

Hele Mai 'Ai: developing a culturally competent nutrition education program

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Introduction

The current health status of Native Hawaiians reflects that of other indigenous peoples whose lifestyles are far removed from those of their ancestors. The traditional Hawaiian diet of fresh, wholesome, minimally processed complex carbohydrates, vegetables, fruits and lean animal meats has largely been replaced by a diet high in kilocalories, fats, sodium, processed foods and chemicals. An active daily lifestyle, which included fishing, hunting, farming, water sports and much more, has been replaced by a sedentary lifestyle.

Unhealthy practices, especially those related to food intake and physical activity, contribute to the high morbidity and mortality rates experienced by Native Hawaiians. The 1990 data show that Native Hawaiians have the highest age-adjusted mortality rates for the five leading causes of death - heart disease, cancer, stroke, accidents and diabetes.¹ For the period 1980-1985, age adjusted mortality rates for Native Hawaiians were higher than U.S. rates for cancer (39%), heart disease (44%), and diabetes (222%).² In addition to high mortality rates, Native Hawaiians experience death at a significantly younger age. Here in their homeland, Native Hawaiians have had the lowest life expectancy among Hawaiians ethnic groups since 1930.^{1,3,4} The highest prevalence of associated risk factors: hypertension, obesity, and impaired glucose tolerance is also found in this population.^{5,6} Among those diagnosed, education and support for long

term control and prevention of further complications is often unavailable or inadequate.

Limited nutrition services

Several problems combine to limit the availability of nutrition services to Native Hawaiians. Three of the seven inhabited islands have no qualified nutritionists or registered dietitians in residence. Recent state budget cuts eliminated all statewide Public Health Nutritionists. The distribution of programs and materials within our island state often does not serve populations of greatest need because most of the resources and activities are concentrated in major urban areas. The cost of travel from isolated communities limits client travel to urban areas where service is available. Travel for outer island residents may involve expenses for airfare, ground transportation and lodging exceeding \$200 per person per day. In addition to barriers involved access of services, many people find that the available services are not appropriate for their needs. A large proportion of the nutrition education materials available in Hawaii are developed on the

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U.S. continent and do not take into account the cultural foods, customs, and values of Native Hawaiians and, therefore, have limited appeal.

The NutriLink 2000 program

The NutriLink 2000 program was initiated in response to the need for innovative, culturally relevant, nutrition education programs for the various ethnic groups at high risk for diet-related chronic diseases in Hawaii.

The program strategy is to increase knowledge of the "links" between traditional dietary practices, physical activity and disease prevention. For the purpose of this paper, only the Native Hawaiian component, "Hele Mai 'Ai" will be discussed.

Hele Mai 'Ai

The educational program for Hawaiians is "Hele Mai 'Ai" (Come and Eat). This invitation appeals to the Hawaiian value of the importance of sharing. Due to the lack of available nutrition professionals, it was designed to be imple-

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mented by community health workers (CHW) who are trained to implement basic nutrition classes in group settings.

The Native Hawaiʻian Health Care Systems (NHHCS), established by the Native Hawaiʻian Health Care Act of 1988, were chosen as the delivery system, as they already serve Native Hawaiʻian communities throughout the state. Community health workers from each of the five NHHCS have been trained to implement the *Hele Mai 'Ai* program in their respective island communities.

Hele Mai 'Ai Curriculum. The *Hele Mai 'Ai* curriculum consists of six educational modules that promote healthy nutrition attitudes and practices. Each module includes skill-building activities and reinforces healthy nutrition concepts. It would be optimal to present all six modules as a continuous series, beginning with the historical module, which provides grounding in the cultural value of the traditional foods. However, the modules are designed to be self-contained and can be used individually or in any combination.

Each module focuses on a specific topic and is 60 to 90 minutes in length. Hawaiʻian tradition, culture, values and language are integrated throughout the curriculum. The benefits of the traditional lifestyle, and how to apply this knowledge to assess and modify current practices are emphasized.

Layout. A user-friendly layout is consistent throughout the modules. Each module provides a script for the facilitator and is set up for easy reference to scripted content and activities.

Format. Each module follows a basic format, which guides the facilitator through the following module components:

- **Objectives** – The Healthy People 2000 Objectives addressed in each module are listed first. They are followed by three learning objectives for participants, based on knowledge, attitude and/or behavior change. The group leader uses this information when planning a session.
- **Introduction** – The group leader and agency, special guests and participants are introduced. It is important that everyone is comfortable and that the atmosphere is conducive to learning.
- **Main Topic** – The topic is presented in a simple, direct manner. Visual aids are used to illustrate and/or accentuate key concepts, facilitate comprehension and keep material interesting and relevant.

'Ohana or family is very important in the Hawaiʻian culture. For this reason, sessions are designed for family groups and we encourage more than one family member to attend.

