

## Multiethnic Cohort Update

One of the goals as we move forward in this study is to produce a newsletter regularly to keep you informed of the progress and results of the Multiethnic Cohort Study.

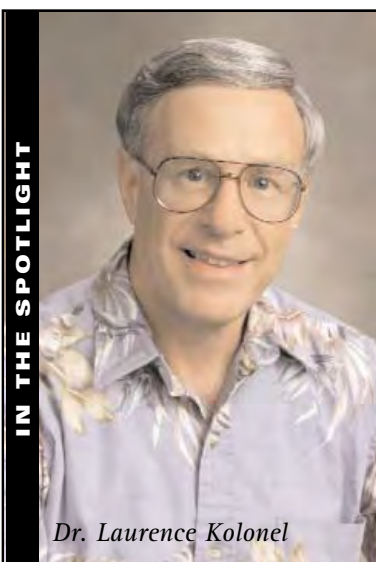
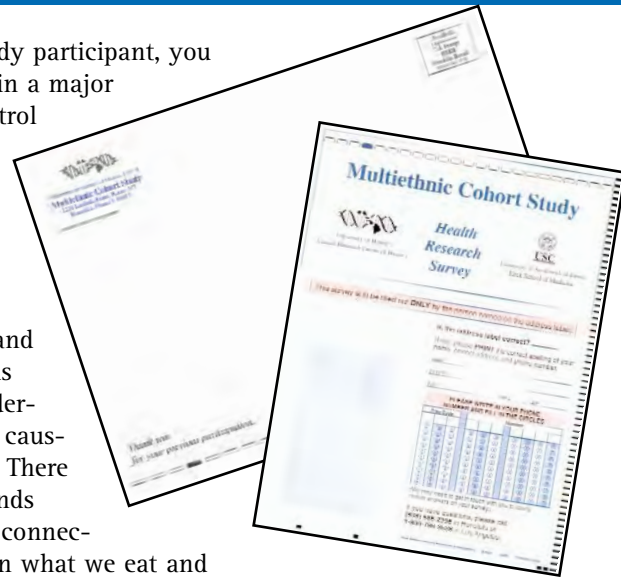
As we may have told you before, this is the first long-term study of its kind in the world to examine ethnic differences as they relate to cancer. All other studies look primarily at European-derived populations. The ethnic diversity of Hawai'i and California—among the nation's top states with a nonwhite population—made it possible to develop a large, multiethnic cohort (scientific word for population) study to identify why different ethnic groups have different risks of developing cancer.

There are more than 200,000 participants in the Multiethnic Cohort Study. Approximately 80,000 of you so far have received the latest Health Research Survey, similar to the original questionnaire that was sent in 1993–1996. The rest of you will receive the current questionnaire over the course of the next five years. Because a person's lifestyle changes with time, the survey is important in updating questions about your medical history, diet, physical activity, and other lifestyle habits. When your survey arrives, we encourage you to take the time to complete it and return it to us as soon as possible. Each of you is very important, because no one can take your place in the study.

As a study participant, you have joined in a major effort to control cancer that will impact your family, neighbors and your community and is bringing us closer to understanding the causes of cancer. There are some trends that explain connections between what we eat and our lifestyle with cancer rates. However, more research is needed. We do know that being seriously overweight and eating a diet low in vegetables and fruits can increase your risk of cancer.

Each and every one of you is truly a hero. You have made a personal commitment of your time and willingness to share important information about you without expecting anything in return. We humbly thank you.

If at any time you have any questions, please call us collect at 1-808-586-2996 in Hawai'i or tollfree 1-800-786-3538 in California. We look forward to continuing our partnership with you. Please know that you are truly making a difference. ❖



