Tools of the Trade: Using NCCOR's Measures Registry Resource Suite in the Field

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Society for Nutrition Education & Behavior 2020

NCCOR

Accelerating Progress to Reduce Childhood Obesity

PRESENTERS

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Session Outline

- Overview of NCCOR
- Overview of NCCOR's Measures Registry Resource Suite
- Case Study: How to use the Measures Registry Resource Suite in a research project
- Case Study: How to use the Measures Registry Resource Suite in the classroom
- Other NCCOR resources
- Closing

Learning Objectives

- By the end of the session, the participant will be able to apply the NCCOR Measures Registry Resource Suite to select appropriate measures of nutrition, physical activity, and environments to support their research and evaluation projects.
- By the end of the session, the participant will be able to describe three considerations for selecting a measure for research or evaluation projects related to nutrition, physical activity, or obesity to inform future research or evaluation efforts.
- By the end of the session, the participant will be able to select tools for evaluating different scenarios using the Measures Registry Resource Suite.

NCCOR

National Collaborative on Childhood Obesity Research

ACCELERATING PROGRESS TO REDUCE CHILDHOOD OBESITY


NIH
National Institutes of Health
The nation's health research engine
Robert Wood Johnson Foundation
The nation's largest philanthropy devoted to health
CDC
Centers for Disease Control and Prevention
The nation's public health agency
USDA
The nation's leader on farming and food
THE FOUR LARGEST FUNDERS OF CHILDHOOD OBESITY RESEARCH JOINED FORCES TO FORM
NCCOR
National Collaborative on Childhood Obesity Research

IDENTIFY, DESIGN, AND EVALUATE INTERVENTIONS

INCREASE AND IMPROVE SURVEILLANCE

IMPROVE CAPACITY TO CONDUCT RESEARCH AND PROGRAM EVALUATION

PROVIDE NATIONAL LEADERSHIP TO ACCELERATE IMPLEMENTATION THROUGH COMMUNICATION AND OUTREACH

WORK WITH NON-HEALTH PARTNERS TO INTEGRATE CHILDHOOD OBESITY PRIORITIES

NCCOR
National Collaborative on Childhood Obesity Research

NCCOR
GOALS

By building on each other's strengths and perspectives, NCCOR's unique public-private partnership demonstrates that it is possible to

get more done more quickly—and have a greater impact—working together

than by working alone.

BOLSTERING EACH AGENCY'S OUTPUT

GENERATING HIGH RETURN ON INVESTMENT

CREATING AND MAXIMIZING EFFICIENCIES

IMPACT

NCCOR is raising the bar,

supporting scientists

with tools to amplify their work and findings

NCCOR

National Collaborative on Childhood Obesity Research

Measurement tools in one place!

MEASURES REGISTRY

USER GUIDES

LEARNING MODULES

HOW TO USE THE RESOURCES SUITE

START with an overview of the domains by watching the **Measures Registry Learning Modules**

SELECT the domain(s) and review the corresponding **Measures Registry User Guides**

USE the **Measures Registry**, select the appropriate measure to address your research or evaluation question.

Domains


Individual Diet
Individual Physical Activity
Measures Registry Resource Suite
Food Environment
Physical Activity Environment

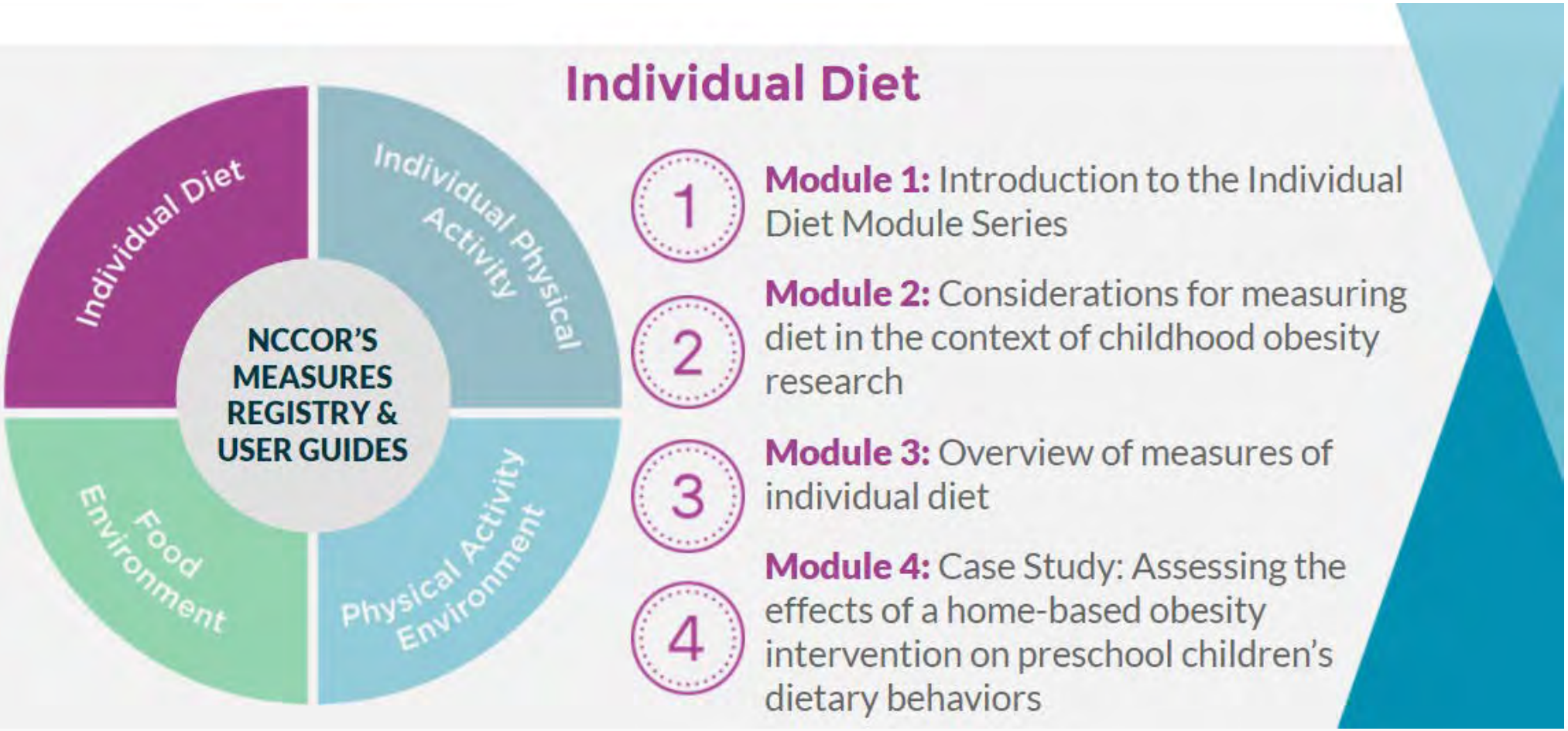
Measures Registry Learning Modules

- Four modules break down key measurement concepts in 15 minutes or less
- Include an introductory module on the series and four modules for each domain
- Each module domain includes a glossary, resources, and a case study to facilitate learning
- Ideal for users newer to research and evaluation in diet or physical activity
- Include short quizzes at the end of modules

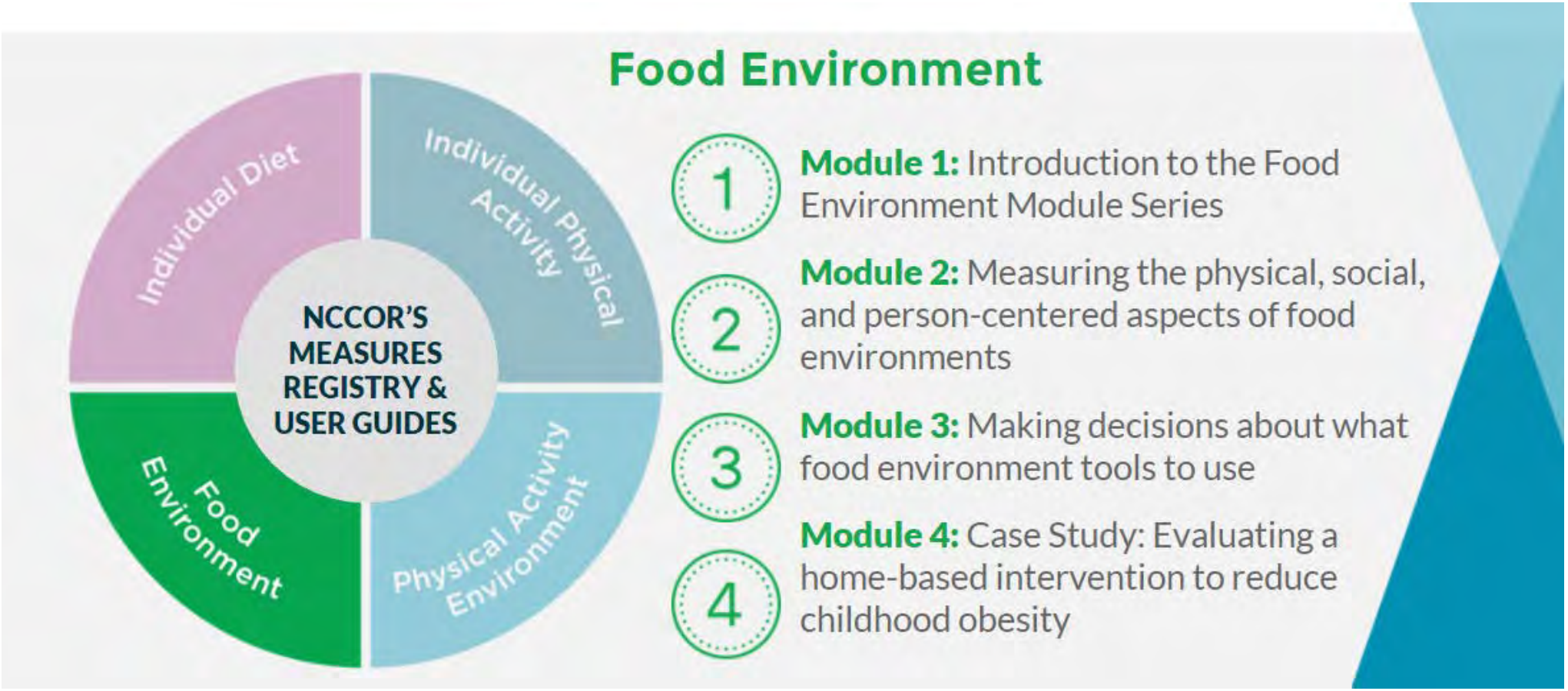
http://www.nccor.org/mrlearningmodules/

Measures Registry Learning Modules: Introduction

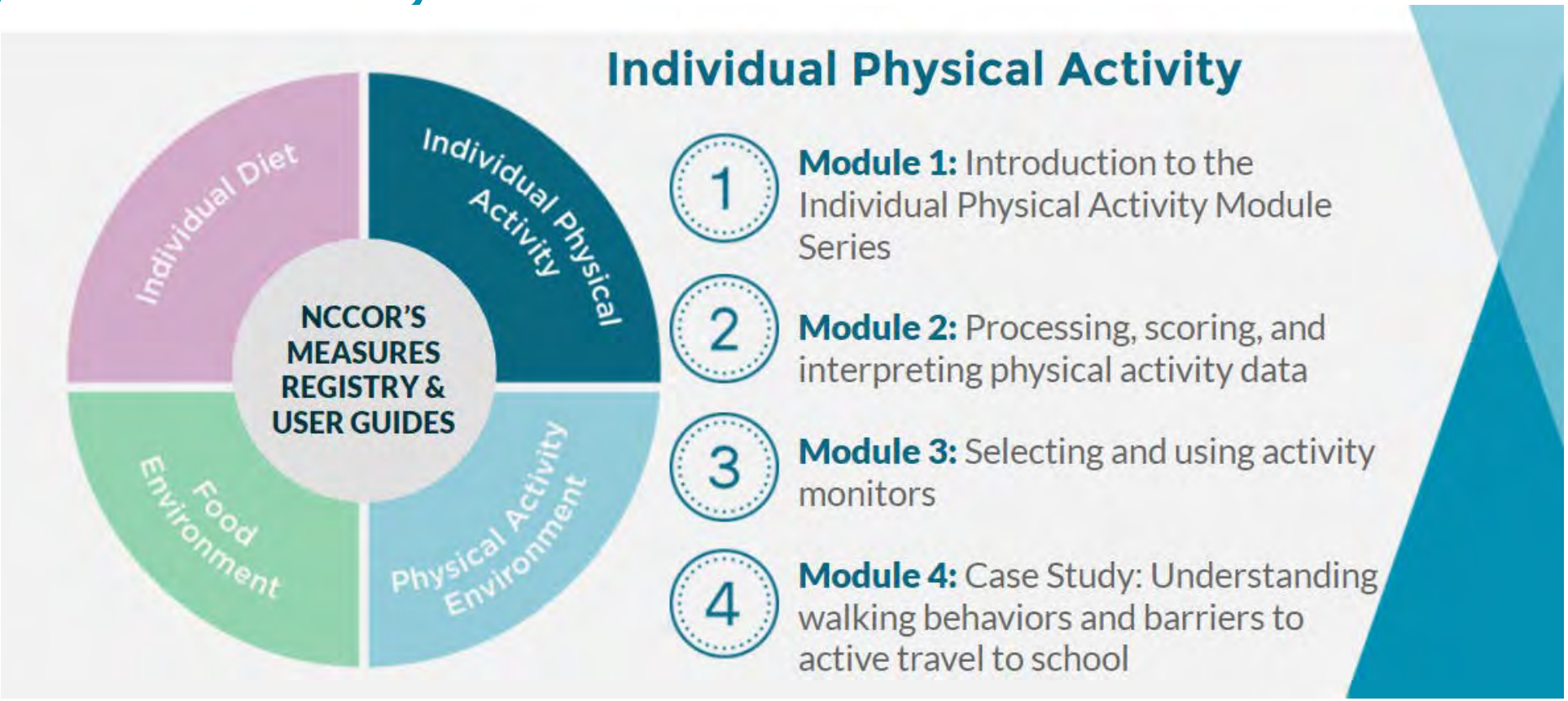
Measures Registry Learning Modules: Individual Diet



