ST3: Physical Activity and Reduced Sedentary Behavior

Framework Component

Readiness & Capacity – Goals and Intentions

Indicator Description

Two-part indicator measuring intentions and goals to increase physical activity and/or reduce sedentary behavior. Physical activity is defined as any body movement that works muscles and requires more energy than resting. Sedentary behavior is defined as too much sitting or lying down at work, at home, in social settings, and during leisure time. Both increasing physical activity and decreasing sedentary behaviors is important for overall health.

Background and Context

ST3 will be used primarily for program evaluation to measure intention or goal setting changes. These changes may result from a short-term intervention such as a one-time workshop or contact or after one or two sessions within a series-based program. This information, however, provides interim markers of program success as interventions work toward behavioral changes. To demonstrate improvement in intentions and goal setting, a post-test only measure can be used. Studies indicate that moving more during the day, in addition to getting the daily 30 minutes of moderate activity on a daily basis, is necessary. Both increasing physical activity and reducing sedentary behavior should be considered in obesity prevention programming and evaluation. A lack of physical activity (too little exercise) and too much sedentary behavior change the body in different ways and should be measured separately. For example, programs designed to reduce obesity by increasing physical activity may not be effective if sedentary behavior remains high.
Outcome Measures

The number or percentage of SNAP-Ed participants who report intentions or set goals to increase physical activity and reduce sedentary behavior. **Increased Physical Activity, Fitness, and Leisure Sport.** Number or percentage of people reporting intentions or setting goals to increase duration, intensity, and frequency of exercise, physical activity, or leisure sport appropriate for the population of interest, and types of activities.

<table>
<thead>
<tr>
<th>ST3a</th>
<th>Physical activity and leisure sport (general physical activity or leisure sport)</th>
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<tbody>
<tr>
<td>ST3b</td>
<td>Physical activity when you breathed harder than normal (moderate-vigorous physical activity)</td>
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<tr>
<td>ST3c</td>
<td>Physical activity to make your muscles stronger ([glossary]muscular strength[/glossary])</td>
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<tr>
<td>ST3d</td>
<td>Physical education or gym class activities (school PE)</td>
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<tr>
<td>ST3e</td>
<td>Recess, lunchtime, classroom, before- and afterschool physical activities (school activities—non-PE)</td>
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<tr>
<td>ST3f</td>
<td>Walking steps during period assessed (e.g., increasing daily goal by ?2,000 steps)</td>
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**Reduced Sedentary Behavior.** Number or percentage of people reporting intentions or setting goals to decrease time spent in sedentary behavior (computers, desk sitting, television watching) during the period assessed.

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<tr>
<th>ST3g</th>
<th>Television viewing</th>
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<tr>
<td>ST3h</td>
<td>Computer and video games</td>
</tr>
<tr>
<td>ST3i</td>
<td>Sitting on weekdays while at work, at home, while doing course work, and during leisure time.</td>
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What to Measure

Physical activity or leisure sport intention or goal setting assessments should be measured using the dimensions of the activity performed including type (what), intensity (how hard), frequency (how often), and duration (how long) using self-report in minutes, days, etc. Sedentary behavior intentions or goals are assessed using a self-report survey. Sedentary behavior should not be confused with screen time which, although is generally sedentary in nature, measures exposure to electronic screens such as phones, televisions, or computers. Sedentary behavior may involve screen time, but should include lying down, sitting, reading books, drawing, writing, and other non-screen-related inactivity (<1.5 METs, or the Metabolic Equivalent of Task). Possible...
physical activity intention or goal setting topics include:
- Increasing frequency (number of days)
- Increasing time (number of minutes)
- Increasing types of activity (cardiovascular, flexibility, muscular strength)
- Increasing intensity (moderate or vigorous)
- Increasing number of steps
- Decreasing screen time (computer, video games, TV)

Population

Older adults, adults, adolescents, children, preschoolers and toddlers (via parents or child care providers)

Surveys and Data Collection Tools

ADULTS [collapse title="Pre/Post - Example"] Depending on program length, a pre/post only measure may be used, such as one or two questions looking at current practice against intentions indicated after the program. As an example a one-time session on integrating physical activity into your day, might include the following questions Current Practice: During the past week how many days did you do physical activity or leisure sport?

