Selected Evaluation Tools for Nutrition and Healthy Lifestyles Projects

This document provides a selection of validated assessment tools that have been used to assess programs similar to those supported by Nutrition and Healthy Lifestyles (NHL) grant funds. Public Policy Associates, Inc. assembled this resource to help project leaders select the most appropriate evaluation tools for their programs. The use of these tools is not required in projects funded by the Health Fund.

The assessment tools were chosen based on the following factors:

- Their topical relevancy to NHL programming goals
- Their focus on gathering pre- and post-program data for measuring progress toward outcomes
- Tools that have been validated through prior research
- Most are promoted by federal offices such as the Centers for Disease Control and Prevention and the U.S. Department of Agriculture

This document provides basic information on each tool’s purpose and audience, as well as comments on its mode of administration, ease of use, adaptability to different formats, grade reading level, level of burden required of respondents, and other considerations.

Analytics. Before selecting a tool, project leaders should also understand the analytic requirements of each tool and the capacity required to manage the resulting data; code, transform or score the responses; and summarize the findings. It is critical to develop a data analysis plan prior to information-gathering. Validated tools should be used as intended, whether that be as a whole or as standalone modules; the use of only some items within an assessment tool is not recommended. If tools are partially implemented, then it may not be accurate to claim that one is using a validated tool.

The tools are organized according to:

- Consumption of fruits and vegetables
- Physical activity
- Food resource management

Within each content area, tools are ordered by:

- Behavior change
- Goals and intentions
## Category 1: Consumption of Fruits and Vegetables

<table>
<thead>
<tr>
<th>Assessment Tool Name</th>
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<tbody>
<tr>
<td><strong>Stages of Change</strong></td>
<td>Adults</td>
<td>This measures the intent to change or set behavior change goals related to increasing consumption of fruits and vegetables and reducing consumption of unhealthy sweetened beverages.(^1) This is a paper-based, self-administered tool that can be administered as a pre- and post-test or as a post-test only. Example: “Are you interested in changing your eating behaviors [Insert specific Healthy Eating behavior]?” 1. Yes, I have been for MORE than 6 months. 2. Yes, I have been for LESS than 6 months. 3. No, but I intend to in the next 30 days. 4. No, but I intend to in the next 6 months. 5. No, and I do NOT intend to in the next 6 months. Scoring  • Choice #1: stage = Maintenance  • Choice #2: stage = Action  • Choice #3: stage = Preparation  • Choice #4: stage = Contemplation  • Choice #5: stage = Pre-Contemplation</td>
<td>- <strong>Ease of Administration:</strong> Easy. Could be difficult to administer data collection as an intercept with transient populations.  - <strong>Adaptability:</strong> Designed for paper use only, but the questions could be adapted for other formats (e.g., electronic).  - <strong>Reading Level:</strong> 3.6  - <strong>Respondent Burden:</strong> Light. It has 13 simple questions.</td>
</tr>
<tr>
<td>Youth and children in grades 3-12</td>
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| *National Cancer Institute (NCI) All-Day Screener* | Adults | The NCI “all day” screener measures frequency and portion size of nine fruits and vegetables. It measures the amount of fruits and vegetables consumed as “times per day” and cups equivalence.² This paper-based questionnaire has been validated in different settings. It can be used as a point in time or a pre- and post-test. Example: “Over the last month, how often did you eat lettuce salad (with or without other vegetables)?”  
  - Never  
  - 1-3 times last month  
  - 1-2 times per week  
  - 3-4 times per week  
  - 5-6 times per week  
  - 1 time per day  
  - 2 times per day  
  - 3 times per day  
  - 4 times per day  
  - 5 or more times per day | **Ease of Administration:** Medium. Would be difficult to administer data collection as an intercept with transient populations.  
**Adaptability:** Designed for paper use only, but the questions could be adapted for other formats (e.g., electronic).  
**Reading Level:** 6  
**Respondent Burden:** Medium. Tool has 19 questions with relatively detailed response options. Estimated response time is 15 minutes.  
Link to tool: [https://epi.grants.cancer.gov/diet/screeners/fruitveg/allday.pdf](https://epi.grants.cancer.gov/diet/screeners/fruitveg/allday.pdf) |
| *Fruit and Vegetable Module – Behavioral Risk Factor Surveillance Survey (BRFSS)* | Adults | The telephone-administered BRFSS tracks an array of major health risks among Americans. It can be used as a point in time or a pre- and post-test.  
The BRFSS fruit and vegetable module includes six questions about fruit and vegetable intake, preceded by the following statement: “These next questions are about the fruits and vegetables you ate or drank during the past 30 days. Please think about all forms of fruits and vegetables including cooked or raw, fresh, frozen or canned. Please think about all meals, snacks, and food consumed at home and away from home.” | **Ease of Administration:** Difficult. Includes open-ended questions requiring interaction/interpretation by interviewer or data analyst.  
**Adaptability:** Designed for telephone use only. Could be adapted as an in-person interview. |

