Connecting you with experts. Exploring the latest childhood obesity news and research.

We will begin at 2:05 to allow participants time to join the webinar.
1. Spotlight
   - Measures Registry User Guides
   - Individual Diet
   - Food Environment
2. One on One
3. Upcoming Webinars
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Today’s Speakers

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Gillings School of Public Health
INTERACTIVE POLL
Measures Registry User Guides
Measures Registry

The Measures Registry is a searchable database of diet and physical activity measures relevant to childhood obesity research. Its purpose is to standardize use of common measures and research methods across childhood obesity research at the individual, community, and population levels.

Measures are tools and methodologies used to assess individuals' diet, physical activity, and the environments in which these behaviors occur. Examples of measures include questionnaires, instruments, diaries, logs, electronic devices, direct observations of people or environments, protocols, and analytic techniques.

http://www.nccor.org/nccor-tools/measures/
User Guides Launched February 21, 2017!

User Guides supported by a 2-year grant from The JPB Foundation
The User Guides cover the four domains of the Measures Registry:

- Individual Diet
- Food Environment
- Individual Physical Activity
- Physical Activity Environment
Measures Registry User Guides

• Designed to:
  – Provide an overview of measurement
  – Describe general principles of measurement selection
  – Present case studies to walk users through the process of using the Measures Registry to select appropriate measures
  – Direct researchers and practitioners to additional resources
Measures Registry User Guides

• Aims to help move the field forward by fostering more consistent use of measures, which will allow for standardization, meta-analyses, and synthesis
## Authors and Expert Panels

<table>
<thead>
<tr>
<th>Food and Nutrition</th>
<th>Physical Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Individual Diet</td>
<td>3. Individual Physical Activity</td>
</tr>
<tr>
<td><strong>Authors:</strong> Sharon Kirkpatrick and Amanda Raffoul (U. of Waterloo)</td>
<td><strong>Authors:</strong> Jim Morrow (U. of North Texas), Pedro Saint-Maurice and Gregory Welk (Iowa State University)</td>
</tr>
<tr>
<td>2. Food Environment</td>
<td>4. Physical Activity Environment</td>
</tr>
<tr>
<td><strong>Authors:</strong> Leslie Lytle and Allison Myers (U. of North Carolina at Chapel Hill)</td>
<td><strong>Authors:</strong> Jordan Carlson and Kelsey Dean (Mercy Children’s Hospital), Jim Sallis (UC San Diego)</td>
</tr>
</tbody>
</table>

### Food and Nutrition Expert Panel
- Alice Ammerman, DrPH, RD
- Carol Boushey, PhD, MPH, RD
- Karen Webb, PhD, MPH
- Gail Woodward-Lopez, MPH, RD

### Physical Activity Expert Panel
- Genevieve Dunton, PhD, MPH
- Patty Freedson, PhD
- Brian Saelens, PhD
Measures Registry User Guide: Individual Diet

Sharon Kirkpatrick & Amanda Raffoul
Why Measure Individual Diet?

• Obesity is affected by many factors, including dietary behaviors

• Dietary intakes and behaviors relevant to obesity begin in infancy and continue into adolescence
CONCEPTUALIZING INDIVIDUAL DIET
## Conceptualizing Individual Diet

### Dietary intake
- Consumption of foods, beverages, supplements
- Frequency of consumption
- Contextual details

### Other dietary behaviors and constructs
- Eating attitudes
- Food preferences
- *Relevant Registry measures usually also assess intake
Complexities of Assessing Diet
MEASUREMENT CHARACTERISTICS
Two Critical Features of Measures

Validity

• Ability of a measure to assess what it intends to measure

• Multiple kinds of validity:
  – Face
  – Content
  – Construct
  – Criterion

Reliability

• Extent to which a measure is consistent or stable over time

• Multiple kinds of reliability:
  – Inter-rater
  – Test-retest
  – Internal consistency
Measurement Error

The distribution of intake with systematic error

The distribution of intake with no systematic error

The distribution of intake with random error

The distribution of intake with no random error

https://epi.grants.cancer.gov/events/measurement-error/
Biases In Self-Reporting Diet

- Cognitive development
- Literacy
- Numeracy
- Recall bias
- Social desirability bias
- Reactivity
### 24-Hour Dietary Recall and Willett Food Frequency Questionnaire