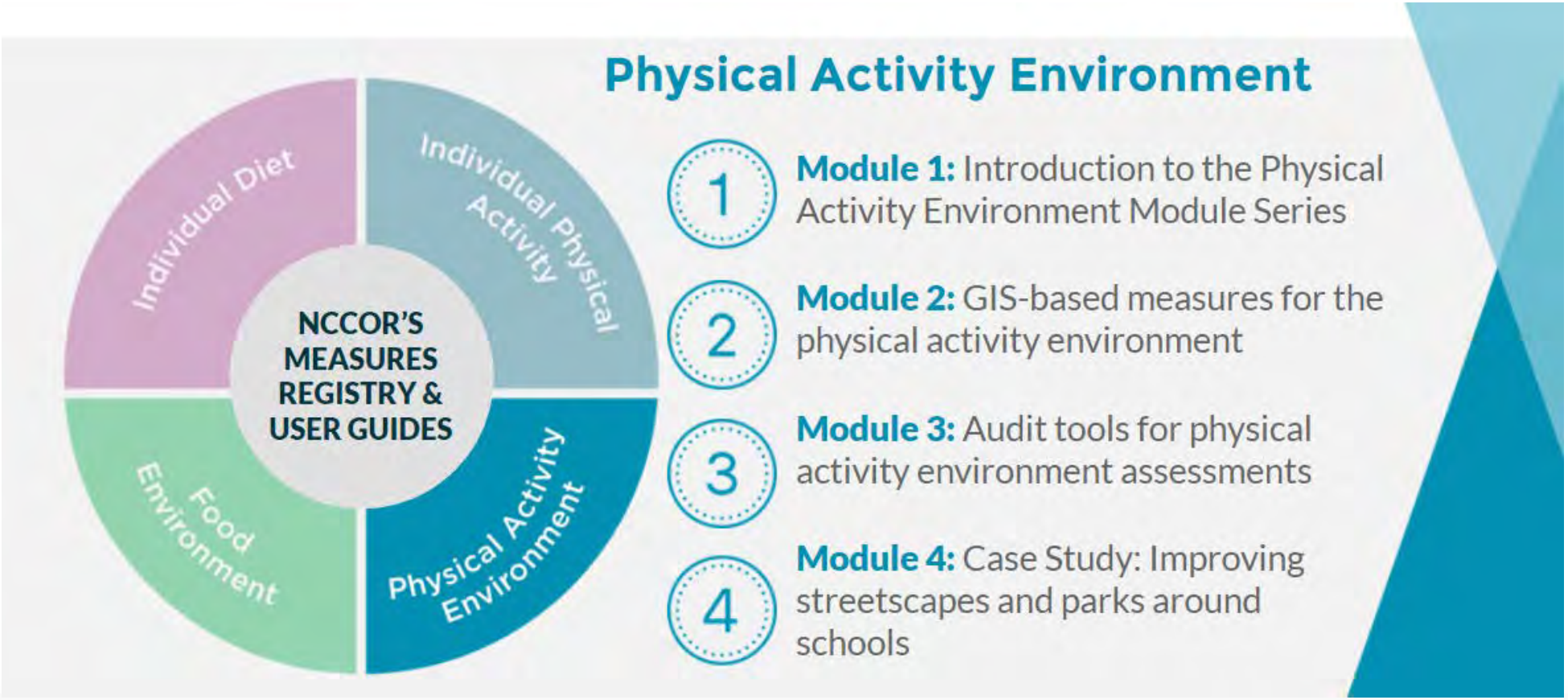
Measures Registry Learning Modules: Food Environment



Measures Registry Learning Modules: Individual Physical Activity



Measures Registry Learning Modules: Physical Activity Environment



Question 5 of 5

When selecting measurement tools for community program projects, it is important to consider the tools' validity and reliability.

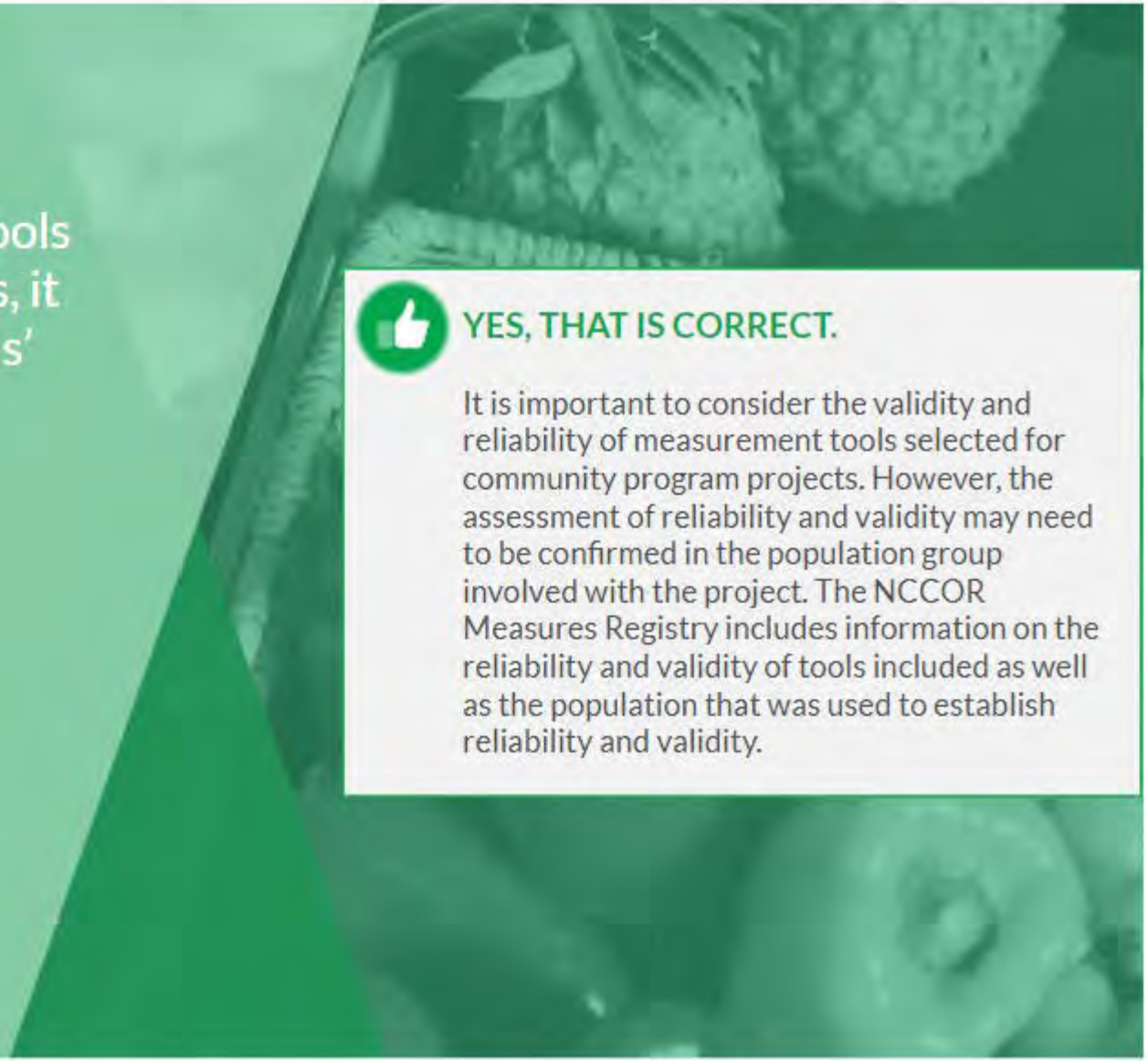
- ○ True
- ○ False

CHECK ANSWER

Question 5 of 5

When selecting measurement tools for community program projects, it is important to consider the tools' validity and reliability.

- (●) True
- ( ) False



YES, THAT IS CORRECT.

It is important to consider the validity and reliability of measurement tools selected for community program projects. However, the assessment of reliability and validity may need to be confirmed in the population group involved with the project. The NCCOR Measures Registry includes information on the reliability and validity of tools included as well as the population that was used to establish reliability and validity.

HOW TO USE THE RESOURCES SUITE

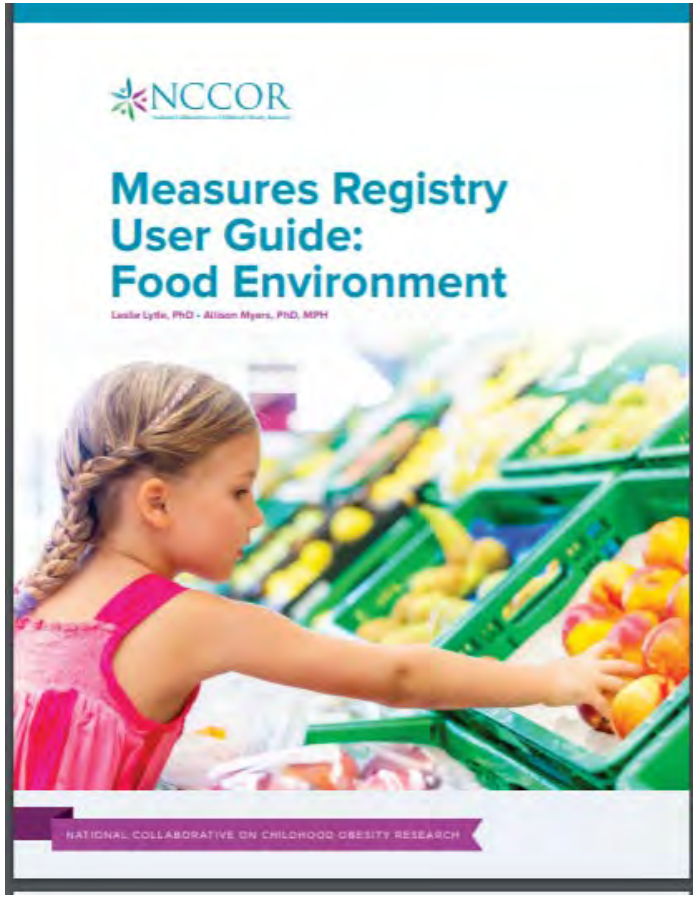
START with an overview of the domains by watching the **Measures Registry Learning Modules**

SELECT the domain(s) and review the corresponding **Measures Registry User Guides**

USE the **Measures Registry**, select the appropriate measure to address your research or evaluation question.

