

EVALUATION OF A FAMILY-BASED HEALTH EDUCATION PROGRAM

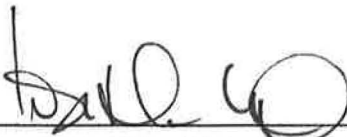
Evaluation of a Family-Based Health Education Program

Addressing Childhood Obesity in Detroit, MI

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Abstract

Background: Childhood obesity disproportionately affects low-income minority children. Detroit has the highest prevalence of obesity in the state of Michigan.

Purpose: This capstone project serves as an evaluation of the HEAL-Families program; a family-based health education program addressing healthy eating and physical activity, conducted by a non-profit organization in Detroit, MI.

Methods: This evaluation utilizes survey data (T3) collected eight months after program implementation. The survey data were analyzed using descriptive statistics to determine the effectiveness of the program and whether any changes in behaviors, knowledge, and attitudes occurred at the time of follow-up. Children ages 5-8, 9-12, and adults who participated in the HEAL program completed surveys at the start of the program (T1), the end of the program (T2), and eight months post program (T3). When possible, results are compared and reported across the three data collections points (T1-T3).

Results: Improvements in knowledge pertaining to eating and physical activity were reported by children and adults at the end of the program. Yet, many of the improvements found at the end of the program did not remain at the time of follow up, particularly in regards to decreased screen time, nutritional knowledge, and physical activity.

Implications: These results provide information that can inform planning and implementation of family-based health education programs. Maintaining contact with participants after the conclusion of health education programs, via phone, postal mail, or email, will help to reinforce the information from the program, helping participants maintain healthy behavior changes.

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Dedication

To my parents, for always believing in me and supporting my choices. My sister, Alysa, for being my sounding board and allowing me to bounce endless ideas off of her throughout the duration of this project. Lastly, to my partner and best friend, Kenneth, for always encouraging me to pursue my dreams.

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INTRODUCTION

Background/Description of Program

Joy-Southfield Community Development Corp. is a non-profit organization located in Detroit, MI. The mission of Joy-Southfield is, “neighborhood revitalization through family life-skill support and community economic development.” The organization offers programs focused on healthy living, youth & families, housing, and community development. HEAL (Healthy Eating Activity & Learning)–Families is a free health education program conducted by Joy-Southfield. The purpose of this program is to improve health behaviors among adults and children living in the Cody-Rouge neighborhood. The HEAL program is part of the Healthy Empowered Youth (HEY) Detroit program at Joy-Southfield, which focuses on the prevention of childhood obesity. Development of the HEAL program began in 2010 and the HEAL program for families was initiated soon after. This program was funded through a grant received from Johnson and Johnson. The HEAL program consists of six weekly classes focusing on healthy eating and physical activity. Each class lasts two hours, with one hour focusing on physical activity and one hour dedicated to healthy eating. During these workshops, a health educator teaches families using an evidence-based curriculum on healthy eating and physical activity.

Programs such as HEAL are critical to the health of communities in which Joy-Southfield serves. Joy-Southfield serves members of the Cody-Rouge neighborhood, located on the west side of Detroit, MI. Detroit has the highest prevalence of obesity in the state of Michigan at 38.1% (Berjaoui, 2015). It is also important to note that the area served by Joy-Southfield is predominantly African-American(Data Driven Detroit, 2012). Black children are more likely to be obese, with an obesity rate of 18.5% compared to 11.2% of white children (Berjaoui, 2015).

In the community in which Joy-Southfield is located, 45.7% of individuals are living below the poverty level and the median household income is \$23,568 (United States Census Bureau, 2016). It is well documented in public health literature that low-income children have disproportionately higher rates of obesity compared to children who come from middle- and high- income families (Pan, McGuire, Blanck, May-Murriel, & Grummer-Strawn, 2015; Sharma, et al., 2009; Rodgers, et al., 2015). In the Cody-Rouge neighborhood there is also a significant lack of access to healthy foods and safe places to participate in physical activity. Within this community, there is only one small-sized grocery store to serve the 14,000 households in the community; however, there are many fast food restaurants and convenience stores providing unhealthy food options within the community (Schmidt, 2011).

There are a variety of factors that increase an individual's likelihood of becoming obese. While some factors, such as community infrastructure, are out of an individual's control, lifestyle, including diet and exercise plays a significant role in the development of childhood obesity. Diet and exercise are two factors that are controllable and can be modified in order to prevent and reduce obesity. The HEAL program helps to address these two important components. The main objective of this program is to improve healthy eating and physical activity habits among participants in the program, with the ultimate goal of reducing obesity within the community. The HEAL-program uses a family-based approach as opposed to being a program strictly for children. Evidence shows that the family and home environment have a significant impact on childhood obesity and targeting the family as a whole is a more effective strategy in addressing a child's health behaviors (Sorg, Yehle, Coddington, & Ahmed, 2013). Joy-Southfield has a unique advantage in that they have been able to partner with schools within

the community to provide this program. The schools they are partnered with include grades K-8, which is why children between the ages of five and 12 are targeted in this program. Both partnering with the schools and involving parents in the HEAL programs create a more inclusive and collaborative approach to improving health behaviors among children. This allows the program to have more influence than if the program worked with children alone.

Pre- and Post-tests were conducted to determine if the program was effective in improving health behaviors among adults and children who participated in the HEAL program. Results will be used to assist in the development of future programming and to determine if the knowledge, behavior, and attitude changes observed during the pre-post surveys changed at time of follow up. Surveys were administered to participants prior to the start of the program (T1), at the conclusion of the program (T2), and eight months post-program (T3). These surveys assessed not only behavior change, but also knowledge and attitudes regarding physical activity and healthy eating.

Purpose of the Capstone Project

This project will serve as a program evaluation for the HEAL-program. There are various types of program evaluations including formative, process, and summative evaluations. A formative evaluation occurs prior to implementation of the program and is used to assess materials and methods in order to ensure quality of the program (McKenzie, Neiger, & Thackeray, 2013). A process evaluation takes place during the implementation of the program and serves to address which components of the program are working effectively and whether the program is being implemented as planned (McKenzie, Neiger, & Thackeray, 2013). A summative evaluation seeks to determine if a program achieved its intended results with the

goal of making decisions about future programming (McDavid, Huse, & Hawthorn, 2013). The current project represents a summative evaluation, as it focuses on changes in knowledge, attitudes, and behavior resulting from the program. Summative evaluations, such as this one, are essential not only for the program being evaluated, but also for public health/health education programming as a whole. The results of this evaluation can be used to improve the HEAL program at Joy-Southfield and to also assist programmers from other organizations in developing and implementing similar programs or interventions targeted to similar populations of urban, African American families.

To conduct this evaluation data collected from T1, T2, and T3 were analyzed to assess the effectiveness of the HEAL program. The information obtained through the data analysis was useful identifying any trends in data in regards to changes in knowledge, behaviors, and attitudes as well as whether or not change were retained post-program.

METHODS

Study Setting and Design

This program is a time series program in which data were collected at three time points: prior to the start of the program (T1), at conclusion of the program (T2), and eight months post-program (T3). The program uses a pre-test-post-test design. Separate surveys were given to children and adults. There were three different surveys based on age-groups: five-eight year olds, nine-twelve year olds and adults. Separate surveys were used to ensure that the questions asked were age-appropriate. Children in the nine-twelve year old age group as well as adults answered the survey questions by themselves, while children in the five-eight year old group

had assistance from their parent/guardian to ensure they were able to answer the questions accurately. There were two components of the surveys given to the five-eight year old group. One component was given to the adults to complete while the other component was read out loud to the children by the HEAL staff for them to complete on their own.

Program Participants

In order to enroll in the HEAL program, participants had to be the parent or legal guardian of a child/children enrolled in Detroit Public Schools (DPS) and living in the Cody-Rouge neighborhood. The families had to include at least one child in grades K-8. The exclusion criteria included adults with no children enrolled in DPS and children in grades above eighth.

Data Collection Methods

All surveys were administered in a hard copy, paper format. For T1 and T2, the surveys were given to participants at a HEAL program workshop (T1-at the beginning of the first workshop and T2-at the end of the last workshop). The surveys were administered by Joy-Southfield staff and volunteers conducting the HEAL program. For T3, a Joy-Southfield representative called participants of the HEAL program eight months after the conclusion of the program and asked if they were interested in taking a follow-up survey. If participants were interested in completing the survey, the representative from Joy-Southfield set up a time for the parents/guardians and children to take the survey. The surveys were administered by Joy-Southfield staff/volunteers. The T3 surveys were conducted at eight locations within the community: Joy-Southfield, Don-Bosco, Dixon Educational Learning Academy, Boys and Girls Club, Leland Church, People's Church, Brightmoor Community Center, and Souls for Christ.

Surveys for children ages five-eight were administered in paper format at T1, T2, and T3. Given the age of the children in this group, the parent/guardian was asked to fill out the majority of the survey. For the portion of the survey that needed to be answered by the children, the Joy-Southfield representative administering the survey read the questions aloud to the children and filled out the answers given by the child. Height, weight, BMI, and BMI percentile (based on height, weight, and age) were also measured for each individual child by the Joy-Southfield representative and reported at the end of the survey. The parent/guardian component of this survey included seven demographic questions pertaining to the child, 32 close-ended questions, and two open-ended questions. The questions in this portion of the survey addressed dietary habits of the previous 24 hours, dietary preferences of the child, frequency of physical activity and screen time, attitudes regarding the HEAL program, and behavior changes since conclusion of the HEAL program. The child component of this survey included 15 close-ended questions. These questions were age-appropriate and easy for the children to understand. This portion focused on the child's knowledge and attitudes regarding healthy eating and physical activity. The attitude questions were presented with yes/no response options and the knowledge questions provided several pictures asking the child to circle the correct response option(s) to each question.

Surveys for the children in the nine-twelve year old age group were administered in paper format at T1, T2, and T3. Unlike the survey for the younger children, the children in this age group were asked to complete the survey on their own. The beginning of this survey included seven demographic questions. Height, weight, BMI, and BMI percentile (based on height, weight, and age) were collected and reported for each child in this age group as well.

The topics addressed in this survey included 24-hour recall of dietary and physical activity habits, usual dietary habits, child's perception of their parents/peers attitude regarding healthy eating and physical activity, knowledge pertaining to healthy eating and physical activity, child's attitude towards healthy eating and physical activity, child's confidence in their ability to make healthy choices, barriers to healthy eating and physical activity, attitudes about the HEAL program, and improvements made since the conclusion of the HEAL program.

The adult survey was administered in paper format to parents/guardians of children enrolled in the program at T1, T2, and T3. A Joy-Southfield representative administered the surveys and the parents/guardians completed the surveys on their own. Height, weight, and BMI were recorded for adult respondents. A series of demographic questions were asked at the start of the survey. The adult survey also included items on dietary and physical activity habits of the parent/guardian, availability of healthy foods in the home, knowledge regarding healthy eating and physical activity, parent/guardian confidence in their abilities regarding healthy eating and physical activity, physical activity and dietary habits of their child, availability of resources within the community, environmental factors, attitudes about the HEAL program, and healthy behavior changes since conclusion of the HEAL program.

Measures

Survey measures for children 5-8 years of age

Demographic variables collected included age, grade, school, sex, race/ethnicity, and primary language spoken. The age of the children was calculated by subtracting the child's date of birth from the date of the survey. Sex was reported as boy/girl. Respondents were given nine

categories, including other to select from in regards to race/ethnicity. Primary language spoken was reported as English, Spanish, Arabic, or "Other" with a write-in option.

There were eight measures regarding how often the child consumed specific food/drink the day prior to the survey. These measures included soda, snacks, French fries or chips, vegetables, fruit, fruit juice, sweets (sweet rolls, doughnuts, cookies, brownies, pies, or cake), and candy. For each of these measures the parent/guardian could select from none to three or more times. The child's attitude towards healthy eating was measured based on how many vegetables they like (none, 0-3, 4-6, most), how many fresh fruits they like (none, 0-3, 4-6, most), if they are a picky eater (yes/no), and their willingness to try new foods (yes/no). Respondents indicated which foods/drinks were currently available in their home by circling all that applied from a given list. The child's water consumption was reported as 0-2 glasses, 3-5 glasses, or 6-8 glasses per day.

Parents/guardians indicated whether their child participated in low-impact or high-impact (Basketball, jogging, skating, fast dancing, swimming laps, tennis, fast bicycling, aerobics) physical activity the day prior to the survey. The number of days during the prior week the child took part in either of those activities was selected from a list of zero days-seven days. Parents/guardians reported the number of sports teams (zero teams-three or more teams) their child was a part of. Screen time was assessed based on the number of TV shows or movies watched during the week/weekend (none-three or more), how many hours each day during the week/weekend the child watched TV or movies (none, two or less, three, four or more), and how many hours during the week/weekend the child played video games or used the computer (none, less than one, one-two, three-four, more than four).

