COVID-19 Research in the WHI

With the emergence of the COVID-19 pandemic, our lives as we know it have been completely upended. These are challenging times for everyone! Further, WHI participants may be at a higher risk for experiencing serious health complications if infected with the COVID-19 virus. The WHI recognized the importance of understanding the impact of the COVID-19 pandemic on the WHI women.

A 40-question COVID-19 survey that could be completed online, over the phone, or by mail was developed. The survey included questions about COVID-19 exposure and testing and the impacts of COVID-19 on health behavior, lifestyle, and well-being. In June, an online form was e-mailed to a sample of WHI participants who shared their e-mail addresses with the WHI. Other WHI women received the survey by mail or were called to complete the survey over the phone in July, August, and September.

A group of scientists within WHI, led by prominent WHI researchers, Dr. Garnet Anderson from the Fred Hutchinson Cancer Research Center and Dr. Sally Shumaker from Wake Forest School of Medicine, was formed to drive discussion and encourage the development of new studies and papers related to COVID-19 research in the WHI. New information from this research may help to address the COVID-19-related health concerns of older women and will meaningfully contribute to our understanding of this novel virus.
Focus on Findings

Intentional Weight Loss and Cancer Risk

Information about the relationship of weight loss during adulthood and future cancer risk is lacking. To provide some insight, Dr. Luo and her colleagues looked at weight and waist circumference changes based on measures taken at baseline and then again at year 3 of the study. Women were grouped as stable (no change more or less than 5%), a loss (5% or more decrease), or a gain (5% or more increase) and were asked if the losses or gains were intentional or unintentional. They concluded that intentional loss in weight or waist circumference might decrease the risk of a future obesity-related cancer in nearly 59,000 women from the WHI Observational Study, he and his team discovered women who consumed the highest amount of total soft drinks (more than 14 servings per week) had a 26% higher risk of hip fracture compared to women who never drank soda. The risk of hip fracture was 32% higher among women who only drank caffeine-free soda, but no associations were shown for women who only drank caffeinated soda. They concluded that drinking an average of more than two servings of soda daily might increase the risk of hip fracture in older women.

Glycemic Index and Insomnia

The glycemic index is a number assigned to foods based on the rate at which that food increases one’s blood glucose levels. The glycemic index is a measure of the carbohydrate quality and ranges from 0-100, with lower numbers indicating a slower release of glucose or better carbohydrate quality. While past studies have examined the relationship of carbohydrate intake and insomnia, Dr. Gangswich and his colleagues took a closer look at carbohydrate quality in the diet – or the dietary glycemic index – and its association with insomnia among women who participated in the WHI Observational Study. In addition to the dietary glycemic index, they also investigated dietary fiber, sugars, and starch and certain foods with carbohydrates, such as whole and processed grains, fruits, and vegetables. Over a 3-year follow-up period, they found that women with the highest dietary glycemic index had a 16% higher rate of insomnia compared to women with the lowest dietary glycemic index. Women with the highest dietary intake of added sugars, starch, and processed/unrefined grains also had a greater risk of insomnia compared to women with the lowest dietary intake of these foods. In contrast, women who had higher consumption of non-juice fruits and vegetables had a lower risk of insomnia over the 3-year follow-up. They concluded that diets with a high glycemic index might be a risk factor for insomnia in postmenopausal women or that women with insomnia may be more fatigued and have a greater hunger for carbohydrate-rich foods. Replacing high glycemic index foods with less processed carbohydrate foods may be a healthy strategy for preventing insomnia in older women, along with getting better sleep, of course!

Soft Drink Consumption and Osteoporotic Fractures

Previous studies have found a relationship between soft drink or soda consumption and lower bone mineral density, but it is unclear whether this relationship affects fracture risk. A study led by Dr. Kremer explored whether consuming soft drinks (all, caffeinated only, and non-caffeinated only) was also associated with osteoporosis and/or risk of hip fracture. Using nearly 12 years of follow-up data from over 72,000 postmenopausal women from the WHI Observational Study, he and his team discovered women who consumed the highest amount of total soft drinks (more than 14 servings per week) had a 26% higher risk of hip fracture compared to women who never drank soda. The risk of hip fracture was 32% higher among women who only drank caffeine-free soda, but no associations were shown for women who only drank caffeinated soda. They concluded that drinking an average of more than two servings of soda daily might increase the risk of hip fracture in older women.