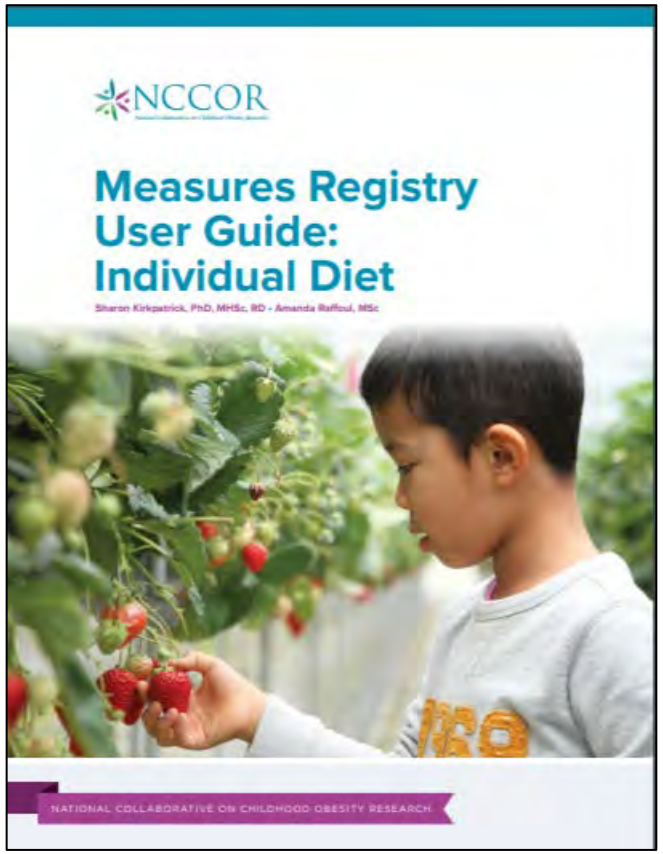
Measures Registry User Guides

- 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



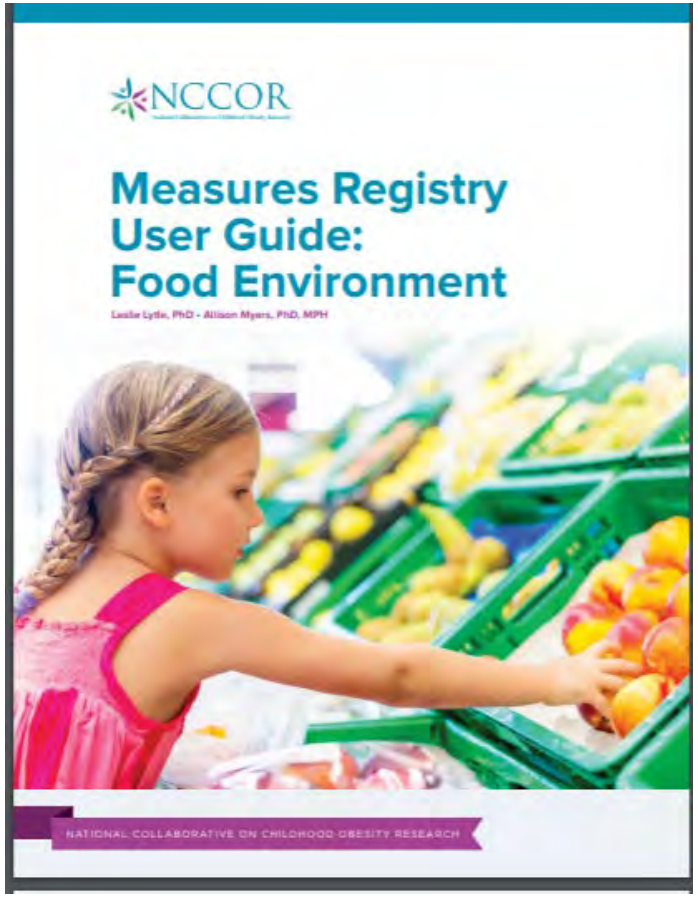
Individual Diet

- Overview of dietary behavior, which is primarily defined as dietary intake and related dietary behaviors (e.g., frequency of snacking, perceptions, and attitudes)
- Outline of the literature identifying links between diet and childhood obesity
- Concepts relevant to studying diet, including unique considerations regarding the quality of data collected in studies of children
- Methods and tools used to assess dietary intake and related dietary behaviors, including objective and self-report methods
- Principles related to psychometric properties of measures, along with random and systematic measurement error



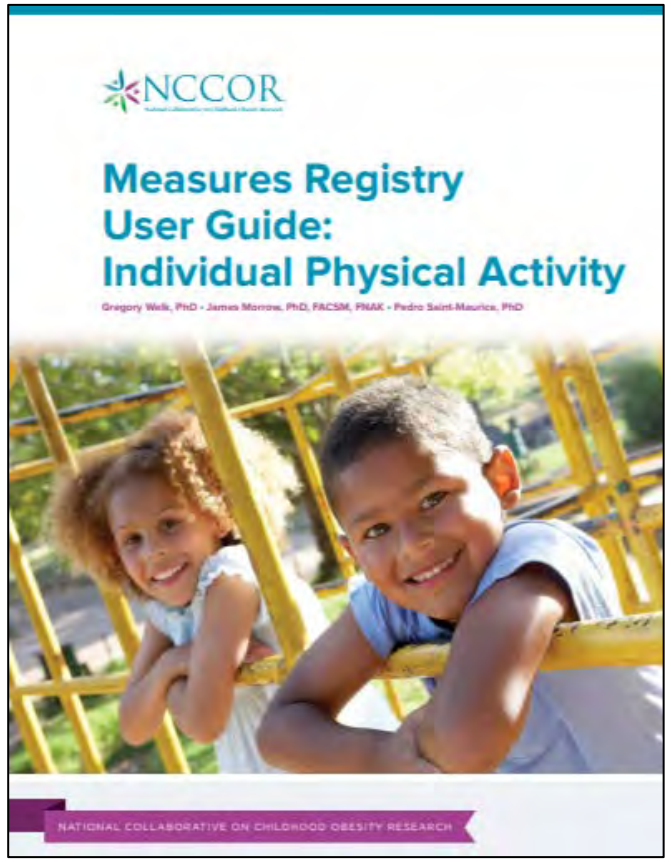
Food Environment

- Definitions for key food environment venues
- Concepts in food environment assessment
- Methods of food environment measurement across settings
- Principles related to psychometric properties of measures
- Distinctions between single and multi-item measures, response scales, and sensitivity to change



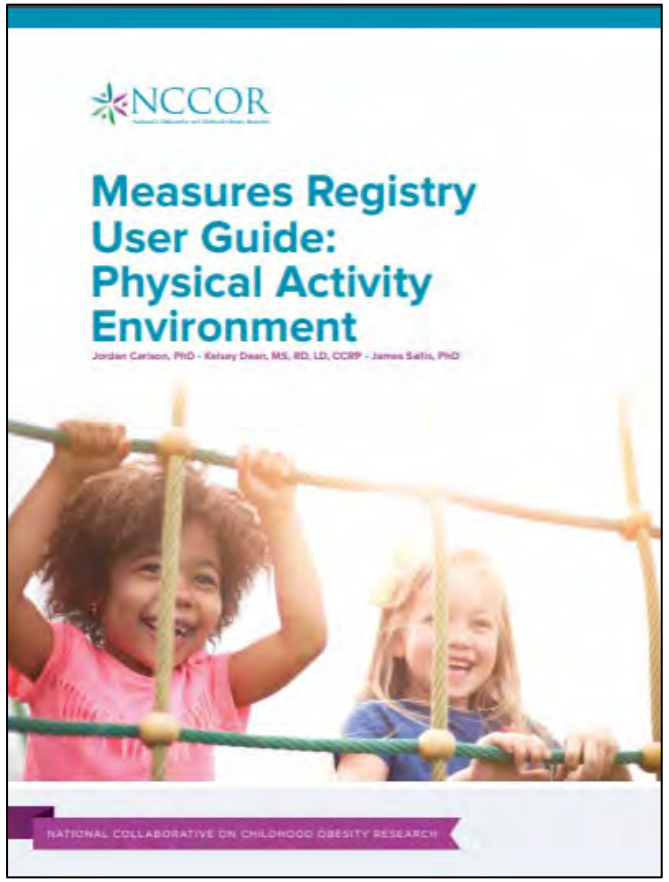
Individual Physical Activity

- A framework to understand the unique needs of different types of studies and an introduction to the various categories of physical activity assessment options
- A description of the complexities of quantifying physical activity
- The challenges involved in assessing a multi-dimensional and dynamic behavior
- Specific considerations for measuring physical activity in children
- Considerations related to calibrating activity monitors, interpreting differences in active versus sedentary behaviors, and using new monitoring and data collection technologies and more



Physical Activity Environment

- A rationale for assessing physical activity environments and defining the key physical activity environment settings
- Description of various methods for measuring the physical activity environment
- Methods of physical activity environment measurement across settings
- Principles related to psychometric properties of measures, along with distinctions between single and multi-item measures, response scales, and sensitivity to change



HOW TO USE THE RESOURCES SUITE

START with an overview of the domains by watching the **Measures Registry Learning Modules**

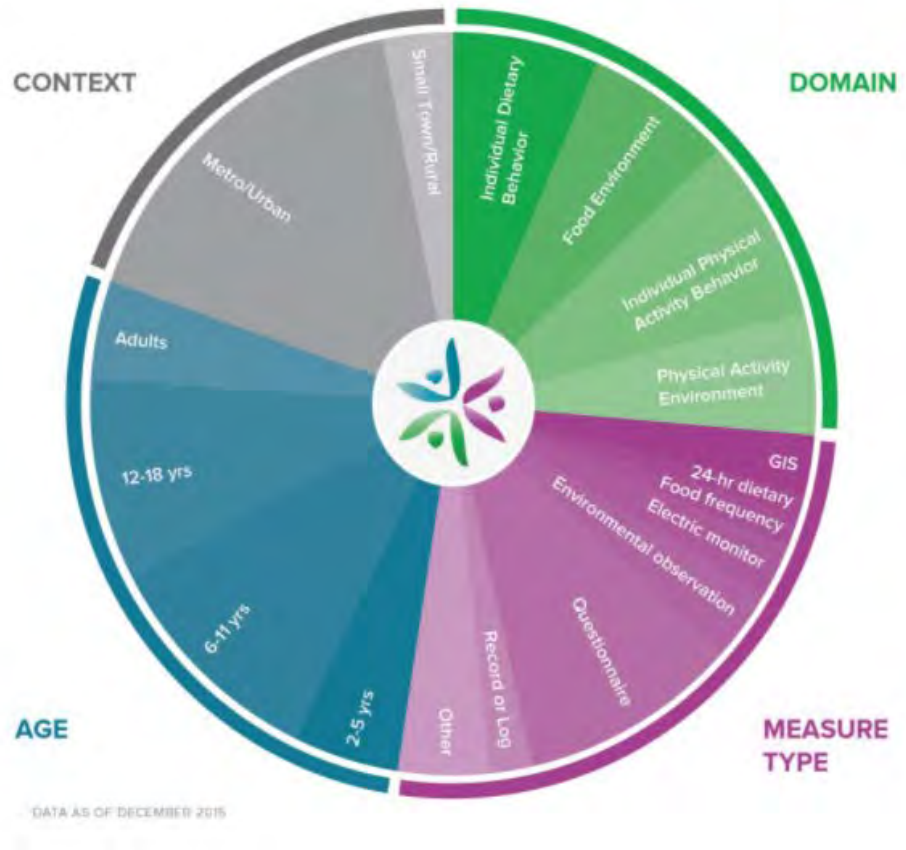
SELECT the domain(s) and review the corresponding **Measures Registry User Guides**

USE the **Measures Registry**, select the appropriate measure to address your research or evaluation question.

Measures Registry

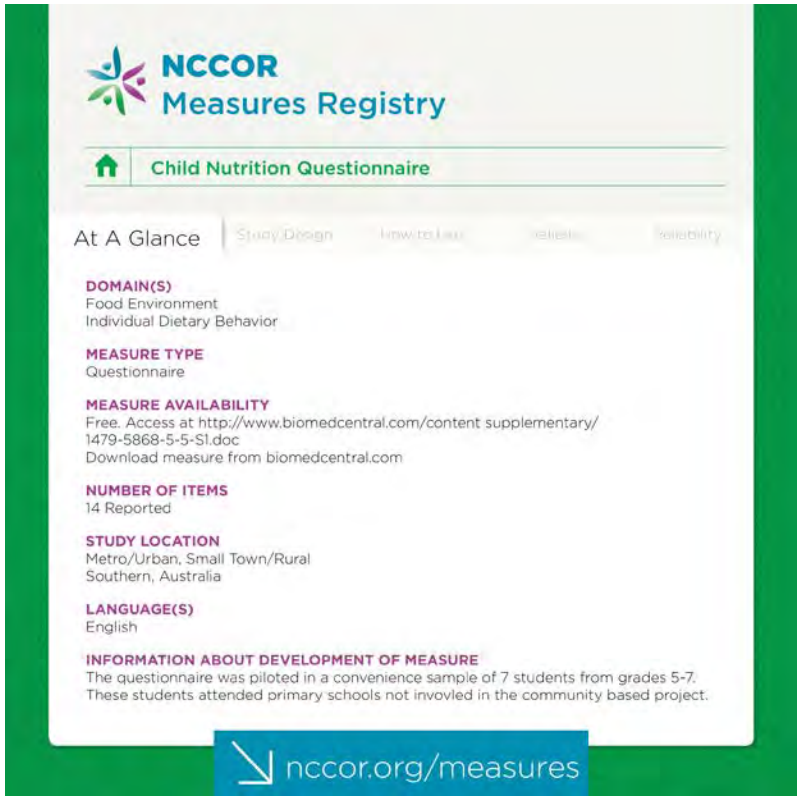
- Launched in 2011, the Measures Registry is a web-based portfolio of nearly 1400 studies using more than 100 discrete measures related to diet and physical activity.
- Search and Filter capabilities by:
  - Domain
  - Measures Type
  - Age
  - Urbanicity