- **Games/Activities** – Games and activities that encourage application of newly learned nutrition concepts are designed to be valuable and enjoyable. They serve to reinforce materials, provide feedback and show relevance. Each module has at least one major game or activity. Traditional as well as modern day dietary practices and foods are included. For example, the module on sodium uses a bingo-like game entitled "*Hiki No*" (which means *Can Do!*). Instead of numbers-filled squares, Players' cards depict traditional and commonly consumed foods labeled with their Hawaiʻian and English names.
 - **Discussion of changes, barriers and solutions** – 'Ohana or family is very important in the Hawaiʻian culture. For this reason, sessions are designed for family groups and we encourage more than one family member to attend. Participants are asked to verbalize the changes they are thinking of making and to identify barriers that may arise (family, economics, time...) and possible solutions. This section is very important and valuable and should not be glossed over.
 - **Snacks/Refreshments/Cooking Demo** – This is an optional activity, but highly encouraged if time and budget allow. Foods and dishes should reflect module concepts (e.g. demonstrate/serve a modified recipe from that module). The majority of participants want concrete examples of how to prepare healthier foods. Shopping and preparation tips and recipes are always appreciated.
 - **Summary/Goal Setting** – A brief summary is given followed by participants identifying behavioral goals they will work on. Individual goals are recorded on the class sign up sheet (included) next to name and phone number. Group leaders are responsible for making follow-up calls to each class participant at 3, 6 and 12 months, post session. Follow-up calls are made to facilitate individual support, maintain minimal contact and provide feedback for administrative purposes.
 - **Materials and Appendix** – A list of all essential and optional items needed for each session along with master copies of all visual aids, overheads, and game materials are included as part of the curriculum.
- Hele Mai 'Ai Training for Community Health Care Workers.** The Nutrition Branch, DOH, provides a two and one half day training, which community health workers are required to attend before using the "*Hele Mai 'Ai*" curriculum. A modified training session is provided for Registered Dietitians and qualified Nutritionists. The first session begins with a historical overview of Native Hawaiʻians and health related

Table 1. Stages in the development of the Hele Mai 'Ai curriculum

Stage	Activity	Outcome
Stage 1 Assess health and nutrition needs	<ul style="list-style-type: none"> » Establish a group representative of target audience » Provide weekly nutrition education for 3 months » Gather information on current nutrition related beliefs, practices, issues, and problems » Test different modes of delivery 	<ul style="list-style-type: none"> » Group formed committed to Stage 1 and Stage 3 » Curriculum was developed and modified according to group needs » Identified subject areas for manual » Knowledge of preferred methods and activities obtained
Stage 2 Draft Module Development	<ul style="list-style-type: none"> » Select six topics from identified areas of concern for development into an educational module » Design basic layout of modules » Develop module » Develop culturally appropriate education activities 	<ul style="list-style-type: none"> » Topics; Historical, Sodium, Fat, Meal Planning, Label Reading, Recipe Modification » Developed user-friendly format » Modules and activities developed and reviewed by staff Nutritionists
Stage 3 Pretesting of modules/focus groups	<ul style="list-style-type: none"> » Pretest modules in Native Hawaiian groups for content, language, activity, time limitations and acceptability 	<ul style="list-style-type: none"> » Pretesting done in two predominantly Native Hawaiian areas » Information obtained to increase effectiveness and acceptability
Stage 4 Publication of Manual	<ul style="list-style-type: none"> » Revise and modify each module » Arrange printing of manual 	<ul style="list-style-type: none"> » Final draft completed » 50 copies produced
Stage 5 Training of Community Health Workers	<ul style="list-style-type: none"> » Develop training for health care workers to provide basic nutrition knowledge and skills 	<ul style="list-style-type: none"> » Two and 1/2 day training developed » Training held on Kaua'i for 15 community health care workers from the Native Hawaiian Health Care Systems

factors from early migration to present day. Additional sessions focus on building a foundation of basic nutrition principles; carbohydrates, protein, fat, and water. Physical activity is included as a topic and mini exercise sessions are provided at certain breaks.

For the staff of the Native Hawai'ian Health Care Systems (NHHCS), training incorporated role-modeling sessions utilizing Nutrition Branch staff nutritionists as group leaders. This afforded participants experiential opportunities coupled with proper delivery of materials. Each NHHCS was asked to develop a one-year implementation plan. Additional time was allowed for staff to report on successful projects, strategies and problem areas. Trainees found this component beneficial, as the NHHCS workers come from different islands and rarely have opportunities to interact.

Table 1 outlines the process undertaken in developing the nutrition education curriculum. Each developmental stage focuses on one major goal requiring completion before moving to the next stage. The activities used to realize each goal are listed along with specific outcomes. Integrated throughout the process is the involvement of community members in pretesting and readability and acceptability of the materials.

References

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