About Eating: An Online Program With Evidence of Increased Food Resource Management Skills

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Objectives

- Identify and describe the multi-stage formative activities associated with producing an online health and nutrition program targeting low-income persons.
- Examine criteria to select appropriate online program evaluation measures.
- Explain the dynamics of comparison group selection in impact assessment.
- Reflect on the applicability of evidence-based nutrition education to current and planned practice.
PRINCIPLES OF ADULT LEARNING

- Self-directed; self-learning
- Draws on accumulated life experiences when learning
- Learning readiness may be time or role change specific
- Intrinsically motivated
- Problem-centered; application immediately

EDUCATORS HELP ADULTS LEARN BY

- Explaining reasons for what is being taught
- Focus on tasks rather than content to memorize
- Address real life problems
Tenets of the Satter Model of Eating Competence

“. . .intra-individual approach to food selection and eating behaviors focused on enjoyment, attention to internal regulation of intake, food acceptance, and food resource management skills. . . “
Educating using ecSatter

- Build relationships - don’t criticize; help learners have self-efficacy.
- Dignify eating “bless eating.”
- Emphasize providing, not depriving
- Trust people to learn and grow
- Identify and discard restrained eating
- Stress family meals
- Join learners where they are
- Teach meal planning

JNEB 2007;39:S189-S194

- **Program Design**
  - Content Areas
  - Evidence Based
  - Goal Setting
  - Appropriate for Audience
  - Literacy Considerations
  - Theoretical Basis
  - Goals and Objectives
  - Social Ecological Model

- **Program Delivery**
  - Learning Styles
  - Experiential Activities
  - Contacts
  - Fidelity
  - Enhancement Items
  - Collaboration

- **Educator Characteristics**
  - Relate to the Target Audience
  - Expertise in Content
  - Expertise in Teaching Methods
  - Performance Expectations

- **Educator Training**
  - Initial Training
  - Ongoing Training
  - Observation of Educators

- **Evaluation**
  - Formative Evaluation
  - Process Evaluation
  - Outcome Evaluation
  - Impact Assessment
  - Sustained Behavior Change
  - Goals and Objectives
  - Social Ecological Model

"About Eating" is unique

- The 6 modules can be completed in any order;
- Within each module, learners can make selections, then revise their decisions before the end of the module;
- Little pressure to engage in module components that don’t interest learners;
- Learners can return to lessons as many times as they want.
Evaluation

- Pre and post program
- Includes EARS items
- Post module evaluation

- Unique surveys available
- Tracking by email address [and unique site code]
Congratulations on completing About My Size.

We are interested in what you liked, what you didn't like, your ideas for changes and any other comments. Your responses below will help us know your thoughts about the lesson. Please choose the best answer that reflects how you think or feel by clicking on the circle. When finished, you will be shown the About Eating Program start page. There you can choose another lesson or revisit a lesson you previously completed.

<table>
<thead>
<tr>
<th></th>
<th>Yes, definitely</th>
<th>Yes, sometimes</th>
<th>No, not very much</th>
<th>No, not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>The lesson was difficult to read.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Getting around the website was difficult.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>This lesson was interesting.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>This lesson was useful for me.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I liked the pictures.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Overall, the length of the lesson was good.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I liked the overall design and/or color.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Please tell us about yourself by answering these questions. This will help us to make changes to the lessons so they are better for you.

What is your highest level of education?

- Not a high school graduate
- High school/GED
- Some college or 2-year degree (includes business, technical school, military training)
- 4-year college degree

Please indicate your age:

-- Please Select --

Indicate your gender:

- Male
- Female
- Prefer not to answer
- Other
Constant Beta or Agile Response

**Single Lesson Formative Assessment**
Small sample sizes (n=12, 24)
Very Targeted audience
- Geo-diversity
- Lesson Order
- Interviewer/Rapport
- Re-evaluation of revisions

**5-Lesson Version**
Health Center (n=84)
Impact Assessment-Randomized Controlled Study (n=512)

**6-Lesson Version**
Parent education component of school-age cooking project (ongoing)
Impact Assessment - Who’s Eligible?

- Females, 18 – 45 y
- County not in SNAP-Ed
- Good General Health
- No 5-yr Dx CVD, Cancer, Liver/Lung Dz, Diabetes
- No weight loss surgery in past 5 y

- Read and write English
- Not in 4-yr college
- Not studying/employed as nutritionist
- Email address
- Internet Access
Recruited: $3.11
Completed: $9.97

Recruited: $5.06
Completed: $17.34

Cost/Participant Recruited: $4.09
Cost/Participant Completed: $13.66
Facebook Is an Effective Strategy to Recruit Low-income Women to Online Nutrition Education

Barbara Lohse, PhD, RD, LDN

$9.26 per eligible participant

$11.48 per interested eligible participant

$15.30 per low-income interested eligible participant

Methods: An advertisement in Pennsylvania to invite a sample of low-income women, 18-45 years old, living in Pennsylvania to complete a survey. The sample was interested in nutrition education and completed surveys about food-related behaviors in a preprogram survey. 52 completed a preprogram survey. Completers were mostly white (73%), with mean age 36.2 ± 12.9, and not eating competent (75%). Low-income (n = 39) of completers. Total recruitment cost over 19 days was $15.30 per low-income interested eligible participant.