www.nccor.org/measures/



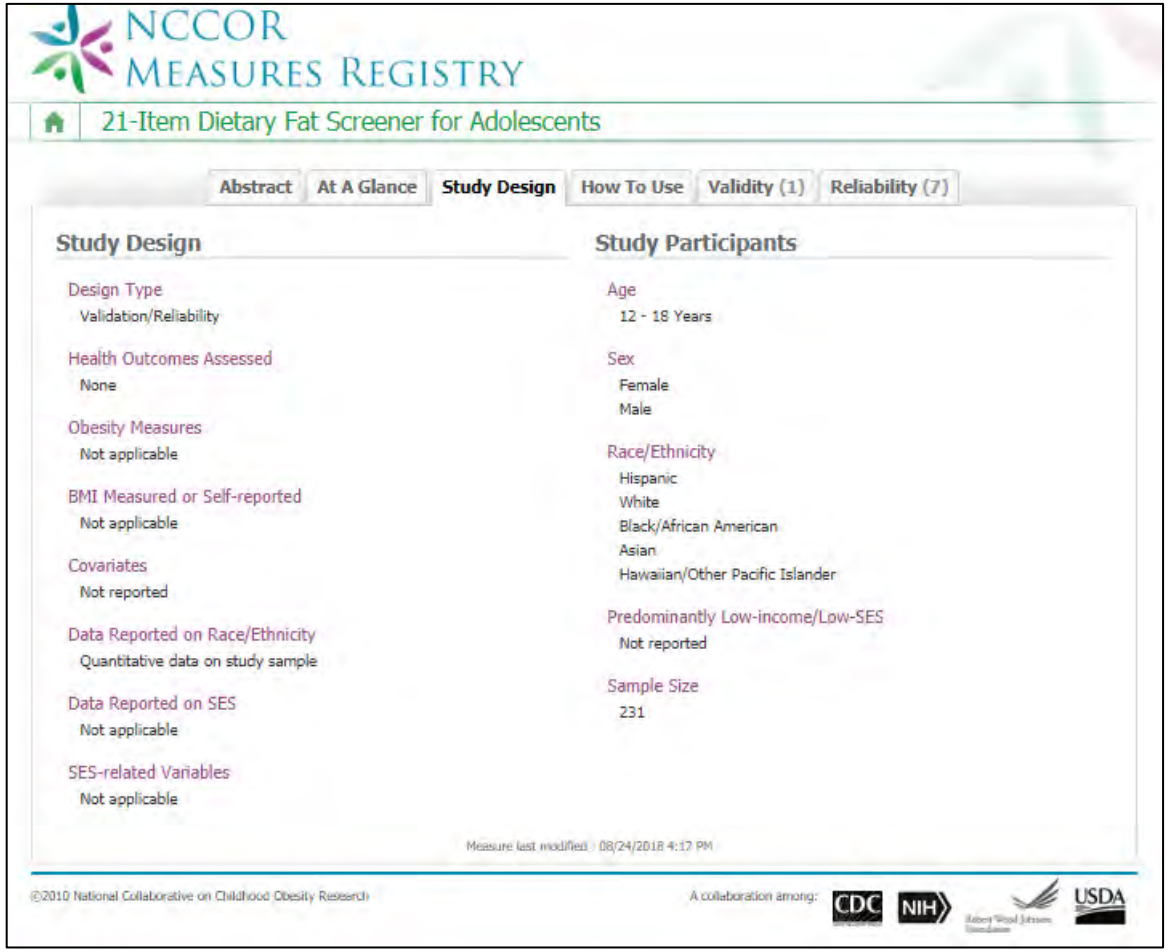
At a glance

- The Measures Registry highlights
  - Type of measures available
  - Number of Items within measurement tools
  - Links to full text
- Measures are provided when available



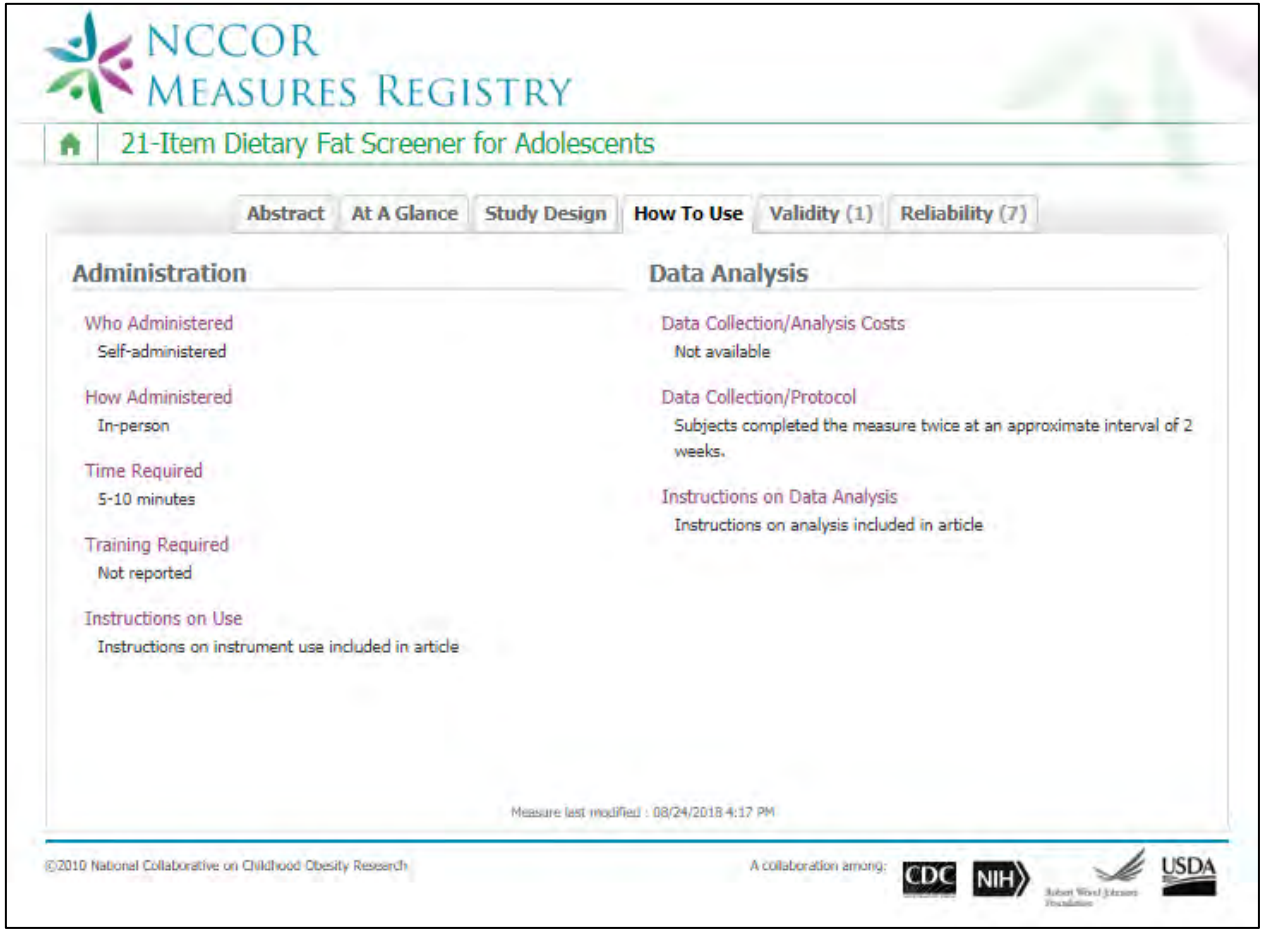
Study Design

- Provides the following details on study design:
  - Design Type
  - Health Outcomes Assessed
  - Obesity Measures
  - BMI Measured or Self-Report
  - Covariates
- Further details study participants:
  - Age
  - Sex
  - Race/Ethnicity
  - Income level
  - Sample Size



Additional information

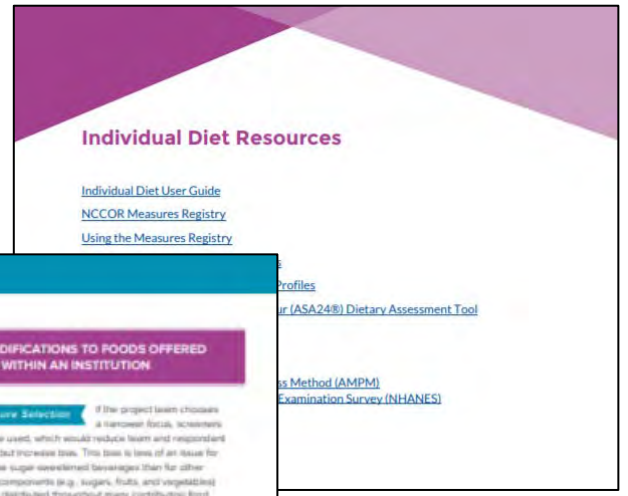
- Reports on
  - How to Use the Measures
    - Including (when available) time required, training required, and data collection protocols, analysis instructions
  - Validity & Reliability
    - Including (when available) type, construct/subscale assessed, test/statistic used, and results

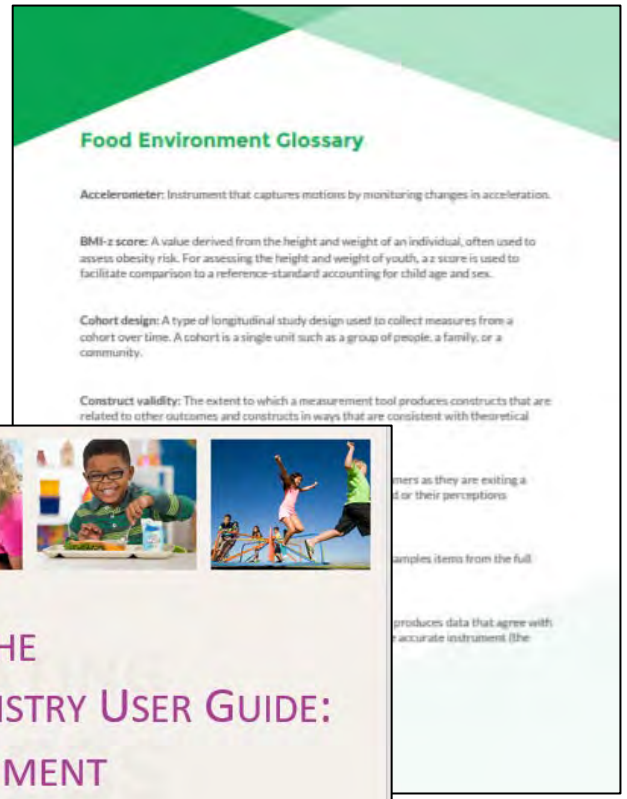


Examples of Included Measures

- Questionnaires
- Instruments
- Diaries
- Logs
- Electronic devices
- Direct observation of people or environments
- Protocols
- Analytic techniques

Additional Resources





Questions?

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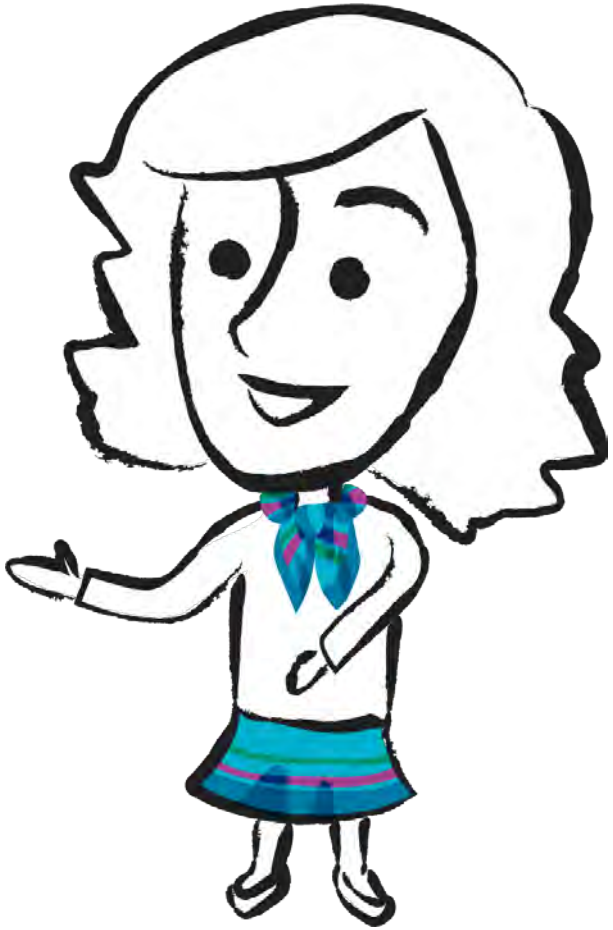

