

# Multiethnic BULLETIN

VOL 17 FALL 2017

## *Multiethnic Cohort Update* *24 Years of Epidemiological Research* *in Cancer Prevention*

The Multiethnic Cohort Study (MEC), which is being conducted by the University of Hawai'i Cancer Center and the University of Southern California Norris Cancer Center, is in its 24th year. It was established in 1993 to study risk factors for cancer among 215,000 Hawai'i and Los Angeles residents. Since the study started, MEC researchers have gained a remarkable wealth of knowledge on how diet, lifestyle and genetics affect cancer risk. This would not have been possible without your generous participation. During the past 24 years, we have updated the information that you originally gave us through health surveys sent every five years.

Having a large number of participants respond to our follow-up surveys is critical to the validity of our findings. After all these years, more than 70 percent of MEC members continue to fill out the surveys that are mailed to them.

Your answers to these surveys have allowed us to compile and analyze the data, and share the findings through over 550 scientific publications ([www.uhcancercenter.org/mec](http://www.uhcancercenter.org/mec)). The findings have been used across the world to make official recommendations about the prevention of cancer and other chronic diseases.

The Multiethnic Bulletin is mailed every year to MEC members to provide an update on the progress of the study. Please know that you are an integral part of our work and are helping to reduce the burden of cancer and other chronic diseases. A heartfelt thank you for your support of the MEC!

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For more information on the Multiethnic Cohort Study,  
please visit our website at [www.uhcancercenter.org/mec](http://www.uhcancercenter.org/mec)

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Coffee is one of the most widely consumed beverages in the world. A growing body of research points to potential health benefits associated with coffee consumption, such as reducing the risk for type 2 diabetes, Parkinson's disease, stroke and certain cancers. Most of these studies have been conducted in white populations. To address whether similar trends also exist among the diverse populations represented in the MEC, we used the data on coffee consumption collected at study entry to examine whether drinking coffee was associated with various health outcomes among MEC participants during follow-up.

We found that the more cups of coffee a person drank, the lower the risk for developing hepatocellular carcinoma (HCC), the most common type of liver cancer. Compared to participants who were not coffee drinkers, those who consumed 2-3 cups per day had their risk of developing HCC reduced by 38%, and those who consumed four or more cups per day had their risk reduced by 41%. This reduction held broadly, regardless of the study participants' ethnicity, gender, body weight, smoking status, alcohol intake, and diabetes status.

We also found a smaller beneficial effect of coffee consumption on reducing the risk of chronic liver

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A Newsletter for the Participants  
of the Multiethnic Cohort Study

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## – STUDYING HEALTHY AGING IN THE MEC –

