service, provide a minimum of one protein-balanced vegetarian menu option during each meal.

AND

- Implement a minimum of four of the following practices:
 - **Wholesome Soup:** Other than for restricted diets menus, all patient and cafeteria soups are made from scratch (with the exception of canned legumes and tomatoes).
 - **Meat Free Option:** Cafeteria and patient food meat-free one day per week.

FS Credit 1.2 continued

Food Nutrition

- **Trans Fats and Healthy Oils:** Eliminate all products that contain trans (partially hydrogenated) fats* and fully hydrogenated fats; AND, create a heart-healthy oils purchasing policy and modify all recipes to use cooking oils high in monounsaturated and polyunsaturated fatty acids.
* “Zero Trans Fats” should be the goal when total elimination is not possible.
- **Fried Food Elimination:** Eliminate deep fried foods from patient menus and cafeteria.
- **Nanotech Foods:** Develop and implement a policy requiring disclosure and elimination of nanotech additives in food, nutritional supplements and food serviceware and packaging by food service contractors, food distributors, food producers, food processors and General Purchasing Organizations (GPOs).
- **Food Color and Additives:** Develop and implement a purchasing policy and program to eliminate from cafeteria and regular patient meal food service processed food products containing food additives including artificial coloring and flavoring in accordance with the Center for Science in the Public Interest’s Food Additives Avoid List. <http://www.cspinet.org/reports/chemcuisine.htm>
- **Healthy Vending and Snacks** 100% of facility-wide vending machines and Cafeteria Pre-packaged snacks offer:
 - Minimum 75% (by quantity) nutritionally healthy foods as defined by the Chula Vista Healthy Vending Policy (with PI modifications).
 - Minimum 20% (by quantity) sustainable foods in accordance with FS Credit 3: Local, Sustainably Produced Food Purchasing.
- **Promote Breast Feeding:** Develop and implement a breastfeeding program as outlined in the UNICEF/WHO’s document “The Ten Steps to Successful Breastfeeding for Hospitals” and eliminate the standard practice of free formula giveaways.

FS Credit 1.2 continued

Food Nutrition

Suggested Documentation

- ❑ Document and annually review program to offer fresh fruit and vegetables, whole grains and breads, and vegetarian menu options through cafeteria and patient food service in accordance with Credit Goals.
- ❑ Compile and annually update evidence that a minimum four of the nutritional practices outlined in the Credit Goals have been implemented.

Reference Standard

Center for Science in the Public Interest, Food Additives Report, Avoid List.
<http://www.cspinet.org/reports/chemcuisine.htm>

Chula Vista Healthy Vending Policy (with PI modifications),
http://www.preventioninstitute.org/sa/policies/policy_detail.php?pid=120

Potential Strategies and Technologies

- **Credit Synergies:** *Coordinate implementation of this credit with GGHC IO Prerequisite 1: Integrated Operations & Maintenance Process; GGHC SSM Credit 1: Site Management; GGHC SSM Credit 2: Reduced Site Disturbance; GGHC SSM Credit 5: Connection to the Natural World; GGHC WM Prerequisite 1: Waste Management Plan; GGHC WM Prerequisite 2: Waste Generation Profile and Measurement; GGHC ES Credit 3: Indoor Integrated Pest Management; GGHC FS Credit 2: Sustainable Food Education and Promotion; GGHC FS Credit 3: Local, Sustainably Produced Food Purchasing; GGHC FS Credit 4: Reusable & Non-Reusable Products; GGHC FS Credit 5: Hospital Supported Agriculture: Food and Farm Linkages; GGHC FS Credit 6.1: Food Donation and Composting; GGHC FS Credit 6.2: Food Services Recycling; GGHC FS Credit 7: Food Vendors; GGHC FS Credit 8: Chemical Management for Food Services.*
- Develop a template letter for the food supply chain and General Purchasing Organization (GPO) indicating the facility's interest in disclosure of foods with transfats, additives, and nanotechnology. Request labeling of these items in electronic catalogues, especially during contract renewal negotiations. Share the facility's approach with other facilities using the same food suppliers or using the same GPO. Compile the responses from suppliers and share with other hospitals.
- Educate food service and dietary staff on issues around nanotechnology and food additives using newsletters and internal listserves.
- Provide education and in-house training on climate change and its relationship to meat production.
- Labeling programs should not require a "meat-free" or "vegetarian" label on all meat-free options.
- Use listserves or websites such as Health Care Without Harm's <http://www.healthyfoodinhealthcare.org> website to research case studies and examples of other facilities that have accomplished these goals.
- Contract with vending companies that offer nutritionally dense foods and are third party eco-labeled organic or other.

FS Credit 1.2 continued

Food Nutrition

Resources

Catholic Health Care West Food and Nutrition Services Vision Statement,
<http://www.foodalliance.org/sustainablefoodpolicy/samples/Catholic%20Healthcare%20West%20Vision%20Statement.pdf>

European Trade Union Confederation (ETUC) Resolution on nanotechnologies and nanomaterials,
<http://www.etuc.org/a/5163>

European Trade Union Institute – Research, Education, Health & Safety (ETUCI-REHS) NANOCAP Project, http://hesa.etui-rehs.org/uk/dossiers/dossier.asp?dos_pk=18,

Jamie Harvie, Michelle Gottlieb, and Marie Kulick, *Green Guide for Health Care* Food Technical Brief,
<http://www.gghc.org>

Johns Hopkins Bloomberg School of Public Health Meatless Mondays,
http://www.meatlessmonday.com/site/PageServer?pagename=a_index

Health Care Without Harm, Healthy Food Workgroup, <http://healthyfoodinhealthcare.org>

Healthy Food in Health Care Pledge: <http://www.noharm.org/us/food/pledge>

Kaiser Permanente's Comprehensive Food Policy (2006),
<http://www.foodalliance.org/sustainablefoodpolicy/kaise/Kaiser%20Permanente%20Comprehensive%20Food%20Policy%202006.pdf>

Out of the laboratory and on to our plates: Nanotechnology in food and agriculture,
<http://nano.foe.org.au/node/220>

"Protecting, Promoting and Supporting Breast-Feeding -The special role of maternity services." A Joint WHO/UNICEF Statement, WHO, Geneva, 1989.
<http://www.unsystem.org/scn/archives/scnnewsextractsmay91/ch4.htm>

Kenneth D. Rosenberg, John D. Stull, Michelle R. Adler, Laurin J. Kasehagen, Andrea Crivelli-Kovach. "Impact of Hospital Policies on Breastfeeding Outcomes," *Breastfeeding Medicine*. June 1, 2008, 3(2): 110-116. doi:10.1089/bfm.2007.0039. <http://www.liebertonline.com/doi/abs/10.1089/bfm.2007.0039>

The Sustainable Food Policy Project, <http://www.sustainablefoodpolicy.org> U.S. Centers for Disease Control and Prevention (CDC), The CDC Guide to Breastfeeding Interventions,
http://www.cdc.gov/BREASTFEEDING/pdf/BF_guide_1.pdf

1 point

FS Credit 2

Sustainable Food Education & Promotion**Intent**

Create awareness about sustainable hospital food service initiatives among staff, patients, visitors, service providers, vendors and the community of hospital food service initiatives and the associated human health benefits.

Health Issues

Shifts in the U.S. food system over the last century are compromising human and ecological health. While total farm acreage has declined, farm size has increased and is more focused on concentrated monocropping. This contributes to declining diversity of food crops necessary to fulfill human nutritional needs, while also leading to a loss of biodiversity. In the U.S., the typical food item now travels from 1,500 to 2,400 miles from farm to plate. This long travel distance disconnects growers from consumers, increases opportunities for food contamination and nutrient loss.

Routine use of antibiotics in animal agriculture has been shown to increase antibiotic resistance among bacteria that cause human infections. Pesticide drift, field dust, waste burning, toxic gases from degrading manure, and diesel exhaust from transporting food long distances are all factors related to food production that contribute to asthma, cardiovascular disease and lung cancer. Commercial fertilizers and pesticides contaminate surface- and ground-water in many locales. Large-scale animal feedlot operations contribute to water pollution with biologically active hormones, nitrates and other breakdown products of untreated animal waste. Calorie-rich, nutrient-poor diets contribute to obesity, diabetes, cancer, and a variety of degenerative diseases. By moving toward a healthier and more sustainable food system, health care can help alleviate human health problems associated with inadequate or inappropriate nutrition, antibiotic resistance, air and water contamination, and global health issues such as climate change.

Credit Goals**Education**

- Upon hire and annually, hold a minimum of one (1) educational event targeted to the food service department (both in-house and contracted food service staff), focused on the facility's sustainability initiatives and pursuit of relevant Credit Goals in the Food Service section of the *Green Guide* and explicitly explaining the link between human health and food production.
- Hold a minimum of one (1) educational event annually targeted to hospital employees outside of the food service department (e.g., senior management, environmental services, physicians, nurses) focused on the facility's sustainability initiatives and pursuit of relevant Credit Goals in the Food Service section of the *Green Guide*.

Note: This portion of the credit goal can also be accomplished by holding a single educational event that targets both food service staff and the broader community.