How to Use the Measures Registry in a Research Project

Nurgul Fitzgerald, PhD, RDN
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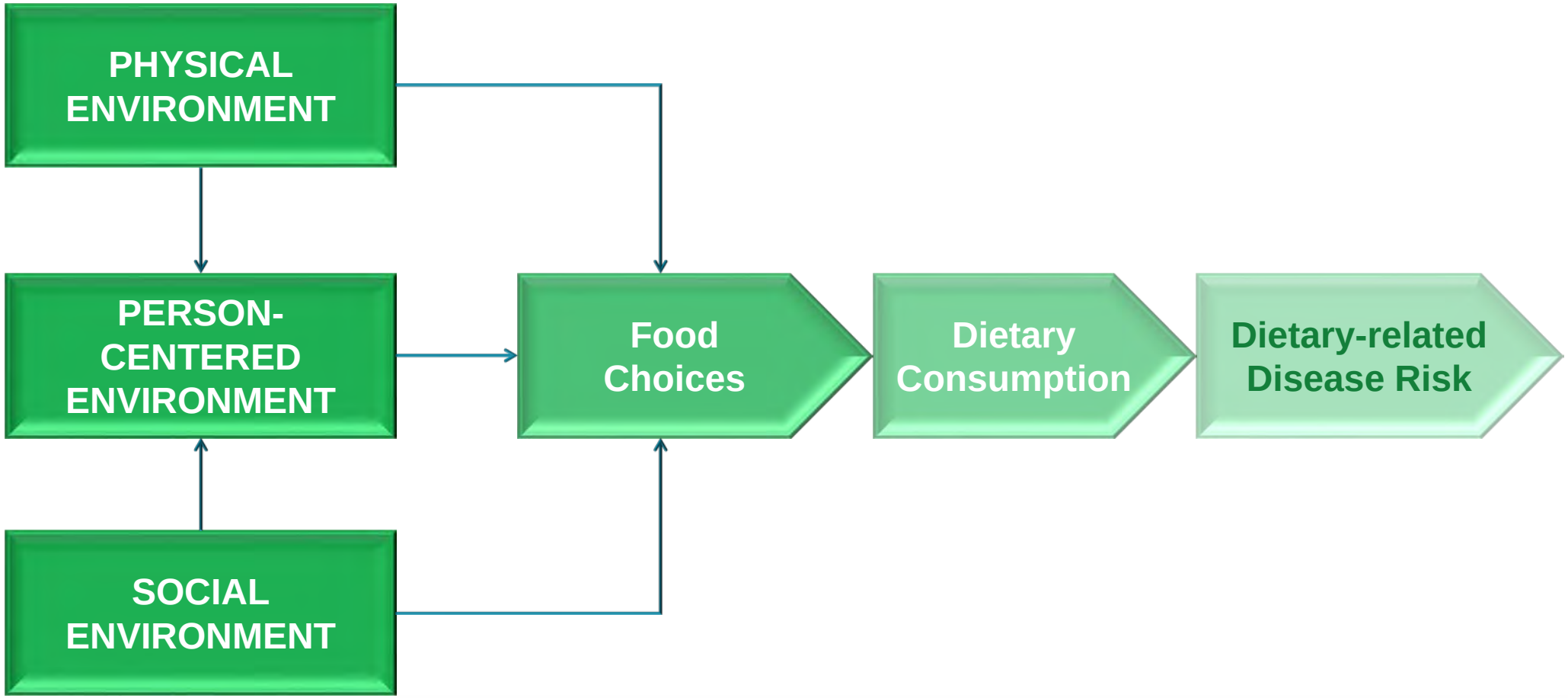
Conceptual Model of Environmental Factors Related to Dietary Disease Risk



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?

SOCIAL ENVIRONMENT

- Youths – peers
- Parents
- Teachers
- Other adults

1. Social 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

PERSON-CENTERED ENVIRONMENT

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

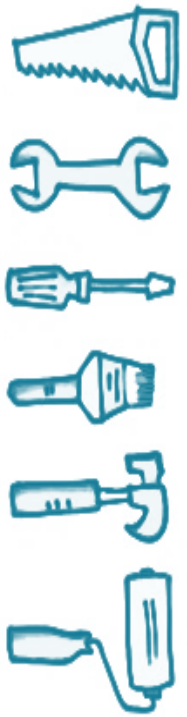
Measuring Food Environment

PHYSICAL ENVIRONMENT

SOCIAL ENVIRONMENT

PERSON-CENTERED ENVIRONMENT

- Geo-spatial analyses (GIS)
- Observational assessments (audits)
  - Example: NEMS
- Interviews, questionnaires
  - School Health Policy and Practice Survey
  - CATCH Health Behavior Questionnaire
  - Many others available



HOW TO USE THE RESOURCES SUITE

START with an overview of the domains by watching the **Measures Registry Learning Modules**

SELECT the domain(s) and review the corresponding **Measures Registry User Guides**

USE the **Measures Registry**, select the appropriate measure to address your research or evaluation question.

Before you begin the measurement selection in the Registry

Clear understanding of

- Project aim
- Population to study, sample size
- Logistics:
  - Access, staff availability, budget and time constraints
- Outcomes of interest

Assessing the physical environment: Opportunities and challenges

Geographic Information Systems (GIS)

PROS

- Data collection is fairly objective
- Data can be pulled and aggregated efficiently
- Data can be portrayed visually in highly effective ways

CONS

- Analytic expertise is required
- Store and restaurant data are often outdated
- Data affecting availability and accessibility are not included
- Does not account for various factors that influence where people shop for food or eat
- Relationship between food availability and diet-related health is difficult to demonstrate

Observational scans

PROS

- Training data collectors is required, but is fairly easy to do
- Data analysis is straightforward
- Can provide feedback to stakeholders quickly

CONS

- May be difficult to find an existing scan to meet specific project needs
- Adapted scans or newly created scans will need to be evaluated for practicality, reliability, and validity

Before you begin the measurement selection in the Registry

Clear understanding of

- Project aim
- Population to study, sample size
- Logistics:
  - Access, staff availability, budget and time constraints
- Outcomes of interest
- Psychometric characteristics: reliability, validity

Two Critical Features of Measures

RELIABILITY

- Do two independent observers record data similarly?
(inter-rater)
- Consistency over time
(test-retest)
- Multiple questions designed to measure the same concept: do they?
(internal consistency)

VALIDITY

- Does the measure seem to assess the intended factor of interest?
(face validity)
- How does the measure perform in comparison to a gold standard?
(criterion validity)
- Does the instrument include all of the relevant aspects of the measure of interest?
(content validity)
- Is the measure related to other factors in the expected direction?
(construct validity)

Other considerations: Reliability, validity, and age appropriate tools

- Abstract concepts will be difficult for many children
- Depending on reading level, surveys may need to be read
- Use the age filter in the Measures Registry
- Check the reliability and validity of tools

Reliability

Validity


NCCOR
National Collaborative on Childhood Obesity Research
ABOUT
PROJECTS
TOOLS
WEBINARS
NEWS
PUBLICATIONS
STUDENT HUB
HOME > TOOLS > MEASURES REGISTRY
A GUIDE TO METHODS FOR ASSESSING CHILDHOOD OBESITY
CATALOGUE OF SURVEILLANCE SYSTEMS
MEASURES REGISTRY RESOURCE SUITE
YOUTH COMPENDIUM OF PHYSICAL ACTIVITIES
WHAT'S HAPPENING IN
NCCOR NEWS
National Institutes of Health releases strategic plan to accelerate nutrition research over next 10 years
¡NUEVO! Traducción al Español del Compendio de actividades físicas para niños, niñas y adolescentes de NCCOR
NEW! Spanish Translation of NCCOR's Youth Compendium of Physical Activities
Childhood Obesity Resources Related to COVID-19
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, GIS and analytic techniques.
Even with the Measures Registry, however, it can be challenging for users to choose the most appropriate measures for their work. Therefore, to aid users in choosing measures for their work in childhood obesity, NCCOR developed the Measures Registry User Guides. Organized by the same four domains as the Measures Registry, the User Guides are designed to provide an overview of measurement, describe general principles of measurement selection, present case studies that walk users through the process of using the Measures Registry to select appropriate measures, and direct researchers and practitioners to additional resources and sources of useful information.
SEARCH THE REGISTRY
ACCESS THE USER GUIDES
EXPLORE MORE RESOURCES
• NCCOR Student Resources Guide

NCCOR Measures Registry

Measures Registry

Filter options [clear filter]

Search

Contains: corner store

Domain

- [ ] Individual Dietary Behavior (1)
- [ ] Food Environment (76)
- [ ] Individual Physical Activity Behavior (2)
- [ ] Physical Activity Environment (10)

Measure Type

- [ ] GIS (25)
- [ ] 24-hour dietary recall (0)
- [ ] Food frequency (0)
- [ ] Electronic monitor (0)
- [ ] Environmental observation (30)
- [ ] Questionnaire (11)
- [ ] Record or log (4)
- [ ] Other (27)

Age

- [ ] 2 - 5 Years (7)
- [ ] 6 - 11 Years (21)
- [ ] 12 - 18 Years (19)
- [ ] Adults (9)

Context

- [ ] Metro/Urban (68)
- [ ] Small Town/Rural (22)

Results

Showing all 76 matching measures Limit to 25 per page

Measure Name ▲	First Author	Year Published	Compare
Analyses of Food Stores and Neighborhood Characteristics	Powell LM	2007	
Availability and Quality of Foods in Grocery Stores	Kipke MD	2007	
BMI and Food Outlet Access Methodology	Sturm R	2005	
Block Urban Area Market Basket Survey	Block D	2006	
China Urban Built Environment Scan Tool (CUBEST)	Su M	2014	
Community Supermarket and Other Food Stores Measure	Morland K	2006	
Community and Home Food Environments for 5 to 18 Year Olds	Ding D	2012	
Convenience Stores Surrounding Junior High and High Schools	Gebauer H	2011	
Corner Stores in Proximity to Schools Food Environment	Lucan SC	2010	
EURO-PREVOB Community Questionnaire for Food and Built Environments	Pomerleau J	2013	
Environmental Beverage Consumption Factors for School-Aged Children	Pabayo R	2012	
Farmers' Market Audit Tool (F-MAT)	Byker Shanks C	2015	
Fast Food Restaurant and Convenience Store Accessability for Schools	Sánchez BN	2012	
Fast Food and Convenience Store Proximity to Schools	Smith D	2013	
Food Availability Survey	Horowitz CR	2004	
Food Costs for Adolescents	Powell LM	2011	
Food Environment Classification Tool for Newcastle upon Tyne	Lake AA	2010	
Food Environment Factors for 11 to 13 Year Olds	He M	2012	

Measures Registry

Filter options

[clear filter]

Search

Contains: corner store

Domain

- [ ] Individual Dietary Behavior (0)
- [x] Food Environment (29)
- [ ] Individual Physical Activity Behavior (0)
- [ ] Physical Activity Environment (4)

Measure Type

- [ ] GIS (3)
- [ ] 24-hour dietary recall (0)
- [ ] Food frequency (0)
- [ ] Electronic monitor (0)
- [x] Environmental observation (29)
- [ ] Questionnaire (1)
- [ ] Record or log (3)
- [ ] Other (8)

Age

- [ ] 2 - 5 Years (1)
- [ ] 6 - 11 Years (4)
- [ ] 12 - 18 Years (4)
- [ ] Adults (0)

Context

- [x] Metro/Urban (29)

Results

Limit to 25 per page

Showing all 29 matching measures

Measure Name ▲	First Author	Year Published	Compare
Availability and Quality of Foods in Grocery Stores	Kipke MD	2007	☑
Block Urban Area Market Basket Survey	Block D	2006	☐
China Urban Built Environment Scan Tool (CUBEST)	Su M	2014	☐
Corner Stores in Proximity to Schools Food Environment	Lucan SC	2010	☐
EURO-PREVOB Community Questionnaire for Food and Built Environments	Pomerleau J	2013	☐
Food Availability Survey	Horowitz CR	2004	☐
Food Environment Classification Tool for Newcastle upon Tyne	Lake AA	2010	☐
Food Environment Survey for Adolescents	Hua J	2014	☐
Food Establishments Relative to Location of Schools (Spatial Analysis)	Kipke MD	2007	☐
Food Store Survey	Hosler AS	2006	☐

Compare 6 measures

Nutrition Env...dy (NEMS) score	Frank L	2006
Nutrition Env...r Retail Stores	Glanz K	2007
Nutrition Envi...WIC Recipients	Andreyeva T	2012
Survey Tool for Food Stores	Hosler AS	2011
Price, Availab...and Vegetables	Winkler E	2006
Availability ... Grocery Stores	Kipke MD	2007

Comparing Measures

Show empty rows

	Availability and Quality of Foods in Grocery Stores ▸	Nutrition Environment Measures Study (NEMS) score ▸	Nutrition Environment Measures Study (NEMS-S) for Retail Stores ▸	Nutrition Environment Measures Survey in Stores (NEMS-S) Survey for WIC Recipients ▸	Price, Availability, and Variety of Fruit and Vegetables ▸	Survey Tool for Food Stores ▸
Domain						
Food Environment	✓	✓	✓	✓	✓	✓
Measure Type						
GIS	✓					
Environmental observation	✓	✓	✓	✓	✓	✓
Record or log				✓		
Other	✓					
Available Info						
Validity	✓	✓	✓	✓	✓	✓
Reliability	✓	✓	✓	✓	✓	✓
Instrument	✓		✓		✓	
Age						
Sex						
Race/Ethnicity						
Hispanic	✓					
Black/African American			✓			✓
Language						
English		✓	✓		✓	✓
Context						
Metro/Urban	✓	✓	✓	✓	✓	✓
Small Town/Rural				✓		

A collaboration among: CDC NIH Robert Wood Johnson USDA

NCCOR
MEASURES REGISTRY

Nutrition Environment Measures Study (NEMS-S) for Retail Stores

Abstract | At A Glance | Study Design | How To Use | Validity (2) | Reliability

Citation

Glanz K, Sallis JF, Saelens BE, Frank LD. Nutrition Environment Measures Survey in stores (NEMS-S): development and evaluation. Am J Prev Med 2007 Apr;32(4):282-9.