#### Validity (2)

<table>
<thead>
<tr>
<th>Type of validity</th>
<th>Construct/subscale assessed</th>
<th>Criterion measure used</th>
<th>Test/statistic used</th>
<th>Result</th>
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<tr>
<td>Criterion</td>
<td>Total fat intake, saturated fat intake, calorie-adjusted total fat intake, calorie-adjusted saturated fat intake (24-hour recall and Willett questionnaire)</td>
<td>LDL-C level analysis</td>
<td>P-value</td>
<td>Statistically significant</td>
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<tr>
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<td>Serum TC level analysis</td>
<td>P-value</td>
<td>Statistically significant</td>
</tr>
</tbody>
</table>
Caveats Relevant to Obesity Research

- Energy is particularly affected by misreporting:
  - Estimates of energy intake should **not** be based on self-report

- Misreporting is associated with *body weight, social desirability*:
  - Complicates comparisons across groups
Categorize broadly as:

**Short-term:** detailed accounting of intake for a day or a few days

- 24-hour dietary recall
- Food record/diary

**Long-term:** less detailed accounting of intake for a long period

- Food frequency questionnaire
- Screener
24-hour recall

- Recent diet (repeats → usual intake)
- Total diet
- Culturally neutral
- Previously cost-prohibitive
- Rely on short-term memory

Rich detail
Salient Considerations for Children

- Cognitive development
- Literacy
- Numeracy
- Knowledge of food/food prep
- Recency/retention interval
- Proxy

24-hour recall
Food record/diary

- Recent diet (repeats → usual intake)
- Total diet
- Culturally neutral
- Previously cost-prohibitive
- Reactivity possible

Rich detail
Salient Considerations for Children

- Cognitive development
- Literacy
- Numeracy
- Knowledge of food/food prep
- Fatigue/boredom
- Proxy

Food record/diary
Aim to assess usual diet
May assess total diet
Require tailoring
Previously less costly
Rely on long-term memory
Lack of detail
Aim to assess usual intake

Lack of detail

Limited aspects of diet

Require tailoring

Rely on long-term memory

Fast

Less costly
Salient Considerations for Children

• FFQs and screeners **not** well-suited due to demands associated with:
  – Literacy and numeracy
  – Concepts of time
  – Memory
  – Attention span
  – Understanding of composite foods
Technology-based Measures

Harray et al., Nutrients 2015

https://epi.grants.cancer.gov/asa24/
Other Dietary Behaviors

• Potential complementary measures related to attitudes, perceptions, etc.
• Measures vary in length and complexity, and may require parental assistance
• As with intake, responses may be affected by social desirability biases
Considerations in Selecting Measures

- Research question
- Target population
- Study design
- Data collection
- Settings
- Comprehensive or focused
- Diet as an exposure, outcome, or covariate
- Parameters of interest
- Complementary measures
- Logistical considerations

Adapted from Sternfeld & Goldberg-Rosas, 2012
Overview of Case Studies

- Influences on diet among population subgroups
- Associations between diet quality and markers of disease
- Implications of modifications to foods offered for sale in vending machines
- Effects of a home-based obesity prevention program on children’s dietary behaviors
- Differences in diet quality among subgroups with different rates of obesity
- Effects of calorie-labeling on energy intake
- Children’s food preferences in relation to advertising
- Impact of a body image program on adolescents’ dietary behaviors and intake
Overview of Case Studies

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Case Study Format

- Case background
- Considerations
- Measure selection
Case Study 1

Case background

Considerations

Measure selection

Estimate average intake and main sources of food groups in relation to sociodemographics; children of varying ages
Case Study 1

Case background

Considerations

- Need quantification of multiple components
- Possibility of differential bias
- Varying ages

Measure selection
Case Study 1

Possibilities:
• Interviewer/web-based 24-hour recall
• Record or mobile record
Case Study 2

Elucidate the relation between diet quality of adolescents and proximal markers of disease
Case Study 2

Multiple dietary components
Consider strategies to mitigate error (e.g., multiple measures)
Adolescents: consider burden and potential for boredom
Case Study 2

Possibilities:
- Web-based 24-hour recall
- Mobile record
- FFQ
Case Study 3

Assess intake of sugar-sweetened beverages and alternatives before and after changes to vending machine policies.
Case Study 3

Case background

Considerations

Measure selection

- Consider SSBs only or total diet more broadly
- Quantification versus frequency
- Self- versus proxy-reporting
- Intervention-related biases?
Case Study 3

