

Fit Together Cohort Study Guide

The goal of this portion of the outcome evaluation is to examine the impact of these projects on specific outcome variables that are important in addressing the prevention and reduction of obesity. When the data from all grantees are combined, we will be able to see how well the interventions as a whole worked on changing health behaviors related to obesity.

There are four main parts of the cohort study:

1. Identify a sample from the program
2. Consent forms
3. Data collection and data entry
4. Follow up over time

1. Identify a sample from the program

With the help of ECU and Duke, each grantee identified a sample of children to include in the cohort study. This sample was chosen based on their exposure to at least one component of the program, as well as the likeliness of success in collecting the information and on following them over the course of the grant. *If further assistance is needed with identifying your sample, please contact the Duke technical assistance team.*

Before any data collection begins, the project coordinator should make a list of children included in the cohort. The list should include, at minimum, each child's first and last name, date of birth, a unique ID number, and a location description.

To assign a unique ID number to each student, use the three initials assigned to your project (See Appendix A, page 8) followed by 001, 002, 003, etc. In the example below, the grantee's name is East Carolina University. The first three ID numbers assigned would be ECU001, ECU002, and ECU003.

The location defines from what component/location of your project the cohort was drawn. For example, as part of their project, ECU will be doing activities in two different venues: schools and after-school programs. Their cohort includes children from both components. Be sure to list the exact name of the location where the child was selected. Below, John and Jane Doe were selected from the school component, but ECU entered the exact name of the school where they attend, JH Rose High School. If all of the children for the cohort study are from the same location simply enter the same location for all children.

This list will be used to help follow the students over the course of the program. An example of this list is shown below:

Last Name	First Name	Date of birth	ID Number	Location
Doe	John	1/01/1990	ECU001	JH Rose High School
Doe	Jane	1/01/1985	ECU002	JH Rose High School
Doe	Jerry	1/01/1990	ECU003	Greenville YMCA After-school Program

2. Consent forms

Active consent forms will be collected. Active consent means a signature from a parent or guardian is required for participation. Survey packets should be prepared for the kindergarten through 5th graders to go home to parents. This packet should contain the following materials:

- Consent form
- Introduction to survey with serving size chart on the back
- Copy of survey

You may want to staple the items in the packet together to help ensure all are returned. Both the consent form and survey must be returned to be included in the cohort study. If a parent does not return the consent form or survey, you can try several things. First, you may resend the packet. If a large number are not returned after two attempts, you may have to select other children to be in the cohort study (if you have others to select from). If a parent sends back a completed survey, but no consent form, resend the consent form. **You cannot use survey data or measure height and weight without a signed consent form.** Also, make sure that the consent forms and surveys are sent out with enough time to allow them to be returned before measurement of height and weight is to occur.

Children in the 6th – 12th grade will complete their own surveys. However, active consent must still be obtained from a parent or guardian. Make sure that the consent forms are sent out with enough time to allow them to be returned before measurement of height and weight is to occur.

3. Data collection

There are three components of the data collection process:

- a. Survey administration
- b. Measurement of height and weight
- c. Data entry via the Fit Together Progress Check system

The survey should be completed before height and weight are measured. If these two components are to be completed on different days or at different times (as will be the case with surveys completed by parents of K-5th graders), make sure that you will be able to link the child's height and weight back to the correct survey.

Survey administration (K-5th grade)

For the students enrolled in grades K-5, a parent or guardian will complete the survey. There are no special instructions for administering the survey, other than ensuring the survey packet (described under consent forms) is sent home in a timely manner. If a parent or guardian requests that the survey be read to them, you may do so if you have the resources.

Survey administration (6th – 12th grade)

Students in grades 6-12 will complete the survey themselves, while the questions and response options are read out loud by a trained survey administrator. The survey administrator will begin by reading the survey introduction. Then s/he will read each question, the response options, and the prompts following each question out loud. If a student asks a question not covered by the available prompts, do not add additional prompts. Simply reread the question and/or prompts and encourage the student to answer as best they can. Students are to choose the one best answer and fill in completely the circle beside their choice. We recommend students complete the survey in pencil so they can erase changes, if necessary. Several of the questions (Q7, 8, 10, 12, and 13) ask about serving sizes of beverages and fruits and vegetables. Please refer the student to the serving sizes chart provided.

