# The Children's Healthy Living (CHL) Program for Remote Underserved Minority Populations in the Pacific Region

**DRAFT** (10-12-2017)

### **CHL Data Dictionary**

# Vol. 1 Individual-Level Data for the CHL Community Randomized Trial and FAS Prevalence Study

**Developed by the CHL Data Work Group** 

for use in the CHL Pacific Region

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# CHL Data Dictionary Draft (06-29-17) Vol. 1 Individual-Level Data

for the CHL Community Randomized Trial and FAS Prevalence Study

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#### The Children's Healthy Living (CHL) Program

The Children's Healthy Living Program for Remote Underserved Minority Populations in the Pacific Region (CHL) is a partnership among the remote Pacific jurisdictions of Alaska; American Samoa; Commonwealth of the Northern Mariana Islands (CNMI); the Freely Associated States of Micronesia (FAS) which includes the Republic of the Marshall Islands (RMI), Republic of Palau, Federated States of Micronesia (FSM); Guam; and Hawaii to study childhood obesity among Pacific children, ages 2 to 8 years. The program is sponsored by the United States Department of Agriculture (USDA), Agriculture and Food Research Initiative.

Figure 1 illustrates CHL's model to influence multiple aspects of the environment to promote healthy food intake and physical activity in young children ages two to eight years old. CHL aims to prevent early childhood obesity in the United States Affiliated Pacific.

#### **CHL Program Objectives**

To address the child obesity epidemic in the Pacific, the CHL Program has the following objectives:

- 1) Conduct program/data inventories and situational analysis;
- 2) Train 22 professionals and para-professionals in obesity prevention;
- 3) Develop a Pacific food, nutrition, and physical activity data management and evaluation system, using assessment data, and aggregate, display and communicate available data pertinent to young child obesity;
- 4) Develop and conduct a community-based environmental intervention to prevent, maintain, or reduce young child overweight and obesity;
- 5) Evaluate the environmental intervention; and
- 6) Incur at least one obesity prevention policy change per jurisdiction.

Figure 1. CHL Conceptual Model

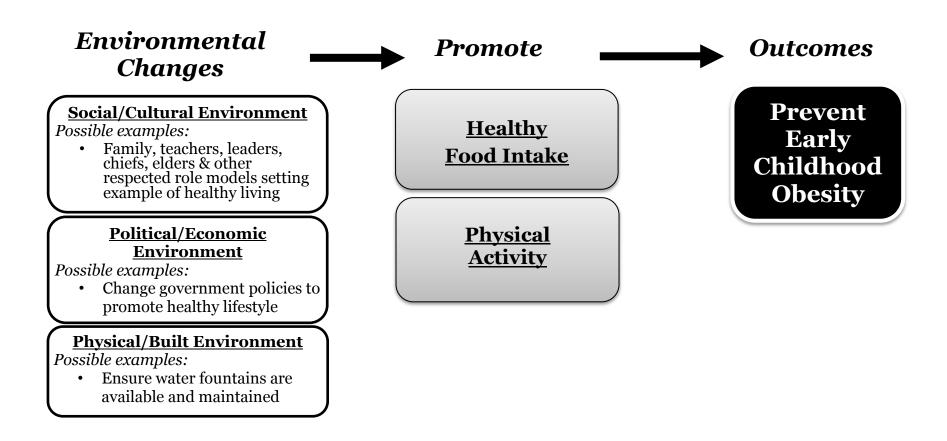


Figure 1. The Children's Healthy Living Program Model to Influence Multiple Aspects of the Environment to Promote Healthy Food Intake and Physical Activity in Young Children (2 -8 years) as a Method to Prevent Early Childhood Obesity in the U.S. Affiliated Pacific

#### **CHL Study Design**

The Children's Healthy Living Program Community Randomized Trial was designed to test the intervention by comparing intervention with non-intervention communities on the prevalence of obesity in the U.S.-affiliated Pacific region collected at baseline and follow-up.

### Objectives of the CHL Community Randomized Trial and the FAS Prevalence Study

#### **Community Randomized Trial**

We are assessing behaviors and anthropometry of children in communities over time as indicators of whether the intervention led to change. Data has been collected at two time points – baseline and post-intervention (about 24 months after baseline measurement) at the end of the CHL community randomized trial.

#### **Objectives for the Community Randomized Trial**

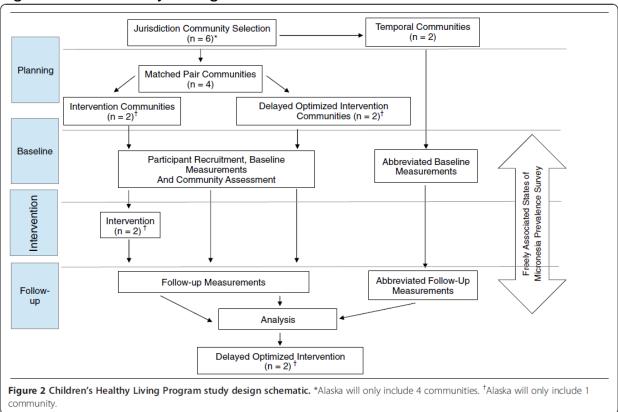
- Measure 2 to 8-year-old children at baseline and post-intervention in selected communities to track behaviors and anthropometry that indicate healthy eating, physical activity, and BMI.
- Decrease the prevalence of young child overweight and obesity by 5%, or a reduction in 0.08 of BMI z-score;
- Decrease the functional outcomes of young child overweight and obesity
  - o decrease acanthosis nigricans by 5%,
  - and increase sleep by 15 min/day;
- increase moderate to vigorous physical activity by 10 min/day
- and decrease sedentary behavior (screen time) by 10 min/day;
- increase healthy eating (fruit and vegetable intake by 1 serving/day),
- increase water intake by ½ cup/day;
- decrease sweetened beverage intake by ½ cup/day,
- Develop a Pacific food, nutrition and physical activity data management and evaluation system

#### **Objectives for the FAS Prevalence Study**

- Provide a jurisdiction-specific prevalence of overweight/obesity and related exposures.
- Measure 2 to 8-year-old children at one time point in selected communities to track behaviors and anthropometry that indicate healthy eating, physical activity, and BMI.

#### **CHL Study Design Overview**

Figure 2. CHL Study Design Schematic



#### **Community / Site Selection**

Communities were identified in Alaska, American Samoa, CNMI, Guam and Hawaii using the 2000 U.S. Census tract data, since 2010 data was not available at the census tract level (U.S. Census Bureau) in 2011 when sites were selected. In the FAS, 2010 country census data were used to inform selection of sites for prevalence survey data collection (Economic Policy, Planning, and Statistics Office of the Republic of the Marshall Islands, 2012; FSM Division of Statistics, 2010; Republic of Palau Office of Planning and Statistics, 2005). The CHL team first selected communities based on initial eligibility criteria and then considered additional selection criteria. Based on the following criteria, communities in each of the jurisdictions were selected to participate in the intervention trial.

#### Community eligibility criteria:

- population size of >1000,
  - Except for FAS
- >25% of the population of indigenous/native descent
  - Except 15% in Alaska due to no census tract with a population of more than 1000 having more than 25% indigenous/native,

and

- >10% of the population under age 10 years
  - (based on combining census tract data groups of < 5 years of age and 5 9 years of age)</li>
  - o to have sufficient population size for CHL target of 2 to 8 year olds.

#### Additional selection criteria:

- adequate settings for sampling and measuring children (e.g., schools);
- reasonable accessibility for the CHL team
  - (e.g., isolated communities that would require substantial travel logistics were excluded);
- community cohesiveness (Swinburn et al., 2007)

#### Additional selection criteria for intervention and delayed optimized (comparison) communities:

- evidence that children live and go to school in the same community
  - o (i.e., not a commuter community),
- ensuring that the measured children have an opportunity to be exposed to the intervention;
- a minimal risk of contamination between matched-pair communities:
- sufficient settings for intervention (e.g., community centers, parks, churches, and stores)

#### Additional selection criteria for FAS:

scheduled air or boat service, and geographical representation.

A list of all eligible communities was created for each of the jurisdictions based on the above criteria. The communities were matched to form pairs based on the following factors:

- percentage in poverty and population density (both from the U.S. census),
- distance from urban centers,
- and percentage overweight/obesity, when available.

In American Samoa, CNMI, Guam and Hawaii, four communities were selected (two matched-pairs), while two communities were selected (1 matched-pair) in Alaska due to large distances between sites (see Figure 2).

In each pair, one community was randomly assigned to intervention and the other to a delayed optimized intervention (community will receive intervention at the end of the main trial). Randomization to intervention, in general, produces study groups that are comparable with

respect to confounding variables (Friedman, Furberg, & DeMets, 1998). A statistician who was not part of the CHL team performed the randomization. The **delayed optimized intervention communities** will be called **comparison communities** in this CHL Data Dictionary.

Two additional non-matched communities (third and fourth for Alaska and fifth and sixth for other jurisdictions) were selected from the eligible list of communities to serve as temporal indicators of anthropometry status (see Figure 2). Generally, the communities selected for temporal assessment had been considered to participate as a matched pair; however, they often did not match another eligible community well or they had less community cohesiveness, which was not as important for a community providing prevalence information only. The temporal communities will not receive the intervention program as part of the CHL trial and early dissemination phase.

In the FAS region, three to five communities were selected for collection of baseline (prevalence) survey data in each of Chuuk, Kosrae, Pohnpei, Yap, Palau and the RMI (n=200 children per location), according to the same criteria, plus a criteria of geographic representation. A total of 27 communities will provide baseline (prevalence) survey data from the FAS.

Thus, in total, four communities in Alaska and six communities in each of the remaining four CHL intervention jurisdictions were selected for a total of twenty-eight communities across the CHL region for participation in the CHL community intervention trial: 9 matched pairs (18 sites total) and 10 temporal sites.

A cross-sectional sample of children in each of the CHL intervention communities is being assessed for outcomes at baseline and post-intervention around 24 months from baseline. Additionally, the outcomes are being assessed once in the FAS region to provide prevalence information.

The intervention does not explicitly target the assessed children; they serve as representatives of their communities. Children who participate at both time points provide repeated measures and serve as an embedded longitudinal sample.

#### Power and sample size calculations

The process for sample size and power estimation was described in Wilken [sic] et al., 2013). Sample size estimates were based on the need for a sufficient number of communities and children in each of the five jurisdictions to ensure adequate statistical power to detect meaningful differences between intervention arms in overweight and related outcomes (listed previously) overall and for select outcomes within jurisdictions. The effect size, Cohen's *d*, (Cohen, 1988) was calculated based on an analysis of 2,000 simulated data sets with children clustered within community clustered within jurisdiction. The intervention effect was tested based on an *F* test of the interaction term of intervention group and time from a mixed model

of the outcomes, accounting for the clustering in a group-randomized trial (GRT) by adjusting the test degrees of freedom to the number of communities (Hsieh, 1988). The calculations assume a minimum n or sample size of 150 children with anthropometry and a minimum n of 100 children with accelerometry and food and activity logs in six communities in four jurisdictions and in two communities in Alaska; this assumption is conservative as the goal is a sample size of 180 children per community.

An expected correlation for communities within jurisdictions was low with an estimate of the interclass correlation coefficient (ICC) that varied between 0.02 to 0.04. We assumed a critical level of 0.05 (two-sided), a power of 80%, and a constant sample size at baseline and post-intervention (around 24 months). The respective effect sizes for an ICC of 0.02 and 0.04 are modest at 0.26 and 0.35 for outcomes with n=150. Using means and variances for the outcomes from previous research (de Silva-Sanigorski , 2010; Murray et al., 2004; Westerlund, Ray, & Roos, 2009), the minimum detectable differences for the two ICC values were 0.09 and 0.12 for BMI z-score, 21 and 28 minutes of television viewing, and 11 and 15 minutes of sleep. The respective effect sizes for an ICC of 0.02 and 0.04 are also modest at 0.31 and 0.42 for outcomes with n=100. Using means and variances for the outcomes from previous research (de Silva-Sanigorski , 2010; Murray et al., 2004; Ludwig, Peterson, & Gortmaker, 2001; Vorwerg, Petroff, Kiess, Bluher, 2013), the minimum detectable differences for the two ICC values were 0.50 and 0.67 servings of vegetables, 0.45 and 0.61 servings of fruits, 0.45 and 0.60 servings of water, 0.34 and 0.46 servings of SSB, and 33 and 45 minutes of PA with metabolic equivalent values (METs) > 3, based on accelerometry.

#### **Measures Overview**

The CHL study design was to collect data on body size, functional outcomes of obesity, food intake, physical activity, lifestyle behavior which includes screen time, and demographics. These are measured through anthropometry, food and activity logs, questionnaires, and visual inspection (of the neck).

The following study outcomes were measured for children across jurisdictions using a common methodology:

#### Body size:

Body size measures included weight, height and waist circumference and the resultant calculations of BMI, percent overweight and obese. Trained staff in all jurisdictions used standardized instruments, such as common scales for weight, stadiometers for height, and tape measures for waist circumference. Body size outcomes include overweight, defined as the 85th - 94th percentile for BMI (weight, kg/height, m2) and obesity, defined as greater than or equal to the 95th percentile for BMI (Centers for Disease Control and Prevention, 2009), BMI Z-score and waist circumference. During training sessions on anthropometry, inter- and intra-person reliability of each measurement, as well as agreement to a expert measurer, were determined. We followed guidelines by Zerfas to assess agreement (1986).

#### Functional outcomes of obesity

Functional outcomes of obesity (Ropka, 2002) included sleep quality and duration, both as minutes per night from the accelerometer and self-reported average duration, and presence of Acanthosis nigricans as an indicator of insulin resistance/pre-diabetes.

#### Food intake:

We calculated nutrients and food groups of the children's diet from two days of food logs, which were completed by the parent/ caregiver, with assistance from other child caregivers. We are using these data to estimate prevalence of dietary patterns in the region. These data have been entered into PacTrac3. We used the food composition database which was developed and is maintained by the Nutrition Support Shared Resource at the UH Cancer Center. This database includes information on local foods in the Pacific region.

#### Physical activity:

We measured physical activity with several strategies with which we have experience – accelerometers and physical activity logs.

We developed 24-hour activity logs to measure physical activity of children in the PacDASH study, which were successfully pilot-tested for children aged 3-5 years. Parents were asked to record all activities for the child for the two days when food intake was recorded. These activity logs provided us with the type and duration of each activity of their child. Trained CHL staff assigned a metabolic equivalent (MET) that reflected the energy expenditure for the child's activity (Ridley, Ainsworth, & Olds, 2008), and a 24-hour METs could be computed.

Children were asked to wear accelerometers for six days in this study. In Year 1 of CHL, we pilot tested Actical accelerometers as a method to measure physical activity in young children to be used in the full study. Based on our successful CHL Physical Activity Pilot results, we used accelerometry at all sites (Nigg et al., 2012; Ettienne-Gittens et al., 2012, submitted). The CHL Coordinating Center (CCC) trained staff at each jurisdiction on use of the accelerometers before measurement began.

#### Other questionnaires:

Parents / caregiver respondents for the children completed questionnaires about demographics, lifestyle measures and culture. Lifestyle measures included food security and food expenditures (USDA, 2008). In addition, parents/caregivers completed standardized questions about screen time, regarded as sedentary behavior and a lifestyle measure (Haas & Nigg, 2009).

Table 1 displays an overview of all the measures used for CHL, and the frequence of their use. The community level measures are described in Volume 2 of the CHL Data Dictionary.

Table 1: The Children's Healthy Living (CHL) Program Individual-level Measures

Individual level mea	ndividual level measures				sed in matched- communities	Assessed in temporal		Assessed in FAS <sup>†</sup>
						comm	unities	
Category	Measurement	Measurement tools	completed by	0 month	24 month	0 month	24 month	=
Demographic	Demographic[15,43-48]	Questionnaire	Surrogate*	Х	X	Х	Х	Х
Anthropometry	Height	Stadiometer	Staff	X	X	X	X	X
	Weight	Portable Scale	Staff	X	X	X	X	X
	Waist circumference	Circumference Tape	Staff	X	X	X	X	X
Diet	2 d <sup>#</sup> Food intake[61,62]	Food & Activity Log	Surrogate*	X	X			X
Physical Activity (PA)	6 d PA[66]	Accelerometer**	Child	X	X			X
	2 d <sup>#</sup> Activity Log [62]	Food & Activity Log	Surrogate*	X	X			X
Sedentary behavior (SB)/Screen Time (ST)	6 d SB/ST[66]	Accelerometer**	Child	Х	Х			Х
(GD), Goldon Time (GT)	2 d <sup>#</sup> Activity Log[62]	Food & Activity Log	Surrogate*	Х	Х			Х
	Usual SB/ST[52]	Questionnaire	Surrogate*	Х	Х			Х
Sleep	6 d Sleeping[66]	Accelerometer**	Child	X	Х			X
	2 d <sup>#</sup> Activity Log[62]	Food & Activity Log	Surrogate*	X	X			X
	Sleeping behavior[53]	Questionnaire	Surrogate*	X	X			X
Acanthosis Nigricans	Presence/Severity[67]	Visual observation/ assessment form	Staff	Х	X			X
Culture	Language/culture[49-51]	Questionnaire	Surrogate*	X	Х			X

<sup>†</sup>FAS = Freely Associates States of Micronesia.

X = indicates measurement completed.

\*Surrogate reporter = parent/caregiver.

\*\*A minimum of 100 children in each matched-pair community and FAS jurisdiction will wear an accelerometer.

#Randomly assigned non-consecutive days.

#### Frequency of measurements

The initial baseline measurement period for **individual** measures was between October 2012 through February 2014 to complete measurement in all five jurisdictions. The post-intervention measurement period will be between January 2015 – December 2015.

In FAS for the prevalence study, measurement began in October 2013 and may continue through early 2015.

Note in the temporal communities we had an abbreviated set of individual level measures, including height, weight, waist circumference and demographics.

#### **Data Collection Visit Protocol**

Measurements were taken in either a school or preschool setting (e.g., Head Start), or in a community-based setting (e.g., community recreation center or a community event) at baseline and at post-intervention (about 24 months).

#### **Intervention and Comparison Communities**

Parents of two to eight-year-old children were approached to learn about the study, to participate in an informed consent process and sign a consent form, to answer screening questions, and to receive instructions about completing the forms. Staff reviewed the forms for completeness as they were turned in and asked the parent to complete unanswered questions, if they were willing. All of the aforementioned may have happened at one time or over two occasions. Staff also provided training on how to complete a Food and Activity Log, using food models, etc. to demonstrate. Also, parents learned how to re-apply a wrist band and accelerometer, in the event it came off during the 6-day wearing period for the child. Parents were asked to notice if their child was still wearing the accelerometer at home and to put it back on, if the child was willing. Parents also kept a food log on their child for two days as well as an activity log for the same two days. One week after the child began to wear the accelerometer, parents sat with CHL staff to review their child's food and activity logs, and document receipt of the record.

After receiving the child's assent, the anthropometry measures and the screening for acanthosis nigricans took place. Children in the intervention and comparison communities were asked to wear an accelerometer for 6 days. CHL staff asked for the child's assent and choice of wrist band before placing the accelerometer.

The protocol called for two visits by participants in intervention and comparison communities. However, for some circumstances, participants only had to attend one visit.

The circumstances for one visit were when accelerometers were not used. After a certain number of participants were accelerometers, they were not used in every measurement event. Also, in community events without an organization group leader who could help with follow up of retrieving accelerometers, measurement events could be held without using accelerometers.

When Food and Activity Logs (FAL) were used, but no accelerometer, sometimes participants returned their FAL by mail or to another collection site. Participants asked to return items by mail were given stamped addressed large envelopes to send their FALs back. Phone follow-up occurred as needed. In some circumstances after a certain number of participants had already completed Food and Activity Logs, the measurement package in intervention and comparison communities did not collect FAL data from participants.

#### **Temporal Communities**

Parents of 2 to 8-year-old children were approached to learn about the study, to participate in an informed consent process and sign a consent, and to receive instructions for the demographics form. Staff reviewed the form as it was turned in and asked parents about any incomplete sections. The aforementioned happened at one time or over two occasions.

Their child may have been measured with the parents present or at a different time in their classroom.

#### Study Sample

Table 2 shows the sample size goals for each intervention, comparison, and temporal community in the jurisdictions. The projected sample size for the individual level measurements will be the same at baseline and post-intervention.

**Table 2: Frequency and Sample Size Goals for CHL Measurement** 

Fr	Frequency and Sample Size Goals							
for CHL Measurement								
			Individua	l Measures				
		n size for each community	Baseline	Post- intervention				
American Sa	moa, CNMI, Gu	am, and Hawaii						
Intervention community 1	Matched pair 1	150	✓	✓				
Comparison 1	-	150	✓	<b>√</b>				
Intervention community 2	Matched pair 2	150	✓	<b>√</b>				
Comparison 2		150	✓	<b>√</b>				
Temporal	2 communities	150	✓ Abbreviated	✓ Abbreviated				
	Alaska							
Intervention community 1	Matched pair 1	200	✓	<b>√</b>				
Comparison 1	-	200	✓	<b>√</b>				
Temporal	2 communities	200	✓ Abbreviated	✓ Abbreviated				
FAS: Pohn	pei, RMI, Palau Kosrae							
All FAS Communities		200	✓					

As of May 9, 2014 the actual sample size for the baseline measurement in all CHL jurisdictions is 5,132, which is the number of participants whose parents/caregivers consented.

The total proposed sample size for anthropometry measures for CHL is 4100 children for the cross-sectional samples at baseline and at 24 months. For the embedded longitudinal (individual) design, the intent is to collect repeated measurements from 40-50% of children with baseline measurements.

Table 3: Number of participants consented at baseline for CHL Community Randomized Trial and FAS Prevalence Study

Number of Participants Consented at Baseline for CHL Community Randomized Trial and FAS Prevalence Study							
	Baseline	Post-Intervention					
	# Consented	# Consented					
Alaska	713	782					
American Samoa	978	950					
CNMI	924	1,001					
Guam	885	908					
Hawaii	988	1,039					
	4488	4,690					
Pohnpei	211	-					
RMI	218	-					
Palau	214	-					
Chuuk	232	-					
Yap	205	-					
Kosrae	207	-					
FAS Prevalence Data (total)	1,287	-					
CHL Total	5,775	4,685					

#### Recruitment

#### Participant recruitment goals

In order to meet sampling goals for children between the ages of 2-8 years, recruitment activities involve schools and other community venues and activities. Recruitment sites consisted of Head Starts, pre-schools/day cares, kindergartens, WIC sites, community health centers and other appropriate venues (e.g., parks and community recreation centers). Recruitment efforts, led by CHL staff in each jurisdiction, involve close collaboration with community liaisons (e.g., teachers, school staff, program directors, matai, mayors) to enhance participation and retention throughout the measurement protocol. The teams in all jurisdictions tailored the recruitment strategies to work effectively with the stakeholder organizations while meeting recruitment goals of CHL.

#### Screening and Eligibility Criteria

Those who attended a measurement event and agreed to informed consent were asked a series of screening questions to confirm their child's eligibility. Eligibility criteria were selected for the purpose of an obesity prevention and management intervention trial. Parents of potential participants were asked to complete a screening with study staff to confirm the health status of the child. The screening questions for study inclusion are in the appendix.

#### Eligibility Criteria: The participating children will be

2-8 years old,

healthy with no known cardiovascular disease, pulmonary or metabolic disease signs and/or symptoms;

no known disease or joint problems or injuries that would be exacerbated by physical activity.

The child will be stable in the use of any prescribed medications.

The child will live in the selected community.

#### **Exclusion Criteria:**

- 1. Children outside the age group (under two or over eight years)
- 2. Known orthopedic, psychological or neurologic impairments that prevent physical activity
- 3. Presence or history of any metabolic or chronic health problems known to affect intermediary metabolism (e.g. untreated thyroid disease, cancer, hepatic disease, renal disease, diabetes, cardiovascular disease, hypertension)
- 4. Irregular use of prescription or over-the-counter medications known to affect appetite, food intake or intermediary metabolism (e.g. appetite suppressants, lithium, antidepressants, etc.)

#### **Data Cleaning and Validation**

Data were collected at the five jurisdictions for the community randomized trial and six jurisdictions (four states of FSM, RMI, and Palau) for the FAS prevalence study. In most cases, these jurisdictions entered the data into CHL Data Entry System and into PacTrac3. Data are stored on a password-protected secure server and on secure computers. Ultimately, the jurisdictions sent the data to the CHL Coordinating Center in Hawaii through secure transfer methods.

In Hawaii, the second data entry occurred, which involves *In process, more later* \*\* The CHL Data Manager was responsible for preliminary data validation cleaning and analysis for the CHL Measurement study.

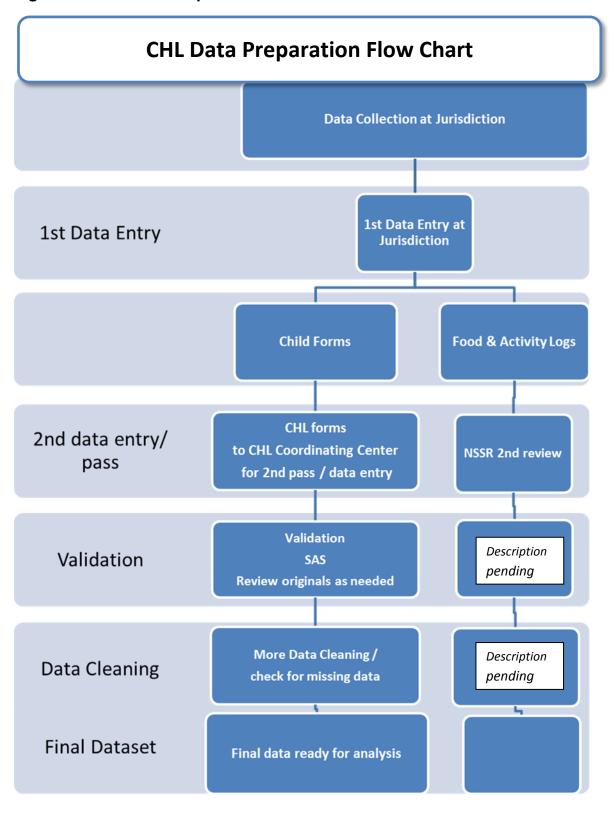
At the validation stage, any discrepancies found between the first data entry and second data entry datasets were corrected at the data set of the second data entry. Scanned images of individual forms are examined to validate the corrections.

Additional data cleaning is conducted on the validated data set when new variables are calculated or a variable is particurlarly examined, e.g., in the calcation of bmi, bmiz, bmipct and other related variables. Variables which need particular attentions include the following new variables:

- dob\_new ( newly created date of birth). Any corrections in child's date of birth
  was done on this newly created variable. The original variable, dob, is not
  changed and should not be used;
- date\_anthr\_new (newly created date of anthropometry measurement). Any
  corrections in child's date of anthropometry measurement was also done upon
  this newly created variables. The original variable, date\_anthr, remained
  unchanged and should not be used;
- 3. Child's measuers on ht (ht1, ht2, ht3, etc), or wt (wt1, wt2, wt3, etc.) or waist (waist1, waist2, waist3, etc.): if obvious errors were found on those measures, the errors are therefore corrected before the calculation of bmi and related variables.

Figure 3 displays the process of data preparation prior to analysis -- the CHL data preparation flow chart. NSSR is the Nutrition Support Shared Resource.

Figure 3. CHL Data Preparation Flow Chart



#### **Measures: Description and Variables**

#### Child and Household Demographics (Form 23-02)

The child and household demographics questionnaire, answered by the parent / caregiver, contained questions about the child, the caregiver, and the household. This demographic questionnaire, Form 23-02, --"Information about your child and household" was used at all CHL measurement sessions in all communities – intervention, comparison (delayed optimized), and temporal. These questions measured the dimensions and dynamics of our population and allow us to compare the variation amongst jurisdictions.

Two versions exist of Form 23-02 – one is used throughout all of CHL except for FAS. This descriptive section and the following variable tables correspond to Form 23-02.

At the end of this section is a section specifically for FAS. It includes all the Form 23-02 variables used in FAS, which also covers the changes made to adapt the form for FAS. The actual variables and their associated response codes are included.

Many of these questions were adapted from The Center for Alaska Native Health Research Demographic and Medical Screening Questionnaire. \*

Information collected included **household** composition and each member's relationship to the child as well as household income.

Questions about the **caregiver** included their relationship to the child, their marital status, educational attainment, employment status, food assistance, and religion. Addressing food security and availability was also included in the demographic questionnaire, to help understand the support services used by participants in our geographically varied jurisdictions. The food security questions were adapted from NHANES (<a href="mailto:cdc.gov/nchs/data/nhanes/

Questions about the **child** included his or her birthdate, sex, racial and ethnic background, languages spoken, place of birth, early child life information -- their birth weight and early feeding, and medical conditions. The demographic form is also used to collect numbers of hours of sleep / day and medical information. Sources include the Behavioral Risk Factor Surveillance System 2011 survey questions and the 2011 Middle School Youth Risk Behavior Survey.

The Child Information section uses validated questions for race/ethnicity. In developing

the ethnicity questions, we were informed by multiple sources including the CDC Race and Ethnicity code set version 1.0 (Centers for Disease Control and Prevention, 2000), the Demographic Information form from the 2010 Census Questionnaire (U.S. Census Bureau, 2009), and Dr. Novotny's previous study, the Healthy Living in the Pacific Islands (2001-9) questionnaire. Sources used in this section include the 2010 Census Questionnaire (U.S. Census Bureau, 2009), the Demographic Information form from the Federal Trade Commission (2012), and The National Health Plan Collaborative Toolkit (2008). The race questions will allow proper reporting to the USDA, based on OMB requirements (http://www.whitehouse.gov/omb/fedreg\_race-ethnicity).

Table 4: Demographic and Other Variables, Form 23-02

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes			
ID	CHL subject ID	Character	7	The first two numbers must be from 01 to 11, the third number must be one from 1 to 6, the fourth number must be one from 1, 2, or 3 and the last 3 numbers are from 1 to 200.	Set as a primary key. Format is in the form of JJCY### where JJ is a number for jurisdiction, C is the number for each community in a jurisdiction, Y is the year of measurement, and ### is a number from 1 to the number of enrollees per community.			
DATE_DEMO	Date of Interview	Date	10	Range = (October, 2012 to February, 2013)	Format should be MMDDYY10.			
COLLECT_NO	Time (year) when the measurement is taken	Character	1	1=Baseline 2=24 months into intervention or post-intervention				
SEX	Sex of the CHL subject	Character	1	1=Boy 2=Girl				
DOB	CHL subject date of birth	Date	10		Format should be MMDDYY10.			
AGE_BASELINE	Age of child at baseline interview	Character	1	Range=2-8	In 24 month data set, this variable is still named "age_baseline",			

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
					although it actually refers to the child's age at the time point of data collection of demo forms for 24 month data collection.
GRADE	CHL subject grade in school in Fall 2012	Character	1	1=Head Start 2=Day Care 3=Preschool 4=Kindergarten 5=Elementary 6=None 9=missing	
RELATION_ DEMO	Respondent relationship to the child	Character	2	01=Biological mom 02=Step mom 03=Adoptive mom 23=Step mom and Adoptive mom 04=Birth dad 05=Step dad 06=Adoptive dad 56=Step dad and Adoptive dad 07=Legal Guardian, Caregiver, Other	Only one choice can be selected

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
				09 =missing	
REL_OTHER	Other type of respondent relationship to the child	Character	25		Only those choose 07 for variable <i>RELATION</i>
MARITAL	Respondent current marital status	Character	1	1=Married 2=Divorced 3=Separated 4=Widowed 5=Single and not living with boyfriend, girlfriend, or partner 6=Single and living with boyfriend, girlfriend, partner 7 =Other 9=Missing	Only one choice can be selected
MARI_OTHER	Respondent current marital status-Other	Character	15		Only for those who choose 7=other for variable <i>MARI</i>
COUNT_ MOTHER	Number of person who currently lives in the child's household -Mother	Character	2		
COUNT_ FATHER	Number of person who currently lives in the child's household -Father	Character	2		
COUNT_ BROTHER	Number of person who currently lives in the child's household -Brother	Character	2		

Variable Name	Variable Description	Data	Length	Response Options / Codes	Notes
		Туре			
COUNT_ SISTER	Number of person who currently lives in the child's household- Sister	Character	2		
COUNT_ GRANDMA	Number of person who currently lives in the child's household -Grandmother	Character	2		
COUNT_ GRANDPA	Number of person who currently lives in the child's household -Grandfather	Character	2		
COUNT_ AUNT	Number of person who currently lives in the child's household -Aunt	Character	2		
COUNT_UNCLE	Number of person who currently lives in the child's household -Uncle	Character	2		
COUNT_ COUSIN	Number of person who currently lives in the child's household -Cousin	Character	2		
COUNT_ FRIEND	Number of person who currently lives in the child's household –Friend	Character	2		
COUNT_ OTHEREL	Number of other persons who currently lives in the child's household	Character	2		
OTHEREL	People who currently lives	Character	20		If not specified, put

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	in the child's household_Other relationship				"unknown" in this field.
CHILD1_ SEX	Sex of other children (for example: siblings, cousins, friends) who live with your child on a regular basis – Child 1	Character	1	1=Boy 2=Girl	
CHILD1_YRS	Age (years) of other children (for example: siblings, cousins, friends) who live with your child on a regular basis – Child 1	Character	2		
CHILD1_ MTS	Age (months) of other children (for example: siblings, cousins, friends) who live with your child on a regular basis – Child 1	Character	2		
CHILD2_ SEX	Sex of other children (for example: siblings, cousins, friends) who live with your child on a regular basis – Child 2	Character	1	1=Boy 2=Girl	
CHILD2_YRS	Age (years) of other children (for example:	Character	2		

#### **Demographic and Other Variables from** Information About Your Child And Household: Form 23-02 **Variable Description** Length **Response Options / Codes Variable Name** Notes Data **Type** siblings, cousins, friends) who live with your child on a regular basis - Child 2 CHILD2\_MTS Age (months) of other 2 Character children (for example: siblings, cousins, friends) who live with your child on a regular basis - Child 2 CHILD3 SEX Sex of other children (for Character 1=Boy example: siblings, cousins, 2=Girl friends) who live with your child on a regular basis -Child 3 CHILD3\_YRS Age (years) of other Character children (for example: siblings, cousins, friends)

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1=Boy

Character

Character

who live with your child on a regular basis – Child 3

Age (months) of other

children (for example: siblings, cousins, friends) who live with your child on a regular basis – Child 3

Sex of other children (for

CHILD3 MTS

CHILD4 SEX

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	example: siblings, cousins, friends) who live with your child on a regular basis – Child 4			2=Girl	
CHILD4_ YRS	Age (years) of other children (for example: siblings, cousins, friends) who live with your child on a regular basis – Child 4	Character	2		
CHILD4_ MTS	Age (months) of other children (for example: siblings, cousins, friends) who live with your child on a regular basis – Child 4	Character	2		
CHILD5_ SEX	Sex of other children (for example: siblings, cousins, friends) who live with your child on a regular basis – Child 5	Character	1	1=Boy 2=Girl	
CHILD5_ YRS	Age (years) of other children (for example: siblings, cousins, friends) who live with your child on a regular basis – Child 5	Character	2		

#### **Demographic and Other Variables from** Information About Your Child And Household: Form 23-02 **Variable Description** Length **Response Options / Codes** Variable Name Notes Data **Type** CHILD5 MTS Age (months) of other 2 Character children (for example: siblings, cousins, friends) who live with your child on a regular basis - Child 5 Sex of other children (for CHILD6 SEX Character 1=Boy example: siblings, cousins, 2=Girl friends) who live with your child on a regular basis -Child 6 Age (years) of other CHILD6 YRS Character 2 children (for example: siblings, cousins, friends) who live with your child on a regular basis - Child 1 CHILD6 MTS Age (months) of other Character children (for example: siblings, cousins, friends)

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2

1=Boy

2=Girl

Character

Character

who live with your child on a regular basis – Child 1

Sex of other children (for

example: siblings, cousins,

friends) who live with your child on a regular basis –

Age (years) of other

Child 7

CHILD7 SEX

CHILD7 YRS

#### **Demographic and Other Variables from** Information About Your Child And Household: Form 23-02 **Variable Description** Length **Response Options / Codes** Notes Data **Type** children (for example: siblings, cousins, friends) who live with your child on a regular basis - Child 7 Age (months) of other 2 Character children (for example: siblings, cousins, friends) who live with your child on a regular basis - Child 7

1=Boy

2=Girl

1=Boy

2=Girl

Variable Name

CHILD7 MTS

CHILD8 SEX

CHILD8 YRS

CHILD8 MTS

CHILD9 SEX

Sex of other children (for

example: siblings, cousins,

friends) who live with your child on a regular basis –

Age (years) of other

children (for example: siblings, cousins, friends) who live with your child on a regular basis – Child 8

Age (months) of other

children (for example: siblings, cousins, friends) who live with your child on a regular basis – Child 8

Sex of other children (for

example: siblings, cousins,

Child 8

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2

Character

Character

Character

Character

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	friends) who live with your child on a regular basis – Child 9				
CHILD9_YRS	Age (years) of other children (for example: siblings, cousins, friends) who live with your child on a regular basis – Child 9	Character	2		
CHILD9_ MTS	Age (months) of other children (for example: siblings, cousins, friends) who live with your child on a regular basis – Child 9	Character	2		
CHILD10_ SEX	Sex of other children (for example: siblings, cousins, friends) who live with your child on a regular basis – Child 10	Character	1	1=Boy 2=Girl	
CHILD10_ YRS	Age (years) of other children (for example: siblings, cousins, friends) who live with your child on a regular basis – Child 10	Character	2		
CHILD10_ MTS	Age (months) of other children (for example: siblings, cousins, friends)	Character	2		

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	who live with your child on a regular basis – Child 10				
EDUCATION	What is the highest grade or year of school you (the respondent) completed	Character	1	1= Never attended school or only attended kindergarten 2= Grades 1 up to 8 (Elementary to Middle school) 3= Grades 9 up to 11 (Some high school) 4= Grade 12 or GED (High School Graduate) 5= College or technical school 1 year to 3 years 6= College 4 years or more 9=Missing	
EMPLOYED_ WAGES	What is your current employment status – Employed for wages/salary	Character	1	0=No 1=Yes	
SELF_ EMPLOYED	What is your current employment status – Self-employed	Character	1	0=No 1=Yes	
UNEMP_MORE	What is your current employment status – Out of work for more than 1 year	Character	1	0=No 1=Yes	
UNEMP_LESS	What is your current employment status – Out of work for less than 1 year	Character	1	0=No 1=Yes	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
HOMEMAKER	What is your current employment status – A Homemaker	Character	1	0=No 1=Yes	
STUDENT	What is your current employment status – A student	Character	1	0=No 1=Yes	
RETIRED	What is your current employment status – Retired	Character	1	0=No 1=Yes	
UNABLE	What is your current employment status – Unable to work	Character	1	0=No 1=Yes	
MOREJOBS	Do you currently have more than one job at this time?	Character	1	0=No 1=Yes 9=Missing	
INCOME	Based on everyone that lives under one roof or house, what is the annual household income from all sources over the past 12 months?	Character	1	1= Under \$10,000 2= From \$10,000 to less than \$20,000 3= From \$20,000 to less than \$35,000 4= From \$35,000 to less than \$60,000 5= From \$60,000 to less than \$75,000 6= \$75,000 and more	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
				7=No response 9=Missing	
NHPI_ CHAMORRO	If your child is Native Hawaiian or other Pacific Islander, do you most identify him/her with Chamorro?	Character	1	0=No 1=Yes	Only for those select 1=Yes for variable NHPI
NHPI_ CAROLINIAN	If your child is Native Hawaiian or other Pacific Islander, do you most identify him/her with Carolinian?	Character	1	0=No 1=Yes	Only for those select 1=Yes for variable NHPI
NHPI_ CHUUKESE	If your child is Native Hawaiian or other Pacific Islander, do you most identify him/her with Chuukese?	Character	1	0=No 1=Yes	Only for those select 1=Yes for variable NHPI
NHPI_ KIRIBATI	If your child is Native Hawaiian or other Pacific Islander, do you most identify him/her with Kiribati?	Character	1	0=No 1=Yes	Only for those select 1=Yes for variable NHPI
NHPI_ KOSRAEAN	If your child is Native Hawaiian or other Pacific Islander, do you most identify him/her with	Character	1	0=No 1=Yes	Only for those select 1=Yes for variable NHPI

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	Kosraean?				
NHPI_ MARSHALLESE	If your child is Native Hawaiian or other Pacific Islander, do you most identify him/her with Marshallese?	Character	1	0=No 1=Yes	Only for those select 1=Yes for variable NHPI
NHPI_ NATIVE HAWAIIAN	If your child is Native Hawaiian or other Pacific Islander, do you most identify him/her with Native Hawaiian?	Character	1	0=No 1=Yes	Only for those select 1=Yes for variable NHPI
NHPI_ PALAUAN	If your child is Native Hawaiian or other Pacific Islander, do you most identify him/her with Palauan?	Character	1	0=No 1=Yes	Only for those select 1=Yes for variable NHPI
NHPI_ SAMOAN	If your child is Native Hawaiian or other Pacific Islander, do you most identify him/her with Samoan?	Character	1	0=No 1=Yes	Only for those select 1=Yes for variable NHPI
NHPI_ TONGAN	If your child is Native Hawaiian or other Pacific Islander, do you most identify him/her with Tongan?	Character	1	0=No 1=Yes	Only for those select 1=Yes for variable NHPI

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
NHPI_ TOKELAUN	If your child is Native Hawaiian or other Pacific Islander, do you most identify him/her with Tokelaun?	Character	1	0=No 1=Yes	Only for those select 1=Yes for variable NHPI
NHPI_ TAHITIAN	If your child is Native Hawaiian or other Pacific Islander, do you most identify him/her with Tahitian?	Character	1	0=No 1=Yes	Only for those select 1=Yes for variable NHPI
NHPI_ YAPESE	If your child is Native Hawaiian or other Pacific Islander, do you most identify him/her with Yapese?	Character	1	0=No 1=Yes	Only for those select 1=Yes for variable NHPI
NHPI_OTHER	If your child is Native Hawaiian or other Pacific Islander, do you most identify him/her with other Pacific ethnic/tribal group?	Character	1	0=No 1=Yes	Only for those select 1=Yes for variable NHPI
NHPI_DESCR	Other ethnic/tribal groups of Native Hawaiian or other Pacific Islander	Character	30		Only for those select "Other" for variable NHPI
LANGUAGEX	What language(s) does your child speak?	Character	50		If missing, put down "Unknown"
LANGUAGE_	What language(s) does	Character	50		If missing, put down

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
HOME	your child most often speak at home?				"Unknown"
BIRTH_PLACE	In what city or county was your child born?	Character	50		If missing, put down "Unknown"
LIVED_YRS	How many years (years) has your child lived here? (Enter the number of years in the space provided)	Character	2		If missing, put down 99
LIVED_MTS	How many years (months) has your child lived here? (Enter the number of months in the space provided)	Character	2	Range 1-11	If missing, put down 99
BIRTHWT_LB	Child birth weight_ Pounds	Character	2		Measured in pounds . For those choose unknown or those missing, 99 will be assigned.
BIRTHWT_OZ	Child birth weight_Ounces	Character	5		Measured in pounds and ounce For those choose unknown or those missing, 99.99 will be assigned.
BIRTHWT_KG	Child birth weight_ Kilograms	Character	5		Measured by Kilograms

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
					For those choose unknown or those missing, 99.99 will be assigned.
BIRTHHT_IN	Child birth height_ Inches	Character	5		Measured by inches. For those choose unknown or those missing, 99.99 will be assigned.
BIRTHHT_CM	Child birth height_ Centimeters	Character	5		Measured by centimeters. For those choose unknown or those missing, 99.99 will be assigned.
BREASTFED	Was your child ever breastfed or fed breastmilk?	Character	1	0=No 1=Yes 2=Other 8=unknown 9=Missing	
FEEDING_ OTHER	Other types of child feeding	Character	30		Only for those choose 2=other for variable BREASTFED
AGE_WEAN	How old (by months) was your child when (he/she) completely stopped	Character	5	75.75=still breast feeding 88.88=unknown 99.99=missing	Only for those who choose 1=Yes for variable <i>BREASTFED</i> .