AND

FS Credit 2 continued

Sustainable Food Education & Promotion

Healthy Sustainable Food Promotion

Annually implement a minimum of three (3) of the following initiatives aimed at educating hospital staff, patients, and the community about food service sustainability commitments and activities:

- Post and annually update a signed copy of the facility's Food Policy or Healthy Food in Health Care Pledge in accordance with GGHC FS Credit 1 or other information on the facility's sustainability initiatives in a visible site within the hospital and on the hospital website explicitly explaining the link between human health and food production.
- Establish and maintain a program to inform cafeteria consumers of specific product offerings that are seasonal, organic, locally grown, and/or sustainably grown/produced, etc. in accordance with GGHC FS Credit 3.
- Establish and maintain a program to inform patients of menu items that are seasonal, organic, locally and/or sustainably grown/produced, etc. in accordance with GGHC FS Credit 3.
- Host special events targeted to patients, employees, and visitors that promote the facility's sustainable food products and initiatives and explicitly explain the link between human health and food production.
- Hold special events (onsite or offsite) targeted to the larger community highlighting the facility's commitment to supporting healthy, local, seasonal, organic, and sustainable foods and food systems and explicitly explaining the relationship between human health and food production and distribution.

Note: For the purposes of this Credit, "local" is defined as sourced from within a 200-mile radius.

FS Credit 2 continued

Sustainable Food Education & Promotion

Suggested Documentation

- ❑ Maintain and annually update a file of annual reporting, communications program, sample menus, table tent cards, posters, newsletters and other documents to demonstrate compliance with Credit Goals.
- ❑ Maintain and annually update new employee and annual educational information, including for example, Power Point presentations, handouts, sign in sheets and agendas.

Reference Standards

There are no reference standards for this credit.

Potential Technologies & Strategies

- **Credit Synergies:** *Coordinate implementation of this credit with GGHC IO Credit 1.2: Education: Staff, Patient, and Community Environmental Sustainability Education; GGHC SSM Credit 1: Site Management; GGHC SSM Credit 2: Reduced Site Disturbance; GGHC SSM Credit 5: Connection to the Natural World; GGHC WM Prerequisite 1: Waste Management Plan; GGHC WM Prerequisite 2: Waste Generation Profile and Measurement; GGHC ES Credit 3: Indoor Integrated Pest Management; GGHC FS Credit 1: Sustainable Food Policy and Plan; GGHC FS Credit 3: Local, Sustainably Produced Food Purchasing; GGHC FS Credit 4: Reusable & Non-Reusable Products; GGHC FS Credit 5: Hospital Supported Agriculture: Food and Farm Linkages; GGHC FS Credit 6.1: Food Donation and Composting; GGHC FS Credit 6.2: Food Services Recycling; GGHC FS Credit 7: Food Vendors; GGHC FS Credit 8: Chemical Management for Food Services.*
- Advertise the facility's sustainable food initiatives through media venues such as the local newspaper.
- In-service educational programs for food service staff should include the credit goals and relevant information embedded in the GGHC Food Service Credit. Programs should be geared specifically for food service staff including management, chefs, nutritionists and dietitians, line prep etc. Options include: roundtables, seasonal cooking demonstrations, farm visits, webinars, etc. See Health Care Without Harm website (<http://www.noharm.org>) for sample programs and ideas.
- Organize a tour of a local farm for hospital staff and/or community members as part of the education program and to build relationships with the local growing community.
- Educational programs for non-food service hospital employees should be geared to senior management, environmental services, physicians, nurses etc. Options include: grand rounds for health professionals, brown bag seminars or roundtables, webinars, cooking demonstrations, farm visits, etc. See Health Care Without Harm website (<http://www.noharm.org>) for sample programs and ideas.

FS Credit 2 continued

Sustainable Food Education & Promotion

- There are many ways to inform cafeteria consumers of the local/seasonal/organic and sustainable foods on the menu, for example:
 - Post point of sale materials (tent cards, signage etc.) within the cafeteria that highlight the daily sustainable offerings;
 - Inform the consumers if milk/coffee creamers are rGBH free; and/or,
 - Identify the farms/ranches/bakeries where the products were purchased – including pictures whenever possible.
- Provide continuing education credit opportunities to employees, where applicable, as an incentive to attend events.
- Ask suppliers and vendors to provide signage promoting the facility's healthy, sustainably produced food practices (e.g., rGBH free stickers, Fair Trade coffee, pictures of farmers).
- Include specific indications of local/seasonal/organic and sustainable options in patient menus, such as a star or other icon next to such items, a list of what is being offered that day, logos from relevant organizations/vendors (e.g., Buy Fresh, Buy Local).
- Use special events to promote sustainable foods, for example: host a farmer's lunch with all local/seasonal foods; invite local farmers to meet with customers; host a cooking demonstration featuring the local products of the day; host a special holiday meal featuring locally and sustainably grown foods. See the Resource section for templates and suggestions for such events.
- Expand the special events to involve and inform the larger community. Host a special Farmer's Market Day and invite local community groups, political leaders, etc. Partner with local community groups at offsite events such as farmer's markets, community gardens, and other forums which can connect the facility's sustainable food service with other food and fitness initiatives within the larger community.
- Seek out organizations that support your efforts to promote local and sustainable products such as Buy Fresh, Buy Local campaigns, etc. Network with state and local agricultural departments for information on local events, farmer's markets etc
- Seek out speakers from local and national sustainability organizations that can participate in educational events.
- Take advantage of the facility's website as a forum for promoting sustainability initiatives.

Resources

Jamie Harvie, Michelle Gottlieb, Roberta Anderson and Marie Kulick, *Green Guide for Health Care Food Technical Brief*, <http://www.gghc.org>

Health Care Without Harm, <http://healthyfoodinhealthcare.org>

Healthy Food in Health Care Pledge: <http://www.noharm.org/us/food/pledge>

Fletcher Allen Health Care, Nutrition Services, <http://www.fahc.org/Nutrition/Services/services.html>

But Fresh, Buy Local Chapters, <http://www.foodroutes.org/bfbl-chapters.jsp#chapter-listMORE>

1-3 points

FS Credit 3.1-3.3

Local, Sustainably Produced Food Purchasing**Intent**

Improve human and ecological health through purchase of local and sustainably produced food products.

Health Issues

Shifts in the U.S. food system over the last century are compromising human and ecological health. While total farm acreage has declined, farm size has increased and is more focused on concentrated monocropping. This contributes to declining diversity of food crops necessary to fulfill human nutritional needs, while also leading to a loss of biodiversity. In the U.S., the typical food item now travels from 1,500 to 2,400 miles from farm to plate. This long travel distance disconnects growers from consumers, increases opportunities for food contamination and nutrient loss.

Routine use of antibiotics in animal agriculture has been shown to increase antibiotic resistance among bacteria that cause human infections. Pesticide drift, field dust, waste burning, toxic gases from degrading manure, and diesel exhaust from transporting food long distances are all factors related to food production that contribute to asthma, cardiovascular disease and lung cancer. Commercial fertilizers and pesticides contaminate surface- and ground-water in many locales. Large-scale animal feedlot operations contribute to water pollution with biologically active hormones, nitrates and other breakdown products of untreated animal waste. Calorie-rich, nutrient-poor diets contribute to obesity, diabetes, cancer, and a variety of degenerative diseases. By moving toward a healthier and more sustainable food system, health care can help alleviate human health problems associated with inadequate or inappropriate nutrition, antibiotic resistance, air and water contamination, and global health issues such as climate change.

Credit Goals

- Achieve a minimum percentage of annual combined food and beverage purchases (both in-house and contracted food service) from any combination of the following sources:
 - Approved to carry one or more of the following independent third party certified eco-labels: USDA Certified Organic, Food Alliance Certified, Rainforest Alliance Certified, Protected Harvest, Fair Trade Certified, Bird Friendly, Certified Humane Raised and Handled, Animal Welfare Approved, Salmon Safe, Marine Stewardship Council or other eco-label that has transparent and meaningful standards and independent verification processes. See Consumers Union Greener Choices Eco-Label Center for individual label ratings. Go to www.greenerchoices.org/eco-labels/eco-home.cfm

Note: Additional information about eco-labels is available in the Green Guide for Health Care Food Technical Brief, <http://www.gghc.org>.

AND/OR

- Carry one of the following label claims allowed by USDA or FDA: "Raised without antibiotics" or "No antibiotics administered" (poultry and meat products); "Raised without antibiotics that cause antibiotic resistance in humans" (poultry); "Raised without added hormones" or "No hormones added" (beef and lamb only); "No genetically engineered ingredients" (products made from corn, soy, canola or their derivatives); "rBGH-free", "rBST-free", or a statement such as "our farmers pledge not to use rBGH or rBST"/"Our farmers pledge not to use artificial hormones" (milk, butter, cheese, yogurt, ice cream, sour cream, cottage cheese); "Grass-fed" (products from ruminants such as beef cattle, dairy cattle, lamb); .

AND/OR

FS Credit 3.1-3.3 continued

Local, Sustainably Produced Food Purchasing

- Farms, ranches, and production/processing facilities located within a 200-mile radius of the facility.

