Theoretical Concepts as a Guiding Principle for Developing Food Preservation and Safety Program for Youth

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OBJECTIVES

- Modify an existing adult food preservation program for youth
- Identify a well known public health theory
- Incorporate the health belief model for youth program planning
Foodborne botulism cases and median age in the United States from 2001-2012

http://www.cdc.gov/nationalsurveillance/botulism-surveillance.html
UNSAFE FOOD PRESERVATION

- Unsafe food handling behaviors
  - Personal hygiene

- Outdated equipment/recipes
  - Recipes before 1997

- Unreliable processing methods
  - Inversion canning
  - Microwave canning
FOOD PRESERVATION AND SAFETY PROGRAM FOR YOUTH

Associated risk

Increased recognition of farmer’s market and community/home gardening.

Increased popularity & participation in county/state fairs

Research & USDA recommendations

Youth program
WHO WE ARE?

- Smith-Lever Act 1914, partnership between the agricultural colleges and the U.S. Department of Agriculture.

- Over 100 Land Grant Universities throughout USA.

- University of Maryland College Park & University of Maryland Eastern Shore.
WHO WE ARE CONTD...


- State ➔ Cluster ➔ County
WHAT WE DO?

- Assess needs in the communities
- Establish & strengthen partnerships
- Create & implement community focused programs
GLIMPSE OF GROW IT EAT IT PRESERVE IT FOR YOUTH

Adapted from University of Maryland Extension’s (UME) adult Food Preservation curriculum.

Changes in curriculum content for youth audience:
- More pictures, less words
- Videos
- Fair labeling guide
- Exclusion of handouts
- Simple language

ACTIVITIES:
- Jelly bean germ,
- Glo germ hand washing experiment
How canning preserves food

Safe temperatures and danger zone for canning

Link between food acidity and spoilage
Risk of botulism and symptoms

Participating in fairs

Videos, games, activities, taste-testing, hands-on canning.
GLIMPSE OF GROW IT EAT IT PRESERVE IT FOR YOUTH CONTD…..

- Recommended canning methods, equipment, recipes and processing
- Personal hygiene, preparing and handling food ingredients
- USDA recommendations
- Not recommended practices

**Dishwasher Canning**

**Open Fire Canning**
A theory presents a systematic way of understanding events or situations.

It is set of concepts, definitions and propositions that explains and predicts these events or situation by explaining relationship between variables.

Primary elements of a theory

Concepts developed or adopted for use in specific theory

The way a construct is to be measured in a specific situation

A number of theories to help understand an issue
USING THEORY FOR PROGRAM PLANNING

- Program planning (program outlining, flow, content development)
- Answering questions (what, why, how etc.)
- Assessment of current program
- Framework for studying problems (why of the issue)
- Evaluation tool designing
- Program evaluation (overall success and lessons learnt from the program)

HOW TO SELECT A THEORY?

Questions to ask while selecting a theory:

- Does the theory include similar variables/issues and exclude redundancy?
- Does it make sense in certain scenario?
- Has it been used for similar purpose/ research/ program?
- Start with a logic model
- Work backwards from the end goal/outcome.

WELL KNOWN THEORIES IN PUBLIC HEALTH

- Health Belief Model
- Transtheoretical Model
- Social Cognitive Theory
- Theory of Planned Behavior
- Socio-Ecological Model
HEALTH BELIEF MODEL (HBM)

- HBM is widely used theory in public health.

- It addresses the individual’s perceptions of the threat posed by a health problem, the benefits of avoiding the threat, and factors influencing the decision to act.
HEALTH BELIEF MODEL (HBM) CONTD…

- Perceived susceptibility of disease or disability
- Perceived severity of disease or disability
- Perceived benefits of health improving behavior
- Perceived barriers to health improving behavior

HEALTH SEEKING BEHAVIOR

Rosenstock & Becker’s Health Belief Model
HEALTH BELIEF MODEL (HBM) Continued...

Perceived Susceptibility

Incidence of Botulism & foodborne illnesses through canning.

Symptoms of foodborne illnesses, and news article on botulism cases,

Perceived severity

Healthy Seeking Behavior

Safe home canned products, increased confidence in canning, prevention of foodborne illnesses.

Perceived benefits

Lower chances of spoilage, lower food and health costs, prevention of foodborne illnesses through home canned foods.

Perceived barriers
THANK YOU!

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Adapted from:
USDA Home Canning Guide #6 (2009)
So Easy to Preserve text (5th edition 2006)
University of Georgia, National Center for Home Food Preservation
Putting Food By, Janet Greene, Ruth Hertzberg, and Beatrice Vaughan, Penguin Group, 2010

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QUESTIONS?
COMMENTS!

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