IN THE SPOTLIGHT

Dr. Laurence Kolonel

## Hawai'i Multiethnic Cohort Study Project Director Receives National and Local Honors

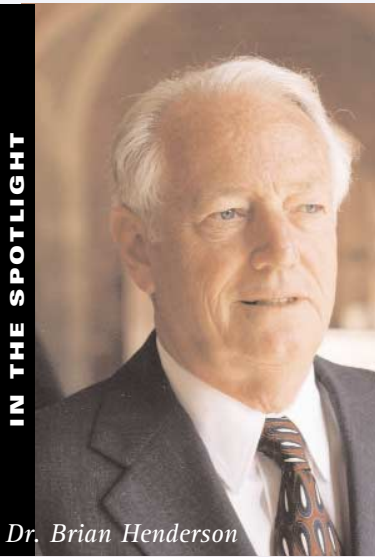
Laurence Kolonel, M.D., Ph.D., project director for the Multiethnic Cohort Study at the Cancer Research Center of Hawai'i, received two distinguished honors during 2003 for his research.

Earlier last year, Dr. Kolonel received a prestigious MERIT (Method to Extend Research in Time) Award for this study from the National Institutes of Health in Washington, DC. This was the first time that a Hawai'i researcher received this honor, which recognizes investigators who

have demonstrated superior competence and outstanding productivity during their previous research projects and are likely to continue to perform in an outstanding manner. The MERIT Award is possible because of your participation in the Multiethnic Cohort Study, which looks at the effects of diet and genetic make-up of 215,000 men and women representing five different ethnic groups.

Before the start of the study, there were few specific relationships that showed cancer

[continued on page 2]



Dr. Brian Henderson

## California Multiethnic Cohort Study Project Director

Meet Brian Henderson, M.D., Multiethnic Cohort Study Project Director at the University of Southern California's Keck School of Medicine. He is a Distinguished Professor of Preventive Medicine at the USC Department of Preventive Medicine and the Kenneth T. Norris Jr. Chair of Cancer Prevention at the USC/Norris Cancer Center.

His affiliation with USC traces back to 1970, when he started a cancer epidemiology program that has evolved into the Department of Preventive Medicine. In 1994, he established a cancer research program at USC focused on genetic susceptibility for breast and prostate cancer that is based on the Multiethnic Cohort Study.

Dr. Henderson says of the Multiethnic Cohort Study, "The Multiethnic Cohort Study has opened up enormous scientific opportunities. The ability to utilize the cancer rates among the different ethnic groups by studying their diet and lifestyle and their genetic susceptibility to cancer is unparalleled." He adds, "The wealth of information

"The ability to study the diet and lifestyle of our participants and their genetic susceptibility to cancer is unparalleled."

we are gathering from the study is enabling us to collaborate with other institutions in the United States and Europe.

"In addition, this study is providing a training ground for new scientists."

Over the years, Dr. Henderson has received numerous awards and honors including the Distinguished Service Award from the University of Chicago and the Research Excellence in Cancer Epidemiology and Prevention Award from the American Academy of Cancer Research. From the University of Southern California, he received the Presidential Medallion—the university's highest honor—as well as being named a Distinguished Professor for bringing special

renown to the medical school through his accomplishments in preventive medicine.

His expertise is widely sought. Dr. Henderson has served in a consulting role for numerous groups, organizations and publications including the editorial boards of *Cancer Causes and Control* and *the Journal of Clinical Oncology*, Associate Editor for *Cancer Research*, and the Scientific Advisory Board for the Coordinating Council for Cancer Research.

He received his medical degree from the University of Chicago and served his internship and residency at Massachusetts General Hospital.

Dr. Henderson has published 400 scientific papers to date.❖

DID YOU KNOW  
...that of the five different ethnic groups in the Multiethnic Cohort Study, Latinos overall have the lowest risk of developing cancer?

[continued from page 1]

## Hawai'i Multiethnic Cohort Study Project Director Receives National and Local Honors

incidence is attributable to diet and the related factors of obesity and physical activity. Dr. Kolonel's earlier research on migrant Japanese showed that the risk of developing common cancers is largely determined by environmental factors rather than by the inheritance of genes. On the other hand, striking differences in the findings among the different ethnic groups in Hawai'i (such as lung cancer rates that were lower than expected among Japanese for the average number of cigarettes smoked) suggested the possibility that some groups may be more susceptible than others to cancer-causing substances.

