



## Food Introduction in Hawai'i Based Schools

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### BACKGROUND

Approximately one in three children entering kindergarten in Hawai'i are already overweight or obese (Pobutsky et al., 2013). Adult obesity rates are also increasing in Hawai'i, a condition that disproportionately impacts Native Hawaiians (40%) and Other Pacific Islanders (43.6%) (CDC, 2022). To address the obesity epidemic, the CDC recommends focusing community efforts in a variety of settings, including schools and early care and education (CDC, 2022). School-based Nutrition education for children that includes family support and food environment changes can improve attitudes, knowledge, and behavior around healthy eating (Langford et al., 2014), which can have positive impacts on weight status (Yip et al., 2016). To address health and nutrition in rural Hawai'i communities, the Tasting with Keiki 4-H nutrition education program provides school-based food introduction lessons for students in kindergarten through second grade and healthy food access outreach services for students' families. First started on Kauai in 2019 as a Food Introduction Spin/School Enrichment program has now bloomed into a Rural Health and Education grant reaching more students throughout the state.



### FIELD STUDY

#### Program Description:

Initially launched on Kaua'i in 2019, the program expanded to Hawai'i Island in 2022.

Since the expansion, the program has reached 528 children and 27 educators (teachers and educational aides) at five elementary schools. The foods that were explored, cooked and tasted by the keiki included:

Taro, Ulu, Coconut, Sweet Potato, Pumpkin (Squash), and Asian Greens. The keiki created items such as Poi Pancakes, Pumpkin Mac and Cheese, and Ulu Chili. Recipes varied throughout the state.

#### Program Impact:

- Over the course of the series, an average of 98% of participants tried the food during the lesson (97% on Kaua'i and 99% on Big Island).
- An average of 76% indicated that they liked the food (86% on Kaua'i and 66% on

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Big Island).

- On both islands, students' favorite recipe was poi pancakes (92% liked the dish).
- After completing the program, an average of 82% of participants self-reported that they liked to try new food (87% on Kaua'i and 78% on Big Island).

Program moving forward:

Marielle Hampton, as well as Hallie Cristobal, Sarah Yuna and Heather Greenwood have received the NIFA (National Institute of Food and Agriculture) for the Rural Health and Education Grant to continue this work statewide through the next three years. Going forwards the overall program goal is to expand and sustain the Tasting with Keiki 4-H program on the islands of Hawai'i and Kaua'i to support healthy food access and consumption for rural families. Program-driven changes in participants' knowledge, skill, attitude, and behavior can contribute to the long-term goal of improving community rates of diet-related health conditions. The following four objectives will help achieve program goals:

Objective 1 : Refine the Tasting with Keiki program curriculum package. Existing curriculum and program materials will be revised and expanded to prepare for standardized delivery by Program Associates and wider distribution with educators. The final Tasting with Keiki program package will include all resources to replicate the

project, including an educator training manual, lesson plans, printable coloring sheets, and recipes. The training manual will provide guidance and context to support

independent implementation of the lessons, such as scripts for promoting positive language around food, cooking demonstration preparation, and classroom management strategies for "traveling" lessons. Subject matter experts will be consulted during the curriculum review process, such as the Hawai'i Farm to School

Hui's Farm to Early Childhood coordinator and UH-CTAHR Farm to School faculty.



Objective 2 : Expand implementation of the Tasting with Keiki program. The project team will hire and train three Program Associates to deliver the program on Kaua'i, the east side of Hawai'i Island, and the west side of Hawai'i Island. Program delivery at each of the three sites will reach 16 classes during the program period, totalling 960 students, 40 educators, and their families. TFB outreach about healthy food access programs will reach 1,000 families on Kaua'i and Hawai'i Island.

Objective 3 : Evaluate program effectiveness. Led by Evaluator Dr. Sarah Yuan, the

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team will develop a survey protocol to measure impact on participating educators, students, and students' families. The Evaluator will also work with subaward TFB to



track the effects of the program's outreach services on enrollment or participation in healthy food access initiatives.

Objective 4 : Sustain impact by sharing the Tasting with Keiki program package. The project team will deliver presentations to share the results of the project at a national conference (e.g., National Child Nutrition Conference) and a state conference (e.g., Hawai'i Early Childhood Conference or Hawai'i Health Welfare Summit). The team will also submit a manuscript to a peer reviewed journal (e.g., Journal of Extension). The program package will be submitted for inclusion on resource lists of relevant organizations (e.g., Hawai'i Farm to School Hui, National 4-H Healthy Living Working

Group). Participating teachers will receive a digital copy of the program package with information about the resources available for conducting lessons after the project period.

We look forward to seeing what the program grows to in the upcoming years.