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	breastfeeding or being fed breast milk?				For those choose unknown or those missing, 99.99 will be assigned.
FORMULA	Was the child ever fed formula?	Character	1	0=No 1=Yes 2=Other 8=unknown 9=missing	
FORMULA_OTH ER	Other types of formula feeding	Character	30		Only
FIRST_ FORMULA	How old (by months) was the child when (he/she) was first fed formula?	Character	5	00.00=since birth 88.88=unknown 99.99=missing	For those choose "Since Birth", put "00" for months of age; For those choose Unknown or those missing, 99.99 will be assigned.
LAST_ FORMULA	If your child was fed formula, how old (by months) was (he/she) completely stopped drinking formula?	Character	5	75.75=still feeding formula 88.88=unknown 99.99=missing	For those choose unknown or those missing, 99.99 will be assigned.
AGE_ OTHERFED	How old (by months) was the child when he/she was first fed anything other than breast milk or formula?	Character	5	88.88=unknown 99.99=missing	For those chosen Unknown or those missing, 99.99 will be assigned.

Demographic and Other Variables from									
Information About Your Child And Household: Form 23-02									
Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes				
	(This includes juice, cow's milk, sugar water, baby food, or anything else that the child might have been given, even water)								
MONEY_FOOD	In the past 12 months, how often does your money for food run out before the end of the month?	Character	1	0=Never 1=Seldom 2=Sometimes 3=Most times 4=Always 8=Don't know 7=no response 9= missing	Only one can be selected				
MONEY_ UTILITY	In the past 12 months, how often does your money for household utilities (e.g., water, fuel oil, electricity) run out before the end of the month?	Character	1	0=Never 1=Seldom 2=Sometimes 3=Most times 4=Always 7=no response 8=Don't know 9= missing	Only one can be selected				
				nly for the intervention study ju sdictions do not have such info					
ASSISFOOD	In the past 12 months, do you receive assistance to	Character	1	0=No 1=Yes					

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	pay for food (e.g., food stamps, WIC coupons)?			7=no response 9= missing	
EBT_SNAP	Does your household receive EBT/SNAP/NAP (formerly called Food Stamps)?	Character	1	0=No 1=Yes 8= Don't know 6= Not applicable	Only for those choose 1=yes for variable ASSISFOOD
FOODASSI	Does your household receive food assistance (Food Bank/Food Pantries or Commodity foods)?	Character	1	0=No 1=Yes 8=Don't know 6=Not applicable	Only for those choose 1=yes for variable ASSISFOOD
WIC	Does your household receive WIC benefits	Character	1	0=No 1=Yes 8=Don't know 6=Not applicable	Only for those choose 1=yes for variable ASSISFOOD
FREEMEAL	Does your household receive reduced-cost breakfasts or lunches at school	Character	1	0=No 1=Yes 8=Don't know 6=Not applicable	Only for those choose 1=yes for variable ASSISFOOD
SLEEP	How long on average (in hours) of sleep does your child get in a 24 hour period? (at night and in	Character	4	0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, 12, 12.5, 13, >13	Should we program in all the choice so the data enterer only click? For those missing,

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	naps)				9999 will be assigned.
DIAGNOSIS1	Does your child have any current medical conditions diagnosed by a doctor?	Character	1	0=No 1=Yes 9=Missing	
DIAGNOSIS2	What condition has your child been diagnosed with in the past 12 months?	Character	200		Only for those answered "Yes" for variable Diagnosis1. Please specify the condition.
ASTHMA	Has a doctor or nurse ever told you that the child has asthma?	Character	1	0=No 1=Yes 8=Don't know/Not sure 9=missing	
RELIGION	What is your religious affiliation?	Character	2	01=Baptist 02=Buddhist 03=Catholic 04=Episcopalian 05=Evangelical Covenant 06=Mormon/Latter-day Saints 07=Moravian 08=Muslim 09=Pentecostal 10=Protestant 11=Russian Orthodox 12=Other (please describe)	

Demographic and Other Variables from Information About Your Child And Household: Form 23-02									
Variable Name	ole Name Variable Description Data Length Response Options / Codes Notes Type								
				13=None 77 no response 99= Missing					
RELIGION_ OTHER	Other types of religious affiliation	Character	50		Only for those answered "other" for variable RELIGION				
ENGAGE	How often do you engage in religious activities or events with your religious community?	Character	1	1=Per Week 2=Per Month 3=Do not attend 7=No response 9= Missing					
NUM_ENGAGE	How many times per week do you engage in religious activities or events with your religious community	Character	2		For those missing, 99 will be assigned.				
NUM_ENGAGE_ MONTH	How many times per month do you engage in religious activities or events with your religious community	Character	2		For those missing, 99 will be assigned.				

FAS Version -- Child and Household Demographics (Form 23-02)

We adapted for FAS Form 23-02 Information about your child and household, which includes the demographics questions. We changed, added, or dropped some items to tailor Form 23-02 for FAS. For example, the lower income response category was changed from under \$10,000 to three categories: under \$2500, from \$2500 to less than \$5000, and from \$5000 to less than \$10000. We dropped questions about SNAP (food stamps) and WIC, since they are not available in the FAS region. We added questions about resource availability and the source of water in the home as well as the main type of fuel their household uses for cooking. Questions about the parent/caregiver's and the household's betel nut, tobacco and alcohol use are part of the new questions. We added questions about the participating child's frequency of tooth brushing and preventative dental care, as these items are of particular interest to this region. Table 5 displays the variables that were changed or added for FAS or that offered different coding for responses.

Table 5: Demographic and Other Variables, Form 23-02 -- FAS version - Additional or modified variables only

Demographic and Other Variables from Information About Your Child And Household: Form 23-02									
	F	<b>AS Version</b>							
Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes				
CHILD INFORMATION	ON								
NHPI_ CHAMORRO_DESC R	If your child is Native Hawaiian or other Pacific Islander, do you most identify him/her with Chamorro - description				Only for those select 1=Yes for variable NHPI				
NHPI_	If your child is Native	Character	30		Only for				

Demographic and Other Variables from Information About Your Child And Household: Form 23-02										
	FAS Version									
Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes					
CHUUKESE_DESCR	Hawaiian or other Pacific Islander, do you most identify him/her with Chuukese - description				those select 1=Yes for variable NHPI					
NHPI_ POHNPEIAN_DESC R	If your child is Native Hawaiian or other Pacific Islander, do you most identify him/her with Pohnpeian - description	Character	30		Only for those select 1=Yes for variable NHPI					
NHPI_ YAPESE_DESCR	If your child is Native Hawaiian or other Pacific Islander, do you most identify him/her with Yapese - description	Character	30		Only for those select 1=Yes for variable NHPI					
WATER AND FUEL	SOURCE									
WATER_ HOUSEHOLD TAP	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): household tap	Character	1	0=No 1=Yes 9= missing						
WATER_PRIVATE TAP IN YARD	Where do you get the water you use at home? Include water for all purposes –	Character	1	0=No 1=Yes 9= missing						

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	Drinking, cooking, cleaning, gardening, etc. (Check all that apply): private tap in yard				
WATER_ STANDPIDE	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): public/shared standpipe	Character	1	0=No 1=Yes 9= missing	
WATER_ NEIGHBOR'S TAP	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): neighbor's tap	Character	1	0=No 1=Yes 9= missing	
WATER_BOTTLED WATER	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): purchased bottled water	Character	1	0=No 1=Yes 9= missing	
WATER_HOME_ RAIN WATER	Where do you get the water you use at home? Include water for all purposes –	Character	1	0=No 1=Yes 9= missing	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	Drinking, cooking, cleaning, gardening, etc. (Check all that apply): home rain water collection				
WATER_ COMMUNITY _RAIN WATER	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): community rain water collection	Character	1	0=No 1=Yes 9= missing	
WATER_RIVER	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): River/Stream/Creek	Character	1	0=No 1=Yes 9= missing	
WATER_SPRING	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): Spring	Character	1	0=No 1=Yes 9= missing	
WATER_ REFILLING_	Where do you get the water you use at home? Include	Character	1	0=No 1=Yes	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
STATION	water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): refilling station			9= missing	
WATER_OTHER	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): other	Character	40		
WATER_OTHER_ DESCR	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): other – description.	Character	40		
ELECTRICITY	What type of fuel does your household mainly use for cooking?(Check all that apply): Electricity	Character	1	0=No 1=Yes 9= missing	
LPG	What type of fuel does your household mainly use for cooking?(Check all that apply): Liquefied petroleum	Character	1	0=No 1=Yes 9= missing	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	gas				
NATURAL_GAS	What type of fuel does your household mainly use for cooking?(Check all that apply): Natural gas	Character	1	0=No 1=Yes 9= missing	
BIOGAS	What type of fuel does your household mainly use for cooking?(Check all that apply): Biogas	Character	1	0=No 1=Yes 9= missing	
KEROSENE	What type of fuel does your household mainly use for cooking?(Check all that apply): Kerosene	Character	1	0=No 1=Yes 9= missing	
COAL	What type of fuel does your household mainly use for cooking?(Check all that apply): Coal / Lignite	Character	1	0=No 1=Yes 9= missing	
WOOD	What type of fuel does your household mainly use for cooking?(Check all that apply): Wood	Character	1	0=No 1=Yes 9= missing	
CHARCOAL	What type of fuel does your household mainly use for cooking?(Check all that apply): Charcoal	Character	1	0=No 1=Yes 9= missing	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
STRAW	What type of fuel does your household mainly use for cooking?(Check all that apply): Straw_shrub_grass	Character	1	0=No 1=Yes 9= missing	
ANIMAL_DUNG	What type of fuel does your household mainly use for cooking?(Check all that apply): Animal Dung	Character	1	0=No 1=Yes 9= missing	
CROP_RESIDUE	What type of fuel does your household mainly use for cooking?(Check all that apply): Agricultural crop residue	Character	1	0=No 1=Yes 9= missing	
FUEL_COOKING_ OTHER	What type of fuel does your household mainly use for cooking?(Check all that apply): Other types (please describe)	Character	40		
FUEL_COOKING_ OTHER_DESCR	What type of fuel does your household mainly use for cooking?(Check all that apply): Other types (please describe)	Character	40		
NO_COOKING	No food cooked in household	Character	1	0=No 1=Yes	

Demographic and Other Variables from Information About Your Child And Household: Form 23-02								
	F.	AS Version						
Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes			
				9= missing				
BETEL NUT USAGE								
CHEWED_EVER	Have you ever chewed betel nut?	Character	1	0=No 1=Yes 8= No response 9= missing				
CHEWED_NOW	Do you now chew betel nut?	Character	1	0=No 1=Yes 7=Don't know 8= No response 9= missing				
CHEW_ FREQ	If yes, how often do you chew betel nut?	Character	1	1=Daily 2=Weekly 3=Monthly 7=Don't know 8= No response 9= Missing				
CHEW_ YEARS	If yes, how long have you been chewing betel nut?: Years	Character	2	77=Don't Know 88= No response 99= missing				
CHEW_ MONTHS	If yes, how long have you been chewing betel nut?:	Character	2	777=Don't Know 888=No response				

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	Months			999=missing	
WITH_TOBACCO	If yes, do you include Tobacco (from cigarette, snuff, twist tobacco, Red Man) when chewing betel nut?	Character	1	0=No 1=Yes 7=Don't Know 8= No response 9= missing	
WITH_LIME	If yes, do you include lime when chewing betel nut?	Character	1	0=No 1=Yes 7=Don't Know 8= No response 9= missing	
WITH_BETEL_ LEAF	If yes, do you include betel leaf when chewing betel nut?	Character	1	0=No 1=Yes 7=Don't Know 8= No response 9= missing	
WITH_ALCOHOL	If yes, do you include alcohol to an of the components of your chew (nut, leaf, lime, or tobacco)?	Character	1	0=No 1=Yes 7=Don't Know 8= No response 9= missing	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
BETEL_OTHER_ USERS	Are there other members in your household who chew betel nut?	Character	1	0=No 1=Yes 7=Don't Know 8= No response 9= missing	
BETEL_OTHERS_ COUNT	If yes, how many household members chew betel nut?	Character	2	77=Don't Know 88= No response 99= missing	
TOBACCO USAGE					
TOBACCO	Aside from adding tobacco to a betel quid, do you now use any tobacco products (smoking cigarette, cigar or pipes; chewing smokeless tobacco)?	Character	1	0=No 1=Yes 8= No response 9= missing	
TOBACCO_COUNT	If yes to smoking cigarettes, cigars or pipes, how many sticks/pipes od you smoke daily?	Character	2	77=Don't Know 88= No response 99= missing	
SMOKELESS_ TOBACCO_FREQ	If yes to chewing smokeless tobacco, how often do you chew smokeless tobacco?	Character	1	1=Everyday 2=Some days 7=Don't know 8= No response	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
				9= missing	
TOBACCO_ OTHER_USERS	Are there other members in your household who use any tobacco products (with or without betel nut; cigarettes, cigars, or pipes; chewing smokeless tobacco)?	Character	1	0=No 1=Yes 7= Don't know 8= No response 9= missing	
TOBACCO_OTHER_ COUNT	If yes, how many household members use any of these tobacco products?	Character	2	77=Don't Know 88= No response 99= missing	
ALCOHOL USAGE					
ALCOHOL	Did you drink alcohol within the past 30 days?	Character	1	0=No 1=Yes 7= Don't know 8= No response 9= missing	
CAN_BEER_ COUNT	During the past 30 days, on the days when you drank, about how many drinks did you drink?: cans of beer	Character	2	77=Don't Know 88= No response 99= missing	
BOTTLE_BEER_ COUNT	During the past 30 days, on the days when you drank,	Character	2	77=Don't Know 88= No response	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	about how many drinks did you drink?: bottles of beer			99= missing	
WINE_COUNT	During the past 30 days, on the days when you drank, about how many drinks did you drink?: Glasses of wine	Character	2	77=Don't Know 88= No response 99= missing	
LIQUOR_COUNT	During the past 30 days, on the days when you drank, about how many drinks did you drink?: Shots of liquor	Character	2	77=Don't Know 88= No response 99= missing	
MIXED_DRINKS_ COUNT	During the past 30 days, on the days when you drank, about how many drinks did you drink?: Glasses of mixed drinks	Character	2	77=Don't Know 88= No response 99= missing	
KAVA_COUNT	During the past 30 days, on the days when you drank, about how many drinks did you drink?: Cups of kava	Character	2	77=Don't Know 88= No response 99= missing	
TUBA_COUNT	During the past 30 days, on the days when you drank, about how many drinks did you drink?: Cups of tuba drink (coconut sap)	Character	2	77=Don't Know 88= No response 99= missing	
YEAST_COUNT	During the past 30 days, on	Character	2	77=Don't Know	

#### **Demographic and Other Variables from** Information About Your Child And Household: Form 23-02 **FAS Version Variable Description** Length **Response Options / Data Type** Notes Codes the days when you drank, 88= No response about how many drinks did 99= missing you drink?: Cups of fermented yeast ALCOHOL\_OTHER\_ Are there other members in Character 1 0=No your household who drank 1=Yes 7= Don't know alcohol within the past 30 days? 8= No response 9= missing If yes, how many household 2 77=Don't Know Character OTHERS\_ COUNT members drank alcohol within 88= No response the past 30 days? 99= missing

#### **MEDICAL**

ALCOHOL

**USERS** 

**Variable Name** 

BRUSH_TEETH	How often does your child brush his/her teeth?	Character	1	1=More than once a day 2=Once a day 3=Once per week 4=Once per year 5=Never 7=Don't know 8=No response 9=Missing	
DENTAL_CARE	During the past 12 months, did your child see a dentist for any routine preventive	Character	1	0=No 1=Yes 7=Don't know/Not sure	

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Demographic and Other Variables from Information About Your Child And Household: Form 23-02							
	FAS Version						
Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes		
	dental care, including check- ups, screenings, and sealants?			8=No response 9=missing			

#### CHL24 Month Version -- Child and Household Demographics (Form 23-02)

We adapted Form 23-02 Information about your child and household which includes the demographics questions for CHL 24month data collection. We changed, added, or dropped some items to tailor Form 23-02 for CHL 24month. For example, we added questions about resource availability and the source of water in the home as well as the main type of fuel their household uses for cooking. We also added questions about child's specific health conditions and questions about the participating child's frequency of tooth brushing and preventative dental care. Table 6 displays the variables that were changed or added for CHL 24month or that offered different coding for responses.

Table 6: Demographic and Other Variables, Form 23-02 – CHL 24month version – Additional or modified variables only

Demographic and Other Variables from Information About Your Child And Household: Form 23-02								
	CHL2	4 month \	/ersion					
Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes			
FISHING_FARMING	What is your current employment status – Fishing / Farming	Character	1	0= NO 1= Yes				
OTHER_BENEFITS	Does your household receive any other benefits	Character	50					
Water_Household_t ap	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): household tap	Character	1	0=No 1=Yes 9= missing				

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
Water_Private_tap	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): private tap in yard	Character	1	0=No 1=Yes 9= missing	
Water_standpide	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): public/shared standpipe	Character	1	0=No 1=Yes 9= missing	
Water_Neighbor_tap	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): neighbor's tap	Character	1	0=No 1=Yes 9= missing	
Water_bottled	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): purchased bottled water	Character	1	0=No 1=Yes 9= missing	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
Water_home_rain	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): home rain water collection	Character	1	0=No 1=Yes 9= missing	
Water_community_ rain	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): community rain water collection	Character	1	0=No 1=Yes 9= missing	
Water_river	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all that apply): River/Stream/Creek	Character	1	0=No 1=Yes 9= missing	
Water_spring	Where do you get the water you use at home? Include water for all purposes – Drinking, cooking, cleaning, gardening, etc. (Check all	Character	1	0=No 1=Yes 9= missing	

#### **Demographic and Other Variables from** Information About Your Child And Household: Form 23-02 **CHL24 month Version Variable Description Response Options /** Data Length **Notes Type** Codes that apply): Spring Where do you get the water Character 0=Noyou use at home? Include 1=Yes water for all purposes -9= missing Drinking, cooking, cleaning, gardening, etc. (Check all

0=No

1=Yes

9= missing

1=More than once per day

2= Once per day 3= Once per week 4=Once per year

Character

Character

Character

40

1

Variable Name

Water\_refilling\_

Water\_other

Water other descr

**DENTAL AND MEDICAL** 

CHL Data Dictionary DRAFT

BRUSH TEETH

that apply): refilling station

vou use at home? Include

water for all purposes -

that apply): other

that apply): other -

brush his/her teeth?

description.

Where do you get the water

Drinking, cooking, cleaning, gardening, etc. (Check all

Where do you get the water

you use at home? Include water for all purposes -Drinking, cooking, cleaning, gardening, etc. (Check all

How often does your child

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station

5= Never Page 62

Demographic and Other Variables from Information About Your Child And Household: Form 23-02							
	CHL2	4 month	<b>Version</b>				
Variable Name	Variable Description Data Type Length Response Options / Codes			Notes			
				8= Don't Know 7= No response			
DENTAL_CARE	During the past 12 months, did your child see a dentist for any routine preventive dental care, including checkups, screenings, and sealants?	Character	1	0= No 1= Yes 8= Don't know 7= No response 9=missing			
	oles are collected from the screeni ed in the demo form.	ng form in ba	ıseline. In	24-month, those questions	/variables were		
Problems_active	Does your child have any problems that keep him/her from being physically active?	Character	1	0= No 1= Yes 9=missing			
Problem_descr	If yes, what type of problem	Character	100				
Heart	If yes, has your child had any problem with his/her heart?	Character	1	0= No 1= Yes			
Nerves	If yes, has your child had any problem with his/her nervers?	Character	1	0= No 1= Yes			
Liver	If yes, has your child had any problem with his/her liver?	Character	1	0= No 1= Yes			
Bloodpressure	If yes, has your child had any problem with his/her blood	Character	1	0= No 1= Yes			

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	pressure?				
Thyroid	If yes, has your child had any problem with his/her thyroid?	Character	1	0= No 1= Yes	
Kidney	If yes, has your child had any problem with his/her kidney?	Character	1	0= No 1= Yes	
Bones_Joints	If yes, has your child had any problem with his/her bones or joints?	Character	1	0= No 1= Yes	
Cancer	If yes, has your child had any problem with cancer?	Character	1	0= No 1= Yes	
Diabetes	If yes, has your child had any problem with diabetes?	Character	1	0= No 1= Yes	
Medication	Does your child take any medications?	Character	1	0= No 1= Yes	
Antidepressants	Does your child take any antidepressants	Character	1	0= No 1= Yes	
Lithium	Does your child take any lithium	Character	1	0= No 1= Yes	
Appetite_ Suppressants	Does your child take any appetite suppressants	Character	1	0= No 1= Yes	
Metabolism	Does your child take any medication that affects appetite or metabolism?	Character	1	0= No 1= Yes	

Demographic and Other Variables from Information About Your Child And Household: Form 23-02							
	CHL24 month Version						
Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes		
Regular	If you answered yes to any of these medications, does your child take them regularly?	Character	1	0= No 1= Yes			

#### Created New Variables from Form 23-02

During the data cleaning process, many new variables were created under various reasons. Whenever a correction was made to an original variable, then a new variable is created in order to differentiate it from the original variable. Some new variables were created to address the needs of various research questions. Those new variables should always be used in place of the original variables. If the methods or protocols used in creating those new variables are simple enough, they are then described in the following table (Table 5) under the column "Notes". For some variables, e.g., new race or ethnicity variable, the methods/protocols used are complicated. Therefore, the following section in particular, describes the protocols used in create the new race or ethnicity variables.

#### Proposed methods for creating a new race\_ethnicity variable

From the original data collection form, we get a total of 45 variables related to race and ethnicity. From those 45 variables, we have created a new variable (*race\_new\_omb*), which is based on US Office of Management and Budget (OMB) Definition and has 6 categories: White, Black, AIAN, Asian, NHPI, and More than one race. Whether a child is of Hispanic origin or not is not considered when creating this variable.

Another new variable, "ethnicity\_new" is created in order to capture or reflect a study participant's race/ethnic composition. This variable is currently in the format of "RACE1-SUBCATEGORIES\_RACE2-SUBCATEGORIES...." in alphabetic order, e.g.,

"ASIAN-CHINESE\_ASIAN-FILIPINO\_ASIAN-INDIAN\_ASIAN-JAPANESE\_ASIAN-THAI\_NHPI-CHAMORRO". The reason to show the larger race category before the smaller ethnic group is to meet the needs of further researchers who may not be familiar with the populations in the Pacific. The variable "ethnicity\_new" currently describes all available ethnicity/race group a participating child has chosen. To create this variable, one of the first steps is to check each of the open space variables and make corrections as needed. For example, for one of the study subject, AIAN is selected; however under aian\_descr, it is written "BGD, Bangl". There are no other race or ethnic categories selected for this subject. Therefore, we are assuming that this child actually is of Asian, instead of AIAN and the following correction was then made:

(a). IF aian\_descr= 'BGD, Bangla' THEN DO;

AIAN='0'; AIAN\_OTHER='0'; AIAN\_DESCR="; ASIAN\_other='1';ASIAN\_DESCR='BANGLADESHI'; END;

As a result, a total of 45 new variables were created to differentiate them from the original 45 race/ethnicity related variables (see Table 5).

The variable "ethnicity\_new" currently has 457 categories. To further reduce the categories, we are proposing to create another new race/ethnic variable. The variable is named "race new pacific" and is created using the following protocols:

#### I. Single race group: some of the subgroups are combined. This includes the following singe race groups:

- a. Among Asian only (3 groups: Filipino, Asian-East and Asian-other):
  - i. FILIPINO: This category will include Filipino only ethnic group.
  - ii. EAST-ASIAN: including Chinese, Japanese, Korean alone or mixed within those 3 ethnic groups;
  - iii. ASIAN-OTHER: All other single Asian ethnic group or mix within those groups
- b. Among NHPI only (9 groups based on CHL participating jurisdiction main ethnic groups):
  - i. CHAMORRO, CAROLINIAN, CHUUKESE, KOSRAEAN, MARSHALLESE, NATIVE HAWAIIAN, PALAUAN, POHNPEIAN, SAMOAN, YAPESE, and NHPI-OTHER (all other single subgroups of NHPI, e.g., KIRIBATI, TOKELAUN, TONGAN, TAHITIAN, etc.)

- c. Among AIAN only: Due to the small number of sample size, all AIAN sub-ethnic groups are combined into one category as "AIAN". They may be consisted of a single AIAN ethnic group or a mix of more than one AIAN ethnic group.
- d. Black only;
- e. White only;
- f. A new category is created and named in the following format "MIX\_WITHIN\_NHPI-PRIORITY ETHNIC GROUP". Due to sample size, this category is only created for NHPI ethnic groups as sample sizes for other race groups are small. The choice of the priority ethnic group is based first on the main ethnic group of interest that particular jurisdiction where the data is from; If for a jurisdiction where there are more than one priority ethnic groups, then priority is given to the ethnic group which has the largest frequency counts, e.g., Guam has two ethnic groups of interest: Chamorro and Chuukese. The followings are some examples:
  - i. If a child is under category "NHPI-CHUUKESE \_NHPI-OTHER" and the data is from Chuuk, we will then treat this as "MIX WITHIN NHPI-CHUUKESE";
  - ii. If a child is under "NHPI-CHAMORRO\_NHPI-CHUUKESE\_NHPI-PALAUAN" and data is from Hawaii, then we will use the frequency counts rule to set the order of priority. Highest priority will be given to those with the most frequency counts.
- II. More than one race group: for those with two or more race groups, or currently under the category of "More than one race" of the variable "race new omb".
  - a. New categories will be given in the format of "MIX\_PRIRORITY ETHNIC GROUP". Priority is giving use the combination of the following two methods: (1) interesting study ethnic groups depending on the source of data (Jurisdiction) and (2) frequency counts of each of these ethnic groups if there are more than one ethnic groups. Interesting study ethnic groups for each of the participating jurisdiction are listed as the following:
    - i. Palau: Palauan;
    - ii. Yap: Yapese;

iii. Guam: Chamorro, Chuukese iv. CNMI: Chamorro, Carolinian

v. Chuuk: Chuukese
vi. Pohnpei: Pohnpeian
vii. Kosrae: Kosraean
viii. RMI: Marshallese
ix. Am. Samoa: Samoan

x. Hawaii: Native Hawaiian

xi. Alaska: AIAN

- b. In general, the order of priority are as the following:
  - i. NHPI>AIAN>Filipino>Asian-east>Asian-other>Black>White for all jurisdictions except for Alaska;
  - ii. AIAN>NHPI> Filipino>Asian-east>Asian-other>Black>White for Alaska;
- c. In some jurisdictions, like Guam and CNMI, there are more than one ethnic groups of study interesting. Under those cases, the priority is given based on frequency counts. The priority order for those three jurisdictions are:
  - i. For Guam: Chamorro>Chuukese>other Pls(order depends on frequency counts)>AIAN>Filipino>Asian-east>Asian-other>Black>White;
  - ii. For CNMI method one: This method follows the general CHL protocol where the top two priority ethnic groups are Chamorro and then Carolinian with the following order: Chamorro>Carolinian>Chuukese>Other PIs (order depends on frequency counts)>AIAN>Filipino>Asian East>Other PIs>Other Asians>Black>White;
  - iii. For CNMI method two: in this method, Carolinians are given the highest priority. If a child is of Carolinian mix with any other ethnic groups, e.g., Chamorro, then she/he is assigned as Carolinian, even though counts of Chamorro are higher than Carolinian. In this method, a new variable, "race\_new\_pacific\_cnmi" is created. For CNMI specific reports, this variable can be used instead.

Priority order under this method for CNMI is: Carolinian>Chamorro> Chuukese>Other PIs (order depends on frequency counts)>AIAN>Filipino>Asian East>Other PIs>Other Asians> Black>White;

- III. The variable "race\_new\_pacific" currently has a total of 43 categories. The distribution of this variable by jurisdiction is presented in the attached excel file. This variable can then be used to create new race variable(s) depending on the needs of individual study or research questions. For example, for the manuscript on obesity prevalence in the pacific region, we are planning to create a new variable which will combine any mix groups into that main ethnic groups, e.g., Mix\_chuukese will be combined with Chuukese, mix\_Hawaiian will be combined with Hawaiian, etc. In this way, there will be no mixed group. We can also think of create a new category as Mixed, which combine all those different mixed groups into one.
- IV. Hispanic. Whether the child is of Hispanic origin is not considered in the creation of new race/ethnicity variables. One of the key reason in doing this is that Hispanic is not one of the focus study group we intended. Nevertheless, there variable "hispanic" (coded 1=yes and 0=no) are there in the data set. In addition, currently there are 27 children indicated they are of Hispanic origin but did not indicate any race/ethnic group among our study participants. If in the future, someone is interested in study Hispanic in the Pacific, he/she can use those available variables to create new ones to address his/her research needs.

Table 7: Created and Calculated Variables from Form 23-02

\* Those new variables are also created for FAS prevalence study;

Created and Calculated Variables from

Demographic and Other Variables from
Information About Your Child And Household: Form 23-02

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes			
	New Race/ethnicity variables: Please refer to the section, "Proposed methods for creating a new race_ethnicity variable", on the description of how those new variables are created							
				created in order to capture or reflect a study participant's race/ethnic composition. This variable is currently in the format of "RACE1-SUBCATEGORIES_RACE 2-SUBCATEGORIES" in alphabetic order, e.g.,  "ASIAN-CHINESE_ASIAN-FILIPINO_ASIAN-INDIAN_ASIAN-JAPANESE_ASIAN-THAI_NHPI-CHAMORRO".	exploring race/ethnic e_new_pacific_CNMI" can be			
Race_new_omb	Child's race following guidelines of US Office of Management and Budget (OMB) Definition	Character	30	One of the following 6 categories: AIAN (American Indian and Alaska Native), Asian, Black, NHPI (Native Hawaiian and Other Pacific Islanders), White, and More than one race.	http://wonder.cdc.gov/wonder/help/populations/bridged-race/Directive15.html.			