Respondents were asked to report what their child's favorite part of the HEAL workshops was and what their child did not like about the HEAL workshops. Both of these questions were open-ended giving the respondent room to write out their response. The subjects addressed during the HEAL program were listed and the respondent was asked to select their child's favorite subject(s). Program outcomes were addressed by asking if the child ate healthier, exercised more, and ate more fruits and vegetables than before participating in the HEAL workshops. These variables were reported as yes/no.

The portion of the survey administered to the children ages 5-8 contained 15 questions. The first six questions addressed the child's attitude towards healthy eating and physical activity. First, the child was asked how they felt when doing active things and they were given the option of three smiley faces (happy, bored, or sad) to choose from. The next several questions addressed how often the child was active with their friends (all the time, sometimes, never), if they like most fresh fruits, if they thought most vegetables tasted bad, if they thought most healthy foods taste bad, and if they thought most junk foods taste better than healthy foods. Each of these questions used a yes/no format. The next nine questions used response categories in picture format. These questions addressed the child's knowledge and preferences. Knowledge was assessed by asking the child to identify the correct picture of a child exercising, circle the healthy drinks, circle all of the healthy snacks, and to circle the picture of the healthy breakfast/lunch/dinner. The child's preferences were assessed by asking them to circle all of the activities they like to do, circle all of the vegetables they like to eat, and circle all of the fruit they like to eat.

Survey measures for children 9-12 years of age

As in the survey for the younger age group, demographic measures collected included age, grade, school, sex, race/ethnicity, and primary language spoken. The age of the children was calculated by subtracting the child's date of birth from the date of the survey. Sex was reported as boy/girl. Respondents were given nine categories, including other to select from in regards to race. Primary language was reported as English, Spanish, Arabic, or Other with a write-in option.

This survey included eight measures regarding how often the child consumed specific foods/drinks the day prior to the survey. These measures included soda, snacks, French fries or chips, vegetables, fruit, fruit juice, sweets, and candy. The child was able to select from none-three or more times. Availability of fresh fruits and vegetables in the home was assessed by how often these foods were available in the child's home. The response options to these questions included never, rarely, sometimes, often, or always. The children were also asked to identify all foods from a given list that were presently available in their kitchen at the time of the survey.

Family eating habits were assessed by asking the children how many days a week they ate with their family and how many times a week they ate out with their family. This survey measured the children's perception of their parents/peers attitudes regarding healthy eating and physical activity by asking how much their parents cared about healthy eating, wanted them to eat healthy, and how much their friends care about eating healthy (not at all, a little bit, somewhat, very much, or I don't know).

Similar to the five-eight year old survey, knowledge and preferences were assessed by asking the children to circle pictures of healthy drinks, healthy snacks, the healthiest breakfast/lunch/dinner, and which fruits vegetables they like to eat. Knowledge within this age group was further assessed by asking whether drinking too much soda and sugary drinks can make you gain weight/unhealthy. Additional knowledge statements asking the children to select strongly disagree, disagree, agree, or strongly agree were posed. These statements included kids do not need to worry about what they eat/their health, the types of food I eat affect my health/how I look/my weight/how well I do in sports/how well I do in school. Response options to these questions included yes, no, or I do not know. The children's attitudes were assessed by asking how much they care about eating healthy foods/being healthy (not at all, a little bit, somewhat, very much), if they were worried about their weight (yes/no), if they were worried about their health (strongly disagree, disagree, agree, strongly agree).

The children's confidence in their ability to make healthy decisions was measured by asking several questions about how sure they were they could make certain choices with the responses being not sure, a little sure, or very sure. These questions included how sure are you that you can eat fresh fruits instead of a candy bar, drink water instead of soda, eat healthy foods when you are at the mall/hungry/ with your friends/sad/stressed out/bored/at a fast food restaurant/alone/eating dinner with your family. The children's preferences regarding specific foods (fruits, vegetables, healthy foods, junk foods) were determined using a Likert-type scale (strongly disagree, disagree, agree, strongly agree).

Screen time was assessed based on the number of TV shows or movies watched during the week and weekend (none-three or more), how many hours each day during the

week/weekend the child watched TV or movies (none, two or less, three, four or more), and how many hours during the week/weekend the child played video games or used the computer (none, less than one, one-two, three-four, more than four). The children were asked to indicate whether they participated in low-impact or high-impact physical activity the day prior to the survey. The number of days during the prior week the child took part in either of those activities was selected from a list of zero days-seven days. The children reported the number of sports teams (zero teams-three or more teams) they were a part of. Respondents were asked to respond to several questions regarding how they felt about physical activity with an answer of agree, not sure, or disagree. The questions asked included if I was active most days, it would help me be healthy, control my weight, be fun, get or keep me in shape, be boring. Children were asked about their neighborhood in order to assess barriers to physical activity. Questions on this topic included: there are trees along the streets in my neighborhood, my neighborhood is free from trash, and the crime rate near my house makes it dangerous to go on walks during the day/at night. Response options to these questions were strongly disagree, somewhat disagree, somewhat agree, and strongly agree.

Lastly, the children were asked questions regarding the HEAL program. Two open-ended questions were asked to determine what the child did not like about the program and what their favorite part of the program was. The children indicated how much they learned from the HEAL program by selecting I learned a lot, I learned a little, or I did not learn anything.

Respondents were asked whether or not they eat less junk food, exercise more, or eat more fruits and vegetable than before the HEAL program. The responses to these questions were yes/no. In regards to future programming, the children were asked to indicate what they would

like to do at the next HEAL program. The response options included worksheet and handout, hands-on activity, presentation, and field trip. The instructions stated for the child to circle as many activities as they like.

Survey measures for adults

Demographic information collected included age, sex, race/ethnicity, primary language spoken, relationship to child, educational attainment of parent/guardian and significant other, current work situation of parent/guardian and significant other, and whether or not they had health insurance. Age was calculated by subtracting the respondent's date of birth from the survey date. Sex was reported as male or female. Respondents were given nine categories, including other to select from in regards to race. Primary language was reported as English, Spanish, Arabic, or Other with a write-in option.

Parents/guardians were asked how often they drank soda (never, once a month, once a week, once a day, more than once a day) and what type of soda they usually drink (diet or regular). They were also asked how often they ate sweets, how much water they drank each day, how often they limit the amount of fried food they eat, and if they buy whole grain bread. Dietary habits within the home were assessed by asking the parent/guardian how often they make healthy balanced meals, how often they have fresh fruit/vegetables in their home (never, rarely, sometimes, often, always), and why they did not have fresh fruit/vegetables in their home (cost too much, store I buy my family's food at does not have fresh fruit/vegetables, family does not like fresh fruit/vegetables, variety is limited at store where I buy food, the condition of fresh fruit/vegetables is poor at the store where I buy food, or I do have fresh fruit/vegetables in my home). Family eating habits were assessed by asking the parent/guardian

how many days a week they ate at home with their family and how many times a week they ate out with their family. The parent/guardian was asked how adequate they felt their cooking skills, money to buy food, appliances to make food, selection of food in store near you, and time available to make food were. Each of these questions offered response options to each of these questions were: very inadequate, inadequate, adequate, and very adequate. Knowledge and attitudes regarding healthy eating was assessed by asking parent/guardians how many servings of fruits and vegetables should a child eat each day, can drinking too much soda make you unhealthy/gain weight, and can healthy foods and being active stop you from becoming overweight (yes, it depends on genetic background, I'm not sure, or no).

Parents/guardians were asked how often they exercise with their child per week and how many times they would like to exercise with their child. The response options to these questions included I do not exercise with my child/I cannot exercise with my child, once a week, twice a week, and three or more times a week. Knowledge regarding physical activity was assessed by asking parent/guardians how much exercise a child should get each day to be healthy. Respondents were asked if they limit their child's screen time with response options of yes, sometimes, or no. They were also asked, in open-ended format, to indicate if they limit their child's screen time what is the usual limit (in hours) each day. Confidence in the ability of parents/guardians to limit their child's screen time was assessed with response options of not confident at all, a little confident, confident, or very confident.

The next section of the survey focused on one's neighborhood and environment. Parents/guardians were asked how long it takes to walk from your house to a fast food restaurant, convenience store, supermarket, gym or fitness facility, park, lake, and walking or

bike path. Response options to these questions included 1-5 minutes, 6-10 minutes, 11-20 minutes, 21-30 minutes, 31+ minutes, and I don't know. Parents/guardians were asked about their neighborhood in order to assess barriers to physical activity. Questions on this topic included there are trees along the streets in my neighborhood, my neighborhood is free from trash, and the crime rate near my house makes it dangerous to go on walks during the day/at night. Response options to these questions were strongly disagree, somewhat disagree, somewhat agree, and strongly agree.

Lastly, the parents/guardians were asked questions regarding their opinions on the HEAL program. Two open-ended questions were asked to determine what they liked about the program and what they would like to change about the program. A list of all the topics taught throughout the HEAL program was given and respondents were asked what topic(s) were most useful, what they would like to learn more about, and what they already knew. The parents/guardians indicated how much they learned from the HEAL program by selecting: I learned a lot, I learned a little, or I did not learn anything. Respondents were asked whether or not they eat less junk food, exercise more, or eat more fruits and vegetable than before the HEAL program. The response options to these questions were yes/no. In regards to future programming, the parents/guardians were asked to indicate what they would like to do at the next HEAL program. The response options included worksheet and handout, hands-on activity, presentation, and field trip. The instructions stated for the respondent to circle all that apply.

Statistical Analysis

After data were collected, it was put into an Excel database by Joy-Southfield staff as well as volunteers. The data collected at T1 and T2 were analyzed prior to this evaluation using

Epi info software. The evaluator cleaned the data from T3 in Excel. Once the data was cleaned, it was input into SPSS, version 22 and analyzed descriptive statistics, chi-square analysis, and T-test. Although chi-square analysis was conducted, because of the small sample size, the p-values were unable to be used. T-test was used to analyze associations between continuous and categorical variables, but no significance was found. This could, however, be due to the very small sample size. The evaluator compared the results to the data from T1 and T2.

The data presented is primarily descriptive. Continuous variables are presented as the mean with standard deviation or median with interquartile range. Categorical variables are presented as frequency distributions. For the purpose of this project, only descriptive statistics were reported due to the unreliability of the p-values given the small sample size.

RESULTS

The sample size for all groups at T1 was n=139. There were n=36 participants in the five-eight year old group, n=44 participants in the nine-twelve year old group, and n=59 participants in the adult group. This remained the same at T2. At T3, however, the number of respondents from all groups was much smaller at n=45. At this time, there were n=5 participants in the five-eight year old group, n=16 participants in the nine-twelve year old group, and n=24 participants in the adult group.

Demographics of Five-eight year olds

Within the five-eight year old group, the majority of respondents were female (60%). English was the primary language of all five (100%) respondents. All (100%) participants within this group identified as black or African-American. The children within this group were in grades

two-four. The average height of individuals in this age group was 53.88 ± 4.02 (SD) inches. The average weight in pounds was 83.28 ± 31.85 (SD).

Table 1. Demographic characteristics of children 5-8 years of age at T3.

Five-Eight year olds (n=5)	
Gender, n (%) female	3 (60)
Race, n (%)	
<i>Black or African American</i>	5 (100)
Grade, n (%)	
<i>2nd Grade</i>	2 (40)
<i>3rd Grade</i>	1 (20)
<i>4th Grade</i>	2 (40)
Primary Language, n (%)	
<i>English</i>	5 (100)
Height, mean (SD), inches	53.88 (4.02)
Weight, mean (SD), pounds	83.28 (31.85)

Nutrition

Within the five-eight year old group, the majority of respondents, as reported by the parent/caregiver, indicated that they were not picky eaters (60%) and 100% were open to trying new foods. At T3 children who answered the survey, 80% indicated that they liked most fruits; only 20% indicated that they liked most vegetables, and 60% liked most junk foods. In

regards to attitudes towards fruit the responses chosen by the parents/guardians were consistent to the answers chosen by the, but when the parents/guardians of these children were asked the same question regarding vegetables, 80% indicated that their child liked most vegetables. The majority of children in this group (75%) only drank three-five glasses of water each day. Data for these measures at T1 and T2 were not available.

