Planting Seeds for Lifelong Health: Improving Food Environments in Native Communities

Elizabeth Hoover, PhD

Roadmap:

• Food-related health issues in Native communities
• Benefits (cultural, social, physical and mental) of gardening programs
• Steps to help you establish a gardening program in your community
American Indian health statistics → the need for fresh, healthy food

- AI experience significantly higher obesity rates than other ethnic groups
- Diabetes: AI are 2.3x more likely to be diagnosed than general US population
- Cardiovascular disease: 16.7% of AI men, 9.1% in general population of men. 13.1% of AI women, national rate=6.8%
- Hypertension rates also higher for AI men and women than national average

**Why?** Low fruit and vegetable consumption
High sugar, carb, fat, sodium consumption
Low energy output
To become healthier: Traditional Diet

- Fresh vegetables, lean meats, fish, nuts, berries
- “Corn, beans, and squash—that also is a medicine. It’s not just a food. It’s a medicine too.”
- John Mohawk: “I’ve been to the hospital and they’ll kill you from the kitchen. They clearly don’t believe that food is medicine.”

Benefits of traditional diet for health

- Corn + beans= perfect protein
- 3 Sisters= diet high in complex carbohydrates, vitamins
- Beans- low glycemic index, good for moderating blood sugar
- Studies in Australia, US, Canada—put indigenous peoples back on their original diets= weight loss, improved blood sugar
HIV and nutrition

• Good nutrition necessary for healthy immune system
• HIV can lead to malabsorption of nutrients
• Vitamins A, B12, C, D, carotenoids, selenium, zinc, iron
• Retroviral drugs- lipid abnormalities

On reservation: Reasons for Fewer Farms:

• Increased participation in wage labor market
• Cost of upgrading technology, inability to procure loans
• Lack of access to land
• Concerns about potential impacts of contamination
Fewer Gardens

- Too busy with full time jobs
  - “we’re grocery store Indians”
- “too lazy”
  - Kids want to play video games all day
- Not enough land
- Lack of knowledge

Benefits of garden project: Physical

- Increased consumption of fruits & vegetables
  - Adults w/ family member involved in community garden ate more F&V
  - Kids involved in gardening programs got families to eat more F&V
- Increased physical activity
- Garden work reduces stress, anger, blood pressure
Benefits of garden project: Social

- Develop relationships: community based group of growers, cooperative projects
- Promote intergenerational activities
- Nice green space for social gatherings, information sharing, co-learning

Benefits of garden project: mental

- Working in garden reduces stress, impacts of depression
- Lower risk of dementia in older people who garden
- Food security—eases stress
- Positive impact on domestic violence shelter residents
Benefits of garden project: spiritual/cultural

- Develop connection with food that is grown, culturally important crops
- Most effective interventions are culturally relevant
- Create “healing gardens” through horticultural therapy
- Cultural importance of caring for seeds

Economic Benefit of Gardens

- Save money not having to buy produce
- Sell produce
  - Farmers markets
  - Farm to school, nursing home, group home, hospital
  - Restaurants and grocery stores
Food Sovereignty Assessment

• Food is important aspect of local economy
• Food is critical part of community revitalization
• Healthy communities ↔ healthy residents. People need to be more involved in nutritional issues
• Distinguish between having enough to eat on a caloric basis, and having enough nutritional and culturally appropriate food
• What kinds of foods should be available to your community? If they aren’t what are the limiting factors. What can we do to remedy that?
• Assets and needs assessment

Urban Community Garden Spaces

• Providence RI: Lots of Hope Program
• Student combed through city records- lots foreclosed on
• Assessed for sun exposure, surface quality, neighbors
• Partnering with organization representing African farmers in need of growing space
Little Earth Urban Farm
Dal Halsey, designer

Individual raised beds
Mohawk Healthy Heart Project

SIZE & SHAPE OF GARDEN

Nuestras Raices, Holyoke MA
Utilizing multiple Spaces, New Urban Farmers, Pawtucket RI and Seekonk MA

5 acre Fennario Field in Seekonk MA

1.5 acre Garden of Life, Gallego Court

Partner with Social Services Organization

- John Hope Settlement House, Providence RI
- Students developed garden program
- Created recipes around produce grown in garden, cook books
- Establishing farmers market for parents
Dream of Wild Health, Hugo MN

- Cora’s Kids
- Garden Warriors Apprentice Program
- Youth Leaders Group
- Women’s Circle

Soil fertility (organic)

- Partner with local farmer for composted manure
- In cities—deliveries of compost
- Compost food scraps
Cold Season Gardening

- Cold frames
- Hoop houses
- Black plastic or mulch around base of plants
- Hoop house inside a greenhouse – can grow spinach all winter
- Geodesic dome
  – New Urban Farmers (RI)
- For more info:
  – Elliot Coleman, Four Seasons Farm (ME)
  – Garden Goddess Winter Greenhouse (MN)

Farm to School

- Farm to nursing home/group home/diabetes program etc
- Benefits: provides a market for your farmers, residents eating healthy local foods
- Challenges:
  – contracts with big companies (Sysco etc)
  – USDA regulations
Healthy Corner Store Initiative

- Environmental Justice League of RI (EJLRI), EcoYouth project
- Helped to outfit local bodegas and corner stores with displays for fruits and vegetables
- Problem: access is not the only issue. People have to want to buy the produce rather than junk food
- Restructuring the message to appeal to teens

Kanenhiio Mobile Farmers Market

- Kanenhiio mini-market to take to park in busy areas with produce
- Take to areas of community without fresh food access
Kanenhi:io Ionkwaienthon:Hakie
“We are Planting Good Seeds”
Feel free to contact me

• Elizabeth Hoover
• Elizabeth_M_Hoover@brown.edu

Resources

• Indigenous Farm to School Guide
  www.firstnations.org/sites/documents/INDIGENOUS%20FARM%20TO%20SCHOOL%20PROGRAMS.pdf

• Food Sovereignty Assessment Tool:
  http://falcon.aihec.org/Lists/WhatsNew/Attachments/3/Food%20Sovereignty%20Assessment%20Tool.pdf

• New Urban Farmers (for more info on geodesic dome for gardens)
  http://newurbanfarmers.org/domes.html