# Created and Calculated Variables from Demographic and Other Variables from Information About Your Child And Household: Form 23-02

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
race_new_pacific	race_new_pacific	Character	250	Please refer to the section, "Proposed methods for creating a new race_ethnicity variable" for more details on how this variable is created.	
race_new_pacific_c nmi	race_new_pacific_ cnmi	Character	250	Please refer to the section, "Proposed methods for creating a new race_ethnicity variable" for more details on how this variable is created	

The following variables were cleaned and should be used in the creation of new race/ethnicity related variables or in data analysis of any purposes

aian_new	aian_new	Character	1	
aian_athabascan_ne		Character	1	
W	new			

# Created and Calculated Variables from Demographic and Other Variables from Information About Your Child And Household: Form 23-02

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
aian_cupik_new	aian_cupik_new	Character	1		
aian_inupiaq_new	aian_inupiaq_new	Character	1		
aian_siberian_new	aian_siberian_new	Character	1		
aian_yupik_new	aian_yupik_new	Character	1		
asian_cambodian_n ew	asian_cambodian _new	Character	1		
asian_chinese_new	asian_chinese_ne w	Character	1		
asian_descr_new	asian_descr_new	Character	30		
asian_filipino_new	asian_filipino_new	Character	1		
asian_indian_new	asian_indian_new	Character	1		
asian_japanese_ne w	asian_japanese_n ew	Character	1		
asian_korean_new	asian_korean_ne w	Character	1		
asian_malaysian_ne w	asian_malaysian_ new	Character	1		
asian_other_new	asian_other_new	Character	1		
asian_pakistani_new	asian_pakistani_n ew	Character	1		
asian_thai_new	asian_thai_new	Character	1		

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
asian_vietnamese_n ew	asian_vietnamese _new	Character	1		
ASIAN_OTHER	If your child is Asian, do you most identify him/her with other Asian group?	Character	1	0=No 1=Yes	Only for those select 1=Yes for variable <i>ASIAN</i>
ASIAN_ DESCR	Other ethnic/tribal groups of Asian	Character	30		Only for those identify the child as "Other" for variable ASIAN
black_new	black_new	Character	1		
hispanic_new	hispanic_new	Character	1		
nhpi_new	nhpi_new	Character	1		
nhpi_carolinian_new	nhpi_carolinian_n ew	Character	1		
nhpi_chamorro_new	nhpi_chamorro_ne w	Character	1		
nhpi_chamorro_des cr_new	nhpi_chamorro_de scr_new	Character	30		24month data set does not have this variable
nhpi_chuukese_new	nhpi_chuukese_n ew	Character	1		
nhpi_chuukese_des cr_new	nhpi_chuukese_d escr_new	Character	30		24month data set does not have this variable

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
nhpi_descr_new	nhpi_descr_new	Character	30		
nhpi_kiribati_new	nhpi_kiribati_new	Character	1		
nhpi_kosraean_new	nhpi_kosraean_ne w	Character	1		
nhpi_marshallese_n ew	nhpi_marshallese _new	Character	1		
nhpi_nativehawaiian _new	nhpi_nativehawaii an_new	Character	1		
nhpi_other_new	nhpi_other_new	Character	1		
nhpi_palauan_new	nhpi_palauan_ne w	Character	1		
nhpi_pohnpeian_de scr_new	nhpi_pohnpeian_d escr_new	Character	30		24month data set does not have this variable
nhpi_samoan_new	nhpi_samoan_ne w	Character	1		
nhpi_tahitian_new	nhpi_tahitian_new	Character	1		
nhpi_tokelaun_new	nhpi_tokelaun_ne w	Character	1		
nhpi_tongan_new	nhpi_tongan_new	Character	1		
nhpi_yapese_new	nhpi_yapese_new	Character	1		
nhpi_yapese_descr_	nhpi_yapese_desc	Character	30		24month data set does not

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
new	r_new				have this variable
white_new	white_new	Character	1		
Other created ne baseline and 24-		ere created	for both F	AS prevalence study and ir	ntervention jurisdictions
DOB_NEW	Date of birth of the child	Date/Time	8	Format of MMDDYY10.	
SEX_NEW	Sex of the child	Numeric	8	1=Male; 2=Female	
SLEEP_NEW	How many hours of sleep on average does your child get in a 24-hour period (at night and in naps)	Numeric	8	Taking values of 0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, 12, 12.5, 13, 1.35; Maximum value is 13.5;	
SLEEP3	Child sleep time in 3 categories	Numeric	8	Three categories:  • 1=less than 8 hours;  • 2=8 hours or more but less than 11 hours;  • 3=between 11 to 13 hours;	
sleep2yrs	Total hours of	Num	8	1='less than 9 hours'	

Variable Name	Variable	Data Type	Length	Response Options /	Notes
	Description			Codes	
	sleep among two years old in three groups			2='9 to less than 11 hours' 3='11 hours or more';	
meeting2yrs_sleep	Does the two- year old child meet national recommendation of sleep during of at least 11 hours a day?	Num	8	1=yes; 0=no;	
sleep3t5yrs	Total hours of sleep among three to five years old in three groups	Num	8	1='less than 8 hours' 2='8 to less than 10 hours' 3='10 hours or more';	
meeting3t5yrs_sleep	Does the three to five-year old child meet national recommendation of sleep during of at least 10 hours a day?	Num	8	1=yes; 0=no;	
sleep6t8yrs	Total sleep time in hours among six to eight years old in three groups	Num	8	1='less than 7 hours' 2='7 to less than 9 hours' 3= '9 hours and more'	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
meeting6t8yrs_sleep	Does the six to eight-year old child meet national recommendation of sleep during of at least 9 hours a day?	Num	8	1=yes; 0=no;	
sleep6t10yrs	Total sleep time in hours among six to ten years old in three groups	Num	8	1='less than 7 hours' 2='7 to less than 9 hours' 3= '9 and more'	For 24month data set only
meeting6t10yrs_slee p	Does the six to ten-year old child meet national recommendation of sleep during of at least 9 hours a day?	Num	8		For 24month data set only

The following variables were created for intervention jurisdictions baseline data set and FAS prevalence data set only for the purpose of the comprehensive community reports; Hence, 24 month data set does not have any of those variables created yet

AGE_BASELINE_N EW	Child age at the interview (both baseline and 24-	Numeric	This variable was further cleaned after correction of child's date of birth, or date	
	month)		of anthropotry assessment	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
				or date of collection of the demo form when date of anthropometry is not available	
RELATION_DEMO_ NEW	What is your relationship to this child?	Numeric	8	1='Biological mom'; 2='step mom' 3='adoptive mom' 4='birth dad' 5='step dad' 6='adoptive dad' 7='Legal guardian, caregive,other' 8='grandmother' 10='grandfather' 18='grandparents'; 23='step mom and adoptive mom' 25='step mom or step dad' 36='adoptive mom or adoptive dad' 56='step dad and adoptive dad'	Not yet cleaned for 24 month data set;
REL_OTHER_NEW	What is your relationship to this child: Legal Guardian,	Character	40	Further cleaned from variable "REL_OTHER"	Not yet cleaned for 24 month data set;

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	Caregiver, Other				
MARITAL_NEW	Respondent current marital status	Character	1	1=Married 2=Divorced 3=Separated 4=Widowed 5=Single and not living with boyfriend, girlfriend, or partner 6=Single and living with boyfriend, girlfriend, partner 7 =Other	Not for 24month yet
MARI_OTHER_NE W	Respondent current marital status-Other	Char	40		
COUNT_MOTHER_ NEW	Number of person who currently lives in the child's household -Mother	Num	8		
COUNT_FATHER_ NEW	Number of person who currently lives in the child's household -Father	Num	8		
COUNT_BROTHER	Number of person	Num	8		

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
_NEW	who currently lives in the child's household - Brother				
COUNT_SISTER_N EW	Number of person who currently lives in the child's household- Sister	Num	8		
COUNT_GRANDMA _NEW	Number of person who currently lives in the child's household - Grandmother	Num	8		
COUNT_GRANDPA _NEW	Number of person who currently lives in the child's household - Grandfather	Num	8		
COUNT_AUNT_NE W	Number of person who currently lives in the child's household -Aunt	Num	8		
COUNT_UNCLE_N EW	Number of person who currently lives	Num	8		

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	in the child's household -Uncle				
COUNT_COUSIN_N EW	Number of person who currently lives in the child's household -Cousin	Num	8		
COUNT_FRIEND_N EW	Number of person who currently lives in the child's household –Friend	Num	8		
OTHEREL_NEW	People who currently lives in the child's household_Other relationship	Character	100	Further cleaned from variable "OTHERREL".	
COUNT_OTHEREL _NEW	Number of other persons who currently lives in the child's household	Num	8		
MULTIGENERATIO N	Do your household have multigeneration? (defined as having	Numeric	8	0=No; 1=Yes; * Based on information on counts of grandma,	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	more than two generations (parents and child)).			grandpa, greatgrandma, greatgrandpa, grandaunt, granduncle or great grandaunt, great granduncle, etc.	
COUNT_CHILD	Total number of children living in your household	Numeric	8	Based on answers from question 4 "Please tell us about other children (for example: siblings, cousins, friends) who live with your child on a regular basis". The minimum number should be one and the maximum number will be 11.	
EDUCATION_NEW	Respondent's education level in two categories	Numeric	8	1= Never attended school or only attended kindergarten 2= Grades 1 up to 8 (Elementary to Middle school) 3= Grades 9 up to 11 (Some high school) 4= Grade 12 or GED (High School Graduate)	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
				5= College or technical school 1 year to 3 years 6= College 4 years or more	
EDUCATION2	Respondent's education level in two categories	Numeric	8	1=higher school or lower; 2=some college or higher;	
EDUCATION3	Respondent's education in years	Numeric	8	Taking only values of 0.5, 4.5, 10, 12, 14, and 16 in years	
INCOME_NEW	Annual household income from all sources over the past 12 months	Numeric	8	1= Under \$10,000 (From \$5,000 to less than \$10,000 for FAS jurisdictions) 2= From \$10,000 to less than \$20,000 3= From \$20,000 to less than \$35,000 4= From \$35,000 to less than \$60,000 5= From \$60,000 to less than \$75,000 6= \$75,000 and more 11=Under \$2,500 (For FAS jurisdictions only);	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
				12=From \$2,500 to less than \$5000 (for FAS jurisdictions only);	
INCOME2	Annual household income from all sources over the past 12 months in 2 categories	Numeric	8	1=less than \$35,000; 2=\$35,000 or more;	
INCOME3	Annual household income from all sources over the past 12 months in dollars	Numeric	8	Taking only values of 1250, 3750, 7500, 15000, 27500, 47500, 67500, 75000;	
UNEMPLOY	Are you(the respondent) currently unemployed	Numeric	8	0=No; 1=Yes; Based on answers to the following 2 choices: Out of work for more than 1 year; out of work for less than 1 year. If someone chooses either one of those, he/she is then treated as unemployed; If neither one is chosen, then "No"	
LANGUAGE_	What language(s)	Character	50	After correction of spelling	This variable may need further

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
NEW	does your child speak?			errors and combination of various ways of spelling of the same language.	cleaning based on the needs of specific research questions.
LANGUAGE_ HOME_NEW	What language does your child most often speak at home?	Character	50	After correction of spelling errors and combination of various ways of spelling for the same language.	This variable may need further cleaning based on the needs of specific research questions.
LANGUAGEOVER1 _ HOME	Does your child speak more than one language based on language spoken at home?	Character	40	Based on the combinations of language(s) a child speaks most often at home (LANGUAGE_HOME_NEW) and languages a child speaks. There are four categories created:  • English only;  • English and one or more other languages;  • One language other than English;  • Two or more languages other than English	This variable may need further working based on the needs of specific research questions.

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
BIRTH_PLACE_NE W	In what city or country was your child born?	Char	20		Further cleaned from original variable "BIRTH_PLACE"
LIVED_YRS_NEW	How many years has your child lived here?	Num	8		
LIVEDHERE_PERC ENT	percent of child life living in this community (1=lived here whole life)	Num	8		Calculated as the ratio of years a child lived in the community over child's age
RELIGION_NEW	Religion in 14 categories	Numeric	8	1='Baptist' 2='Buddist' 3='Catholic' 4='Episcopalian' 5='Evangelical Covenant' 6='Mormon' 7='Moravian' 8='Muslim' 9='Pentecostal' 10='Protestant' 11='Russian Orthodox' 12='Other' 13='None' 14='Other_Christian'	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
				77='no response' 99='Missing';	
RELIGION_ OTHER_NEW	Other types of religious affiliation	Character	50	Further cleaned from variable "religion_other" so that there are less categories	Only for those answered "other" for variable RELIGION
RELIGION2GRP	Do you have any relgions affiliation?	Num	8	1=yes; 0=no	
BRUSH_TEETH_NE W	How often does your child brush his/her teeth?	Num	8	1='More than once per day' 2='Once per day' 3='Once per week' 4='Once per year' 5='Never';	
DENTAL_CARE_NE W	Did your child see a dentish in the past 12 months?	Num	8	1=yes; 0=no	
DIAGNOSIS1_NEW	Does your child has a medical conditions diagnosed by a doctor?	Char	100	1=yes; 0=no	
DIAGNOSIS2_NEW	If yes, what is the medical conditions diagnosed by a	Char	100		

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	doctor?				
ASTHMA_NEW	Has a doctor of nurse ever told you that the child has asthma?	Num	8	1=yes; 0=no	
ASSISFOODTYPE	What type of assistance did you receive to pay for food in the past 12 months?	Char	30	In four categories: noassis; other; wiconly; wic/other	
MONEY_FOOD_NE W	In the past 12 months, how often does your money for food run out before the end of the month?	Num	8	0='Never' 1='Seldom' 2='Sometimes' 3='Most time' 4='Always';	
MONEY_UTILITY_N EW	In the past 12 months, how often does your money for household utilities (e.g., water, fuel oil, or electricity) run out before the end of the month?	Num	8	0='Never' 1='Seldom' 2='Sometimes' 3='Most time' 4='Always';	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
MONEY_FOOD_ SOMEMOSTALWA YS	In the past 12 months, does money for food runs out at least sometimes (or most times, always) in your household?	Num	8	1=yes; 0=no	
MONEY_UTILITY_S OMEMOSTALWAY S	In the past 12 months, does money for household utilities runs out at least sometimes (or most times, always) in your household?	Num	8	1=yes; 0=no	
ASSISFOOD_NEW	In the past 12 months, do you receive assistance to pay for food?	Num	8	1=yes; 0=no	
EBT_SNAP_NEW	If yes, dis you receive EBT/SNAP/NAP (formerly called	Num	8	1=yes; 0=no	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	Food Stamps)?				
FOODASSI_NEW	If yes, did you receive food assistance (Food Bank/Food Pantries or Commodity foods)?	Num	8	1=yes; 0=no	
WIC_NEW	If yes, did you receive WIC benefits?	Num	8	1=yes; 0=no	
FREEMEAL_NEW	If yes, did you receive free or reduced-cost breastfast or lunches at school?	Num	8	1=yes; 0=no	

Variables related to early life. Those variables are created for baseline data sets for intervention jurisdictions and FAS jurisdictions only for the purpose of first round comprehensive community reports. Those variables are not created for the 24month data set.

BIRTHWT_LB_NEW	Child's birth weight, pounds	Num	8	
BIRTHWT_OZ_NE W	Child's birth weight, ounces	Num	8	
BIRTHWT_KG_NE	Child's birth	Num	8	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
W	weight, kilograms				
BIRTHWT_NEW_P OUND	Child's birth weight in pounds	Num	8		Calculated based on available answers from the above three variables
BIRTHWT_NEW_K G	Child's birth weight in kilograms	Num	8		Calculated the same way as variable "BIRTHWT_NEW_POUND" but in the unit of kilograms
BIRTHWT3GRP	Child's birth weight in 3 groups	Char	50	Three categories: Healthy birth weight(2500g-4000g); High birth weight (>4000g); low birth weight(<2500g)	
BIRTHHT_IN_NEW	Child's birth length, inches	Num	8		
BIRTHHT_CM_NE W	Child's birth length, centimeter	Num	8		
BIRTHLENGTH_NE W_INCH	Child's birth length in inches	Num	8		Calculated based on available answers of variables "BIRTHHT_IN_NEW" and "BIRTHHT_CM_NEW"
BIRTHLENGTH_NE	Child's birth length	Num	8		

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
W_CM	in centimeters				
BIRTHLENGTH_NE W_ METER	Child's birth length in meters	Num	8		
BIRTHLENGTH_BE LOW5	Is the child's birth length below 5th percentile, using CDC 2000 reference data	Num	8	1=yes; 0=no	If a child's birth length is less than 45.572 cm, then it is defined as below 5 <sup>th</sup> percentile using CDC 2000 reference data
BIRTHBMI	Child's BMI at birth	Num	8		Calculated as the ratio of child's birth weight in kilograms over the square of child's birth length in meters
BREASTFED_NEW	Was the child ever breastfed or fed breastmilk?	Num	8	1=Yes; 0=No;	
AGE_WEAN_NEW	Age in months of child when stopped breastfeeding (among those who ever breast fed)	Num	8		
AGE_STILLBREAS TFED	Age in month of the child if she/he	Num	8		

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	is still breast fed at the time of interview				
FORMULA_NEW	Was the child ever fed formula?	Num	8	1=Yes; 0=No;	
FIRST_FORMULA_ NEW	Age in months of child when started formula feeding	Num	8		
LAST_FORMULA_N EW	Age in months of child when stopped formula feeding	Num	8		
AGE_STILLFORMU LAFED	Age in month of the child if she/he is still formula fed at the time of interview	Num	8		
AGE_OTHERFED_ NEW	Age in month of child when fed anything other than breast milk or formula	Num	8		

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes

The following variables of child early life was created for the paper on stunting and obese; They were created for only interevention juridictions baseline data set and FAS prevalence data set; The 24 month data set does not have those variables created. The variables were created using the CDC's SAS program for the WHO Growth Charts for ages 0 to <2 years. The sas program can be found at:

http://www.cdc.gov/nccdphp/dnpao/growthcharts/resources/sas-who.htm

AGEINDAYS_DAY1	child age in days at day 1	Num	8	All were set to 1	
HAZ_DAY1	height-for_age Z at day 1	Num	8		
HAPCT_DAY1	height-for-age percentile at day 1	Num	8		
WAZ_DAY1	weight-for-age percentile at day 1	Num	8		
WAPCT_DAY1	weight-for-age percentile at day 1	Num	8		
WHZ_DAY1	weight-for-height Z at day 1	Num	8		

The following variables are created for FAS prevalence data sets only during the process of producing the comprehensive community reports; No such variables can be found in the intervention jurisdictions baseline data sets or 24month data sets

TOBACCO_NEW	Aside from adding	Num	8	1=yes; 0=No
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Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	tobacco to a betel quid, do you now use any tobacco products (smoking cigarettes, cigars or pipes, chewing smokless tobacco)?				
TOBACCO_COUNT _NEW	(Among those who used tobacco) how many sticks/pipes do you smoke daily?	Num	8		
TOBACCO_OTHER _USERS_ NEW	Are there any other household members who used tobacco?	Num	8	1=yes; 0=no	
TOBACCO_OTHER _COUNT_ NEW	If yes, howm any household members use any of these tobacco products?	Num	8		
SMOKELESS_TOB ACCO_FREQ_NEW	If yes to chewing smokeless	Num	8	1='Everday' 2='Some days';	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	tobacco, how often do you chew smokeless tobacco?				
CHEWED_EVER_N EW	Ever Chewed Betel nut?	Num	8	1=yes; 0=no	
CHEWED_NOW_N EW	Do you now chew betel nut?	Num	8	1=yes; 0=no	
CHEW_FREQ_NEW	How often do you chew betel nuts?	Char	8	1='daily' 2='weekly' 3='monthly';	
CHEW6GRP	How long have you been chewing betel nut?	Num	8	1='less than 1 year' 2='1-3 years' 3='4-7 years' 4='8-10 years' 5='11-13 years' 6='14 and more'	
CHEW_YEARS_NE W	How long (in years) have you been chewing betel nut?	Num	8		
CHEW_MONTHS_N EW	How long (in months) have you been chewing betel nut?	Num	8		

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
WITH_TOBACCO_ NEW	When chewing betel nut do you include tobacco?	Num	8	1=yes; 0=no	
WITH_LIME_NEW	When chewing betel nut do you include lime?	Num	8	1=yes; 0=no	
WITH_BETEL_LEA F_NEW	When chewing betel nut do you include Betel leaf?	Num	8	1=yes; 0=no	
WITH_ALCOHOL_N EW	When chewing betel nut do you include alcohol?	Num	8	1=yes; 0=no	
BETEL_OTHER_US ERS_NEW	Are there other members in your household who chew betwel nut?	Num	8	1=yes; 0=no	
BETEL_OTHERS_C OUNT_ NEW	If yes, how many household members chew betel nut?	Num	8		

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
ALCOHOL_NEW	Did you drink alcohol within the past 30 days?	Num	8	1=yes; 0=no	
CAN_BEER_COUN T_NEW	During the past 30 days, on the days when you drank, about how many drinks did you drink?—Cans of beer	Num	8		
WINE_COUNT_NE W	During the past 30 days, on the days when you drank, about how many drinks did you drink?— glasses of wine	Num	8		
BOTTLE_BEER_CO UNT_NEW	During the past 30 days, on the days when you drank, about how many drinks did you drink?— Bottoles of beer	Num	8		
LIQUOR_COUNT_N	During the past	Num	8		

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
EW	30 days, on the days when you drank, about how many drinks did you drink?—shots of liquor				
MIXED_DRINKS_C OUNT_ NEW	During the past 30 days, on the days when you drank, about how many drinks did you drink?— Glasses of mixed drinks	Num	8		
TUBA_COUNT_NE W	During the past 30 days, on the days when you drank, about how many drinks did you drink?—Cups of tuba drink	Num	8		
KAVA_COUNT_NE W	During the past 30 days, on the days when you drank, about how	Num	8		

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	many drinks did you drink?—Cups of kava				
YEAST_COUNT_N EW	During the past 30 days, on the days when you drank, about how many drinks did you drink?—cups of fermented yeast	Num	8		
TOTAL_DRINK	Total numbers of drinks, including cans of beer, bottles of beer, galsses of wine, shots of liquor, glasses of mixed drinks, cups of kava, cups of tuba drink, and cups of fermented yeast, during the past 30 days	Num	8		
ALCOHOL_OTHER S_COUNT_NEW	Are there other members in your	Num	8		

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	household who drank alcohol within the past 30 days?				
ALCOHOL_OTHER _USERS_ NEW	If yes, howm any household members drank alcohol within the past 30 days?	Num	8		
CAN_BEER_3GRP	Among those that reported drinking can beer, number of drinks in 3 groups.	Num	8	1='1-2 drinks'; 2='3 to 4 drinks' 3='5 or more drinks';	
BOTTLE_BEER_3G RP	Among those that reported drinking bottle beer, number of drinks in 3 groups.	Num	8	1='1-2 drinks'; 2='3 to 4 drinks' 3='5 or more drinks';	
WINE_3GRP	Among those that reported drinking wine number of drinks in 3 groups.	Num	8	1='1-2 drinks'; 2='3 to 4 drinks' 3='5 or more drinks';	
LIQUOR_3GRP	Among those that	Num	8	1='1-2 drinks';	

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	reported drinking liquor number of drinks in 3 groups.			2='3 to 4 drinks' 3='5 or more drinks';	
MIXED_DRINK_3G RP	Among those that reported drinking mixed drinks number of drinks in 3 groups.,	Num	8	1='1-2 drinks'; 2='3 to 4 drinks' 3='5 or more drinks';	
YEAST_3GRP	Among those that reported drinking yeast drinks, number of drinks in 3 groups.	Num	8	1='1-2 drinks'; 2='3 to 4 drinks' 3='5 or more drinks';	
KAVA_3GRP	Among those that reported drinking kava, number of drinks in 3 groups.	Num	8	1='1-2 drinks'; 2='3 to 4 drinks' 3='5 or more drinks';	
TUBA_COUNT_NE W	Among those that reported drinking tuba, number of drinks in 3 groups.	Num	8	1='1-2 drinks'; 2='3 to 4 drinks' 3='5 or more drinks';	
TUBA_3GRP	Among those that reported drinking any alcohol, total	Num	8	1='1-2 drinks'; 2='3 to 4 drinks' 3='5 or more drinks';	

	Created and Calculated Variables from								
	Demographic and Other Variables from								
	Information About Your Child And Household: Form 23-02								
Variable Name	riable Name Variable Data Type Length Response Options / Notes  Codes								
	number of drinks in 3 groups.								
TOTAL_DRINK_3G RP	Among those that reported drinking any alcohol, total number of drinks in 3 groups.	Num	8	1='1-2 drinks'; 2='3 to 4 drinks' 3='5 or more drinks';					

#### **Child Anthropometry**

Weight, height, and waist circumference were measured by trained research staff based on standardized procedures and protocols (Lohman, Roche, & Martorell, 1988; Ikeda & Crawford, 2000; CDC, 2006). Child's height, weight, and waist circumference measurements were taken three times at each visit. The results were reviewed right away to ensure that two of the three readings were within 0.2 units of each other (e.g., 0.2 kg for weight). If not, another series of three measurements were taken. This protocol ensured good data quality. Trained CHL staff measured each child's height, weight and waist circumference, respectively using a portable scale, stadiometer, and tape measure. A trained second person recorded the results using the anthropometric recording sheet Form 59-01 and verified with the measurer that the written data were correct.

The Lohman, Roche, and Martorell (1988) Anthropometric Standardization Reference manual was also used in the form\* and protocol development. This manual also informed us in the development of a internally-prepared CHL manual based on current standard practice in the field -- CHL Participant Measurement Training Guide. This protocol ensured good data quality. The Anthropometry form was developed using the Procedure Manual of the National Health and Nutrition

Examination Survey (2002). The protocol for reading was adapted from the training module on technique to accurately weigh and measure infants, children and adolescents (Maternal and Child Health Bureau \*) as well as The University of California at Berkeley's (2000) *Guidelines for collecting heights and weights on children and adolescents in school settings*. ?\*

Zerfas informed our measurement standardization process. Zerfas criteria (\*1986) were used to standardize research staff against the height, weight, and waist measurement of a certified anthropometrist, the CHL Principal Investigator, Dr. Novotny. No research staff assessed children for a measure for which they did not pass the Zerfas criteria. Zerfas did not provide any waist circumference criterion; however, Zerfas' criteria for assessments measured in cm (mm) units (height and arm circumference) was applied to waist circumference.

Participants wore lightweight clothing and no shoes, and removed hair bands that added height. Height was measured to the nearest 0.1 cm using portable stadiometers (Perspective Enterprises, PE-AIM-101; Portage MI). Weight was measured to the nearest 0.1 kg using portable scales (Seca Model 876; Chino CA). Plastic tape (Seca Model 201; Chino CA) was used to measure waist circumference at the level of the umbilicus to the nearest 0.1 cm [Lohman et al., 1988). The parent/ caregiver often assisted to hold up the participant's shirt or by asking the child for permission to hold up their shirt.

Baseline and post-intervention period anthropometry allow us to measure progress toward our objective to decrease the prevalence of young child overweight and obesity by

5%. These measures were used to compute Body Mass Index (BMI) as weight (kg) / height (m)2, waist (cm) to height (cm) ratios, and subsequently BMI z-score, waist circumference z-score, BMI-for-age-percentiles, and waist circumference-for-age percentiles (Barlow, 2007; Cook, Auinger, & Huang, 2009).

CHL Protocol for data cleaning and data analysis for Anthropometry Data

The CHL protocol for anthropometry measurement states that each of the anthropometry components (height, weight, and waist circumference) must be taken 3 times regardless of the first 2 measurements being within 0.2 units (cm for height and waist and kg for weight). If no two of the 3 measures are within 0.2 units, the first 3 measures should be crossed out and the entire 3-measures process is repeated. The measurer should repeat the process until there were at least 2

measures within 0.2 units. The measurer was free to continue to obtain more than 3 measures if he/she believed that the first 3 measures were not consistent. A total of 9 variables were given to each of the 3 anthropometry components:

- For height, the 9 variables are:
   ht1 ht2 ht3 ht1\_v2 ht2\_v2 ht3\_v2 ht1\_v3 ht2\_v3 ht3\_v3;
- For weight, the 9 variables are:
   wt1 wt2 wt3 wt1\_v2 wt2\_v2 wt3\_v2 wt1\_v3 wt2\_v3 wt3\_v3;
- For waist circumference, the 9 variables are:
   waist1 waist2 waist3 waist1\_v2 waist2\_v2 waist3\_v2 waist1\_v3 waist2\_v3 waist3\_v3;

The suffix \_v2 stands for the second measurement cycle for the 3 measures for any component and the suffix \_v3 stands for the third measurement cycle for the 3 measures for any component when needed. Following this protocol, for each of the 3 anthropometry components, a child can have 3, or 6 or 9 measures, a number which is multiplied by 3 and the maximum total number of measure a component can have is 9.

In reality, CHL data revealed dozens of data patterns. For example, some study subjects had only 1 measure or 2 measures of one of those 3 components. When the measuring process needed to be repeated, it is not repeated accordingly to the protocol of 3 other measures per measurement component. As a result, there were study participants who had 4, or 5, or 7 or other numbers rather than a multiple of 3 measures for a measurement components.

The following data cleaning and data analysis protocols are set for the anthropometry data, in particular, for the calculation of BMI, BMI Z score, BMI percentile or other BMI-related variables, and waist-related variables (e.g., waist height ratio) for different case scenarios.

- For study participants with <u>no measure</u> of height, weight, or waist
   BMI and BMI-related variables, or waist circumference and waist-related variables will be set to missing.
- For study participant with <u>1 measure</u> of height, weight, and waist

The value of that single measure will be used as the value of that participant's height, weight, or waist circumference, respectively.

- For study participants with <u>2 or more measures</u> (usually up to 9 measures) of height, weight, and waist Mean value of all available measures of each of the 3 components will be used as the value of that component and be used in the later calculation of BMI, BMI-related variables, waist circumference and waist-related variables. The rationale of this decision is from the experience of anthropometric standardization where low variability in measures was found to lead to more biased results than measures with larger variability.
- In addition, to capture the number of measures each child has for the 3 components and whether among all available measures of any component, there are at least 2 measures within 0.2 units, the following variables are created:
  - validity\_ht, validity\_wt, validit\_waist. all those 3 variables are coded 1 for yes to reflect the fact that there are at least two measures within 0.2 units and coded 0 for no to reflect that fact that no two measures are within 0.2 units among all available measures. Those 3 variables can be used in the future to determine whether an analysis will use all available data or only those whose data is valid (at least 2 measures are within 0.2 units). They can be used in combination with the following variables, numbermeasures\_ht, numbermeasures\_wt, numbermeasures\_wt, numbermeasures\_wt, in future analysis for specific investigation.
  - o numbermeasures\_ht, numbermeasures\_wt, numbermeasures\_waist: to reflect the number of measures each child has for the 3 components. This variable can be used in the future to determine whether an analysis will include all data, or only data from children with certain number of measures (e.g., n=3). It can be used in combination with the above three variables (validity\_ht, validity\_wt, validit\_waist), in future analysis for specific investigation.

#### Calculation of BMI and BMI-related variables

Once the value of height and weight are determined for a participant, BMI and BMI-related variables are then calculated using CDC's SAS program which uses the 2000 CDC growth charts for ages 0 to <20 years (available at: <a href="http://www.cdc.gov/nccdphp/dnpao/growthcharts/resources/sas.htm">http://www.cdc.gov/nccdphp/dnpao/growthcharts/resources/sas.htm</a>).

For BMI-related variables, including BMIZ, BMI percentile to be calculated, the dataset must include the following variable with the same exact name and the given data format before to run this SAS program:

**AGEMOS:** child's age in months. This numeric variable may need to be calculated from the date of anthropometry measurement and the date of birth.

**SEX:** child's gender with 1 for male and 2 for female.

**HEIGHT:** child's recumbent length or standing height in centimeters. It is a numeric variable.

**RECUMBENT:** Indicator of child's height measurement with 1 for recumbent length and 0 for standing height. It is a numeric \* variable.

**WEIGHT:** Child's weight in kilograms. It is a numeric variable.

In some cases, study participants may miss information on one or more of those variables. As a result, the total number of study participants may be different from the total number of study participants with a calculated BMI, or other BMIrelated variables.

**Table 8: Anthropometry Variables, Form 59-01** 

Anthropometry Variables, Form 59-01										
Variable Name	Variable Description	Data Type	Lengt h	Response Options / Codes	Notes					
ID	CHL subject ID	Characte r	7							
DATE_ANTHR	Date of Interview/Measureme nt	Date	10		DATETIME20					
ACCELEROMETE R	Is the child wearing an accelerometer?	Characte r	3	0=No 1=Yes 999=Unknow n						
STADIOMETER										
HT1	First reading of child's height (in centimeter)	Characte	3	75 to 140 (Other values are allowed, once data enterer double checks the form)	Measurement unit is in centimeter.  The range posted here should not function as exclusion criteria. In contrast, it should act as a flag system, so that data enter will be reminded to double check the data. Data enter should still be able to enter a value less than 75 or larger than 140 into this field. The same rule follows for					

Anthropometry Variables, Form 59-01								
Variable Name	Variable Description	Data Type	Lengt h	Response Options / Codes	Notes			
					HT2 and HT3.			
HT2	Second reading of child's height (in centimeter) at baseline	Characte r	3	75 to 140	Measureme nt unit is in centimeter.			
HT3	Third reading of child's height (in centimeter) at baseline	Characte r	3	75 to 140	Measureme nt unit is in centimeter.			
WT1	First reading of child's weight (in kilogram) at baseline	Characte	3	9 to 40	Measureme nt unit is in kilograms  The range posted here should not function as an exclusion criteria. In contrast, it should act as a flag system, so that data enter will be reminded to double check the data. Data enter should still be able to enter a value less than 9 to large than 40 into this field. The same rule follows for HT2 and HT3.			
WT2	Second reading of child's weight (in	Characte r	3	9 to 40	Measureme nt unit is in			

Anthropometry Variables, Form 59-01								
Variable Name	Variable Description	Data Type	Lengt h	Response Options / Codes	Notes			
	kilogram) at baseline				kilograms.			
WT3	Third reading of child's weight (in kilogram) at baseline	Characte r	9	9 to 40	Measureme nt unit is in kilograms.			
WAIST1	First reading of child's waist circumstance (in centimeter)	Characte	3	40-69	Measureme nt unit is in centimeter.  The range posted here should not function as exclusion criteria. In contrast, it should act as a flag system, so that data enter will be reminded to double check the data. Data enter should still be able to enter a value less than 40 or larger than 69 into this field. The same rule follows for WAIST2 and WAIST3.			
WAIST2	Second reading of child's waist circumstance (in centimeter)	Characte r	3	40-69	Measureme nt unit is in centimeter.			
WAIST3	Third reading of child's waist circumstance (in	Characte r	3	40-69	Measureme nt unit is in centimeter.			

Anthropometry Variables, Form 59-01							
Variable Name	Variable Description	Data Type	Lengt h	Response Options / Codes	Notes		
	centimeter)						
COMM_HT1	Related comments on the first measure of height	Characte r	255				
COMM_HT2	Related comments on the second measure of height	Characte r	255				
COMM_HT3	Related comments on the third measure of height	Characte r	255				
COMM_WT1	Related comments on the first measure of weight	Characte r	255				
COMM_WT2	Related comments on the second measure of weight	Characte r	255				
COMM_WT3	Related comments on the third measure of weight	Characte r	255				
COMM_WAIST1	Related comments on the first measure of waist circumference	Characte r	255				
WT1_V3	First reading of child's weight (in kilogram) during the third measurement cycle at baseline	Characte r					
WT2_V3	Second reading of child's weight (in kilogram) during the third measurement cycle at baseline	Characte r					
WT3_V3	Third reading of child's weight (in kilogram) during the third measurement cycle at baseline	Characte r					
WAIST1_V3	First reading of child's waist circumstance (in centimeter) during	Characte r					

Anthropometry Variables, Form 59-01							
Variable Name	Variable Description	Data Type	Lengt h	Response Options / Codes	Notes		
	the third measurement cycle						
WAIST2_V3	Second reading of child's waist circumstance (in centimeter) during the third measurement cycle	Characte r					
WAIST3_V3	Third reading of child's waist circumstance (in centimeter) during the third measurement cycle	Characte r					
COMM_HT1_V3	Related comments on the first measure of height during the third measurement cycle	Characte r					
COMM_HT2_V3	Related comments on the second measure of height during the third measurement cycle	Characte r					
COMM_HT3_V3	Related comments on the third measure of height during the third measurement cycle	Characte r					
COMM_WT1_V3	Related comments on the first measure of weight during the third measurement cycle	Characte r					
COMM_WT2_V3	Related comments on the second measure of weight during the third measurement cycle	Characte r					
COMM_WT3_V3	Related comments on the third measure of weight during the third measurement cycle	Characte r					

Anthropometry Variables, Form 59-01									
Variable Name	Variable Description	Data Type	Lengt h	Response Options / Codes	Notes				
COMM_WAIST1_V 3	Related comments on the first measure of waist circumference during the third measurement cycle	Characte r							
COMM_WAIST2_V 3	Related comments on the second measure of waist circumference during the third measurement cycle	Characte r							
COMM_WAIST3_V 3	Related comments on the third measure of waist circumference during the third measurement cycle	Characte r							

Anthropometry form was slightly modified for CHL 24 month data collection. Three new fields were added to the form: scale number, stadiometer number and tape number. Table 9 listed those additional variables.

Table 9: Additional variables from Form 59-01 Anthropometry Measurements for CHL 24 measurement

Anthropometry Variables, Form 59-01									
Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes				
scale_no		Char	9						
stadiometer_no		Char	9		*in baseline and FAS jurisdictions, the variable is named "stadiometer".				
tape_no		Char	9						

Table 10: Created and Calculated Variables Anthropometry

Created and Calculated Variables									
	Anthropometry, Form 59-01								
Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes				

DOB_NEW	Date of Birth of the child *should be used in any data analysis				
DATE_ANTH R_NEW	Date when anthropometry is measured *should be used in any data analysis	Date/ Time	8	Format of MMDDYY10.	Taking only the date part of the original variable DATE_ANTHR
STADIOMET ER_No_NEW	Stadiometer number	Character	9		For some observations, data was corrected and any correction done was reflected in this new variable. The original variable "STADIOMETER" remained unchanged.
TAPE_NO_N EW	Tape number	Character	9		For 24 month data set only;
NUMBERME ASURES_ HT	The total number of measures of height	Numeric	8		
VALIDITY_HT	Whether there is at least 2 measures within 0.2 cm	Numeric	8	0=No 1=Yes	
AVG_HT	Mean value of height among all measures	Numeric			
NUMBERME ASURES_ WT	The total number of measures of weight	Numeric	8		
VALIDITY_W T	Whether there is at least 2 measures within 0.2 kg	Numeric	8	0=No 1=Yes	
AVG_WT	Mean value of weight among all measures	Numeric			
NUMBERME ASURES_ WAIST	The total number of measures of	Numeric	8		

	waist				
VALIDITY_W AIST	Whether there is at least 2 measures within 0.2 cm	Numeric	8	0=No 1=Yes	
AVG_WAIST	Mean value of waist among all measures	Numeric			
ANTHRO_CH _AGE	Child's age in years when anthropometry was measured	Numeric			Based on the difference in years between child's date of anthropometry measurement and date of birth
AGEMOS	Child's age in months when anthropometry was measured	Numeric			Based on the difference in months between child's date of anthropometry measurement(DA TE_ANTHR_NEW ) and date of birth(DOB_NEW)
ANTHR_AGE 2GRP	Child's age in two groups			The two categories:  • 2-5  • 6-8 (6-10 for 24 month data sets and the combined data set)	
ANTHR_AGE 7GRP	Child's age in single year age group			The seven categories:  age2 age3 age4 age5 age6 age6 age7	For 24month data sets and the combined data sets, this variable is called anthr_age9grp(ag e2, age3, age4, age10).
METHODS_H T	Methods used for height	Character	20	2 categories: Stadiometer	Rafter method was only used for a

	100 0 0 0 1 1 1 0 100 0 10 t			and Datter	total of 10 abildren
	measurement			and Rafter	total of 12 children
					from Kenai during baseline
					measurement in
The fellowine D	MAL and atlanta				Alaska
	BMI and other rel		s are caic	ulated based on	CDC 2000
	g the CDC's sas			, , ,	
	.gov/nccdphp/dn			sources/sas.htm	<u>]</u>
BMI		Numeric	8		
	weight-for-age Z	Numeric	8		
	weight-for-age percentile	Numeric	8		
	modified	Numeric	8		
_	weight-for-	1101110110			
	height Z				
	BIV weight-for-	Numeric	8		
_	age				
	BMI-for-age Z	Numeric	8		
BMIPCT	BMI-for-age	Numeric	8		
	percentile				
_FBMIZ	modified BMI-	Numeric	8		
	for-age Z				
_BIVBMI	BIV BMI-for-age	Numeric	8		
BMIPCT95	% of 95th BMI	Numeric	8		
	percentile				
	height-for-age Z	Numeric	8		
HAPCT	height-for-age	Numeric	8		
	percentile				
_BIVHT	BIV height-for-	Numeric	8		
	age				
	modified height-	Numeric	8		
	for-age Z				
	weight-for- height Z	Numeric	8		
	weight-for-	Numeric	8		
	height				
	percentile				
	BIV weight-for-	Numeric	8		
	height				
_	modified	Numeric	8		
	weight-for-				
	height Z				
	any low BIV	Numeric	8		
	any high BIV	Numeric	8		
BMI		Numeric	8		
	Bmi in 4	Character	1	4 categories:	* Underweight:
ORY	categories			1=underweight	bmi<5 percentile;

	using CDC 2000 reference			2=Overweight 3=Obese 4=Healthy weight	Healthy weight: 5% to 84% of bmi; Overweight: 85 to 94% percentile; Obese: >=95% bmi
OBESE	Is the child obese or not?	Num	8	1=yes; 0=no;	
OVERWT	Is the child overweight or not?	Num	8	1=yes; 0=no;	
UNDERWT	Is the child underweight or not?	Num	8	1=yes; 0=no;	
HEALTHYWT	Is the child of healthy weight or not?	Num	8	1=yes; 0=no;	
OWOB	Is the child overweight/obe se or not?	Num	8	1=yes; 0=no;	
WT_ANTHRO	Unadjusted weight calculated for each community/child	Num	8		calculated for sample weights
WT_ANTHRO _ADJ	Adjusted weight calculated for each community/child	Num	8		calculated for sample weights
JURISNUM	Jurisdiction code	Num	8		calculated for sample weights
COMMNUM	Commuity code	Num	8		calculated new variables from form 23-02 (DEMO)
ABDOMINAL _OBESITY_C HL	Using CHL data set as a reference data set	Num	8	1=yes; 0=no	cutoff value is >= 71.4667cm of mean waist circumference; *only calculated for intervention jurisdictions baseline data sets and FAS prevalence data sets;
ABDOMINAL	Using average	Num	8	1=yes; 0=no	Cutoff value is

_OBESITY_I	of values of		>=67.65cm of
DF	boys and girls		mean waist
	at 8 years old		circumference
	as reported by		* only calculated
	the IDF report		for intervention
			jurisdictions
			baseline data sets
			and FAS
			prevalence data
			sets;

### Diet of Children - Food and Activity Log -

\*In process - more to be added.\*

To collect information about food and beverage intakes of the children participating in CHL, the dietary record method was used. This method can be very useful when detailed information is recorded. The dietary record administered at time one for the intervention jurisdictions and at time one for the prevalence jurisdictions included collection of physical activity; thus, the tool was referred to as the "food and activity log" or FAL. The FAL was based on the Food and Physical Activity record used for Dr. Novotny's study Pacific Kids DASH for Health and the dietary records used in the dietary data collection conducted by Dr. Boushey as part of the CoASTAL cohort. Parents were asked to complete two days of food and activity logs (FAL) at baseline. These logs were used to estimate dietary intake over the two randomly assigned days. The information gathered in "real time" was used to measure progress toward the CHL objectives of increasing fruits and vegetables and water; and reducing sugar-sweetened beverages. From two 24-hour periods, the data will estimate foods and beverages and amounts each child consumes.

