How Does Your Garden Grow?

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Objectives

- Name the benefits of creating a garden for your customers and employees.
- Discuss the regulatory support for edible gardens.
- Discuss the logistics of setting up an edible garden.
- Describe food safety risks that must be considered when setting up an edible garden.

Poll

Does your facility currently have an edible garden?
Health Benefits

Benefits of Gardens

- Horticulture therapy
  - Pain reduction
  - Improves attention
  - Stress reliever/ decreases agitation
  - Helps with hematopoietic support to the brain
  - Improves psychiatric symptoms

Employee Health Benefits

- Unique opportunity for patient/community treatment and education
  - Increase physical activity
  - Increase consumption of fruits and vegetables
- Feelings of well-being
  - Community building
  - Environmental stewardship
  - Stress reduction
  - Feelings of productivity and autonomy from learning new skills


Regulatory Support
Centers for Medicaid & Medicare Services

483.60 i) that facilities could procure food directly from local producers, farmers or growers, in accordance with state and local laws or regulations.

(ii) that this provision does not prohibit or prevent facilities from using produce grown in facility gardens, subject to compliance with applicable safe growing and food-handling practices.

Memorandum

Residents can benefit from having a variety of fresh foods for their consumption, as long as the dangers of food-borne illness are mitigated to the greatest extent possible through the facility.

Centers for Medicaid & Medicare Services, October 4, 2016; Centers for Medicaid & Medicare Services, September 7, 2011.

Logistics
Poll

Which of the following would be your greatest concern in setting up a garden?
A. Defining the purpose for the garden.
B. Finding the right set up for the garden.
C. Establishing food safety protocols for working in and harvesting the garden.
D. Marketing the garden.

Overview

- Purpose
- Support
- Regulations
- Space/Setup
  - Outdoor
  - Indoor
  - No space
- Training
- Marketing
Purpose

- Desire to provide “local” food
- Provide a connection to the land
- Therapy
- Education
  - Customers
  - Employees

Support- Personnel

- Core committee
  - Planning
  - Funding
  - Input
- Support committee
  - Administration
  - Maintenance
- Volunteers
- Leading activities
- Set-up/tear down
- Watering/maintenance
Support – Safety/Legal

- Quality Assurance and Performance Improvement (QAPI)
  - Paperwork maintenance for volunteers (permission slips, photo releases)
  - Knowledge/satisfaction of garden (residents/staff/family)
  - Training auditing (safety, basic gardening skills, etc.)
  - Compliance with policies (food safety, receiving, chemical usage)
  - Food borne illness audits potentially related to harvested produce

- Legal aspects
  - Permission slips and photo releases
  - Insurance policies to cover volunteers and foodborne illness outbreaks

- Cooperative Extension Office
  - Provide information on local food, gardening, area Master Gardeners programs

Support - Funding

**FUNDING USAGE**

- Set-up
  - Construction material
- Seeds/plants
- Soil/fertilizer
- Water
- Staff
- Education tools
- Gardening tools

**FUNDING SOURCES**

- Local food pantries
- AmeriCorps
- FoodCorp
- Rotary Club
- Future Farmers of America (FFA)
- Feeding America
- Local hardware and garden store
- Food manufacturers
- Grants
  - USDA - Peoples Garden
  - National Garden Association - [garden.org](http://garden.org)
Regulations

- Gardens must adhere to state/local health and sanitation requirements

- Gardens must have policies and procedures for maintaining gardens
  - Good Agricultural Practices (GAP) and Good Handling Practices (GHP)
  - Include a section on addressing foodborne illness outbreaks

Regulation Resources

- Pioneer Network – www.pioneernetwork.net
  - Gardening policy available in the New Dining Standards Toolkit
- Institute of Child Nutrition – theicn.org
  - Produce Safety Resources
    - Food Safety Tips for School Gardens
    - Handling Fresh Produce in Classrooms
- USDA Farm to School - https://www.fns.usda.gov/farmtoschool/farm-school-resources
Space: outdoor

- Container garden
- Straw bale garden
- Raised bed
- Native gardens

Space: indoor

- Aquaponic/hydroponic
- Container garden
- Tower garden
- Native garden
Space: no space

- Community garden
  - School
  - Community space/food pantry
- Old farm
- Urban renewal project

Set-up: Soil

EXISTING
- Potentially less expensive if the soil will work “as is”
- Should be tested for contamination
  - Cooperative Extension office
  - Land grant university
  - Agricultural department (high school, college)
- May still need to add fertilizer and other components to optimize

IMPORTING
- Upfront cost
- Correct mix for what you are growing
- Consider soil that is packaged to sell for growing food
Set-up: Construction Material