Once surveys are complete (both K-5th completed by the parent and 6th-12th grade completed by the children) please make sure that the child's name and date are filled in on the top of the survey. Also, at the end of the survey, you will find a "For Program Staff Only" box (See Example below). Please fill in the child's unique ID number, the county code, and location. The unique ID number and location can be found in your cohort list (described on page 1 of this manual). The county code refers to the county in which the survey was administered. The three digit county codes are provided in Appendix B (See page 9). Most grantees will use the same county code for all of their cohort surveys. However, some grantees will be administering surveys in multiple counties and will use several county codes. When the child's height and weight are measured, record that information in the staff use box. Circle the Y beside Self-Reported if a child refused to have her/his height and or weight measured, but did self-report it.

<u>FOR PROGRAM STAFF USE ONLY:</u>			
ID Number:	_____		
County Code:	_____		
Location:	_____		
Height:	____ feet	____ inches	Self-Reported? Y
Weight:	_____ pounds		Self-Reported? Y
Measurement Date:	____/____/____		

Appendix C (See page 12) includes copies of the three surveys:

- Health Behavior Survey: Parent Version (to be sent home to parents of children in grades K-5)
- Health Behavior Survey: Middle and High School Version (for children in grades 6-12)
- Health Behavior Survey: Middle and High School Version for Survey Administrators (for the person administering the survey to children in grades 6-12).

Measurement of height and weight¹

Setting: Each child should be weighed and measured in private with no other children present. Do not have another child do it. Consider having the child face away from the scale if s/he appears anxious about being weighed.

Comments to children: Do not comment on the height or weight of a child at the time the measurements are being taken. Neutral comments such as, "Thanks, you can get off the scale now," are appropriate. If a child makes a negative comment about his/her body, it is appropriate to say, "Kids bodies come in lots of different sizes and shapes. If other kids are teasing you about your body, let's talk and see what we can do about it."

Teachers and other school staff should discourage teasing by modeling and promoting respectful behavior. The philosophy "We respect the bodies of others even though they are different from our own" should guide words and actions. If a child asks, "Am I too fat?" or "Am I too skinny?" say that you don't know and suggest the child ask his/her doctor this question.

Make no medical diagnosis: Unless you are a licensed health care professional whose scope of practice includes diagnosing medical conditions, refrain from making a diagnosis of overweight or obesity. Labeling a child as "overweight," "too fat," "too thin," or "skinny" based on a single height/weight measurement at one point in time is inappropriate. In order to determine if a child is underweight, overweight, or at risk of these conditions, standard practice is for a physician to gather additional medical information necessary for making a diagnosis.

Height

The preferred method of measuring height is to use a stadiometer. However, if a stadiometer is not available, we suggest two other methods of measuring height – one if you can affix a tape measure to the wall and one if you cannot affix a tape measure to the wall.

Stadiometer: "The child should stand on the footplate of the stadiometer, without shoes. The individual is positioned with heels close together, legs straight, arms at sides, shoulders relaxed. Ask the child to inhale deeply and to stand fully erect without altering the position of the heels. Make sure that the heels do not rise off the footplate. Make sure the child's head is in the Frankfort plane. Lower the perpendicular headpiece snugly to the crown of the head with sufficient pressure to compress the hair. Hair ornaments, buns, braids, etc. must be removed to obtain an accurate measurement. To ensure an accurate reading, the measurer's eyes should be parallel with the headpiece."

(<http://depts.washington.edu/growth/module5/text/page7b.htm>)

Height should be recorded to the nearest quarter (1/4) inch.

