

Multiethnic Cohort Update

Receiving a completed Health Research Survey from you is the most important element of the Multiethnic Cohort (MEC) Study! Most of you have already received the Health Research Survey in the mail to fill out and return to us. Since the fall of 2003, we have mailed the survey to more than 180,000 study participants like you. If you have not mailed your survey back to us yet, it's not too late! Each and every completed survey that we receive is valuable and helps us towards our goal of preventing cancer.

We have received more than 80,000 completed surveys so far. The MEC staff is continually reviewing the survey data, and at least 800 surveys are processed daily through our optical scanner (machine that reads the bubbled answers that you marked) in Hawai'i and California. To assure confidentiality of your responses, names and any contact information are removed at this time.

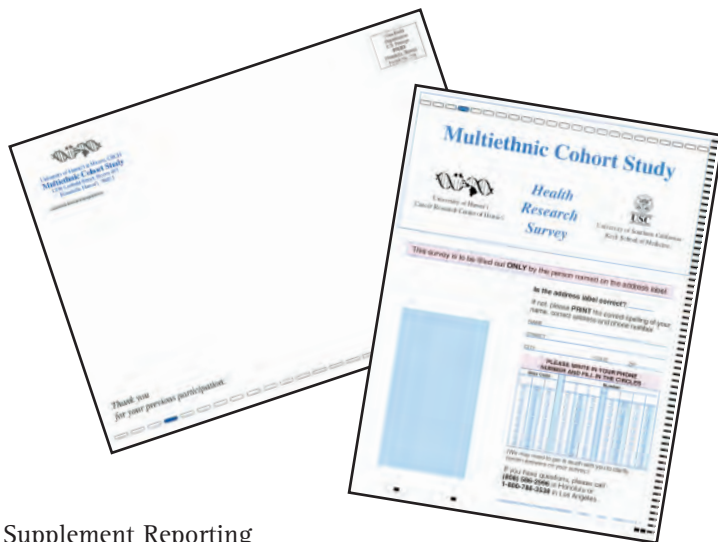
WHY WE ASK ABOUT YOUR EATING HABITS

There is a good reason for the 18 pages of questions in the survey asking your usual eating habits during the past year. From this information, we get a good idea of what foods you are eating regularly and can calculate your intake of different nutrients (fat, protein, vitamin C, etc.). One of the purposes of the MEC Study is to investigate the correlation between diet and risk of cancer.

You may question why certain foods are missing from the survey. The survey would be too long if we included every possible food, so we used information from our past studies to select the most common foods consumed by our population. But, we know that diets can change and new foods are often introduced, so we included a section in the survey where you could write in foods that you ate frequently but were not asked about. If we find that many study members are writing in the same foods, we will consider adding them to the eating habits section of future surveys.

SUPPLEMENT REPORTING STUDY

Some of you may have been contacted recently for the



Supplement Reporting

(SURE) Study. This study is being conducted by Dr. Suzanne Murphy to find out what types of dietary supplements are being taken by participants in the MEC, and to test different ways of collecting this type of information. This study is needed because although supplements are a major source of vitamins and minerals for many individuals, information on them in past studies of cancer has been limited.

We hope to recruit close to 1,000 participants over a period of two years. We have just finished the first full year of the study, and are very pleased with the cooperation of the participants. We find that people take many different kinds of supplements - over 500 different products have been reported so far! When we

have completed the second year of the study, we will be able to better describe supplement use by the participants, and also will know more about the best ways to collect information on use of supplements. This information will be crucial in the future as we



SURE Study Interviewers, Kim Yonemori and Yukiko Morimoto examine the labels of dietary supplements reported by study participants.

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<COLORECTAL CANCER FINDINGS>

Diet, Genes and Colorectal Cancer

According to the American Cancer Society, colorectal cancer claims the lives of approximately 55,000 people in the United States every year. Multiethnic Cohort Study (MEC) researchers at the Cancer Research Center of Hawai'i have been studying the disease for over a decade. They have been focusing on how dietary factors and genetic variants (small differences in genes) may contribute to colorectal cancer. Doctors Loïc Le Marchand, Lynne R. Wilkens, Laurence N. Kolonel, and Brian E. Henderson recently published their findings in the journal *Cancer Epidemiology, Biomarkers and Prevention*.

In the study, the researchers compared the food intake and genetic make-up of 822 MEC participants who developed colorectal cancer with those of 2,021 MEC participants who did not develop the disease. Participants included men and women of Japanese, White, African American, Latino, and Native Hawaiian origin residing in Hawai'i or Los Angeles. The groups completed questionnaires inquiring about lifestyle, diet, smoking, alcohol consumption, medical history, medications, vitamin intake, and for women, reproductive history and hormone use. Blood and urine samples were collected from the participants.

Dr. Loïc Le Marchand, a MEC researcher in Hawai'i, states: "Dietary factors as causal agents are not well-established for most cancers." However, this most recent study showed that "...there is good evidence that low intake of folate increases the risk of colon cancer. Because genetic variants modify how folate is metabolized, we are interested in studying genes."