# Additional data collected in the FAL for Freely Associated States (FAS)

The FAL used for the FAS jurisdictions differed from the FAL used in the intervention jurisdictions study. Unique to the FALs used in the FAS with regard to data collection was the request to provide source information for all foods and water used as single items and as ingredients in prepared dishes. Examples of sources were provided in the FAL and shown below in Table 11. The FAL for the FAS jurisdictions included an additional portion size estimation aid for fish. Pictures of fish were included in the FAL representing three portion sizes by whole fish and cut pieces of fish. The additional aids

for estimating fish intake were provided due to the importance of fish in the diet among the FAS jurisdictions.

Table 11: Examples of Source of Food on FAL in FAS

Purchase	Communal/gift/donation	Local labor or self-
		labor
Supermarket	Food bank / food pantry	Fishing
Restaurant	Field trip	Hunting
Road side stand / stall	Church gathering	Home garden
Convenience store	Government assisted	Personal farm
Grocery store	Gift from friend/relative	Community garden
Farmers' market	USDA Commodities	Commercial farm
Lunch wagon / food wagon	Funeral	Ocean gathering
Fish markets	Traditional event	Animal husbandry
Merchant/Cargo		Specify: non-purchase

#### PacTrac3

The Pacific Tracker 3 (PacTac3) database and web application is a modification of the MyPyramid Tracker developed by the U.S. Department of Agriculture's (USDA) Center for Nutrition Policy and Promotion and the PacTrac2 modification by the UH Cancer Center and the Human Nutrition, Food and Animal Science (HNFAS) department (Murphy S, Blitz C, & Novotny R, 2006). PacTrac2 modified the MyPyramid Tracker for collection of dietary data in the Pacific islands. Two modifications had been made to the existing MyPyramid Tracker: 1. The addition of a function to save entered data and allow data to be accessed at a later date. 2. The addition of foods specific to the diets of the Pacific Islands' populations. PacTrac2 was modified for use in CHL and was designated as PacTrac3. This tool was used to input and analyse data collected from the food records.

Pac Trac 3 generates two data tables that can be used for data analysis. The "heh" table includes derived food groupings, energy, and nutrients based on information recorded on the Food and Activity Log (FAL) and entered by CHL staff into PacTrac3. The heh file has one or two record days along with the dates of each record day per CHL ID. The "hei" table contains the names of the foods and beverages recorded on the FAL by the parents or caretakers. There is one data row per food/beverage entered associated with the user ID, record date, record time, and other relevant variables. The University of Hawaii Cancer Center's Nutrition Support Shared Resource (NSSR) Food Composition Table (FCT) was used in PacTrac3.

Most participants have records over two days at – baseline and/or post-intervention period. The index d1 or d2 at the end of each variable indicates the record is for day 1 or day 2 of each visit. Variable *heh\_visit\_no* tells which visit the data were associated with.

Average 2 day Variables for Nutrients. If only data from a certain visit are needed, use variable *heh\_visit\_no* (values 1 to 2) to the particular visit number of interest.

Weighted Variables for Nutrients. If only data from a certain visit are needed, use variable *heh\_visit\_no* (values 1 to 2) to the particular visit number of interest.

The following variable tables from the FAL are from the UH Nutrition Support Shared Resource (NSSR).

### **Energy and Nutrients**

#### **Assessments**

This table contains the user's nutrients intake assessments. One record per user ID and record date.

FIELD	DATA TYPE	DESCRIPTION
userid	varchar(255)	user ID
rec_date (was entrydate)	varchar(20)	Record/recall date (MM/DD/YYYY) The date when the foods were consumed
aprot	int	Assessment for protein intake
acarb	int	Assessment for carbohydrate intake
afiber	int	Assessment for fiber intake
ao6	int	Assessment for omega-6 intake
ao3	int	Assessment for omega-3 intake
avita	int	Assessment for vitamin A intake
avitc	int	Assessment for vitamin C intake
avite	int	Assessment for vitamin E intake
athia	int	Assessment for thiamin intake
Aribo	int	Assessment for riboflavin intake
Ania	int	Assessment for niacin intake
afolate	int	Assessment for folate intake
ab6	int	Assessment for vitamin B6 intake
ab12	int	Assessment for vitamin B12 intake
Acalc	int	Assessment for calcium intake
aphos	int	Assessment for phosphorus intake
Amag	int	Assessment for magnesium intake

Airon	int	Assessment for iron intake
Azinc	int	Assessment for zinc intake
aselenium	int	Assessment for selenium intake
Apota	int	Assessment for potassium intake
asodium	int	Assessment for sodium intake

#### Assessment codes

0	Likely adequate
1	Should be higher
2	Cannot determine (intake is below recommendation, no assessment can be determined, or not enough confidence to determine your intake adequacy)
-1	N/A

userid	entrydate	aprot	acarb	afiber	ao6	ao3 7	avita	avito	avite	atl
20118291510	8/29/2011	1	1	2	2	2	1	1	1	1
20118414744	8/4/2011	0	0	2	2	2	1	1	1	1
test001	8/17/2011	1	1	2	2	2	1	1	1	1

# $R_RDA$

This lookup table contains *Estimated Average Requirement (EAR) and Recommended Daily Allowance (RDA)*. It contains 23 nutrient records per gender and age group.

FIELD	DATA TYPE	DESCRIPTION
gender	int	Gender: 0 – female, 1 – male
agecat	int	Age group
nutrient	int	Nutrient number
SDi	float	
SDr	int	

gender	agecat	nutrient	SDi	SDr
0	1	203	14.49	10
0	1	205	49.06	10
0	1	208	336.76	10
0	1	291	3.88	10
0	1	301	296.63	10
0	1	303	3.72	10
0	1	304	53.79	10
0	1	305	273.78	10
0	1	306	577.48	10
0	1	307	696.27	10
0	1	309	2.87	10
0	1	317	19.82	10
0	1	392	409.57	10
0	1	394	2.32	10
0	1	401	57.48	10
0	1	404	0.36	10
0	1	405	0.49	10
0	1	406	4.52	10
0	1	415	0.47	10
0	1	417	83.45	10
0	1	418	1.67	10
0	1	618	3.41	10
0	1	619	0.32	10
0	2	203	20.4	10
0	2	205	70.8	10
^		000	470	40

# EBH \* Energy Balance History

This table contains the users' energy balance, estimated energy requirement, calorie intake, and calories expended from physical activity over time (history). One record per user ID and record date.

FIELD	DATA TYPE	DESCRIPTION
userid	varchar(255)	User ID
rec_date (was entrydate)	varchar(20)	Record/recall date (MM/DD/YYYY)  The date when the foods were consumed and physical activities done
energybalance	int	Energy balance
eer	int	Estimated Energy Requirement
totalenergy	int	Total food energy / calorie intake
percenteer	int	Percent of calories from EER
percentpa	int	Percent of calories expended from physical activity

userid	entrydate	energybalance	eer	totalenergy	percenteer	percentpa
201182915107	8/29/2011	-1172	2166	994	0	0

### **New Nutrient Recommendation Analysis**

This lookup table contains the 2005 RDA recommendation values for Vitamin A, C, and B12 nutrients by gender and age group.

FIELD	DATA TYPE	DESCRIPTION
gender	int	Gender: 0 = female, 1 = male
agecat	int	Age groups: 1 to 8
nutrients	int	Nutrient numbers: 392, 401, 418
recommendation	float	New recommended amount

gender	agecat	nutrient	rec	commendation	
1	1	392	21	10	
1	1	401	13	3	
1	1	418	0.7	0.7	
1	2	392	27	275	
1	2	401	22		
1	2	418	1		
1	3	392	42	0	
1	3	401	39		
1	3	418	1.5		
1	4	392	48	5	
1	4	401	56		
1	4	418	2	_	
1	5	392	50	U	
1	5	401	60 2		
1	5 6	418 392	50	0	
1	6	401	60		
1	6	418	2		
1	7	392	50	n	
1	7	401	60		
1	7	418	2		
1	8	392	50	0	
1	8	401	60	-	
1	8	418	2	-	
gender	agecat	nutrient		recommendat	
gender	agocai	Hattierit		recommendat	
0	1	392		210	
_		_			
0	1	392		210	
0	1	392 401		210 13	
0 0	1 1 1	392 401 418		210 13 0.7	
0 0 0	1 1 1 2 2	392 401 418 392		210 13 0.7 275	
0 0 0 0	1 1 1 2 2 2	392 401 418 392 401		210 13 0.7 275 22	
0 0 0 0 0	1 1 1 2 2	392 401 418 392 401 418		210 13 0.7 275 22 1	
0 0 0 0 0 0	1 1 1 2 2 2 2 2 3 3	392 401 418 392 401 418 392		210 13 0.7 275 22 1 445 39	
0 0 0 0 0 0 0	1 1 1 2 2 2 2 3 3 3	392 401 418 392 401 418 392 401 418		210 13 0.7 275 22 1 445	
0 0 0 0 0 0 0 0 0	1 1 1 2 2 2 2 2 3 3	392 401 418 392 401 418 392 401		210 13 0.7 275 22 1 445 39 1.5 630	
0 0 0 0 0 0 0 0 0 0	1 1 1 2 2 2 2 3 3 3 3 4 4	392 401 418 392 401 418 392 401 418 392 401		210 13 0.7 275 22 1 445 39 1.5 630 63	
0 0 0 0 0 0 0 0 0 0	1 1 1 2 2 2 2 3 3 3 3 4 4	392 401 418 392 401 418 392 401 418 392 401 418		210 13 0.7 275 22 1 445 39 1.5 630 63 2	
0 0 0 0 0 0 0 0 0 0 0	1 1 1 2 2 2 2 3 3 3 3 4 4 4 4 5	392 401 418 392 401 418 392 401 418 392 401 418 392		210 13 0.7 275 22 1 445 39 1.5 630 63 2 625	
0 0 0 0 0 0 0 0 0 0 0 0	1 1 1 2 2 2 2 3 3 3 4 4 4 4 5 5	392 401 418 392 401 418 392 401 418 392 401 418 392 401		210 13 0.7 275 22 1 445 39 1.5 630 63 2 625 75	
0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 1 2 2 2 2 3 3 3 4 4 4 4 5 5	392 401 418 392 401 418 392 401 418 392 401 418 392 401 418		210 13 0.7 275 22 1 445 39 1.5 630 63 2 625 75 2	
0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 1 2 2 2 2 3 3 3 4 4 4 4 5 5 5 5	392 401 418 392 401 418 392 401 418 392 401 418 392 401 418 392		210 13 0.7 275 22 1 445 39 1.5 630 63 2 625 75 2 625	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 1 2 2 2 2 3 3 3 4 4 4 4 5 5 5 6 6	392 401 418 392 401 418 392 401 418 392 401 418 392 401 418 392 401		210 13 0.7 275 22 1 445 39 1.5 630 63 2 625 75 2	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 1 2 2 2 2 3 3 3 4 4 4 4 5 5 5 5 6 6	392 401 418 392 401 418 392 401 418 392 401 418 392 401 418 392 401 418		210 13 0.7 275 22 1 445 39 1.5 630 63 2 625 75 2 625 75 2	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 1 2 2 2 2 3 3 3 4 4 4 4 5 5 5 6 6 6	392 401 418 392 401 418 392 401 418 392 401 418 392 401 418 392 401 418 392		210 13 0.7 275 22 1 445 39 1.5 630 63 2 625 75 2 625 75 2	
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### **New Nutrient Recommendations**

This lookup table contains the 2005 RDA recommended values for nutrients by gender and age group.

FIELD	DATA TYPE	DESCRIPTION
gender	int	Gender: 0 = female, 1 = male
agecat	int	Age groups: 1 to 8
nutrients	int	Nutrient number
recommendation	float	New recommended amount

gender	agecat	nutrient	recommendation
0	1	203	13
0	1	204	0.3
0	1	291	19
0	1	301	500
0	1	303	7
0	1	304	80
0	1	305	460
0	1	306	3000
0	1	307	10001500
0	1	309	3
0	1	317	20
0	1	392	300
0	1	394	6
0	1	401	15
0	1	404	0.5
0	1	405	0.5
0	1	406	6
0	1	415	0.5
0	1	417	150
0	1	418	0.9
0	1	618	7
0	1	619	0.7
0	1	2040	0.4
0	2	203	19
0	2	204	0.25
0	2	291	25
n	2	201	onn

# ped

This lookup table contains pyramid food groups information. There are 33 pyramid food groups per food.

FIELD	DATA TYPE	DESCRIPTION
survey_food_code	int	Food code
pyramidID	int	Pyramid nutrient ID  101, 102, 103, 104, 105, 106, 107, 108 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120 121, 122, 123, 124, 125, 126, 127, 128, 129, 130 200, 300, and 400
serving_value	float	Serving value

Survey_Food_Code	PyramidID	Serving_Value
100010	101	0
100010	102	0
100010	104	0
100010	105	0
100010	106	0
100010	107	0
100010	108	0.016
100010	109	0
100010	110	0.016
100010	111	0
100010	112	0
100010	113	0
100010	114	0
100010	116	0
100010	117	0
100010	118	3.274
100010	119	0
100010	120	0
100010	121	0
100010	122	0
100010	123	0
100010	124	0
100010	125	0
100010	126	0
100010	127	0
100010	128	0
100010	129	0
100010	130	0
100010	200	0
100010	300	2.854
100011	101	0
100011	102	0
100011	104	0
100011	105	0
100011	106	0
100011	107	0
100011	108	0
100011	109	0

# **Recommended Servings**

This table includes recommended servings and allowances by gender and age group

FIELD	DATA TYPE	DESCRIPTION
Age	nvarchar(50)	Age groups
Gender	nvarchar(50)	Gender: Male or Female
Energy	real	Recommended calorie intake
Grains	real	Recommended servings
Vegetables	real	Recommended servings
Fruits	real	Recommended servings
Milk	real	Recommended servings
Meat	real	Recommended servings
Thiamin	real	Recommended Dietary Allowance
Riboflavin	real	Recommended Dietary Allowance
Niacin	real	Recommended Dietary Allowance
Vitamin_B6	real	Recommended Dietary Allowance
Vitamin_B12	real	Recommended Dietary Allowance
Vitamin_E	real	Recommended Dietary Allowance
Phosporous	real	Recommended Dietary Allowance

Age	Gender	Energy	Grains	Vegetables	Fruits	Milk	Meat	Thiamin	Riboflavin	Niacin	Vitamin_B6	Vitamin_B12	Vitamin_E	Phosphorus
11-24	Female	2200	9	4	3	3	2.4	1	1	14	1.2	2.3	8	1020
1-3	Female	1300	4	3	1.34	2	1.34	0.5	0.5	6	0.5	0.9	6	460
25-50	Female	2200	9	4	3	2	2.4	1.1	1.1	14	1.3	2.4	15	700
4-6	Female	1800	7	3.3	2.3	2	2.1	0.6	0.6	8	0.6	1.2	7	500
51+	Female	1900	7.4	3.5	2.5	2	2.2	1.1	1.1	14	1.5	2.4	15	700
7-10	Female	2000	7.8	3.7	2.7	2	2.3	0.8	0.8	10	0.8	1.5	9	880
11-14	Male	2500	9.9	4.5	3.5	3	2.6	1	1	13	1.1	2	12	1250
1-3	Male	1300	4	3	1.34	2	1.34	0.5	0.5	6	0.5	0.9	6	460
15-18	Male	3000	11	5	4	3	2.8	1.2	1.3	16	1.3	2.4	15	1250
19-24	Male	2900	11	5	4	3	2.8	1.2	1.3	16	1.3	2.4	15	700
25-50	Male	2900	11	5	4	2	2.8	1.2	1.3	16	1.3	2.4	15	700
4-6	Male	1800	7	3.3	2.3	2	2.1	0.6	0.6	8	0.6	1.2	7	500
51+	Male	2300	9.1	4.2	3.2	2	2.5	1.2	1.3	16	1.7	2.4	15	700
7-10	Male	2000	7.8	3.7	2.7	2	2.3	0.8	0.8	10	0.8	1.5	9	880

# **Supplements**

(This table may not be used in CHL?)

This lookup table contains nutrient values from supplements. There is one record per supplement.

FIELD	DATA TYPE	DESCRIPTION
aid	int	Supplement ID
aname	varchar(255)	Supplement Name
usercat	int	
supcat	int	
vita	int	Nutrient value
vitc	int	Nutrient value
vitd	int	Nutrient value
vite	int	Nutrient value
vitb1	float	Nutrient value
vitb2	float	Nutrient value
niacin	float	Nutrient value
vitb6	float	Nutrient value
folate	float	Nutrient value
vitb12	float	Nutrient value
pantothenic	int	Nutrient value
vitk	int	Nutrient value
calcium	int	Nutrient value
phosphorus	int	Nutrient value
magnesium	int	Nutrient value
iron	float	Nutrient value
zinc	float	Nutrient value
selenium	float	Nutrient value
potassium	float	Nutrient value
sodium	int	Nutrient value
copper	float	Nutrient value
maganese	float	Nutrient value
calories	int	Nutrient value
sugars	int	Nutrient value
carbohydrate	int	Nutrient value
fiber	int	Nutrient value

aid 4	aname	usercat	supcat	vita	vite	vitd	vite	vitb1	vitb2	niacin	vitb6	folate	vitb12	pantoth	vitk	calcium	pho
1000042300	TUMS REGULAR STRENGT	0	0	(null)	(null	400	(nul										
1000042400	TUMS EX EXTRA STRENGT	0	0	(null)	(null	600	(nul										
1888000201	GENERIC BETA CAROTEN	0	1	25000	(null)	(null	(null)	(nul									
1888000500	GENERIC FOLATE	Π	1	(null)	(null)	(null)	(null)	fnulli	fnull)	(null)	(null)	400	fnulli	fnull)	ínull	(null)	ínul

# **Survey Nutrient Values**

This table contains nutrient values from foods. There are 30 records per food code.

**SPECIAL NOTE:** Water (255) and copper (312) are not present in the USDA version.

FIELD	DATA TYPE	DESCRIPTION
Survey_Food_Code	int	Food code
Nutrient_Code	int	Nutrient Code  203 – protein 204 – total fat 205 – carbohydrate 208 – food energy 255 – water * 291 – total fiber 301 – calcium 303 – iron 304 – magnesium 305 – phosphorus 306 – potassium 307 – sodium 309 – zinc 312 – copper * 317 – selenium 392 – vitamin A 394 – vitamin E 401 – vitamin C 404 – thiamin 405 – riboflavin 406 – niacin 415 – vitamin B6 417 – folate 418 – vitamin B12 601 – cholesterol 606 – saturated fat 618 – linolenic / omega 3 645 – monounsaturated fat 646 – polyunsaturated fat
Nutrient_Value	float	Nutrient Value

Survey_Food_Code	Nutrient_Code	Nutrient_Value
100010	203	17.1
100010	204	0.76
100010	205	6.01
100010	208	105
100010	255	74.56
100010	291	0
100010	301	31
100010	303	3.19
100010	304	48
100010	305	190
100010	306	250
100010	307	301
100010	309	0.82
100010	312	0.196
100010	317	44.8
100010	392	2

Survey_Food_Code	Nutrient_Code	Nutrient_Value
100010	394	4
100010	401	2
100010	404	0.19
100010	405	0.1
100010	406	1.5
100010	415	0.15
100010	417	5
100010	418	0.73
100010	601	85
100010	606	0.149
100010	618	0.007
100010	619	0.049
100010	645	0.107
100010	646	0.104
100011	203	19.63
100011	204	6.78

#### iron

This lookup table contains iron probability information used to assess iron intake. There is one record per probability by gender and age group.

FIELD	DATA TYPE	DESCRIPTION
gender	int	Gender
agecat	int	Age group
ironprob	int	Iron probability
requirefrom	float	Iron level lower limit
requireto	float	Iron level upper limit

gender	agecat	ironprob	requirefrom	requireto
0	1	0	6.82	9999
0	1	4	6.07	6.81
0	1	8	5.26	6.06
0	1	15	4.39	5.25
0	1	25	3.83	4.38
0	1	35	3.4	3.82
0	1	45	3.02	3.39
0	1	55	2.67	3.01
0	1	65	2.33	2.66
0	1	75	1.97	2.32
0	1	85	1.55	1.96
0	1	93	1.25	1.54
0	1	96	1.1	1.24
0	1	100	0	1.09
0	2	0	9.53	9999
0	2	4	8.46	9.52
0	2	8	7.32	8.45
0	2	15	6.09	7.31
0	2	25	5.28	6.08
0	2	35	4.65	5.27
0	2	45	4.12	4.64
0	2	55	3.63	4.11
0	2	65	3.14	3.62
0	2	75	2.64	3.13
0	2	85	2.07	2.63
0	2	93	1.65	2.05
0	2	96	1.34	1.64
0	2	100	0	1.33
0	3	0	7.92	9999
n	2	4	7.59	7 91

# Food Description and Measurement

# Food\_Description

This table contains the list of foods a user can choose from when entering food records.

FIELD	DATA TYPE	DESCRIPTION
survey_food_code	int	Food code
food_description	nvarchar(255)	Food description
subcode	bigint	Sub code
rank	int	Rank

Survey_Food_Code	Food_Description	Subcode	Rank
100010	ABALONE, RAW	0	1000
100010	OPIHI, RAW	100000	1000
100011	ABALONE, FRIED	0	1000
100020	ABALONE, CANNED	0	1000
100080	NUTS, ALMONDS, DRIED, UNBLANCHED, UNSALTED	0	1000
100090	NUTS, ALMONDS, OIL-ROASTED, SALTED	0	1000
100120	ANCHOVIES, CANNED IN OIL, DRAINED	0	1000
100120	ANCHOVIES, SMOKED, CANNED	100001	1000
100130	APPLES, RAW, W/ SKIN	0	1000
100210	APPLES, DRIED, UNCOOKED	0	1000
100270	APPLE JUICE, CANNED, BOTTLED OR FROZEN	0	1000
100280	APPLESAUCE, UNSWEETENED	0	1000
100290	APPLESAUCE, SWEETENED	0	1000
100300	APRICOTS, RAW	0	1000
100320	APRICOTS, CANNED, WATER PACKED, SOLID & LIQUID	0	1000
100350	APRICOTS, CANNED, HEAVY SYRUP, SOLID & LIQUID	0	1000
100390	APRICOTS, DRIED, UNCOOKED	0	1000

# FUF Frequently Used Foods

This table contains *frequently used foods* saved by the user. These saved foods are meant to make for future entries easier.

FIELD	DATA TYPE	DESCRIPTION
userid	varchar(255)	User ID
code	int	Food code
Food_Description	varchar(255)	Food description
subcode	int	Sub code

userid	code	Food_Description	subcode
11	134335	RICE PILAF	0
CH	104710	BREAD, WHOLE WHEAT	0
CH	127010	WATER	0
ch	150431	CEREAL, COCOA KRISPIES (KELLOGG'S)	0

### **Gram\_Weights**

This lookup table contains weigh information for all foods in the list by different household measurements. There is one record per food and household measurement.

FIELD	DATA TYPE	DESCRIPTION
Survey_Food_Code	int	Food code
Measure_Code	int	Household measurement code
Gram_Weight	float	Weight in grams of specified measure
subcode	bigint	Sub code

Survey_Food_Code	Measure_Code	Gram_Weight	Subcode
100010	21000	15	0
100010	61667	6	0
100010	61935	6	0
100010	63083	85	0
100010	21000	15	100000
100010	61667	6	100000
100010	61935	6	100000
100010	63083	85	100000
100011	60313	32	0
100011	63083	85	0
100020	144	7	0
100020	10130	139	0
100020	60511	199	0
100080	10099	95	0
100080	10161	95	0
100080	10168	108	0
100080	10192	143	0
100080	61509	1.2	0
100090	10192	157	0
100090	61509	1.3	0

# Measure\_Description

This lookup table contains household measurements information.

FIELD	DATA TYPE	DESCRIPTION
Measure_Code	int	Household measurement code
Description	nvarchar(255)	Household measurement description

Measure_Code z	Description
0	None
10000	1 cup, Better Cheddars
10001	1 cup Boston Baked Beans
10002	1 cup, Cheez-its
10003	1 cup Chiclets
10004	1 cup Goobers
10005	1 cup, Graham Bites
10006	1 cup Jimmies
10007	1 cup Jordan
10008	1 cup, Krunch Twists, crushed
10009	1 cup, Krunch Twists, loose
10010	1 cup
10011	1 cup, NS as to fresh or frozen
10012	1 cup
10013	1 cup, NS as to variety
10014	1 cup, Ripplin's Potato Snack Chips
10015	1 cup Squirrel Nuts
10016	1 cup, Teddy Grahams
10017	1 cup, Thin Bits
10018	1 cup Toll House
10019	1 cup acorn
10000	1 aug saam aubad

### Table 12: HEI Variables

This table includes derived food groupings and nutrients based on information entered by the user. There is one record per user ID and Record / Recall date.

**NOTE:** This table has been modified to save pyramid servings.

FIELD NAME	DATA TYPE	VARIABLE DESC	UNIT OF MEASURE
userid	varchar(255)	User Identity	
hei1	float	Grains	OZ
hei2	float	Vegetables	cup
hei3	float	Fruits	cup
hei4	float	Milk	cup
hei5	float	Meat	oz
foodenergy	float	Energy	kcals
protein	float	Protein	gram
carbohydrate	float	Carbohydrate	gram
dietaryfiber	float	Dietary Fiber	gram
dietaryfiberp	varchar(10)		
totalfat	float	Total Fat	gram
saturatedfat	float	Saturated Fat	gram
monounsaturatedfat	float	Monounsaturated Fat	gram
polyunsaturatedfat	float	Polyunsaturated Fat	gram
cholesterol	float	Cholesterol	mg
vitamina	float	Vitamin A	mcg RAE
vitamine	float	Vitamin E	mg α-TE
vitaminc	float	Vitamin C	mg
thiamin	float	Thiamin	mg
riboflavin	float	Riboflavin	mg
niacin	float	Niacin	mg
folate	float	Folate	mcg DFE
vitaminb6	float	Vitamin B6	mg
vitaminb12	float	Vitamin B12	mcg
calcium	float	Calcium	mg
iron	float	Iron	mg

FIELD NAME	DATA TYPE	VARIABLE DESC	UNIT OF MEASURE
magnesium	float	Magnesium	mg
phosphorus	float	Phosphorus	mg
zinc	float	Zinc	mg
potassium	float	Potassium	mg
sodium	float	Sodium	mg
selenium	float	Selenium	mcg
omega3	float	Omega 3	gram
omega6	float	Omega 6	gram
pyr101	float	[ADD_SUG] Added sugar	teaspoon
pyr102	float	[A_BEV] Alcoholic Beverage	number of drinks
pyr103	float	[DISCFAT] Discretionary fat  Special note: Tthis pyramid group is not calculated. Value will always be 0 (zero).	gram
pyr104	float	[D_CHEESE] Cheese	serving
pyr105	float	[D_MILK] Milk	serving
pyr106	float	[D_TOTAL] Total dairy	serving
pyr107	float	[D_YOGURT] Yogurt	serving
pyr108	float	[F_CITMLB] Citrus, melon, and berry fruits	serving
pyr109	float	[F_OTHER] Other fruits	serving
pyr110	float	[F_TOTAL] Total fruits	serving
pyr111	float	[G_NWHL] Non-whole grain	serving
pyr112	float	[G_TOTAL] Total grain	serving
pyr113	float	[G_WHOLE] Whole grain	serving
pyr114	float	[M_EGG] Lean meat equivalent from egg	OZ
pyr115	float	[M_FISH] Lean meat from fish and other seafood	OZ

FIELD NAME	DATA TYPE	VARIABLE DESC	UNIT OF MEASURE
pyr116	float	[M_FRANK] Lean meat from franks, luncheon meat	OZ
pyr117	float	[M_MEAT] Lean meat from beef, pork, lamb, etc.	OZ
pyr118	float	[M_MPF] Lean meat from meat, poultry, fish	OZ
pyr119	float	[M_NUTSD] Lean meat equivalent from nuts, seeds	OZ
pyr120	float	[M_ORGAN] Lean meat from organ meats	OZ
pyr121	float	[M_POULT] Lean meat from poultry	OZ
pyr122	float	[M_SOY] Lean meat equivalent from soy product	OZ
pyr123	float	[V_DPYEL] Deep-yellow vegetables	serving
pyr124	float	[V_DRKGR] Dark-green leafy vegetables	serving
pyr125	float	[V_LEGUME] Dry bean and pea	serving
pyr126	float	[V_OTHER] Other vegetables	serving
pyr127	float	[V_POTATO] White potato	serving
pyr128	float	[V_STARCY] Other starchy vegetables	serving
pyr129	float	[V_TOMATO] Tomato	serving
pyr130	float	[V_TOTAL] Total vegetables	serving
pyr200	float	[DISCFAT_OIL] Discretionary oil	gram
pyr300	float	[DISCFAT_SOLID] Discretionary solid fat	gram

FIELD NAME	DATA TYPE	VARIABLE DESC	UNIT OF MEASURE
pyr400	float	<b>[EXTRAS]</b> Total calories from discretionary solid fat, added sugars, and alcohol.	
MeetsForFruits	Num(8)	[???] Child meets recommendations for fruit consumption for age	
MeetsForVegs	Num(8)	[???] Child meets recommendations for vegetable consumption for age	
Num_Days	Num(8)	[???] Number of Dietary Records	
Num_weekday	Num(8)	[???] Number of weekdays among Dietary Records	
Num_weekend	Num(8)	[???] Number of weekend among Dietary Records	
SSB_PortionInCups	Num(8)	[???] Intake per day: SSB Consumption In Cups, weighted for weekday/weekend days	cup
SSB_PortionInCups_adjforVar	Num(8)	[???] Intake for day: SSB Consumption In Cups, weighted for weekday/weekend days and adjusted for within person variance	cup
SSB_PortionInGrams	Num(8)	[???] Intake per day: SSB Consumption In Grams, weighted for weekday/weekend days	gram
SSB_PortionInGrams_adjforVar	Num(8)	[???] Intake for day: SSB Consumption In Grams, weighted for weekday/weekend days and adjusted for within person variance	gram
community	Num(8)	[???] Community	

FIELD NAME	DATA TYPE	VARIABLE DESC	UNIT OF MEASURE
diet_age	Num(8)	[???] Child age at diet record collection	
hei1_adjforVar	Num(8)	[???] Intake for day: Whole Grains in oz, weighted for weekday/weekend days and adjusted for within person variance	OZ
hei2_adjforVar	Num(8)	[???] Intake for day: Vegetables in cups, weighted for weekday/weekend days and adjusted for within person variance	cup
hei3_adjforVar	Num(8)	[???] Intake for day: Fruit in cups, weighted for weekday/weekend days and adjusted for within person variance	cup
hei4_adjforVar	Num(8)	[???] Intake for day: Milk in cups, weighted for weekday/weekend days and adjusted for within person variance	cup
hei5_adjforVar	Num(8)	[???] Intake for day: Meat in oz, weighted for weekday/weekend days and adjusted for within person variance	oz
id	Num(8)	[???] Child ID	
int_hei2_adjForVar	Num(8)	[???] Intake for day: Vegetables in cups, weighted for weekday/weekend days and adjusted for within person variance	cup
int_hei3_adjForVar	Num(8)	[???] Intake for day: Fruit in cups, weighted for weekday/weekend days and adjusted for within person variance	cup
jurisdiction	Num(8)	[???] Jurisdiction (1=Palau, 2=Yap, 3=Guam, 4=CNMI, 5=Chuuk, 6=Pohnpei, 7=Kosrae, 8=RMI, 9=Am Samoa, 10=HI, 11=AK)	
pyr101_adjforVar	Num(8)	[???] Food pyramid intake for day: Added sugar in tsp, weighted for weekday/weekend days and adjusted for within person variance	tsp

FIELD NAME	DATA TYPE	VARIABLE DESC	UNIT OF MEASURE
pyr102_adjforVar	Num(8)	[???] Food pyramid intake for day: Alcoholic beverage in # drinks, weighted for weekday/weekend days and adjusted for within person variance	
pyr104_adjforVar	Num(8)	[???] Food pyramid intake for day: Cheese in servings, weighted for weekday/weekend days and adjusted for within person variance	serving
pyr105_adjforVar	Num(8)	[???] Food pyramid intake for day: Milk in servings, weighted for weekday/weekend days and adjusted for within person variance	serving
pyr106_adjforVar	Num(8)	[???] Food pyramid intake for day: Total Dairy in servings, weighted for weekday/weekend days and adjusted for within person variance	serving
pyr107_adjforVar	Num(8)	[???] Food pyramid intake for day: Yogurt in servings, weighted for weekday/weekend days and adjusted for within person variance	serving
pyr108_adjforVar	Num(8)	[???] Food pyramid intake for day: Citrus, melon and berry fruit in servings, weighted for weekday/weekend days and adjusted for within person variance	serving
pyr109_adjforVar	Num(8)	[???] Food pyramid intake for day: Other Fruits in servings, weighted for weekday/weekend days and adjusted for within person variance	serving
pyr110_adjforVar	Num(8)	[???] Food pyramid intake for day: Total Fruits in servings, weighted for weekday/weekend days and adjusted for within person variance	serving
pyr111_adjforVar	Num(8)	[???] Food pyramid intake for day: Non-whole Grain in servings, weighted for weekday/weekend days and adjusted for within person variance	serving
pyr112_adjforVar	Num(8)	[???] Food pyramid intake for day: Total grain in servings, weighted for weekday/weekend days and adjusted for within person variance	serving
pyr113_adjforVar	Num(8)	[???] Food pyramid intake for day: Lean Meat Equivalent from Egg in oz, weighted for weekday/weekend days and adjusted for within person variance	OZ

FIELD NAME	DATA TYPE	VARIABLE DESC	UNIT OF MEASURE
pyr114_adjforVar	Num(8)	[???] Food pyramid intake for day: Lean Meat from Fish and Other Seafood in oz, weighted for weekday/weekend days and adjusted for within person variance	oz
pyr115_adjforVar	Num(8)	[???] Food pyramid intake for day: Lean Meat from Franks and Luncheon Meat in oz, weighted for weekday/weekend days and adjusted for within person variance	oz
pyr116_adjforVar	Num(8)	[???] Food pyramid intake for day: Lean Meat from Beef, Pork and Lamb in oz, weighted for weekday/weekend days and adjusted for within person variance	oz
pyr117_adjforVar	Num(8)	[???] Food pyramid intake for day: Lean Meat from Meat, Poultry and Fish in oz, weighted for weekday/weekend days and adjusted for within person variance	oz
pyr118_adjforVar	Num(8)	[???] Food pyramid intake for day: Lean Meat Equivalent from Egg in oz, weighted for weekday/weekend days and adjusted for within person variance	oz
pyr119_adjforVar	Num(8)	[???] Food pyramid intake for day: Lean Meat from Fish and Other Seafood in oz, weighted for weekday/weekend days and adjusted for within person variance	OZ
pyr121_adjforVar	Num(8)	[???] Food pyramid intake for day: Lean Meat from Poultry in oz, weighted for weekday/weekend days and adjusted for within person variance	oz
pyr122_adjforVar	Num(8)	[???] Food pyramid intake for day: Lean Meat Equivalent from Soy in oz, weighted for weekday/weekend days and adjusted for within person variance	OZ
pyr123_adjforVar	Num(8)	[???] Food pyramid intake for day: Deep-yellow Vegetables in servings, weighted for weekday/weekend days and adjusted for within person variance	serving
pyr124_adjforVar	Num(8)	[???] Food pyramid intake for day: Dark Green Leafy Vegetables in servings, weighted for weekday/weekend days and adjusted for within person variance	serving
pyr125_adjforVar	Num(8)	[???] Food pyramid intake for day: Dry Bean and Pea in servings, weighted for weekday/weekend days and adjusted for within person variance	serving

FIELD NAME	DATA TYPE	VARIABLE DESC	UNIT OF MEASURE
pyr126_adjforVar	Num(8)	[???] Food pyramid intake for day: Other Vegetables in servings, weighted for weekday/weekend days and adjusted for within person variance	serving
pyr127_adjforVar	Num(8)	[???] Food pyramid intake for day: White Potato in servings, weighted for weekday/weekend days and adjusted for within person variance	serving
pyr128_adjforVar	Num(8)	[???] Food pyramid intake for day: Other Starchy Vegetables in servings, weighted for weekday/weekend days and adjusted for within person variance	serving
pyr129_adjforVar	Num(8)	[???] Food pyramid intake for day: Tomato in servings, weighted for weekday/weekend days and adjusted for within person variance	serving
pyr130_adjforVar	Num(8)	[???] Food pyramid intake for day: Total Vegetables in servings, weighted for weekday/weekend days and adjusted for within person variance	serving
pyr300_adjforVar	Num(8)	[???] Food pyramid intake for day: Discretionary Solid Fat in g, weighted for weekday/weekend days and adjusted for within person variance	gram
pyr400_adjforVar	Num(8)	[???] Food pyramid intake for day: Calories from Discretionary Fat, Added Sugars and Alcohol in kcal, weighted for weekday/weekend days and adjusted for within person variance	
sex	Char(1)	[???] Child sex	
time	Num(8)	[???] Measurement time (1=Baseline, 2=24 month)	
water_PortionInCups	Num(8)	[???] Intake for day: Water Consumption In Cups, weighted for weekday/weekend days	cup
water_PortionInCups_adjforVar	Num(8)	[???] Intake for day: Total Fat in g, weighted for weekday/weekend days	gram

FIELD NAME	DATA TYPE	VARIABLE DESC	UNIT OF MEASURE
water_PortionInGrams	Num(8)	[???] Intake for day: Water Consumption In Grams, weighted for weekday/weekend days	gram
water_PortionInGrams_adjforVar	Num(8)	[???] Intake for day: Water Consumption In Grams, weighted for weekday/weekend days and adjusted for within person variance	gram

userid	entrydate z	hei1	hei2	hei3	hei4	hei5	hei6	hei	i7   h	iei8	hei9	hei10	heia	rs foo	denerg	y foo	denergy	p pro	otein	proteinp	carboh
201181616049	8/16/2011	5.4	0	0.1	0	2.2	0	0	10	0	10	0	0	998	;			33			99
201181616949	8/16/2011	6.3	0.2	0	0.5	3.8	10	10	10	0	8.9	0	0	114	18			50			154
test001	8/17/2011	0.5	0	0	0	8.9	0	0	10	0	10	0	0	736	ò			75			11
201182293440	8/22/2011	1.4	0	0.2	0	0	0	10	10	0	10	0	0	260	)			3			40
test001	8/23/2011	4.4	0	0	0	0	0	10	10	0	10	0	0	384	l .			3			88
201182915107	8/29/2011	3.7	1	0	0	5	10	10	10	0	10	0	0	994	ļ.			55			112
20118414744	8/4/2011	4.7	4	0	0.2	15.1	10	5.2	0		0	0	0	253	31			15	4		260
pyr111 pyr112	. pyr113 pyr1	14 p	yr115	pyr116	pyr117	pyr118	pyr119	pyr120	pyr121	pyr122	pyr123	pyr124	pyr125	pyr126	руг127	pyr128	pyr129	pyr130	pyr200	pyr300	pyr400
4.025178 4.025	17 0 1.15	564 !	9.99981	0.4177722	0.4322	10.851	0.1328	0	0	0	0.0641	0.0706	0	0.91601	0	0.03778	0	1.08856	20.0083	12.8967	13.0212

# Table 13: HEI Healthy Eating Index Created Variables from PacTrac3

**NOTE**: REC\_TIME was added to make multiple entries of same the food for the same day possible.

FIELD	DATA TYPE	DESCRIPTION
userid	varchar(255)	User ID
rec_date (was entrydate)	varchar(20)	Record/recall date (MM/DD/YYYY) The date when the food was consumed
rec_time	varchar(8)	Record/recall time (HH:MM AM/PM) The time when the food was consumed 12:01 AM – If time was not entered or wrong format entered
Food_Description	varchar(255)	Food description
quantity	float	Number of serving(s)
location_prepared	varchar(50)	Location where the food was prepared
location_consumed	varchar(50)	Location where the food was consumed
concurrent_activity	varchar(50)	Concurrent activity while consuming the food
detailed_desc	varchar(255)	Participant's detailed description of the food item
Community	Num(8)	Community
Foodcode	Num(8)	Food code for CHL only
id	Num(8)	Child ID
jurisdiction	Num(8)	Jurisdiction (1=Palau, 2=Yap, 3=Guam, 4=CNMI, 5=Chuuk, 6=Pohnpei, 7=other, 8=Yap, 9=Am Samoa, 10=HI, 11=AK)
time	Num(8)	Measurement Number (1=Baseline or Prevalence, 2=24 Month)
unit_of_measure	varchar(78)	Unit of measure for food (e.g., cup, slice)

# **User Information**

#### Person

This lookup table contains predefined sex and age groups.