Possibilities:

- **Narrow**: screener
- **Broad**: 24-hour recall, record, FFQ
- Consider complementary data sources

Considerations

Measure selection
Key Messages

• Diet is complex and so is dietary assessment
• Choosing the best possible measure of diet requires weighing many considerations, including those salient to children
• Using the Registry and other resources to inform measure selection → more cohesive evidence base
Additional Considerations

• Consult colleagues with expertise in dietary assessment
  – Get advice on appropriate analytic techniques from a statistician
• Interpret findings in light of what is known about dietary data
• Clearly report methods to ensure research is replicable and interpretable
Selected Additional Resources

The National Cancer Institute’s Dietary Assessment Primer: A Resource for Diet Research

Frances E. Thompson, PhD, MPH, Sharon I. Kirkpatrick, PhD, MHS, RD, Amy F. Subar, RD, Jill Reedy, PhD, MPH, RD, TusaRebecca E. Schap, PhD, MPH, RD, Magdalena M. Wilson, M. Krebs-Smith, PhD, MPH

- [https://dietassessmentprimer.cancer.gov/](https://dietassessmentprimer.cancer.gov/)
- [http://epi.grants.cancer.gov/events/measurement-error/](http://epi.grants.cancer.gov/events/measurement-error/)
Other Issues Covered in This Guide

• More detail on:
  – Considerations and recommendations for diet assessment in children
  – Existing evidence on measurement error
  – Guiding questions

• Brief overview of biomarkers and other objective approaches

• Additional illustrative case studies
QUESTIONS?

Please type your question(s) in the chat box located on the right.
MEASURING FOOD ENVIRONMENT
Why Study the Food Environment?

- Influences health-related outcomes:
  - Weight status/obesity
  - Dietary patterns
  - Chronic disease
- Target of public health interventions
- Robust measures are needed for epidemiologic and intervention studies
Conceptual Model of Environmental Factors Related to Dietary Disease Risk

1. PHYSICAL ENVIRONMENT
2. PERSON-CENTERED ENVIRONMENT
3. SOCIAL ENVIRONMENT
4. Food Choices
5. Dietary Consumption
6. Dietary-related Disease Risk
1. Physical

PHYSICAL ENVIRONMENT

- Home
- Childcare, preschool, school, and community venues
- Stores and restaurants

1. How many and what types of food venues are present?
2. What foods are available?
3. What foods are accessible?
4. What health-related information is present?
2. Social

Social referents:
- Other Youth
- Parents
- Teachers
- Other adults

1. Support for healthy food choices
2. Role modeling or social expectation of food choice, eating behavior
3. Food choice incentives or rewards
4. Policies, practices, or rules about eating behavior
3. Person-Centered

1. Perceptions of the physical environment
   • Availability, access
   • Affordability
   • Acceptability of product

2. Perceptions of the social environment
   • Social norms
   • Social support
   • Perceptions of policies, rules
   • Perceptions of cultural appropriateness
Measuring Food Environment

- Physical Environment
- Social Environment
- Person-Centered Environment
1. Geo-spatial analyses or GIS
   - Number, location, density of food stores or restaurants
   - Proximity of food stores or restaurants to home, schools or community venues, and each other

2. Observational scans or assessments
   - AKA “log,” “record,” “audit,” “environmental scan”
   - Product availability
   - Pricing
   - Placement/merchandising
   - Advertising and information

- Measures Registry: GIS; environmental observation; record or log
Audit Tools, Environmental Scans

Standardized Tobacco Assessment for Retail Settings (STARS)

Data Collector(s) Present in Store:
- Adult only
- Youthful only
- Adult and youth

FIELD NOTES:
- This retail environment provides a great photo opportunity.