Abstract

BACKGROUND: Eating, or nutrition, environments are believed to contribute to obesity and chronic diseases. There is a need for valid, reliable measures of nutrition environments. This article reports on the development and evaluation of measures of nutrition environments in retail food stores.

METHODS: The Nutrition Environment Measures Study developed observational measures of the nutrition environment within retail food stores (NEMS-S) to assess availability of healthy options, price, and quality. After pretesting, measures were completed by independent raters to evaluate inter-rater reliability and across two occasions to assess test-retest reliability in grocery and convenience stores in four neighborhoods differing on income and community design in the Atlanta metropolitan area. Data were collected and analyzed in 2004 and 2005.

RESULTS: Ten food categories (e.g., fruits) or indicator food items (e.g., ground beef) were evaluated in 85 stores. Inter-rater reliability and test-retest reliability of availability were high: inter-rater reliability kappas were 0.84 to 1.00, and test-retest reliabilities were .73 to 1.00. Inter-rater reliability for quality across fresh produce was moderate (kappas, 0.44 to 1.00). Healthier options were higher priced for hot dogs, lean ground beef, and baked chips. More healthful options were available in grocery than convenience stores and in stores in higher income neighborhoods.

CONCLUSIONS: The NEMS-S tool was found to have a high degree of inter-rater and test-retest reliability, and to reveal significant differences across store types and neighborhoods of high and low socioeconomic status. These observational measures of nutrition environments can be applied in multilevel studies of community nutrition, and can inform new approaches to conducting and evaluating nutrition interventions.

Full Text

The full text is available at https://dx.doi.org/10.1016/j.amepre.2006.12.019

Measure last modified : 08/24/2018 4:16 PM

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MEASURES REGISTRY

Nutrition Environment Measures Study (NEMS-S) for Retail Stores

Abstract | At A Glance | Study Design | How To Use | Validity (2) | Reliability (4)

Domain(s)

Food Environment

Measure Type

Environmental observation

Measure Availability

Free. Access at the appendix to the article at American Journal of Preventative Medicine.
Download measure from riskfactor.cancer.gov

Number of Items

93 Reported

Study location

Metro/Urban
Atlanta, GA, USA
4 neighborhoods (each a census tract)

Languages

English

Information about Development of Measure

Nothing to add

Food Environment Variables

#	Type of Environment/Institution
88	Total Environments/Locations
64	Convenience/Corner Store
24	Grocery Store

Measure	objective	perceived
Affordability/Pricing	✔	✗
Availability/Access	✔	✗
Food Quality	✔	✗

Food Group/Type of Food
Fruits and vegetables
Low-fat dairy
Whole grains
Foods of minimal nutritional value
Sweetened beverages
Meat/fish/poultry/eggs
Low-fat foods other than dairy

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A collaboration among: CDC NIH Robert Wood Johnson Foundation USDA

NCCOR MEASURES REGISTRY

Nutrition Environment Measures Study (NEMS-S) for Retail Stores

Abstract | At A Glance | **Study Design** | How To Use | Validity (2)

Study Design

Design Type
Validation/Reliability

Health Outcomes Assessed
None

Obesity Measures
Not applicable

BMI Measured or Self-reported
Not applicable

Covariates
Not reported

Data Reported on Race/Ethnicity
Quantitative data for community or area

Data Reported on SES
Quantitative data on study sample

SES-related Variables
Income

Study Participants

Age
Not applicable

Sex
Not applicable

Race/Ethnicity
Black/African American

Predominantly Low-income/L
Yes

Sample Size
Not Available

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A collaboration among:

NCCOR

NCCOR MEASURES REGISTRY

Nutrition Environment Measures Study (NEMS-S) for Retail Stores

Abstract | At A Glance | Study Design | **How To Use** | Validity (2) | Reliability (4)

Administration

Who Administered
Researcher-administered

How Administered
In-person

Time Required
41.8 (SD 14.4) minutes for grocery stores and 14.4 (SD 5.3) minutes for convenience stores

Training Required
Yes, time reported: 2 days

Instructions on Use
Access at the appendix to the article at American Journal of Preventative Medicine.

Data Analysis

Data Collection/Analysis Costs
Not available

Data Collection/Protocol
Not available

Instructions on Data Analysis
Access at the appendix to the article at American Journal of Preventative Medicine.

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A collaboration among:

CDC | NIH | Robert Wood Johnson Foundation | USDA

NCCOR MEASURES REGISTRY

Nutrition Environment Measures Study (NEMS-S) for Retail Stores

Abstract | At A Glance | Study Design | How To Use | Validity (2) | **Reliability (4)**

Type of reliability	Construct/subscale assessed	Test/statistic used	Result
Inter-rater	Food availability	Kappas, percent agreement	Kappas were 0.83 to 1.00 and rates of agreement were from 92.9% to 100%
Inter-rater	Quality across fresh produce	Kappas, percent agreement	Kappas were 0.44 to 1.00 and rates of agreement were from 85.3% to 100%
Test-retest	Food availability	Kappas, percent agreement from 86.6% to 100%	Kappas were 0.73 to 1.00 and rates of agreement were from 90.2% to 100%
Test-retest	Quality across fresh produce.	Kappas, percent agreement	Kappas were 0.11 to 1.00 and rates of agreement were from 76% to 100%

In summary

1. Finding the appropriate measurement tool is essential in any research project or program evaluation.
2. Be certain the tool you choose meets the needs of your project and is appropriate for your population.
3. Look for one that has *some* demonstrated reliability and validity, and try to contribute to reliability and validity.
4. Choose a tool that will provide the most rigorous measure within your project resources.
5. There is no PERFECT tool! Do the best you can.

Sources: NCCOR Measures Registry Learning Modules and Teaching Slide Deck (www.nccor.org); Lyle & Myers (2017) Measures Registry User Guide.

Questions?

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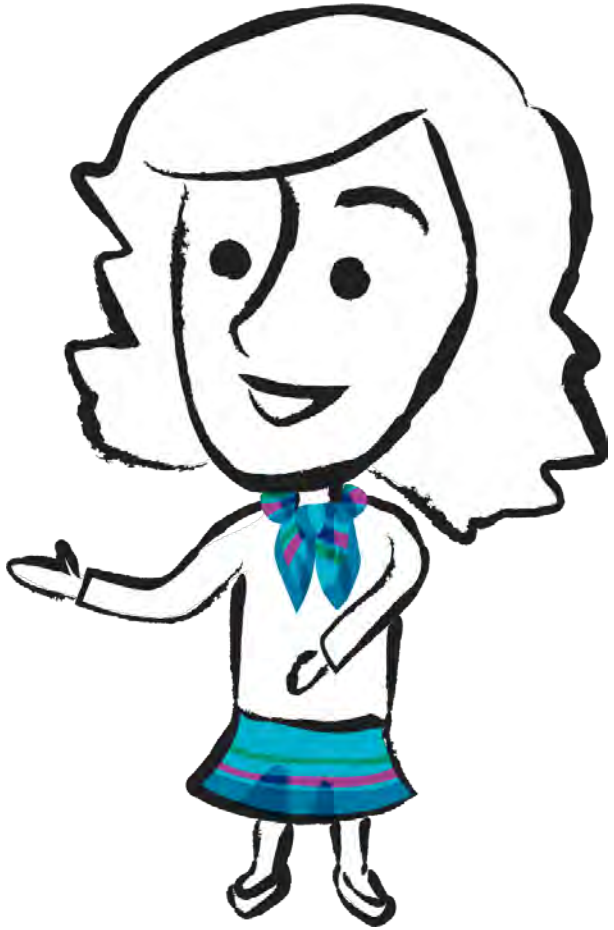

Using the Measures Registry Resource Suite in the Classroom

Alisha Farris, PhD, RDN
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Appalachian State University
farrisar@appstate.edu

Applicable *Courses* for the NCCOR Measures Registry

- Community Assessment
- Community Research

Case Study: Community Health Assessment Course

- Graduate level
- Course goal:
  - develop skills to *assess community health status and resources* in rural and global settings
- Selected course objectives:
  - utilize qualitative, quantitative, and mixed methods to conduct a health assessment on a county in North Carolina
  - assess current and future community-level needs for keeping the public healthy

County Health Assessment Project

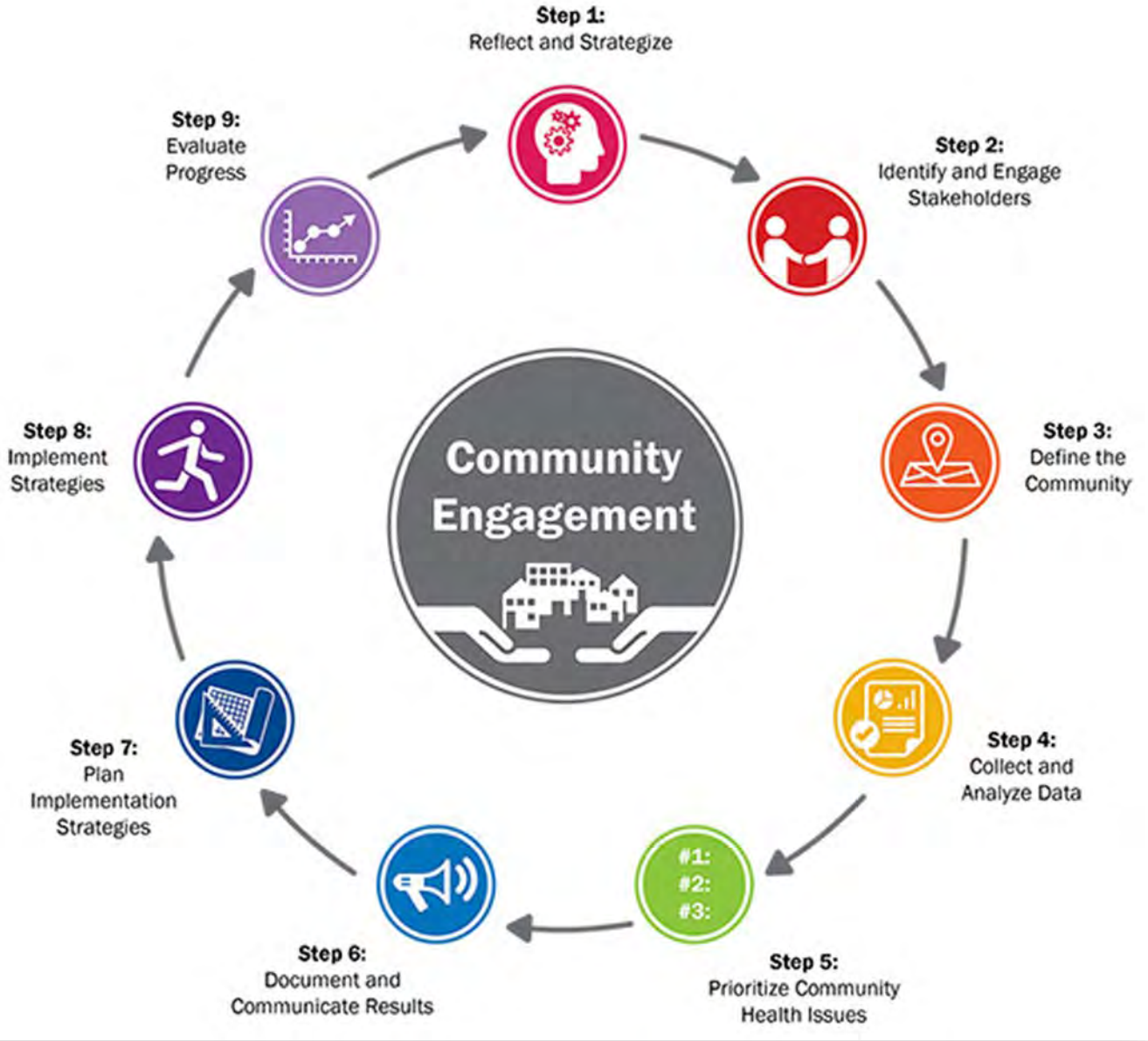

Photo from: https://www.healthycommunities.org/resources/community-health-assessment-toolkit

Community Health Assessment Assignment

COMMUNITY TOOL BOX

https://ctb.ku.edu/en

Association for Community Health Improvement™

https://www.healthycommunities.org/resources/community-health-assessment-toolkit

CASE STUDY CLASS ASSIGNMENT: COMPARING MEASURES OF PHYSICAL ACTIVITY ENVIRONMENT IN A LOCAL PARK.

INTRODUCING THE MEASURES REGISTRY USER GUIDE: FOOD ENVIRONMENT

TEACHING SLIDE DECK

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MEASURES REGISTRY, USER GUIDES, AND LEARNING MODULES

A SUITE OF RESOURCES FOR PROFESSORS

Looking for tools and resources designed and developed by other experts in the field to make research and teaching easier? Look no further than NCCOR's Measures Registry, User Guides, and Learning modules—a suite of free tools that can support faculty within and outside of the classroom. The Measures Registry is an online database of articles with measures of individual diet and physical activity and their environments, and the User Guides and Learning Modules provide an overview of measurement and describe general principles of measure selection.

https://www.nccor.org/wp-content/uploads/2016/09/A-Suite-of-Resources-for-Professors.pdf

Two Critical Features of Measures: Important in Environmental Measures as Well!