Increased protection against colorectal cancer was found in participants with high intakes of folate. A specific gene variant, along with a high folate intake, offered additional protection. The beneficial effect of folate was cancelled by alcohol consumption. Natural folate (one of the B vitamins) is found in broccoli and leafy greens. Folic acid, the synthetic form of folate, is present in many dietary supplements and in fortified cereals and breads.

"What's special about the MEC study," said Dr. Le Marchand, "is that it is the only large study of its kind that is examining ethnic differences in cancer risk." For now, the goal in studying genes is not so much to make individualized dietary recommendations or lifestyle changes, but to understand the nature of cancer, and hopefully come up with better treatments and prevention.

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IN THE SPOTLIGHT

Meet Our Telephone Interviewers

"Have you received our 'Health Research Survey' packet in the mail?" If this sounds familiar, you may have spoken with one of our interviewers who were calling to remind you to complete the survey. Brenda Figueroa, Karla Soriano and Norma Torres are at the University of Southern California (USC) Keck School of Medicine in Los Angeles, California, and Naomi Hee and Janine Mattos are at the University of Hawai'i (UH) Cancer Research Center in Honolulu, Hawai'i.

Brenda Figueroa is the newest addition to the staff and considers her work at USC a good match for her. She has a degree in psychology from Woodbury University in Burbank, California and says the job allows her to put educational theory into practice. Figueroa has been with the research center for five years and would like to return to school to pursue an advanced degree in psychology.

Karla Soriano is a five-year veteran with USC. She began in a general clerical position but

Janine Mattos and Naomi Hee (l to r), Interviewers at the University of Hawai'i Cancer Research Center.

quickly moved to helping with research projects that have her communicating directly with study members. Her strategy in trying to encourage study participation? "Just be a good listener and try to answer their questions," she says. "If they don't wish to cooperate, I let them know that I understand and I don't pressure them." Although she enjoys her work, Soriano is thinking of pursuing a career in early childhood education. "I've always wanted to be a teacher."

Norma Torres has been with the project at USC for over seven years. She was drawn to work with the MEC Study because she enjoys helping others, and because several of her family members have had cancer. The study also has special significance because it includes a large number of Latino participants. She is of Latino heritage herself.

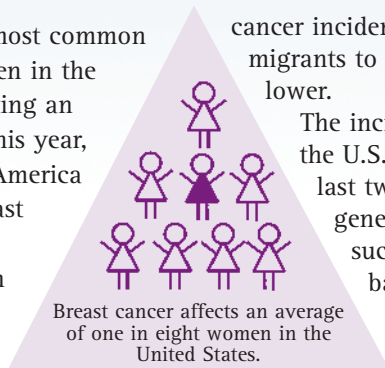
Brenda Figueroa, Karla Soriano and Norma Torres (l to r), Interviewers at the University of Southern California Keck School of Medicine.



Breast Cancer in the Populations of the Multiethnic Cohort Study

Breast cancer is the most common cancer among women in the United States, affecting an average of one in eight. This year, nearly 213,000 women in America will be diagnosed with breast cancer. Additionally, 1,700 men will be diagnosed with the disease.

The risk for breast cancer varies among the ethnic populations of **The Multiethnic Cohort Study** (see figure). The incidence rates among Native Hawaiian and white women are highest of all five groups. Though the rates are lower in Japanese American and African American women, they are still quite high. Latino women have the lowest rate. The high rate in Japanese American women reflects long-term residence in the U.S. and adaptation to American culture, because the breast

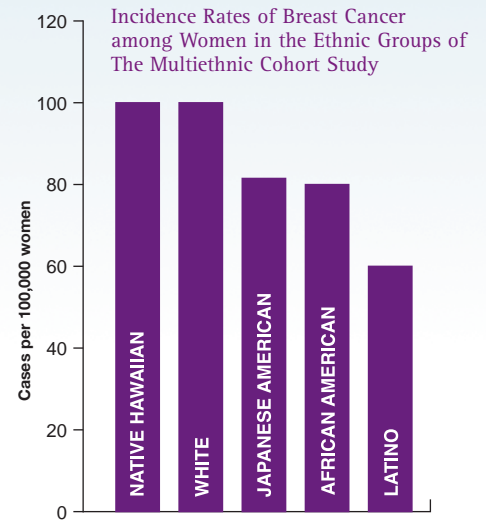


cancer incidence rate in early Japanese migrants to the U.S. was very much lower.

The incidence of breast cancer in the U.S. has increased over the last two decades, not just in later generations of migrant groups such as the Japanese. The basis for this rise in breast cancer incidence is not clearly understood, though some of it is due

to better and earlier diagnosis through increased mammographic screening.

Many factors are known to increase the risk of breast cancer. These include older age, a family history of breast cancer, early menstruation or late menopause, later age at delivery of a first child, obesity, use of oral contraceptives, alcohol consumption, and long-term use of hormone-replacement therapy. However, if detected early, the five-year survival rate for



women with breast cancer exceeds 95 percent. The best way to detect breast cancer early is to have an annual mammogram beginning at age 40.