1. Date of visit: __________________ Start Time: __________________ End Time: __________________
2. Grantee Code: __________________
3. Store Name: __________________
4. Store Address: __________________
   - Actual address matches assigned address
   - County
5. Can you survey this store? (If not, then select an option below and STOP)
   - Yes
   - No, store does not exist
   - No, store is closed
   - No, under 18 not allowed to enter
   - No, membership or fee required to enter
   - No, environment unsafe for me
   - No, asked to leave before completing the survey
   - Other (specify): __________________

EXTERIOR:
- Which products are advertised outside the store (on windows, doors, building, sidewalk or elsewhere)?
  - Cigarettes – non-mendahl
  - Cigarettes – mendahl
  - Cigarettes/tobacco
  - Large cigars
  - Cigars, moist or dry snuff, dip or snus
  - E-cigarettes/EDOs

INTERIOR:
7. Store Type: (Choose one)
   - Convenience store
   - Supermarket
   - Drugstore/pharmacy
   - Grocery store
   - Retail store
   - Tobacco shop
   - Other (specify): __________________

8. Any tobacco products sold here (e.g., cigarettes, cigars, cigarette/tobacco little cigars, chew, moist or dry snuff, dip, snus or e-sign/EDOs)? (Choose one)
   - Yes and visible to customers
   - Yes but not visible to customers
   - No (STOP if focusing on tobacco retailers)

9. Does the store have a pharmacy counter? (Choose one)
   - Yes
   - No

10. Alcoholic beverages sold here? (Choose one)
    - Yes
    - No

11. Does store display a graphic health warning sign? (Choose one)
    - Yes
    - No

NCCOR CONNECT & EXPLORE
2. Social

- Interviews or questionnaires with parents and children
- Self-administered/self-report questionnaire
- Questionnaires of stakeholders/policy decision makers (e.g., food service staff or school principal)
- Measures Registry: questionnaires; records or logs
36. At your school, are students able to get butter or margarine...
   a. In the serving line or on the tables? ..................................................1 ..................2
   b. If they ask for it? .............................................................................1 ..................2

37. Is salt available to students...
   a. In the serving line or on the tables? ..................................................1 ..................2
   b. If they ask for it? .............................................................................1 ..................2

38. Does your school have a self-serve salad bar?
   Yes ..................................................................................................1 ..................2
   No ...................................................................................................1 ..................2

39. In the serving line, are...
   a. Fruits and vegetables placed near the case so that
      they are easy to access? ...............................................................1 ..................2
   b. Attractive displays used for fruits and vegetables? ....................1 ..................2

63. During the past 12 months, has anyone from your school...
   a. Made menus available to students?..............................................1 ..................2
   b. Made information available to students on the nutrition
      and caloric content of foods available to them? .........................1 ..................2
   c. Placed posters or other materials promoting healthy
      eating habits on display in the cafeteria? ..................................1 ..................2
   d. Placed posters or other materials promoting healthy
      eating habits on display in the school? .....................................1 ..................2
   e. Included nutrition services topics during school
      announcements? .............................................................................1 ..................2
   f. Included articles about the school nutrition services
      program in a school newsletter, newspaper, website, or
      other publication? .................................................................1 ..................2

https://www.cdc.gov/healthyyouth/data/shpps/questionnaires.htm
3. Person-Centered

- Phone interview
- Self-administered questionnaire
- Questionnaire read to children
- Measures Registry: questionnaire; record or log
CATCH: Health Behavior Questionnaire

GENERAL INFORMATION
Affix ID Label Here: 

1. Student ID #: 

2. Form Version: 1. 2. 3. 4. 5. 6.

3. Today’s Date: ______/_____/______  3a. Time: ______:______ 

4. Measurement Period
   1. Fall 1991 
   2. Spring 1991 
   3. Fall 1992 
   4. Spring 1992 
   5. Fall 1993 
   6. Spring 1994 

5. CATCH Staff Initials: 

6. Language Version: English 1  Spanish 2 

INTRODUCTION: This is a questionnaire about health. There are no right or wrong answers. Please read each question and answer the best you can. Do not work ahead. Stop at the end of each section. Remember no one at school will see your answers.

SECTION II: WHAT DO OTHER PEOPLE WANT YOU TO EAT?

INSTRUCTIONS: The questions in this section ask about what other people want you to eat. Please answer by circling either YES or NO for each question.