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)

List of Included Case Studies

- **Case Study 1:** Study to Evaluate a **School**-based Intervention on its Ability to Positively Influence the School Food Environment
- **Case Study 2:** Study to Evaluate a **Family**-based Intervention on Its Ability to Reduce BMI-z Scores in Obese Children
- **Case Study 3:** Intervention to Improve Healthy Eating Behaviors in Independent **Neighborhood** Restaurants
- **Case Study 4:** Study on Implementing a **Farmers Market**-based Obesity Treatment Program to Change Purchase and Eating Behaviors for Women and Children Enrolled in WIC/SNAP

Community Health Assessment Assignment

- Part 1: Describe your NC county and identify stakeholders
- Part 2: Define the purpose, goals and objectives of the assessment
- Part 3: Collect secondary data, plan for primary data
- Part 4: Analyze and interpret the data
- Part 5: Disseminate and agree on identified health priorities

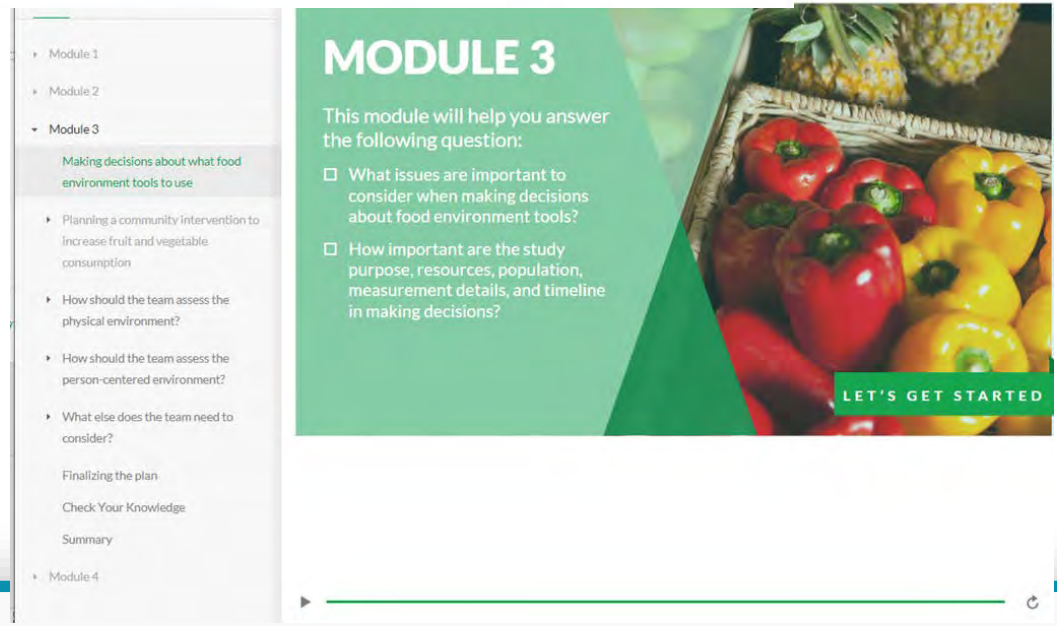
Part 3: Collect secondary data, plan for primary data

- Thorough review of secondary data
  - Surveillance systems, literature review
  - County, state, national levels
- Identification of gaps – what do they still need to know?
  - Plan for primary data collection

Part 3, Question 1:
What data do you still need to gather about your NC County health issue/population?

Steps

- READ/WATCH:
  - Readings
  - NCCOR Measures Registry Video
  - NCCOR Food Environment, Module 3
    - https://www.nccor.org/wp-content/uploads/articulate_uploads/Food-Environment/story_html5.html



Part 3, Question 2 & 3:

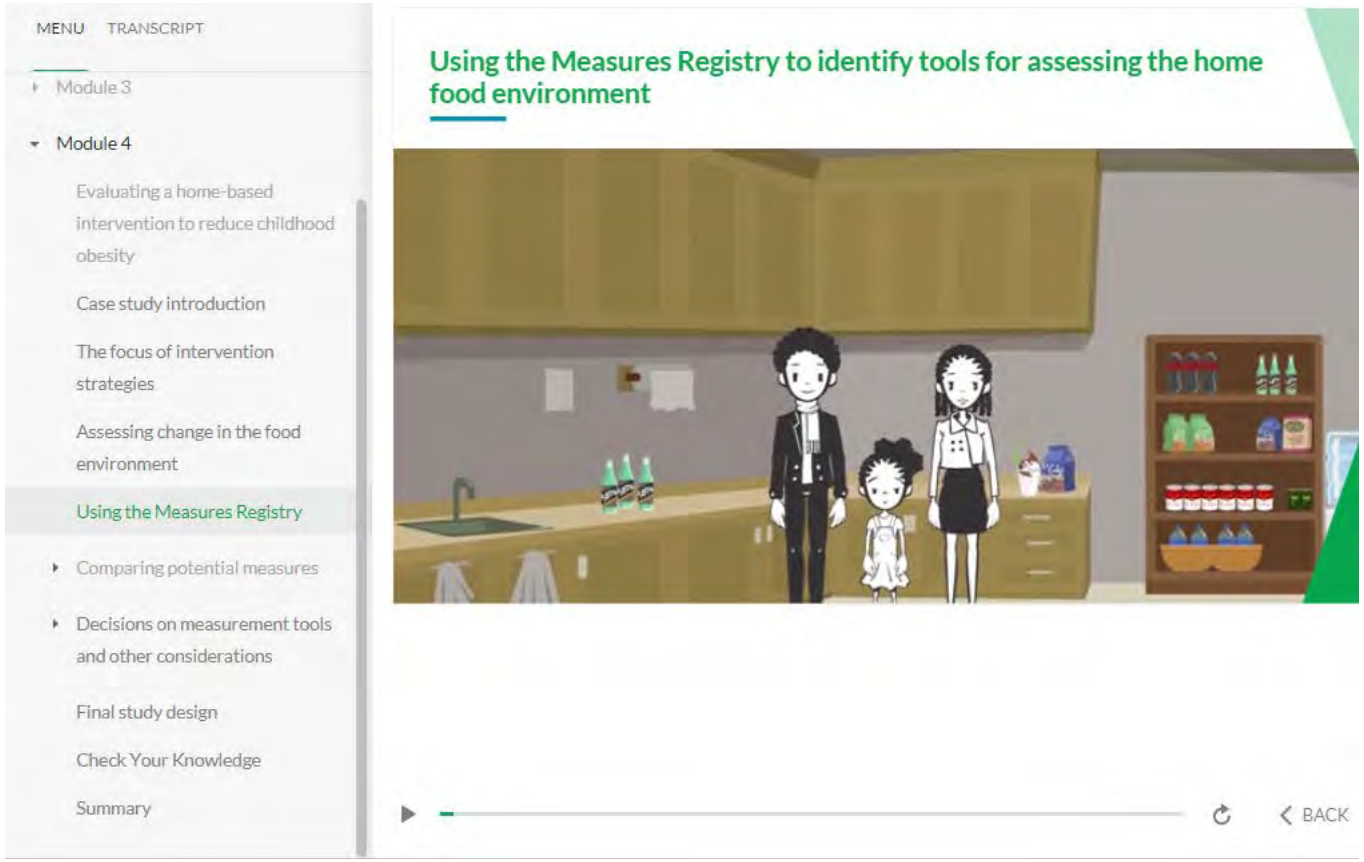
Using the NCCOR website, find an appropriate tool for your population and health issue and list it below.

--Why did you choose this survey tool? Be sure to comment on:

a) Validity and reliability
b) Appropriate fit for your demographic
c) Accessibility

- READ/WATCH:
  - NCCOR Food Environment, Module 4
    - https://www.nccor.org/wp-content/uploads/articulate_uploads/Food-Environment/story_html5.html
  - Dr. Farris, example using NCCOR

- Using the Registry
- Comparing potential measures
- Things to consider
  - Access and availability
  - Validity and reliability
  - Resources and time



Adaptations

4. Did you include the whole survey or select only sections of it? Why or why not?
5. Are you planning on adapting the tool to fit your specific population needs? Why or why not?
6. How will you distribute this tool to your population? What things might you need to consider in reaching your population?

Questions?

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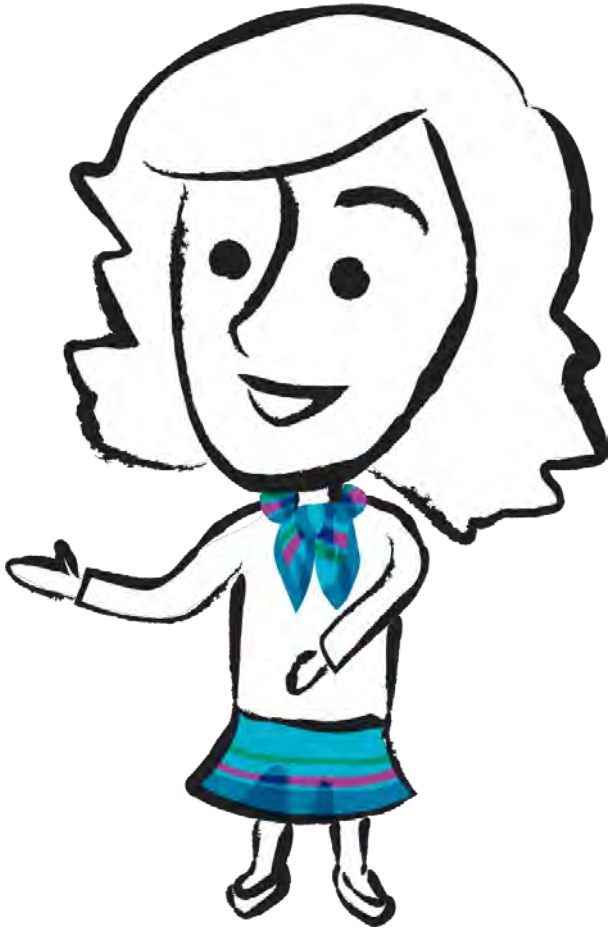

NCCOR Tools


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TOOLS
Our work is supporting researchers and practitioners with tools that help build the capacity for research and surveillance.
CATALOGUE OF SURVEILLANCE SYSTEMS
This interactive web tool provides one-stop access to a wide array of national, state, and local surveillance systems at multiple levels.
LEARN MORE >

Catalogue of Surveillance System

One-stop access to review, sort, compare over 100 surveillance systems relevant to childhood obesity research and the evaluation of policy and environmental interventions

- All offer publicly available data collected within the past 10 years in the U.S.
- Includes systems that contain data for evaluating policy and environmental interventions
- Makes manuscript development easier
- A great resource for teaching and for students
- Video overview of features and how to use
- Updated annually

Find the Catalogue at www.nccor.org/css

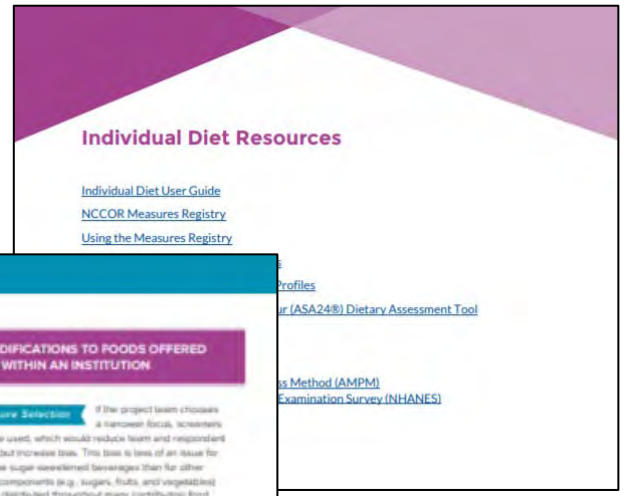
Youth Compendium of Physical Activities

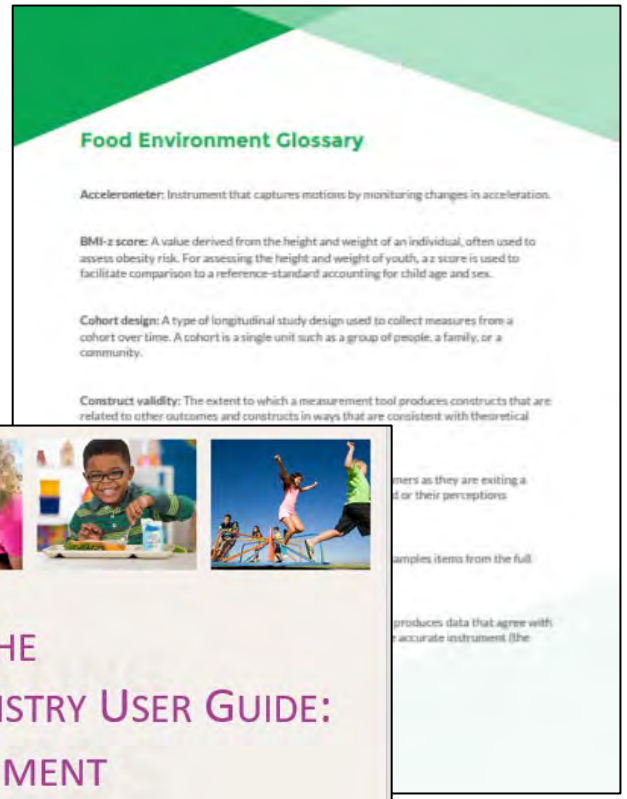
A searchable tool of 196 common activities and the estimated energy cost associated with each activity