The children were shown pictures of several healthy and unhealthy foods and beverages. All of the children (100%) in this age group were able to correctly identify whether the food or beverage was healthy or unhealthy. The parents/guardians of the children in this group indicated that 80% of the children ate vegetables two times within the 24-hours prior to the survey and the remaining children (20%) ate vegetables one time during the prior 24-hours. When asked this same question at T1 and T2, 68.6% and 69.7% respectively, ate at least one vegetable the day before. All of the children (100%) ate fresh fruit at least once within the 24-hours preceding the survey compared to both T1 and T2 in which 70.6% and 66.7% respectively, ate at least one serving of fresh fruit the day before.

Table 2. Nutrition responses for children 5-8 years of age.

	T1 (n=36) %	T2 (n=36) %	T3 (n=5) n (%)
Picky Eater*	-	-	40%
Like most fruits*	-	-	80%
Like most vegetables*	-	-	20%
Like most junk foods*	-	-	60%
Eat ≥1 serving of vegetables during the	66.7%	69.4%	100%

previous day

Eat ≥1 serving of fresh fruit during the previous day	70.6%	66.7%	100%
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*Data not available for T1 and T2

Physical activity and screen time

Parents/guardians of children in the five-eight year old group indicated that 100% of the children get at least five days of high intensity exercise per week with 40% getting six-seven days. The majority of children in this group (60%) were not on any sports teams. Children in this age-group identified jumping rope, baseball, soccer, and playing outside as their favorite physical activities. When the children were asked whether or not they enjoy doing active things together with their friends, all of the respondents (100%) answered yes. These measures were only available from T3.

In regards to screen time, 80% of parents/guardians indicated that their children watched at least three hours or more of television each day during the week. During the week, 60% of these children had one-two hours each day of video game/computer time with the remainder having one hour of video game/computer time. During T1 and T2, 42.9% and 41.6% respectively, had two or more hours of video game/computer time each day. Video game/computer time slightly decreased from T1 to T2, but increased significantly at T3.

Table 3. Physical activity and screen time measures for children 5-8 years of age.

	T1 (n=36) %	T2 (n=36) %	T3 (n=5) n (%)
Get ≥ 5 days of exercise/week*	-	-	5 (100)
Not on any sports teams*	-	-	3 (60)

Watch ≥ 3 hours of TV per day during the week	80.6	52.8	4 (80)
≥ 2 hours of video game/computer time per day during the week	42.9	41.6	3 (60)

*Data not available for T1 and T2

Weight classification category

The percentage of children in this group that fell into the healthy weight classification category at T1, T2, and T3 surveys was 44.4%, 52.8%, and 60%, respectively (Table 4). The percentage of children that fell within the overweight category, however, increased from T1 (22.2%) to T2 (28.6%) and increased again to 40% at T3. The number of underweight children decreased from 2.8% at T1 to 0% at T2 and T3. The percentage of children that fell into the at-risk for overweight category also decreased from 30.6% at T1, 16.7% at T2 and 0% at T3.

Table 4. Weight classification categories for children 5-8 years of age.

	T1 (n=36) %	T2 (n=36) %	T3 (n=5) %
Underweight	2.8%	0%	0%
Healthy weight	44.4%	52.8%	60.0%
At risk for overweight	30.6%	16.7%	0%
Overweight	22.2%	28.6%	40%

HEAL impact and results

At T3 participants in this group were asked questions about how HEAL impacted their health behaviors and which portions of the workshop they liked or did not like. Children in this

age group indicated that their favorite portions of the HEAL workshops were learning how to eat healthy at restaurants, choosing healthy snacks, and exercising. The least favorite portions of the workshops for this age group were learning about screen time, sugar beverages, and portion control. All of the respondents in this group (100%) indicated that they felt the HEAL workshops helped to change their behavior in regards to healthy eating, exercising, and increasing fruit and vegetable intake.

Nine-twelve year olds

Within the nine-twelve year old group, the majority of respondents (62.5%) were female and identified as black or African-American (93.8%). The children were in grades five-eight. All of the children in this group (100%) selected English as their primary language.

Table 5. Demographic characteristics of children 9-12 years of age.

<i>Nine-Twelve year olds (n=16)</i>	
Gender, n (%) female	10 (62.5)
Race, n (%)	
<i>Black or African American</i>	15 (93.8)
<i>Hispanic or Latino</i>	1 (6.3)
Grade, n (%)	
<i>5th Grade</i>	5 (35.7)
<i>6th Grade</i>	2 (14.3)
<i>7th Grade</i>	4 (28.6)
<i>8th Grade</i>	3 (21.4)
Primary Language, n (%)	
<i>English</i>	16 (100)
Height, mean (SD), inches	59.44 (4.02)

Weight, mean (SD), pounds

116.24 (34.75)

Nutrition

Within the nine-twelve year old age group, 87.5% of respondents reported that they like most fruits, while 62.5% reported that they did not like vegetables. All of the respondents (100%) felt that they were able to make healthy choices for their dinner. The majority of children (62.5%) felt that their parents/guardians cared about eating healthy. Only 50% of children felt that their friends cared about eating healthy. Data regarding these measures were not available for T1 and T2.

Knowledge regarding recommended daily servings of fruits and vegetables decreased from 37.8% at T1 to 20% at T2 and then increased to 43.8% at T3. The percentage of children in the 9-12 age group that were very confident in their ability to choose water over soda increased from T1 (73.3%) to the T3 (87.5%). In regards to fruit consumption, more children had no fruit servings the day prior to the survey at T3 (60%) than at both T1 (25.6%) and T2 (30%). Vegetable consumption among children in this age group decreased from 71.1% at T1 to 65.9% at T2 and 68.7% at T3. In regards to knowledge about soda being unhealthy, 71.1% of children in this age group knew that soda was unhealthy at T1. At T2, 80% of children answered this question correctly and 81.3% answered correctly at T3. Within this group, 73.3% of respondents reported drinking less than six glasses of water per day at T3. Data pertaining to daily water consumption were not available for T1 and T2.

At T3 the majority of children reported that they were “very” confident in their abilities to choose water over soda (87.5%), fruit over candy (66.7%), and make healthy choices during family dinners (60%). The majority of children in this age group were knowledgeable in regards to most key nutrition concepts. When asked whether the food they eat affects sports performance, 75% selected agree or strongly agree. In this group, 81.3% of children were aware that drinking soda had an impact on weight. The majority of children (68.8%), however, did not believe that their diet could have an impact on their school performance. All of the children (100%) were able to identify the healthy dinner option out of several choices, 92.9% were able to correctly identify the healthy lunch option, and 86.7% were able to identify the healthy breakfast option.

Table 6. Nutrition measures for children 9-12 years of age.

	T1 (n=44) %	T2 (n=44) %	T3 (n=16) n (%)
Like most fruits*	-	-	14 (87.5)
Do not like vegetables	15.6	17.8	10 (62.5)
No fruit servings day prior to survey	25.6	30	9 (60)
No vegetable consumption day prior to survey	31.4	30.3	5 (31.3)
Drink <6 glasses of water per day*	-	-	11 (73.3)
Believe parent/guardian cares about healthy eating*	-	-	10 (62.5)
Believe their friends care about healthy eating*	-	-	8 (50)
Know daily recommended servings of fruits and vegetables	37.8	20	7 (43.8)
Know soda is unhealthy	71.1	80	13 (81.3)
Confident in ability to choose water over soda	73.3	66.7	14 (87.5)

Confident in ability to choose fruit over candy*	-	-	10 (66.7)
Know the food they eat affects sports performance*	-	-	12 (75)
Know soda has an impact on weight*	-	-	13 (81.3)
Know diet has an impact on school performance*	-	-	11 (68.8)

*Data not available for T1 and T2

Physical activity and screen time

At T3, the majority of children ages nine-twelve (81.3%) were knowledgeable in regards to physical activity being healthy. Within this group, only 6.8% correctly identified the daily physical activity requirement at T2 compared to T1 (22.2%) and T2 (20%) surveys. Many of the children (68.8%) at T3 were not sure/a little sure that they could exercise three-five times a week. This was a change from T1 and T2 surveys in which 42.2% and 37.8% respectively, indicated that they were not sure/a little sure they could exercise three-five times a week.

Only 31.4% indicated that they currently exercise at least five times a week. Despite the lack of physical activity among children in this group, 68.8% of children in this group indicated that they thought physical activity was fun or very fun. The majority of children felt that their neighborhood was not safe during the day (68.8%) and not clean (50%). At T3, 62.5% of children were not on any sports teams. Data on these measures were not available for T1 and T2.

In regards to screen time, 46.6% of respondents spent three or more hours per day on the computer or playing video games. This was an increase from both T1 and T2 surveys, which were both 18.2%. Within this group, 81.3% of parents/guardians limited their child's screen

time all or some of the time. Fifty percent of parents/guardians limit the amount of TV their child watches. Only 13.3% of children in this group had a computer or TV in their room. The majority of respondents (73.3%) in this age group felt not sure/a little sure in their confidence to limit their screen time. This was an increase from both T1 and T2, in which 55.6% and 51.5%, respectively felt not sure/a little sure they could limit their screen time.

Table 7. Physical activity and screen time measures for children 9-12 years of age.

	T1 (n=44) %	T2 (n=44) %	T3 (n=16) n (%)
Know physical activity is healthy*	-	-	13(81.3)
Know daily physical activity requirement	22.2	20	1 (6.8)
Not Confident in ability to exercise 3-5 times/week	42.2	37.8	11 (68.8)
Currently exercise ≥5 times/week*	-	-	5 (31.4)
Think physical activity is fun/very fun*	-	-	11 (68.8)
Feel neighborhood not safe during the day*	-	-	11 (68.8)
Feel neighborhood not clean*	-	-	8 (50)
Not on any sports teams*	-	-	10 (62.5)
Spend ≥3 hours/day on the computer or playing	18.2	18.2	7 (46.6)

video games			
Parents/guardians limit screen time*	-	-	13 (81.3)
Confidence in ability to limit daily screen time	55.6	51.5	11 (73.3)

*Data not available for T1 and T2

Weight classification category

The percentage of children in the healthy weight category at T1 was 41.9%. Children that fell into this category increased slightly to 42.9 at T2 and then decreased to 28.6% at T3 (Table 5). The percentage in the overweight category, however, decreased from the T1 (34.9%) to T2 (33.3%), but then increased to 42.9% at T3. The percentage of children who were underweight increased from T1 (2.3%) to T2 (4.8%) and then decreased to 0% at T3. The number of children at risk for overweight decreased slightly from T1 (20.9%) to T2 (19%), but increased to 28.6% at T3.

Table 8. Weight classification categories of children 9-12 years of age.

	T1 (n=44) %	T2 (n=44) %	T3 (n=16) %
Underweight	2.3	4.8	0
Healthy weight	41.9	42.9	28.6
At risk for overweight	20.9	19	28.6
Overweight	34.9	33.3	42.9

HEAL impact and results

At T3 participants in this group answered questions about how they felt the program impacted their health behaviors as well as what they would like to see in future programs. The

majority of participants (62.5%) did not decrease their junk food consumption. Many of the participants (62.5%), however, did increase their fruit and vegetable intake. Half of the children in this group increased the amount of physical activity they were engaging in. The majority of children in this age group were not interested in presentations (68.8%) or worksheets/handouts (68.8%); 62.5% would like to go on field trips as part of the workshops. Overall, 87.5% felt that learned something from the HEAL program.

Adults

Among the adults, 24 individuals answered the survey. Of these 24, the majority (91.7%) were female. The majority of the group (87.5%) identified as black or African American. All of the respondents (100%) spoke English as their primary language. The majority of adults (91.3%) did have health insurance, with only 8.7% indicating they had no health insurance. Within this group, majority of respondents (61.9%) were currently working full-time. In the adult group 4.2% did not graduate high school, 41.7% graduated high school, 12.5% obtained a GED, 16.7% attended college but did not graduate, 12.5% had an associate’s degree, 12.5% had a bachelor’s degree, 20.8% had a graduate degree, and 20.8% went to trade school. The average height of this group was 64.64 ± 3.47 (SD) inches and the mean weight was 203.07 ± 52.46 (SD) pounds. The average BMI was 34.12 ± 7.82 (SD).