FIELD	DATA TYPE	DESCRIPTION
People_Code	int	Code
Age	nvarchar(50)	Age group
Sex	nvarchar(50)	Sex: M, F, or M&F

userid	rec_date	rec_time	Food_Descrip	code	sub	servingcode	quantity	location_prepared	location_consumed	concurrent_act	detailed_desc	entry_ID	entry_datetime	mod_ID	mod_datetime
111111	02/12/2013	08:00 AM	RICE PILAF	134335	0	(null)	0	loc 1	loc 2	act 1		UNK	2/12/2013	UNK	2/12/2013
111111	02/15/2013	07:00 AM	RICE, FRIED	127570	0	10205	2	Home	Home	act 1		UNK	2/15/2013	UNK	2/25/2013
chlpractice	01/07/2013	02:00 PM	COOKIES, C	108171	0	61283	3	did not record	did not record	Watching TV	CHIPS AHOY COOKIES	ΔΔΔ	2/12/2013	UNK	2/13/2013
chlpractice	01/07/2013	02:00 PM	GUAVA NEC	165498	0	10205	1.5	did not record	did not record	Watching TV	MEADOW GOLD GUAVA	ΔΔΔ	2/12/2013	UNK	2/13/2013
chlpractice	01/07/2013	03:30 PM	WATER	127010	0	10205	1	did not record	did not record	sitting down to	WATER - AQUAFINA BOT	ΑΔΑ	2/12/2013	UNK	2/13/2013
chlpractice	01/07/2013	07:00 AM	CEREAL, CO	150431	0	63766	1.33	Home	Home	did not record	CEREAL - COCOA CRISP	AAA	2/12/2013	UNK	2/13/2013
chlpractice	01/07/2013	07:00 AM	MILK, REDU	113230	0	10205	0.5	Home	Home	did not record	(2%) MILK	AAA	2/12/2013	UNK	2/13/2013
chlpractice	01/07/2013	07:00 PM	BEEF, GROU	165569	0	63083	0.12	Home	Home	Sitting down w	MAY'S BRAND TERI PAT	ΑΑΑ	2/13/2013	UNK	2/13/2013
chlpractice	01/07/2013	07:00 PM	CORN, SWE	108570	0	10205	0.25	Home	Home	Sitting down w	CORN (FROZEN) BOILED	AAA	2/13/2013	UNK	2/13/2013

	People_Code	Age	Sex
1	1	1-3	M&F
2	2	4-6	M&F
3	3	7-10	M&F
4	4	11-24	F
5	5	>50	F
6	6	11-14	М
7	7	15-18	М
8	8	19-24	М
9	10	<1	M&F
10	41	25-50	F
11	81	25-50	М
12	91	>50	М

#### tempusers

(This table has IT information that may not be needed in the Data Dictionary?)

This table contains information for temporary (CheckItOut) users. Each session creates a unique user ID.

FIELD	DATA TYPE	DESCRIPTION
age	int	Age
gender	char(1)	Gender: m- male, f - female
weight	int	Weight in pounds
height	int	Height in inches
userid	varchar(255)	System-generated user ID in <i>yyyymmdd99999</i> format

age	gender	weight	height	userid
32	f	110	61	200111113000
35	m	130	62	20111121648
30	m	120	64	2011113103038

#### **UserAccounts**

(This table has IT information that may not be needed in the Data Dictionary?)

This table contains user login information.

FIELD	DATA TYPE	DESCRIPTION
Username	varchar(255)	User name
PasswordHash	varchar(40)	Encrypted password using the random set of charactes in the salt field
salt	varchar(10)	Random set of characters that will be used to encrypt the user password
logincount	int	Number of times the user logged in
logintime	datetime	Last date and time the user logged in

UserName	PasswordHash	salt	logincount	logintime
test001	830762ADC6A4D4	BNxc2E78	4	8/24/2011

#### userdata

(Some of the IT information in this table may not be needed in the Data Dictionary?)

This table contains user information provided during registration

userid	email	age	gender	height	weight	pwdhint	zipcode
test001	test001@test.com	30	m	62	140	test001	96712
user999	user999@user.com	25	f	62	120	user999	96797

FIELD	DATA TYPE	DESCRIPTION
userid	nvarchar(255)	User ID
email	nvarchar(255)	E-mail address
age	int	Age
gender	char(1)	Gender: m - male, f - female
height	int	Height in inches
weight	int	Weight in pounds
pwdhint	varchar(255)	Password Hint

zipcode	int	Address Zipcode

## **Physical Activity**

#### Physical Activity – Food and Activity Logs

#### \*In process – more to be added.\*

# \*\*As of 8/31/2016 variables for the Physical Activity section of the Food and Activity Logs are not available for request

Parents were asked to complete a record of their child's activities for two days. The activity log in conjunction with the use of the accelerometer provided more specific information about the type of activity the child was doing.

PacTrac3 was developed from MyPyramid Tracker (<a href="mailto:cnpp.usda.gov/MyPyramidTracker.htm">cnpp.usda.gov/MyPyramidTracker.htm</a>) with added metabolic equivalents (METS) for children (Ridley, Ainsworth, & Olds, 2008), research functionality to manage output, and local/traditional activities, such as surfing. Thus, we can quantify child physical activity in MET-adjusted minutes per day, from two days of physical activity logs per child.

PacTrac3 **physical activity** related data sets: pah (physical activity), peer (Percentage of Estimated Energy Requirement).

#### fpa

This table contains *frequently performed activities* saved by the user. These saved activities are meant to make for future entries easier.

FIELD	DATA TYPE	DESCRIPTION
userid	varchar(255)	User ID
PA_code	varchar(10)	Physical activity code

userid	PA_Code
PA	121050
PA	341242
PA	341902
PA	521080

#### PA\_ActivityGroup

<sup>\*\*</sup>Insert PacTrac3 activity variables\*

This look up table contains physical activity groups.

FIELD	DATA TYPE	DESCRIPTION
ActivityGroupCode	int	Physical activity group code
Description	nvarchar(50)	Physical activity group description

ActivityGroupCod	Description
1	BICYCLING
2	CONDITIONING EXERCISE
3	DANCING
4	FISHING AND HUNTING
5	HOME ACTIVITIES
6	HOME REPAIR
7	INACTIVITY LIGHT
8	INACTIVITY QUIET
9	LAWN AND GARDEN
10	MISCELLANEOUS
11	MUSIC PLAYING
12	OCCUPATION
13	RELIGIOUS ACTIVITIES
14	RUNNING
15	SELF CARE
17	SPORTS
18	TRANSPORTATION
19	VOLUNTEER ACTIVITIES
20	WALKING
21	WATER ACTIVITIES
22	WINTER ACTIVITIES

#### PA\_BasalEnergyMET

This lookup table contains the minimum energy required to live by age and gender.

(\*\*Question: Basal Energy MET per \_\_\_\_\_?)

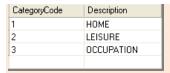
FIELD	DATA TYPE	DESCRIPTION
Age	int	Age of user: 3 to 18
BasalEnergyMET	float	Basal energy MET
Gender	varchar(1)	Gender of user: M=male, F-=female

Age	BasalEnergy	Gender
3	0.044	F
4	0.04	F
5	0.037	F
6	0.034	F
7	0.031	F
8	0.029	F
9	0.026	F
10	0.024	F
11	0.022	F
12	0.021	F
13	0.02	F
14	0.019	F
15	0.018	F
16	0.017	F
17	0.017	F
18	0.016	F
3	0.043	М
4	0.04	М
5	0.037	М
6	0.035	М
7	0.033	М
8	0.031	М
9	0.029	М
10	0.027	М
11	0.025	М
12	0.024	М
13	0.022	М
14	0.021	М
15	0.021	М
16	0.02	М
17	0.019	М
18	0.018	М

# PA\_Category

This lookup table contains categories of physical activity.

FIELD	DATA TYPE	DESCRIPTION
CategoryCode	int	Physical activity category code
Description	nvarchar(50)	Physical activity category description



# PA\_Intensity

This lookup table contains intensity level of physical activity.

FIELD	DATA TYPE	DESCRIPTION
IntensityCode	int	Code for the intensity of the physical activity
Description	nvarchar(50)	Description

IntensityCode	Description	
1	LIGHT	
2	MODERATE	
3	VIGOROUS	

# PA\_PhysicalActivity

This lookup table contains all physical activities a user can select from on the physical activity entry screen.

FIELD	DATA TYPE	DESCRIPTION
PA_Code	nvarchar(6)	Physical activity code
ActivityGroupCode	int	Physical activity group code
PA_Description	nvarchar(50)	Physical activity description
METS	real	METS
CategoryCode	int	Physical activity category code  (see PA_category table)
IntensityCode	int	Physical activity intensity code  (see PA_intensity table)
DafaultFlag	bit	Default:  1/0 or Checked/Unchecked or True/False

PA_Code	ActivityGroup	PA_Description	METS	CategoryCode	IntensityCode	DefaultFlag
001009	1	BICYCLING, BMX OR MOUNTAIN	8.5	2	3	
001010	1	BICYCLING, <10 MPH, LEISURE, WORK OR PLEASURE	4	2	2	
001015	1	BICYCLING, GENERAL	8	2	3	~
001020	1	BICYCLING, 10-11.9 MPH, LEISURE, SLOW, LIGHT EFFOR	6	2	2	
001030	1	BICYCLING, 12-13.9 MPH, LEISURE, MODERATE EFFORT	8	2	3	
001040	1	BICYCLING, 14-15.9 MPH, RACING, VIGOROUS EFFORT	10	2	3	
001050	1	BICYCLING, 16-19 MPH, RACING GENERAL	12	2	3	
001060	1	BICYCLING, >20 MPH, RACING, NOT DRAFTING	16	2	3	
001070	1	UNICYCLING	5	2	2	
002010	2	BICYCLING, STATIONARY, GENERAL	7	2	3	
002011	2	RICYCLING STATIONARY 50 WATTS VERY LIGHT FEED	2	2	2	

# PA\_ScoreModerateAdult

This lookup table contains an <u>adult's</u> score based on the number of minutes spent on a physical activity.

FIELD	DATA TYPE	DESCRIPTION
Minutes	smallint	Duration of physical activity in minutes: 0 to 60
Score	real	Score based on the number of minutes

0         0           1         2           2         5.25           3         8.5           4         11.74           5         15           6         17.6           7         20.2           8         22.8           9         25.4           10         28           11         30.6           12         33.2           13         35.8           14         38.4           15         41           16         43.6           17         46.2           18         48.8           19         51.4           20         54           21         56.6           22         59.2           23         61.8           24         64.4           25         67           26         69.6           27         72.2           28         74.81           29         77.41           30         80.01	Minutes	Score
2 5.25 3 8.5 4 11.74 5 15 6 17.6 7 20.2 8 22.8 9 25.4 10 28 11 30.6 12 33.2 13 35.8 14 38.4 15 41 16 43.6 17 46.2 18 48.8 19 51.4 20 54 21 56.6 22 59.2 23 61.8 24 64.4 25 67 26 69.6 27 72.2 28 74.81 29 77.41	0	0
3     8.5       4     11.74       5     15       6     17.6       7     20.2       8     22.8       9     25.4       10     28       11     30.6       12     33.2       13     35.8       14     38.4       15     41       16     43.6       17     46.2       18     48.8       19     51.4       20     54       21     56.6       22     59.2       23     61.8       24     64.4       25     67       26     69.6       27     72.2       28     74.81       29     77.41	1	2
4 11.74 5 15 6 17.6 7 20.2 8 22.8 9 25.4 10 28 11 30.6 12 33.2 13 35.8 14 38.4 15 41 16 43.6 17 46.2 18 48.8 19 51.4 20 54 21 56.6 22 59.2 23 61.8 24 64.4 25 67 26 69.6 27 72.2 28 74.81 29 77.41	2	5.25
5     15       6     17.6       7     20.2       8     22.8       9     25.4       10     28       11     30.6       12     33.2       13     35.8       14     38.4       15     41       16     43.6       17     46.2       18     48.8       19     51.4       20     54       21     56.6       22     59.2       23     61.8       24     64.4       25     67       26     69.6       27     72.2       28     74.81       29     77.41	3	8.5
6 17.6 7 20.2 8 22.8 9 25.4 10 28 11 30.6 12 33.2 13 35.8 14 38.4 15 41 16 43.6 17 46.2 18 48.8 19 51.4 20 54 21 56.6 22 59.2 23 61.8 24 64.4 25 67 26 69.6 27 72.2 28 74.81 29 77.41	4	11.74
7 20.2 8 22.8 9 25.4 10 28 11 30.6 12 33.2 13 35.8 14 38.4 15 41 16 43.6 17 46.2 18 48.8 19 51.4 20 54 21 56.6 22 59.2 23 61.8 24 64.4 25 67 26 69.6 27 72.2 28 74.81 29 77.41	5	15
8 22.8 9 25.4 10 28 11 30.6 12 33.2 13 35.8 14 38.4 15 41 16 43.6 17 46.2 18 48.8 19 51.4 20 54 21 56.6 22 59.2 23 61.8 24 64.4 25 67 26 69.6 27 72.2 28 74.81 29 77.41		17.6
9 25.4 10 28 11 30.6 12 33.2 13 35.8 14 38.4 15 41 16 43.6 17 46.2 18 48.8 19 51.4 20 54 21 56.6 22 59.2 23 61.8 24 64.4 25 67 26 69.6 27 72.2 28 74.81 29 77.41	7	20.2
10     28       11     30.6       12     33.2       13     35.8       14     38.4       15     41       16     43.6       17     46.2       18     48.8       19     51.4       20     54       21     56.6       22     59.2       23     61.8       24     64.4       25     67       26     69.6       27     72.2       28     74.81       29     77.41	8	22.8
11     30.6       12     33.2       13     35.8       14     38.4       15     41       16     43.6       17     46.2       18     48.8       19     51.4       20     54       21     56.6       22     59.2       23     61.8       24     64.4       25     67       26     69.6       27     72.2       28     74.81       29     77.41	9	25.4
12 33.2 13 35.8 14 38.4 15 41 16 43.6 17 46.2 18 48.8 19 51.4 20 54 21 56.6 22 59.2 23 61.8 24 64.4 25 67 26 69.6 27 72.2 28 74.81 29 77.41	10	28
13     35.8       14     38.4       15     41       16     43.6       17     46.2       18     48.8       19     51.4       20     54       21     56.6       22     59.2       23     61.8       24     64.4       25     67       26     69.6       27     72.2       28     74.81       29     77.41	11	30.6
14     38.4       15     41       16     43.6       17     46.2       18     48.8       19     51.4       20     54       21     56.6       22     59.2       23     61.8       24     64.4       25     67       26     69.6       27     72.2       28     74.81       29     77.41	12	33.2
15 41 16 43.6 17 46.2 18 48.8 19 51.4 20 54 21 56.6 22 59.2 23 61.8 24 64.4 25 67 26 69.6 27 72.2 28 74.81 29 77.41	13	35.8
16     43.6       17     46.2       18     48.8       19     51.4       20     54       21     56.6       22     59.2       23     61.8       24     64.4       25     67       26     69.6       27     72.2       28     74.81       29     77.41	14	38.4
17     46.2       18     48.8       19     51.4       20     54       21     56.6       22     59.2       23     61.8       24     64.4       25     67       26     69.6       27     72.2       28     74.81       29     77.41	15	41
18     48.8       19     51.4       20     54       21     56.6       22     59.2       23     61.8       24     64.4       25     67       26     69.6       27     72.2       28     74.81       29     77.41	16	43.6
19 51.4 20 54 21 56.6 22 59.2 23 61.8 24 64.4 25 67 26 69.6 27 72.2 28 74.81 29 77.41	17	46.2
20 54 21 56.6 22 59.2 23 61.8 24 64.4 25 67 26 69.6 27 72.2 28 74.81 29 77.41	18	48.8
21     56.6       22     59.2       23     61.8       24     64.4       25     67       26     69.6       27     72.2       28     74.81       29     77.41	19	51.4
22 59.2 23 61.8 24 64.4 25 67 26 69.6 27 72.2 28 74.81 29 77.41	20	54
23 61.8 24 64.4 25 67 26 69.6 27 72.2 28 74.81 29 77.41	21	56.6
24 64.4 25 67 26 69.6 27 72.2 28 74.81 29 77.41	22	59.2
25 67 26 69.6 27 72.2 28 74.81 29 77.41	23	61.8
26 69.6 27 72.2 28 74.81 29 77.41	24	64.4
27 72.2 28 74.81 29 77.41	25	67
28 74.81 29 77.41	26	69.6
29 77.41	27	72.2
	28	74.81
30 80.01	29	77.41
	30	80.01

Minutes	Score
31	80.81
32	81.61
33	82.4
34	83.2
35	84
36	84.8
37	85.6
38	86.4
39	87.2
40	88
41	88.6
42	89.2
43	89.8
44	90.4
45	91
46	91.6
47	92.2
48	92.79
49	93.39
50	94
51	94.6
52	95.2
53	95.79
54	96.39
55	97
56	97.6
57	98.2
58	98.8
59	99.4
60	100

# PA\_ScoreModerateChild

This lookup table contains a **child's** score based on the number of minutes spent on a physical activity.

FIELD	DATA TYPE	DESCRIPTION
Minutes	smallint	Duration of physical activity in minutes: 0 to 60
Score	real	Score based on the number of minutes

Minutes Z	Score
0	0
1	2
2	4.5
3	7
4	9.49
5	12
6	13.6
7	15.2
8	16.8
9	18.4
10	20
11	21.6
12	23.2
13	24.8
14	26.4
15	28
16	29.6
17	31.2
18	32.8
19	34.4
20	36
21	37.6
22	39.2
23	40.8
24	42.4
25	44
26	45.6
27	47.2
28	48.8
29	50.4
30	52

Minutes ∠	Score
31	53.6
32	55.2
33	56.8
34	58.4
35	60
36	61.6
37	63.2
38	64.8
39	66.4
10	68
11	69.6
12	71.2
13	72.8
14	74.4
15	76
16	77.6
17	79.2
18	80.79
19	82.39
50	94
51	94.6
52	95.2
53	95.79
54	96.39
55	97
56	97.6
57	98.2
58	98.8
59	99.4
60	100

#### pah

This table contains derived information based on the physical activity entered by the user. There is one record per physical activity and Record / Recall date.

FIELD	DATA TYPE	DESCRIPTION
userid	varchar(255)	User ID
rec_date (was entrydate)	varchar(20)	Record date (MM/DD/YYYY) The date when the physical activity was done
pascore	float	Physical activity score
calories	float	Calories burned
minutes	int	Total minutes Total minutes for sleep, sedentary, light, moderate, and vigorous activities
creditedminutes	int	Number of minutes credited  Total minutes of moderate and vigorous activities.  (light, sedentary, and sleep activities were excluded)
energyreq	float	Energy required
pae	char(2)	Physical activity entry type: s - standard (24 hours activities required) c - condensed
I_minutes	int	Light activities total minutes  Total minutes of light intensity activities with MET > 1.5
I_mets	decimal (8,2)	Light activity MET minutes  Total MET minutes of light intensity activities with MET > 1.5
m_minutes	int	Moderate activities total minutes  Total minutes of moderate intensities activities
m_mets	decimal (8,2)	Moderate activity MET minutes  Total MET minutes of moderate intensities activities
v_minutes	int	Vigorous activities total minutes Total minutes of vigorous intensities activities
v_mets	decimal (8,2)	Vigorous activity MET minutes Total MET minutes of vigorous intensities activities
s_minutes	int	Sedentary activities total minutes  Total minutes of light intensity activities with MET 1.0 and  MET <= 1.5
s_mets	decimal (8,2)	Sedentary activity MET minutes  Total MET minutes of light intensity activities with MET 1.0  and MET <= 1.5
sleep_minutes	int	Sleep total minutes Total minutes of light intensity activities with MET < 1.0
sleep_mets	decimal (8,2)	Sleep MET minutes Total MET minutes of light intensity activities with MET < 1.0
total_mets	decimal (8,2)	Total MET minutes Total MET minutes for sleep, sedentary, light, moderate, and vigorous activities

userid	rec_date	pascore	calories	minutes	creditedminut	energyreq	pae	I_minutes	I_mets	m_minute	m_mets	v_minutes	v_mets	s_minutes	s_mets	sleep_minute	sleep_mets	total_mets
111111	02/15/2013	100	1532	307	202	(null)	s	15	37.50	121	568.70	81	688.20	30	36.00	60	54.00	1384.40

#### pat

This table contains physical activity information entered by the user. There is one record per physical activity and Record / Recall date.

FIELD	DATA TYPE	DESCRIPTION
userid	varchar(255)	User ID
rec_date (was entrydate)	varchar(20)	Record date (MM/DD/YYYY)  The date when the physical activity was done
PA_Code	varchar(10)	Physical activity code (see PA_PhysicalActivity table)
PA_Description	varchar(50)	Physical activity description
duration	int (was float)	Physical activity duration (in minutes)
start_time	varchar(8)	Start time
end_time	varchar(8)	End time
detailed_desc	varchar(255)	Participant's detailed description of the activity
entry_ID	varchar(3)	Data entry person's initial  UNK – if initial is not entered
entry_datetime	datetime	Date and time when the physical activity record was entered to the system (Hawaii Time since the server is located in Hawaii)
mod_ID	varchar(3)	Data entry person's initial when the activity entry was last modified UNK – if initial is not entered
mod_datetime	datetime	Date and time when the physical activity record was last modified (Hawaii Time since the server is located in Hawaii)

userid 4	rec_date	PA_Code	PA_Description	duration	start_time	end_time	detailed_desc	entry_ID	entry_datetime	mod_ID	mod_datetime
111111	02/15/2013	342032	_CHILD BASKETBALL - MODERATE	10	07:10 PM	07:20 PM		UNK	2/15/2013	UNK	2/19/2013
111111	02/15/2013	342033	_CHILD BASKETBALL - HARD	30	07:30 PM	08:00 PM		UNK	2/15/2013	UNK	2/19/2013
CHRISLIN	12/18/2012	013040	GROOMING (E.G.PERSONAL HYGIENE), SITTING/STANDIN	150	07:00 AM	09:30 AM	GETTING UP TO GET READY FOR THE DAY	UNK	2/13/2013	UNK	2/13/2013
CHRISLIN	12/18/2012	013020	DRESSING, UNDRESSING (STANDING OR SITTING)	30	09:30 AM	10:00 AM	GETTING DRESSED FOR PARTY	UNK	2/13/2013	UNK	2/13/2013
CHRISLIN	12/18/2012	016015	RIDING IN A CAR OR TRUCK	30	10:00 AM	10:30 AM	RIDING IN CAR TO 7-11	UNK	2/13/2013	UNK	2/13/2013

#### **PercentEER**

This table includes the percentage of the Estimated Energy Requirement. There is one record per user ID and Record / Recall date.

FIELD	DATA TYPE	DESCRIPTION
Userid	varchar(255)	User ID
rec_date (was entrydate)	varchar(20)	Record date (MM/DD/YYYY) The date when the physical activity was done
pEER	int	Percentage of Estimated Energy Requirement

us	erid	entrydate	pEER
20	1181616049	8/16/2011	46
20	1181616949	8/16/2011	53
20	1182293440	8/22/2011	12
20	118414744	8/4/2011	117
tes	:t001	8/17/2011	34
tes	:t001	8/23/2011	18

#### Physical activity – Accelerometry

# \*\*As of 8/31/2016 variables from accelerometry are not available for data request.

Objective Measurement of Physical Activity – Accelerometry. Accelerometers have become an important tool to objectively monitor physical activity in free-living conditions. Triaxial accelerometers measure vertical, horizontal and lateral acceleration and raw data can be analyzed to provide an objective measure of the intensity, duration and frequency of physical activity throughout the day. The detected accelerations are filtered, converted to a numerical value and summed over a specified time interval or epoch. The recorded counts for each epoch can be used to represent the intensity of the physical activity. Children's physical activity tends to be intermittent and characterized by rapid changes from rest to vigorous physical activity. In order to accurately quantify physical activity intensity and duration, short (<30 secs.) epoch durations are necessary (Baquet, 2006; Nilsson, 2002).

These monitors store data over long periods, allowing analysis of patterns of physical activity in free-living subjects over the course of several days to weeks. The small size of the device is unobtrusive and allows monitoring of subjects without interfering with normal movement. Several studies including our own unpublished CHL Physical Activity Pilot have concluded that accelerometers can be effectively used in free-living children to measure levels of physical activity (Trost, 2002; Freedson et al., 2005; Hoos et al., 2003). In addition, relatively short periods of monitoring (4-7 days) have been found to be reliable (Trost, 2000).

Accelerometers measured physical activity in young children. Accelerometers provide data of different intensities, including inactivity during waking hours, making them ideal for lifestyle interventions or interventions not specific to a location. This approach allowed us to obtain objective measures for sleep, sedentary behavior and physical activity at different intensities. Each participant was asked to wear an accelerometer for six days. We used accelerometry for about 100 participants per each intervention and comparison community as well as at all FAS sites in a subset of the study population (50%; n of around 100 per jurisdiction). The accelerometer data were processed using the manufacturer's software and its output is in activity in counts/minute.

#### CHL protocols for Actical Accelerometer Data

CHL participants were expected to wear the Actical accelerometer for six consecutive days. In general, the Actical accelerometer was placed on the child on day 1 and removed on day 7. For each day, a child's activity was recorded from 0:00:00 a.m. in the morning to 23:59:59 p.m., which sums to 1440 minutes. Occasionally, a child might have had his/her accelerometer removed on some day(s) during the week and later have had the accelerometer placed back on. For these children, their accelerometer data may show as non-consecutive days. These types of data will be identified during the data cleaning and data analysis stages and the following rules will be applied.

The CHL protocol for Actical accelerometer data cleaning and data analysis includes the following 3 rules:

- 1. To be included in the data analysis, the Actical accelerometer data of each day must be valid. The criteria for valid data for each day are: the total number of minutes for any one single type of activity must not exceed 1300 minutes (90% of the time). If the total number of minutes for any single type of activity during a day was 1,300 minutes or greater (90% or over of the time), then data for that day was excluded from data analysis.
- 2. The data analysis is based on all valid days of data. The days with valid data are not required to be consecutive, even though for the majority of children, the days are consecutive. If a child has 3 or more days of valid data, the total minutes of different types of activities should add up to 1440 minutes for each of the first few days (e.g., day 1 2 for those with 3 days of valid data) and only the last day's (e.g., day 3) total minutes may or may not add up to 1440 (minutes). This will depend on the time when the accelerometer was placed and removed from the child.
- 3. Data from the first day a child wore the Actical was excluded from data analysis in order to avoid potential reactivity effects of children wearing the Acticals. Data from the last day a child wore the Actical was also excluded because it may not have complete data (e.g., 1440 minutes) for that day. As a result, to be included in this data analysis, the participants need to have at least 3 days of valid Actical accelerometer data.

As a result, based on the rules above, if a child has only 3 days of valid Actical data, only data from the second day is included in the analysis. If a child has 4 days of valid Actical data, only data from the second and third day are included. If a child has 5 days of valid Actical data, then only data from day 2 to day 4 are included. If a child has 6 days of valid Actical data, then only data from day 2 to day 5 are included. If a child has 7 or more than more than 7 days of valid Actical data, only data from day 2 to day 6 will be used in the data analysis. Data from the remaining days are kept in the database but are not used in this data analysis. A new variable, **days\_Actical\_data**, was created to reflect the number of days of Actical data each child had.

Consequently, the total number of Actical data files uploaded to the CHL server by each Jurisdiction may not match the final number of Acticals included in data analysis.

For this data analysis, the major statistic of interest from the Actical Data is the weighted average minutes per day at the various activity levels (e.g., sedentary, light, moderate, and vigorous). The steps that were followed to compute this statistic are below.

Counts per minute (cpm) were first calculated by summing the counts per second within that minute as recorded by the accelerometer. Accelerometer data were then summarized every minute into 4 activity levels using the following rules (as recommended by Actical):

- sedentary, if cpm ≤40
- light, if 41≤ cpm ≤ 2295
- moderate, if 2296≤ cpm ≤ 6815
- vigorous, if cpm ≥ 6816

The number of minutes on each day spent in each of the 4 activities is then calculated as the sum of minutes from 0:00:00 am to 23:59:59 pm assigned to that category. Sleeping activity cannot be evaluated by accelerometer data. Descriptive data from the child's Food & Activity Log can be used in the future to validate accelerometer sleep data and to sort out sleeping activities.

A weighted average for each of the 4 activities was then calculated for each child based on the number of valid days of Actical data available and the number of weekdays or weekend days included. For data analysis, after excluding data from the first day and the last day, the minimum number of days of valid data a child may have is 1 and the maximum days of valid data a child may have is 5. For those participants with only 1 day of valid data to be included in the analysis, that single day's value is treated as the weighted average. For those participants with 2 days of valid data to be included in the analysis, the simple average is treated as the weighted average if both days are weekdays or both are weekend days. For those participants with 2 days of valid data with at least one weekday and one weekend day, a weight of 5 (i.e., number of weekdays) is given to the weekday data while a weight of 2 (i.e., number of weekend days) is given to the weekend day data. The weighted average is then calculated as the sum of the weighted week day and weekend day data divided by 7. The formula for calculating a participant's weighted average for 2 days of valid data is below:

Weighted average = (5 × value of weekday) + (2 × value of weekend)

7 (days of the week)

If a child has more than 2 days of valid data to be included in the analysis, e.g., 3 to 5 days, the simple average is taken if all days are weekdays. If there is at least one weekday and at least one weekend day, then the formula for the weighted average is modified as follows:

The weighted average of moderate or vigorous types of activities (weighted\_mv) is calculated as the sum of the weighted average of moderate activities and weighted average of vigorous activities per child. This is equivalent to the weighted average of the daily minutes of moderate or vigorous activity. A dichotomous variable (pameet) was created to assess whether the child meets the national standard of 60 minutes a day of moderate or vigorous activities. It is coded 1 for yes and 0 for no.

#### **Accelerometer Data Variables**

Although all participants are expected to have the Actical placed on day 1 and removed on day 7, because of schedule conflicts or other issues, a child may wear the Actical for less than 1 day or more than 7 days. The CHL protocol requests to keep the participant's data up to 10 days. Data from any additional days, e.g., day11, day 12, etc. were not included in the final data set.

For Actical accelerometer final data set, the following variables were kept or created from the accelerometer data:

- (1) date when Actical is placed on or worn, in the format of day<sub>i</sub>, where i takes the value of 1 to 10; For example, variable *day1* means the date of the first day when Actical was placed on the child, *day2* means the second day since Actical was placed on the child, etc.
- (2) minutes of light, sedentary, moderate, vigorous, moderate and vigorous types and total minutes of all 4 types of activities per day, in the format of minutes\_type of activities\_day<sub>i</sub>, where type of activities include light, sedentary, moderate, and vigorous types of activities as reflected/captured by the Actical Accelerometer; i takes the value of 1 to 10. For example, you will see variables like *minutes\_light\_d1* (minutes of light type of activities), *minutes\_sedentary\_d1* (minutes of sedentary type of activities), minutes\_moderate\_d1 (minutes of moderate type of activities), *minutes\_vigorous\_d1* (minutes of vigorous types of activities), minutes\_mv\_d1 (minutes of moderate and vigorous types of activities), *minutes\_total\_d1* (total minutes of activities as recorded by the Actical Accelerometer), etc.;
- (3) weighted average of the 4 different types of activities, as well as moderate and vigorous types of activities and weighted average of all types of activities, in the format of **weighted type of activity** (e.g., light, sedentary, moderate, vigorous, total).

Please refer to the section on protocols of accelerometer data clean and analysis for more information on how minutes of various types of activities per day and weighted average of each type of activity per participant were calculated.

**Table 14: Actical Accelerometer Data Variables** 

	Actical Accelerometer Data Variables							
Variable	Variable Description	Data Type	Lengt h	Response Options/ Codes	Note			
days_actical_data	Number of days with Actical data	Numeric	8	1 to 10	*Newly created variable			
day1	Date of the first day when Actical accelerometer was placed on the participating child	Numeric	8					
day2	Date of the second day since Actical accelerometer has been placed on the participating child	Numeric	8					
day3	Date of the third day since Actical accelerometer has	Numeric	8					

	Actical Accelerometer Data Variables							
Variable	Variable Description	Data Type	Lengt h	Response Options/ Codes	Note			
	been placed on the participating child							
day4	Date of the fourth day since Actical accelerometer has been placed on the participating child	Numeric	8					
day5	Date of the fifth day since Actical accelerometer has been placed on the participating child	Numeric	8					
day6	Date of the sixth day since Actical accelerometer has been placed on the participating child	Numeric	8					
day7	Date of the seventh day since Actical accelerometer has been placed on the participating	Numeric	8					

	Actical Accelerometer Data Variables							
Variable	Variable Description	Data Type	Lengt h	Response Options/ Codes	Note			
	child							
day8	Date of the eighth day since Actical accelerometer has been placed on the participating child	Numeric	8					
day9	Date of the ninth day since Actical accelerometer has been placed on the participating child	Numeric	8					
day10	Date of the tenth day since Actical accelerometer has been placed on the participating child	Numeric	8					
minutes_light_d <sub>i</sub>	Minutes of light activities of day <sub>i</sub>	Numeric	8		i from 1 to 10			

Actical Accelerometer Data Variables							
Variable	Variable Description	Data Type	Lengt h	Response Options/ Codes	Note		
minutes_sedentary_	Minutes of sedentary activities of day <sub>i</sub>	Numeric	8		i from 1 to 10		
minutes_moderate_d <sub>i</sub>	Minutes of moderate activities of day <sub>i</sub>	Numeric	8		i from 1 to 10		
minutes_vigorous_d <sub>i</sub>	Minutes of vigorous activities of day <sub>i</sub>	Numeric	8		i from 1 to 10		
minutes_mv_d <sub>i</sub>	Minutes of moderate and vigorous types of activities of day <sub>i</sub>	Numeric	8		i from 1 to 10		
minutes_total_d <sub>i</sub>	Minutes of total activities of day <sub>i</sub>	Numeric	8		Usually for all children, total minutes for any day when Actical is wearing should be 1440 minutes except for the last day when Actical is removed from the child.		

