Healthy FCS Classrooms: New Perspectives on Social and Cultural Factors
Presented by Candace K. Fox, PhD, CFCS

Background Goals

- Sustain FCS programs in schools
  - Update our image
- Present culturally relevant healthy lifestyle information within the classroom
  - Variety of foods
  - Contemporary lifestyle

Objectives

- Identify social and cultural factors that influence healthy lifestyle choices.
- Determine ways to showcase the healthy lifestyle information within classrooms, schools, and communities.
- Develop an understanding of how problem solving can help individuals make healthy lifestyle choices.
- Create and apply healthy choices within the classroom related to healthy lifestyle choices.
1. Who is in the audience?
A. future teachers  
B. current public school teachers  
C. teacher educators  
D. others?

Broad Field FCS Competencies
3. Family Well-being  
   – 3B. Evaluate the effects of diverse perspectives, needs, and characteristics of individuals and families

6. Nutrition and Wellness  
   – 6A. Analyze factors that influence nutrition and wellness across the life span, and be able to educate others to implement this information.  
   – 6B. Evaluate various dietary guidelines when planning to meet nutrition and wellness needs, and be able to educate others to implement this information.

Nutrition, Food, and Wellness Competencies
1. Wellness  
   – 1A. Assess emotional, psychological, spiritual, cultural, and intellectual influences on individual/family food choices and nutrition and wellness across the lifespan.  
   – 1B. Analyze economic and environmental influences on food choices and nutritional practices.  
   – 1D. Analyze the effects of food and diet fads on wellness.
Healthy Living

Standard 1: Advocate a Healthy Lifestyle
• Advanced Benchmark A: Evaluate social and cultural factors that influence healthy lifestyle choices.
  2. Interpret ethnic perceptions of body weight and food choices.


Healthy Living, cont.

• Advanced Benchmark C: Choose food patterns for healthy lifestyle outcomes.
  7. Determine the many cultural influences on food preparation techniques.
  9. Evaluate healthy food choices that span cultural patterns and preferences.

2. Why do we eat what we eat?
   A. Source of pleasure
   B. Source of sustenance
   C. Gain social status (form of social capital)
   D. Narcissistic preoccupation with body

3. Why do we prepare what we do in our Foods classes?

A. Tradition
B. Limited time
C. Limited money—inexpensive foods
D. Specific techniques

Feel free to write your ideas in the chat area.

Ways to alter tradition?

• Change the nutritional value of a food
  – “Calorie Count” analyzes your recipes, changes with new ingredients, computes food label
  – “Recipe Calculator” at Spark People—similar to above
  – Pumpkin muffin—grade of B-
  – Following example is for ‘granola bars’

Calorie Count—example
Altering traditions, cont.

• Try a new vegetable each lab day (or week)
  – Challenge was given to Nutrition students
  • Even a new ‘food’ could be a challenge!
  – Okra, kohlrabi, rattail radishes, daikon radishes,
    eight ball zucchini, squash varieties
• Ask students for suggestions
  – Family favorites
  – Cultural dishes might be new to others

Limited resources

• Limited time
  – Pre-prep and demo a food that takes more time
  – Cook couscous one day, finish as salad next day
• Limited money
  – Donations?
  – Small sample portions
Food and Culture

• One teacher’s account: Hispanic students didn’t know what some foods were
• Used children’s books to make learning relevant (bilingual)
  – *Sip, Slurp, Soup, Soup/ Caldo, Caldo, Caldo*- Bertrand
  – *Chato’s Kitchen-Soto*
• One mother sent in tamales for all to try

Just the facts, please

• By 2020, approximately ½ of public schools students will be culturally and/or linguistically diverse (CLD) students
• Over 1,000 students from foreign countries enter U. S. public school each day
• Majority of teachers are white, middle class

Culp, B. (2012). Culturally responsive teaching:

• Doesn’t exclude existing curricula and lessons
• Enhances, enriches the learning process
• Adds values to classes and teaching
• Avoids ethnocentric assumptions
  – Asian student who is assumed to be low on calcium intake may be eating mineral-rich broth
How do we plan our curriculum?

