Towards improved measurement of individual diet behaviors and food environment exposures:

Resources from the National Collaborative on Childhood Obesity Research (NCCOR)

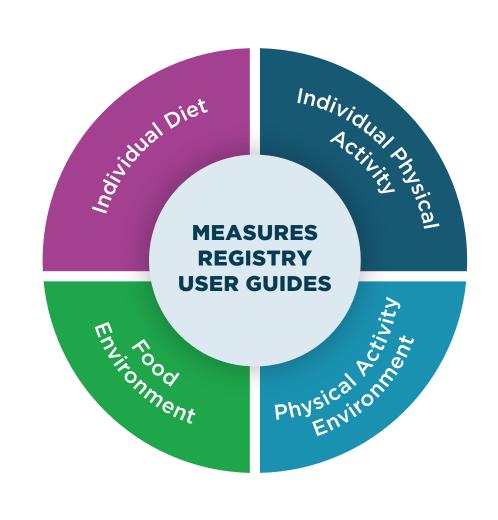
WORKING TOGETHER TO REVERSE CHILDHOOD OBESITY

The National Collaborative on Childhood Obesity Research (NCCOR) is a partnership of the four leading funders of childhood obesity research: the Centers for Disease Control and Prevention (CDC), the National Institutes of Health (NIH), the Robert Wood Johnson Foundation (RWJF), and the U.S. Department of Agriculture (USDA). For more information about NCCOR, visit www.nccor.org.

MEASURES REGISTRY

The Measures Registry is a web-based portfolio of nearly 1,400 studies on more than 100 discrete measures related to diet and physical activity. The Registry promotes the consistent use of common measures and research methods across childhood obesity research and prevention programs.

Measures are categorized into four domains:



Examples of measures include:





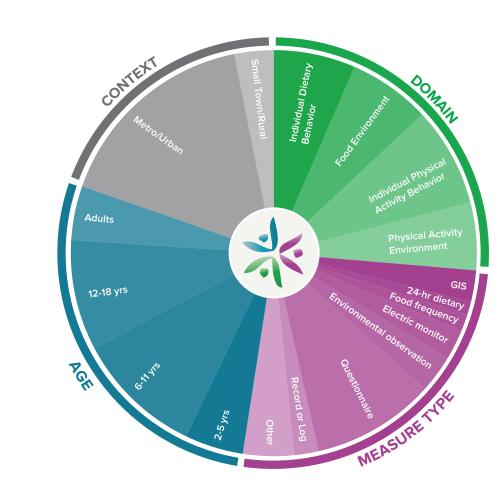








Registry users can search and filter by:



Provides information on study design, validity, reliability & more:



MEASURES REGISTRY USER GUIDES

The four User Guides are designed to complement the Measures Registry.