- Provides energy costs for sedentary activities, standing, household chores, playing in games and sports, walking, and running
- Reports energy expenditure levels in youth METs. A youth MET (METy) is a MET that has been adjusted to account for the unique physiological characteristics of children and adolescents.
- For use by a wide variety of people, including researchers, health care professionals, teachers and coaches, and fitness professionals
- Use for research, public health policy making, education, and interventions to encourage physical activity in youth
- Represents group-level estimates for energy expenditure

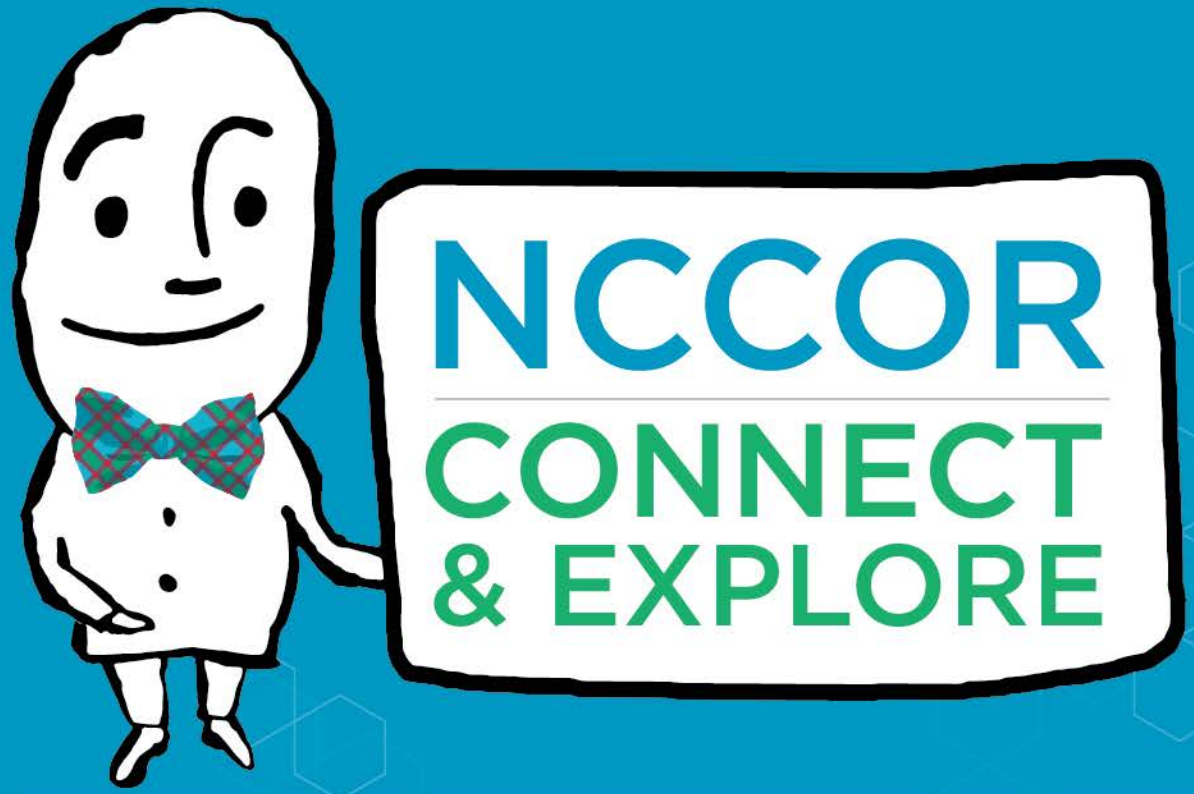
Find the Compendium at www.nccor.org/youthcompendium

Additional Resources





NCCOR SNAP-Ed Resources



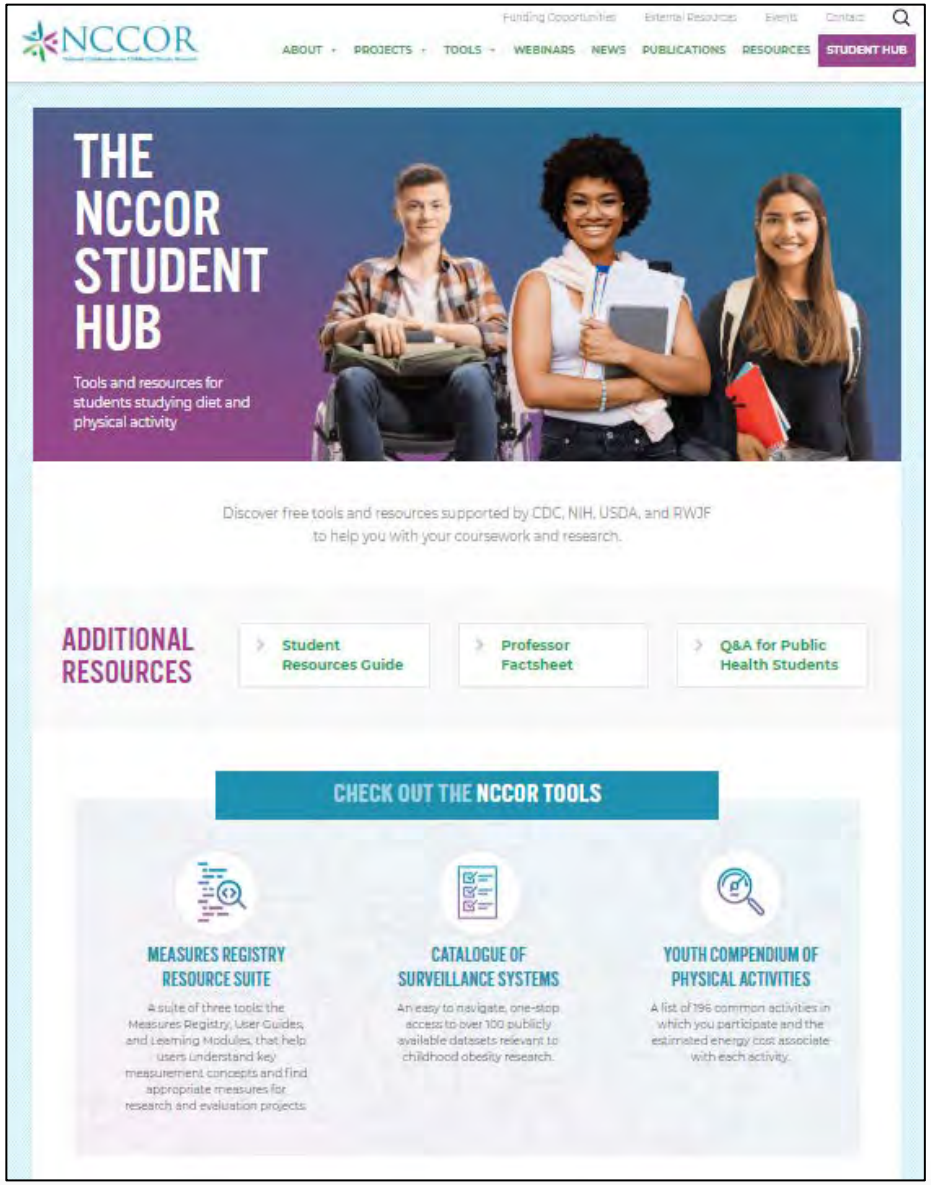
NCCOR
CONNECT & EXPLORE

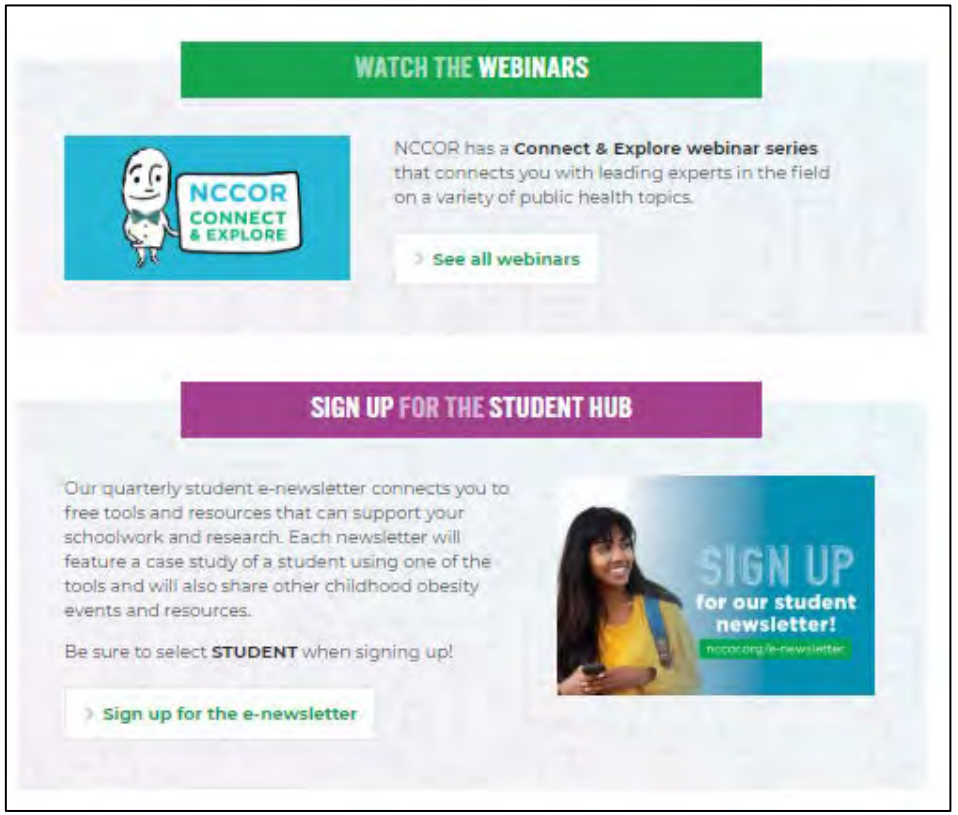
NCCOR's webinar series connects you with experts and explores the latest childhood obesity news and research.

@NCCOR #CONNECTEXPLORE NCCOR.ORG/WEBINARS

HEY STUDENTS!

Check out the NCCOR **Student Hub!**





https://www.nccor.org/student-hub/


Sign up!
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NCCOR.org/enewsletter

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Sign up for NCCOR Student Hub!

→ nccor.org/e-newsletter

FOLLOW US *on* SOCIAL MEDIA

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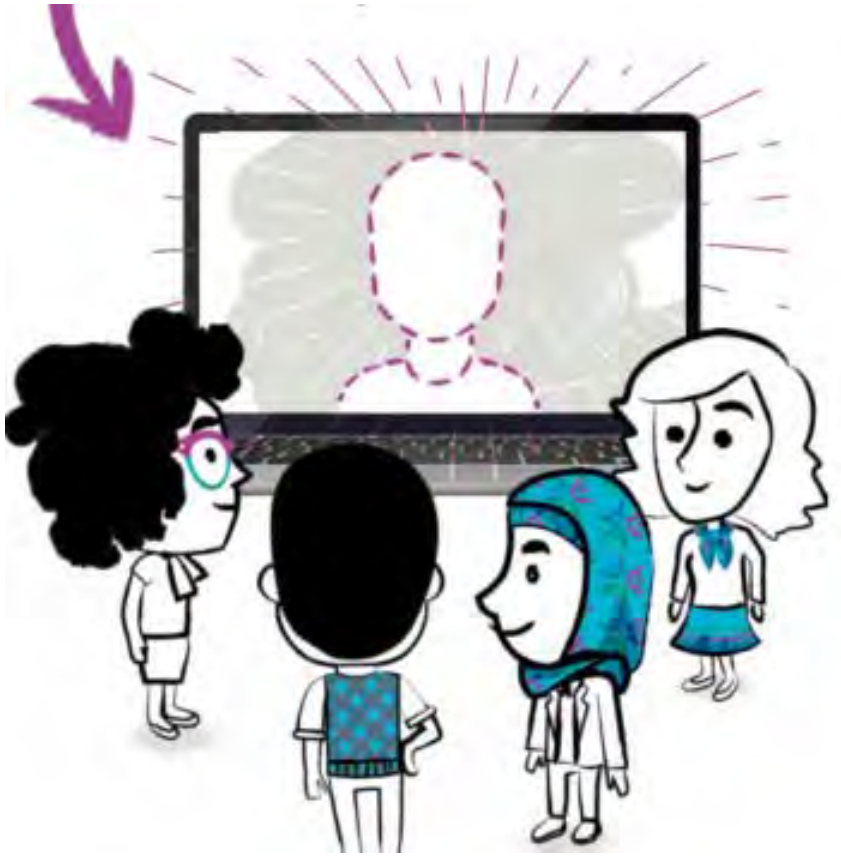
Have you used any of NCCOR's tools?

- Let us know at nccor@fhi360.org and we may feature you in our next webinar or resource!



Questions?