Table 8. Demographic characteristics of adult group

Adults (n=24)	
Gender, n (%) female	22 (91.7)
Race, n (%)	
<i>Black or African American</i>	21 (87.5)
<i>American Indian/Alaskan Native</i>	1 (4.2)

<i>Hispanic or Latino</i>	1 (4.2)
Education Level, n (%)	
<i>Attended high school but did not graduate</i>	1 (4.2)
<i>High school graduate</i>	10 (41.7)
<i>GED</i>	3 (12.5)
<i>Attended college but did not graduate</i>	4 (16.7)
<i>Associate degree</i>	3 (12.5)
<i>Bachelor's degree</i>	3 (12.5)
<i>Graduate degree</i>	5 (20.8)
<i>Trade school</i>	5 (20.8)
Primary Language, n (%)	
<i>English</i>	22 (100)
Medical Insurance, n (%)	
<i>Yes</i>	21 (91.3)
<i>No</i>	2 (8.7)
Current Work, n (%)	
<i>Working full-time</i>	13 (61.9)
<i>Working part-time</i>	2 (9.5)
<i>Stay-at-home caregiver</i>	3 (14.3)
<i>Currently unemployed, actively seeking work</i>	1 (4.8)
<i>Not working for money</i>	2 (9.5)
Height, mean (SD), inches	64.64 (3.47)
Weight, mean (SD), pounds	203.07 (52.46)
BMI, mean (SD)	34.12 (7.82)

Nutrition

At T3, almost all (90.9%) of the parents/guardians reported caring “very much” about eating healthy and 87% reported preparing a healthy balanced meal three or more times a week. Fifty percent of households always had fresh vegetables while 39.1% of households

always had fresh fruits. In regards to communicating healthy messages to their children, 47.8% spoke to their child almost daily about physical activity and 45.5% spoke to their child almost every day about healthy eating. All respondents (100%) indicated they knew that soda was unhealthy. The majority of adults (52.2%) drank less than six glasses of water a day. Only 13% of respondents live within ten minutes of a grocery store or supermarket.

Table 9. Nutrition measures for adults

	T3 (n=24) n (%)
Care "very much" about eating healthy	21 (90.9)
Prepare a balanced meal \geq 3 times/week	20 (87)
Household always has fresh vegetables	12 (50)
Household always has fresh fruit	9 (39.1)
Speak to child(ren) daily about healthy eating	10 (45.5)
Know soda is unhealthy	24 (100)
Drink > 6 glasses of water/day	12 (52.2)
Live within 10 minutes of a grocery store/supermarket	3 (13)

Physical Activity and Screen time

During T3, 40.9% of adults knew the daily physical activity recommendation for children. Within this group, 30.9% of respondents indicated that they did not exercise with their child at all; however, 83.3% expressed a desire to exercise with their child three or more times a week.

Only 21.7% live within 30 minutes of a gym or fitness facility. The majority of respondents (59.1%) felt that their neighborhood was not clean while 43.5% felt that their neighborhood was not safe during the day.

In regards to screen time, the vast majority (91.3%) felt confident in limiting their child’s screen time to two hours or less a day. Most of the parents/guardians (56.5%) indicated that they currently limit their child’s screen time. Many of the adults (82.6%) answered that they had active video games available for themselves and their child to use. Parents/guardians limited their child’s screen time to an average of 2.61 ± 1.14 (SD) hours a day. Data for these measures were not available for T1 and T2.

Table 10. physical activity and screen time measures for adults

	T3 (n=24) n (%)
Know daily physical activity recommendation for children	9 (40.9)
Do not exercise with child at all	7 (30.9)
Desire to exercise with child ≥ 3 times/week	20 (83.3)
Live within 30 minutes of gym/fitness facility	5 (21.7)
Speak to child(ren) daily about physical activity	11 (47.8)
Feel neighborhood not safe during the day	10 (43.5)
Feel neighborhood not clean	13 (59.1)
Feel confident limiting child’s screen time	21 (91.3)
Currently limit child’s screen time	13 (56.5)
Have active video games available for self/child	19 (82.6)
Average time limiting child’s screen time to, (SD)	2.61 (1.14)

BMI

The adults who answered at T3 had a mean BMI of 34.12 ± 7.82 . According to the United States Centers for Disease Control (CDC), this falls into the category of class 1 obesity.

HEAL impact and results

The parents/guardians were asked questions at T3 pertaining to what they knew prior to the program, what they would be interested in learning more about, and what they would like to see in future HEAL workshops. At T3, respondents indicated that prior to the beginning of the HEAL workshops only 20.8% knew the recommended dietary guidelines, 83.3% did not know about portion size, and 66.7% did not know about healthy shopping. The majority (75%) did not know about recommended daily screen time guidelines. Many of the participants were interested in learning more about healthy shopping (54.2%) and ordering healthy food at restaurants (45.8%), but were not interested in learning more about portion size (75%), sugar beverages (70.8%), or pedometer use (79.2%). The parents/guardians would prefer hands on activities (91.7%), presentations (54.2%), and field trips (79.2%); 79.2% reported that they were not interested in take home handouts. Data for these measures were only available at T3. Overall, all of the caregiver participants felt that they learned something from the HEAL program.

DISCUSSION

Overall, the majority of participants in the HEAL program indicated that they felt the program helped them to change their behavior in regards to healthy eating and physical activity. Many of the health indicators improved somewhat from T1 to the T2, but then decreased between T2 and T3. Since this was the case, it may be beneficial to follow-up with the participants after the end of the program. This could be in the form of phone calls or information via postal mail or email. Evidence from public health literature suggests that

keeping in touch and maintaining contact with participants helps to influence behavior change (Frank et al., 2003). This will help to reinforce the information from the program, making participants more likely to continue healthy behavior changes.

In relation to the reported decrease in healthy behaviors i.e., increased screen time and lack of physical activity, post program, once the program was complete, it may have been difficult for participants to continue with healthy behaviors due to barriers such as lack of resources. Providing participants with outside resources during the program can help to complement the workshops and increase the impact of healthy changes during the program and can also help to sustain the changes once the program is over. Given that participants must be enrolled in Detroit Public Schools, it may be helpful to have the schools involved in the HEAL curriculum. For example, encouraging teachers in the schools to hold monthly refresher lessons on the importance of nutrition and physical activity. This will help to keep the information relevant to the children and will also reach children that were not enrolled in the HEAL program. Evidence shows that programs which include parents, children, and schools can be more effective in producing behavior change and increasing participation (Boat, Oconnell, & Warner, 2009). Encouraging more parents/guardians to speak to the children while at home about healthy eating and physical activity is also important. This will help to reinforce the information learned during the HEAL program and can also make parents feel more accountable for their children's health behaviors.

The age range of children participating in the HEAL workshops ranged from five-twelve. This is a relatively wide age range, with children in the different age groups having varying interests as well as abilities. A recommendation would be to conduct separate programs for

children in the five-eight year old group and the nine-twelve year old group. This would allow the staff to better tailor the program to children in each age group. For example, children in the younger age group indicated that they enjoy baseball, soccer, and jumping rope. Incorporating these activities into the workshops will help the younger children become more involved. Children in the younger age group reported being more physically active than children in the older age group. More of an emphasis can be placed on increasing physical activity in the older age group. Determining which sports and physical activity each particular group is interested in can help to educate and also provide opportunities and resources for participants with a more targeted approach.

It is likely that a child's diet at home differs from their diet while at school. This is particularly true if the child gets lunch from the school cafeteria each day. Within Detroit Public Schools the rate of children receiving free/reduced lunches is high. This makes it likely that many of the children in the HEAL program receive their lunch and possibly breakfast from school every day. For future programming, it may be beneficial to ask participants questions regarding how their diet at home differs from what they eat while at school. Given that Joy-Southfield has developed relationships with schools in the community, this information can potentially be used to assist in advocating for policy changes within the schools to ensure that children are receiving healthy and balanced meals, further reinforcing program efforts to promote healthy children and adults.

The majority of children did not believe that diet could have an impact on their school performance. Evidence within public health literature shows that diet quality is associated with school performance. Students with poor diets are more likely perform poorly on assessments

(Florence, Asbridge, & Veugelers, 2008). This point should be stressed during the HEAL program. Children may not fully understand the relationship between their diet, physiologic functioning, and cognitive, thus it may be beneficial to incorporate into future programming.

One area in which all groups were lacking significantly was water consumption. Of all three age groups, the majority of participants did not drink the recommended amount of water daily. Focusing on water consumption in the HEAL workshops can help to increase water consumption among participants. Developing lessons discussing the benefits of drinking water and the negative impact of not drinking enough water may be helpful; however, it would be more beneficial to couple lessons with other activities to encourage participants to drink more water. For example, along with lessons regarding water consumption, program management staff could encourage each family to have a “water challenge.” This would consist of each family member logging the amount of water they drink each day throughout the HEAL program. At the end of the program, the winner from each family would be identified. Offering a small incentive to the winner from each family may serve as an effective strategy to encourage behavior change (Giles, Robalino, McColl, Sniehotta, & Adams, 2014). Once the program is over families can be encouraged to continue having these challenges amongst themselves.

Another area in which both groups of children lacked was involvement in sports teams. The majority of children in both age groups were not on any sports teams. Participation in sports teams among children and adolescents is important for not only health, but for social and emotional development as well (Eime, Young, Harvey, Charity, & Payne, 2013). Studies show that being involved in sports teams helps children to live a healthier lifestyle and avoid negative influences (Pate et al., 2000). In order to increase sports team participation, program

management staff could invite coaches of local sports teams to come and speak to the families during the program. This will allow the parents/guardians and children to get to know the coaches. It will also give the parents/guardians an opportunity to exchange contact information with the coaches or even possibly sign their children up for the team at that time. An additional concern regarding participation on sports teams is cost. Given that this is a primarily low-income population cost can pose a significant barrier to sport team participation. One way to address this would be to provide parents/caregivers with information regarding resources for free or low cost sports teams within the community. One such organization in the Detroit community is Detroit PAL (www.detroitpal.org). This organization offers a variety of sports teams for children in Detroit and discounted rates are given to families who are currently on Medicaid.

Overall, it appears that the HEAL program did a good job at increasing knowledge among participants, especially in regards to key nutrition concepts such as daily fruit/vegetable intake recommendations and soda being unhealthy. Although knowledge is not a sufficient predictor of behavior change, this is a great starting point. Increasing knowledge on these topics coupled with changes in attitude can help to create a strong foundation for future behavior change in regards to healthy eating and physical activity (Spehr & Curnow, 2011).

Some of the barriers to healthy behaviors identified through the surveys were lack of access to grocery stores and fitness facilities as well as feeling unsafe outside. Many participants indicated that they do not live close to a grocery store or fitness facility. The HEAL program could help to address this barrier by providing lists of places that residents can go to purchase healthy food options, such as farmers markets or community gardens, and where

people can go to participate in physical fitness, such as community centers with physical activity programs that participants may not be aware of. Lack of knowledge or awareness regarding safe and clean spaces for residents to exercise may also play a role in this outcome. For future programming, it may be useful to not only ask participants if there are any gyms or fitness facilities near their home, but to also ask if there are any safe spaces within the community they are able to go to engage in physical activity. Many participants from all age groups indicated a strong desire to have field trips in future programs. Taking participants on a community tour or field trip to the grocery store or fitness facilities can help to increase interest in the program as well as provide resources for participants. It would be helpful to take participants on a field trip to the local grocery store and help them shop for healthy foods. This would help participants feel more comfortable in their ability to access healthy food options. A community tour could also be used to point out community centers or safe and clean outdoor spaces that can be used for physical activity.

In regards to the issue of safety, many children indicated that they felt their neighborhood was not safe during the day. This can be a significant barrier to physical activity. This is apparent in the fact that the majority of participants expressed positive attitudes towards physical activity, but there was still a significant lack in the amount of physical activity they are participating in. Many of the participants may have a positive attitude towards physical activity as well as intention to be physically active, but their environment may not allow for them to put this intention into action. Identifying community centers, sports teams, or fitness facilities can help to give the children options for physical activity if they do not feel safe being outside in their neighborhood. Although, these issue may be outside the scope of the HEAL

program, connecting participants with outside resources that deal with these barriers can be helpful.

Many of the children spent large amounts of time playing video/computer games. The majority of parents/guardians indicated that they owned some form of active video games. The HEAL program can promote the use of active video games in place of traditional video games. This is more likely to lead to change as opposed to simply telling children to cut down their video game use and be physically active. This approach couples something the children are interested in (video games) with the desired healthy behavior (physical activity). Although this will not likely cut down on screen time, the children are still being physically active while being in front of the screen.

Another measure pertaining to screen time that had interesting findings was the discrepancy between parent's confidence in limiting their child's screen time and the percentage of parents that actually monitor their child's screen time. This is another instance in which behavioral intention and action do not match up. Parents may need strategies in order to enforce screen time limits in their home. This is especially true for working parents. If parents are not home when their child gets home from school, it can be difficult to monitor their child's screen time. Encouraging parents to be positive role models in regards to time spent in front of the TV or computer and to talk with their family to get the whole family on board can help to make parents more proactive in regards to screen time. Also, encouraging parents and children to keep a screen time log to monitor how much time the child is spending in front of TV/computer can help to show parents how much screen time their child is actually getting. This will serve a similar purpose to a food log. When we see something in front of us and we are

actively keeping track of it, we are more likely to be more motivated to change that behavior (McDole, Ralston, Coccia, & Young-Clark, 2013). The National Institutes of Health We Can! Program offers several evidence-based curricula pertaining to successfully limiting screen time and increasing physical activity in children (<https://www.nhlbi.nih.gov/health/educational/wecan/>). The We Can! Programs offers a sample screen time chart used to monitor screen time and determine daily and weekly total screen time (Appendix D). A screen time chart such as this example may help encourage parents to monitor their child's screen time.

