The Children's Healthy Living (CHL) Program

University of Hawaii

Overview

The Children’s Healthy Living Program (CHL) is a direct education, social marketing, and PSE change intervention designed to help children ages 2-8 in pacific communities decrease sugar-sweetened beverage (SSB) intake, increase water intake, increase fruit and vegetable intake, decrease recreational screen time, increase physical activity, and increase the duration of sleep. The CHL toolkit has 4 functions that partners can choose from: 1) strengthen and implement school wellness policies, 2) partner and advocate for environmental change, 3) promote the CHL message, and 4) train trainers (capacity building) that address healthy behaviors at multiple levels of the social ecological model. Nineteen specific activities are recommended under each of the 4 functions. These activities promote PSE changes through the development of community strengths and interests. 

Target Behavior: Healthy Eating, Physical Activity and Reducing Screen Time Intervention Type: Direct Education, Social Marketing, PSE Change

Intervention Reach and Adoption

CHL targets children aged 2-8 years and their families in a variety of settings. CHL was piloted in 5 jurisdictions (Alaska, American Samoa, Commonwealth of the Northern Mariana Islands (CNMI), Guam, and Hawaii) among predominantly indigenous communities in the US Affiliated Pacific. CHL encompasses a vast region with diverse cultures. CHL accounted for the region’s unique circumstances by using a community engagement process (CEP) to identify community priorities to develop an environmental intervention addressing early childhood obesity. There were 1,130 activities implemented by the nine CHL communities. 

Setting: Child care (Learn), Community (Live), School (Learn) Target Audience: Preschool (<5 years), Elementary School, Parents/Mothers/Fathers, Adults Race/Ethnicity: American Indian or Alaskan Native, Native Hawaiian or Other Pacific Islanders, Asian
Intervention Components

The CHL intervention includes 4 components: 1) strengthen school wellness policies, 2) partner and advocate for environmental change, 3) promote CHL messages, and 4) train trainers. These intervention components provide the knowledge and capacity to address behaviors related to early childhood obesity prevention. CHL is based on the social ecological model (SEM). The first year of the program requires a lead organization to build a system of community partners, establish regular meetings, and plan the implementation of activities. Activities are then implemented over the next six to 12 months. A monthly process report is used to track activities and implementation progress. To achieve sustainable and optimal results, activities are implemented with community partners, quarterly updates to community partners are provided, and interventions are adapted to match the community’s readiness, resources, and willingness for change.

Intervention Materials

CHL is a multilevel, multicomponent, multijurisdiction intervention. Intervention materials were developed by the CHL intervention team and locally adapted by each CHL jurisdictions (Alaska, American Samoa, CNMI, Guam, and Hawaii). All materials are located on the CHL website. CHL intervention materials are organized by jurisdiction and type of material and include nutrition education lessons, healthy nutrition flyers, resources for parents/caregivers, and policy toolkits.

Intervention Costs

Materials available at no cost.

Evidence Summary

CHL was informed by the analysis grid for elements linked to obesity (ANGELO) model, a community and ecologically framework used to develop interventions to reduce childhood obesity. The multi-step process was guided by a CHL specific conceptual model that engaged key stakeholders through a local advisory committee, key informant interviews, community meetings, and community feedback meetings. CHL communities show significant improvement compared with control communities in overweight and obesity prevalence (effect size \(d = 3.95\%\); 95% CI, 7.47% to 0.43%), waist circumference (\(d = 0.71\) cm; 95% CI, 1.37 to 0.05 cm), and acanthosis nigricans prevalence (\(d = 2.28\%\); 95% CI, 2.77% to 1.57%). Age and sex subgroup analysis revealed a greater difference among the intervention communities in acanthosis nigricans prevalence in the group aged 2 to 5 years (3.99%) vs the group aged 6 to 8 years (3.40%), and the interaction was significant (\(d = 0.59\%\), \(P < .001\)), as well as the smaller difference in the group aged 2 to 5 years (0.10%) vs the group aged 6 to 8 years (1.07%) in screen time (\(d = 0.97\) hour per day, \(P = .01\)). Additional CHL randomized clinical trial publications can be found on the CHL Publications from Program webpage. Evidence-based Approach: Research-tested
Evaluation Indicators

Based on the SNAP-Ed Evaluation Framework, the following outcome indicators can be used to evaluate intervention progress and success.

<table>
<thead>
<tr>
<th></th>
<th>Readiness and Capacity – Short Term (ST)</th>
<th>Changes – Medium Term (MT)</th>
<th>Effectiveness and Maintenance – Long Term (LT)</th>
<th>Population Results (R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>ST1, ST2</td>
<td>MT1, MT3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Settings</td>
<td>ST5</td>
<td>MT5, MT6</td>
<td>LT5, LT6</td>
<td>R9</td>
</tr>
<tr>
<td>Sectors of Influence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Evaluation Materials

Currently, no evaluation tools or materials are available.

Additional Information

**Website:** The [CHL website](https://example.com) includes additional information on CHL, regions it operates in, finding of the program, community resources, and trainings. **Contact Person:** Jean Butel, PhD 808-956-3838 jbutel@hawaii.edu