Note: All food items that are processed must be sourced from within a 200-mile radius to meet the intent of this Credit Goal. For processed foods with multiple ingredients, including breads and other bakery items, only products with the majority of ingredients (>50% by weight) produced within the 200-mile radius may be included in the calculation.

Credit	Point total	Minimum Percentage (combined food and beverage purchases, based on cost)
3.1	1 point	15%
3.2	2 points	25%
3.3	3 points	50%

Reference Table: Third Party Certified Eco-Labels

Products	Animal Welfare Approved	Bird Friendly	Certified Humane Raised & Handled	Certified USDA Organic	Fair Trade Certified	Food Alliance Cert.	Marine Stewardship Council	Protected Harvest	Rainforest Alliance Certified	Salmon Safe
Beef/Bison	X		X	X		X				X
Lamb	X		X	X		X				X
Pork	X		X	X		X				
Poultry	X		X	X		X				
Coffee		X		X	X				X	
Tea				X	X				X	
Fruit Juices				X					X	X
Wine				X						X
Milk			X	X		X				X
Eggs			X	X		X				X
Cheese			X	X		X				
Yogurt				X						
Fruit				X	X	X		X	X	X
Vegetables				X		X		X		X
Breads				X						
Cereals				X						
Grains				X	X	X				
Sugar				X	X					
Processed Foods				X		X				
Cocoa				X	X				X	
Chocolate				X	X				X	
Nuts				X		X				
Oils				X		X				
Snacks				X						
Premade soups				X						
Fish							X			

FS Credit 3.1-3.3 continued

Local, Sustainably Produced Food Purchasing

General Label Claims

Label Claim	Food Category
"Raised without antibiotics" or "No antibiotics administered"	poultry and meat
"Raised without antibiotics that cause antibiotic resistance in humans"	poultry
"Raised without added hormones" or "No hormones added"	beef and lamb
"No genetically engineered ingredients"	products made from corn, soy, canola or their derivatives
"rBGH-free", "rBST-free", or something to this effect "our farmers pledge not to use rBGH or rBST"/"Our farmers pledge not to use artificial hormones"	milk, butter, cheese, yogurt, ice cream, sour cream, cottage cheese
"Grass-fed"	products from ruminant animals such as beef cattle, dairy cattle, lamb

Suggested Documentation

- Demonstrate through annual purchasing records that combined food and beverage purchases from food service operations (patient food and cafeterias), based on total cost, have met the credit goals over a minimum one-year period.

Reference Standards

Note: For additional information on the Reference Standards for this credit, view the Green Guide for Health Care Food Technical Brief, <http://www.gghc.org>

Bird Friendly, <http://www.si.edu/smbc>

Certified Humane Raised and Handled, <http://www.certifiedhumane.com>

Certified USDA Organic, <http://www.ams.usda.gov/NOP/indexNet.htm>

Fair Trade Certified™, <http://www.transfairusa.org>

Food Alliance Certified, <http://www.foodalliance.org>

Grass Fed, <http://www.usda.gov>

Marine Stewardship Council, <http://www.msc.org>

Raised Without Antibiotics/No Antibiotics Administered,
http://www.fsis.usda.gov/Fact_Sheets/Meat_&_Poultry_Labeling_Terms/index.asp

FS Credit 3.1-3.3 continued

Local, Sustainably Produced Food Purchasing

Raised without antibiotics that cause antibiotic resistance in humans,
http://www.fsis.usda.gov/Regulations/Use_of_Ionophores/index.asp

Raised without added hormones/No hormones added,
http://www.fsis.usda.gov/Fact_Sheets/Meat_&_Poultry_Labeling_Terms/index.asp

Protected Harvest, <http://www.protectedharvest.org>

Rainforest Alliance Certified, <http://www.rainforest-alliance.org/index.cfm>

Salmon Safe, <http://www.salmonsafe.org/>

U.S. Department of Agriculture, Food Labeling,
http://fnic.nal.usda.gov/nal_display/index.php?info_center=4&tax_level=1&tax_subject=273

U.S. Food and Drug Administration, Labeling and Nutrition, <http://www.cfsan.fda.gov/label.html>

Potential Technologies & Strategies

- **Credit Synergies:** *Coordinate implementation of this credit with GGHC IO Prerequisite 1: Integrated Operations & Maintenance Process; GGHC WM Prerequisite 1: Waste Management Plan; GGHC WM Prerequisite 2: Waste Generation Profile and Measurement; GGHC FS Credit 1: Sustainable Food Policy and Plan; GGHC FS Credit 2: Sustainable Food Education and Promotion; GGHC FS Credit 4: Reusable & Non-Reusable Products; GGHC FS Credit 5: Hospital Supported Agriculture: Food and Farm Linkages; GGHC FS Credit 6.1: Food Donation and Composting; GGHC FS Credit 6.2: Food Services Recycling; GGHC FS Credit 7: Food Vendors; GGHC FS Credit 8: Chemical Management for Food Services; and, EP Credit 1: Solid Waste Prevention in Purchasing.*
- There is no single definition for sustainable agriculture; however, such a system includes characteristics such as:
 - **Conservation and preservation:** The use of land and other natural resources does not deplete their existence and therefore makes those resources available to future generations. Agrichemicals (ie., chemical products used in agriculture for insecticides, herbicides, fertilizers, etc.) are not conducive to sustainability, and therefore should be used minimally and only when necessary. Conservation in agriculture includes soil conservation, water conservation and protection, and energy conservation during the production process.
 - **Animal welfare:** Sustainably-raised animals are treated humanely and with respect, and are well cared for. They are permitted to carry out their natural behaviors, such as grazing, rooting or pecking, and are provided with a natural diet appropriate for their species.
 - **Biodiversity:** Rotation of a variety of plant and animal types can enrich soil nutrients, prevent disease, and minimize pest outbreaks, whereas continued support of a single species depletes those resources used by that species alone. Ecosystem is integral to sustainability.
 - **Economic viability:** In a sustainable agricultural system, farmers earn fair prices for their products that are appropriate to their reasonable costs. A sustainable system does not depend on subsidies, treats workers fairly, and pays wages and benefits that provides a meaningful livelihood to farmers to enable them to continue their work.

FS Credit 3.1-3.3 continued

Local, Sustainably Produced Food Purchasing

The following strategies can be used to identify food and beverages that meet some or all of the characteristics of sustainable agriculture:

- **Third-party certification/eco-labels:** Third-party certifications provide independent verification that standards have been met. These certifications usually include on-farm/ ranch inspections to verify that standards have been met. It is also important that the standards are meaningful and developed through an open process by parties free of any conflict of interest. Certifications such as USDA Organic and the others mentioned herein have been deemed “Highly Meaningful” by Consumers Union, <http://www.eco-labels.org>.
- **Marketing claims:** Some common marketing claims, such as those allowed by USDA or FDA and listed above, can be used by purchasers to identify products that offer measurable social and environmental benefits. These claims are usually a statement made by the producer, sometimes with a signed affidavit as the only verification; thus, they do not represent independent third-party verification.
- **Local, independent family farms/ranches:** Many small, local farm sources subscribe to sustainable agriculture practices and deserve support, though they may lack the resources or have been unable to complete the transition to obtain state or USDA organic certification. Sustainable agriculture is plant and food animal cultivation that is healthful and humane, economically viable, environmentally sound, and socially just.
- **Work directly with farmers/ranchers, local distributors and the facility’s Group Purchasing Organization (GPO):** Participate in GPO selection process for food vendors.
- **Identify Local and Independent Family Farms:** The definition of what is “local” may differ in various regions of the country. Ideally foods will travel less than 200 miles or 4-5 hours from the farm to the facility. In areas with abundant year round produce, purchasing even closer is often possible. Purchasing preference should be given to independent family farm/ ranch or cooperative/ network of independent family farms/ ranches where farmers/ ranchers own, labor on and earn a meaningful livelihood from their farms. Similarly, the definition of “family farm” is not always uniform. At the time this document went to print, one eco-label could be used to identify producers that met both family farm and sustainability criteria- the Animal Welfare Institute’s “Animal Welfare Approved” label, which applies to poultry and other meat products (<http://www.awionline.org>). However, the Association of Family Farms (AFF) has adopted similar draft standards for an AFF eco-label that purchasers will be able to use in the future to identify a wide range of sustainably produced products on family farms (<http://www.familyfood.net>).

Resources

Eat Well Guide, <http://www.eatwellguide.org/index.cfm>.

FoodRoutes, <http://www.foodroutes.org>

Jamie Harvie, Michelle Gottlieb, Roberta Anderson and Marie Kulick, *Green Guide for Health Care Food Technical Brief*, <http://www.gghc.org>

Health Care Without Harm, <http://healthyfoodinhealthcare.org>

National Rural Catholic Conference on the Ethics of Eating, <http://www.ncrlc.com/>

Organic Trade Association (OTA), <http://www.ota.com/index.html>.

1-2 points

FS Credit 4.1-4.2

Reusable & Non-Reusable Products: Food Service Ware

Intent

Support environmental stewardship of virgin resources by purchasing reusable and non-reusable products.

