

## 2014 Child Behaviors and Health in Majuro 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. In January, 2014, parents, teachers, community members, and project partners gathered data in your community. A total of 143 children from the Majuro community 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

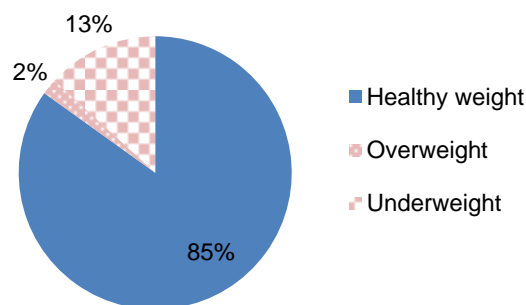
Among the children, 140 had information on sex, of which 82 (59%) were girls and 58 (41%) were boys. Furthermore, 54 (39%) were of age group 2-5 years and 86 (61%) were of age group 6-8 years. One hundred forty children had information on race, of which 124 (89%) were Native Hawaiian/ Pacific Islander (NHPI) and 16 (11%) were more than one race. Among the 124 self-reported NHPIs, 118 (84%) were Marshallese, while 6 (4%) were Marshallese mixed with other ethnic groups.

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.

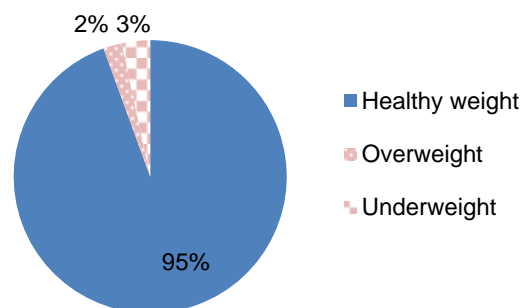
### Children's Body Mass Index by Category as defined by the Center for Diseases Control and Prevention (CDC)

A total of 139 children were included for this analysis. Among 2-5 year olds, 85% were healthy weight, 2% were overweight, and 13% were underweight, while among 5-8 year olds, 95% were healthy weight, 2% were overweight, and 3% were underweight (Figure 1A and Figure 1B). No difference was found between boys and girls.

**Figure 1A. Prevalence of overweight and obesity of 2-5 year old children from Majuro (n=53)**



**Figure 1B. Prevalence of overweight and obesity of 6-8 year old children from Majuro (n=86)**



Strategies that CHL are promoting in raising healthy children 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 those strategies.

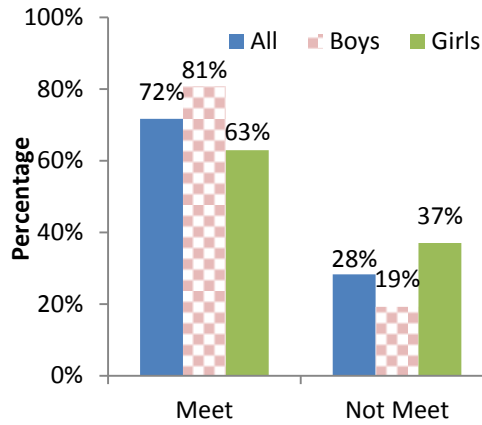
### Children's moderate and vigorous level of physical activity (MVPA) as measured by accelerometer

In each study community, 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.

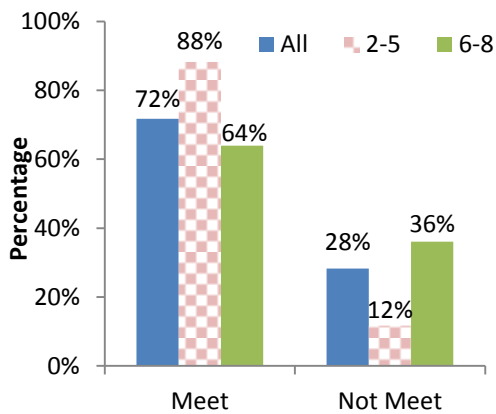
In Majuro a total of 53 children had valid accelerometer data. Among those 53 children, daily average minutes of moderate and vigorous physical activity were 97 (sd=43) for boys, 73 (sd=28.7) for girls and 84 overall (sd=37.1). Younger children ages 2-5 were more active (99 minutes per day sd=39) than 6-8 years old (78 minutes per day sd=35).