¹ Adapted from *Guidelines for collecting heights and weights on children and adolescents in school settings*. Center for Weight and Health, College of Natural Resources, University of California, Berkeley.
http://nature.berkeley.edu/cwh/PDFs/bw_weighing.pdf

Tape Measure: If a stadiometer is not available there are two options. Regardless of the option you choose the following instructions apply. Measurement of height should be done on a level floor, against a straight wall, which is at a 90-degree angle to the floor. Ideally, this would be a doorframe, because it wouldn't have a molding at the bottom, which could push the child's feet away from the wall. The child should remove shoes, hair ornaments, buns, and braids to the extent possible. The child should be standing erect, with his/her back against the wall and feet flat on the floor. The heels should be together and against the wall. The child should be looking straight ahead, such that a line between the bottom of the eye socket and the middle of the ear would be perfectly horizontal. Have the child take a deep breath.

1. If you can affix a non-stretchable tape measure to the wall:

Equipment needed:

- a. Orange triangular ruler
- b. Metal tape measure (use feet and inches)
- c. Pencil

Affix the tape measure to the wall making sure that the bottom is correctly aligned. The *orange ruler* should be placed snugly but not tightly on the top of the head to form a right angle between the top of the head and the tape measure. Use sufficient pressure to press hair down. The fat edge of the ruler should be flush against the tape measure on the wall. Be sure the ruler is not upside down. The bottom edge, which touches the child's head, should be parallel with the floor, not at an angle. The child's height is where the bottom of the orange ruler touches the tape measure. Ask the child to move away slightly. Record the number from the measuring tape to the closest quarter (1/4) inch.

2. If you cannot affix a tape measure to the wall:

Equipment needed:

- a. Post-it notepads
- b. Pencil
- c. Orange triangular ruler
- d. Metal tape measure (use feet & inches)

Place the *Post-it note* on the wall behind the child's head so that the upper point of it is above the head. Then the *orange ruler* should be placed snugly but not tightly on the top of the head to form a right angle between the top of the head and the Post-it note. Use sufficient pressure to press hair down. The fat edge of the ruler should be flush against the Post-it note on the wall. Be sure the ruler is not upside down. The bottom edge, which touches the child's head, should be parallel with the floor, not at an angle. The child's height should be where the bottom of the orange ruler touches the Post-it note (you may need to adjust the location of the Post-it note up or down if the measurement cannot be recorded). Please carefully draw a line on the Post-it note where the ruler rests against the wall, using the bottom of the fat edge of the ruler as a guide. Now remove the ruler and have the child move away slightly. Extend the metal measuring tape from the floor to the pencil line on the Post-it note and record the number from the measuring tape onto the Post-it note. Height should be recorded to the closest quarter (1/4) inch.

Although it would seem efficient to use a stature device attached to a scale, height attachments on scales are never used. Not only are they inaccurate -- because they do not provide a firm platform for the measurement -- but they are relatively sharp, and thus pose a risk for harm to the child. It is inappropriate to measure stature with the moveable measuring rod on platform scales. The headpiece is unsteady and too narrow and the base [weighing platform] will sink because of the weight of the individual.²

Weight

Equipment needed for weight measurement:

Good-quality balance beam or electronic/digital scale with the following qualities:

- Weighs in at least 1/4 lb increments (prefer. 2 lb increments)
- Has a stable weighing platform
- Can be easily set at zero
- Can be calibrated

If you need to purchase a scale, we recommend the HD333 Digital Lithium Scale by Tanita. This scale measures in 0.2 lb (0.1 kg) increments and can weigh up to 360 pounds (160 kg). For more information about this scale or to order the scale, please call Tanita customer service at 1-800-Tanita-8 or go online to www.tanita.com.

The scale should be calibrated each day you plan to use it by weighing something you know the weight of, such as a 5-pound hand weight. If the scale is off by a small amount, make the appropriate correction to your data (add or subtract from the measured weight). If the scale is off by more, you will need to use another scale.

Measurement of weight should be done on a surface, which is level and firm (i.e., not a carpet). *Remember to activate digital scales just before the child steps onto it!* After removing shoes, any heavy clothing (e.g., sweater, jacket, coat), and emptying pockets, the child should stand in the middle of the scale with head erect and eyes looking straight ahead. Weight should be recorded to at least the nearest quarter (1/4) pound, if possible, as shown on the scale.

