

2014 Child Behaviors and Health in The Republic of Marshall Islands 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 from three communities (Majuro, Ebeye, and Ailinglaplap) in the Republic of Marshall Islands (RMI). A total of 215 children from the three communities 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

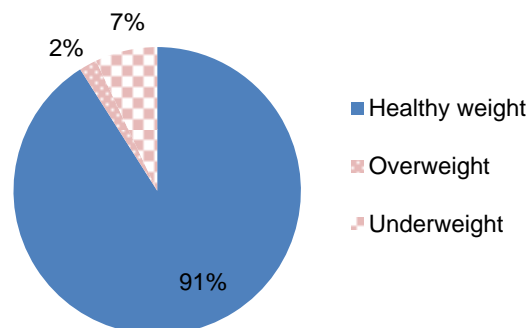
Among the 215 children, all had information on sex, of which 127 (59%) were girls and 88 (41%) were boys. Furthermore, 81 (38%) were of age group 2-5 years and 134 (62%) were of age group 6-8 years. All 215 children had information on race, of which 192 (89%) were Native Hawaiian/ Pacific Islander (NHPI) and 23 (11%) were more than one race. Among the 192 self-reported NHPIs, 183 (85%) were Marshallese.

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 211 children were included for this analysis. Among them, 91% were healthy weight, 2% were overweight, 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 RMI (n=211)



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.

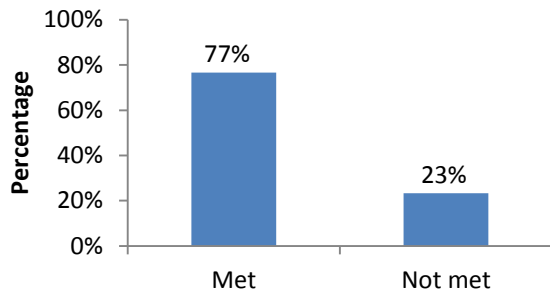
Children moderate and vigorous level of physical activity (MVPA) as measured by accelerometer

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 RMI, a total of 88 children had valid accelerometer data. Among those 88 children, daily average minutes of moderate and vigorous physical activity (MVPA) were 91 (sd=40.3). No difference was found between the averages of boys and girls, or between children ages 2-5 and those 6-8 years old.

Seventy-seven percent or 68 children met the national recommendation of 60 minutes a day of MVPA (Figure 2). No difference was found between boys and girls, or between children ages 2-5 and those 6-8 years old.

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



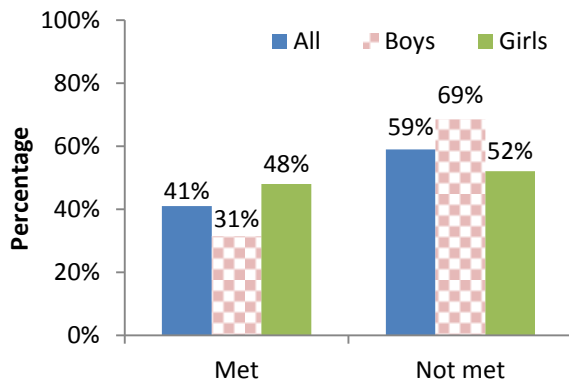
Almost one-in-four children (23%) did not meet the national recommendation of 60 minutes a day of MVPA. This is an opportunity for both parents and educators to intervene to help children get more physical activity.

Children's screen time

A total of 212 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=3.5). 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 31% of boys and 48% of girls in our study children met this recommendation (Figure 3). There was no difference between those ages 2-5 and those ages 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



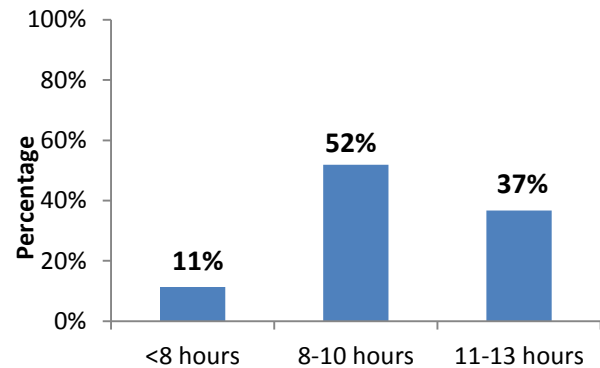
Over half (59%) of children appear to be spending too much time watching screens! This is an opportunity for both parents and educators to intervene to help children spend less screen time.

Children Sleep Duration

A total of 211 children were included in the analysis of sleep duration. The average number of hours of sleep per day among those 211 children was 10 (sd=1.8). 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 78 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 52% of children slept more than 8 hours but less than 11 hours daily (8-10 hours in the graph) and 11% 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 forty-eight (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.

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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