

Functional Foods: The Crossroads of Nutrition, Food Science and Agriculture

by Dr. Corilee Watters



Papayas from Kamiya Papayas

CTAHR's HNFAS department started the year off with a conference on functional foods in January. This conference was co-lead by Dr. Corilee Watters, Assistant Professor of Nutrition and Dr. Stuart T. Nakamoto, Extension Economist. They developed the conference to create a forum to bring together researchers, extension workers and educators along with industry to discuss new developments and opportunities to promote nutritional health. One theme that includes both agriculture, and food and nutrition approaches is functional foods.

Functional foods are foods that have health promoting qualities in addition to the nutrients they contain. Promoting functional

foods is another way to market healthy eating and encourage increased consumption of fruits, vegetables and whole grains. Presenters discussed the role of functional foods in providing optimal health value to consumers and increased market value for producers. In particular Dr. Radovich discussed the health benefits of glucosinolates and how crop management techniques can increase the phytochemical components. Likewise Dr. Bittenbender mentioned methods to improve the fermentation and polyphenol content of chocolate. Data from the Cancer Research Center of Hawaii's Multiethnic Cohort study presented by Dr. Park indicated the important role of a balanced diet rather than supplements in preventing chronic disease. David St. Jules reviewed the benefits of plant sterols, however indicated caution with fortification and supplementation. Dr. Maria Stewart provided an overview of the health benefits of pre-biotics - fermentable fibers found in foods, and probiotics, bacteria with health promoting effects. Dr. Watters discussed the evidence for inclusion of food and



Dr. Pratibha Nerurkar, MBBE discussed the health benefits of bitter melon consumption.



Dr. Stuart T. Nakamoto suggested how functional foods provide opportunities for Hawai'i Agriculture, and also cautioned that consumers should be aware of "functional" claims used as a marketing ploy.

supplement sources of omega-3s in clinical practice in cardiovascular disease, rheumatoid arthritis, wound healing and inflammatory bowel disease. Dr. Willcox reviewed the clinical outcomes of the Okinawa and Portfolio diets which incorporate functional foods in promoting health and longevity. Overall presenters reinforced the important health benefit from consuming a variety of fruits and vegetables.

The conference was attended by registered dietitians, public health professionals, physicians as well as members from industry and students. Additional professional development opportunities are needed that include both agriculture, food and nutritional sectors.

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