A small number of children will be reluctant (or will initially refuse) to be weighed. If this occurs, reassure the child that information about weight is kept completely confidential (private) and is being sought because it is very important in understanding how people develop certain health problems such as high blood pressure, diabetes and heart disease. If the child is still reluctant, first offer the child the option of weighing her/himself privately and then reporting it. If the child still does not want to be weighed, ask if s/he would be willing to tell her/his current weight. You should indicate on the questionnaire if these estimates seem correct. Outright refusals to be weighed and to report weight should be rare and should be accepted in a non-judgmental manner.

² from www.cdc.gov

Data entry

Each participant's survey responses, height and weight will be entered into a database via the Fit Together Progress Check system. Grantees will export these data to the Duke Technical Assistance team after each round of data collection and data entry. Grantees will be able to generate reports that summarize survey responses, BMI and percentiles for at risk for overweight and overweight status.

4. Follow-up over time

The data collected from the surveys, along with the measurement of height and weight, will be entered into the Fit Together Progress Check system. You will be trained during your site visit to enter the data.

Remember that you will be repeating this data collection process on these same children at three more time points during the grant period. It is important to keep the list of students included in the cohort, their date of birth, and ID number. This will be necessary at later data collection times to ensure that you are measuring the same children.

Appendix A: Project Initials for Cohort ID Numbers

Agency	Code
Albemarle Regional Health Services	ARH
Cleveland County Health Department	CHD
Children First - Buncombe Co.	CFB
Cumberland Co. Schools	CCS
Durham Public Schools	DPS
Goldsboro Family YMCA	GLD
FirstHealth of the Carolinas	FHC
Halifax Co. Health Dept.	HHD
Mecklenburg Co. Health Dept.	MHD
Mitchell County Schools	MCS
New Life Leadership	NEW
Partnership for Health	PFH
Person County Schools	PCS
Pitt County Schools	PIT
Southeastern Regional Med.	SRM
Wake Forest University	WFU
Be Active	BEA
NCAFP	AFP
NC Division of Public Health	DPH
UNC-TV	UNC

Appendix B: County Codes

County Name	County Code
Alamance	001
Alexander	002
Alleghany	003
Anson	004
Ashe	005
Avery	006
Beaufort	007
Bertie	008
Bladen	009
Brunswick	010
Buncombe	011
Burke	012
Cabarrus	013
Caldwell	014
Camden	015
Carteret	016
Caswell	017
Catawba	018
Chatham	019
Cherokee	020
Chowan	021
Clay	022
Cleveland	023
Columbus	024
Craven	025
Cumberland	026
Currituck	027
Dare	028
Davidson	029
Davie	030
Duplin	031
Durham	032
Edgecombe	033
Forsyth	034
Franklin	035
Gaston	036
Gates	037
Graham	038
Granville	039
Greene	040
Guilford	041
Halifax	042
Harnett	043
Haywood	044

County Name	County Code
Henderson	045
Hertford	046
Hoke	047
Hyde	048
Iredell	049
Jackson	050
Johnston	051
Jones	052
Lee	053
Lenoir	054
Lincoln	055
Macon	056
Madison	057
Martin	058
McDowell	059
Mecklenburg	060
Mitchell	061
Montgomery	062
Moore	063
Nash	064
New Hanover	065
Northhampton	066
Onslow	067
Orange	068
Pamlico	069
Pasquotank	070
Pender	071
Perquimans	072
Person	073
Pitt	074
Polk	075
Randolph	076
Richmond	077
Robeson	078
Rockingham	079
Rowan	080
Rutherford	081
Sampson	082
Scotland	083
Stanly	084
Stokes	085
Surry	086
Swain	087
Transylvania	088
Tyrrell	089
Union	090

County Name	County Code
Vance	091
Wake	092
Warren	093
Washington	094
Watauga	095
Wayne	096
Wilkes	097
Wilson	098
Yadkin	099
Yancey	100