



## 2015 Child Behaviors and Health in Chuuk: Preliminary Results

The US Department of Agriculture (USDA)-supported Children's Healthy Living Program, or CHL, has been working with your community to understand the behaviors and health of children 2-8 years of age. During 2015, parents, teachers, community members, and project partners gathered data in your community. A total of 197 children from Chuuk participated in this study. Here we have some preliminary results from our joint work. With this information parents and community leaders can see where things are going well and where additional energy, leadership, and resources will need to be placed to raise the next generation of healthy, happy children.

### Child sex, age, race distribution

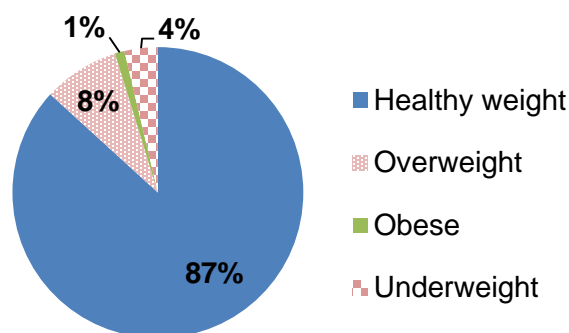
Among the 197 children, a total of 191 had information on sex, of which 85 (45%) were girls and 106 (55%) were boys. Furthermore, all children had information on age, of which 108 (55%) were of age group 2-5 years and 89 (45%) were of age group 6-8 years. A total of 195 children had information on race, of which 167 (86%) were Native Hawaiian/Pacific Islander (NHPI) and 28 (14%) were more than one race. Among NHPI children, 166 (85%) were Chuukese and 1 (1%) was Chuukese mixed with Pohnpeian.

Potential outliers with extreme values (defined as those with a value of 3 standard deviations (sd) above or below the mean) were excluded from this report. Data was looked at by child's sex and age group.

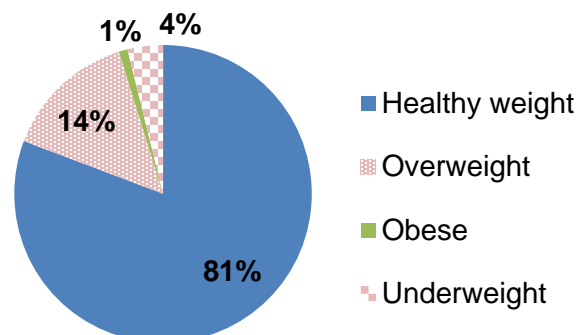
### Children's Body Mass Index by Category as defined by the Center for Diseases Control and Prevention (CDC)

A total of 189 children were included for this analysis. Among them, 87% were healthy weight, 8% were overweight, 1% was obese, and 4% were underweight (Figure 1). Although obesity was low, overweight status was higher among boys (14%) than girls (1%) (Figures 2 and 3). No difference was found between children ages 2-5 and those 6-8 years old.

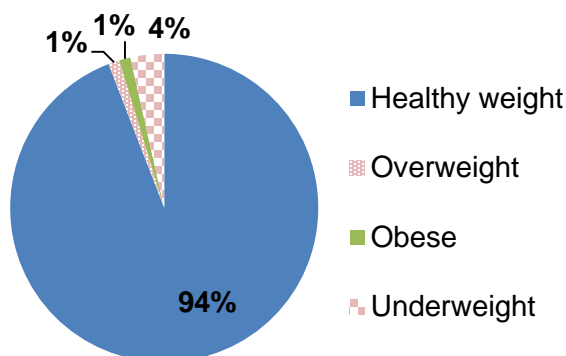
**Figure 1. Prevalence of overweight and obesity of study children from Chuuk (n=189)**



**Figure 2. Prevalence of overweight and obesity of boys from Chuuk (n=104)**



**Figure 3. Prevalence of overweight and obesity of girls from Chuuk (n=85)**



Effective strategies in the prevention of childhood obesity include: (1) A healthy lifestyle, which encourages children to move more, sleep more and spend less screen time (2) A healthy diet, which encourages children to drink more water, eat more fruit and vegetables and consume fewer sugar sweetened beverages. Below we show how the children are doing on achieving some of these strategies.