Conclusions and Implications: Facebook appears to be an effective modality for recruitment to nutrition education projects.

Key Words: low-income, nutrition education, social network, Facebook, recruitment, Pennsylvania, low-income women, nutritional education, social network.
Pre/Post Program Surveys: Randomly assigned by Survey Research Center

Pre-Survey
- How learned of study?
- Reasons for sign-up
- Internet usage
- Culinographics
- SNAP/EFNEP use
- Food security screener
- Worry about $ for food
- Food restrictions
- Demographics
- Contact information

Post-Survey
- AE evaluation, use
- Module ranking
- Life event changes
- Changes in eating
- Overall comments

Both Surveys
- Self-rated eating habits
- Food preference-14 items
- Food availability in home-9 items
- 18-item 3 Factor Eating Questionnaire
- EFNEP Food Resource Mgmt/LOC
- Wt/ht, Wt satisfaction, desired weight
- Amount of physical activity
- Eating Competence-ecSI/LI
Key

Number of links sent

Number of completers

Day 3
Day 8
Day 13

Lesson 1 Link
Lesson 1 Completed
Lesson 2 Link Sent

Day 6
Day 10

Number of attritors

LESSON 1

- Indicates immediate completion of step
- Day range of lesson link sent varies by lesson completion time
- Email reminder sent 3 days post lesson link if lesson not completed
- Email reminder sent 5 days post lesson link and post survey link if lesson or survey not completed
- Email reminder sent 2 days post survey link if survey not completed
- Latest possible day for lesson or survey completion
Of 154 About Eating completers:

40 order combinations
70% started with 1 (Food Variety)
13% started with 5 (About Being Active)
Only 31% used order listed on website
<table>
<thead>
<tr>
<th>Assessment Item a</th>
<th>About Eating²¹ (n = 155)</th>
<th>Comparison²¹ (n = 148)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre Mean (SD)</td>
<td>Post Mean (SD)</td>
</tr>
<tr>
<td>Run out of food before the end of the month?</td>
<td>2.7 (1.3)</td>
<td>2.4 (1.2)</td>
</tr>
<tr>
<td>Use nutrition facts on the food label to make choices?</td>
<td>3.1 (1.1)</td>
<td>3.3 (1.2)</td>
</tr>
<tr>
<td>Use a written spending plan or budget for food?</td>
<td>2.7 (1.4)</td>
<td>3.0 (1.3)</td>
</tr>
<tr>
<td>Keep track of some or all of your food-related expenses?</td>
<td>2.8 (1.3)</td>
<td>2.9 (1.3)</td>
</tr>
<tr>
<td>Feel confident about managing your money to make healthy food available to you?</td>
<td>3.1 (1.1)</td>
<td>3.3 (1.1)</td>
</tr>
<tr>
<td>Plan meals to include all food groups?</td>
<td>3.2 (1.0)</td>
<td>3.4 (1.0)</td>
</tr>
<tr>
<td>Make successful recipe from scratch?</td>
<td>3.7 (1.1)</td>
<td>3.9 (1.0)</td>
</tr>
<tr>
<td>Compare prices to save money?</td>
<td>4.1 (0.94)</td>
<td>4.1 (0.84)</td>
</tr>
</tbody>
</table>

NS indicates not significant.

aPossible responses range from 1 (do not do this) to 5 (almost always do this); bPre–post paired t test.
Mean change from baseline

**Confidence managing money for food**

- **Food Secure**: P=0.002
- **Food Insecure**: NS

**About Eating**

- **Food Secure**: 0
- **Food Insecure**: P=0.07

**Click ’n Go**

- **Food Secure**: NS
- **Food Insecure**: NS

**Uses a written budget/spending plan**

- **Food Secure**: 0.4
- **Food Insecure**: 0.3

**About Eating**

- **Food Secure**: P=0.07
- **Food Insecure**: NS

**Click ’n Go**

- **Food Secure**: 0.3
- **Food Insecure**: NS

**Keeps track of food related purchases**

- **Food Secure**: 0.4
- **Food Insecure**: P=0.02

**About Eating**

- **Food Secure**: NS
- **Food Insecure**: NS

**Click ’n Go**

- **Food Secure**: NS
- **Food Insecure**: NS
Evaluation Considerations

- Consider evaluation objectives
  - F&V intake?

- Consider recruitment issues
  - Time/Cost

- Be contextual-evaluate it like you would use it
  - Online navigation considerations

- Pick your control/comparison group very carefully
  - Consider similarities and dissimilarities

Learn from the evaluation!
Funded with USDA FNS SNAP-Ed funds provided to PSU for PA Nutrition Education TRACKS