

## 2014 Child Behaviors and Health in Yap: 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 2014, parents, teachers, community members, and project partners gathered data in your community. A total of 203 children from Yap 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

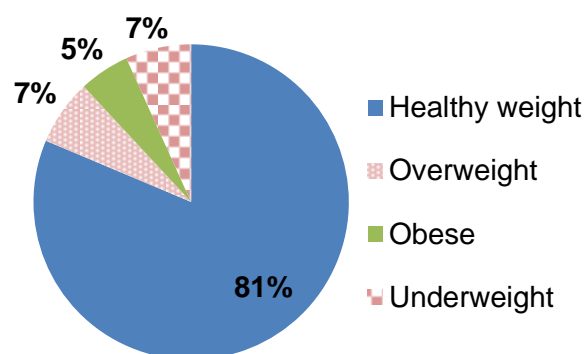
Among the 203 children, a total of 199 had information on sex, of which 106 (53%) were girls and 93 (7%) were boys. Furthermore, all children had information on age, of which 142 (70%) were of age group 2-5 years and 61 (30%) were of age group 6-8 years. All 203 children had information on race, of which 190 (93.5%) were Native Hawaiian/Pacific Islander (NHPI), 2 (1%) were Asian, and 11 (5.5%) were more than one race. Among NHPI children, 185 (91%) were Yapese, 2 (1%) were Yapese mixed with Chamorro, 1 (0.5%) was Chamorro, 1 (0.5%) was Chuukese, and 1 (0.5%) was Yapese mixed with Samoan.

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 193 children were included for this analysis. Among them, 81% were healthy weight, 7% were overweight, 5% were obese, and 7% were underweight (Figure 1). No difference was found between boys and girls, or between children ages 2-5 and those 6-8 years old.

**Figure 1. Prevalence of overweight and obesity of study children from Yap (n=193)**



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.

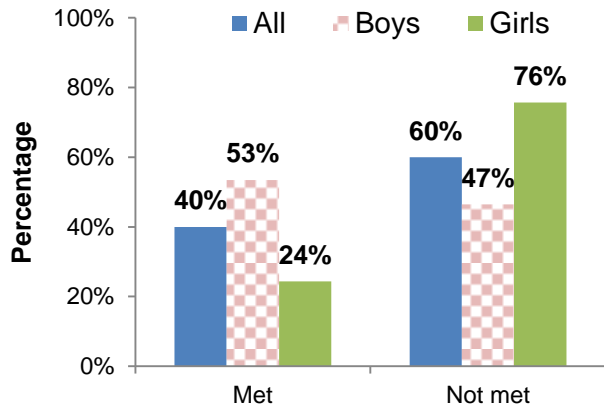
### Children's moderate and vigorous level of physical activity (MVPA) as measured by accelerometer

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 Yap, a total of 80 children had valid accelerometer data. Among those 80 children, daily average minutes of moderate and vigorous physical activity (MVPA) were 60.4 (sd=29.8). The average of boys was higher (69.2; sd=28.6) than girls (50.2; sd=28.1). The average of children ages 6-8 years old was higher (81.1; sd=36.6) than children ages 2-5 years old (52.2; sd=22.8).

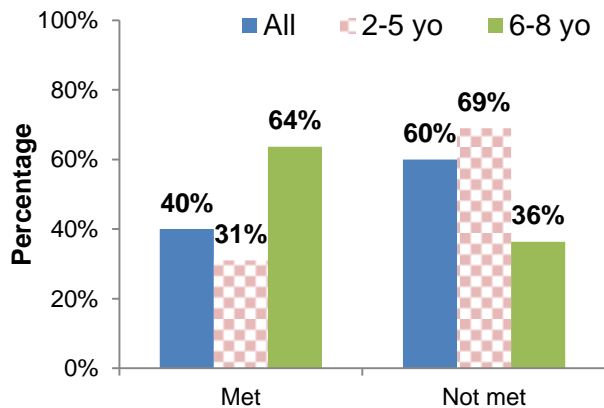
Forty percent of those 80 children met the national recommendation of 60 minutes a day of MVPA. A higher percentage of boys (53%) than girls (24%) met the national recommendation (Figure 2).

**Figure 2. Percentage of children, by sex, meeting national recommendation of 60 minutes a day of moderate and vigorous types of physical activity**



A higher percentage of children ages 6-8 (64%) than those ages 2-5 years old (31%) met the national recommendation (Figure 3).

**Figure 3. Percentage of children, by age, meeting national recommendation of 60 minutes a day of moderate and vigorous types of physical activity**



Three in five (60%) of all children did not meet the national recommendation of 60 minutes a day of MVPA. In particular, three in four girls (76%) and two in three 2-5 years old (69%) did not meet this recommendation. This is an opportunity for both parents and educators to intervene to help children, especially girls and younger children, to get more physical activity.

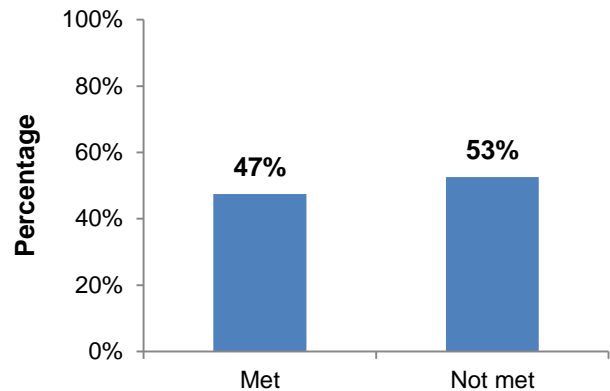
### Children's screen time

A total of 196 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 3.0 hours (sd=2.9). 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 48% of our study children met this recommendation (Figure 4). No difference was observed between boys and girls, or between children ages 2-5 and those 6-8 years old.

**Figure 4. Percentage of children meeting the national recommendation of each child to spend 2 or fewer hours of screen time every day**



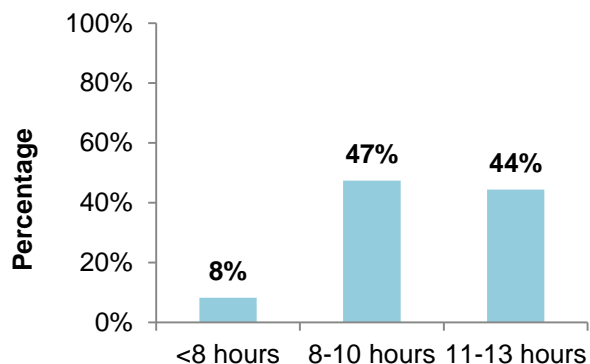
Over half (53%) of children appear to be spending too much time on screens! This is an opportunity for both parents and educators to intervene to help children spend less screen time.

### Children's Sleep Duration

A total of 190 children were included in the analysis of sleep duration. The average number of hours of sleep per day among those 190 children were 10.6 (sd=1.7). Girls had a higher average (10.8; sd=1.6) than boys (10.2; sd=1.8). No difference was observed between the averages of children ages 2-5 and those 6-8 years old.

Among the 133 two to five year olds, 44% met the national recommendation of sleep of between 11-13 hours daily (11-13 hours in the graph). Another 47% of children slept more than 8 hours but less than 11 hours daily (8-10 hours in the graph) and 8% slept less than 8 hours (<8 hours in the graph) (Figure 5).

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



Over half (55%) 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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