Health Issues

Each year, health care institutions purchase billions of pounds of janitorial paper including napkins and other paper products, plastic trash liners, and paper and fossil-fuel based plastic packaging and other disposable food service items. Disposable products provide some benefits to hospitals—ease of use, minimal maintenance and reduced dishwashing needs. Yet, when most of these single-use items leave the facility after use, they are disposed in landfills, incinerated, or pollute the world's oceans where they can harm humans, wildlife, and the environment and contribute to other negative impacts including depletion of nonrenewable resources, release of greenhouse gas emissions; generation of air and water pollutants from manufacturing, shipping and disposal; introduction of toxic chemicals into the environment during production, use and disposal; and, food contamination through chemicals leaching from packaging and food service ware. Hospitals can help mitigate these impacts by reducing overall use of packaging and other disposable products and by purchasing reusable products or those made from recycled or renewable materials and without use of hazardous chemicals.

Credit Goals

FS Credit 4.1 Reusable Food Service Ware (1 point):

- Develop and implement a program whereby all food service ware for either cafeterias or patient meals is reusable. Demonstrate that the program has been in place for a minimum one-year period.

Note: Food service ware includes plates and covers, cutlery, bowls, hot and cold cups, and cafeteria and patient trays.

Note: An innovation point is available for converting to reusable food service ware for both cafeterias and patient meals.

FS Credit 4.2 Non-Reusable Food Service Ware and Take Out Containers (1 point in addition to FS Credit 4.1):

- Develop and implement a program whereby 50% of single-use, non-reusable food service ware and take-out containers purchased meet the "Preferred" criteria for biobased food service ware outlined in the Health Care Without Harm fact sheet "Choosing Environmentally Preferable Food Service Ware". Demonstrate that the program has been in place for a minimum one-year period.

Note: An innovation point is available if 50% of single-use, non-reusable food service ware and take-out containers purchased meet the "More Preferred" criteria for biobased food service ware outlined in the Health Care Without Harm fact sheet "Choosing Environmentally Preferable Food Service Ware".

FS Credit 4.1-4.2 continued

Reusable & Non-Reusable Products: **Food Service Ware**

Suggested Documentation

- ❑ Maintain documentation from suppliers that demonstrates how purchased products meet the "preferred" or "more preferred" criteria in accordance with Credit Goals over a minimum one-year period.

Reference Standards

Health Care Without Harm, "Choosing Environmentally Preferable Food Service Ware-Reusable and Sustainable Biobased Products," <http://www.noharm.org/details.cfm?ID=1456&type=document>

Potential Technologies & Strategies

- **Credit Synergies:** *Coordinate implementation of this credit with GGHC IO Prerequisite 1: Integrated Operations & Maintenance Process; GGHC WM Prerequisite 1: Waste Management Plan; GGHC WM Prerequisite 2: Waste Generation Profile and Measurement; GGHC ES Credit 1.1-1.2: Environmentally Preferable Cleaning: Policy Development; GGHC ES Credit 1.3-1.5: Environmentally Preferable Cleaning: Sustainable Cleaning Products and Materials; GGHC ES Credit 3: Indoor Integrated Pest Management; GGHC FS Credit 1: Sustainable Food Policy and Plan; GGHC FS Credit 2: Sustainable Food Education and Promotion; GGHC FS Credit 3: Local, Sustainably Produced Food Purchasing; GGHC FS Credit 5: Hospital Supported Agriculture: Food and Farm Linkages; GGHC FS Credit 6.1: Food Donation and Composting; GGHC FS Credit 6.2: Food Services Recycling; GGHC FS Credit 7: Food Vendors; GGHC FS Credit 8: Chemical Management for Food Services; GGHC EP Credit 1: Solid Waste Prevention in Purchasing.*
- Reduce overall use of packaging by requesting suppliers to eliminate excess packaging. Coordinate with GGHC EP Credit 1: Solid Waste Prevention in Purchasing.
- Control use of disposable food ware and take out containers by storing them behind the counter and requiring patrons to request them.
- Purchase reusable products. When disposable products are required, purchase items with high recycled or renewable material content and manufactured without the use of highly hazardous chemicals as defined in the Health Care Without Harm fact sheet "Choosing Environmentally Preferable Food Service Ware."
- Employ the following on-line calculator to determine the cost savings of switching to reusable cups and bowls,
http://www.nyc.gov/html/nycwasteless/html/in_business/measurement_tools_cupsbowls.shtml
- Employ the suggested supplier survey questions in the HCWH fact sheet "Choosing Environmentally Preferable Food Service Ware" to identify environmentally preferable food service ware.
- Purchase food in bulk containers where possible and distribute condiments from behind the counter rather than offering self-service.

FS Credit 4.1-4.2 continued

Reusable & Non-Reusable Products: **Food Service Ware**

Resources

Case study: U.S. Environmental Protection Agency (EPA) Green Cafeterias,
<http://www.practicegreenhealth.org>

Case study: Harvard University cafeteria switching to reusable cups,
<http://web.indstate.edu/recycle/IOR3.html>

Case study: Switching to reusable trays in the NYC school system (scroll to number 5-Waste prevention in Schools), http://www.informinc.org/cwp_shortlist.php

Jamie Harvie, Michelle Gottlieb, Roberta Anderson and Marie Kulick, *Green Guide for Health Care Food Technical Brief*, <http://www.gghc.org>

Health Care Without Harm, "Choosing Environmentally Preferable Food Service Ware,"
<http://www.noharm.org>

Health Care Without Harm, Sample Policy for Purchasing Reusable Products, <http://www.noharm.org>

1 point

FS Credit 4.3

Reusable & Non-Reusable Products: Non-Food Service Ware Items

Intent

Support environmental stewardship of virgin resources by purchasing reusable and non-reusable products.

Health Issues

Each year, health care institutions purchase billions of pounds of janitorial paper including napkins and other paper products, plastic trash liners, and paper and fossil-fuel based plastic packaging and other disposable food service items. Disposable products provide some benefits to hospitals—ease of use, minimal maintenance and reduced dishwashing needs. Yet, when most of these single-use items leave the facility after use, they are disposed in landfills, incinerated, or pollute the world’s oceans where they can harm humans, wildlife, and the environment and contribute to other negative impacts including depletion of nonrenewable resources, release of greenhouse gas emissions; generation of air and water pollutants from manufacturing, shipping and disposal; introduction of toxic chemicals into the environment during production, use and disposal; and, food contamination through chemicals leaching from packaging and food service ware. Hospitals can help mitigate these impacts by reducing overall use of packaging and other disposable products and by purchasing reusable products or those made from recycled or renewable materials and without use of hazardous chemicals.

Credit Goals

- Develop and implement a purchasing program for non-food service ware items that includes, at a minimum, the following criteria:
 - All plastic bags shall be Certified Compostable as outlined in the Health Care Without Harm fact sheet “Choosing Environmentally Preferable Food Service Ware” (Table 1, Criterion 5) OR made from a minimum of 10% post consumer recycled content material.
 - Coordinate purchasing practices for non-food service ware items with GGHC WM Prerequisite 1: Waste Management Plan and GGHC FS Credit 6.2: Food Services Recycling.
 - All paper-based non-food service ware items (e.g., napkins, paper towels, general purpose industrial wipes, tray liners and patient menus) purchased for cafeteria and patient food service meet the reference standards listed below and are certified Processed Chlorine-Free®, if applicable. Demonstrate that the program has been in place for a minimum one-year period.

PRODUCT	REFERENCE STANDARDS
Napkins	• Green Seal GS-09 for Paper Towels and Napkins
Paper Towels	• Green Seal GS-09 for Paper Towels and Napkins
Kitchen Towels	• Environmental Choice CCD-085 for Kitchen Towels
General Purpose Industrial Wipes	• Most current EPA Comprehensive Purchasing Guidelines
Tray Liners	• Green Seal GS-07 for Printing and Writing Paper • Green Seal GS-10 for Coated Printing Paper
Patient Menus – Uncoated Paper	• Green Seal GS-07 for Printing and Writing Paper
Patient Menus – Coated Paper	• Green Seal GS-10 for Coated Printing Paper
Paper Products used in Preparation of Food	• Green Seal GS-08 for Paper Products Used in the Preparation of Food

Note: Recycled content thresholds referenced in Green Seal standards meet or exceed the U.S. EPA Comprehensive Purchasing Guidelines.

FS Credit 4.3 continued

Reusable & Non-Reusable Products: **Non-Food Service Ware Items**

Suggested Documentation

- ❑ Maintain documentation from suppliers that demonstrates how products meet the "preferred" or "more preferred" criteria in accordance with Credit Goals over a minimum one-year period.

Reference Standards

U.S. Environmental Protection Agency (EPA) Comprehensive Procurement Guidelines,
<http://www.epa.gov/cpg/products.htm>.