	Actical Accelerometer Data Variables							
Variable	Variable Description	Data Type	Lengt h	Response Options/ Codes	Note			
weighted_light	Weighted daily average minutes of light activities	Numeric	8					
weighted_ moderate	Weighted daily average minutes of moderate activities	Numeric	8					
weighted_ vigorous	Weighted daily average minutes of vigorous activities	Numeric	8					
weighted_ mv	Weighted daily average minutes of moderate and vigorous activities	Numeric	8					
weighted_ sedentary	Weighted daily average minutes of sedentary activities	Numeric	8					
weighted_total	Weighted daily average minutes of total activities	Numeric	8		*Usually for all children, total minutes for any day when Actical is wearing should be 1440			

	Actical Acce	lerometer	Data Va	ariables	
Variable	Variable Description	Data Type	Lengt h	Response Options/ Codes	Note
					minutes except for the last day when Actical is removed from the child.
Pameet	Whether the participant meets the national recommendation of 60 minutes of moderate and vigorous types of activities a day	Numeric	8	1=Yes 0=No	
	were calculated only for inte of comprehensive communi	•	sdictions	baseline data sets	and FAS prevalence study
WEIGHTED_SEDENTA RY_HM	Weighted dialy average in hours of sedentary PA	Num	8		
WEIGHTED_MODERA TE_HM	Weighted daily average in hours of light PA	Num	8		
WEIGHTED_VIGOROU S_HM	Weighted daily average in hours of moderate PA	Num	8		

Actical Accelerometer Data Variables							
Variable	Variable Description	Data Type	Lengt h	Response Options/ Codes	Note		
WEIGHTED_MV_HM	Weighted daily average in hours of moderate or vigorous PA	Num	8				

## Sedentary Behavior (SB) / Screen Time (ST)

This "Lifestyle Behavior" tool was adapted to help measure one of CHL's objectives -- to decrease sedentary behavior, that is recreational screen time by 10 min/day. The measure was modified to include active and inactive video games. It was adapted from Buckworth, J., & Nigg, C. (2004); Nigg, C. R. (2005); Haas, S., & Nigg, C. R. (2009).

Table 15: Sedentary Behavior / Screen Time Variables, Form 23-04

	Sedentary Behavior: SEDBH Form 23-04							
Variable Name	Variable Description	Data Type	Length	Response Options/ Codes	Notes			
ID	CHL subject ID	Character	7	The first two numbers must be from 01 to 11, the third number must be one from 1 to 6, the fourth number must be one from 1, 2, or 3 and the last 3 numbers are from 1 to 200.	Set as a primary key.  Format is in the form of JJCY### where JJ is a number for jurisdiction, C is the number for each community in a jurisdiction, Y is the year of measurement, and ### is a number from 1 to the number of enrollees per community.			
DATE_SEDBH	Date of Interview	Date	10		Format should be MMDDYY10.			

	Sedentary Behavior: SEDBH Form 23-04							
Variable Name	Variable Description	Data Type	Length	Response Options/ Codes	Notes			
COLLECTION_N O	Time (year) when the measurement is taken	Character	1	1=Baseline 2=24 months into intervention or Post-intervention	This variable is not from the form but added to differentiate data from different collection time			
WEEKDAY_TV	On usual weekdays (Monday to Friday), how long on average a day does your child spend watching Television and/or videos/DVD?	Character	3	0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7+	Please select only one. Measurement unit is in hour (h.).  If missing, 9.9 will be assigned.			
WEEKDAY_ INACTIVE	On usual weekdays (Monday to Friday), how long on average a day does your child spend playing INACTIVE video games (DS, Play station, XBOX, Wii computer games, etc.)?	Character	3	0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7+	Please select only one. Measurement unit is in hour (h.).  If missing, 9.9 will be assigned.			
WEEKDAY_ ACTIVE	On usual weekdays (Monday to Friday), how long on average a day does your child spend playing ACTIVE video games (DS,	Character	3	0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7+	Please select only one. Measurement unit is in hour (h.).  If missing, 9.9 will be			

	Sedentary Behavior: SEDBH Form 23-04							
Variable Name	Variable Description	Data Type	Length	Response Options/ Codes	Notes			
	Play Station, XBOX, Wii computer games, etc.) that incorporate movement or exercise?				assigned.			
WEEKEND_TV	On a usual weekend day (Saturday or Sunday), how many hours a day does your child spend watching Television and/or videos/DVD?	Character	3	0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7+	Please select only one. Measurement unit is in hour (h.).  If missing, 9.9 will be assigned.			
WEEKEND_ INACTIVE	On a usual weekend day (Saturday or Sunday), how long on average a day does your child spend playing INACTIVE video games (DS, Play station, XBOX, Wii computer games, etc.)?	Character	3	0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7+	Please select only one. Measurement unit is in hour (h.).  If missing, 9.9 will be assigned.			
WEEKEND_ ACTIVE	On a usual weekend day (Saturday or Sunday), how long on average a day does your child spend playing ACTIVE video games (DS,	Character	3	0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7+	Please select only one. Measurement unit is in hour (h.).  If missing, 9.9 will be			

Sedentary Behavior: SEDBH Form 23-04								
Variable Name	Variable Description	Data Type	Length	Response Options/ Codes	Notes			
	Play Station, XBOX, Wii computer games, etc.) that incorporate movement or exercise?				assigned.			

Table 16 : Sedentary Behavior / Screen Time Created Variables

Sedentary Behavior: SEDBH Form 23-04									
	Created new variables								
Variable Name	Variable Description	Data Type	Length	Response Options/ Codes	Notes				
WEEKDAY_TV_NEW	On usual weekdays (Monday to Friday), how long on average a day does your child spend watching Television and/or videos/DVD?	Numeric	8	0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7	Maximum is 7 hours				
WEEKDAY_ INACTIVE_NEW	On usual weekdays (Monday to Friday), how long on average a day	Numeric	8	0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7	Maximum is 7				

# Sedentary Behavior: SEDBH Form 23-04 Created new variables

Variable Name	Variable Description	Data Type	Length	Response Options/ Codes	Notes
	does your child spend playing INACTIVE video games (DS, Play station, XBOX, Wii computer games, etc.)?				
WEEKDAY_ ACTIVE_NEW	On usual weekdays (Monday to Friday), how long on average a day does your child spend playing ACTIVE video games (DS, Play Station, XBOX, Wii computer games, etc.) that incorporate movement or exercise?	Numeric	8	0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7	Maximum is 7
WEEKEND_ TV_NEW	On a usual weekend day (Saturday or Sunday), how many hours a day does your child spend watching Television and/or videos/DVD?	Numeric	8	0, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7	Maximum is 7

#### Sedentary Behavior: SEDBH Form 23-04 Created new variables Data **Variable Description** Length **Response Options/** Notes Type Codes On a usual weekend day Numeric 8 0, 0.5, 1, 1.5, 2, 2.5, Maximum is 7 (Saturday or Sunday), how 3, 3.5, 4, 4.5, 5, 5.5, long on average a day 6, 6.5, 7 does your child spend playing INACTIVE video games (DS, Play station, XBOX, Wii computer games, etc.)? 8 WEEKEND\_ ACTIVE\_NEW On a usual weekend day Numeric 0, 0.5, 1, 1.5, 2, 2.5, Maximum is 7 (Saturday or Sunday), how 3, 3.5, 4, 4.5, 5, 5.5, long on average a day 6, 6.5, 7 does your child spend

**Variable Name** 

WEEKEND

**INACTIVE NEW** 

SCREEN\_ WEEKEND

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Numeric

8

playing ACTIVE video games (DS, Play Station, XBOX, Wii computer games, etc.) that

incorporate movement or

On a usual weekend day

(Saturday or Sunday), how long on average a day

exercise?

#### Sedentary Behavior: SEDBH Form 23-04 Created new variables **Variable Name Variable Description Response Options/** Data Length **Notes** Codes Type does your child spend on watching TV, videogames, DVD or playing activit and/or inactive games? SCREEN WEEKDAY On a usual weekday Numeric 8 (Monday to Friday), how long on average a day does your child spend on watching TV, videogames, DVD or playing activit and/or inactive games? **SCREENTIME** Weighted average in hours Numeric 8 of the child's screen time in a week **SCREENMEET** Whether the child meets Numeric 8 0=No; the national 1=Yes; recommendation of spending 2 hours or less a day on screen time

#### Sedentary Behavior: SEDBH Form 23-04 **Created new variables Variable Name Variable Description Response Options/** Notes Data Length Codes Type Weighted average of TV 8 A weight of 2 **TVTIME** Num watching giving to weekend time and a weight of 5 giving to week day time TV watching time in hours Num 8 WEEKDAY\_TV\_NEW on weekdays TV watching in hours on Num 8 WEEKEND\_TV\_NEW weekends **TV5GRP** Char 40 Five categories: 1/2 hour or less More than 1/2 hour up to 2 hours More than 2 hours up to 4 hours More than 4 hours up to 6 hours More than 6 Total TV watching time in 5 groups hours up to 7 hours

#### **Sedentary Behavior: SEDBH Form 23-04** Created new variables **Variable Name Variable Description Response Options/** Data Length Notes Codes Type WEEKDAYTV5GRP Char 40 Five categories: 1/2 hour or less More than 1/2 hour up to 2 hours More than 2 hours up to 4 hours More than 4 hours up to 6 hours More than 6 hours up to 7 hours Weekday TV watching time in 5 group WEEKENDTV5GRP Char Five categories: 40 1/2 hour or less More than 1/2 hour up to 2 hours More than 2 hours up to 4 hours Weekend TV watching More than 4 time in 5 groups hours up to 6 hours

#### Sedentary Behavior: SEDBH Form 23-04 **Created new variables Variable Name Variable Description** Data Length **Response Options/ Notes** Type Codes More than 6 hours up to 7 hours INACTIVETIME weighted average in hours Num 8 of INACTIVE screen time WEEKDAY\_INACTIVE\_NEW INACTIVE screen time in Num 8 hours on weekdays INACTIVE screen time in WEEKEND\_INACTIVE\_NEW Num 8 hours on weekends Char 40 **INACTIVETIME5GRP** Five categories: 1/2 hour or less More than 1/2 hour up to 2 hours More than 2 hours up to 4 hours More than 4 INACTIVE screen time in hours up to 6 hours hours distributed in 5 More than 6 hours up to 7 hours groups

#### Sedentary Behavior: SEDBH Form 23-04 Created new variables **Variable Name Variable Description** Data Length **Response Options/** Notes Type Codes WEEKDAY\_INACTIVE5GRP Char 40 Five categories: 1/2 hour or less More than 1/2 hour up to 2 hours More than 2 hours up to 4 hours More than 4 hours up to 6 hours More than 6 hours up to 7 hours INACTIVE screen time in 5 groups for weekdays WEEKEND INACTIVE5GRP Char Five categories: 40 1/2 hour or less More than 1/2 hour up to 2 hours More than 2 INACTIVE screen time in hours up to 4 hours hours in 5 groups for More than 4 weekends hours up to 6 hours

#### Sedentary Behavior: SEDBH Form 23-04 **Created new variables Variable Name Variable Description** Data Length **Response Options/ Notes** Type Codes More than 6 hours up to 7 hours ACTIVETIME weighted average in hours Num 8 of ACTIVE screen time WEEKDAY\_ACTIVE\_NEW ACTIVE screen time in Num 8 hours on weekdays ACTIVE screen time in WEEKEND\_ACTIVE\_NEW Num 8 hours on weekends Char 40 Five categories: ACTIVETIME5GRP 1/2 hour or less More than 1/2 hour up to 2 hours More than 2 hours up to 4 hours More than 4 ACTIVE screen time in hours up to 6 hours hours distributed in 5 More than 6 hours up to 7 hours groups

#### Sedentary Behavior: SEDBH Form 23-04 **Created new variables Variable Name Variable Description** Data Length **Response Options/** Notes Type Codes WEEKDAY\_ACTIVE5GRP Char 40 Five categories: 1/2 hour or less More than 1/2 hour up to 2 hours More than 2 hours up to 4 hours More than 4 hours up to 6 hours More than 6 hours up to 7 hours ACTIVE screen time in 5 groups for weekdays WEEKEND ACTIVE5GRP Char Five categories: 40 1/2 hour or less More than 1/2 hour up to 2 hours More than 2 ACTIVE screen time in hours up to 4 hours hours in 5 groups for More than 4 weekends hours up to 6 hours

#### **Sedentary Behavior: SEDBH Form 23-04** Created new variables **Variable Name Variable Description Response Options/** Notes Data Length Codes Type More than 6 hours up to 7 hours SCREENTIME5GRP 40 Char Five categories: 1/2 hour or less More than 1/2 hour up to 2 hours More than 2 hours up to 4 hours More than 4 hours up to 6 hours More than 6 hours up to 7 hours Total screen time in hours in 5 groups SCREENWEEKDAY5GRP Char 40 Five categories: 1/2 hour or less Distribution in 5 groups of More than 1/2 SCREEN time on hour up to 2 hours weekdays More than 2

#### **Sedentary Behavior: SEDBH Form 23-04 Created new variables Variable Name Variable Description Response Options/** Data Length Notes Codes Type hours up to 4 hours More than 4 hours up to 6 hours More than 6 hours up to 7 hours SCREENWEEKEND5GRP Char 40 Five categories: 1/2 hour or less More than 1/2 hour up to 2 hours More than 2 hours up to 4 hours More than 4 hours up to 6 hours More than 6 Distribution in 5 groups of hours up to 7 hours SCREEN time on weekends

## Sleep

The "Sleep Questionnaire" tool was modified from The Tayside children's sleep questionnaire (McGreavey, Donnan, Pagliari, & Sullivan, 2005). One modification was to replace the word sleep "problem" with sleep "behavior" due to concerns and feedback in field testing that some of these behaviors have different meanings to some cultures in our jurisdictions. The demographic form asks about amount of sleep. Sleep quality and duration is considered a functional outcome or a secondary outcome of obesity.

Table 17: Sleep Variables, Form 23-05

	Sleep Variables, Form 23-05									
Variable Name	Variable Description	Data Type	Lengt h	Response Options / Codes	Notes					
ID	CHL subject ID	Character	7	The first two numbers must be from 01 to 11, the third number must be one from 1 to 6, the fourth number must be one from 1, 2, or 3 and the last 3 numbers are from 1 to 200.	Set as a primary key.  Format is in the form of JJCY### where JJ is a number for jurisdiction, C is the number for each community in a jurisdiction, Y is the year of enrollment, and ### is a number from 1 to the number of enrollees per community.					

Sleep Variables, Form 23-05								
Variable Name	/ariable Name Variable Data Lengt Description Type h		Lengt h	Response Options / Codes	Notes			
DATE_SLEEP	Date of Interview	Date	10		Format should be MMDDYY10.			
COLLECTION_NO	Time (year) when the measurement is taken	Character	1	1=Baseline  2=24 months into intervention or Post-intervention	This variable is not from the form but added to differentiate data from different collection time			
FALL_ASLEEP	How long after going to bed does your child usually fall asleep?	Characte r	1	0= 0 to less than 15 minutes 1= 15 to less than 30 minutes 2= 30 to less than 45 minutes 3= 45 minutes to less than 60 minutes 4= 60 minutes and more 9=Missing				
RELUCTANT	Your child goes to bed reluctantly	Characte r	1	0= The sleep behavior never occurs				

Sleep Variables, Form 23-05								
Variable Name	Name Variable Data Lengt Response ( Description Type h		Response Options / Codes	Notes				
	(hesitant, slowly, involuntary)?			1= The behavior occurs once or twice a month 2= Occurs one or two times a week 3= Occurs between three and five nights a week 4= The sleep behavior happens every night 9=Missing				
DIFFICULTY	The child has difficulty getting to sleep at night (and may require a parent to be present)	Characte r	1	0= The sleep behavior never occurs  1= The behavior occurs once or twice a month  2= Occurs one or two times a week  3= Occurs between three and five nights a week  4= The sleep behavior happens every night				

Sleep Variables, Form 23-05									
Variable Name	Variable Description	Data Type	Lengt Response Options / Codes h		Notes				
				9=Missing					
NOTOWNBED	The child does not fall asleep in his or her own	Characte r	1	0= The sleep behavior never occurs 1= The behavior occurs once					
	bed			or twice a month					
				2= Occurs one or two times a week					
				3= Occurs between three and five nights a week					
				4= The sleep behavior happens every night					
				9=Missing					
WAKEUP	The child wakes up two or more	Characte r	1	0= The sleep behavior never occurs					
	times in the night			1= The behavior occurs once or twice a month					
				2= Occurs one or two times a week					

Sleep Variables, Form 23-05								
Variable Name	Variable Description	Data Type	Lengt h	Response Options / Codes	Notes			
				3= Occurs between three and five nights a week				
				4= The sleep behavior happens every night				
				9=Missing				
DIFF_SLEEPAGAIN	After waking up in the night the	Characte r	1	0= The sleep behavior never occurs				
	child has difficulty falling			1= The behavior occurs once or twice a month				
	asleep again by himself or herself			2= Occurs one or two times a week				
				3= Occurs between three and five nights a week				
				4= The sleep behavior happens every night				
				9=Missing				
PARENTBED	The child sleeps in the parent's bed at some	Characte r	1	0= The sleep behavior never occurs				

Sleep Variables, Form 23-05									
Variable Name	Variable Description	Data Type	Lengt h	Response Options / Codes	Notes				
	time during the night			1= The behavior occurs once or twice a month 2= Occurs one or two times a					
				week					
				3= Occurs between three and five nights a week					
				4= The sleep behavior happens every night					
				9=Missing					
COMFORTER	If the child wakes, he or	Characte r	1	0= The sleep behavior never occurs					
	she uses a comforter (e.g., pacifier or			1= The behavior occurs once or twice a month					
	binky) and requires a			2= Occurs one or two times a week					
	parent to replace it			3= Occurs between three and five nights a week					
				4= The sleep behavior happens every night					

Sleep Variables, Form 23-05								
Variable Name	Variable Description	Data Type	Lengt h	Response Options / Codes	Notes			
				9=Missing				
DRINK	The child wants a drink during the night (including breast or bottlefeed)	Characte r	1	0= The sleep behavior never occurs  1= The behavior occurs once or twice a month  2= Occurs one or two times a week  3= Occurs between three and five nights a week  4= The sleep behavior happens every night  9=Missing				
HAS_DIFF	Do you think your child has sleeping difficulties?	Characte r	1	0=No 1=Yes 9=Missing				
EXPLAIN_DIFF	Please explain your child's sleeping	Characte r	100		Only for those answer Yes to variable			

Sleep Variables, Form 23-05								
Variable NameVariable DescriptionData TypeLengt hResponse Options / Codes hNotes								
	difficulties				"SLEEPDIFFI"			

**Table 18 : Sleep Created Variables** 

	Sleep Variables, Form 2-05									
	C	reated ne	w variab	oles						
Variable Name	Variable Description	Data Type	Length	Response Options/ Codes	Notes					
FALL_ASLEEP_N EW	How long after going to bed does your child usually fall asleep?	Numeric	8	0= 0 to less than 15 minutes  1= 15 to less than 30 minutes  2= 30 to less than 45 minutes  3= 45 minutes to less than 60 minutes  4= 60 minutes and more						
RELUCTANT_NE W	Your child goes to bed reluctantly (hesitant, slowly, involuntary)?	Numeric	8	0= The sleep behavior never occurs 1= The behavior						

#### Sleep Variables, Form 2-05 **Created new variables Variable Name Variable Description** Data **Response Options/** Length **Notes** Codes Type occurs once or twice a month 2= Occurs one or two times a week 3= Occurs between three and five nights a week 4= The sleep behavior happens every night DIFFICULTY\_NE The child has difficulty Numeric 8 0= The sleep W getting to sleep at night behavior never (and may require a parent occurs to be present) 1= The behavior occurs once or twice a month 2= Occurs one or

#### Sleep Variables, Form 2-05 **Created new variables Variable Name Variable Description** Data Length **Response Options/ Notes** Codes Type two times a week 3= Occurs between three and five nights a week 4= The sleep behavior happens every night The child does not fall Numeric 8 NOTOWNBED\_N 0= The sleep EW asleep in his or her own behavior never bed occurs 1= The behavior occurs once or twice a month 2= Occurs one or two times a week 3= Occurs between three and five

#### Sleep Variables, Form 2-05 **Created new variables Variable Name Variable Description** Data **Response Options/** Length **Notes** Codes Type nights a week 4= The sleep behavior happens every night WAKEUP\_NEW Numeric 0= The sleep The child wakes up two or behavior never more times in the night occurs 1= The behavior occurs once or twice a month 2= Occurs one or two times a week 3= Occurs between three and five nights a week 4= The sleep behavior happens

#### Sleep Variables, Form 2-05 **Created new variables Variable Name Variable Description** Data **Response Options/** Length **Notes** Codes Type every night Numeric DIFF\_SLEEPAGA After waking up in the 8 0= The sleep IN NEW night the child has behavior never difficulty falling asleep occurs again by himself or herself 1= The behavior occurs once or twice a month 2= Occurs one or two times a week 3= Occurs between three and five nights a week 4= The sleep behavior happens every night

#### **Sleep Variables, Form 2-05 Created new variables Variable Name Variable Description Response Options/** Data Length **Notes** Codes Type 0= The sleep PARENTBED\_NE The child sleeps in the Numeric 8 W parent's bed at some time behavior never during the night occurs 1= The behavior occurs once or twice a month 2= Occurs one or two times a week 3= Occurs between three and five nights a week 4= The sleep behavior happens every night Numeric COMFORTER\_N If the child wakes, he or 8 0= The sleep EW she uses a comforter behavior never (e.g., pacifier or binky) occurs

## Sleep Variables, Form 2-05 Created new variables

Variable Name	Variable Description	Data Type	Length	Response Options/ Codes	Notes
	and requires a parent to replace it			1= The behavior occurs once or twice a month 2= Occurs one or two times a week 3= Occurs between three and five nights a week 4= The sleep behavior happens every night	
DRINK_NEW	The child wants a drink during the night (including breast or bottle-feed)	Numeric	8	0= The sleep behavior never occurs  1= The behavior occurs once or twice a month	

## Sleep Variables, Form 2-05 Created new variables

Variable Name	Variable Description	Data Type	Length	Response Options/ Codes	Notes
				2= Occurs one or two times a week 3= Occurs between three and five nights a week 4= The sleep behavior happens every night	
HAS_DIFF_NEW	Do you think your child has sleeing difficulities	Numeric	8	1=yes 0=no	
TCSQ	Total score of the Tayside Children's Sleep questionnaire	Numeric	8		Maximum score is 36
DIMS	Does the child has disorders of of initiating and maintaining sleep?	Numeric	8	1=yes; 0=no	If TCSQ>=8 then DIMS coded as 1;

#### Acanthosis Nigricans Screening (Form 52-09)

Acanthosis Nigricans is a skin condition characterized by dark, velvety skin in the body folds and creases such as the armpits, groin, and neck. (Burke, Hale, Hazuda, & Stern, 1999). It is often associated with conditions that raise insulin levels such as obesity, Polycystic Ovarian Syndrome, and Cushing's syndrome; it is a risk factor for type 2 diabetes. Acanthosis nigricans is considered a functional and secondary outcome of obesity.

CHL measurement staff will be trained to identify acanthosis nigricans, a possible early indication of insulin resistance and pre-diabetes. Each child's neck will be examined at baseline and post-intervention period. Two trained research staff examine child participants' necks for the presence of acanthosis nigricans (AN). Using Burke's quantitative scale for AN, staff will rate each child on a scale for Acanthosis Nigricans severity: 0 to 4 [68]. Staff marks their rating on the recording sheet Form 59-02. Participants with a score of one or higher are considered to have AN. AN is independently associated with hyperinsulinemia, an important risk factor for type 2 diabetes [69].

These measurements will allow us to measure progress toward our objective of decreasing Acanthosis Nigricans by 5%. *Acanthosis Nigricans referral.* Parents/caregivers of participants with a positive screen for AN are provided a referral to follow-up with their children's health care providers or a public health service provider. If staff observes that a child might have acanthosis nigricans, they will talk to the parent in private and present a written referral for their child to see a medical professional. The referral form was used to refer positive children to local medical attention. Each jurisdiction identified the most appropriate referral options for their community.

Table 19: Acanthosis Nigricans Screening Variables

	Acanthosis Nigricans (AN) Screening Variables, Form 59-02									
Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes					
ID	CHL subject ID	Character	7	The first two numbers must be from 01 to 11, the third number must be one from 1 to 6, the fourth number must be one from 1, 2, or 3and the last 3 numbers are from 1 to 200.  Maybe the id numbers can be preloaded.	Set as a primary key.  Format is in the form of JJCY### where JJ is a number for jurisdiction, C is the number for each community in a jurisdiction, Y is the year of measurement, and ### is a number from 1 to the number of enrollees per community.					
DATE_AN	Date Acanthosis form is filled in	Date	10		Format should be MMDDYY10.					

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
STUDY_YEAR	Study year when the measurement is taken	Character	1	1=Baseline 2=24 months into intervention or Post-intervention (year 2)	This variable is not from the form but added to differentiate data from different collection time  Maybe this variable should be added to the form?
SEVERITY_AN	Severity of acanthosis nigricans on the back of neck	Character	1	0= Absent 1= Present 2= Mild 3= Moderate 4= Severe 9=missing	
REFERRED_A N	Is a referral made for this child?	Character	1	0=No 1=Yes 9=Missing	Refer to Log 3 Acanthosis Nigricans Referral to find

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
				8=Unknown	the needed information
	only coloulated for		iuriodiatio	on bosoling datagets and EAS providence of	tudy For 24
	only calculated for	or Intervention	jurisdiction	ns baseline datasets and FAS prevalence s	tudy. For 24

## Culture (Form 23-03)

The "Culture" questionnaire" (Form 23-03) assesses native peoples' ethnic and American mainstream affiliation in line with a bidimensional assumption of ethnic identity in U.S dominated/controlled societies. Stronger empirical support for considering it as a bidimensional construct exists rather than unidimensional (Kaholokula, Grandinetti, Keller, Nacapoy, Kingi, and & Mau 2012; Kaholokula, Iwane, & Nacapoy 2010; Kaholokula, Grandinetti, Nacapoy, & Chang 2008).

Degree of participant's own group's cultural and US mainland cultural identifications were assessed using an accuration questionnaire originally designed for use with Native Hawaiian (Kaholokula, Grandinetti, Nacapoy and Change, 2008). The questionnaire consists of 2 subscale: a 4-item participant's native culture identify subscale (NCIS) and a 4-item US mainland culture identity subscale (USCIS). The two subscales assess the four same aspects of Native/Own group and US mainland cultural identifies: Knowledge about each cultural group, degree of involvement with, feeling towards and associations with each cultural group. A 5-point response scale, ranging from 1 (very knowledgeable; very involved; very positive; mostly of the time) to 5 (not at all knowledgeable; not at all involved; very negative; not at all associated) was used for each item.

The original 8 variables in the data set gives a "5" to very knowledgeable, very positive, or very involved and a "1" to not knowledgeable, very negative, or disinterested. Eight new variables were created to reserve the score so that the scoring pattern matches with the literature. A total score was created for each of those two subscale (variable names: NCISand USCIS) by summing the scores of the 4 items, which ranges from 4 to 20, with lower score indicated a stronger identity. Scores <=12 on each subscale (median score 12, range 4-20) indicated higher levels of affiliation. NCIS and USCIS scores were calculated only for subjects who had complete information for the two 4-items associated with that subscale.

A categorical variable, "ACCULTURATION" was created with four categoris: Integrated, traditional, assimilated, and marginalized.

Table 20: Culture Variables, Form 23-03

		Culture \	/ariable	s, Form 23-03	
Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
ID	CHL subject ID	Character	7	The first two numbers must be from 01 to 11, the third number must be one from 1 to 6, the fourth number must be one from 1, 2, or 3 and the last 3 numbers are from 1 to 200.	Set as a primary key. Format is in the form of JJCY### where JJ is a number for jurisdiction, C is the number for each community in a

		Culture \	Variable	s, Form 23-03	
Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
					jurisdiction, Y is the year of measurement, and ### is a number from 1 to the number of enrollees per community.
DATE_CUL	Date of Interview	Date	10		Format should be MMDDYY10.
Collection_NO	Time (or year) when the measurement is taken	Character	1	1=Baseline  2= 24 months into intervention or Post-intervention	This variable is not from the form but added to differentiate data from different collection time
Created new va	ariables from the cult	ure form:			
GROUP_ KNOWLEDGE_ NEW	How knowledgeable are you of your group's traditional culture and lifestyle?	Numeric	8	1=Very Knowledgeable 2= Somewhat knowledgeable 3= Neutral or no response 4=Somewhat not knowledgeable 5=Not at all knowledgeable	
GROUP_ INVOLVEMENT _NEW	How involved are you in your group's traditional culture and lifestyle?	Numeric	8	1=Very involved 2= Somewhat involved 3= Neutral or no response 4=Somewhat not involved 5=Not at all involved	
GROUP_ FEELING_NEW	How do you feel toward your group's	Numeric	8	1=Very positive 2= Somewhat positive	

		Culture \	/ariable	s, Form 23-03	
Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	traditional culture and lifestyle?			3= Neutral or no response 4=Somewhat negative 5=Very negative	
GROUP_ ASSOCIATION _NEW	How often do you associate with people of your group's traditional culture and lifestyle?	Numeric	8	1=Most of the time 2= Somewhat often 3= Neutral or no response 4= Very little of the time 5=Not at all	
US _ KNOWLEDGE_ NEW	How knowledgeable are you of U.S. Mainland culture and lifestyle?	Numeric	8	1=Very Knowledgeable 2= Somewhat knowledgeable 3= Neutral or no response 4=Somewhat not knowledgeable 5=Not at all knowledgeable	
US_ INVOLVEMENT _NEW	How involved are you in U.S. Mainland culture and lifestyle?	Numeric	8	1=Very involved 2= Somewhat involved 3= Neutral or no response 4=Somewhat not involved 5=Not at all involved	
US_ FEELING_NEW	How do you feel toward U.S. Mainland culture and lifestyle?	Numeric	8	1=Very positive 2= Somewhat positive 3= Neutral or no response 4=Somewhat negative 5=Very negative	
US_	How often do you	Numeric	8	1=Most of the time	

Culture Variables, Form 23-03					
Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
ASSOCIATION _NEW	associate with people of U.S. Mainland culture and lifestyle?			2= Somewhat often 3= Neutral or no response 4= Very little of the time 5=Not at all	
NCIS	Own group, native culture identify subscale score	Numeric	8	Ranges 4-20; Sum of the four sub- indicating a stronger identity	items, with lower score
USCIS	US mainland/American culture identify subscale score	Numeric	8	Ranges 4-20; Sum of the four sub- indicating a stronger identity	items, with lower score
ACCULTURATI ON	Four acculturation modes: Integrated, Traditional, Assimilated, and Marginalized	Numeric	8	1=Integrated (NCIS<=12 and USC 2=Traditional (NCIS<=12 and USC 3=Assimilated (NCIS>12 and USC 4=Marginalized (NCIS>12 and USC	CIS>12); CIS<=12);

Household Food and Physical Environment (Form 23-06)

#### **Table 21 Food and PA environment**

\*Variables included in Table 17 can only be found in CHL 24month data sets.

<sup>\*\*</sup> As of 08/31/2016 variables for Form 23-06 are not available for datga request.

Table 17: FORM 23-06_24-month_Child and Household's Food and
Physical Activity Environment Information

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
DATE_FOOD_PA	Date of Interview	Number	8		Format should be MMDDYY10.
CHECKER_Food_P A_1	Initials of person who checked the form's first page.	Character	3		3 letters
CHECKER_Food_P A_2	Initials of person who checked the form's page 2.	Character	3		3 letters
ACTIVE_PLACE	Does your child go to places in the community to be physically active?	Character	1	0=No 1=Yes	
PLACE1	Name of the first place where your child goes to be physically active over the past year- during the Summer	Character	255		
PLACE2	Name of the second place where your child goes to be physically active over the past year- during the Summer	Character	255		
PLACE3	Name of the third place where your child goes to be physically active over the past year- during the Summer	Character	255		
PLACE4	Name of the forth place	Character	255		

# Table 17: FORM 23-06\_24-month\_Child and Household's Food and Physical Activity Environment Information

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	where your child goes to be physically active over the past year- during the Summer				
PLACE5	Name of the fifth place where your child goes to be physically active over the past year- during the Summer	Character	255		
PLACE1	Name of the first place where your child goes to be physically active over the past year- during the Summer	Character	255		
PLACE2	Name of the second place where your child goes to be physically active over the past year- during the Summer	Character	255		
PLACE3	Name of the third place where your child goes to be physically active over the past year- during the Summer	Character	255		
PLACE1_SCHOOLY R	How often first place where your child goes to be	Character	1	4=4-7 days/week 3= 1-3 days/week	

Table 17: FORM 23-06_24-month_Child and Household's Food and
Physical Activity Environment Information

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	physically active over the past year- during the School Year			2=1-3 times/Month 1=less than once a month	
PLACE2_SCHOOLY R	How often second place where your child goes to be physically active over the past year- during the School Year	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	
PLACE3_SCHOOLY R	How often the third place where your child goes to be physically active over the past year- during the School Year	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	
PLACE4_SCHOOLY R	How often fourth place where your child goes to be physically active over the past year- during the School Year	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	
PLACE5_SCHOOLY R	How often fifth place where your child goes to be physically active over the past year- during the School Year	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	
PLACE1_SUMMER	How often first place where your child goes to be physically active over the	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month	

Table 17: FORM 23-06_24-month_Child and Household's Food and
Physical Activity Environment Information

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	past year- during the Summer			1=less than once a month	
PLACE2_SUMMER	How often second place where your child goes to be physically active over the past year- during the Summer	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	
PLACE3_SUMMER	How often third place where your child goes to be physically active over the past year- during the Summer	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	
PLACE4_SUMMER	How often fourth place where your child goes to be physically active over the past year- during the Summer	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	
PLACE5_SUMMER	How often fifth place where your child goes to be physically active over the past year- during the Summer	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	

# Table 17: FORM 23-06\_24-month\_Child and Household's Food and Physical Activity Environment Information Variable Name Variable Description Data Type Length Response Options / Codes Notes GROCERY1 Name of the first grocery store where your household buys groceries over the past

Character

Character

Character

Character

year -during the summer

Name of the second grocery

store where your household buys groceries over the past year -during the summer

Name of the third grocery

store where your household buys groceries over the past year -during the summer

Name of the fourth grocery

Name of the fifth grocery

store where your household

store where your household buys groceries over the past year -during the summer

**GROCERY2** 

**GROCERY3** 

**GROCERY4** 

**GROCERY5** 

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255

255

255

255

Table 17: FORM 23-06_24-month_Child and Household's Food and
Physical Activity Environment Information

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	buys groceries over the past year -during the summer				
GROCERY1_ SCHOOLYR	How often first grocery store where your household buys groceries over the past year -during the School Year	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	
GROCERY2_ SCHOOLYR	How often second grocery store where your household buys groceries over the past year -during the School Year	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	
GROCERY3_ SCHOOLYR	How often third grocery store where your household buys groceries over the past year -during the School Year	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	
GROCERY4_ SCHOOLYR	How often fourth grocery store where your household buys groceries over the past year -during the School Year	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	
GROCERY5_ SCHOOLYR	How often fifth grocery store where your household buys groceries over the past year -during the School Year	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	
GROCERY1_	How often first grocery store	Character	1	4=4-7 days/week	

## Table 17: FORM 23-06\_24-month\_Child and Household's Food and Physical Activity Environment Information

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
SUMMER	where your household buys groceries over the past year -during the summer			3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	
GROCERY2_ SUMMER	How often second grocery store where your household buys groceries over the past year -during the summer	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	
GROCERY3_ SUMMER	How often third grocery store where your household buys groceries over the past year -during the summer	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	
GROCERY4_ SUMMER	How often fourth grocery store where your household buys groceries over the past year -during the summer	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	
GROCERY5_ SUMMER	How often fifth grocery store where your household buys groceries over the past year -during the summer	Character	1	4=4-7 days/week 3= 1-3 days/week 2=1-3 times/Month 1=less than once a month	
ENTRY_DT_FOOD PA		Number	8		
ENTRY_FOODPA		Character	3		

Table 22: Intervention Exposure Variables

Table 18: Intervention Exposure FORM 23-07_24month						
Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes	
DATE_IE	Date of Interview	Number	8		Format should be MMDDYY10.	
RULE_FOOD	Does child's school have rules about the types of food the children are allowed to eat at school?	Character	1	0=No 1=Yes 8= Don't Know 9= Missing	Only for those whose child attends a school	
RULE_DRINK	Does child's school have rules about the types of Drink the children are allowed to eat at school?	Character	1	0=No 1=Yes 8= Don't Know 9= Missing	Only for those whose child attends a school	
PA_REQUIRED	Does child's school require the children to participate in exercise or physical activity every day at school?	Character	1	0=No 1=Yes 8= Don't Know 9= Missing	Only for those whose child attends a school	
DRINK_WATER_ SCHOOL	Does child able to easily get clean drinking water at school?	Character	1	0=No 1=Yes 8= Don't Know 9= Missing	Only for those whose child attends a school	
NEW_EXERCISE	Does your child have any new places in the community to exercise or play outside of school?	Character	1	0=No 1=Yes 8= Don't Know 9= Missing		
SPORT_EQUIPMENT	Did you notice more sports equipment in your child's school or community this	Character	1	0=No 1=Yes 8= Don't Know		

Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes
	past year?			9= Missing	
DRINK_WATER_PAR K	Do the parks that your child visits have clean drinking water available?	Character	1	0=No 1=Yes 8= Don't Know 9= Missing	
GARDENING	Have you or your child been involved in any gardening or hydroponics projects this past year?	Character	1	0=No 1=Yes 8= Don't Know 9= Missing	
MESSAGE_VEG_FRUI	Have you heard messages or been told about eating vegetables and fruits?	Character	1	0=No 1=Yes 8= Don't Know 9= Missing	
MESSAGE_ WATER	Have you heard messages or been told about drinking water instead of sugary drinks?	Character	1	0=No 1=Yes 8= Don't Know 9= Missing	
MESSAGE_EXERCIS E	Have you heard messages or been told about being more active / exercising?	Character	1	0=No 1=Yes 8= Don't Know	

Table 18: Intervention Exposure FORM 23-07_24month							
Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes		
				9= Missing			
MESSAGE_SLEEP	Have you heard messages or been told about getting more sleep?	Character	1	0=No 1=Yes 8= Don't Know 9= Missing			
MESSAGE_SCREEN_ TIME	Have you heard messages or been told about reducing screen time – such as, watching TV or playing video games	Character	1	0=No 1=Yes 8= Don't Know 9= Missing			
CHL_MATERIALS	Have you seen or received any of the CHL materials this past year	Character	1	0=No 1=Yes 8= Don't Know 9= Missing			
CHL_ROLE_MODEL	Did you or anyone you know attend a CHL role model training this past year?	Character	1	0=No 1=Yes 8= Don't Know 9= Missing			
TRAINING_ GARDENING	Did you or anyone you know attend training or an event on gardening or hydroponics	Character	1	0=No 1=Yes 8= Don't Know 9= Missing			

Table 18: Intervention Exposure FORM 23-07_24month						
Variable Name	Variable Description	Data Type	Length	Response Options / Codes	Notes	
	this past year?					
TRAINING_PA_FOOD	Did you or anyone you know attend training or an event on physical activity or healthy eating this past year?	Character	1	0=No 1=Yes 8= Don't Know 9= Missing		
TALK_SLEEP	Did your child talk about how much sleep to get each night?	Character	1	0=No 1=Yes 8= Don't Know 9= Missing		
TALK_SCREEN_TIME	Did your child talk about the importance of limiting the amount of TV and computer games (screen time)?	Character	1	0=No 1=Yes 8= Don't Know 9= Missing		

### Variables from Screen Form (baseline) which was intergrated into the Demo Form at 24-month (post-intervention) data collection

Prior to participating in the study but after the consent process, CHL staff asked the parents screening questions for each child that was to be enrolled. Those questions were added to the demo form for 24 month data collection

Table 23: Screening variables

	Screening Variables						
Variable Name	Variable Description	Data Type	Lengt h	Response Options / Codes	Notes		
ID	CHL subject ID	Character	7	The first two numbers must be from 01 to 11, the third number must be one from 1 to 6, the fourth number must be one from 1, 2, or 3 and the last 3 numbers are from 1 to 200.	Set as a primary key. Format is in the form of JJCY### where JJ is a number for jurisdiction, C is the number for each community in a jurisdiction, Y is the year of measurement, and ### is a number from 1 to the number of enrollees per community.		
DATE_SCREEN	Date of Screening	Date	10		Format should be MMDDYY10.		
COLLECTION_N O	Time (or year) when the measurement is taken	Character	1	1=Baseline 2= 24 months into intervention or Post- intervention	This variable is not from the form but added to differentiate data from different collection time		

	Screening Variables					
Variable Name	Variable Description	Data Type	Lengt h	Response Options / Codes	Notes	
PROBLEM_LEA DS_TO_INACTIV ITY	Q1. Does your child have any problems that keep him/her from being physically active.	Character	2	0=No 1=Yes 99 = Missing		
PROBLEM_SPE CIFY_LEADS_IN ACTIVITY	If yes to Q1, What type of problem?	Character	100		Only if answered Yes to variable "PROBLEM_LEADS_TO_IN ACTIVITY"	
HEART	If yes to Q1, has your child had any problems with her/his heart?	Character	2	1=Yes 99 = Missing		
BLOOD_PRESS URE	If yes to Q1, has your child had any problems with her/his blood pressure?	Character	2	1=Yes 99 = Missing		
BONES_JOINTS	If yes to Q1, has your child had any problems with her/his bones or	Character	2	1=Yes 99 = Missing		

	Screening Variables						
Variable Name	Variable Description joints?	Data Type	Lengt h	Response Options / Codes	Notes		
NERVES	If yes to Q1, has your child had any problems with her/his nerves?	Character	2	1=Yes 99 = Missing			
THYROID	If yes to Q1, has your child had any problems with her/his thyroid?	Character	2	1=Yes 99 = Missing			
CANCER	If yes to Q1, has your child had any problems with her/his cancer?	Character	2	1=Yes 99 = Missing			
LIVER	If yes to Q1, has your child had any problems with her/his liver?	Character	2	1=Yes 99 = Missing			
KIDNEY	If yes to Q1, has your child had any problems with her/his kidney?	Character	2	1=Yes 99 = Missing			

Screening Variables					
Variable Name	Variable Description	Data Type	Lengt h	Response Options / Codes	Notes
DIABETES	If yes to Q1, has your child had any problems with her/his diabetes?	Character	2	1=Yes 99 = Missing	
PROBLEM_MISS ING	Said child had problem in Q1, but did not specify type of problem in checklist	Character	2	99=Missing	Only if Q1 was yes, and none of the health problems were checked.
MEDS	Child takes medications	Character	2	0=No 1=Yes 99 = Missing	
ANTIDEPRESSA NTS	Q4???	Character	2	1=Yes 99 = Missing	
LITHIUM		Character	2	1=Yes 99 = Missing	
APPETITE_SUP RES		Character	2	1=Yes 99 = Missing	
OTHER_MED_A FFECT_APPETIT E_METABOLISM		Character	2	1=Yes 99 = Missing	
TAKE_MEDS_RE GULARLY		Character	2	0=No 1=Yes 99 = Missing	

### **Jurisdiction, Community, and Intervention Group Codes**

The following table provides the response codes for the jurisdictions and communities that participated in CHL.