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|                      |          | Respondents are asked to report consumption of the following beverages and foods during the past month as times per day, week, or month: (1) 100% PURE fruit juices; (2) fruit, including fresh, frozen, or canned fruit (not counting juice); (3) cooked or canned beans (not including long green beans); (4) dark green vegetables; (5) orange-colored vegetables; (6) other vegetables (not counting what was reported already). | ○ **Reading Level:** 6.1  
○ **Respondent Burden:** Medium. Only six questions, but they require specific and detailed recall of recent food consumption. |
| Youth Risk Behavior Survey (YRBS) | Youth (Middle School and High School) | The YRBS has a six-question fruit and vegetable component. Participants report the number of times in the past seven days that they have consumed fruit, juices, vegetables, salads, potatoes, and carrots. Data should be analyzed to approximate the number of times per day that the participant ate fruits and vegetables. It can be used as a point in time or a pre- and post-test. Example (high school assessment tool): “During the past 7 days, how many times did you eat fruit? (Do not count fruit juice.)”  
A. I did not eat fruit during the past 7 days  
B. 1 to 3 times during the past 7 days  
C. 4 to 6 times during the past 7 days  
D. 1 time per day  
E. 2 times per day  
F. 3 times per day  
G. 4 or more times per day | ○ **Ease of Administration:** Easy. Includes nine simple multiple-choice questions.  
○ **Adaptability:** Appears to have been designed for paper data collection, but could be adapted for online or telephone use.  
○ **Reading Level:** 5.2  
○ **Respondent Burden:** Light. Includes nine simple multiple-choice questions. |

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<tr>
<td>Expanded Food and Nutrition Education Program (EFNEP) Nutrition Education Survey: Grades 6-8; Grades 9-12</td>
<td>Youth</td>
<td>Assessment tool for grades 6-8 on the nutrition education topics of eating behaviors and intentions, food choices, food safety and hygiene, and physical activity attitudes. Assessment tools available for grades 6-8 and grades 9-12. The answer options include, none, 1 time, 2 times, 3 times, 4 or more times. It can be administered as a point in time or a pre- and post-test. Link to tool: <a href="https://www2.ag.purdue.edu/programs/hhs/efnep/Pages/Resource-Evaluation.aspx">https://www2.ag.purdue.edu/programs/hhs/efnep/Pages/Resource-Evaluation.aspx</a></td>
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<tr>
<td>EFNEP Nutrition Education Survey: Grades 3-5</td>
<td>Children</td>
<td>Assessment tool for grades 3-5 on the nutrition education topics of eating behaviors, food choices, food safety and hygiene, and physical activity attitudes. The answer options in the tool for grades 3-5 answer options include never, 1-3 days, 4-6 days, about once a day, or 2 or more times a day. It can be used as a point in time or a pre- and post-test. A new tool is anticipated October 2018. Link to tool: <a href="https://www2.ag.purdue.edu/programs/hhs/efnep/Pages/Resource-Evaluation.aspx">https://www2.ag.purdue.edu/programs/hhs/efnep/Pages/Resource-Evaluation.aspx</a></td>
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5 Ibid.
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<td>Healthy Kids, 3-5 years old</td>
<td>Children (via caregivers)</td>
<td>Includes several pictorial tools to assess children’s consumption of an array of food types, including fats and sweets, sweet drinks, veggies, snacks, and more. Can be used for programmatic pre/post-evaluation, participant risk assessment, and/or programmatic needs assessment. Parent/caregiver completes the tool on behalf of the preschool child. The paper based questionnaire includes response option such as times per day and frequencies such as no, some days, most days, almost every day, and every day. Completed by caregiver. This is administered as a pre- and post-test (before the first lesson is taught and then after the last lesson is taught).</td>
<td>Ease of Administration: Easy. Consists of simple multiple-choice questions. Adaptability: Designed for paper data collection, but includes instructions for setup as an iPad kiosk. Materials are protected by copyright and must not be modified.</td>
</tr>
<tr>
<td>Family Nutrition and Physical Activity (FNPA) Screening Tool</td>
<td>Children (via parents)</td>
<td>The first half of the FNPA screening tool consists of questions on a variety of behaviors related to nutrition, including family meals, family eating practices, food and beverage choices, and parental restriction/reward practices. Parents complete the tool on behalf of their children. This measures how often children and family members engage in behaviors that facilitate or impede healthy eating, ranging from never/almost never to very often/always. It can be administered as a point in time or a pre- and post-test.</td>
<td>Ease of Administration: Easy. Nutrition component includes simple multiple-choice questions. Adaptability: Originally designed for paper data collection, but could be adapted for online or telephone use. Respondent Burden: Light. Nutrition component includes 10 simple multiple-choice questions.</td>
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7 Ibid.