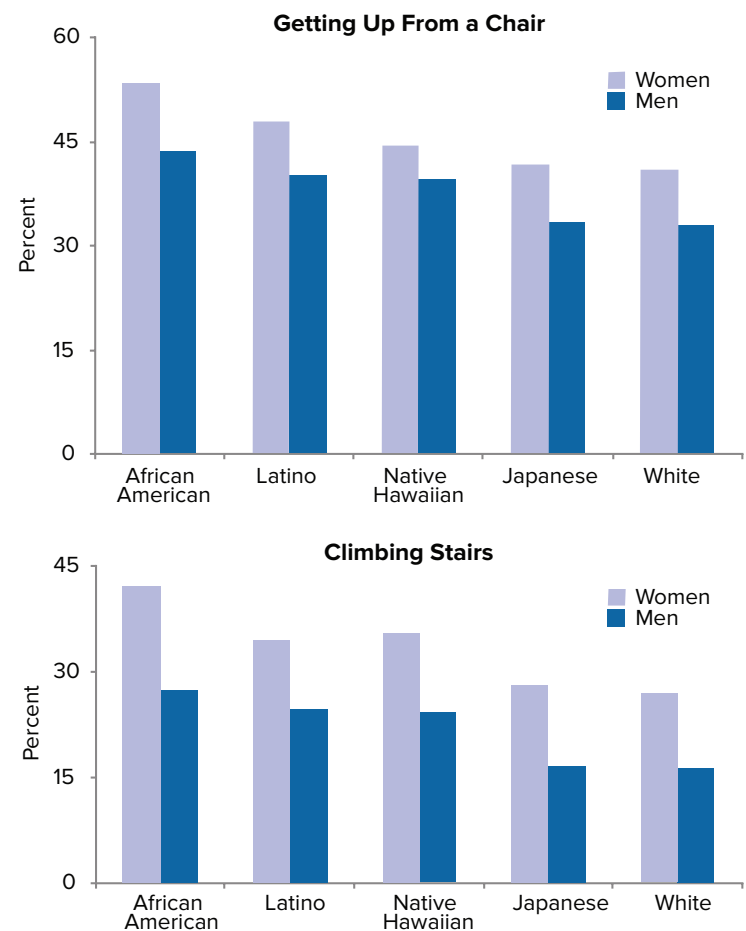
In the US, 40 million people are now 65 years or older and this number is expected to grow to 72 million by 2030. One of the most notable physical changes in aging is the loss of skeletal muscle mass, known clinically as ‘sarcopenia’. In the clinic, muscle mass can be measured through imaging such as CT scans, and muscle strength can be tested such as with a handheld dynamometer. However, these methods are not practical in large population-based research, such as the MEC. It has been found that asking older individuals about difficulty with walking, getting up from a chair, climbing stairs, and falls can help identify sarcopenia.

As most of the MEC participants are now 70 years of age or older, MEC researchers are particularly interested in knowing what lifestyles lead to better health in older adults. Therefore, the last Follow-Up Health Survey asked questions related to quality of life, social/emotional support and the questions mentioned above to screen for sarcopenia.

Preliminary analyses of responses from 42,500 men and women in the MEC suggest that sarcopenia is more common in women than in men. Specifically, 18% of women and 12% of men reported they had fallen in the past two years, and a fairly large proportion of women reported they had difficulty with getting up from a chair

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**Percentage of MEC Participants Who Had Difficulty Getting Up From a Chair or Climbing Stairs**



### MEC PARTICIPANTS NEEDED FOR

## Gut Microbiome Research in the MEC

**A** new study will soon be starting in the MEC to investigate the relationship of gut microbes to health and disease. The study involves the mail collection of a small stool sample by MEC study participants. This is an easy task that was accomplished so far by 4,000 MEC members. We will now be contacting all MEC members 70 years old or younger to request such a sample. Subjects who are interested can contact, in Hawai'i, the University of Hawai'i at 808-237-3902 or, in California, the University of Southern California at 1-800-786-3538.

- ✓ Stool collection kits and instructions will be mailed
- ✓ Sample will need to be returned in the postage-paid return envelope
- ✓ Subjects will be sent a \$20 gift card for their time

These samples will help MEC scientists better understand the relationship between ethnicity, nutrition, lifestyle and the numbers and types of bacteria that are found in the intestines and their effects on health and disease.