**Table 24: CHL Jurisdiction and Community Codes** 

CHL Jurisdiction and Community Codes Created Variables						
Variable Variable Description Data Type Response Options / Codes						
JURISDICTION	Participant Jurisdiction	Character	1=Palau			
			2=Yap			
			3=Guam			

CHL Jurisdiction and Community Codes Created Variables					
Variable	Variable Description	Data Type	Response Options / Codes		
COMMUNITY	Participant community	Character	4=CNMI 5=Chuuk 6=Pohnpei 7=Kosrae 8=RMI 9=American Samoa 10=Hawaii 11=Alaska 11=Airai_Olbedekall 12=Koror(Madalaii, Meyuns, Ngerbeched, Ngermid) 13=Melkeok 14=Ngaraard_Ngeremlengui 21=Rull(Beleau and Ganelay ELM/YICS) 22=Rumuu 23=Tomil 24=Ulithi 25=Weloy (Colonia A/B and Mock) 31=Agat_Santa Rita 32=Sinajana_Agana Heights 33=Yigo 34=Yona_Talfofo 35=Dededo 41=Tanapag_San Roque 42=Garapan		

CHL Jurisdiction and Community Codes Created Variables						
Variable	Variable Description	Data Type	Response Options / Codes			
			43=Kagman 44=Tinan_Rota 45=Oleai 46=Koblerville_ San Antonio 51=Iras(plus mock) 52=Tol 53=Tonoas 54=Sapuk 55=Uman 61=Mand 62=Nett 63=Sekere 64=Wenik 71=Lelu(plus Mock) 72=Malem 73=Sansrik 74=Tafunsak 75=Utwe_Walung 81=Ailinglaplap 82=Ebeye(SDA, EPES, and EHCR) 83=Majuro(Rita elm., Delap Ele., Laura, and Uliga Mock) 91=Aua 92=Fagaitua_Alofau_Masefau_LDS 93=Aoloau_ Malaeloa_Siliaga 94=Tula_Aloa_Aoa			

CHL Jurisdiction and Community Codes Created Variables									
Variable Variable Description Data Type Response Options / Codes									
			95=Tafuna 96=Pavaiai 101=Nanakuli 102=Waimanalo 103=Hilo 104=Wailuku 105=Kauai 106=Molokai 111=Fairbanks 112=MatSu 113=Kenai 114=Anchorage						
Group	Whether the community belongs to intervention, control, or temporal community	Char	Three categories: control, intervention, temporal						

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# Appendices CHL Data Collection Forms

FORM 23-02	Children's Healthy Living Progr	ram For Office Use Only
	Information About Your Child	Child's ID:
	<b>E</b>	Date:
		MM DD YEAR Checked by:

#### INFORMATION ABOUT YOUR CHILD AND HOUSEHOLD

Parent, Guardian OR Caretaker: Please complete <u>all 6 pages</u> of this form. When completing this form, consider the child who will participate in the Children's Healthy Living Program. Thank you!

SEX (Circle One)			BIRTHDATE Month Day Year				AGE In Years		GRADE IN SCHOOL  (Circle One)  Circle Grade in Fall 2012				
Boy	Girl				20				Head Start Day Care Preschoo				
						•		'	Kindergarten	Elementary	None		
но	HOUSEHOLD COMPOSITION												
1.	What is y	Ol	ur relation	ıship t	o this c	hil	d? (Plea	35(	e check which a	applies to you:)			
	Birth moth	ie	г			Birth father							
□ Sten mother □ Sten father													

1.	What is your relationship to this child? (Please check which applies to you:)								
	Birth mother			Birth father					
	Step mother			Step father	ep father				
	Adoptive mothe	er		Adoptive fat	her				
	Legal Guardian uncle, sibling)	n, Caregiver, (	Other: If related, please indicate the relationship: (e.g., grandm				., grandmother,		
2.	What is your o	urrent Marita	al Statu	s: (Please m	nark <u>ONLY</u> One	e)			
	Married			Widowed					
	Divorced			Single and N	NOT living with boyfriend, girlfriend, partner				
	Separated			Single and li	iving with boyfriend, girlfriend, partner				
	Other		If Othe	r is checked,	please describe	): :			
3.	Who currently (Mark ALL tha		child's	household a	nd how are the	ey related to you	r child?		
Rela	tionship to		Rela	tionship to		Relationship			
you	r child	How Many?	your	child	How Many?	to your child	How Many?		
Moti	Mother Gi		Gran	dmother		Cousin			
Father		Gran	ıdfather		Friend				
Brother		Aunt							
Sister			Uncl	e		1			
Other, please specify:									

FORM 23-02	Children's Healthy Living Program	For Office Use Only
	Information About Your Child	Child's ID:
		Date: / / MM DD YEAR Checked by:

HOUSEHOLD COMPOSITION (CONTINUED)

Please tell us about of your child on a regular.		le; siblings, cousins, friends) v	who live with						
	Please, specify below whether the child is a boy or a girl and the age of the child.								
	Boy	Girl	Age						
Child 1									
Child 2									
Child 3									
Child 4									
Child 5									
Child 6									
Child 7									
Child 8									
Child 9									
Child 10									

2

FORM 23-02

### Children's Healthy Living Program Information About Your Child



For Office Us	e Only	
Child's ID:		
Date:/_		
Checked by:	DD YEAR	

#### HOUSEHOLD INFORMATION (OTHER)

5. What is the highest grade or year of	f school you completed?
☐ Never attended school or only attended kindergarten	☐ Grade 12 or GED (High school graduate)
Grades 1 up to 8 (Elementary to middle school)	☐ College or technical school 1 year to 3 years
☐ Grades 9 up to 11 (Some high school)	☐ College 4 years or more (College graduate)
6. Your current employment status? (	Please select all that apply.)
Employed for Self-employed wages/salary (full-time/part-time/seasonal)	Out of work  for more than 1  year  year
☐ A Homemaker ☐ A Student	☐ Retired ☐ Unable to work
7. Do you currently have more than or	ne job at this time?
☐ Yes ☐ N	0
8. Based on everyone that lives under income from all sources over the page.	one roof or house, what is the annual household ast 12 months?
☐ Under \$10,000	
$\square$ From \$10,000 to less than \$20,000	
☐ From \$20,000 to less than \$35,000	
☐ From \$35,000 to less than \$60,000	
☐ From \$60,000 to less than \$75,000	
☐ \$75,000 or more	

3

FORM 23-02	Children's Healthy Living Program	For Office Use Only
	Information About Your Child	Child's ID:
	The state of the s	Date:

OHILL	INFURIVI									
1.					oe of Cuba Itural herit		xica	an, Puerto R	ican, S	South or Central
	Yes		No							
Which	category	(s) belo	w best	des	cribes yo	our c	hild	l?		
2. Yo	ou may che	eck (√) <u>m</u>	ore than	one	box.					
	Black or a	African A	merican	- A p	erson havin	g origii	ns of	any of the ori	ginal pe	oples of Africa.
	White - A Africa.	person ha	ving origir	ıs in a	any of the or	riginal	peop	oles of Europe	, the Mi	ddle East, or North
		outh Amer attachme	ica (includ nt.	ing C	entral Åmer	ica), a	nd w	origin in any o ho maintains t <b>ify with (<i>ch</i></b>	tribal af	
			Athabasca		ic(s) you i	OSL   		Siberian	con an	τησε αρριγή.
			Cup'ik				_	Yup'ik		
			•			L	_	Other		
			Inupiaq			L		(please desc	ribe)	
	Asian									
		Please	specify th	ne or	ne(s) you r	nost i	iden	tify with ( <i>ch</i>	eck all	that apply):
			Cambodi	an		Japa	anes	se		Pakistani
			Chinese			Kore	ean			Thai
			Filipino			Mala	aysi	an		Vietnamese
			Indian			Oth	er (p	lease descrit	be)	
	Native Ha	waiian c	r other P	acifi	c Islander	:				
		Please	specify th	ne or	ne(s) you r	nost i	iden	tify with: ( <i>cl</i>	neck al	ll that apply):
		☐ Ch	amorro		Kosraean			Pohnpeian		Tokelaun
		☐ Ca	rolinian		Marshalle	se		Samoan		Tahitian
		☐ Ch	uukese		Native Hawaiian			Tongan		Yapese
		☐ Kiri	ibati		Palauan			Other (please desci	ribe)	_

FORM 23-02

#### Children's Healthy Living Program Information About Your Child



For Office Use Only
Child's ID:
Date:/
MM DD YEAR Checked by:

	***************************************
СНІІ	LD INFORMATION (CONTINUED)
3.	What language(s) does your child speak?
4.	What language does your child most often speak at home?
5.	In what city or country was your child born?
6.	How many years has your child lived here? (Enter the number of years in the space provided)
EAR	LY LIFE OF YOUR CHILD
1.	Child's Birth Weight: lb. and oz. OR kilograms
2.	Child's Birth Length: inches OR cm Unknown
3.	Was your child ever breastfed or fed breastmilk?
	□ Yes □ No (skip to question 4) □ Unknown □ Other (please describe)
	If yes, how old was your child when he/she completely stopped breastfeeding or being fed breastmilk?
	Months of age
4.	Was your child ever fed formula?
	Yes No (skip to question 5) Unknown Other (please describe)
$\Lambda$	If yes, how old was the child when he/she was first fed formula?
Y	Months of age ☐ Since Birth ☐ Unknown
	If your child was fed formula, how old was your child when he/she completely stopped drinking formula?
	Months of age
5.	How old was the child when he/she was first fed anything other than breast milk or
	formula? (This includes juice, cow's milk, sugar water, baby food, or anything else that the child might have been given, even water)
	Months of age

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#### OTHER INFORMATION

#### FOOD SECURITY/AVAILABILITY

	1.	In the p		s, how often doe	s your mon	ey for food run	out before	the end of the
		Never	Seldom	☐ Sometimes	☐ Most times	☐ Always	☐ Don't know	☐ No Response
	2.			s, how often doe t before the end				
		Never	Seldom	Sometimes	☐ Most times	☐ Always	☐ Don't know	☐ No Response
	3.	In the p		s, do you receive	assistanc	e to pay for foo	d (e.g., food	stamps, WIC
		Yes	□ No	☐ No Response	9			
Í	4.	If yes, v	which benefits	does this house	ehold recei	ve? (Check all i	that apply)	
		EBT/ SNAP/ NAP (formerly called Food Stamps)	Food Assistance (Food Bank/Food Pantries of Commodit foods)	d r	fits co	ee or reduced- st breakfasts or aches at school	□ Don't know	☐ Not applicable

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	DICA	_												
1.	<ul> <li>How many hours of sleep on average does your child get in a 24-hour period (at night and in naps)? (Please choose one, ☑; h= hours)</li> </ul>													
	0h □	0.5h □	1h □	1.5h □	2h	2.5h □	3h □	3.5h □	4h □	4.5h □	5h □	5.5h □	6h □	6.5h □
	7h	7.5h	8h □	8.5h □	9h. □	9.5h □	10h □	10.5h □	11h □	11.5h □	12h □	12.5h □	13h □	>13h □
2.	Does	s your	child	have a	ny cı	ırrent n	nedica	l conditi	ons dia	agnosed	bya	doctor?	•	
	□ Y	es			No									
	If yes	, please	spec	ify:										
				_										
				_										
3.	Has	a docto	or or	nurse e	ever t	old you	ı that t	he child	has as	sthma?				
I⊢,	☐ Yes ☐ No ☐ Don't Know/Not Sure													
	Yes		No		] Do	n't Knov	w/Not S	ure						
	Yes LIGIC		No		Do	n't Knov	w/Not S	ure						
	LIGIC	N		igious a			w/Not S	ure						
RE	LIGIC	DN t is <u>yo</u> u		igious			w/Not S		slim					
RE 1.	LIGIC Wha	ON t is <u>you</u>		igious a			w/Not S	☐ Mu	slim ntecost	ral				
1.	LIGIC Wha	ON t is <u>you</u> :		igious a			w/Not S	☐ Mu ☐ Pe						
1.	LIGIC Wha Baptist Buddh	DN t is <u>you</u> : ist ic		igious a			w/Not S	☐ Mu ☐ Pel ☐ Pro	ntecost otestant					
1.	LIGIC Wha Baptist Buddh Cathol	DN t is <u>you</u> : ist ic	<u>ır</u> reli				√/Not S	☐ Mu ☐ Pei ☐ Pro	ntecost otestant ssian C	t				
1.	LIGIC Wha Baptist Buddh Cathol Episco	DN t is you : : ist ic palian pelical C	<u>ır</u> reli		affilia		w/Not S	☐ Mu ☐ Pei ☐ Pro	ntecost otestant ssian C ner <i>(ple</i>	t Orthodox				
1.	LIGIC Wha Baptist Buddh Cathol Episco	DN t is you ist ic palian pelical C	<u>ır</u> reli	ant	affilia		w/Not S	☐ Mu ☐ Per ☐ Pro ☐ Ru: ☐ Oth ☐ No	ntecost otestant ssian C ner <i>(ple</i>	t Orthodox ease des				
1.	LIGIC Wha Baptist Buddh Cathol Episco Evange Mormo	DN t is you ist ic palian pelical C en/ Latte	<u>ır</u> reli ovena er-day	ant / Saints	affilia	tion?		☐ Mu ☐ Per ☐ Pro ☐ Ru: ☐ Oth ☐ No	ntecost otestant ssian C ner <i>(ple</i> ne Respo	t Orthodox ease des	cribe) _		comm	unity?

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#### TEKOI EL KIREL A NGELEKEM ME A DELENGCHEKLEM (INFORMATION ABOUT YOUR CHILD AND HOUSEHOLD)

Chedam, Chedil, me a lechub eng oungerachel er a ngalek: Moutekangel el rukui aika el rokui el tacher ma kldei el llel tia el form. Sel mongetmokl er tia el form, e komdasu el kirel ng ke el ngalek el mo ngar er tial omesuub er a Children's Healthy Living Program. Sulang! (Parent, Guardian OR Caretaker: Please complete all 13 pages of this form. When completing this form, consider the child who will participate in the Children's Healthy Living Program. Thank you!)

SECHAL/REDIL (SEX)				
(Mlechesii a				
chaibibed	b el meliuekl			
ra cl	nimong)			
((Circle One))				
Sechal	Redil ( <i>Girl</i> )			
(Boy)	Redii (Giri)			

SILS RA CHEROLL ( <i>BIRTHDATE</i> )								
Buil ( <i>Month)</i>	Sils ( <i>Day)</i>	Rak ( <i>Year)</i>						
20_								

REKIL ( <i>AGE</i> )
Rak ( <i>In Years)</i>

#### **ONGETELA EL SKUUL** (GRADE IN SCHOOL)

(Mlechesii a chaibibeob el meliuekl ra chimong) ((Circle One)) Mlechesii a chaibibeob el meliuekl er a skulel er a Spring 2014 (Circle Grade in Spring 2014)

Head Start	Day Care	Preschool					
Kindergarten	Elementary	Diak ( <i>None</i> )					

#### CHERRENGELEL A DELENGCHOKL (HOUSEHOLD COMPOSITION)

1.	Ngera deleuill er kau el mo er ngkal ngalk? Moutekangel el luchesii sel ngii a ochotii) ((What is your relationship to this child? (Please check which applies to you)):								
	Ulemechell el chedil (Birth mother)		Ulemechell el chedam ( <i>Birth father</i> )						
	Bechil a demal (Step mother)		Bechil a delal (Step father)						
	Milrodel el chedil (Adoptive mother)		Milrodel el chedam (Adoptive father)						
	Telutk ra court el Oungerachel er a ngalek, di oungerachel er a ngalek, me a kuk bebil: Alsekum ke chedal a ngalek e mochotii a deleuill er kau (delal mechas, angko, ta er ngii me a lechub e ke ochedal) (Legal Guardian, Caregiver, Other: If related, please indicate the relationship: (e.g., grandmother, uncle, sibling):								

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### CHERRENGELEL A DELENGCHOKL (OMECHELEL) (HOUSEHOLD COMPOSITION)

2.	Ngera deruchuali er a chebechili ei om ngar er ngli er chelechang: (Moutekangel ei Luchesii a <u>DI</u> Chimong) ( <i>What is your current Marital Status: (Please mark <u>ONLY</u>One))</i>								
	Bechiil ( <i>Marrie</i>	d)	Mla mad a bechil (	(Widowed)					
	Mla mo diak el ( <i>Divorced</i> )	bechiil		Mesobil e <u>DIAK</u> el kiei lobengkel a sechelil sechal, sechelil el redil, chaibo er ngii (Single and <u>NOT</u> living with boyfriend, airlfriend, partner)					
	Kakerous el bla bechil (Separa		Mesobil e kiei lobe chaibo er ngii (Sing partner)	gle and living w	rith boyfriend, girlfi	riend,			
	Bebil (Other)		Alsekum ng Iluches a B checked, please describ		ngel el smodii: ( <i>lf C</i>	Other is			
3.	3. Te rua techa er chelecha el taem a kiei er a delengcheklel a ngalek e uangera rolel a deleui er tir el mora ngelekem? (Mluches aike el ROKUI el oureor) (Who currently lives in the child's household and how are they related to your child? (Mark ALL that apply))								
nge ( <i>Rel</i>	euill el mora lekem lationship to r child)	Telang? (How Many?)	Deleuill el mora ngelekem (Relationship to your child)	Telang? (How Many?)	Deleuill el mora ngelekem (Relationship to your child)	Telang ? (How Many?)			
Delal (Mother)			Delal el mechas (Grandmother)		Ngelekel a ta er a delal/ demal (Cousin)				
Dem	Demal (Father)		Demal el rubak ( <i>Grandfather</i> )		Sechelil (Friend)				
Och	edal ( <i>Brother</i> )		Aunt (Aunt)						
Тае	er ngii ( <i>Sister</i> )		Angko (Uncle)						
Kuk	bebil, moutekar	ngel meketakl (C	Other, please specify):						

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#### CHERRENGELEL A DELENGCHOKL (OMECHELEL) (HOUSEHOLD COMPOSITION) (CONTINUED)

Moutekangel el subedemam er a rebebil er a rengalek (uai ar ta er ngii, ruchedal,

rengelekir ar bebil er a delal/demal, mar sechelil) el kiei lobengkel a ngelekem er a bek el taem? (Please tell us about other children (for example; siblings, cousins, friends)						
who live with your chil	Id on a regular basis?)  Moutekangel el meketakl er eou el kmo a ngalek ng sechal me a lechub eng redil me a rekil a ngalek. (Please, specify below whether the child is a boy or a girl and the age of the child.)					
	Sechal (Boy)	Redil ( <i>Girl</i> )	Rekil (Age)			
Kot el ngalek (Child 1)						
Ongeru el ngalek (Child 2)						
Ongedei el ngalek (Child 3)						
Ongeua el ngalek (Child 4)						
Ongeim el ngalek (Child 5)						
Ongelolem el ngalek ( <i>Child</i> 6)						
Ongeuid el ngalek (Child 7)						
Ongeai el ngalek (Child 8)						
Ongetiu el ngalek (Child 9)						
Ongeteruich el ngalek ( <i>Child 10</i> )						
TEKOI EL KIREL A DEL	ENGCHOKL (BEBIL)	(HOUSEHOLD INFORMATIO	N (OTHER))			
5. Ngera kot el ngar er bab el skuul me a lechub eng rak er a skuul el om tilobed er ngii? (What is the highest grade or year of school you completed?)						
□ Dimlak ngara skuul me a lechub eak di mlara kindergarten (Never attended school or only attended kindergarten) □ Ongeteruich ma Ongeru el Skuul me a lechub eng GED (Tilobed er a high skuul) (Grade 12 or GED (High school graduate))						
•	☐ Kot el mora Ongeai el skuul (Elementary school) (Grades 1 up to 8 (Elementary to middle school)) ☐ Daingak me a lechub eng technical skuul el ta el mo edei el rak (College or technical school 1 year to 3 years)					
	el mora Ongeteruich me a Ta el Daingak el eua me a lechub eng betok el rak (Tilobed er a daingak) ( <i>College 4 years or more ne high school</i> )) ( <i>College graduate</i> )					

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### Children's Healthy Living Program Information About Your Child



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TEKOI EL KIREL A DELENGCHOKL (BEBIL) (HOUSEHOLD INFORMATION (OTHER))

_ I L	NOI LE NINLE A DELL	.NOOHOTIL (DE	-DIL) (NOOSENC	LD IN ONNATION (OTTICK))		
6.				el Imuches aike el rokui el		
	loureor.) (Your current emp	- ,				
		Di ngii el	Diak el	Diak el		
	kerreker/ udoud (oureor el eai el sikang	loureor el mo	loureor el mla mo	loureor el sebechel kesai er a loureor		
	er a sils/oureor el kesai	er ngii (Self- employed)	betok er a	kesai er a loureor ta el rak ( <i>Unable to work</i> )		
	er eai el sikang er a sils	employed)	ta el rak	(Out of work		
	/ulterkokl aike el taem el		(Out of work	for less than		
	loureor er a rak)		for <u>more than</u>	1 year)		
	(Employed for wages/		1 year)			
	salary) (full-time/part-					
	time /seasonal) Chad er a Sers/Chad	Ngalek era □	Mla retire □	Di kiei el mengetmokl er a blai me		
	er a Chei (Subsistence	Skuul (A	(Retired)	a delengchokl ea bechil a oureor		
	Living)	Student)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(A Homemaker)		
_	Chelecha el taem eng be	tok er a chimong	a urelem? (Do voi	u currently have more than one job at		
7.	this time?)	<b>y</b>	(			
	Choi (Yes)	☐ Diak ( <i>Na</i>	))			
	Illtuil er a ildieir a rechad	l al nagra chalcal	a delengchekler	n, e ngera klungel a udoud el		
		_	_	el mla mo merek el teruich me a		
8.				, what is the annual household income		
	from all sources over the past 12 months?)					
П						
	Ingal edu el a \$2000 (diluel \$2000)					
	☐ Ngar er a \$2500 el mo kekerei er a \$5000 ( <i>From \$2500 to less than \$5000</i> )					
L	· · · · · · · · · · · · · · · · · · ·					
Ш	☐ Ngar er a \$5000 el mo kekerei er a \$10,000 ( <i>From \$5000 to less than \$10,000</i> )					
	☐ Ngar er a \$10,000 el mo kekerei er a \$20,000 ( <i>From \$10,000 to less than \$20,000</i> )					
	□ Ngar er a \$20,000 el mo kekerei er a \$35,000 ( <i>From</i> \$20,000 to less than \$35,000)					
	Name of the Control o					
	☐ Ngar er a \$35,000 el mo kekerei er a \$60,000 ( <i>From</i> \$35,000 to less than \$60,000)					
	☐ Ngar er a \$60,000 el mo kekerei er a \$75,000 ( <i>From</i> \$60,000 to less than \$75,000)					
	\$75,000 me a lechub eng b	etok (\$75,000 or m	ore)			
$I_{\vdash}$						
Ш	Diak a nger (No Response)					

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#### TEKOI EL KIREL A NGALEK (CHILD INFORMATION)

1.	lechub eng heritage? (	<b>Centra</b> Do you d	par er ngii a rolel el mo Cuban, Mexican, Puerto Rican, South me a la American, me a lechub eng kuk bebil er a Spanish cultural consider your child to be of Cuban, Mexican, Puerto Rican, South or Central panish cultural heritage?)
	Choi (Yes)		Diak (No)

#### Ngera el bliongel el ngar eou a ungil smodii a ngelekem?

(Which category(s) below best describes your child?)						
2. Se	2. Sebechem el lmuus (✓) a betok er a chimong el baks. (You may check (✓) more than one box.)					
	Black me a lechub eng African American- Chad el uchelel a mlengai er a ngii di el ta er tireke el mle kot el chad er a Africa. (Black or African American- A person having origins of any of the original peoples of Africa.)					
		<del>-</del>		le kot el chad er a Europ		
	the Middle East, or I		son navi	ing origins in any of the o	riginai	peoples of Europe,
	American Indian i kot el chad er a Nort melemolem a deleui Alaska Native - A	me a lechub eng A h me a lechub eng So Il er tir lobengterir a re person having origin	outh Am echad e <i>in any</i> o	Native – Chad el uchele nerica (luldimukl er a Cen I losisu a uchelir er a bua of the original peoples of i ribal affiliation or commu	tral An ii. ( <b>An</b> North d	nerica), e nerican Indian or or South America
	Asian	, ·			•	
Moutekangel el meketakl aike el ngii a mui el lochotau (Ke lmuches aike el rokui el lochotau): (Please specify the one(s) you most identify with (check all that apply):)						
		Chad er a Cambodia (Cambodian)		Chad er a Siabal ( <i>Japanese</i> )		Chad er a Pakistan ( <i>Pakistani</i> )
		Chad er a China ( <i>Chinese</i> )		Chad er a Korea (Korean)		Chad er a Thailand ( <i>Thai</i> )
		Chad er a Philippines ( <i>Filipino</i> )		Chad er a Malaysia ( <i>Malaysian</i> )		Chad er a Vietnam ( <i>Vietnamese</i> )
		Chad er a India ( <i>Indian</i> )		Bebil (moutekangel e describe))	l smod	

.....

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#### OMECHELEL (CONTINUED)

	` □ Native Hawaiia	n or ta er a Dac	ific Islander (Ma	tivo E	Jawaiian or other Pacific Islander):			
	☐ Native Hawaiian or ta er a Pacific Islander (Native Hawaiian or other Pacific Islander):  Moutekangel el meketakl aike el ngii a mui el lochotau (Ke Imuches aike el							
	rokui el lochotau): (Please specify the one(s) you most identify with (check all that							
	apply):)							
		Chamorro	Chad er a Kosrae (Kosraean)		Chad er a  Tahiti  (Tahitian)  Chad er a  Tokelau  (Tokelaun)			
		Carolinian	Chad er a Marshall ( <i>Marshallese</i> )		Chad er a Tonga ( <i>Tongan</i> )			
		Chad er a Kiribati (Kiribati)	Chad er a Hawaii ( <i>Native</i> <i>Hawaiian</i> )		Chad er a Ruk (moutekangel el smodii) (Chuukese (please describe))			
		Chad er a Belau  (Palauan)	Chad er a Samoa ( <i>Samoan</i> )		Chad er a Bolabei (moutekangel el smodii) (Pohnpeian (please describe))			
		Chad er a Beluu (moutekangel el s (please describe)	modii) (Yapese		Bebil (moutekangel el smodii) (Other (please describe))			
3.	Ngera el tekoi (language) a longedecheduch a ngelekem? (What language(s) does your child speak?)							
4.	Ngera el tekoi (language) a blechoel el lousbech el 4. mengedecheduch er ngii a ngelekem er a blai? (What language does your child most often speak at home?)							
5.	Ngera el beluu a le mlechell er ngii a ngelekem? (In what city or country was your child born?)							
6.	6. Ng mla mo tela el rak el kiei er tiang a ngelekem?  (Miechesii a ildisel a rak er tia el kerbai) (How many years has your child lived here? (Enter the number of years in the space provided))							

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LICHELEL A KLENGAR ER A NGELEKEM (FARLYLIEF OF YOUR CHILD)

	LELL A RELIGAR ER A NOLLEREN (LARLY LIFE OF TOOK CHILD)								
1.	Berredel a Ngelekem er a Cheroll (Child's Birth Weight):    ME A LECHUB (OR)   Diak Lodengei (Unknown)								
2.	Klemengetel a  Ngelekem er a Cheroll inches ME A LECHUB (OR) · Diak Lodengei (Child's Birth Length):								
3.	A ngelekem ng tilut a osechel a tul a delal me a lechub e toltut er ngii er osechel a tut? (Was your child ever breastfed or fed breastmilk?)								
	□ Choi       □ Diak (bo er a question 4)       □ Diak Lodengei smodii) (Other (please (Unknown))         (Yes)       (No (skip to question 4))       □ Diak Lodengei smodii) (Other (please (Unknown))								
1	Alsekum ng choi, ng mle tela rekil e kmal mo diak el tut a osechel a tul a delal? (If yes, how old was your child when he/she completely stopped breastfeeding or being fed breastmilk?)								
	el Bilel (Months of age)								
4.	A ngelekem ng mla er ngii a taem el tilut a ocheraol el tut? (Was your child ever fed formula?)  Choi Choi (Yes) Diak (bo er a question 5) (No (skip to question 5))  Diak Lodengei (Unknown)  Diak Lodengei (Unknown)								
	Alsekum ng choi, ng mle tela rekil er a le kot el mo tmut a ocheraol el tut? (If yes, how old was the child when he/she was first fed formula?)								
1	el Bilel (Months of age) Se er a lemechell Diak Lodengei (Since Birth) Unknown)								
	Alsekum a ngelekem a tilut a ocheraol el tut, ng tela a rekil er a bo lak el lolim a milk er a stoang? (If your child was fed formula, how old was your child when he/she completely stopped drinking formula?)								
	el Bilel ( <i>Months of age</i> )								
5.	lechub eng milk er a stoang? (Aika a uldimukl er ngii a juice, osechel a tul a kerebou, merekos el ralm, baby food, me a lechub en g ngii di el ngerang el bilsang a ngalek, me a dirrek el ralm) (How old was the child when he/she was first fed anything other than breast milk or formula? (This includes juice, cow's milk, sugar water, baby food, or anything else that the child might have been given, even water))								
	el Bilel ( <i>Months of age</i> )								

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#### BEBIL ER A TEKOI (OTHER INFORMATION)

### ILDOIS ER A KALL ME A USBECHALL EL KLALO (FOOD SECURITY/RESOURCE AVAILABILITY)

<del></del>	(FOOD CLOCKIT INLEGGORGE AVAILABLETT)									
	A chelsel aika el mereko el teruich me a eru el buil, ea ike el ududem el kirel el cheral a kall a									
1.	nguemed er a uchei er a bol merek a buil? (In the past 12 months, how often does your money for									
	food run out bet	fore the end of t	he month?)	,		•	•			
			ebil er a 🌷 🗆	Betok el	□ Di	□ Diak	□ Diak a			
	a tang ng	•	em	taem	Blechoel	kudenge	nger (No			
	•		ometimes)	(Most	(Always)		Response)			
	•	`	omeumes)		(Always)	i (Don't	Response)			
		eldom)		times)		know)				
	A chelsel aika	a el mereko el	teruich me a	eru el buil, ea	a ike el udud	lem el kirel ch	neral a dengki,			
2.	ralm, cheluch	a nguemed e	er a uchei er a	bol merek a	buil? (Moute	kangel el lmu	iches aike el			
۷.	rokui el loure	<b>or.)</b> (In the pas	t 12 months, ho	w often does vo	our money for l	household utiliti	es (e.a., water.			
	fuel oil, electrici									
			Bebil er a	□ Betok	□ Di	□ Diak	⊂ Diak a			
	tang ng	giia t	aem	el taem	Blecho	kudeng	nger ( <i>No</i>			
	•	•	Sometimes)	(Most	el	ei ( <i>Don't</i>	Response)			
	,	Seldom)		times)	(Always)	know)	,			
	Ke melai a ra	ılm el mousbe	ch er ker? K	e odak a ralm	` ,	,	lle- omelim			
_							aike el rokui el			
3.							drinking, cooking			
		ene do you get t ening, etc. (Che			nade water for	an parposes –	dililikilig, cookilig			
	Suido er a	∃ Suido er a	Ralm er □	, ,	ora □ O	teruul el 🗆	Tank er a			
	blai	mekesong	buai	tonari		Im	ralm ( <i>Home</i>			
		(Private tap	(Public/			urchased	rain (nome rain water			
	(Household	•	(	(Neigh	`					
	tap)	in yard)	shared	tap)		ottled	collection)			
	<b>-</b> . –	¬ • • • • • • • • • • • • • • • • • • •	standpip	•		ater)	1 1 22			
Ш	Tank er a	☐ Omoachel/	☐ Madedo			ebil <i>(moutekan</i>	~			
	ralm er a	madedok/di	(Spring)	domel		other (please de	scribe))			
	buai	ong ( <i>River/</i>		a ralm	er					
	(Community	stream/		ngii						
	Community									
	rain water	creek)		(Refillii	ng					

FORM:	23-02			
FAS				

### Children's Healthy Living Program Information About Your Child

_	_		_	
	_	2	>	
	,	1/2	•	\
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	en's	ealthy	livi	DE Pro

For Office Use Only	
Child's ID:	
Date://	
Checked by: DD YEAR	

ILDOIS ER A KALL ME A USBECHALL EL KLALO (OMECHELEL) (FOOD SECURITY/RESOURCE AVAILABILITY (CONTINUED))

	Ngera el bedengel a cheluch a lousbech er ngii a delengcheklem el meruul a kall? (Mluches									
	oku	i el loureor) (	Wha	at type of fue	l do	es your househ	old mainly use for	cook	ing? (	Check all that
apply))										
□ Dengki ( <i>Electricity</i> )		Liquefied Petroleum Gas (LPG)		Kas el meruul er a mla mad el charm (Natural gas)		Kas el meruul er a dechil a charm/dello mel ( <i>Biogas</i> )	□ Kerisil (Kerosene)	□ C Nga (Coa Lign	al/	□ Kerrekar ( <i>Wood</i> )
□ Sumi ( <i>Charcoal</i> )		Sengsongd /Mekekerei el dellomel/ chudel (Straw/ shrub/ grass)		Dechil a charm (Animal dung)		Uleokel er a Dellomel er a Sers (Agricultural crop residue)	☐ Kuk Bebil (Moutekang el el Smaod) (Other (please describe))	   	Merui Deler	a Kall el ul er a ngchokl (No nooked in nhold)

FORM 23-02 **FAS** 

# Children's Healthy Living Program Information About Your Child



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Child's ID:	
Date://	_
Checked by:	AR 