- Non-toxic materials
  - Raised beds – no chemically treated wood or tires
  - Containers – food grade
  - Stakes
  - Trellises

Set-up: Plants

- Appropriate for zone
  - Check with local garden stores or catalogs
  - Consider growing season
  - Consider exposure to light
  - planthardiness.ars.usda.gov

- Appropriate for container
  - Container size plants vs. garden bed plants

- Non-allergenic and non-toxic plants
  - Check with local Cooperative Extension

https://planthardiness.ars.usda.gov/PHZMWeb/
Set-up: Placement

- Uphill and away from potential sources of contamination
  - Streets
  - Run-off
  - Drainage pipes
  - Garbage
  - Utilities
- “Call Before You Dig” 811 – utility companies
- Create barriers to protect from animals and unauthorized guests
  - Fences – locked
  - Cages

Set-up: Water

- Safe water source
  - Municipal water
- Potential water sources – check with local Cooperative Extension office
  - Rain barrel
  - Private well
  - May need to be tested several times throughout the growing season
  - Maintain water testing records
- Non-safe water source
  - Pond
  - Fountains
- Use food grade containers to transport water
Set-up: Chemicals

- Avoid pesticides and herbicides
  - Check with local Cooperative Extension office for non-chemical local pest control techniques
- Fertilizers
  - Maintain Safety Data Sheet – educate on its location to all volunteers
  - Check with local health department about OSHA standards regarding use
  - Do not use food containers for dispensing fertilizer
  - Only allow coordinators in charge to mix and apply
  - Label and store properly away from food in a locked unit
  - Do not use raw manure – biological hazard
- Compost
  - Seek advice from local Cooperative Extension office or composting expert
  - Restrict access to compost
  - Only use plant materials – not oils, protein, or animal waste
  - Wear gloves
  - Consider purchasing commercially prepared compost that is safe for edible gardens
    - Vermicomposting

Set-up: Garden Equipment

- Personal protective equipment – store separate from food preparation equipment
  - Garden gloves
  - Safety glasses
  - Garden shoes
- Harvesting materials
  - Use clean and sanitized food-grade containers
  - Use clean and sanitized food-grade knives/scissors
  - Discard produce that has been contaminated by animals or insects
Set-up: Garden Log

- Log
  - Who harvested
  - What was harvested
  - Amount
  - When harvested
  - What is the produce used in
  - Signed in by foodservice staff

<table>
<thead>
<tr>
<th>Harvest Log</th>
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<tbody>
<tr>
<td>Date</td>
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Training: Garden Group

- Include all members involved with the garden
- Topics for training
  - Policy and procedure
  - Basic food and garden safety training
    - Proper clothing and footwear (closed-toed shoes)
    - Personal protective equipment
  - Safety and storage of equipment
    - Keep separate from food handling equipment
    - Wash and sanitize utensils used to harvest/process produce
  - Safe fertilizer application/exposure
Training: Garden Group

- Infection control
  - Hand washing and personal hygiene
  - Glove usage
  - Handling produce during harvest, washing, transportation
- Addressing potential food borne illnesses
  - Harvest logs
  - Receiving and storage of produce from the garden

Training: Foodservice Staff

- Follow same food safety guidelines as other produce
  - Inspect produce when bringing it into the kitchen
  - Receiving and storage of produce from the garden
  - Tracking how the produce is used
  - Wash produce prior to preparing, not prior to storing
- Store
  - Refrigerate at <41°F when received (unless produce is stored at room temperature)
  - Store separate from commercially purchased produce for traceability
  - Store in a covered container away or above products that could contaminate it (raw meat, fish, poultry)
  - Date mark produce that has been prepared so it is discarded within 7 days
  - Process for later use (check with local health department)
Marketing

- Passive
  - Bulletin boards
  - Newsletters (paper or electronic)
  - Facebook/website

- Active
  - Taste tests
  - Garden tours
  - Highlight on the menu
  - Recipe contest or “food fight”

Garden Talk: Outdoor
University of Vermont - Medical Center Rooftop Garden

University of Vermont – Learning Garden
Garden Talk: Indoor

Viterbo University
Garden Talk: Community Collaboration

Learn2Grow, Grow2Learn
Summary

- Facility gardens can be both therapeutic and community building.
- Edible gardens are supported by federal regulations as long as local/state regulations are followed.
- Teamwork approach is essential for successfully building a gardening program.
- Food safety risks can be minimized by establishing and following food safety protocols.

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Please note that the opinions and information shared by these individuals are their own and not those of Reinhart Foodservice.
References

- Photos: www.pixabay.com; www.shutterstock.com; Meredith Hink