Green Seal, <http://www.green Seal.org>

Health Care Without Harm, "Choosing Environmentally Preferable Food Service Ware-Reusable and Sustainable Biobased Products," <http://www.noharm.org/details.cfm?ID=1456&type=document>

Processed Chlorine-Free®, <http://chlorinefreeproducts.org/marks.htm>

Potential Technologies & Strategies

- **Credit Synergies:** *Coordinate implementation of this credit with GGHC IO Prerequisite 1: Integrated Operations & Maintenance Process; GGHC WM Prerequisite 1: Waste Management Plan; GGHC WM Prerequisite 2: Waste Generation Profile and Measurement; GGHC ES Credit 1.1-1.2: Environmentally Preferable Cleaning: Policy Development; GGHC ES Credit 1.3-1.5: Environmentally Preferable Cleaning: Sustainable Cleaning Products and Materials; GGHC ES Credit 3: Indoor Integrated Pest Management; GGHC FS Credit 1: Sustainable Food Policy and Plan; GGHC FS Credit 2: Sustainable Food Education and Promotion; GGHC FS Credit 3: Local, Sustainably Produced Food Purchasing; GGHC FS Credit 5: Hospital Supported Agriculture: Food and Farm Linkages; GGHC FS Credit 6.1: Food Donation and Composting; GGHC FS Credit 6.2: Food Services Recycling; GGHC FS Credit 7: Food Vendors; GGHC FS Credit 8: Chemical Management for Food Services; GGHC EP Credit 1: Solid Waste Prevention in Purchasing.*
- Reduce overall use of packaging by requesting suppliers to eliminate excess packaging. Coordinate with GGHC EP Credit 1: Solid Waste Prevention in Purchasing.
- Install roll type dispensers to limit quantities of paper products used. Use large rolls wherever possible, and hands-free dispensers that limit paper portions. Do not use C-fold or multi-fold paper towel systems.
- Reduce paper consumption through strategies such as digital data storage, double-sided copying, computer-generated reports, and intranet communication.
- Control napkin use via distribution points instead of making them readily available via dispensers.
- Eliminate unnecessary use of trash can liners.
- Purchase reusable products. When disposable products are required, purchase items with high recycled or renewable material content and manufactured without the use of highly hazardous chemicals.

FS Credit 4.3 continued

Reusable & Non-Reusable Products: **Non-Food Service Ware Items**

- Employ the suggested supplier survey questions in the HCWH fact sheet “Choosing Environmentally Preferable Food Service Ware” to identify environmentally preferable food service ware.
- Purchase food in bulk containers where possible and distribute condiments from behind the counter rather than offering self-service.

Resources

Case study: U.S. Environmental Protection Agency (EPA) Green Cafeterias,
<http://www.practicegreenhealth.org>

Jamie Harvie, Michelle Gottlieb, Roberta Anderson and Marie Kulick, *Green Guide for Health Care Food* Technical Brief, <http://www.gghc.org>

Processed Chlorine-Free® certified products, <http://www.chlorinefreeproducts.org/endorsed.htm>

Reach for Unbleached-Choosing Chlorine-Free Paper and Paper Products,
<http://www.noharm.org/details.cfm?type=document&id=598>

Recycled Content Products Directory, <http://www.ciwmb.ca.gov/RCP/>

1 point

FS Credit 4.4

Reusable & Non-Reusable Products: Bottled Water Elimination & Public Drinking Water Access

Intent

Support environmental stewardship of virgin resources by purchasing reusable and non-reusable products.

Health Issues

Water is essential to life. As such, access to water is a human right. Increasingly, commercial bottled water sales are supplanting public access to public water supplies, while 40% of commercially sold bottled water in the U.S. and Canada is derived from municipal tap water. Bottled water travels many miles from the source, resulting in the burning of fossil fuels during production and through transport and contributing to global greenhouse gases and other emissions. Bottled water also contributes to the billions of plastic bottles deposited annually in landfills and to the plastic contamination of the marine environment. Bottled water also erodes support for public water supply and infrastructure and may restrict drinking water access in some areas from populations with reduced economic means.

Credit Goals

- Eliminate single-use bottled water sales throughout the facility including vending/meetings and conferences.
- In cafeteria provide easy access to water derived from local public water supply and through signage clearly indicate its availability.
- In cafeteria provide reusable water containers (for purchase or free) and through signage or shelf space clearly indicate their availability.
- In vending areas and break rooms provide clear signage indicating nearest local publicly accessible water fountain.

FS Credit 4.4 continued

Reusable & Non-Reusable Products:

Bottled Water Elimination & Public Drinking Water Access

Suggested Documentation

- ❑ Document the facility's purchasing policy to eliminate single-use bottled water sales throughout facility including vending/meetings and conferences.
- ❑ Demonstrate through documentation such as photographs and purchasing/sales records that the cafeteria provides easy access to water derived from local public water supply, availability of reusable water containers, and appropriate signage in the cafeteria and next to vending machines in accordance with Credit Goals.

Reference Standards

There is no reference standard for this credit.

Potential Technologies & Strategies

- **Credit Synergies:** Coordinate implementation of this credit with GGHC IO Prerequisite 1: Integrated Operations & Maintenance Process; GGHC WM Prerequisite 1: Waste Management Plan; GGHC WM Prerequisite 2: Waste Generation Profile and Measurement; GGHC ES Credit 1.1-1.2: Environmentally Preferable Cleaning: Policy Development; GGHC ES Credit 1.3-1.5: Environmentally Preferable Cleaning: Sustainable Cleaning Products and Materials; GGHC ES Credit 3: Indoor Integrated Pest Management; GGHC FS Credit 1: Sustainable Food Policy and Plan; GGHC FS Credit 2: Sustainable Food Education and Promotion; GGHC FS Credit 3: Local, Sustainably Produced Food Purchasing; GGHC FS Credit 5: Hospital Supported Agriculture: Food and Farm Linkages; GGHC FS Credit 6.1: Food Donation and Composting; GGHC FS Credit 6.2: Food Services Recycling; GGHC FS Credit 7: Food Vendors; GGHC FS Credit 8: Chemical Management for Food Services.
- For meetings, provide pitchers and reusable glasses.
- At nursing stations provide pitchers or consider installation of water filters at taps in nursing stations.
- In the cafeteria, provide easily accessed and publicly identified public water source.
- Install water fountains throughout the facility.
- Sign the Think Outside the Bottle Institutional Pledge <http://www.thinkoutsidethebottle.org>

Resources

Think Outside the Bottle Campaign, <http://www.thinkoutsidethebottle.org>

Blue Ocean Society resources on Marine Plastic <http://www.blueoceansociety.org/plastics.htm>

Food and Water Watch <http://www.foodandwaterwatch.org/water/bottled>

1 point

FS Credit 5

Hospital Supported Agriculture: Food & Farm Linkages**Intent**

Support local and regional food production by increasing its visibility in the community and strengthening local agriculture infrastructure.

Health Issues

Locally produced and distributed foods in the local market may reduce the fuel consumption and accompanying emissions associated with long distance transport. Furthermore, sustainably-produced food often comes from small or mid-sized farms on the edges of cities and therefore contributes to the preservation of farmland and open space near urban areas. Supporting locally owned and managed farms reinforces the economic well-being of producers and communities. Many communities are considered food deserts, lacking access to fresh and/or local foods. By providing access to fresh local foods, health care institutions can help improve consumption of nutritious food and awareness about fresh healthy foods while supporting the local economy.

Credit Goals

Develop and implement a program or programs incorporating a minimum of three (3) of the following:

- **Processing and Season Extension** – Beyond direct food purchases, develop and support relationships with at least one local farm, not-for-profit farming organization, and/or meat or produce processing facility to extend the seasonal availability of local food for the facility.
- **Food Service Procurement** - Proactively coordinate with local family managed or owned farm(s) to match planting decisions with purchasing intentions prior to growing season.
- **Farmers Markets** - Host and promote local (within immediate service area or neighborhood) or on-site farmers markets during growing season.
- **Food Box** - Actively promote Community Supported Agriculture (CSA) food box programs for patients, employees and/or community residents. Host CSA pick up locations on-site.
- **Hospital Garden or Hospital Farm** - Support on-site or off-site hospital owned food producing garden(s) and/or farm(s).
- **Urban Garden Program** – Provide direct or in-kind support for not-for-profit urban food producing community garden organization(s).
- **Conference and Meeting Food Policy** – Develop and implement a policy requiring sustainable purchases in accordance with GGHC FS Credit 3 for minimum 50% of combined food and beverage purchases (by cost) at all facility-sponsored or -hosted conferences and workshops (both onsite and with contracted hotels or conference centers).

Note: An innovation point is available to facilities implementing two additional criteria.

Note: For the purposes of this Credit, "local" is defined as sourced from within a 200-mile radius.

FS Credit 5 continued

Hospital Supported Agriculture: Food and Farm Linkages

Suggested Documentation

- Compile and annually revise records of hospital-supported agriculture in accordance with the Credit Goals.