# Category 2: Physical Activity

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<tbody>
<tr>
<td><strong>Assessment Tools Related to Goals and Intentions</strong></td>
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| PACE - Adolescent Psychological and Stage-of-Change (SOC) Measures Related to Physical Activity | Youth—elementary age      | This questionnaire assesses an individual’s level or "stage" of physical activity. Factors measured include pros and cons of physical activity, confidence, behavior change strategies, self-efficacy, family and peer influences, enjoyment, activity choices, and environmental influences related to physical activity. The questionnaire also focuses on physical activity for 60 minutes or more and sedentary habits of respondents. The instrument (paper version) can be downloaded for free. It can be used as a point in time or a pre- and post-test. | *Ease of Administration:* Easy. Consists of simple multiple-choice questions.  
*Adaptability:* Designed for paper data collection, but could be adapted for online or telephone use.  
*Reading Level:* 6.6  
*Respondent Burden:* Medium to high. Relatively long tool with a question skip logic that could be confusing for some respondents.                                                                                   |
| **Assessment Tools Related to Behavioral Change**                   | Adults                    | Module 4 Physical Activity is part of the CDC’s BRFSS. It is a 7-item tool designed to detect changes in moderate to vigorous activity (10 minutes at a time). Sedentary behaviors also assessed. Remington and colleagues provide background on the BRFSS. A paper-based version is available. It can be administered as a point in time or a pre- and post-test. | *Ease of Administration:* Easy. Consists of simple multiple-choice or numerical questions.  
*Adaptability:* Designed for telephone data collection, but could be adapted for online or paper use.  
*Reading Level:* 5.8  
*Respondent Burden:* Light. Consists of seven simple multiple-choice or numerical questions.                                                                                                                      |

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10 Ibid.