- Often we think in terms of what we want
- Standards based but have latitude to make some decisions
- Bias—how does it enter into the curriculum?
  - Personal: whole wheat bread or white?
  - Cultural: pork products
  - Ethnic: communication skills
  - Finding biases—Understanding Prejudices

“Principles and Practices of Culturally Responsive Pedagogy”

- “A Beginning Guide to Meeting the Needs of Diverse Learners in Physical Activity”
- Discusses types of bias
- Discusses the role of bias in informing our practices
- Suggests ways to become more culturally responsive in PE classroom

Cultural Background Pies

- Who are you?
- Why do you believe as you do?
- What/who shaped your beliefs?
- Some parts of our identity—gender, SES, family, location, ethnicity, religion, location, hobbies/interests
- Each person’s pie will be different. Will they have the same view of the world?

Two different cultural background pies

What shaped my pie?
- Female affects much of what I do
- Access to local food
- Pork and sauerkraut!
- Friend and collaborator
- Worldview, stewardship
- Second chance at parenting!

What would your pie look like?
- Gender
- SES
- Location
- Ethnicity
- Family
- Religion
- Age
How do we classify foods?

A. Inedible
B. Edible by animals, but not by me
C. Edible by humans, but not by my peers
D. Edible by humans, but not by me
E. Edible by me

Can you give examples of each category?


Classifications of food

A. Inedible foods—taboos such as cattle in India
B. Edible by animals but not by me—varies by culture; ants in US, corn in France-feed grain
C. Edible by humans, but not by my kind—giant snails acceptable in Africa
D. Edible by humans, but not by me—choices
E. Edible by me—all foods that I consume

Ex-durian

4. Which of these facts is true about ‘durian’?

A. It is high in fiber
B. It is readily available in US grocery stores
C. It has a mild, pleasant odor
D. Thailand holds a World Durian Festival in May
Cultural Influences

• Obesity is an issue for society
  – 42% of Americans could be obese by 2030 (CDC)
• Much higher rates in African American, Mexican American, and Native American populations
• Tend to view others’ foods and diets as strange—Jell-O
• How can diets be modified for culture?

Other Cultural Influences

• Culture of the family
• Cultural issues in physical activity
  – Religious limitations on appropriate dress
  – Helmet affects on hairstyles
• Cultural issues towards body image
  – Desirable body types

Deaton, A.V., and Pollock, C. Culturally sensitive approaches to healthy eating and activity: A compilation of resources and strategies. Healthsmartva.pwnet.org

Sample Modifications
Arabic “Food Pyramid”

- Combination Foods:
  - Falafel (meat, fat)
  - Hummus (meat, fat)
  - Tabouli (vegetable, grain, fat)
  - Baba Ghannouj (vegetable, fat)
  - Pilaf (grain, fat)
  - Stuffed Grape Leaves (meat, grain, fat)
  - Sample recipe in supporting materials

Other Sources for Food Pyramids

- Oldways—Health Through Heritage
  - Extensive website that examines the history behind the food of a culture; includes recipes, webinars, spice charts, substitutions
    - Mediterranean
    - African
    - Latino
    - Asian
    - Vegetarian

Oldways Resource Sample

1. [Eggplant Image]
Ten Pyramids of the World

- UK beat us to the plate!

Comparison of Food Guides

- James Painter, 2002
- Attempted to collect guides from 20 countries
- Some have adopted US
- Mexico and Great Britain each have plates
- Sweden, Portugal have circles
- Charted 7 different guides for comparison

Canada’s Food Guide

- “Eating Well with Canada’s Food Guide-First Nations, Inuit and Métis”
- Very detailed presentation that expands on Canada’s Food Guide
- Recognizes the importance of traditional and store-bought foods for First Nations peoples
  - Beaver, caribou, moose, crab, fish
Canada’s Food Guides

- General one

Integrating American Indian Education into FCS

- Focuses on preparing teacher candidates
  - Includes background reading and history
- Article discusses all areas of FCS including:
  - Family life education
  - Personal and family finance plus Housing
  - Food and Nutrition
  - Textiles, Fashion and Interior Design

FCS teacher education, cont.