1. Who wants you to eat popcorn without salt and butter on it?
   a. Your parents  1. YES  2. NO 
   b. Your teachers  1. YES  2. NO 
   c. Your friends  1. YES  2. NO 

2. Who wants you to eat lots of fruits and vegetables?
   a. Your parents  1. YES  2. NO 
   b. Your teachers  1. YES  2. NO 
   c. Your friends  1. YES  2. NO 

3. Who wants you to eat food without putting salt on it from the salt shaker?
   a. Your parents  1. YES  2. NO 
   b. Your teachers  1. YES  2. NO 
   c. Your friends  1. YES  2. NO 

CATCH - Health Behavior Questionnaire - (G19) Form Version 10/12/92 - Page 14
MEASUREMENT CONSIDERATIONS AND CHARACTERISTICS
Conceptual Model of Environmental Factors Related to Dietary Disease Risk

1. **Physical Environment**
2. **Person-centered Environment**
3. **Social Environment**

Flowchart:
- Physical Environment → Person-centered Environment → Social Environment → Food Choices → Dietary Consumption → Dietary-related Disease Risk
Using the Measures Registry: How Does the Conceptual Model Help?

• What domain or domains do I need to study?
• Is my purpose to examine predictors of food choice in a population or to examine one aspect of the environment already linked to a health outcome?
• If I’m interested in studying the physical environment, what venues do I want to assess?
• If I’m interested in studying the social environment, what aspects and referents should I focus on?
• Is it important to assess people’s perceptions of their environment?
• Is my question etiologic or am I testing an intervention?
Two Critical Features of Measures: Important in Environmental Measures, Too!

**Reliability**
- Do two independent observers record data on the environment in a similar way? (inter-rater)
- Is there consistency over time in how the environment is assessed? (test-retest)
- Are items designed to measure the same aspect of the environment correlated? (internal consistency)

**Validity**
- Does the measure used seem to assess the factor of interest? (Face validity)
- Is the measure used related to a gold standard measure of the environment? (criterion)
- Do the items used to assess the environment include all of the relevant aspects of the environment? (content)
- Is the environmental measure related to other factors in expected directions? (construct)
Food Environment Case Studies

Case Studies

1. Study to evaluate a school-based intervention on its ability to positively influence the school food environment.

3. Intervention to improve healthy eating behaviors in independent neighborhood restaurants.
Case Study 1: Background

Study to evaluate a school-based intervention on its ability to positively influence the school food environment

- Importance of early learning
- Components of school food environment
- Goal: Improve à la carte food healthfulness, as measured by calories and added sugar
- 24 schools, group-randomized pre-post design
Case Study 1: Considerations

• How will they document what is sold/available on the à la carte lines before and after the intervention?
• How often and when will data collection occur?
• What resources are available for data collection, cleaning, and analysis?
• Will they collect sales data directly, or will they need to interview or observe students as they purchase food?
• How much detail on the foods available and sold is necessary to evaluate the success of their intervention?
Decisions:

• Items on à la carte change quickly, so multiple data collection days need to be scheduled both for the pre and post phases of data collection.

• They can use direct sales data from cashier registers to collect data on sales.

• Study staff will need to collect the data on foods available on the line, but resources are limited.
Checklist for Middle School Environments

**Domain(s)**
Food Environment

**Measure Type**
Checklist

**Measure Availability**
Not reported

**Number of Items**
17 Reported

**Study location**
Metro/Urban
Minnesota, USA

**Languages**
English

**Information about Development of Measure**
The checklist was modified from the Center of Disease Control's School Health Policy and Practice Survey and contains categories of common foods found in school environments. Pilot data showed excellent inter-rater reliability for data collection.

Measure last modified: 01/27/2017 2:02 PM
### Case Study 1: Summary Table

**Title:** Study to evaluate a school-based intervention on its ability to positively influence the school food environment

<table>
<thead>
<tr>
<th>Type of Case Study</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
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</table>

**Background**
- School-based obesity prevention intervention to change à la carte offerings in 24 metro area middle school cafeterias
- Primary outcome is foods sold on à la carte using sales data from cash register receipts
- Secondary outcome is foods available on à la carte

**Considerations**
- Schools are willing/able to provide daily detailed sales data
- Study staff will need to assess food and beverage availability
- Measures Registry > Food Environment > Schools

**Measure Selection**
- TACOs for primary outcome
- IDEA/ECHO checklist for documentation of available food
Case Study 3: Background

Intervention to improve healthy eating behaviors in independent neighborhood restaurants

- Small, independent restaurants offer healthy foods, affordable prices
- Large city health department
- 2 year timeline: baseline with follow-up
- Project goal: Identify change in availability and pricing and changes in menu sales over 2 years
Case Study 3: Considerations

- Recruit independent restaurant owners
- Train health department and restaurant association staff to collect data on:
  - Menus in each restaurant (including types of foods offered, serving size, and price per serving)
  - Contextual factors that may influence patrons’ decision making about menu selection (such as menu labeling or nutrition information)
  - Sales records from before and after the program begins
## Comparing Measures