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<tr>
<td>Seven Day Physical Activity Recall</td>
<td>Adults</td>
<td>The Seven Day Physical Activity Recall (PAR) is a structured interview that measures a person’s time spent engaging in physical activity over a seven-day period. It covers different levels of physical activity intensity such as aerobic exercise, work-related activities, gardening, walking, recreation, and leisure-time activities. Total minutes spent on each activity are recorded in a scoring matrix by weekday. The survey is administered through telephone and in-person interviews as a point in time or a pre- and post-test. Example: &quot;Were the last seven days a typical week for you in terms of the things you did? Did you get the usual amount of sleep?&quot; [If NO, get a reason and write it down] Link to tool: <a href="https://epi.grants.cancer.gov/paq/q094.html">https://epi.grants.cancer.gov/paq/q094.html</a></td>
<td>• <strong>Ease of Administration:</strong> Difficult. Requires a telephone or in-person interview with detailed accounting of physical activity.  &lt;br&gt;• <strong>Adaptability:</strong> Due to the complexity of the assessment tool, would be difficult to adapt to other formats.  &lt;br&gt;• <strong>Reading Level:</strong> 7.5  &lt;br&gt;• <strong>Respondent Burden:</strong> Medium to high. Requires strong listening comprehension and detailed recall of physical activity during the past week.</td>
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<tr>
<td>Youth Risk Behavior Surveillance System - Physical Activity Survey</td>
<td>Youth</td>
<td>The YRBS Physical Activity Survey assesses a variety of health-risk behaviors among high school students. One of these is a five-question section on physical activity. The survey subjects are high school students in grades 9-12, roughly between ages 14 and 18. The survey measures change over time in days with physical activity by minutes (e.g., 20 minutes for 3 days versus 20 for 5 days). It can be administered as a point in time or a pre- and post-test. Link to tools: <a href="https://www.cdc.gov/healthyyouth/data/yrbs/questionnaires.htm">https://www.cdc.gov/healthyyouth/data/yrbs/questionnaires.htm</a></td>
<td>• <strong>Ease of Administration:</strong> Easy. Includes five simple multiple-choice questions.  &lt;br&gt;• <strong>Adaptability:</strong> Appears to have been designed for paper data collection, but could be adapted for online or telephone use.  &lt;br&gt;• <strong>Reading Level:</strong> 9.0  &lt;br&gt;• <strong>Respondent Burden:</strong> Light. Includes five simple multiple-choice questions.</td>
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| Family Nutrition and Physical Activity (FNPA) Screening Tool | Children and their parents | The second half of the FNPA screening tool consists of questions on a variety of behaviors related to physical activity and environment, including screen time, family physical activity, child physical activity, and family and child sleep routines. Parents complete the survey on behalf of their children. The survey measures how often children and family members engage in behaviors that facilitate or impede physical activity, ranging from never/almost never to very often/always. It can be used as a point in time or a pre- and post-test. | **Ease of Administration:** Easy. Physical activity component includes simple multiple-choice questions.  
**Adaptability:** Originally designed for paper data collection, but could be adapted for online or telephone use.  
**Reading Level:** 4.4  
**Respondent Burden:** Light. Physical activity component includes 10 simple multiple-choice questions. |

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## Category 3: Food Resource Management

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<th>Name</th>
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| Share Our Strength’s Cooking Matters for Adults | Adults   | Measures adult intent to practice at least one method for managing their food resources through food shopping practices, food storage, food preparation, and budgeting. It is designed to be administered before and after the course. Example: “How confident are you that you can choose the best-priced form of fruits and vegetables (fresh, frozen, or canned)?”  
- Not at all confident  
- Not very confident  
- Neutral  
- Somewhat confident  
- Very confident  
- Does not apply | Ease of Administration: Medium. Length may require extra effort to facilitate completion.  
Adaptability: Designed for paper data collection, but could be adapted for online use.  
Reading Level: 3.1  
Respondent Burden: Medium to high. Relatively long survey requiring significant recall of intentions and behaviors related to food resource management. |

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https://static1.squarespace.com/static/56016d60e4b08cf9f5ba61f7/t/5992e9986f4ca36403d969af/1502800283041/Survey.CMF.English.pdf
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<th>Name</th>
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<tbody>
<tr>
<td>EFNEP Evaluation Tools Checklist</td>
<td>Adults</td>
<td>Measures several dimensions of self-reported behavior related to food resource management by adults. The last five questions relate to the respondent’s children. It can be used as a point in time or a pre- and post-test. Example: “I plan meals. [With pictures of people packaging meat in freezer bags and making a grocery list while looking at money-saving coupons for a grocery store]. . .” • No • Sometimes • Often • Very Often • Almost Always</td>
<td>• <strong>Ease of Administration:</strong> Easy. Consists of simple multiple choice questions. • <strong>Adaptability:</strong> Designed for paper data collection, but could be adapted for online use. • <strong>Reading Level:</strong> 2.5 • <strong>Respondent Burden:</strong> Light. Includes 15 simple multiple choice questions with visual aids.</td>
</tr>
<tr>
<td>Share our Strength’s Cooking Matters for Adults</td>
<td>Adults</td>
<td>The purpose is to understand what participants are doing or thinking before the six-week Cooking Matters course and whether they make any changes during the six weeks. Particularly, this tool measures items such as “Shop with a list,” “Compare prices before buying foods,” and “Identify foods on sale or use coupons to save money.” This paper-based assessment tool is available in Spanish. It is designed to be administered before and after the course.</td>
<td>• <strong>Ease of Administration:</strong> Medium. Length may require extra effort to facilitate. • <strong>Adaptability:</strong> Designed for paper data collection; could be adapted for online use. • <strong>Reading Level:</strong> 3.1 • <strong>Respondent Burden:</strong> Medium to high. Relatively long tool requiring significant recall of intentions and behaviors. Post-test includes four open-ended questions.</td>
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