The sample size of the T3 group was significantly smaller than T1 and T2. This may have been due to loss to follow up for reasons such as participants moving or changing their numbers. This may have also been due to the fact that participants were required to go to a center in the community to complete surveys. This can pose a problem for several reasons. Once a program is completed, it can be difficult to obtain participation from respondents due to issues such as time constraints, lack of transportation, or simply not wanting to go to fill out a survey. One way in which this barrier could be addressed is to input the survey into an online survey engine and send the link to participants so that they are able to complete the survey on their computer or mobile phone. This is much more convenient for participants and will likely yield a larger number of responses. This larger number of responses will help program planners to gain more insightful information pertaining to trends and allow for more robust statistical analysis to compare T1, T2, and T3 data.

Limitations

There were several limitations in assessing the impact of the HEAL program at T3. The greatest limitation was the very small response rate. There were significantly more respondents in T1 and T2 than in T3. This small response rate can skew the data and also did not allow for bivariate or multivariate analysis. When there is a very small sample size the frequency of a response can seem significantly more or less frequent than it actually is because of the small number of participants. The loss to follow-up from T1 to T3 also makes it difficult to make comparisons between the two periods or to draw any causal conclusions. For T1 and T2, data were only available for participants who responded at both T1 and T2. Subject attrition may have occurred during the time from T1 to T2. As a result, the results may be biased in that participants who responded to both surveys may have been more motivated and thus, more likely to engage in healthy behaviors. Given that the original sample size was not available, it is impossible to know how many people dropped out of the program over time.

The data were collected through self-report measures. When dealing with sensitive subjects, such as eating habits and physical activity, respondents may be reluctant to be completely truthful due to fear of judgment and wanting to provide “socially acceptable” responses. In regards to the children, they may be more likely to provide answers that they feel are appropriate to the adults who will be reading the surveys, especially if their parents are there at the time the survey is being conducted. Another issue with self-report, especially among children, is memory. Respondents may not always remember exactly how much of a particular food/drink they had or how much they exercised in the past.

Although there was a reported increase in healthy food intake, there was also an observed weight gain. This discrepancy may be explained by issues with self-reporting. The dietary questions asked in the surveys only asked participants about their diet the previous day. It is unlikely that a single day will reflect an individual's overall diet. Participants may have had an abnormally healthy or unhealthy day prior to the survey. To control for this, in addition to the survey, program management staff can provide participants with weekly or monthly food journals in which participants can log what they eat each day. This may help to better assess the participant's diet as well as help the participant to be more mindful of their diet each day. Several of the questions in the survey were subjective in nature. Asking a participant how often they prepare a "balance/healthy meal" or how many serving of fruit/vegetables can cause the responses to be skewed. Respondents have different perceptions about what is considered balanced /healthy or what a true serving size is. Individuals can only attest to what they feel to be accurate and true. A serving size to one person may be completely different than a serving size to another person. Providing specific examples with these types of questions may help to obtain more objective answers from respondents. Some ways to do this would include listing all the components needed for a balanced/healthy meal and providing pictures of actual serving sizes for each food group being asked about.

Lastly, many of the measures obtained at T3 were either not reported or analyzed for T1 and T2. This makes it impossible to determine a causal relationship or correlation between the program and the results obtained from the follow-up survey. In order to provide a complete and thorough evaluation for future programming, it would be beneficial to provide the same survey and measure the same outcome for T1, T2, and T3. This follow-up survey does, however,

provide insight into health knowledge, behaviors, and attitudes within the community and can serve to guide the development of further HEAL and other health education programs.

CAPSTONE COMPETENCIES

Conducting this capstone project has allowed me to put into practice several competencies I have learned during the course of the MPH program at University of Michigan-Flint. Many of the courses I have taken were useful in developing and carrying out this project. Although specific courses such as Biostatistics for Health Professionals, Program Planning and Program Design, and Evaluation of Health Education and Promotion Programs were particularly helpful in completing this project, I feel that all of the courses I have taken were useful in the overall completion of this project. The competencies that were especially important in the development, process, and completion of this capstone project were: **Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate;** and **Apply qualitative and quantitative methods to assess the feasibility, effectiveness, and efficacy of programs.**

- 1.) **Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate.**

To conduct this project, I obtained an Excel file of survey responses from participants enrolled in a program promoting healthy eating and physical activity to families with children enrolled in Detroit Public Schools. The first step of the project was to clean the data to prepare for SPSS import. All questions were renamed as variables with each response coded numerically. Once the data was cleaned and coded it was then transferred into SPSS. Once in

SPSS I was able to run statistical analyses on the data. The course Biostatistics for Health Professionals prepared me to prepare data in Excel, work in SPSS, and run data analyses. Taking this course was essential in learning the appropriate statistical tests to run depending on the data and also how to properly interpret the results after analysis.

2.) Apply qualitative and quantitative methods to assess the feasibility, effectiveness, and efficacy of programs.

After analyzing the data, I was able to use the results to assess the effectiveness of the program in regards to knowledge, behaviors, and attitudes. The data I analyzed to measure effectiveness was taken from the T3 survey given eight months after the program ended; I also had access to the analysis of the pre-post data for comparison. In conducting this project I was looking to assess the impact of the program at follow-up and to also identify any relevant trends in the data. Both Evaluation of Health Education and Promotion Programs and Program Planning and Program Design were helpful in this aspect of my project. The evaluation course helped me understand what to look for when comparing data to assess a program. I was able to identify changes in not only behavior, but attitude and knowledge as well.

Understanding program planning is essential to being able to evaluate or assess a program. Taking my knowledge from the program planning course, I was able to not only assess the program, but also provide recommendations using evidence-based strategies to encourage behavior change that I felt would be beneficial to future programs given both the data analyzed and my knowledge obtained through the MPH program.

Obtaining the foundational and track competencies through the MPH program at the University of Michigan-Flint helped me to effectively complete this capstone project. All of the competencies as well as the curriculum of the program were beneficial to me and will serve as foundational principles to guide both personal and professional endeavors in my future.

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Appendix A: Five-eight year old survey

Survey (5- to 8-year-olds)

Dear Parent or Caregiver,

Please help your child by filling out the first part of the survey. Thank you for your help!

Parent/Caregiver Section

Caregiver ID _____ Child ID _____

Child's Name _____ Survey Date _____

Child's birthday: Month _____ Day _____ Year _____

What grade is your child going into in the fall? _____

What school does your child go to? _____

Is your child a boy or girl?

- Boy
- Girl

How would you describe your child? Check all that apply

- American Indian or Alaska Native
- Asian
- Arabic
- Black or African American

- Chaldean
- Mexican-American, Latino or Hispanic
- Native Hawaiian or Other Pacific Islander
- White
- Other

What language do you speak the most at home?

- English
- Spanish
- Arabic
- Other _____

INSTRUCTIONS: Please CIRCLE your answer.

1. Did your child have *regular* (not diet) pop or soda yesterday?

- a. No, they didn't have *regular* pop or soda.
- b. Yes, they had *regular* pop or soda **1 time**.
- c. Yes, they had *regular* pop or soda **2 times**.
- d. Yes, they had *regular* pop or soda **3 or more times**.

2. Did your child have *diet* (not regular) pop or soda yesterday?

- a. No, they didn't have *diet* pop or soda.
- b. Yes, they had *diet* pop or soda **1 time**.
- c. Yes, they had *diet* pop or soda **2 times**.
- d. Yes, they had *diet* pop or soda **3 or more times**.

3. Did your child have a snack yesterday? A snack is food or drink that you eat or drink before, after, or between meals.

- a. No, they did not have a snack.
- b. Yes, they had a snack **1 time**.
- c. Yes, they had a snack **2 times**.
- d. Yes, they had a snack **3 or more times**.

4. **Did your child eat French fries or chips yesterday? Chips are potato chips, tortilla chips, cheetos, corn chips, or other snack chips.**
- No, they did not eat any French fries or chips.
 - Yes, they ate French fries or chips **1 time**.
 - Yes, they ate French fries or chips **2 times**.
 - Yes, they ate French fries or chips **3 or more times**.
5. **Did your child eat any vegetables yesterday? Vegetables are salads; boiled, baked and mashed potatoes; and all cooked and uncooked vegetables. Do not count French fries or chips.**
- No, they did not eat any vegetables.
 - Yes, they ate vegetables **1 time**.
 - Yes, they ate vegetables **2 times**.
 - Yes, they ate vegetables **3 or more times**.
6. **Did your child eat fresh fruit yesterday? Do not count fruit juice.**
- No, they did not eat any fresh fruit.
 - Yes, they ate fresh fruit **1 time**.
 - Yes, they ate fresh fruit **2 times**.
 - Yes, they ate fresh fruit **3 or more times**.
7. **Did your child drink fruit juice yesterday? Fruit juice is a drink, which is 100% juice, like orange juice, apple juice, or grape juice. DO NOT count punch, kool-aid, sports drinks, and other fruit-flavored drinks.**
- No, they did not drink any fruit juice.
 - Yes, they drank fruit juice **1 time**.
 - Yes, they drank fruit juice **2 times**.
 - Yes, they drank fruit juice **3 or more times**.
8. **Did your child have any drinks like punch, kool-aid, sports drinks, or other fruit-flavored drinks yesterday?**
- No, they did not have fruit-flavored drinks.
 - Yes, they had fruit-flavored drinks **1 time**.
 - Yes, they had fruit-flavored drinks **2 times**.
 - Yes, they had fruit-flavored drinks **3 or more times**.
9. **Did your child eat sweet rolls, doughnuts, cookies, brownies, pies, or cake yesterday?**
- No, they did not eat any of these foods.
 - Yes, they ate one of these foods **1 time**.
 - Yes, they ate one of these foods **2 times**.
 - Yes, they ate one of these foods **3 or more times**.

10. Did your child eat any candy yesterday?

- a. No, they did not eat any candy.
- b. Yes, they ate candy **1 time**.
- c. Yes, they ate candy **2 times**.
- d. Yes, they ate candy **3 or more times**.

11. Does your child like vegetables?

- a. Yes, they like most vegetables.
- b. There are a few (4-6) vegetables that they like to eat.
- c. There are very few (0-3) vegetables that they like to eat.
- d. They do not like vegetables.

12. Does your child like fresh fruit?

- a. Yes, they like most fresh fruit.
- b. There are a few (4-6) fresh fruits that they like to eat.
- c. There are very few (0-3) fresh fruits that they like to eat.
- d. They do not like fresh fruit.

13. Is your child a picky eater?

- a. Yes
- b. No

14. Is your child willing to try new foods?

- a. Yes
- b. No

15. Circle all of the foods currently in your kitchen at home

- a. Chips
- b. Ice-cream
- c. Cookies
- d. Soda or Pop
- e. Candy
- f. Sugary cereal
- g. Whole-grain bread
- h. Yogurt
- i. Skim milk
- j. Pretzels
- k. Fresh vegetables
- l. Fresh fruit

16. How many glasses of water does your child drink per day?

- a. 0-2 glasses
- b. 3-5 glasses
- c. 6-8 glasses

- 17. How many times a week do you eat out with your family? (fast food restaurants, cafeteria, sit-down restaurants, drive-thru, pick-up)**
- a. Never
 - b. 1 time per week
 - c. 2 times per week
 - d. 3 times per week
 - e. 4 times per week
 - f. 5 times per week
 - g. 6 times or more per week
- 18. Yesterday, did your child do a sport for at least 20 minutes that made them out of breath? (Basketball, jogging, skating, fast dancing, swimming laps, tennis, fast bicycling, aerobics).**
- a. Yes
 - b. No
- 19. How many days last week did your child do an activity like that described above?**
- a. 0 days
 - b. 1 day
 - c. 2 days
 - d. 3 days
 - e. 4 days
 - f. 5 days
 - g. 6 days
 - h. 7 days
- 20. How many days last week did your child do an activity for at least 30 minutes that did not make them out of breathe? (Fast walking, slow bicycling, skating, or mopping floors).**
- a. 0 days
 - b. 1 day
 - c. 2 days
 - d. 3 days
 - e. 4 days
 - f. 5 days
 - g. 6 days
 - h. 7 days
- 21. How many sports teams did your child play on in the last year? (Baseball teams, soccer teams, swim teams, basketball teams or football teams).**
- a. 0 teams
 - b. 1 team
 - c. 2 teams
 - d. 3 or more teams

22. How many TV shows or movies does your child watch during the week?

- a. They don't watch TV or movies
- b. 1 show/movie
- c. 2 shows/movies
- d. 3 or more shows/movies

23. How many hours each day during the week does your child watch TV or movies?

- a. 2 hours or less each day
- b. 3 hours each day
- c. 4 hours or more each day
- d. My child does not watch TV or movies during the week

24. How many TV shows or movies does your child watch during the weekend?

- a. They do not watch TV or movies
- b. 1 show/movie
- c. 2 shows/movies
- d. 3 or more shows/movies

25. How many hours during the weekend does your child watch TV or movies?

- a. 4 hours or less
- b. 5-8 hours
- c. 8 hours or more
- d. My child does not watch TV or movies during the weekend

26. How many hours during the week does your child play video games (Nintendo, Sega, games at the arcade) or use the computer to surf the internet?