Eighty-one percent of boys and 63% of girls, met the national recommendation of 60 minutes a day of MVPA (Figure 2A, 2B), while 88% of 2-5 year olds, 64% of 5-8 year olds, and overall 72% of all the children met the national recommendations (Figure 2A, 2B).

**Figure 2A. Percentage of boys and girls meeting national recommendation of 60 minutes a day of moderate and vigorous types of physical activity**



**Figure 2B. Percentage of children in both age groups (2-5 and 6-8 years) meeting national recommendation of 60 minutes a day of moderate and vigorous types of physical activity**



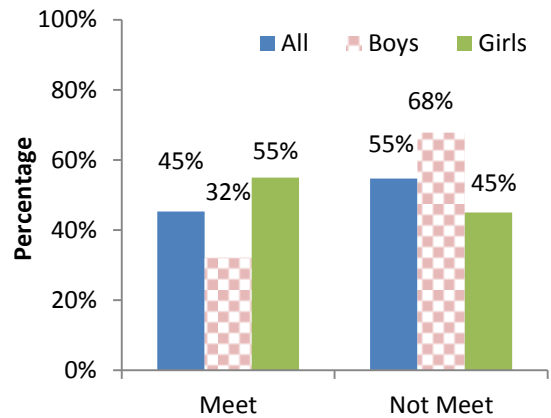
A little more than one in 4 children (28%) did not meet national recommendations of achieving 60 minutes a day of MVPA. Generally speaking, children in Majuro were doing well in obtaining daily physical activity.

### Children's screen time

A total of 139 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 4.3 hours (sd=3.2) for boys and 3.3 hours (sd=3.7) for girls; no differences were found 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 45% of our study children met this recommendation (55% of girls and 32% of boys) (Figure 3). No difference was found children ages 2-5 and those 6-8 years old.

**Figure 3. Percentage of children meeting the national recommendation of each child to spend 2 or fewer hours of screen time every day**



More than half (55%) of children and over two thirds of boys (68%) appear to be spending too much time watching screens! This is an opportunity for both parents and educators to intervene to help children spend less screen time.

For more information about this report or the CHL Program, contact:

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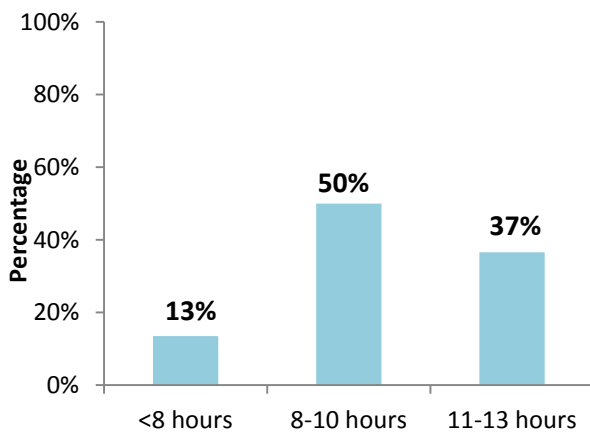
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## Children Sleep Duration

A total of 107 children were included in the analysis of sleep duration. The average number of hours of sleep per day among those 107 children was 10 (sd=1.9). No difference was observed between the averages of boys and girls, or between those ages 2-5 and those ages 6-8 years old.

Among the two to five year olds (n=37), 37% met the national recommendation of sleep of between 11-13 hours daily (11-13 hours in the graph). Another 50% of children slept more than 8 hours but less than 11 hours daily (8-10 hours in the graph) and 13% slept less than 8 hours (<8 hours in the graph) (Figure 4).

**Figure 4. Percent of children 2-5 years old among 3 groups of sleep duration**



Over two thirds (68%) 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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