- Article suggests that candidates could create unit plans or lesson plans with an emphasis on being culturally responsive.
American Indian Diet Resources

- Native American Food Pyramid (USDA 2010)
  - Traditional foods in culturally responsible way
- American Indian and Alaska Native Heart Disease and Stroke Fact Sheet (CDC)
- American Indian Health and Diet Program (2010) University of Kansas

Sample from “River of Recipes”

Blue Corn Flapjacks
Makes 8 servings

Ingredients
- 2 eggs
- ½ cup non-fat dry milk
- 1½ cups whole wheat flour
- 1 tablespoon vegetable oil
- 1 teaspoon baking powder
- 1 teaspoon baking soda
- 2 tablespoons sugar
- 1 teaspoon salt

Instructions
1. Mix all ingredients in a blender. Blend until smooth. Pour mixture into a greased or oiled 9x13” baking pan.
2. Bake at 350°F (175°C) for 25 minutes or until the edges are golden brown.

Nutrition Information (per serving):

<table>
<thead>
<tr>
<th>Carbohydrates</th>
<th>23 g</th>
</tr>
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<tbody>
<tr>
<td>Total Fat</td>
<td>7 g</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>4 mg</td>
</tr>
<tr>
<td>Sodium</td>
<td>160 mg</td>
</tr>
</tbody>
</table>

Programs for Nutritional Reform

- “My Big Fat Diet” (Wortman, 2008)
  - Alert Bay, B.C. village returns to native diet
- Promoting Physical Activity and Nutrition in an American Indian Community (CDC)
- Diabetes Education in Tribal Schools (National Institute of Diabetes and Digestive and Kidney Diseases, 2009)
  - K-12 materials
Science Activities

- Available on the Internet
- Several activities could be used as background material for FCS classrooms
- Labs could be created using these topics as a basis

Food Preservation

- Drying—jerky
- Salting and drying—Chinese dried fruits
- Pickling—pickles, sauerkraut
- Fermenting—sauerkraut, yogurt, cheese
- Fire—smoked meats
- Ice—freeze-dried potatoes, ice cream
- Oil—replaced by corks

Cancer and Culture

- Breast cancer affects 5X fewer women in Japan and China
- Colon cancer lower in Japan and China
- Stomach cancer in China is 90.9 cases in 100,000 people, 6.5 cases in United States
- When Japanese move to US, their risk of colon cancer increases and stomach cancer decreases—why?
Cancer and Culture, cont.

- Higher rates of breast cancer in US women could be related to a protein, called a receptor estrogen—could be controlled by diet, drugs
- Higher rates of stomach cancer in Chinese could be due to diet high in preserved vegetables—not fresh
  - Increasing intake of vitamins A and E reduced rates by 13%

Cancer and Culture, cont.

- Lifestyle choices matter
  - Lung cancer low in Japan until cigarette smoking increased in mid 1900s.
- Adopting healthful practices of countries around the world and avoiding harmful ones can lower our cancer risk

Biodiversity

- Growing interest in restoring crop diversity
- Indigenous people are returning to traditional agriculture methods
- Value of diversity
  - 30,000-80,000 edible plants
  - Humans rely on about 150
  - 3 crops (rice, corn, and wheat) make up one-half of human diet
Some diverse crops

• Blue corn—Hopi included in rituals
  – tortilla, cornbread, pancakes
  – 30% more protein than yellow corn
• Amaranth—popular in West Africa today
  – seeds can be popped like popcorn, 500,000 seeds
  – highest protein of any grain
  – leaves like spinach, high in iron, fiber, A & C

Diverse crops, cont.

• Quinoa—grown in Andes for at least 5,000 yrs.
  – Higher level of amino acids than other grains
  – 3 times more calcium and 2 times more phosphorus as wheat
  – Can be boiled, toasted, or popped
• Blue potatoes
  – May be higher in mineral content

Our challenge?

• Consider the culture of your students
• Consider the culture of your candidates future students
• Consider your biases
• Become culturally responsive