- a. They do not play video games or use the computer to surf the internet during the week.
- b. Less than 1 hour each day.
- c. 1-2 hours each day.
- d. 3-4 hours each day.
- e. More than 4 hours each day.

27. How many hours during the weekend does your child play video games (Nintendo, Sega, games at the arcade) or use the computer to surf the internet?

- a. They do not play video games or use the computer to surf the internet during the weekend
- b. Less than 1 hour each day
- c. 1-2 hours each day
- d. 3-4 hours each day
- e. More than 4 hours each day

28. Are you worried about your child's weight?

- a. Yes
- b. No

29. What was your child's favorite part of the HEAL workshops?

30. What did your child not like about the HEAL workshops?

31. What subject(s) from the HEAL workshops were your child's favorite?

Circle all that apply

- a. What is healthy eating and what is a balanced diet
- b. How big is a serving and how much should I eat
- c. How to shop for healthy foods and where I can find healthy foods in the grocery store
- d. How to order healthy foods at restaurants
- e. What beverages contain sugar
- f. How to plan my own healthy meal
- g. How to choose healthy snacks
- h. Exercises to increase my physical activity
- i. How to use a pedometer
- j. How much should I watch TV, play video games or play on the computer

32. Does your child eat healthier now than they did before the HEAL workshops?

- a. Yes
- b. No

33. Does your child exercise more now than they did before the HEAL workshops?

- a. Yes
- b. No

34. Does your child eat more fruits and vegetables since going to the HEAL workshops?

- a. Yes
- b. No

Dear Parent or Caregiver,

Thank you for completing the Parent/Caregiver Section of this survey. The following section will be read to your child by the Joy-Southfield representative present.

Child Section

Name _____

1. How do you feel when you do active things like running, playing outside, playing basketball, or other things



Happy



Bored



Sad

2. My friends and I like to do active things together
- a. All the time
 - b. Sometimes
 - c. Never
3. I like the taste of most fresh fruits
- a. Yes
 - b. No
4. Most vegetables taste bad
- a. Yes
 - b. No
5. Most healthy foods taste bad
- a. Yes
 - b. No
6. Most junk foods taste better than healthy foods

- a. Yes
- b. No

7. Circle the child that is exercising



Playing Soccer
w/Shin Guards



Playing video
games



Watching TV



Standing talking
w/ friends

8. Circle all of the activities that you like to do



Play basketball



Play baseball



Ride a bike



Play soccer



Jump rope



Walk



Play
outside

9. Circle all of the healthy drinks.



Soda



Water



Orange juice



Kool-Aid



Skim milk



Low-fat
chocolate milk

10. Circle all of the healthy snacks.



Candy



Carrot and
celery sticks



Yogurt



Cherries



Cookies



Pretzels



Ice cream



Raisins



Chips

11. Circle all of the vegetables you like to eat.



broccoli



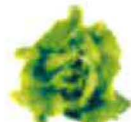
cucumber



carrots



corn



salad/lettuce



peas



squash



sweet peppers

12. Circle all of the fruit you like to eat



apple



banana



grapes



orange



peach



grapefruit



pineapple



pear



strawberry



watermelon

13. Circle the picture of the healthy breakfast.



Oatmeal, yogurt, fruit, orange juice



Sugar cereal, skim milk



Doughnut, low-fat chocolate milk

14. Circle the picture of the healthy lunch.



Pepperoni pizza, fruit roll-up, soda



Turkey sandwich w/lettuce, tomato, and cheese



Hot dog, chips, water

15. Circle the picture of the healthy dinner.



Hamburger, French fries, pop



Fried Fish and Chips



Chicken, rice, green beans and apples

For Official Use Only:

Height: _____

Weight: _____

BMI: _____ **BMI Percentile:** _____

Appendix B: Nine-twelve year old survey

ID _____ Survey Date _____

Survey (9- to 12-year-olds)

Name _____

What is your birthday? Month _____ Day _____ Year _____

What grade will you be in the fall? _____

What school do you go to? _____

Are you a boy or a girl?

- Boy
- Girl

How do you describe yourself? Check all that apply

- American Indian or Alaska Native
- Asian
- Arabic
- Black or African American
- Chaldean
- Mexican-American, Latino or Hispanic
- Native Hawaiian or Other Pacific Islander
- White
- Other

What language do you speak the most at home?

- English
- Spanish
- Arabic
- Other _____

INSTRUCTIONS: Please CIRCLE your answer.

1. Did you drink any *regular* (not diet) pop or soda yesterday?

- a. No.
- b. Yes, **1 time**.
- c. Yes, **2 times**.
- d. Yes, **3 or more times**.

2. Did you drink any *diet* (not regular) pop or soda yesterday?

- a. No.
- b. Yes, **1 time**.
- c. Yes, **2 times**.
- d. Yes, **3 or more times**.

3. Did you have a snack yesterday? A snack is food or drink that you eat or drink before, after, or between meals.

- d. No.
- e. Yes, **1 time**.
- f. Yes, **2 times**.
- g. Yes, **3 or more times**.

4. Did you eat French fries or chips yesterday? Chips are potato chips, tortilla chips, cheetos, corn chips, or other snack chips.



- a. No.
- b. Yes, **1 time**.
- c. Yes, **2 times**.
- d. Yes, **3 or more times**.

5. How often do you have fresh fruit to eat in your home?

- a. We **never** have fresh fruit in my home
- b. We **rarely** have fresh fruit in my home
- c. We **sometimes** have fresh fruit in my home
- d. We **often** have fresh fruit in my home
- e. We **always** have fresh fruit in my home

6. How often do you have vegetables to eat in your home?

- a. We **never** have vegetables in my home
- b. We **rarely** have vegetables in my home
- c. We **sometimes** have vegetables in my home
- d. We **often** have vegetables in my home
- e. We **always** have vegetables in my home

7. Did you eat any vegetables yesterday? *Vegetables are salads; boiled, baked and mashed potatoes; and all cooked and uncooked vegetables. Do not count French fries or chips.*



- a. No.
- b. Yes, **1 time**.
- c. Yes, **2 times**.
- d. Yes, **3 or more times**.

8. Did you eat fresh fruit yesterday? Do not count fruit juice.



- a. No.
- b. Yes, **1 time**.
- c. Yes, **2 times**.
- d. Yes, **3 or more times**.

9. Did you drink fruit juice yesterday? *Fruit juice is a drink, which is 100% juice, like orange juice, apple juice, or grape juice. Do not count punch, kool-aid, sports drinks, and other fruit-flavored drinks.*



- a. No.
- b. Yes, **1 time**.
- c. Yes, **2 times**.
- d. Yes, **3 or more times**.

10. Did you drink any drinks like punch, kool-aid, sports drinks, or other fruit-flavored drinks yesterday?

- a. No.
- b. Yes, **1 time**.
- c. Yes, **2 times**.
- d. Yes, **3 or more times**.

11. Did you eat any sweet rolls, doughnuts, cookies, brownies, pie, or cake yesterday?



- a. No.
- b. Yes, **1 time**.
- c. Yes, **2 times**.
- d. Yes, **3 or more times**.

12. Did you eat any candy yesterday?

- a. No.
- b. Yes, **1 time**.
- c. Yes, **2 times**.
- d. Yes, **3 or more times**.

13. Circle all of the foods that are in your kitchen at home right now

- a. Chips
- b. Ice-cream
- c. Cookies
- d. Soda or Pop
- e. Candy
- f. Sugary cereal
- g. Whole-grain bread
- h. Yogurt
- i. Skim milk
- j. Pretzels
- k. Fresh vegetables
- l. Fresh fruit

14. How many days a week do you eat dinner with your family?

- a. 0 days

- b. 1 day
- c. 2 days
- d. 3 days
- e. 4 days
- f. 5 days
- g. 6 days or more

15. How many times a week do you eat out with your family? (fast food restaurants, cafeterias, sit-down restaurants, drive-thru, or pick-up)

- a. Never
- b. 1 time
- c. 2 times
- d. 3 times
- e. 4 times
- f. 5 times
- g. 6 times or more

16. My parents care about eating healthy food.

- a. Not at all
- b. A little bit
- c. Somewhat
- d. Very much

17. My parents want me to eat healthy food.

- a. Not at all
- b. A little bit
- c. Somewhat
- d. Very much

18. Many of my friends care about eating healthy food.

- a. Not at all
- b. A little bit
- c. Somewhat
- d. Very much
- e. I don't know

19. Circle all of the healthy drinks.



Soda



Water



Orange juice



Kool-Aid



Skim milk



Low-fat
chocolate milk

20. Circle all of the healthy snacks.



21. Circle all of the vegetables you like to eat.



22. Circle all of the fruits you like to eat



23. Circle the picture of the healthiest breakfast.



Oatmeal, yogurt, fruit, orange juice



Sugar cereal, skim milk



Doughnut, low-fat chocolate milk

24. Circle the picture of the healthiest lunch.



Pepperoni pizza, fruit roll-up, soda



Turkey sandwich w/lettuce, tomato, and cheese



Hot dog, chips, water

25. Circle the picture of the healthiest dinner.



Hamburger, French fries, pop



Fried Fish and Chips



Chicken, rice, green beans and apples

26. Can drinking too much soda and sugary drinks make you gain weight?

- a. Yes
- b. No
- c. I do not know

27. Can drinking too much soda and sugary drinks make you unhealthy?

- a. Yes
- b. No
- c. I do not know

28. How much do you care about eating healthy foods?

- a. Not at all
- b. A little bit
- c. Somewhat
- d. Very much

29. How much do you care about being healthy?

- a. Not at all
- b. A little bit
- c. Somewhat
- d. Very much

30. Are you worried about your weight?

- a. Yes
- b. No

31. How much do you agree with the following sentences:

a. Kids do not need to worry about what they eat

- i. Strongly disagree
- ii. Disagree
- iii. Agree
- iv. Strongly agree

b. Right now I am not very worried about my health

- i. Strongly disagree
- ii. Disagree
- iii. Agree

iv. Strongly agree

c. **Kids do not need to worry about their health**

- i. Strongly disagree
- ii. Disagree
- iii. Agree
- iv. Strongly agree

32. The types of food I eat affect my health.

- a. Strongly disagree
- b. Disagree
- c. Agree
- d. Strongly Agree

33. The types of food I eat affect how I look.

- a. Strongly disagree
- b. Disagree
- c. Agree
- d. Strongly Agree

34. The types of food I eat affect my weight.

- a. Strongly disagree
- b. Disagree
- c. Agree
- d. Strongly Agree

35. The types of food I eat affect how well I do in sports.

- a. Strongly disagree
- b. Disagree
- c. Agree
- d. Strongly Agree

36. The types of food I eat affect how well I do in school.

- a. Strongly disagree
- b. Disagree
- c. Agree
- d. Strongly Agree

37. How many total servings of fruits and vegetables should you eat each day?

- a. At least 2 servings
- b. At least 5 servings
- c. At least 8 servings
- d. At least 10 servings
- e. I don't know

38. How sure are you that you can eat fresh fruit instead of a candy bar?

- a. Not sure
- b. A little sure
- c. Very sure

39. How sure are you that you can drink water instead of soda?

- a. Not sure
- b. A little sure
- c. Very sure

40. How sure are you that you can eat healthy foods when you are at the mall?

- a. Not sure
- b. A little sure
- c. Very sure

41. How sure are you that you can eat healthy foods when you are hungry after school?

- a. Not sure
- b. A little sure
- c. Very sure

42. How sure are you that you can eat healthy foods when you are with your friends?

- a. Not sure
- b. A little sure
- c. Very sure

43. How sure are you that you can eat healthy foods when you are stressed out?

- a. Not sure
- b. A little sure
- c. Very sure

44. How sure are you that you can eat healthy foods when you are feeling sad?

- a. Not sure
- b. A little sure
- c. Very sure

45. How sure are you that you can eat healthy foods when you are bored?

- a. Not sure
- b. A little sure
- c. Very sure

46. How sure are you that you can eat healthy foods when you are at a fast food restaurant?

- a. Not sure
- b. A little sure
- c. Very sure

47. How sure are you that you can eat healthy foods when you are alone?

- a. Not sure
- b. A little sure
- c. Very sure

48. How sure are you that you can eat healthy foods when you are eating dinner with your family?

- a. Not sure
- b. A little sure
- c. Very sure

49. I like the taste of most fruits

- a. Strongly disagree
- b. Disagree
- c. Agree
- d. Strongly Agree

50. Most vegetables taste bad

- a. Strongly disagree
- b. Disagree
- c. Agree
- d. Strongly Agree

51. Most healthy foods taste bad

- a. Strongly disagree
- b. Disagree
- c. Agree
- d. Strongly Agree

52. Most junk food tastes better than healthy foods

- a. Strongly disagree
- b. Disagree
- c. Agree
- d. Strongly Agree

53. How many glasses of water do you drink each day?

- a. 0-2 glasses
- b. 3-5 glasses
- c. 6-8 glasses
- d. More than 8 glasses

54. How many TV shows or movies do you watch during the week?

- a. I do not watch TV or movies
- b. 1 show/movie
- c. 2 shows/movies
- d. 3 or more shows/movies

55. How many TV shows or movies do you watch during the weekend?

- a. I do not watch TV or movies
- b. 1 show/movie
- c. 2 shows/movies
- d. 3 or more shows/movies

56. How many hours during the week do you play video games (Nintendo, Sega, games at the arcade) or use the computer to surf the Internet?