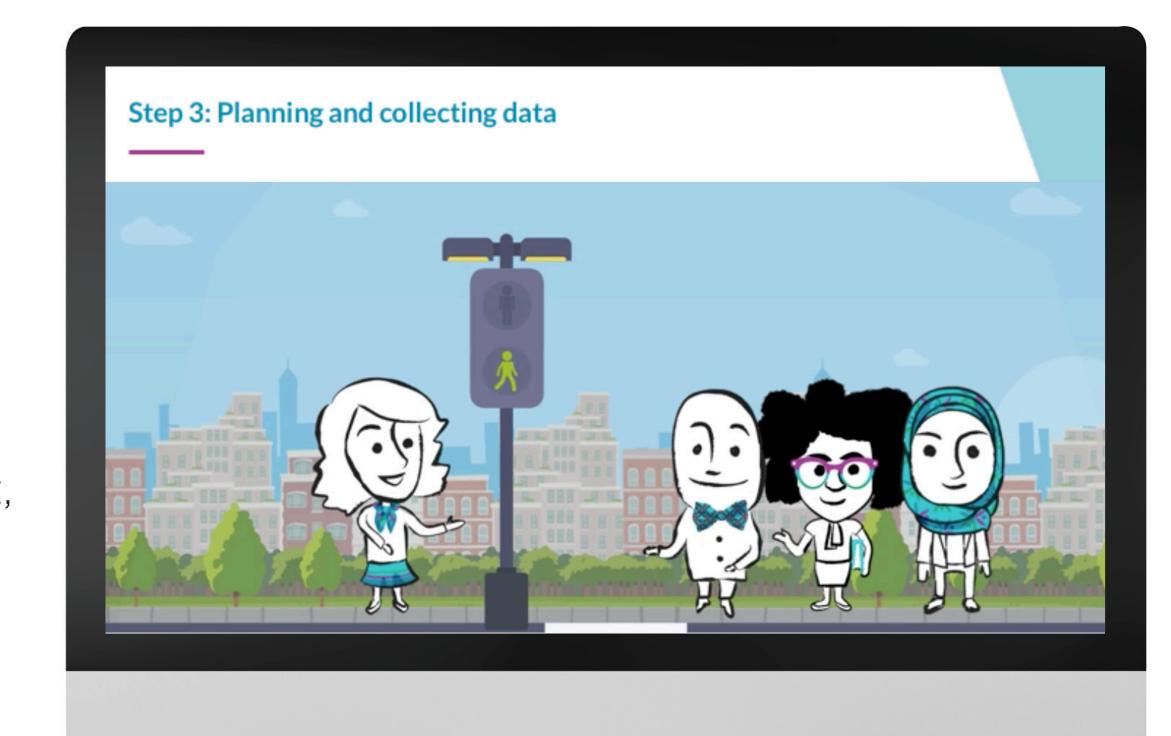
- The Guides provide an overview of measurement and describe general principles of measure selection
- Each Guide has several case studies that walk users through the process of using the Measures Registry
- The Guides are designed to improve the user experience through step-by-step directions that help users determine what measures they need for their research and evaluation efforts



MEASURES REGISTRY LEARNING MODULES

The Measures Registry Learning Modules are designed to complement the Measures Registry and User Guides.

- Each interactive module walks users through key topics related to diet and physical activity measurement in 10 minutes or less
- Modules can be accessed from a smartphone or tablet, making them practical for busy professionals
- Users can check their understanding of the topic with a few simple quiz questions at the end of each module





COMING FALL 2019

CASE STUDY: ASSESSING THE EFFECTS OF CHANGES TO VENDING MACHINE POLICIES ON INTAKE OF SUGAR-SWEETENED BEVERAGES AND ALTERNATIVES IN A SCHOOL SETTING

Background

- A project team wishes to assess intake of sugar-sweetened beverages and alternatives before and after changes to vending machine policies in a local school.
- This is an intervention study involving swapping out energy-dense choices within vending machines for more nutrient-dense options, including replacing sodas and energy drinks with water.
- Given a systems perspective, the intent may be to capture intake across settings to allow the project team to account for trade-off effects.
- The project team also wants to consider whether the new policy change has an affect on the physical, social, and person-centered environment.

Considerations

Food Environment

 Physical Environment: What beverages are available in the vending machine?

What is the price of water versus the price of SSBs in the vending machine?

- Social Environment: What role modeling is happening in the school?
- Person-centered Environment: Do the students perceive healthy choices as available and accessible?

Individual Diet

- Should the project team consider SSBs only or total diet more broadly?
- Quantification vs. frequency?
- Self- versus proxy reporting?
- Are there any intervention related biases?

Measure Selection

Food Environment

- To measure the availability in vending machines, the project team can choose an audit tool.
- To measure role modeling, the project team can choose an observational tool, questionnaire, or interviews of teachers and students.
- To measure the student perspective, the project team could use a questionnaire or interviews.

Individual Diet

- Should you choose a narrow focus or broader focus for the research question?
- For a narrow focus, screeners could be used, which would reduce team and respondent burden but increase bias.
- Screeners may be difficult for children, depending on cognitive abilities to average intake over a long period of time.
- For a broader focus, a more comprehensive tool is needed.

Potential tools: 24-hour dietary recalls, food records, or food frequency questionnaire

 To address the potential for interventionrelated biases in reporting, consider complementing the intake data with sales data from the vending machines.