**IF YOU HAVE ANY QUESTIONS ABOUT THE STUDY, PLEASE CALL:**

**1-800-786-3538** (Toll free in California) • **(808) 586-2996** (Oahu)

**1-877-415-8323** (Toll free in Hawai'i)



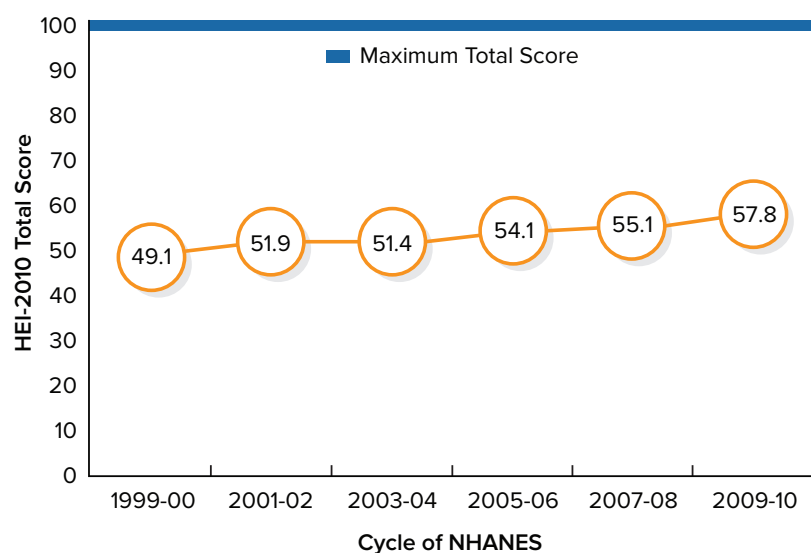
# How Good are the Diets of MEC Participants?

During the last century, the frequency of cardiovascular disease, high blood pressure, obesity, type 2 diabetes, some cancers, and poor bone health has risen. Poor eating habits combined with less physical activity have contributed to these significant health challenges.

Trends in food intake over time show that Americans do not have healthy eating patterns. The *Healthy Eating Index (HEI)* is used to track how well people in the United States are following the Dietary Guidelines for Americans (<https://health.gov/dietaryguidelines/2015>). The HEI can be used to monitor the quality of the diet.

The figure below shows the average HEI-2010 score for the total population of the United States between 1999 and 2010. Although small improvements occurred every year, the dietary choices of the US population would need to change drastically to reach the goal of a maximum total score of 100. As a MEC participant, you may be wondering how members of the MEC compare with the general US population. Overall, MEC members do better than the general US population. **The average HEI-2010 score for the MEC is 67.5** which is substantially higher than the current US average of 57.8. Despite the good news, improvements in diet are still needed to reach the 100 goal. Suggestions for reaching a higher HEI score are outlined on the right.

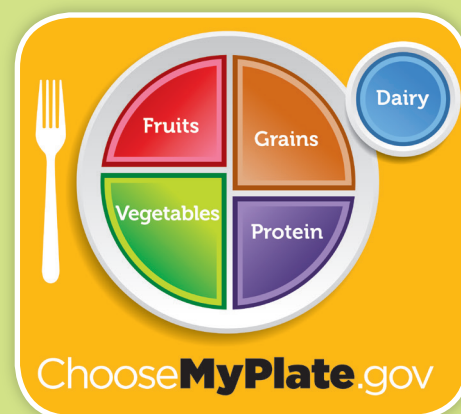
Adherence of the US Population to the 2010 Dietary Guidelines over Time



Data Source:  
Analyses of What We Eat in America, National Health and Nutrition Examination Survey (NHANES) data from 1999-2000 through 2009-2010.

Note:  
HEI-2010 total scores are out of 100 possible points. A score of 100 indicates that recommendations on average were met or exceeded. A higher total score indicates a higher quality diet.

## How to improve your diet using MyPlate



MyPlate can help people find a healthy eating pattern that can be used across their lifespan. People of all ages should eat a variety of foods to promote overall health and help prevent chronic disease. A healthy eating pattern includes:

- A variety of vegetables
- Fruits, especially whole fruit
- Grains, at least half of which are whole grain
- Fat-free or low-fat dairy products
- A variety of protein foods, including seafood, lean meats and poultry, eggs, legumes (beans and peas), soy products, nuts and seeds
- Oils, including those from plants: canola, corn, olive, peanut, safflower, soybean and sunflower. Oils are naturally present in nuts, seeds, seafood, olives, and avocados.

A healthful diet limits added sugars, saturated and *trans* fats, and sodium. Most people can benefit from making small changes in their daily eating habits to improve their health in the long run. These small changes in food choices can make a difference in working toward a healthy eating pattern that works for people in all stages of life. Check out the official MyPlate website at <https://www.choosemyplate.gov/>.