- a. I do not play video games or use the computer to surf the internet
- b. Less than 1 hour a day
- c. 1-2 hours a day
- d. 3-4 hours a day
- e. More than 4 hours a day

57. How many hours during the weekend do you play video games (Nintendo, Sega, games at the arcade) or use the computer to surf the Internet?

- a. I do not play video games or use the computer to surf the internet
- b. Less than 1 hour a day
- c. 1-2 hours a day
- d. 3-4 hours a day
- e. More than 4 hours a day

58. How much time should kids spend watching TV, playing video games, and on the computer each day to be healthy?

- a. 1 hour or less
- b. 2 hours or less
- c. 3 hours or less
- d. It doesn't matter

59. Is there a TV or computer in your room?

- a. Yes
- b. No

60. **How sure are you that you can turn off the TV or computer after 2 hours?**
- Not sure
 - A little sure
 - Very sure
61. **Do adults stop you from watching a lot of TV, playing on the computer a lot, or playing a lot of video games?**
- All the time
 - Sometimes
 - Never
62. **Does your family limit TV viewing?**
- Yes
 - No, I can watch as much TV as I want
63. **Yesterday, did you do a sport for at least 20 minutes that made you out of breath? (basketball, jogging, skating, fast dancing, swimming laps, tennis, fast bicycling, aerobics).**
- Yes
 - No
64. **How many days last week did you do an activity like that described above?**
- 0 days
 - 1 day
 - 2 days
 - 3 days
 - 4 days
 - 5 days
 - 6 days
 - 7 days
65. **How many days last week did you do an activity for at least 30 minutes that did not make you out of breathe? (fast walking, slow bicycling, skating, pushing a lawn mower, or mopping floors).**
- 0 days
 - 1 day
 - 2 days
 - 3 days
 - 4 days
 - 5 days
 - 6 days
 - 7 days

66. How many sports teams did you play on last year? (baseball teams, soccer teams, swim teams, basketball teams or football teams)

- a. 0 teams
- b. 1 team
- c. 2 teams
- d. 3 or more teams

67. My friends are active and play a lot of sports.

- a. Strongly disagree
- b. Somewhat disagree
- c. Somewhat agree
- d. Strongly agree

68. My friends think it is important to be active.

- a. Strongly disagree
- b. Somewhat disagree
- c. Somewhat agree
- d. Strongly agree

69. My friends and I like to do active things together.

- a. Strongly disagree
- b. Somewhat disagree
- c. Somewhat agree
- d. Strongly agree

70. Why do you not get much exercise? Circle all that apply

- a. It is not safe to play outside
- b. I do not like to exercise
- c. I am not allowed to play outside when there is no adult home
- d. I do not have time to exercise

71. How much exercise should you get each day to be healthy?

- a. At least 15 minutes
- b. At least 30 minutes
- c. At least 60 minutes
- d. At least 90 minutes

72. How sure are you that you can exercise 3-5 times a week?

- a. Not sure
- b. A little sure
- c. Very sure

73. How fun do you think it is to be active?

- a. Not fun at all
- b. A little fun
- c. Fun
- d. Very fun

74. Can eating healthy foods and being active stop you from becoming overweight?

- a. Yes
- b. It depends on your genetic background
- c. I do not know
- d. No

Physical Activity- Circle whether you agree, disagree or are not sure about the following statements:

75. If I was active most days, it would help me be healthy.

- a. Agree
- b. Not sure
- c. Disagree

76. If I was active most days, it would help me control my weight.

- a. Agree
- b. Not sure
- c. Disagree

77. If I was active most days, it would be fun.

- a. Agree
- b. Not sure
- c. Disagree

78. If I was active most days, it would get or keep me in shape.

- a. Agree
- b. Not sure
- c. Disagree

79. If I was active most days, it would be boring.

- a. Agree
- b. Not sure
- c. Disagree

80. Who makes your breakfast?

- a. I do
- b. My parent does
- c. My sister/brother does
- d. My school gives me breakfast
- e. I don't eat breakfast

81. Who makes your lunch?

- a. I do
- b. My parent does
- c. My sister/brother does
- d. I buy lunch
- e. I do not eat lunch

82. Who makes your dinner?

- a. I do
- b. My parent does
- c. My sister/brother does
- d. I buy dinner from a fast food place, restaurant or other store
- e. I do not eat dinner

83. Is there an adult home when you get home from school?

- a. Yes
- b. No
- c. Sometimes

84. There are trees along the streets in my neighborhood.

- a. Strongly disagree
- b. Somewhat disagree
- c. Somewhat agree
- d. Strongly agree

85. There are lots of interesting things to look at while walking in my neighborhood.

- a. Strongly disagree
- b. Somewhat disagree
- c. Somewhat agree
- d. Strongly agree

86. My neighborhood is free from trash.

- a. Strongly disagree
- b. Somewhat disagree
- c. Somewhat agree

d. Strongly agree

87. I see and talk to people when I am walking in my neighborhood.

- a. Strongly disagree
- b. Somewhat disagree
- c. Somewhat agree
- d. Strongly agree

88. The crime rate near my house makes it dangerous to go on walks during the day.

- a. Strongly disagree
- b. Somewhat disagree
- c. Somewhat agree
- d. Strongly agree

89. The crime rate near my house makes it dangerous to go on walks at night

- a. Strongly disagree
- b. Somewhat disagree
- c. Somewhat agree
- d. Strongly agree

90. What didn't you like about the HEAL workshops?

91. What was your favorite part of the HEAL workshops?

92. How much did you learn from the HEAL workshops?

- a. I learned a lot
- b. I learned a little
- c. I did not learn anything

93. Do you eat less junk food now than you did before the HEAL workshops?

- a. Yes
- b. No

94. Do you exercise more now than you did before the HEAL workshops?

- a. Yes

b. No

95. Do you eat more fruits and vegetables now than you did before the HEAL workshops?

- a. Yes
- b. No

96. What would you like to do at the next HEAL workshop? Circle as many activities as you like.

- a. Worksheet and handout
- b. Hands-on activity
- c. Presentation
- d. Field-trip

For Official Use Only:

Height: _____

Weight: _____

BMI: _____ **BMI Percentile:** _____

Appendix C: Adult survey

ID _____ Survey Date _____

Adult Survey

INSTRUCTIONS: Please CIRCLE or write your answer.

1. Name _____

2. When were you born? (Month/day/year) _____

4. What is your gender?

- a. Male
- b. Female

5. How do you describe yourself? (Circle all that apply)

- a. American Indian or Alaska Native
- b. Asian
- c. Arabic
- d. Black or African American
- e. Chaldean
- f. Mexican-American, Latino or Hispanic
- g. Native Hawaiian or Other Pacific Islander
- h. White
- i. Other

6. What language do you speak the most at home?

- a. English
- b. Spanish
- c. Arabic
- d. Other _____

7. How are you related to the child you attended the HEAL workshops with?

- a. Mother
- b. Father
- c. Grandmother
- d. Grandfather
- e. Aunt
- f. Uncle
- g. Other: _____
- h.

8. We'd like to know about your educational background. Which of these apply to you? (Circle all that apply)

- a. Attended high school but did not graduate
- b. Graduated from high school
- c. Received a GED
- d. Attended college but did not graduate
- e. Received an Associate's Degree
- f. Received a Bachelor's Degree
- g. Received a Graduate Degree
- h. Attended trade school

9. What is your current work situation?

- a. Working full-time
- b. Working part-time
- c. Stay at home caregiver
- d. Currently unemployed, but actively seeking work
- e. Not working for money (unable to work, retired, student)

10. What is your significant other's work situation?

- a. Working full-time
- b. Working part-time
- c. Stay at home caregiver
- d. Currently unemployed, but actively seeking work
- e. Not working for money (unable to work, retired, student)

11. Do you have medical insurance?

- a. Yes
- b. No

12. How often do you drink pop or soda?

- a. Never
- b. Once a month
- c. Once a week
- d. Once a day
- e. More than once a day

13. What type of pop or soda do you usually drink?

- a. Diet
- b. Regular

14. How often do you make healthy balanced meals for your family?

- a. I do not make healthy balanced meals
- b. Once a week
- c. Twice a week
- d. Three or more times a week

15. How often do you have fresh fruit to eat in your home?

- a. We **never** have fresh fruit in our home.
- b. We **rarely** have fresh fruit in our home.
- c. We **sometimes** have fresh fruit in our home.
- d. We **often** have fresh fruit in our home.
- e. We **always** have fresh fruit in our home.

16. Why do you not have fresh fruit in your home? Circle all that apply

- a. I don't buy many fresh fruits because they cost too much
- b. The store I buy my family's food at does not have fresh fruit
- c. My family does not like fresh fruit
- d. The variety of fresh fruit is limited at the store where I buy food
- e. The condition of fresh fruit is poor at the store where I buy food
- f. I do have fresh fruit in my home

17. How often do you have fresh vegetables to eat in your home?

- a. We **never** have fresh vegetables in our home.
- b. We **rarely** have fresh vegetables in our home.
- c. We **sometimes** have fresh vegetables in our home.
- d. We **often** have fresh vegetables in our home.
- e. We **always** have fresh vegetables in our home.

18. Why do you not have fresh vegetables in your home? Circle all that apply

- a. I don't buy many fresh vegetables because they cost too much
- b. The store I buy my family's food at does not have fresh vegetables
- c. My family does not like fresh vegetables
- d. The variety of fresh vegetables is limited at the store where I buy food
- e. The condition of fresh vegetables is poor at the store where I buy food
- f. I do have fresh vegetables in my home

19. How often are a mixture of healthy foods available to your child and served at meals?

- a. Never
- b. Rarely
- c. Sometimes
- d. Often
- e. Always

20. How many days a week does your family eat dinner together at home (not in front of the TV)?

- a. 0 days per week
- b. 1 day per week
- c. 2 days per week
- d. 3 days per week
- e. 4 days per week
- f. 5 days per week
- g. 6 days or more per week

21. How many times a week do you eat out with your family? (At a fast food restaurant, cafeteria, sit down restaurant, drive thru, or pick up)

- a. Never
- b. 1 time per week
- c. 2 times per week
- d. 3 times per week
- e. 4 times per week
- f. 5 times per week
- g. 6 times or more per week

22. How often do you eat sweets? (doughnuts, cookies, cakes, candy, pies, other sweetened food)

- a. Never

- b. Sometimes
- c. A few times per week
- d. Once or twice a day
- e. Three or more times a day

23. Circle all of the foods currently in your kitchen at home

- a. Chips
- b. Ice-cream
- c. Cookies
- d. Soda or Pop
- e. Candy
- f. Sugary cereal
- g. Whole-grain bread
- h. Yogurt
- i. Skim milk
- j. Pretzels
- k. Fresh vegetables
- l. Fresh fruit

24. How often do you limit the amount of fried food you and your family eats?

- a. All of the time
- b. Most of the time
- c. Sometimes
- d. Never

25. Do you buy whole grain bread?

- a. Yes, all of the time
- b. Yes, most of the time
- c. Yes, sometimes
- d. No

26. How many glasses of water do you drink each day?

- a. 0-2 glasses
- b. 3-5 glasses
- c. 6-8 glasses
- d. More than 8 glasses

27. How often do you exercise with your child?

- a. I do not exercise with my child.
- b. Once a week
- c. Twice a week
- d. Three or more times a week

28. Does your child have a TV or computer in their room?

- a. Yes
- b. No

29. Do you limit your child's screen time? Screen time is watching TV, playing video games, and using the computer.

- a. Yes, I limit my child's screen time.
- b. I sometimes limit my child's screen time.
- c. No, I never limit my child's screen time.