Potential Technologies & Strategies

- **Credit Synergies:** *Coordinate implementation of this credit with GGHC IO Prerequisite 1: Integrated Operations & Maintenance Process; GGHC SSM Credit 1: Site Management; GGHC SSM Credit 2: Reduced Site Disturbance; GGHC SSM Credit 5: Connection to the Natural World; GGHC WM Prerequisite 1: Waste Management Plan; GGHC WM Prerequisite 2: Waste Generation Profile and Measurement; GGHC ES Credit 3: Indoor Integrated Pest Management; GGHC FS Credit 1: Sustainable Food Policy and Plan; GGHC FS Credit 2: Sustainable Food Education and Promotion; GGHC FS Credit 3: Local, Sustainably Produced Food Purchasing; GGHC FS Credit 4: Reusable & Non-Reusable Products; GGHC FS Credit 6.1: Food Donation and Composting; GGHC FS Credit 6.2: Food Services Recycling; GGHC FS Credit 7: Food Vendors; GGHC FS Credit 8: Chemical Management for Food Services.*
- Fresh, nutritious food is available at farmers markets across the United States. Many hospitals and health systems, e.g., Kaiser Permanente, host seasonal farmers markets on-site. Farmers markets support local farms, reduce food miles, and help to increase access to healthy food for patients, staff and local community residents.
- Hospital or Community Supported Agriculture (CSA) is a way to support local farmers and sustainable agriculture; establish direct connections between consumers and farmers; and, increase access to nutritious, seasonal, high quality, and mostly organic food. In practice, CSAs often involve a system of weekly delivery or pick-up of vegetables, as well as flowers, fruits, herbs and occasionally milk or meat products. By making a financial commitment to a farm, CSA participants become "members" or "subscribers" of the CSA. Most CSA farmers prefer that members pay for the season up-front, but some farmers will accept weekly or monthly payments. Potential drop-off sites include hospitals, childcare centers, and/or local schools or other sites where families regularly visit. Alternatively facilities can include rebates or discounts through their employee wellness programs
- In many urban areas, vacant lots have been converted into urban gardens. Studies have shown that urban gardens have a measurable impact on the surrounding community's level of nutrition and that access to community gardens is an important strategy for improving vegetable consumption. Health care campuses can implement or host community gardens.
- Incorporating requirements for sourcing locally and sustainably into hotel and conference center contracts helps provide greater support and demand for sustainable foods.
- Over the last several decades the number of local processing facilities has declined through industrial consolidation. A variety of season extending techniques such as hoop houses, cold storage and state approved processing facilities such as mobile butchering buses support producers' access to markets.

FS Credit 5 continued

Hospital Supported Agriculture: Food & Farm Linkages

Resources

Janet Bachmann, "Farmers' Markets: Marketing and Business Guide." Resources on how to start a Farmers Market, <http://attra.ncat.org/attra-pub/PDF/farmmarket.pdf> Community Food Security Coalition, <http://www.foodsecurity.org/>.

Food Med, <http://www.foodmed.org>

Health Care Without Harm, Farmers' Markets and CSAs on Hospital Grounds, <http://www.noharm.org/details.cfm?ID=1134&type=document>

Health Care Without Harm Food website, <http://www.healthyfoodinhealthcare.org>

Jamie Harvie, Michelle Gottlieb, Roberta Anderson and Marie Kulick, *Green Guide for Health Care Food Technical Brief*, <http://www.gghc.org>

Kaiser Permanente Farmers Market Resource Guide, <http://www.noharm.org/details.cfm?ID=1112&type=document>

Marie Kulick, *Healthy Food, Healthy Hospitals, Healthy Communities*, includes several case studies on hospital-based farmers' markets, <http://www.healthobservatory.org/library.cfm?refid=72927>.

Local Harvest. Information and listings on CSA's throughout the US and many other resources on local food production. <http://www.localharvest.org/csa/>. Lots to Gardens, supported by the Sisters of Charity Health System in Maine, is a youth and community driven organization that uses sustainable urban agriculture to create access to fresh food, and to nurture healthy youth and a healthy community, <http://www.stmarysmaine.com/about/foundation/special/lots.html>.

Model local, nutritious, Sustainable Food at Conferences, Meetings and Workshops Society for Nutrition Education, "Guidelines To Increase The Use Of Local Foods At Meetings," <http://www.sne.org/guidelinesformetings.htm> and downloadable brochure "A Sense of Place: Serving Local Food at Your Meeting," http://www.sne.org/locfoods_n.pdf

Plow to Plate, <http://www.plowtoplate.org> - hospital-sponsored community coalition supporting local farms, food, and health

Ripe for Change: Rethinking California's Food Economy addresses the root causes of breakdown in the food economy and points to solutions and case studies of how an alternative vision can work, <http://www.isec.org.uk/ripeforchangepage.html>

Urban Community Gardens, <http://www.mindspring.com/~communitygardens/orgs.html>

U.S. Department of Agriculture, Food and Nutrition. The primary focus of this program is food security. <http://www.fns.usda.gov/fsec/>

1 point

FS Credit 6.1

Food Waste Reduction, Donation & Composting**Intent**

Support food security programs, soil restoration, and waste reduction through food waste reduction, donation and composting programs.

Health Issues

According to the U.S. EPA, roughly 20% of food produced in the U.S. is disposed of prior to consumption.¹ A 1998 Memorandum of Understanding between the U.S. EPA and the American Hospital Association targeted a reduction in total waste volume. Food and food waste products are the second largest constituent of the health care waste stream, comprising close to 20% of the solid waste volume in medical facilities with food service operations. Food donations both reduce facility solid waste disposal costs and reduce the need to produce and purchase duplicate food items for non-profits and charities such as homeless shelters and food kitchens. Beneficial reuse of organic matter diverts waste constituents from disposal while also contributing to ecosystem health. Composting organic matter and applying it to the soil increases soil micronutrients, and reduces reliance on chemical fertilizers and their associated industrial, ecologic and health burdens.

Credit Goals

- Develop and implement a food waste reduction and donation program for usable food, as deemed by state health code and other regional regulators.
- Develop and implement a food waste composting program consistent with Department of Health and solid waste regulations, for collection from all food use areas including but not limited to: catering, patient rooms (where possible by regional regulation), cafeteria and food preparation areas.
- Develop and implement food waste reduction, donation and food waste composting written management plans and include in the overall Waste Management Plan outlined in GGHC WM Prerequisite 1.
- Estimate and track pounds of composted and donated food and include under the recycling section of the Waste Management Waste Profile outlined in GGHC WM Prerequisite 2.
- Provide controlled areas to facilitate removal of food waste, consistent with an Integrated Pest Management (IPM) plan as outlined in GGHC ES Credit 3: Integrated Pest Management.

¹ U.S. Environmental Protection Agency EPA, <http://www.epa.gov/wastewise/pubs/wwupda7.pdf>

FS Credit 6.1 continued

Food Waste Reduction, Donation & Composting

Suggested Documentation

- ❑ Compile and annually review documentation demonstrating food waste reduction by tracking waste data (by weight) through the Waste Generation and Profile outlined in GGHC WM Prerequisite 2 Waste Generation Profile and Measurement.
- ❑ Compile and annually review reduction, donation and compost plan and include updates in the Waste Management Plan: GGHC WM Prerequisite 1.
- ❑ Prepare and annually update a space program and plan showing the area(s) dedicated to food waste collection and storage (and composting if applicable).
- ❑ Compile and annually review copies of contract(s) with food waste hauler, composter, food donation contractor (or others) demonstrating compliance with credit goals.

Reference Standards

There is no reference standard for this credit.

Potential Technologies & Strategies

- **Credit Synergies:** *Coordinate implementation of this credit with GGHC IO Prerequisite 1: Integrated Operations & Maintenance Process; GGHC SSM Credit 1: Site Management; GGHC SSM Credit 2: Reduced Site Disturbance; GGHC SSM Credit 5: Connection to the Natural World; GGHC WM Prerequisite 1: Waste Management Plan; GGHC WM Prerequisite 2: Waste Generation Profile and Measurement; GGHC ES Credit 1.1-1.2: Environmentally Preferable Cleaning: Policy Development; GGHC ES Credit 3: Indoor Integrated Pest Management; GGHC FS Credit 1: Sustainable Food Policy and Plan; GGHC FS Credit 2: Sustainable Food Education and Promotion; GGHC FS Credit 3: Local, Sustainably Produced Food Purchasing; GGHC FS Credit 4: Reusable & Non-Reusable Products; GGHC FS Credit 5: Hospital Supported Agriculture: Food and Farm Linkages; GGHC FS Credit 6.2: Food Services Recycling; GGHC FS Credit 7: Food Vendors; GGHC FS Credit 8: Chemical Management for Food Services.*
- Implement food service programs to reduce volume of unconsumed prepared food. Strategies include such programmatic innovations as “room service”, “meals on demand,” “just in time” food preparation, control of excessive late trays (duplicate patient trays), mitigate sometimes wasteful catering and physician feeding procedures, maximize yields from fresh produce and meat, and limit spoilage through improved handling procedures, or other programs that have been demonstrated to reduce the quantity of unconsumed food.
- Store food waste destined for composting in secure locations outside of patient areas to protect the building occupants from coming in contact with it.
- Work with state environmental regulator and/or policy makers to pull entities together to find outlets and support composting in a health care environment.
- A hospital’s food preparation area generates the largest amount of food waste, by weight, and is a good place to start implementation of the food donation and waste reduction program.
- Site material and waste handling areas as close to the food services department as possible to facilitate baling and/or storage of recyclables and waste for preparation and storage prior to removal.