<table>
<thead>
<tr>
<th>Hide empty rows</th>
<th>Availability and Quality of Foods in Grocery Stores</th>
<th>China Urban Built Environment Scan Tool (CUBEST)</th>
<th>EURO-PREVOB Community Questionnaire for Food and Built Environments</th>
<th>Nutrition Environment Measures Study in Restaurants (NEMS-R)</th>
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<tbody>
<tr>
<td><strong>Domain</strong></td>
<td></td>
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<td>Food Environment</td>
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<tr>
<td>Individual Physical Activity Behavior</td>
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<tr>
<td>Physical Activity Environment</td>
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<td><strong>Measure Type</strong></td>
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<tr>
<td>GIS</td>
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<tr>
<td>24-hour dietary recall or food frequency</td>
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<td>Electronic monitor</td>
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<td>Record or log</td>
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Title: Intervention to improve healthy eating behaviors in independent neighborhood restaurants

<table>
<thead>
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<th>Program evaluation</th>
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<tbody>
<tr>
<td><strong>Background</strong></td>
<td></td>
</tr>
<tr>
<td>• Large city health department with goal to prevent obesity and chronic disease and to promote economic development</td>
<td></td>
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<tr>
<td>• Collect baseline and follow-up data on foods and prices in locally owned and operated restaurants</td>
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<tr>
<td><strong>Considerations</strong></td>
<td></td>
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<tr>
<td>• Data collectors are health department and restaurant association staff</td>
<td></td>
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<tr>
<td>• Measures Registry &gt; Food Environment &gt; Environmental Observation &gt; Metro/Urban &gt; Compare</td>
<td></td>
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<tr>
<td><strong>Measure Selection</strong></td>
<td></td>
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<tr>
<td>• NEMS-R: Instrument is freely available, has been widely used, includes a free online training, and has demonstrated reliability</td>
<td></td>
</tr>
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</table>
Conclusions

1. Finding the appropriate measurement tool is an essential step in any research project or program evaluation.
2. Be certain the tool you choose meets the specific needs of your project and is appropriate for your population of interest.
3. Look for one that has *some* demonstrated reliability and validity, and try to contribute to reliability and validity in your study.
4. Choose a tool that will provide the most rigorous measure possible given your project resources.
5. There is no PERFECT tool! Do the best you can.
QUESTIONS?
Please type your question(s) in the chat box located on the right.
UPCOMING EVENTS
Next Connect & Explore: April 12

New NCCOR Measures Registry User Guides: Selecting the Best Measure – Physical Activity Guides

• April 12, 2017
  – 2:00 p.m. ET / 11:00 a.m. PT

• Guest speakers:
  – **Gregory Welk, PhD**, Associate Professor, Department of Kinesiology, Iowa State
  – **James Morrow, Jr., PhD, FACSM, FNAK**, Regents Professor Emeritus, Health Promotion, and Recreation, University of North Texas
  – **Pedro Saint-Maurice, PhD**, Postdoctoral Fellow, National Cancer Institute, National Institutes of Health
  – **Jordan Carlson, PhD**, Director, Community Engaged Research, Children’s Mercy Kansas City
  – **James Sallis, PhD**, Distinguished Professor, Department of Family and Preventive Medicine, University of California, San Diego
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**Other reviewers:**
- We would also like to thank Seung Hee Lee-Kwan, PhD, MS; Latetia Freeman Moore, PhD, MSPH; Sohyun Park, PhD; Jesus Soares, ScD, MSc; and Tina Kauh, PhD, for reviewing the final draft of the guides.
FURTHER QUESTIONS?

Other questions about NCCOR or upcoming activities?

Email the NCCOR Coordinating Center

nccor@fhi360.org
Connect & Explore

Upcoming Webinars
Mark your calendar for these upcoming Connect & Explore webinars!

- **NOV 10**: Evaluating Health Care-Community Collaborations: Implications and Recommendations for the Field

Archived Webinars
Missed a webinar? Check out videos from past webinars.

- **OCT 27**: Looking Back and Looking Forward: Nine Years of School District Wellness Policy Implementation
- **SEP 14**: Evaluating Health Care-Community Collaborations - A Three-Part Series
THANK YOU!