30. If you limit your child's screen time, what is the usual limit (in hours) each day?

31. How many times a week would you like to exercise with your child?

- a. I cannot exercise with my child.
- b. Once a week
- c. Twice a week
- d. Three or more times a week

32. Would you be willing to move the TV, computer, or cell phone out of your child's room?

- a. My child does not have a TV, computer, or cell phone in their room.
- b. Yes
- c. No
- d. Maybe

33. How confident are you that you can limit your child's TV and computer time to two hours or less per day?

- a. Not confident at all.
- b. A little confident
- c. Confident
- d. Very confident

34. How many servings of fruits and vegetables should a child eat each day?

- a. At least 2 servings
- b. At least 5 servings

- c. At least 8 servings
- d. At least 10 servings
- e. I don't know

35. How many times last year did you talk to your child about healthy eating habits?

- a. Never or rarely
- b. A few times a year
- c. A few times a month
- d. A few times a week
- e. Almost every day

36. Circle all you would include in a balanced meal.

- a. Meat
- b. Grain
- c. Vegetable
- d. Fruit
- e. Dairy
- f. Fat

37. How adequate is/are your...

- a. **Cooking skills**
 - i. Very inadequate
 - ii. Inadequate
 - iii. Adequate
 - iv. Very adequate
- b. **Money to buy food**
 - i. Very inadequate
 - ii. Inadequate
 - iii. Adequate
 - iv. Very adequate
- c. **Appliances to make food (e.g., stove, oven, fridge)?**
 - i. Very inadequate
 - ii. Inadequate
 - iii. Adequate
 - iv. Very adequate
- d. **The selection of foods in stores near you?**
 - i. Very inadequate
 - ii. Inadequate
 - iii. Adequate
 - iv. Very adequate
- e. **Time available to make food?**
 - i. Very inadequate
 - ii. Inadequate

- iii. Adequate
- iv. Very adequate

38. Can drinking too much soda and other sweetened drinks make you unhealthy?

- a. Agree
- b. Disagree
- c. Not sure

39. Can drinking too much soda and other sweetened drinks make you gain weight?

- a. Agree
- b. Disagree
- c. Not sure

40. How much do you care about eating healthy foods?

- a. Not at all
- b. A little bit
- c. Somewhat
- d. Very much

41. How much do you care about being healthy?

- a. Not at all
- b. A little bit
- c. Somewhat
- d. Very much

42. How much do you agree with the following statements:

- a. **Children do not need to worry about their eating habits**
 - i. Strongly disagree
 - ii. Disagree
 - iii. Agree
 - iv. Strongly agree
- b. **At this point in my child's life, I am not very worried about their health**
 - i. Strongly disagree
 - ii. Disagree
 - iii. Agree
 - iv. Strongly agree
- c. **Children do not need to worry about their health**
 - i. Strongly disagree
 - ii. Disagree
 - iii. Agree

iv. Strongly agree

43. How much exercise should a child get each day to be healthy?

- a. At least 15 minutes each day
- b. At least 30 minutes each day
- c. At least 60 minutes each day
- d. At least 90 minutes each day

44. How much time should a child spend watching TV, playing video games, and on the computer each day to be healthy?

- a. One hour or less
- b. Two hours or less
- c. Three hours or less
- d. It doesn't matter.

45. How much sleep does your child usually get a night during the week?

- a. 6 hours or less a night
- b. 7 hours a night
- c. 8 hours a night
- d. 9 hours a night
- e. 10 or more hours a night

46. How much sleep does your child usually get a night during the weekend?

- a. 6 hours or less a night
- b. 7 hours a night
- c. 8 hours a night
- d. 9 hours a night
- e. 10 or more hours a night

47. Can eating healthy foods and being active stop you from becoming overweight?

- a. Yes
- b. It depends on genetic background
- c. I'm not sure.
- d. No

48. Why does your child not exercise much? Circle all that apply.

- a. It is not safe for my child to play outside
- b. My child does not like to exercise
- c. I am not at home during the day and cannot supervise my child
- d. My child does not have time to exercise

49. Do you have things your child can use to be active in your house, yard, or apartment?

- a. **Exercise equipment (bicycle, treadmill, etc...)**
 - i. Yes
 - ii. No
- b. **Bicycle, skateboard, scooter, rollerskates/blades**
 - i. Yes
 - ii. No
- c. **Basketball hoop**
 - i. Yes
 - ii. No
- d. **Active video games (Wii Sport, Wii Fit and Dance Dance Revolution)**
 - i. Yes
 - ii. No

50. How many times last year did you talk to your child about being active?

- a. Never or rarely
- b. A few times a year
- c. A few times a month
- d. A few times a week
- e. Almost every day

51. How long does it take to walk from your house to the following places?

- a. **Fast food restaurant**
 - i. 1-5 minutes
 - ii. 6-10 minutes
 - iii. 11-20 minutes
 - iv. 21-30 minutes
 - v. 31+ minutes
 - vi. I don't know
- b. **Convenience / small grocery store**
 - i. 1-5 minutes
 - ii. 6-10 minutes
 - iii. 11-20 minutes
 - iv. 21-30 minutes
 - v. 31+ minutes
 - vi. I don't know
- c. **Supermarket/ mid-size grocery store**
 - i. 1-5 minutes
 - ii. 6-10 minutes
 - iii. 11-20 minutes
 - iv. 21-30 minutes
 - v. 31+ minutes

- vi. I don't know
- d. **Gym or fitness facility**
 - i. 1-5 minutes
 - ii. 6-10 minutes
 - iii. 11-20 minutes
 - iv. 21-30 minutes
 - v. 31+ minutes
 - vi. I don't know
- e. **Park**
 - i. 1-5 minutes
 - ii. 6-10 minutes
 - iii. 11-20 minutes
 - iv. 21-30 minutes
 - v. 31+ minutes
 - vi. I don't know
- f. **Lake (or other body of water)**
 - i. 1-5 minutes
 - ii. 6-10 minutes
 - iii. 11-20 minutes
 - iv. 21-30 minutes
 - v. 31+ minutes
 - vi. I don't know

- g. **Walking or bike path**
 - i. 1-5 minutes
 - ii. 6-10 minutes
 - iii. 11-20 minutes
 - iv. 21-30 minutes
 - v. 31+ minutes
 - vi. I don't know

52. There are trees along the streets in my neighborhood.

- a. Strongly disagree
- b. Somewhat disagree
- c. Somewhat agree
- d. Strongly agree

53. There are lots of interesting things to look at while walking in my neighborhood.

- a. Strongly disagree

- b. Somewhat disagree
- c. Somewhat agree
- d. Strongly agree

54. My neighborhood is free from trash.

- a. Strongly disagree
- b. Somewhat disagree
- c. Somewhat agree
- d. Strongly agree

55. I see and talk to people when I am walking in my neighborhood.

- a. Strongly disagree
- b. Somewhat disagree
- c. Somewhat agree
- d. Strongly agree

56. The crime rate in my neighborhood makes it unsafe to go on walks during the day.

- a. Strongly disagree
- b. Somewhat disagree
- c. Somewhat agree
- d. Strongly agree

57. The crime rate in my neighborhood makes it unsafe to go on walks at night.

- a. Strongly disagree
- b. Somewhat disagree
- c. Somewhat agree
- d. Strongly agree

58. What did you like about the HEAL Workshops?

59. What would you like to change about the HEAL Workshops?

60. What subject(s) taught during the HEAL workshops were the most useful? Circle all that apply.

- a. What is healthy eating and what is a balanced diet
- b. How big is a serving and how much should I eat
- c. How to shop for healthy foods and where I can find healthy foods in the grocery store
- d. How to order healthy food at restaurants
- e. What beverages contain sugar
- f. How to plan my own healthy meal
- g. How to choose healthy snacks
- h. Exercises to increase my physical activity
- i. How to use a pedometer
- j. How much I should watch TV, play video games or play on the computer to stay healthy

61. What subject(s) taught during the HEAL workshops would you like to learn more about? Circle all that apply.

- a. What is healthy eating and what is a balanced diet
- b. How big is a serving and how much should I eat
- c. How to shop for healthy foods and where I can find healthy foods in the grocery store
- d. How to order healthy food at restaurants
- e. What beverages contain sugar
- f. How to plan my own healthy meal
- g. How to choose healthy snacks
- h. Exercises to increase my physical activity
- i. How to use a pedometer
- j. How much I should watch TV, play video games or play on the computer to stay healthy

62. What subject(s) taught during the HEAL workshops did you already know before the workshops? Circle all that apply.

- a. What is healthy eating and what is a balanced diet
- b. How big is a serving and how much should I eat
- c. How to shop for healthy foods and where I can find healthy foods in the grocery store
- d. How to order healthy food at restaurants

- e. What beverages contain sugar
- f. How to plan my own healthy meal
- g. How to choose healthy snacks
- h. Exercises to increase my physical activity
- i. How to use a pedometer
- j. How much I should watch TV, play video games or play on the computer to stay healthy

63. How much did you learn at the HEAL workshops?

- a. A lot
- b. Some
- c. A little
- d. Nothing

64. Did your eating and exercise habits change after going to the HEAL workshops?

- a. Yes
- b. No

65. Did your family change their eating and exercise habits after going to the HEAL workshops?

- a. Yes
- b. No

66. Do you and your family eat more fruits and vegetables after going to the HEAL workshops?

- a. Yes
- b. No

67. What would you like to do more of at HEAL workshops? Circle all that apply

- a. Worksheets and handouts
- b. Hands-on activities such as cooking, grocery shopping, etc...
- c. Presentations
- d. Field Trips

For Official Use Only:

Height: _____

Weight: _____

BMI: _____

Appendix D. Example Screen time chart



We Can! Screen Time Chart

Fill out the **We Can!** Screen Time Chart to see how much time your family spends in front of a screen. Keep one chart for each person.



Be sure to include time spent with cell phones and other hand-held video or gaming devices.

Post the chart where it's easy for everyone to see and use. Good places are near the family TV, by the computer, or on the refrigerator.

If screen time for each person is less than 2 hours a day, you're doing great! If it's 2 hours or more, then it's time to move more. Find ideas to get your family moving in the **We Can!** Family Guide. Take a look at:

- **We Can!** Parent Tips: Help Your Kids Reduce Screen Time and Move More
- **We Can!** Parent Tips: Be Active and Have Fun

You can print more screen time charts from the **We Can!** Web site at <http://www.nhlbi.nih.gov/health/public/heart/obesity/wecan/downloads/screen-time-log.pdf>.

How to fill in the We Can! Screen Time Chart

To fill in your family's screen time chart— For each day, write the hours spent for each type of screen.

- Then add the hours for each day. Write the total in the "Daily Total" column.

See the sample chart below.

We Can! Screen Time Chart — Sample Chart

Name: Billy

Dates: 6/4 – 6/10

	TV	Video Games	Hand-held Devices	Computer	Daily Total
Monday	2 hours	1 hour		1 hour	4 hours
Tuesday	3 hours	1 ½ hours		1 hour	5 ½ hours
Wednesday	1 hours	1 hour	2 ½ hours	½ hour	5 ½ hours
Thursday	4 hours			1 hour	5 hours
Friday	4 hours	1 hour			5 hours
Saturday	3 hours	2 hours	2 hours	1 hour	8 hours
Sunday	2 hours	1 hour	2 hours	2 hours	7 hours



We Can! Screen Time Chart

Name:

Dates:

	TV	Video Games	Hand-held Devices	Computer	Daily Total
Monday					
Tuesday					
Wednesday					
Thursday					
Friday					
Saturday					
Sunday					

production note: second side Screen Time Chart

We Can! is a program from the National Institutes of Health that offers resources for parents, caregivers and communities to help children 8-13 years old stay at a healthy weight through eating right, increasing physical activity, and reducing screen time.

To learn more, go to <http://wecan.nhlbi.nih.gov> or call 1-866-35-WECAN.

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