[ST3a] 0 1 2 3 4 5 6 or more

Intended Practice: During the next week, how many days do you plan or intend to do physical activity or leisure sport?

0 1 2 3 4 5 6 or more

The questions and responses could also be modified to a specific SNAP-Ed program based on program content. For example “physical activity and leisure sport” might be replaced with “activities that made you breathe harder than normal [ST3b],” or “strength building activity [ST3c],” etc. Questions could also be modified to look at time (# of minutes per day.) [/collapse] [collapse title="Post Only"] Exercise: Stages of Change (short form) Regular exercise is any planned physical activity (e.g., brisk walking, aerobics, jogging, bicycling, swimming, rowing, etc.) performed to increase physical fitness. Such activity should be performed 3 to 5 times per week for 20-60 minutes per session. Exercise does not have to be painful to be effective but should be done at a level that increases your breathing rate and causes you to break a sweat. Question: Do you exercise regularly according to that definition?

- Yes, I have been for MORE than 6 months.
- Yes, I have been for LESS than 6 months.
- No, but I intend to in the next 30 days.
- No, but I intend to in the next 6 months.
- No, and I do NOT intend to in the next 6 months.

Scoring

- Answered with choice #1: stage = Maintenance
- Answered with choice #2: stage = Action
- Answered with choice #3: stage = Preparation
- Answered with choice #4: stage = Contemplation
- Answered with choice #5: stage = Precontemplation

The responses could also be modified to a specific program based on program content. For example “exercise
CHILDREN & YOUTH

PACE - Adolescent Psychological and Stage-of-Change Measures Related to Physical Activity and Sedentary Behavior (Adolescent only)

1. In a typical week, how many days do you do physical activity for 60 minutes or more? [ST3a]

   0 1 2 3 4 5 6 or more

   If you answered between “0” and “4” to question 1, go to question 3. If you answered “5” or “6 or more” to question 1, go to question 2.

2. How many months have you been doing 60 minutes of physical activity on 5 or more days per week?
   a. Less than 6 months b. 6 months or more

3. Do you think you will start doing 60 minutes of physical activity 5 or more days a week in the next 6 months?
   a. No and I do not intend to in the next 6 months b. Yes, I intend to in the next 6 months c. Yes, I intend to do in the next 30 days

4. How many months have you been doing 60 minutes of physical activity on 5 or more days per week?
   a. Less than 6 months b. 6 months or more

Sedentary Habit Changes

1. On a school day, how many hours do you do sedentary habits (like being a couch potato)?
   0 1 2 3 4 5 6 or more

2. Do you consistently do 2 hours or less of sedentary habits each day?
   No, and I do NOT intend to in the next 6 months No, but I intend to in the next 6 months No, but I intend to in the next 30 days.

Additional evaluation tools to measure ST3 can be found in the SNAP-Ed Library.

Key Glossary Terms

- Aerobic activity
- Duration
- Flexibility
- Frequency
- Intensity
- Muscular endurance
- Muscular strength
- Physical activity
- Sedentary behavior
- Structured physical activity
- Unstructured physical activity

Additional Resources or Supporting Citations

Sallis, 2001 San Diego State University

- Physical Activity Stages http://fmph.ucsd.edu/pacedocs/PAS.pdf
- Sedentary Habit Stages http://fmph.ucsd.edu/pacedocs/SED.pdf
- Scoring http://fmph.ucsd.edu/pacedocs/Scoring.pdf

Other assessments that can be used for evaluating programs at the ST3 level include: Additional PACE questionnaires, Sallis, 2001 SDSU (e.g., Change Strategies, Pros & Cons, Family Support, Confidence, etc.) Stages http://fmph.ucsd.edu/pacedocs/PAS.pdf Intention to Exercise Scale, Kerner & Grossman, 2001 (Assesses intention to adhere to a physical activity program for the next 12 months) Self-efficacy for Exercise Scale, Resnick and Jenkins, 2000 (Assesses confidence in ability to exercise for 20 minutes 3 times a week)

Decisional Balance Questionnaire