

## 2013 Child Behaviors and Health in Kauai 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. From June to August, 2013, parents, teachers, community members, and project partners gathered data in your community. A total of 191 children from Kauai 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 191 children, a total of 190 children had information on sex, of which 98 (52%) were girls and 92 (48%) were boys. All 191 children had information on age, of which 149 (78%) were of age group 2-5 years and 42 (22%) were of age group 6-8 years. All 191 children had information on race, of which 89 (47%) were of more than one racial group, 42 (22%) were White, 40 (21%) were Asian, and 20 (10%) were Native Hawaiian/ Pacific Islander (NHPI).

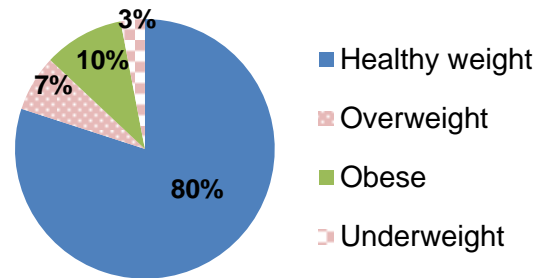
Potential outliers with extreme values (defined as those with a value of 3 standard deviations (sd) above or below the mean) were also excluded from this report. Data was looked at by child's sex and age group.

### 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, 80% were healthy weight, 7% were overweight, 10% were obese, and 3% were underweight (Figure 1).

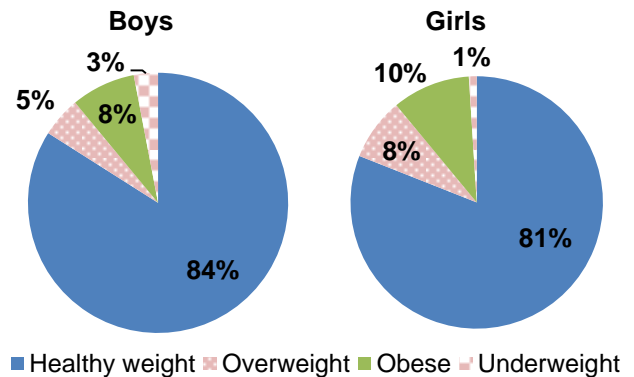
No difference in the BMI distribution was found between boys and girls. The distribution of BMI was different between those ages 2-5 and those 6-8 years old (Figure 3).

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



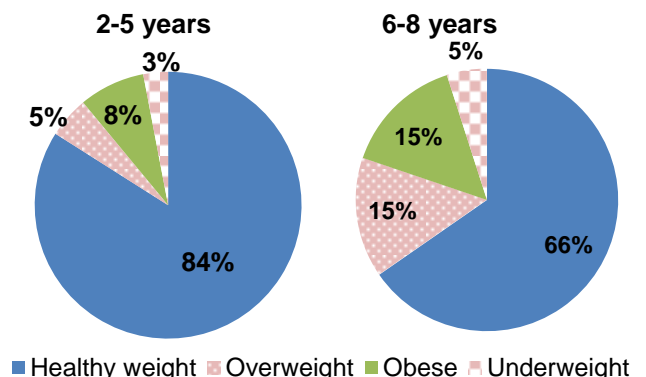
No difference was found between boys and girls (Figure 2).

**Figure 2. Prevalence of overweight and obesity comparing boys (n=91) to girls (n=98)**



The obesity rate is higher among ages 6-8 years (15%) than those ages 2-5 years old (8%) (Figure 3).

**Figure 3. Prevalence of overweight and obesity comparing 2-5 years (n=148) to 6-8 years (n=41)**



Strategies that have found to be effective 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.

Parents were asked about their children's' sleeping duration on a typical day. Let's see how the kids are doing on sleeping and on achieving national sleep recommendations in Kauai.

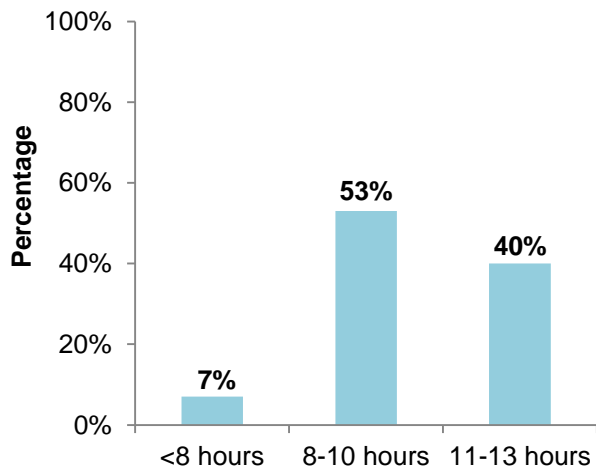
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### Children Sleep Duration

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 10.0 (sd=1.8). No difference was found between the averages of boys and girls. However, the average sleep time was higher among those ages 2-5 (10.1 hours; sd=1.9) than ages 6-8 years (9.4 hours; sd=1.2).

Among the 149 two to five year olds, 40% met the national recommendation of sleep of between 11-13 hours daily (11-13 hours in the graph). Another 53% of children slept more than 8 hours but less than 11 hours daily (8-10 hours in the graph) and 7% 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**



Three out of five (60%) of our younger children (2-5 years old) 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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