Women should see their doctor if they notice any changes in their breasts. Symptoms of breast cancer can include a lump, skin irritation or dimpling, nipple pain or nipple turning inward, redness of the nipple or breast skin, breast discharge, or a lump in the underarm area. ❖

For Torres, the rewards of the job outweigh the challenges. “The ultimate reward is internal,” she remarks. “Knowing that I am part of this one of a kind study on such a devastating disease is what keeps me at this job.”

It’s no wonder that Naomi Hee is the lead interviewer at the Hawai’i site. She has a soothing voice that is bound to break any barriers and she loves people! “When I start telling people about the study, it’s hard to get me off the soapbox,” claims the Kailua resident who has been with the MEC Study for five years. To be a successful interviewer, “you need to speak from the heart.” “People can hear it in your voice.” That’s why Hee tells trainees to look in the mirror and smile before making a phone call. “A smile can travel a long way,” she says, with a huge smile!

Janine Mattos has been involved with the MEC Study for almost a year and has been enjoying the experience. “This is where it all starts,” says the Pearl City resident who loves doing research and talking to people. Mattos attempts to reach 80-100 study members a day in a period of four hours. She kindly reminds them to return their completed surveys. When people don’t want to talk, she tries not to take it personally. “I just apologize and explain what the study is trying to do.” At one time, she thought of pursuing a career in medicine - a goal that she may still one day strive to achieve. For now, she’s happy to apply her knowledge in research. ❖

The interviewers play an important role in the MEC Study, and the study would not be possible without them. We appreciate their commitment and dedication.

Colorectal Cancer [continued from page 2]

When comparing ethnic groups, previous studies of colorectal cancer incidence carried out by Le Marchand and colleagues have shown that Native Hawaiian men and women had the lowest rates of colorectal cancer, and Japanese Americans the highest. “The fact that Japanese Americans have the highest rates of colorectal cancer in the study has been of great interest,” said Le Marchand. “There is a significant consumption of beef in this population.” Ethnic Japanese more often have specific gene variants that may make them more susceptible to carcinogens (cancer-causing substances) found in well-done meat. “Particularly interesting is what has happened in Japan since WWII, as beef consumption has increased. From very low rates of colorectal cancer formerly, the rates in Japan are now among the highest in the world,” he noted.

People with colorectal cancer more often have a family history of the disease, are older, less physically active, and smoke more. They consume less dietary fiber and folate, but more alcohol than those without the disease. “Theoretically, by exercising, not smoking, increasing fiber, calcium and folate intake, and decreasing consumption of meat and alcoholic beverages, you should be able to reduce the risk of colorectal cancer by as much as 70 percent,” noted Le Marchand. “Colorectal cancer is difficult to cure after it has spread outside the large intestine. Therefore, it is important to go for regular screening, which can include colonoscopy (considered the most accurate), a sigmoidoscopy, or a blood stool test.” ❖

Dr. Loïc Le Marchand is originally from France, but after living in the islands for nearly 25 years, calls Hawai’i home.



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RECIPE FOR HEALTHY LIVING

PUMPKIN MOUSSE

This dessert is a great substitute for pumpkin pie during Thanksgiving and Christmas. It won't leave you feeling overly full after a large holiday meal. Served in dessert glasses with a ginger snap cookie on top, it is a festive and fun dessert - and it can be made in less than fifteen minutes.

Nutrition analysis

Makes ten (1/2 cup) servings	
Calories	110
Total Fat (g)	1.5
% of calories from fat	12
Protein (g)	3
Vitamin A (mcg)	270
Vitamin C (mg)	1.5
Total Isoflavonoids (mg)	7

Nutrient analysis does not include the optional ingredients.

Ingredients:

1 15-ounce can pumpkin pie mix with spices	1 tsp finely chopped Kaffir lime leaves or lime zest (optional)
1 12.3-ounce package firm silken tofu, broken into pieces	1/2 cup sugar
1 cup non-fat whipped topping	10 ginger snap cookies for garnish
1 Tbsp grated ginger root	Chopped candied ginger for garnish (optional)

Place the first six ingredients in a food processor and process until very smooth, about 4 to 5 minutes, scraping the sides occasionally. Taste and add more sugar if desired. Place the mousse in the refrigerator to chill and set for at least 2 hours. Serve individually in small bowls or glasses with a ginger snap cookie and chopped candied ginger on top.

Multiethnic Cohort Update

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investigate whether dietary supplements can reduce the risk of cancer.

SPECIMEN COLLECTION

In addition to the Health Research Survey, the study includes a laboratory phase in which technicians have collected over 67,000 blood and urine samples so far. Study participants who were unable to provide a blood sample are now being asked to provide a mouthwash or saliva sample instead. Researchers can look at cells in these specimens, and can correlate variations that they find with the occurrence of diseases. Mouthwash, saliva and blood collections will continue for another 6 months. All of this information, combined with the Health Research Survey data collected, can help us identify important risk factors for getting cancer.

We would like to extend our deepest appreciation and heartfelt thanks to all of you for your continued support of the Multiethnic Cohort Study! ❖