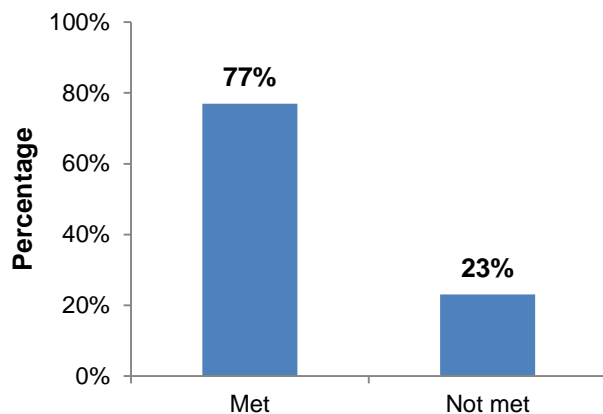
### Children moderate and vigorous level of physical activity (MVPA) as measured by accelerometer

In each study community, about half of the children were asked to wear an accelerometer for 6 days, which records the child's activity by each second. Average minutes per day of children's MVPA were obtained from the accelerometer data.

In Chuuk, a total of 78 children had valid accelerometer data. Among those 78 children, daily average minutes of moderate and vigorous physical activity (MVPA) were 85.1 (sd=32.9). The average of boys was higher (91.9; sd=33.4) than girls (75.4; sd=30.0). No difference was observed between those ages 2-5 and those ages 6-8 years old.

Seventy-seven percent of those 78 children met the national recommendation of 60 minutes a day of MVPA (Figure 4). No difference was observed between boys and girls, or between those ages 2-5 and those ages 6-8 years old.

**Figure 4. Percentage of children, by sex, meeting national recommendation of 60 minutes a day of moderate and vigorous types of physical activity**



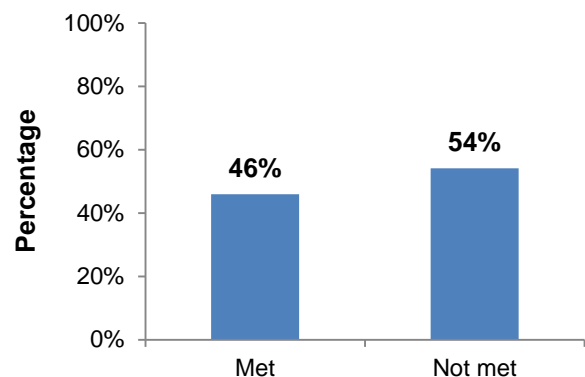
One in five (23%) of all children did not meet the national recommendation of 60 minutes a day of MVPA. This is an opportunity for both parents and educators to intervene to help children to get more physical activity.

### Children's screen time

A total of 61 children were included in the analysis of screen time. Among them, average screen time, such as watching TV, video games, or DVD, or playing active or inactive video games was 3.8 hours (sd=3.8). No difference was found between the averages of boys and girls, or between children ages 2-5 and those 6-8 years old.

While the national recommendation is for each child to spend 2 or less hours on screens every day, only 46% of our study children met this recommendation (Figure 5). No difference was observed between boys and girls, or between those ages 2-5 and those ages 6-8 years old.

**Figure 5. Percentage of children meeting the national recommendation of each child to spend 2 or fewer hours of screen time every day**



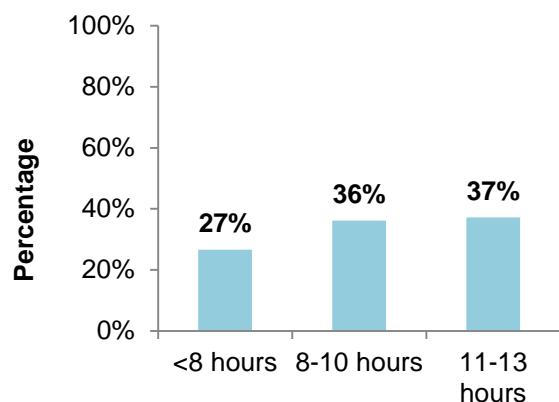
Over half (54%) of children appear to be spending too much time on screens! This is an opportunity for both parents and educators to intervene to help children spend less screen time.

### Children Sleep Duration

A total of 170 children were included in the analysis of sleep duration. The average number of hours of sleep per day among those 170 children were 9.9 (sd=2.7). No differences were found between the averages of boys and girls, or between children age 2-5 and those 6-8 years old.

Among the 94 two to five year olds, 37% met the national recommendation of sleep of between 11-13 hours daily (11-13 hours in the graph). Another 36% of children slept more than 8 hours but less than 11 hours daily (8-10 hours in the graph) and 26% slept less than 8 hours (<8 hours in the graph) (Figure 6).

**Figure 6. Percent of children 2-5 years old among 3 groups of sleep duration**



Over half (63%) of our younger children ages 2-5 years did not meet the national recommendation of 11-13 hours daily of sleep. This is an opportunity for both parents and educators to intervene to help children get more sleep.

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### Acknowledgements

We would like to thank all the families of participants who completed our assessments so that we could make this important information available, as well as all our community partners for working with us to improve the health of children across the Pacific.

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For more about this data or the CHL Program, contact:

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