FS Credit 6.1 continued

Food Waste Reduction, Donation & Composting

- Implement on-site composting programs for food wastes and compostable non-reusable food service items, or contract with private or municipal compost ventures or small-scale farmers for handling of food waste.
- Include the requirements associated with the food waste collection system in the space program, including storage spaces. Determine size of spaces based upon volume of projected waste and length of time anticipated for storage. Consider Integrated Pest Management issues outlined in GGHC ES Credit 4: Integrated Pest Management in design.
- Donate Emergency Preparedness food to a food bank one month prior to the food's expiration date.
- Adjust inventory levels on perishables to reduce waste due to spoilage or dehydration.
- Request that suppliers take back shipping boxes for reuse or recycling.
- Distribute condiments from behind the counter instead of offering self-service.
- Educate cafeteria users through signage and brochures.
- Review state Department of Health Code for guidance on food composting in a health care facility.

Resources

Food Donation Page from Minnesota Technical Assistance Program
<http://www.mntap.umn.edu/source/13-4/Sr998-g7.htm>

Jamie Harvie, Michelle Gottlieb, Roberta Anderson and Marie Kulick, *Green Guide for Health Care Food Technical Brief*, <http://www.gghc.org>

Health Care Without Harm's Environmentally Preferable Purchasing Food Service Ware Fact Sheet,
<http://www.noharm.org/details.cfm?ID=1456&type=document>

Health Care Without Harm's Biobased food service ware and fact sheet,
<http://www.noharm.org/details.cfm?ID=1659&type=document>

Practice Greenhealth, 10-Step Guide to Composting in Healthcare Facilities,
<http://www.practicegreenhealth.org>

Practice Greenhealth, Composting Page, <http://www.practicegreenhealth.org>

Practice Greenhealth, Donation and Surplus Programs, <http://www.practicegreenhealth.org>

U.S. Environmental Protection Agency (EPA) food waste reduction fact sheet,
<http://www.epa.gov/epaoswer/non-hw/reduce/food/food.htm>

U.S. Environmental Protection Agency (EPA) food donation fact sheet,
<http://www.epa.gov/wastewise/pubs/wwupda7.pdf>

U.S. Environmental Protection Agency (EPA) WasteWise program, <http://www.epa.gov/epaoswer/non-hw/reduce/wstewise/index.htm>

1 point

FS Credit 6.2**Food Services Recycling****Intent**

Increase recycling of food services generated wastes to reduce solid waste disposal in landfills and incinerators.

Health Issues

According to the U.S. EPA, roughly 20% of food produced in the U.S. is disposed of prior to consumption.² All waste is preventable to a certain extent. And, the majority of non-hazardous solid waste can be recycled, composted, or otherwise diverted from landfill or incineration. Since the 1998 Memorandum of Understanding between the U.S. EPA and the American Hospital Association mandating reduction in total waste volumes, hospitals have initiated ambitious waste prevention, sorting and recycling programs. Food and food waste products are the second largest constituent of the health care waste stream, comprising close to 20% of the solid waste volume in medical facilities with food service operations. Recycling conserves natural resources and reduces greenhouse gas emissions by reducing demand for virgin materials and reducing the amount of waste sent to landfills and incinerators.

Credit Goals

Implement recycling for all of the following Food Service materials:

- Glass, metal and plastic (preferably in a single stream, upon availability in region).
- Corrugated boxes, boxboard and paper
- Shrink wrap (bagged or baled)
- Return pallets to vendors for reuse.

Suggested Documentation

- Compile and annually review documentation demonstrating food waste reduction through recycling by tracking recycling data (by weight) through the waste management plan outlined in GGHC WM Prerequisite 1.
- Track recycling and reuse pounds for inclusion in waste profile tracking as outlined in GGHC WM Prerequisite 2.
- Prepare and annually update a space program and plan showing the area(s) dedicated to recycling collection and storage.
- Compile and annually review copies of contract(s) with recyclers demonstrating compliance with credit goals.

Reference Standards

There is no reference standard for this credit.

² U.S. Environmental Protection Agency EPA, <http://www.epa.gov/wastewise/pubs/wwupda7.pdf>

FS Credit 6.2 continued

Food Services Recycling

Potential Technologies & Strategies

- **Credit Synergies:** Coordinate implementation of this credit with GGHC IO Prerequisite 1: Integrated Operations & Maintenance Process; GGHC WM Prerequisite 1: Waste Management Plan; GGHC WM Prerequisite 2: Waste Generation Profile and Measurement; GGHC ES Credit 1.1-1.2: Environmentally Preferable Cleaning: Policy Development; GGHC ES Credit 3: Indoor Integrated Pest Management; GGHC FS Credit 1: Sustainable Food Policy and Plan; GGHC FS Credit 2: Sustainable Food Education and Promotion; GGHC FS Credit 3: Local, Sustainably Produced Food Purchasing; GGHC FS Credit 4: Reusable & Non-Reusable Products; GGHC FS Credit 5: Hospital Supported Agriculture: Food and Farm Linkages; GGHC FS Credit 6.1: Food Donation and Composting; GGHC FS Credit 7: Food Vendors; GGHC FS Credit 8: Chemical Management for Food Services.
- Consider purchasing a baler, which can be used to compact a variety of types of materials from cans to plastics to shrink wrap to boxes.
- Site material and waste handling areas as close to the food services department as possible to facilitate baling and/or storage of recyclables and waste for preparation and storage prior to removal. Some facilities store bagged recyclables and when they have enough, they bale them into a size that makes storage easier and prepares the material for pick up by recycler. Other facilities place recyclables into a collection container (for example, a 5 yard container) that is serviced by the recycling vendor.
- If compliance is a problem in the cafeteria, consider eliminating waste and recycling containers so that all trays are returned with wastes/recyclables on the trays and employees properly segregate recyclables from the trays.
- Educate patients and visitors through signage on patient menus and on tent cards in the cafeteria.
- Place recycling bins next to beverage dispensing machines.
- Expand bottle and can collection to break areas, patient lounges and wherever soda machines are located throughout the facility. Service receptacles daily consistent with infection control protocols.
- Request that suppliers take back shipping boxes for reuse or recycling.
- Purchase food in bulk containers where possible and distribute condiments from behind the counter rather than offering self-service.
- Integrate food service waste reduction efforts into overall facility environmental initiatives, recognizing their role in an overall environmental sustainability program.

Resources

Practice Greenhealth Waste Reduction Page: <http://www.practicegreenhealth.org>

Practice Greenhealth Specific Material Recycling Page, <http://www.practicegreenhealth.org>

1-2 points

Food Credit 7.1-7.2

Food Vendors

Intent

Establish facility-wide implementation of healthy, sustainably produced food service programs by establishing parallel policies and programs with contracted food service vendors.

Health Issues

Shifts in the U.S. food system over the last century are compromising human and ecological health. While total farm acreage has declined, farm size has increased and is more focused on concentrated monocropping. This contributes to declining diversity of food crops necessary to fulfill human nutritional needs, while also leading to a loss of biodiversity. In the U.S., the typical food item now travels from 1,500 to 2,400 miles from farm to plate. This long travel distance disconnects growers from consumers, increases opportunities for food contamination and nutrient loss.

Routine use of antibiotics in animal agriculture has been shown to increase antibiotic resistance among bacteria that cause human infections. Pesticide drift, field dust, waste burning, toxic gases from degrading manure, and diesel exhaust from transporting food long distances are all factors related to food production that contribute to asthma, cardiovascular disease and lung cancer. Commercial fertilizers and pesticides contaminate surface- and ground-water in many locales. Large-scale animal feedlot operations contribute to water pollution with biologically active hormones, nitrates and other breakdown products of untreated animal waste. Calorie-rich, nutrient-poor diets contribute to obesity, diabetes, cancer, and a variety of degenerative diseases. By moving toward a healthier and more sustainable food system, health care can help alleviate human health problems associated with inadequate or inappropriate nutrition, antibiotic resistance, air and water contamination, and global health issues such as climate change.

Credit Goals

In addition to complying with the relevant GGHC Food Service credits through the Food Service department, establish and maintain facility-wide implementation of Food Service credits through contracts with food vendors. Calculate based on total facility food service budget including contracted food vendors unless listed otherwise. Up to two points total available. Additional innovation points available for facilities that achieve more than two of the categories listed below.

1 point	100% of all food service operations attain all 3 points under FS Credit 3: Local, Sustainably Produced Food Purchasing.
1 point	100% of all food service operations attain at least 2 points under FS Credit 4: Reusable and Non-reusable Products.
1 point	100% of all food service operations attain FS Credit 6: Food Donation and Waste Reduction.

**Note: For the purposes of this credit, nutritionally healthy vending machine food is defined as meeting the Kaiser Permanente Minimum Standard for Healthy Food and Beverage Selections in Vending Machines or equivalent.*

Food Credit 7.1-7.2 continued

Food Vendors

Suggested Documentation

- ❑ Demonstrate through purchasing records that combined annual facility wide food service purchases meet Credit Goals. Review and revise records annually.
- ❑ Compile and annually review vendor contracts requiring compliance with relevant GGHC Food Service credit goals.