The questionnaires that you completed have provided considerable detail about your diet, as well as information on ethnic background, use of medications, past medical conditions, physical activity, sun exposure, smoking, and, in women, reproductive history and use of hormones. The blood and urine samples that are being collected from participants should help researchers identify the basis for differences among individuals and among ethnic groups in their risks for developing cancer.

The MERIT Award guarantees that the Multiethnic Cohort Study will be automatically funded for an additional three to five years at the same level without Dr. Kolonel having to reapply for funding. The award came upon the recommendation of the National Cancer Institute.

Most recently, Dr. Kolonel also was one of three professors at the University of Hawai'i at Manoa to be awarded the 2003 Regents' Medal for Excellence in Research for his work in epidemiology and cancer. An internationally recognized scholar and researcher, Dr. Kolonel pioneered work that revealed the role of environmental factors in the causes of cancer resulting in different

rates of incidence and deaths among different ethnic groups. His research has demonstrated the importance of diet in the development of cancer in humans.

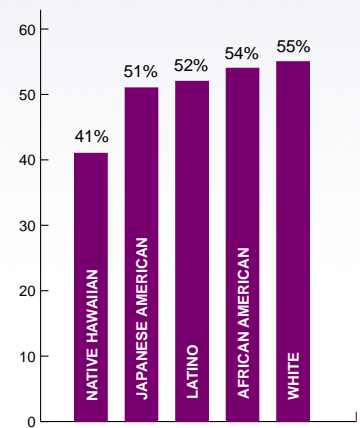
Dr. Kolonel is also Director of the Cancer Etiology Program and Deputy Director of the Cancer Research Center of Hawai'i. He received his medical degree from Harvard Medical School and a doctorate in epidemiology from the University of California at Berkeley and is board certified in Preventive Medicine. In addition to serving on various editorial boards of medical journals and on the Board of Scientific Counselors for the National Cancer Institute, Dr. Kolonel is also the author of numerous articles and is a sought-after speaker on the topic of cancer. ❖

**DID YOU KNOW**  
...that the *Multiethnic Cohort Study* is the first study of its kind that aims to link ethnicity with the incidence of cancer?

## Multivitamin Use in the Multiethnic Cohort

“Factors Associated with Dietary Supplement Use Among Healthy Adults of Five Ethnicities,” a research report from Multiethnic Cohort Study investigators, was recently published in the *American Journal of Epidemiology*. The paper shared findings on multivitamin use among study participants.

In the Multiethnic Cohort Study, multivitamin use is common: 48 percent of the men and 56 percent of the women reported regularly taking multivitamins. As the figure shows, approximately 40 percent of Native Hawaiian adults take multivitamin supplements, while adults of other ethnic groups indicate higher levels of usage (51 percent - 55 percent). When compared to those adults who do not take multivitamins regularly, users were more likely to be older, exercise regularly, eat more fiber, eat less fatty food, be of normal weight, have more years of schooling,



Multiethnic Cohort Study  
Percentage of Multivitamin Use  
by Ethnic Group

and not smoke. The researchers will use this information to study whether the use of vitamins and mineral supplements changes an individual's risk of cancer.

Many people apparently take multivitamins because they believe their diets are inadequate in some nutrients. A multivitamin supplement that provides up to 100 percent of the Daily Value for a variety of vitamins and minerals may supply missing nutrients [continued on back page]

## Prostate Cancer

Prostate cancer is the most common cancer in men in the United States and has increased dramatically over the past three decades. In particular, the number of men being diagnosed with prostate cancer jumped in the late 1980s, due to the widespread use of the PSA (prostate specific antigen) test, which was able to detect very early prostate tumors.

The increase in prostate cancer diagnoses has led to more early cancers being found. Therefore, screening has allowed earlier identification of tumors when the disease can be successfully treated.

Age is a factor that strongly affects the risk of prostate cancer. The graph in Figure 1 shows that a man's chance of getting prostate cancer is very small before the age of 50, but increases dramatically when he reaches age 60.