OOL	<u> </u>	HELLEL A BUUCH (BETEL NUT USAGE)
1.	_	ar er ngii a ta el molamech a buuch? (Have you ever chewed betel nut?)
		Choi (Yes)   Diak (No)   Diak a Nger (No response)
2.	Cł	elecha e ke melamech a buuch? (Do you now chew betel nut?) Choi (Yes)   Diak (No)   Diak Kudengei (Don't know)   Diak a Nger (No response)
	<i>(h</i> □ Al	ekum ng choi, ng ua ngera ildisel a taem el molamech a buuch?  ves, how often do you chew betel nut?)  Bek el Sils
\	_	rak (years) Diak Kudengei (Don't know) Diak a Nger (No response)
*	ΑI	ekum ng choi, komelecha (If yes, do you include): Dekool (mla er a dekool, snuff, cheliud, Red Man) sel omolamech a buuch? (Tobacco (from cigarette, snuff, twist tobacco, Red Man) when chewing betel nut?)
		Choi (Yes) 🗆 Diak (No) 🗆 Diak Kudengei (Don't know) 🗀 Diak a Nger (No response)
		Aus sel omolamech a buuch? (Lime when chewing betel nut?)  □ Diak Kudengei (Don't
		Choi (Yes) ☐ Diak (No) know) ☐ Diak a Nger (No response)
		Kebui sel omolamech a buuch? (Betel leaf when chewing betel nut?)
		□ Diak Kudengei ( <i>Don't</i> Choi (Yes) □ Diak ( <i>No</i> )
		Rrom el mo er a ngii di ta er a telengtengil a omelemechem (buuch, kebui, aus, me a lechub eng dekool)? (Alcohol to any of the components of your chew (nut, leaf, lime, or tobacco)?)
		Choi (Yes)   Diak (No)   Diak Kudengei (Don't know)   Diak a Nger (No response)
3.		ar er ngii a re ngodech el chad er a delengcheklem el melamech a buuch? (Are there er members in your household who chew betel nut?)
		Choi (Yes) □ Diak (No) □ Diak Kudengei (Don't know) □ Diak a Nger (No response) ekum ng choi, te tela el chad el ngar er a delengcheklem a melamech a buuch? (If yes, many household members chew betel nut?)
-		chad ( <i>members</i> )

FORM 23-02 **FAS** 

# Children's Healthy Living Program Information About Your Child



For Office Us	se Only	
Child's ID:		_
Date:/_		
Checked by:	DD YEAR	

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# Children's Healthy Living Program Information About Your Child



For Office U	se Only
Child's ID:	
Date:/_	
Checked by:	DD YEAR

<b>USBECHELLEL A RROM (OMECHELE</b>	USBECHELLEL A RROM (OMECHELEL) (ALCOHOL USAGE (CONTINUED))					
Ngar er ngii a re ngodech el chad er a delengcheklem el millim a rrom er a chelsel aika el merko el okedei el klebesei? (Are there other members in your household who drank alcohol within the past 30 days?)						
□ Choi (Yes) □ Diak (No) □ Diak Kudengei (Don't know) □ Diak a Nger (No response)  Alsekum ng choi, eng tela el chad er a chelsel a delengcheklem a millim a rrom er a  chelsel aika el mereko el okedei el klebesei? (If yes, how many household members drank  alcohol within the past 30 days?)						
chad ( <i>members</i> )  □ Diak K	(udengei ( <i>Don't know</i> ) Diak a Nger ( <i>No response</i> )					
KLECHELID (RELIGION)						
1. Ngera a klechelid <u>er kau</u> ? (What is <u>your</u> re	eligious affiliation?)					
☐ Baptist	☐ Muslim					
☐ Buddhist	☐ Pentecostal					
☐ Catholic	☐ Protestant					
☐ Episcopalian	☐ Russian Orthodox					
Evangelical Covenant	☐ Kuk Bebik (Moutekangel el Smaod) (Other (please describe))					
☐ Mormon/ Latter-day Saints	☐ Diak ( <i>None</i> )					
☐ Moravian	☐ Diak a Nger ( <i>No Response</i> )					
Ng uangera ildisel a taem el om teloi er a ureor me a lechub eng teletael er a klechelid <u>er kau</u> ? (How often do <u>you</u> engage in religious activities or events with your religious community?)						
$\square$ er a Ta el $\square$ er a Ta el B Sandei (per Week) (per Month)	uil   Diak Teloi   Diak a Nger  (Do not attend)   (No Response)					

FOF	۲M	23	-02
	F	28	

## Children's Healthy Living Program Information About Your Child

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E.	1		13

For Office Us	se Only
Child's ID:	
Date:/_	
Checked by:	DD YEAR

#### UKERUUL (MEDICAL)

1.	Ng tela el sikang el le bechiuaiu a ngelekem er a chelsel a lluich me a eua el sikang (a le klebesei me a lultuil)? (Moutekangel el ngiltii a chiming, ☑; h= sikang) (How many hours of sleep on average does your child get in a 24-hour period (at night and in naps)? (Please choose one, ☑; h= hours))													
	0h □	0.5h □	1h □	1.5h □	2h □	2.5h □	3h □	3.5h □	4h □	4.5h □	5h □	5.5h □	6h □	6.5h □
	7h	7.5h	8h	8.5h □	9h. □	9.5h □	10h	10.5h □	11h	11.5h □	12h □	12.5h □	13h □	>13h □
2.	A ngolokom ng ngar or ngji a ko or a roktol or cholocha ol taom ol bla ol botik or ngji a													
3.								<b>a lechu</b> d has ast		nurse el	kmo a	ngelek	em a	ngul?
	Choi (\	∕es) □	Dia	ak (No)		Diak Ku	idengei	(Don't ki	now)					
4.		a nger		sel el ta	aem e	el lolate	ch a u	ngelel a	ngelek	kem? ( <i>H</i>	ow ofte	n does y	our chil	d brush
	sils	er a tan than ond				ang er a ils (O <i>nce</i>		<sub>v)</sub> s	ang er andei ( <i>eek)</i>	a ta el O <i>nce per</i>		Tang er (O <i>nce pe</i>		rak
	Diak a	tang (N	lever)			iak Kud	lengei (	Don't kno	w) 🗆	Diak a	Nger (/	No respoi	nse)	
5.	kirel ome	a uker lechud	uul e ech e	r a uing el uinge	gel, e el? (D	l uldim uring the	ukl er r e past 1	i <b>el buil</b> ngii a ch 2 months eenings, a	eck-up	, <mark>ukeru</mark> ı ur child se	ul, me	a lechu	b eng	
	Choi (\	(es)	□ Di	iak ( <i>No)</i>		Diak k	Kudeng	ei ( <i>Don't l</i>	know)	□ Di	ak a N	ger (No i	respons	se)

FORM 59-01	Children's Healthy Living Program	For Office Use Only
	Anthropometric Measurements	Child's ID:
	<b>k</b>	Date:/ /20
		MM DD YEAR Measured by:
	A. A.	Checked by:

#### Instructions:

Record all measurements using a black/blue pen.

Two of the 3 measures <u>must</u> be within 0.2 units. Otherwise, cross out the first 3 measures and repeat the **entire** 3 measure process.

**Each measurement must be taken 3 times at each site** regardless of the first 2 measurements being within 0.2 units. If the need arises to repeat the 3 measure process, write the resulting measures in the comments section of this form.

Is the child wearing	an accelerometer?	Stadiometer number	<u>?</u>
☐ Yes	□ No	1	
Measurement:	1 <sup>st</sup> Reading:	2 <sup>na</sup> Reading:	3 <sup>rd</sup> Reading:
Weight	kg	 	 
Comments:			
Height	cm		cm
ricigiit	LIII.	L L viii	
Comments:			
Waist Circumference	cm	cm	cm
Comments:			

Approved by UH IRB 10-19-2012

### Children's Healthy Living Program

CHL



### **Food & Activity Log**

Name of Chi	Name of Child:							
Name of Par	ent:							
For this reco below:	rd period, please re	cord during the days	outlined					
	Day (e.g., Monday)	Date (mm/dd/yyyy)	]					
			]					
If you have o	f you have questions, please call at							
ar amail at								

Please, <u>do not change</u> your child's eating or activity habits. We are interested in finding out what your child does on a normal basis.

#### Additional Information to Record for Each Time Your Child Eats Something

Next to each meal or snack, record additional information. For example, if your child has a "bottled water" while watching a baseball game, the following would be recorded. The place prepared would be "concession stand." The place eaten would be "ball park". The other activity would be "watching ball game." Other examples are in the table below.

		Other Activities while
Place Prepared	Place Eaten	eating
Home	Home, specify where within home	Sitting & eating only
Grocery store	Friend's home	At day care
Relative's home	Fast-food restaurant	T-ball practice
School	Camp ground	Watching TV
Day care center	Day care center	Running around
Sit-down restaurant	Relative's home	Sports practice
Market stand	Car	Playing video games
Friend's home	School	Family meal time
Fast-food restaurant	Sit-down restaurant	At school
Beach, camp ground	Park bench	At fiesta (party)
Lunch wagon	Backyard	Sitting on porch
Concession stand	Beach	At barbeque

Tips for recording the foods and beverages that your child eats and activities.

- Use an ink pen or a #2 pencil and write clearly
- Fill in the times for each meal and snack and activity
- Write each food or ingredient or activity on a separate line
- · Write down everything your child ate and drank throughout the day and night
- Record all beverages, including water. Record all activities, including sleep
- Record foods and activities as soon as possible, that is during or right after.
- Keep the Food & Activity Log with you at all times
- When your child is at day care, with relatives, or friends, ask their help for recording foods and activities.
- Use the recipe pages to describe homemade recipes.
- Remember to save packages & containers. Clean the packages and containers before putting into the bag. Put any school/child care menus in the bag.
- Record only the amount of food that your child ate.



Participant ID					
Day:	:: <u> </u>				
Date	:	/_		_	

	F	O O D	L	O G	
	Time	Detailed Description of Foods & Beverages	Amount	Place Prepared	Place Eaten
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

Food & Activity Log – Day 1, Page 1 of Log

		A	CTIVITY LOC	G
_	Other Activities While Eating	Start Time	Activity	End Time

	F	O O D	L	O G	
	Time	Detailed Description of Foods & Beverages	Amount	Place Prepared	Place Eaten
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

Food & Activity Log – Day 1, Page 2 of Log

		A	CTIVITY LOC	G
_	Other Activities While Eating	Start Time	Activity	End Time

	F	O O D	L	O G	
	Time	Detailed Description of Foods & Beverages	Amount	Place Prepared	Place Eaten
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					

Food & Activity Log – Day 1, Page 3 of Log

		A	CTIVITY LOC	G
_	Other Activities While Eating	Start Time	Activity	End Time

Recipe 1, Name:	
Number of servings recipe made:	
Number of servings your child ate:	
Ingredients:	Amount:
Bosino 2 Nomes	
Recipe 2, Name:  Number of servings recipe made:	
Number of servings your child ate:	
Ingredients:	Amount:
ii igredients.	Amount.

Second Day

Participant ID				
Day:				_
Date:	1	1		

	F	O O D	L	O G	
	Time	Detailed Description of Foods & Beverages	Amount	Place Prepared	Place Eaten
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

Food & Activity Log – Day 2, Page 1 of Log

		A	CTIVITY LOC	G
_	Other Activities While Eating	Start Time	Activity	End Time

	F	O O D	L	0 G	
	Time	Detailed Description of Foods & Beverages	Amount	Place Prepared	Place Eaten
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					

Food & Activity Log – Day 2, Page 2 of Log

		A	CTIVITY LOC	G
_	Other Activities While Eating	Start Time	Activity	End Time

	F		D	L	0 G	
	Time	Detailed Descriptio Foods & Beverag	n of es	Amount	Place Prepared	Place Eaten
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						

Food & Activity Log – Day 2, Page 3 of Log

		A	CTIVITY LOC	G
_	Other Activities While Eating	Start Time	Activity	End Time

Recipe 3, Name:	
Number of servings recipe made:	
Number of servings your child ate:	
Ingredients:	Amount:
Recipe 4, Name:	
Number of servings recipe made:	
Number of servings your child ate:	
Ingredients:	Amount:
ingredients.	7 (TTOGETE.

#### More Tips for Keeping an Accurate Food & Activity Log

- Record the type of activity your child did, e.g. reading, swimming, running, sleeping, watching television.
- Be as specific as possible.
- Record the start time of an activity and the end time of the activity as shown in the sample.

#### Include Detail About Foods

- Include the cooking method used to prepare food, e.g. baked, broiled, fried, canned, fresh, frozen.
- Include brand names and the name of fast food restaurants whenever possible.
- Describe the liquid included in canned foods, e.g. tuna in water, sliced peaches in heavy syrup.
- Include added condiments, e.g. ketchup, mayonnaise, mustard.
- Record the amount of fat or oil added in cooking.

#### **Guidelines to Estimating Portion Sizes**

It's important to be accurate in determining amounts eaten.

- ☑ If possible, use measuring cups and measuring spoons provided to make your child's log more accurate.
- ☐ In a restaurant, you can ask the serving sizes of various foods (for example, ounces of meat, cups or ounces of ice cream).
- ☑ Use the ruler on the back of this book.
- ☑ Use the palm of your hand to estimate amounts.
- ☑ Use common shapes, such as a deck of cards, a baseball to describe amounts.

Children eat much smaller amounts and more frequently than adults. Therefore, it is important to write down exactly what was eaten and how much at the time of the eating.

RULER					
	- Tip	s for Kee	ping an Accurate Food & Activity Log		
6 inches					
	Brand:	When possible, indicate the brand of processed foods, such as Meadow Gold cottage cheese, Crisco All-Vegetable Shortening For frozen dinners, indicate the brand and name of the meal.			
5	Extras:	added on	Remember to record the foods or condiments that are extra or added on top like salad dressings, butter/sour cream, sugar or milk on cereal, mayonnaise, syrup.		
4	Cuts:	list the typ	, specify the cut if possible. When using ground beef, e and percent lean. For chicken, indicate which f chicken such as leg, breast. Specify type of fish.		
7	Observe		Observe what your child does throughout the day and record as activities, including sitting, laying on the floor, running, riding a tricycle.		
3	Modifica	ations:	Share if the food was low-fat, low-sugar, low-sodium, calcium-fortified, or different from the regular form of the food.		
	Prepara	tion:	Specify the way food was cooked – such as fried, baked, grilled, boiled. Be sure to list any added fat, sugar, oil, butter, even if added after cooking.		
2		always:	Do not change your how your child eats or what you and others prepare for your child to eat.		
	Eating o	ut:	If you eat your food away from home, be sure to list the restaurant name and how food was cooked. Include restaurant name and how food was cooked.		
1	Thoroug	ghness:	Think "detail". Tell us whether your child ate white or brown rice, 100% orange juice or orange crush, played an active computer game or sat at computer.		
	Eating p	ortions:	When possible, measure portions using the special measuring cups and measuring teaspoons provided Or use the ruler on the left side of this page.		
0 inches	_		Remember to save packages & containers. Clean the packages and containers before putting into the bag. Put any school/child care menus in bag.		

8/30/2012 Approved by UH IRB 10-19-12

### Children's Healthy Living Program

### **CHL**



### **Food & Activity Log**

Name of Chi	ld:		
Name of Par	ent:		
For this reco pelow:	rd period, please red	cord during the days	outlined
	Day (e.g., Monday)	Date (mm/dd/yyyy)	
f you have o	questions, please ca	II at <sub>_</sub>	
or email at _		·	

Modified for FAS Approved by UH IRB 7-17-13

#### Tips for recording the foods and beverages that your child eats and activities.

- Use an ink pen or a #2 pencil and write clearly
- Fill in the times for each meal and snack and activity
- · Write each food or ingredient or activity on a separate line
- · Write down everything your child ate and drank throughout the day and night
- Record all beverages, including water. Record all activities, including sleep
- Record foods and activities as soon as possible, that is during or right after.
- · Keep the Food & Activity Log with you at all times
- When your child is at day care, with relatives, or friends, ask their help for recording foods and activities.
- Remember to save packages & containers. Clean the packages and containers before putting into the bag. Put any school/child care menus in the bag.
- Record only the amount of food that your child ate.
- Water can come from many sources. Examples include catchment, household tap, neighbor's tap, river, stream, creek, bottled purchased at a store. Be as specific as possible.

Please, <u>do not change</u> your child's eating or activity habits. We are interested in finding out what your child does on a usual basis.

#### Additional Information to Record Each Time Your Child Eats Something

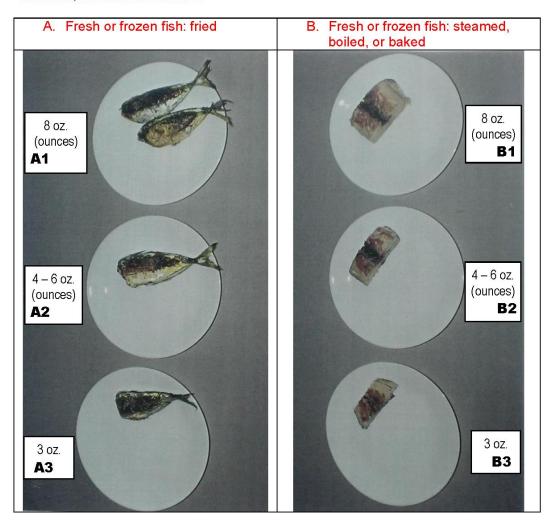
Next to each ingredient or food, record the **source** for the food. That would be whether the food was purchased, caught, gifted, traded, etc. Some examples are provided below.

Purchase	Communal/gift/donation	Local-labor or self-labor
Supermarket	Food bank / food pantry	Fishing
Restaurant	Field trip	Hunting
Road side stand / stall	Church gathering	Home garden
Convenience store	Government assisted	Personal farm
Grocery store	Gift from friend/relative	Community garden
Farmers' market	USDA Commodities	Commercial farm
Lunch wagon / food wagon	Funeral	Ocean gathering
Fish markets	Traditional event	Animal husbandry
Merchant/Cargo		Specify: non-purchase

Next to the first ingredient or food in a single eating event, record additional information about **place prepared, place eaten, and other activities** happening at the same time. For example, if your child has a "bottled water" while watching a baseball game, the following would be recorded. The place prepared would be "concession stand." The place eaten would be "ball park". The other activity would be "watching ball game." Other examples are in the table below.

		Other Activities while
Place Made	Place Eaten	eating
Home	Home, specify where within home	Sitting & eating only
Grocery store	Friend's home	At day care
Relative's home	Fast-food restaurant	T-ball practice
School	Camp ground	Watching TV
Day care center	Day care center	Running around
Sit-down restaurant	Relative's home	Sports practice
Market stand	Car	Playing video games
Friend's home	School	Family meal time
Fast-food restaurant	Sit-down restaurant	At school
Beach, camp ground	Park bench	At fiesta (party)
Lunch wagon	Backyard	Sitting on porch
Concession stand	Beach	At barbeque

Use the images below to help estimate the amount of fried fish, fresh, or frozen fish, steamed, boiled or baked fish.



Make portions easy, write:

"Picture A3, Fried fish  $\frac{1}{2}$  3 ounces" OR

"Picture A2, Fried fish picture, Middle" OR

"Picture B1, Steamed fish 1/3 8 ounces"

First Day

Participant ID				
Day:				

Date: \_\_\_\_/\_\_\_/

	F	0	0	D	L	0	G
	Time	Deta Ingredie	ailed Descr ents, Foods	iption of , Beverages	Amount	Source	Place Made
1							
2							
3							
4							
5							
6							
7							
8							
9							
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22							
23							
24							

Food & Activity Log - Day 1, Page 1 of Log

		A C	TIVITY	O G
Place	Other Activities	Start		End
 Eaten	While Eating	Time	Activity	Time
				1
				1
				-
				1
				<del>                                     </del>

	F	С		D		L	0	G	
	Time	Ingre	etailed De dients, Foo	scription of ods, Beverag	es An	nount	Sour	ce	Place Made
25									
26									
27									
28									
29									
30									
31									
32									
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36									
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45									
46									
47									
48									

Food & Activity Log – Day 1, Page 2 of Log

		Α	CTIVITY LOC	3
Place	Other Activities	Start		End
 Eaten	While Eating	Time	Activity	Time

	F	0	O D		L	0	G	
	Time	Detaile Ingredients	d Description , Foods, Beve	of rages	Amount	Source		Place Made
49								
50								
51								
52								
53								
54								
55								
56								
57								
58								
59								
60								
61								
62								
63								
64								
65								
66								
67								
68								
69								
70								
71								
72								

Food & Activity Log - Day 1, Page 3 of Log

		А	CTIVITY LOC	3
Place	Other Activities	Start		End
 Eaten	While Eating	Time	Activity	Time

Date: Month / Day / Year Mon Tue Wed Thu Fri Sat Sun (circle one)

EXAMPLES OF ENTRIES

	F	O O D	L	O G	
	Time	Detailed Description of Ingredients, Foods, Beverages	Amount	Source	Place Made
1	7:00 am	Liliby's Vienna sausage, blue can, hepted in microwave	3 links	Grocery store	Home
2					
3		Rice			Home
4		1 cup white rice, Hinode	Makes	Grocery store	
5		2 cups boiled water	3 cups	Catchment	
6		1 teaspoon salt	Ate ¼ cup	Grocery store	
7					
8	5:00 pm	Fish in coconut sauce			Home
9		Picture A24 reeffish	Makes 4	Caught on the reef	
10		1 ½ cup coconut cream	Servings,	Tree near house	
11		1 tsp salt	Ate ½	Grocery store	
12		1 small white onion, diced	serving	Farmer's market	
13		)			
14		Kapaika biscuits	1	Auntie	Auntie's house
15		Breadfruit, small	1/8	Home yard	Home
16		Paul's milk	1/2 cup	Grocery store	Business
17					
18	7:05 pm	Coconut water	¾ small coconut	Tree near house	Ноте

# Food & Activity Log – Day 2, Page 1 of Log **EXAMPLES OF ENTRIES**

		A		G
Place	Other Activities	Start		End
Eaten	While Eating	Time	Activity	Time
Living	_	6:45	Wake-up and get ready for the	
room	Watching TV	am	day	7:00 am
		7:00		
		am	Sit and eat breakfast	7:30 am
		7:30		
		am	Ríde in care to Grandma's house	7:45 am
		7:45		
		am	Get settled at Grandma's	8:00 am
		8:00	Play indoors with trucks with	
		am	cousins	9:00 am
		9:00	Play hide-and-seek outdoors	
-		am	with cousins	10:15 am
Living	Sitting at coffee	5:00		
room	table/talking	ъm	Sitting and eating dinner	5:45 pm
	,	-	, ,	,
Front Porch	Free play in front yard			

### NOTES

Second Day

Participant ID						
Day:						_
Date	:	1	/	ri.		

Date: \_\_\_\_/\_\_\_ Mon Tue Wed Thu Fri Sat Sun (circle one)

	F	0	0	D	L	0	G
	Time	D Ingre	etailed Desci dients, Foods	ription of s, Beverages	Amount	Source	Place Made
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2							
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Food & Activity Log - Day 2, Page 1 of Log

			Α	С	ΤI	VΙ	ΤΥ	•	L O	G	
Р	lace	Other Activities	Start								End
E	aten	While Eating	Time			Act	ivity				Time
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Date: \_\_\_\_/\_\_\_ Mon Tue Wed Thu Fri Sat Sun (circle one)

	F	0		D	L	0 0	
	Time	D Ingred	etailed Desc dients, Foods	ription of s, Beverages	Amount	Source	Place Made
25							
26							
27							
28							
29							
30							
31							
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33							
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47							
48							

Food & Activity Log - Day 2, Page 2 of Log

			Α	CTIVITY LOC	3
	Place	Other Activities	Start		End
	Eaten	While Eating	Time	Activity	Time
-					
-					
-					
-					

Date: \_\_\_\_/\_\_\_ Mon Tue Wed Thu Fri Sat Sun (circle one)

	F		0	0	D	L	0	G	
	Time	Ing	Detailed gredients,	Descrip	tion of Beverages	Amount	Sour	ce	Place Made
37									
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
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56									
57									
58									
59									
60									

Food & Activity Log - Day 2, Page 3 of Log

			С	Т	I V	I	Т	Υ	L	0	G	
Place	Other Activities	Start										End
Eaten	While Eating	Time			,	Acti	vity					Time
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## Tips for Estimating Serving Size

FOOD/DRINK	RECORD SERVING SIZE AS:
1 oz of Cheese	= 2 slices pre-sliced, wrapped cheese = the size (and thickness) of two (2) dominoes
3 ounces of meat	<ul> <li>One-half of a whole chicken breast</li> <li>A piece of meat, poultry, or fish the size (and thickness) of a deck of cards</li> <li>A small hamburger patty (approximately one-quarter pound uncooked) which forms a patty fitting into the palm of your hand</li> </ul>
Beverages	soft drinks (12 ounces) = 1 can glass of milk (medium) 8 ounces = 1 cup
Vegetables	cup leafy vegetables (such as lettuce, spinach), uncooked = size of a baseball     cup peas or chopped veggies, cooked = size of one half baseball     medium potato = size of a computer mouse
Fruits	1 medium-size fruit = size of a tennis ball 1 cup chopped fruit = size of one half baseball 3/4 cup fruit or vegetable juice = size of a tennis ball
Peanut butter, beans, nuts	1 teaspoon of butter or margarine = size of a postage stamp 2 tablespoons peanut butter = size of a ping-pong ball 1 cup cooked beans = size of a baseball 1/2 cup chopped nuts = size of one half baseball
How many peanuts or potato chips in one ounce?	Approximately one handful
Cereal	3/4 cup cold cereal = size of a tennis ball

#### More Tips for Keeping an Accurate Food & Activity Log

- Record the type of activity your child did, e.g. reading, swimming slow, running fast, sleeping, watching television.
- Be as specific as possible.
- Record the start time of an activity and the end time of the activity as shown in the sample.

#### **Include Detail About Foods**

- Include the cooking method used to prepare food, e.g. baked, broiled, fried, canned, fresh, frozen.
- Include brand names and the name of fast food restaurants whenever possible.
- Describe the liquid included in canned foods, e.g. tuna in water, sliced peaches in heavy syrup.
- Include added condiments, e.g. ketchup, mayonnaise, mustard.
- Record the amount of fat or oil added in cooking.

#### **Guidelines to Estimating Portion Sizes**

It's important to be accurate in determining amounts eaten.

- ☑ If possible, use measuring cups and measuring spoons provided to make your child's log more accurate.
- ☐ In a restaurant, you can ask the serving sizes of various foods (for example, ounces of meat, cups or ounces of ice cream).
- ☑ Use the ruler on the back of this book.
- ☑ Use the palm of your hand to estimate amounts.
- ☑ Use the entire hand to describe the size of reef fish, e.g., size of entire hand, ¾ of an entire hand.
- ☑ Use common shapes, such as a deck of cards, a baseball to describe amounts.

Children eat much smaller amounts and more frequently than adults. Therefore, it is important to write down exactly what was eaten and how much at the time of the eating.

RULER								
	Tip	s for Kee	ping an Accurate Food & Activity Log					
6 inches								
	<b>B</b> rand:	Meadow C For frozen	sible, indicate the brand of processed foods, such as Sold cottage cheese, Crisco All-Vegetable Shortening. Indinners, indicate the brand and name of the meal.					
5	Extras:	Remember to record the foods or condiments that are extra or added on top like salad dressings, butter/sour cream, sugar or milk on cereal, mayonnaise, syrup.						
	Cuts:	For meats	s, specify the cut if possible. When using ground beef,					
4	<b>G</b> uto.		e and percent lean. For chicken, indicate which f chicken such as leg, breast. Specify type of fish.					
	Observe	<b>e</b> :	Observe what your child does throughout the day and record as activities, including sitting, laying on the floor, running, riding a tricycle.					
3	Modifica	ations:	Share if the food was low-fat, low-sugar, low-sodium, calcium-fortified, or different from the regular form of the food.					
	Prepara	tion:	Specify the way food was cooked – such as fried, baked, grilled, boiled. Be sure to list any added fat, sugar, oil, butter, even if added after cooking.					
2	Live like	always:	Do not change your how your child eats or what you and others prepare for your child to eat.					
	Eating o	ut:	If you eat your food away from home, be sure to list the restaurant name and how food was cooked. Include restaurant name and how food was cooked.					
1	Thoroug	jhness:	Think "detail". Tell us whether your child ate white or brown rice, 100% orange juice or orange crush, played an active computer game or sat at computer.					
	Eating p	ortions:	When possible, measure portions using the special measuring cups and measuring teaspoons provided Or use the ruler on the left side of this page.					
0 inches	_		Remember to save packages & containers. Clean the packages and containers before putting into the bag. Put any school/child care menus in bag.					

05 June 2013

FORM 23-04	Children's Healthy Living Program	For Office Use Only
	Lifestyle Behavior	Child's ID:
		Date: / /20 MM DD YEAR Checked by:

						A.A.A.	č								
Plea	se	com	plete	the f	ollov	ving q	uest	ions a	bout	your	child	i.			
	. Or		week					how lon				does y	our ch	ild spen	d watching
	0h □	0.5h	1h	1.5h	2h	2.5h	3h □	3.5h □	4h □	4.5h	5h	5.5h	6h □	6.5h □	7h+ □
2	IN		E vide												end playing se one, ⊠;
	0h □	0.5h	1h	1.5h	2h	2.5h	3h □	3.5h	4h □	4.5h □	5h	5.5h	6h □	6.5h □	7h+ □
3	A	TIVE	video (	games	(DS, I		tion, X	BOX, W							end playing movement
	0h □	0.5h	1h	1.5h	2h	2.5h	3h □	3.5h	4h □	4.5h □	5h	5.5h	6h □	6.5h □	7h+ □
	. Or		ual we	ekend (				Sunday), Please ch					y doe	s your o	child spend
	0h □	0.5h	1h	1.5h	2h □	2.5h	3h □	3.5h	4h □	4.5h	5h □	5.5h	6h □	6.5h	7h+ □
5	pla		NACTI	VE vide											child spend ase choose
	0h □	0.5h	1h	1.5h	2h	2.5h	3h □	3.5h	4h □	4.5h	5h	5.5h	6h □	6.5h □	7h+ □
6	pla	aying /	ACTIVI	video	gam	es (DS,	Play	ounday), station, ne, ⊠; h=	XBOX	, Wii, c	avera omput	ige a da ter game	y doe es, etc	s your o	child spend incorporate
	0h	0.5h	1h	1.5h	2h	2.5h	3h □	3.5h	4h □	4.5h	5h	5.5h	6h □	6.5h	7h+

Reference: Buckworth, J. & Nigg, C., (2004). Physical activity, exercise, and sedentary behavior in college students. *Journal of American College Health*, *53*, 28-34. Approved by UH IRB 10-19-2012

FORM 23-05	Children's Healthy Living Program	For Office Use Only
	Sleep Behavior	Child's ID:
		Date://20 MM DD YEAR Checked by:

#### Please complete the questions below in regard to your child's sleep behavior.

1.	How long after going to bed does your child usually fall asleep?
	0 to less than 15 minutes
	15 to less than 30 minutes
	30 to less than 45 minutes
	45 to less than 60 minutes
	More than 60 minutes
2.	Your child goes to bed reluctantly, (hesitant, slowly, involuntary)
	The sleep behavior never occurs
	The behavior occurs once or twice a month
	Occurs one or two times a week
	Occurs between three and five nights a week
	The sleep behavior happens every night
3.	The child has difficulty getting to sleep at night (and may require a parent to be present)
	The sleep behavior never occurs
	The behavior occurs once or twice a month
	Occurs one or two times a week
	Occurs between three and five nights a week
	The sleep behavior happens every night
4.	The child does not fall asleep in his or her own bed
	The sleep behavior never occurs
	The behavior occurs once or twice a month
	Occurs one or two times a week
	Occurs between three and five nights a week
	The sleep behavior happens every night

Approved by UH IRB 10-19-2012

FORM 23-05	Child

# Children's Healthy Living Program Sleep Behavior

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For Office Use Only	
Child's ID:	
Date://20	
Checked by:	_

5.	The child wakes up two or more times in the night
	The sleep behavior never occurs
	The behavior occurs once or twice a month
	Occurs one or two times a week
	Occurs between three and five nights a week
	The sleep behavior happens every night
6.	After waking up in the night the child has difficulty falling asleep again by himself or herself
	The sleep behavior never occurs
	The behavior occurs once or twice a month
	Occurs one or two times a week
	Occurs between three and five nights a week
	The sleep behavior happens every night
7.	The child sleeps in the parent's bed at some time during the night
<b>7.</b>	The child sleeps in the parent's bed at some time during the night  The sleep behavior never occurs
7.	
7. 	The sleep behavior never occurs
7.	The sleep behavior never occurs  The behavior occurs once or twice a month
7.   	The sleep behavior never occurs  The behavior occurs once or twice a month  Occurs one or two times a week
	The sleep behavior never occurs  The behavior occurs once or twice a month  Occurs one or two times a week  Occurs between three and five nights a week
	The sleep behavior never occurs  The behavior occurs once or twice a month  Occurs one or two times a week  Occurs between three and five nights a week  The sleep behavior happens every night  If the child wakes, he or she uses a comforter (e.g. pacifier or binky) and requires a
	The sleep behavior never occurs  The behavior occurs once or twice a month  Occurs one or two times a week  Occurs between three and five nights a week  The sleep behavior happens every night  If the child wakes, he or she uses a comforter (e.g. pacifier or binky) and requires a parent to replace it
	The sleep behavior never occurs  The behavior occurs once or twice a month  Occurs one or two times a week  Occurs between three and five nights a week  The sleep behavior happens every night  If the child wakes, he or she uses a comforter (e.g. pacifier or binky) and requires a parent to replace it  The sleep behavior never occurs
	The sleep behavior never occurs  The behavior occurs once or twice a month  Occurs one or two times a week  Occurs between three and five nights a week  The sleep behavior happens every night  If the child wakes, he or she uses a comforter (e.g. pacifier or binky) and requires a parent to replace it  The sleep behavior never occurs  The behavior occurs once or twice a month

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FORM 23-05	Children's Healthy Living Program	For Office Use Only
	Sleep Behavior	Child's ID:
	The state of the s	Date: /_/20
	Marine Land	Checked by:

9.	The child wants a drink during the night (including breast or bottle-feed)
	The sleep behavior never occurs
	The behavior occurs once or twice a month
	Occurs one or two times a week
	Occurs between three and five nights a week
	The sleep behavior happens every night
10.	Do you think your child has sleeping difficulties?
	☐ Yes ☐ No
Plea	se explain:

Questions above were modified from the Tayside Children's Sleep Questionnaire (McGreavy et al. *Child: Care, Health & Development* 31(5); 539–544, 2005).

Children's Healthy Living Program	For Office Use Only
Acanthosis Nigricans Screen	Child's ID:
<b>k</b>	Date: //20
	Measured by:
	Checked by:

<u>Instructions</u>: Rate and circle using a black/blue pen the severity of acanthosis nigricans on the back of the neck using the screening scale below.

Neck Severity	Rating:	0	1	2	3	4
Comments:						
ľ						

### **Acanthosis Nigricans Screening Scale**

(Burke JP, Hale DE, Hazuda HP, Stern MP. 1999. A quantitative scale of acanthosis nigricans. Diabetes Care 22:1655–1659.)

Neck Severity	Neck	
Rating	Severity	Description
0	Absent	Not detectable on close inspection.
1	Present	Clearly present on close visual inspection, not visible to the casual observer, extent not measurable
2	Mild	Limited to the base of the skull, does not extend to the lateral margins of the neck (usually <3 inches in breadth).
3	Moderate	Extending to the lateral margins of the neck (posterior border of the sternocleidomastoid) (usually 3-6 inches), should not be visible when the participant is viewed from the front.
4	Severe	Extending anteriorly (>6 inches), visible when the participant is viewed from the front.

Approved by UH IRB 10-19-2012

FORM 23-03	Children's Healthy Living Program	For Office Use Only
	Culture	Child's ID:
	<b>i</b> ⊏.	Date: / /20
		MM DD YEAR Checked by:
	The state of the s	

Below are questions about your attitude and beliefs on your group's culture and lifestyle. Please read each question carefully and circle the response that best describes you.

resperses that best describes you.					
Your Group's Heritage and Lifestyle					
<ol> <li>How <u>knowledgeable</u> are you of your group's traditional culture and lifestyle?</li> </ol>	Very Knowledgeable	Somewhat knowledgeable	Neutral or no response	Somewhat not knowledgeable	Not at all knowledgeable
How <u>involved</u> are you in your group's traditional culture and lifestyle?	Very involved	Somewhat involved	Neutral or no response	Somewhat not involved	Not at all involved
<ol><li>How do you <u>feel toward</u> your group's traditional culture and lifestyle?</li></ol>	Very positive	Somewhat positive	Neutral or no response	Somewhat negative	Very Negative
How often do you <u>associate</u> with people of your group's traditional culture and lifestyle?	Most of the time	Somewhat often	Neutral or no response	Very little of the time	Not at all

Below are questions about your attitude and beliefs on U.S. Mainland culture and lifestyle. Please read each question carefully and circle the response that best describes you.

	<del>-</del>					
U.S. Main	land Heritage and Lifestyle					
	nowledgeable are you of U.S. Mainland and lifestyle?	Very Knowledgeable	Somewhat knowledgeable	Neutral or no response	Somewhat not knowledgeable	Not at all knowledgeable
2) How in and life	volved are you in U.S. Mainland culture estyle?	Very involved	Somewhat involved	Neutral or no response	Somewhat not involved	Not at all involved
How do and life	o you <u>feel toward</u> the U.S. Mainland culture estyle?	Very positive	Somewhat positive	Neutral or no response	Somewhat negative	Very Negative
	ften do you <u>associate</u> with people of U.S. and culture and lifestyle?	Most of the time	Somewhat often	Neutral or no response	Very little of the time	Not at all

FORM 59-02	Children's Healthy Living Program Acanthosis Nigricans Screen	For Office Use Only Child's ID:
		Date: / /20  Measured by:  Checked by:

<u>Instructions</u>: Rate and circle using a black/blue pen the severity of acanthosis nigricans on the back of the neck using the screening scale below.

Neck Severity Rating:		0	1	2	3	4
Comments:						
	_					

## **Acanthosis Nigricans Screening Scale**

(Bunke JP, Hale DE, Hazuda HP, Stern MP. 1999. A quantitative scale of acanthosis nigricans. Diabetes Care 22:1655–1659.)

Neck Severity Rating	Neck Severity	Description
rading	Severity	Description
0	Absent	Not detectable on close inspection.
1	Present	Clearly present on close visual inspection, not visible to the casual observer, extent not measurable
2	Mild	Limited to the base of the skull, does not extend to the lateral margins of the neck (usually <3 inches in breadth).
3	Moderate	Extending to the lateral margins of the neck (posterior border of the sternocleidomastoid) (usually 3-6 inches), should not be visible when the participant is viewed from the front.
4	Severe	Extending anteriorly (>6 inches), visible when the participant is viewed from the front.