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## Coffee Consumption is Associated with Health Benefits

### *Continued from Page 1*

disease and cirrhosis due to non-alcoholic fatty liver disease, chronic hepatitis C infection or heavy alcohol consumption.

Finally, we found that participants who drank coffee had a lower risk of dying during the study follow-up. Participants who consumed two or more cups of coffee per day had an about 18% lower risk of dying at a specific age, compared to those who reported drinking no coffee, and this was not due to coffee drinkers having different lifestyles than non-coffee drinkers related to smoking, body weight, and physical activity. A similar association was seen with decaffeinated coffee. Coffee drinkers had reduced risks of dying from the most common causes of death – heart disease, cancer, respiratory diseases, stroke, diabetes, and kidney disease.

Only a study where people are randomly assigned to drink coffee could “prove” that coffee prevents these conditions. However, the findings from the MEC do suggest that moderate coffee drinking can be part of a healthy diet and lifestyle.

## *Studying Healthy Aging in the MEC*

### *Continued from Page 2*

(43% women vs 35% men), lifting more than 10 pounds (37% women vs 18% men), or climbing stairs (31% women vs 19% men). Difficulty with performing each of these tasks was more common in women than men across the five ethnic groups. In particular, African American women had the most difficulty, followed by Latina and Native Hawaiian women, while Japanese American and white women had less difficulty completing these daily tasks. A similar pattern was found in men among the five ethnic groups (see figure on page 2).

Previous studies have shown that physical capacity for walking a block, climbing stairs, and lifting groceries; ability to do the daily activities of bathing/dressing, preparing meals and grocery shopping; and social/emotional support of friends and family and active engagement in the community are all key features of healthy aging. Thus, it is a priority for MEC researchers to better understand the lifestyle factors and health conditions that may explain these sex and ethnic differences in healthy aging.







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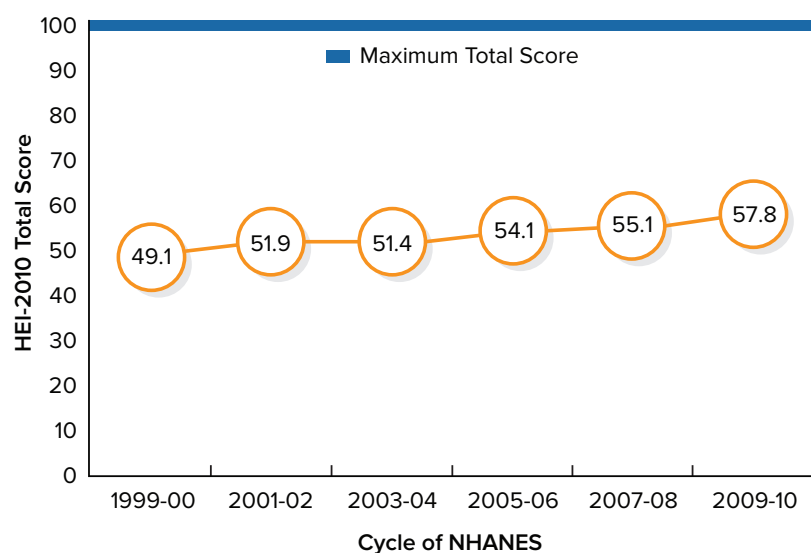
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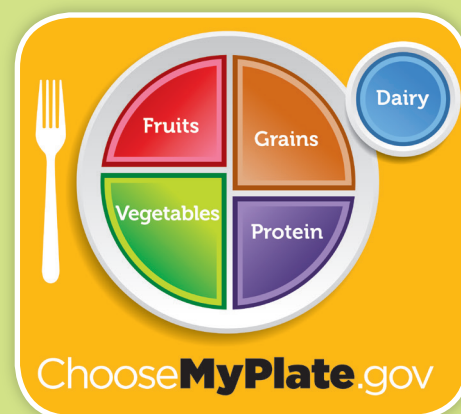
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