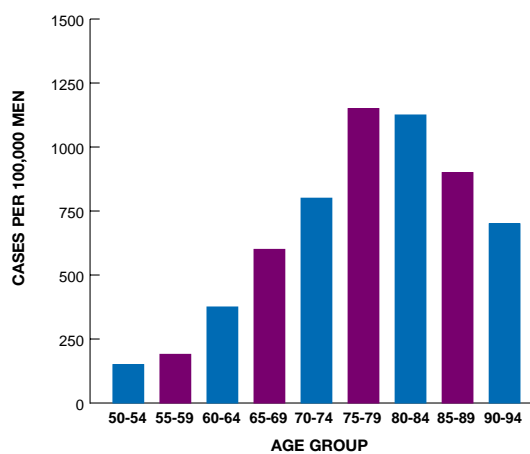


FIGURE 1  
Prostate Cancer Risk by Age

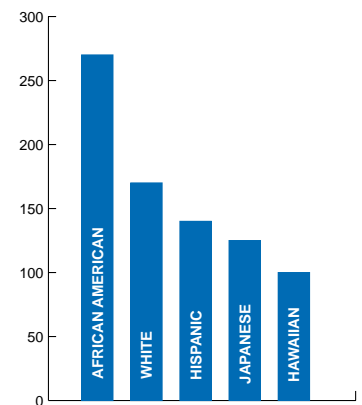


FIGURE 2  
Prostate Cancer Risk by Ethnicity

Prostate cancer risk varies by ethnicity. African American men have nearly double the chance of getting prostate cancer as other ethnic groups, as shown in the graph in Figure 2. Presently, the reason for this higher risk is not known.

In general, little is known about what causes prostate cancer. Using the Multiethnic Cohort Study data, investigators will study how diet and other factors influence the disease and why African American men have a higher risk than other ethnic groups. ❖



University of Hawai'i at Mānoa, CRCH  
**Multiethnic Cohort Study**  
1236 Lauhala Street, Room 407  
Honolulu, Hawai'i 96813

Non-Profit Org.  
U.S. Postage  
**PAID**  
Honolulu, Hawaii  
Permit No. 278

ADDRESS SERVICE REQUESTED



## HEART-HEALTHY RECIPE

### SIMPLE SALMON SALAD

*Here is a quick and easy way to increase your omega-3 (heart-healthy) fatty acid intake as well as your intake of 'good-for-you' phytochemicals, such as quercetin in onions and lycopene in tomatoes.*

#### Nutrition analysis

Per 3/4 cup serving	
Calories:	80
% Calories from fat:	20%
Dietary fiber:	2 g
Vitamin A:	52 RE
Vitamin C:	18 mg
Omega- 3's:	0.5 g
Calcium:	70 mg
Sodium:	290 mg

#### Ingredients:

- 1 small can salmon, with bone (3 1/2 oz.)
- 2 Maui or other mild yellow onions, medium
- 2 ripe tomatoes, medium
- 2 stalks of green onion, finely chopped
- 1 tsp. sugar
- 2 Tbsp. vinegar (rice wine or cider)
- 1 Tbsp. reduced sodium soy sauce

#### Directions:

Dice onions and tomatoes. Add onions, tomatoes, vinegar, sugar, and soy sauce and toss together in a mixing bowl. Add in the salmon with liquid, break apart the salmon and toss again. Refrigerate for 1 hour to allow flavors to blend. Top with green onion before serving. Serve with whole grain crackers, if desired.  
Serves 4.

### Multivitamin Use in the Multiethnic Cohort

[continued from page 3]

for some individuals. Vitamins and minerals in supplements usually act the same way in the body as vitamins and minerals in foods. However, foods supply other important nutrients (such as protein, fiber, and energy), as well as other compounds that promote health (like various flavonoids in fruits and vegetables). It is usually difficult to consume excessive amounts of nutrients through foods, but when vitamins and minerals are concentrated in supplements, it is important not to exceed the recommended dosage.❖

#### Reference:

Foote JA, Murphy, SP, Wilkens LR, Henderson BE, and Kolonel LN. Factors associated with supplement use among healthy adults of five ethnicities: The Multiethnic Cohort Study. *American Journal of Epidemiology* 157(10): 888-897, 2003.