

The Kulanui Project

*“With Creativity and Unity, We Strengthen Our Community”- C.N. Lee
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The Kulanui program is an innovative University of Hawai'i project designed to nurture the entrepreneurial spirit of students, by helping them learn and practice critical and creative thinking through the process of manufacturing, branding and marketing of various products. The idea was conceived several years ago by Wayne Fujjishige, the former director of University of Hawai'i at Mānoa's (UHM) Auxiliary Enterprises.



Kulanui, defined as “higher learning,” integrates knowledge and experiential learning into entrepreneurial activities to enhance the value of local foods and other products produced in Hawai'i. The research and development of products under this brand are solely conducted by students in the University of Hawai'i system. The program started just over a year ago and has expanded to become a system-wide initiative. The products currently marketed are produced by students from UH Hilo and UH Mānoa, and is rapidly expanding to include products from Kaua'i Community College.

The food product development idea started over 20 years ago through a project in the Department of Food Science and Human Nutrition (FSHN) program at UHM, under the guidance of Professors Wayne Iwaoka, Stuart Nakamoto, and Alvin Huang. The objective was to develop value-added food products from the culls of locally grown fruits and vegetables and by-products from local food manufacturing operations.

It began with the utilization of papaya as a base ingredient to develop value-added food products that are shelf-stable. The different products developed showcase the versatility and creativity of students in using culled papayas. The students were challenged to critically analyze the different characteristics of food products in order to develop formulations that

utilized at least 50% of the culls in combination with other ingredients.



Different tests were conducted to incorporate the papaya puree into salad dressings either with or without oil, and a barbeque sauce with a hint of smoke flavor. The flavors were then enhanced with a special blend of curry spices developed by the students to provide uniqueness to the product. Multiple trials were carried out to achieve the optimal appearance, flavor and texture. The end products were a fusion of Hawaiian and Asian flavors, making them distinctively Hawai'i!

Green papayas can be defined as those mature and immature papayas that are unable to ripen and turn yellow. When these immature papayas were accidentally harvested, they can't be exported as a fresh fruit. Professor Iwaoka challenged his students to develop another product. A variety of chutney formulations were examined to determine complementary ingredients to the flavor and texture of the green papayas. The final product is a combination of spices that provided a perfect blend to give the green papaya chutney a unique Hawaiian flavor.



Four products developed by the FSHN students are now being sold under the Kulanui brand at the University of Hawai'i Bookstores and Rainbowtiques:

- Papaya Curry Salad Dressing
- Oil-Free Papaya Curry Salad Dressing
- Papaya Curry Barbeque Sauce
- Green Papaya Chutney



Currently, students in the FSHN program at UHM are working on developing new food products, utilizing culls and by-products of other locally grown food items, including eggplant and okara, a by-product of the tofu making process. Under the direction of Professors Iwaoka and CN Lee, new products under development range from jams, jellies and dips, to snack foods, breakfast bars, granola, and fruit leather.

Iwaoka and Lee like working on the Kulanui project because the program helps develop the whole student – it helps them to acquire skills, develop constructive attitudes, learn how to use the knowledge of the discipline to work effectively on teams, resolve conflicts, solve problems, and make decisions, so they will prosper as future employees, employers, and community members. The program can also help educate Hawaii's communities about the integral role that the University of Hawai'i plays throughout the islands. The program demonstrates how to maximize the use of finite resources and hopefully renew the awareness of the importance of a sustainable society.