Reference Standards

Kaiser Permanente Minimum Standard for Healthy Food and Beverage Selections in Vending Machines, <http://www.foodalliance.org/sustainablefoodpolicy/kaise/Kaiser%20Permanente%20Healthy%20Vending%20Standards.pdf>

Potential Technologies and Strategies

Refer to Potential Technologies and Strategies associated with GGHC FS c3: Local, Sustainably Produced Food Purchasing, GGHC FS c4: Reusable and Non-Reusable Products, and GGHC FS c6: Food Donation and Waste Reduction.

Resources

See also Resources associated with GGHC FS c3: Local, Sustainably Produced Food Purchasing, GGHC FS c4: Reusable and Non-Reusable Products, and GGHC FS c6: Food Donation and Waste Reduction.

- American Medical Association, 2006 survey of fast food in healthcare facilities. The report found that of the 234 hospitals surveyed, 42 percent were selling brand-name fast food on their campuses. <http://www.amsa.org/cph/healthyhospitals.cfm>
- The Health Collaborative Healthy Vending Guidelines: A Fit City Initiative San Antonio, Texas, <http://www.healthcollaborative.net/assets/pdf/vendingcriteria.pdf>
- Kaiser Permanente Minimum Standard for Healthy Food and Beverage Selections in Vending Machine, www.foodalliance.org/sustainablefoodpolicy/kaise/Kaiser%20Permanente%20Healthy%20Vending%20Standards.pdf
- University of Michigan Health System and Ann Arbor VA Medical Center, 2002. The report found 38% of the nation's top health institutions had regional or national fast food franchises on their main medical campuses. <http://www.med.umich.edu/opm/newspage/2002/fastfood.htm>

1-2 points

FS Credit 8.1-8.2**Chemical Management for Food Services****Intent**

Minimize toxic chemical use in food services preparation and service areas, including cleaning chemicals and pest management.

Health Issues

The health of building occupants and the local ecosystem can be directly impacted by the chemicals and materials used for clinical and facility operations. Sustainable cleaning practices are an essential part of sustainable building. Some cleaning products use toxic chemicals hazardous to human health and the environment. Some chemicals can compromise indoor air quality and cause cancer, reproductive disorders, respiratory ailments (including occupational asthma), eye and skin irritation, central nervous system impairment, and other ailments. In addition, some chemicals used in these products are classified as persistent, bioaccumulative and toxic (PBT), are classified as hazardous waste, and/or otherwise contribute to environmental pollution during their manufacture, transport, use, and/or disposal. Non-toxic and least-toxic cleaning products and materials are available on the market that meet or exceed health care facilities' performance requirements. By working in consultation with infection control committees, hospitals can minimize unnecessary disinfection as part of their toxic chemical reduction and indoor air quality improvement plans. The emerging field of nanotechnology presents potential benefits to society, while also posing risks associated with nanoscale materials' ability to cross biological barriers that protect human organs and tissues. Preliminary studies have reported toxic effects of nanomaterials on the lungs, heart, reproductive system, kidneys, and skin. Given uncertainty about the toxic effects of nanomaterials, a precautionary approach regarding their use is appropriate.

Credit Goals**FS Credit 8.1: Cleaning Products**

- Utilize environmentally preferable cleaning products to clean food preparation and food service areas (cafeterias), kitchen equipment, surfaces and dishware. These products may include floor cleaners, drain cleaners, oven cleaners, dish detergent, glass and surface cleaners, and multipurpose cleaners and sanitizers meeting the following criteria:
 - Utilize cleaning products certified under the listed specifications in GGHC ES Credits 1.3-1.4 for available product categories.
 - Avoid phenolics in Food Service applications.
 - Where use of a sanitizer is recommended for previously cleaned food contact surfaces, sanitizer must meet U.S. EPA Efficacy Data Requirements for Sanitizing Rinses, and be in accordance with the U.S. Food and Drug Administration Hazard Analysis and Critical Control Point (HACCP) standard. All sanitizers for food contact surfaces must meet the current U.S. Food and Drug Administration Food Code (2005).
 - If using chlorinated sanitizers, ensure concentrations of available chlorine are no greater than 200ppm for previously cleaned food-contact surfaces in food service areas (per U.S. EPA Efficacy Data Requirements for Sanitizing Rinses), unless required by authorities having jurisdiction (AHJ). AHJs may include state and local health departments and/or the U.S. Food and Drug Administration.

FS Credit 8.1-8.2 continued

Chemical Management for Food Services

- Use of disinfectants for hard surfaces (not food contact surfaces) in Food Services areas shall only occur as the result of explicit evaluation and recommendation by the Infection Control committee using the Infection Control Risk Assessment (ICRA) process. Ensure that the selection of any disinfectant for use on hard surfaces is an EPA-registered hospital-use disinfectant under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requirements.
- Utilize only integrated pest management (IPM) techniques for pest management in the food services area per GGHC ES Credit 3: Integrated Pest Management.

FS Credit 8.2: Cutlery and Food Preparation Equipment

- Develop and implement a policy/program in consultation with the facility's Infection Control Committee and in accordance with the facility's Infection Control Risk Assessment and Audit that prohibits the purchase and use of cutlery and food preparation equipment impregnated with antimicrobials.

Suggested Documentation

FS Credit 8.1

- Compile and revise annually an inventory of cleaning products used in food services areas in accordance with Credit Goals.
- Document and annually review use of IPM techniques for pest management in food services areas.
- Compile and review annually documentation of contractors' agreement to abide by the chemical management program outlined in Credit Goals.

FS Credit 8.2

- Document and annually review progress of the policy/program to prohibit impregnated antimicrobials from cutlery and food preparation equipment in accordance with Credit Goals.

Reference Standard

U.S. Environmental Protection Agency (EPA), 40 CFR Parts 152, 156, and 158. Exemption of certain pesticide substances from Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requirements. Amended 1996. Federal Register 1996;61:8876-9, <http://www.epa.gov/oecaerth/civil/fifra/index.html>

U.S. Environmental Protection Agency (EPA), Efficacy Data Requirements for Sanitizing Rinses (for previously cleaned food-contact surfaces). Jan. 30, 1979, http://www.epa.gov/oppad001/dis_tss_docs/dis-04.htm

U.S. Food and Drug Administration Food Code, <http://www.cfsan.fda.gov/~dms/foodcode.html>

U.S. Food and Drug Administration Hazard Analysis and Critical Control Point (HACCP), <http://www.cfsan.fda.gov/~lrd/haccp.html>

FS Credit 8.1-8.2 continued

Chemical Management for Food Services

Potential Technologies and Strategies

Refer to the Potential Technologies and Strategies in GGHC ES Credit 1 and Credit 3.

- **Credit Synergies:** *Coordinate implementation of this credit with GGHC IO Prerequisite 1: Integrated Operations & Maintenance Process; GGHC CM Prerequisite 2: Chemical Management Policy and Audit; GGHC CM Credit 1: Indoor Chemical Contaminant Prevention; GGHC ES Credit 1.1-1.2: Environmentally Preferable Cleaning: Policy Development; GGHC ES Credit 3: Indoor Integrated Pest Management; GGHC FS Credit 1: Sustainable Food Policy and Plan; GGHC FS Credit 2: Sustainable Food Education and Promotion; GGHC FS Credit 3: Local, Sustainably Produced Food Purchasing; GGHC FS Credit 4: Reusable & Non-Reusable Products; GGHC FS Credit 5: Hospital Supported Agriculture: Food and Farm Linkages; GGHC FS Credit 6.1: Food Donation and Composting; GGHC FS Credit 6.2: Food Services Recycling; and, GGHC FS Credit 7: Food Vendors.*
- Meet with health department liaison and food services director to determine organisms of concern in foodborne illnesses and review environmentally preferable cleaning product specifications to ensure adequate protection through food storage, preparation, and food service cleaning policies and procedures.
- Work with facilities maintenance and food service staff to identify facility fixes, maintenance activities, and methods to improve physical building pest barriers in the food services area.

Resources

Refer to the Resources section in GGHC ES Credit 1 and ES Credit 3.

European Trade Union Confederation (ETUC) Resolution on nanotechnologies and nanomaterials, <http://www.etuc.org/a/5163>

European Trade Union Institute – Research, Education, Health & Safety (ETUCI-REHS) NANOCAP Project, http://hesa.etui-rehs.org/uk/dossiers/dossier.asp?dos_pk=18,

Out of the laboratory and on to our plates: Nanotechnology in food and agriculture, <http://nano.foe.org.au/node/220>

U.S. Centers for Disease Control and Prevention (CDC) Guidelines for Environmental Infection Control in Healthcare, 2003, http://www.cdc.gov/ncidod/dhqp/gl_environmentinfection.html

U.S. Environmental Protection Agency (EPA), Antimicrobial Science Policies, Disinfectant Technical Science Section (DIS/TSS), <http://www.epa.gov/oppad001/sciencepolicy.htm>

U.S. Environmental Protection Agency (EPA), Sanitizing Rinses (for previously cleaned food-contact surfaces), DIS/TSS-4 Jan 30, 1979, http://www.epa.gov/oppad001/dis_tss_docs/dis-04.htm