Thyroid Disorders and Breast Cancer Risk

The thyroid is a gland that is located on the front side of the windpipe. It releases thyroid hormones, which aid in the body’s metabolism. Thyroid disorders occur when the body produces and releases too much (“hyperthyroidism”) or too little (“hypothyroidism”) thyroid hormone. Dr. Weng and his team were interested in investigating whether there was an association between thyroid disorders and invasive breast cancer risk and whether the risks were different for women who used vs. did not use estrogen and/or progesterone therapy. In their analysis of over 134,000 women from the WHI, they found that those with a history of hypothyroidism had a 9% lower risk of developing breast cancer compared to women without a history of a thyroid disorder. They further discovered a 20% lower risk of breast cancer among women who had hypothyroidism and never used hormone therapy. Hyperthyroidism was not associated with breast cancer. This study suggests lower thyroid function may be associated with lower risk of invasive breast cancer in postmenopausal women.

Coffee and Tea Drinking and Living to More Advanced Age

Previous studies have reported an association between coffee and tea intake and a lower risk of many chronic diseases, including diabetes, cardiovascular disease, and cancers. However, less work has been done to understand the relationship of coffee and tea consumption on late-age survival, defined here as living past age 90 years. To address this gap, Dr. Shadayb and his colleagues examined whether drinking coffee or tea was associated with living to age 90 years and older in nearly 27,500 women who participated in the WHI Observational Study. Women were placed into one of four groups based on how many cups of coffee (both caffeinated and decaffeinated) or tea they said they drank per day (0, 1, 2-3, or 4+ cups) when they started in WHI. They found that the odds of living to 90 years of age were similar across all four groups. In other words, the amount of coffee or tea that a woman drank, or if they drank these at all, did not influence living to a later age. This finding was consistent when looked across various race/ethnic groups, body sizes, or smoking histories. They concluded that coffee or tea consumption was not associated with longevity in older women.
WHI Updates Its Website

A team at the WHI's Clinical Coordinating Center in Seattle, WA has been working on giving the WHI website a new look! After over a year of rewriting pages, organizing content and graphics, and consulting with a website designer, we proudly launched the new site publicly in July.

The new website was redesigned to continue to be a tool for researchers. An important goal of the website is to encourage new and seasoned investigators to use the rich data resources within WHI to advance science and our understanding about the health of older women.

The website development team was also very excited to redesign the WHI Participant’s webpage and we encourage you to explore it! It can be found at: [www.whi.org/participants](http://www.whi.org/participants).

Here is a look at the new webpage with highlights of some of the new features:

### Participant Slideshow

In the 2019-2020 WHI Matters newsletter, we invited you to send us your picture and a few words about what being a WHI participant has meant to you. The response was incredible—over 100 entries were received! A slideshow of these meaningful entries is displayed on the new WHI Participant’s webpage. The entries will rotate every 2-3 months. Every woman who submitted an entry will be shown.

All your words and photos of dedication and commitment to the WHI study and women’s health are an inspiration that should be seen by the greater WHI community!

### Study Updates

This is a new feature on the WHI Participant’s webpage for sharing study information and updates. Ancillary study updates will be shared here as well.

### WHI Matters Online

A digital copy of the latest WHI Matters newsletter will be available in this section. This includes any resources or web links mentioned in the latest newsletter. You may also find previous editions of the WHI Matters newsletter archived here.

### Participant News Feed

This is where study news, including summaries of the latest WHI research findings, will be posted and archived.

### What do you want to see on the website?

We want this new WHI Participants webpage to speak to you! What would you like to see on this page? We welcome your ideas and invite you to share them with the WHI Matters editorial staff. See the Correspondence box on page 7 for our e-mail and mailing address.
Improve Your Technology Prowess

We all continue to spend more time at home and physically distanced from some of our family and friends. While we all long to engage in our typical in-person routines, we fortunately live at a time when technology can provide a decent “virtual” substitute for some of our usual in-person activities. The extra time spent at home offers a great opportunity to become more familiar with technology, computers, and the Internet, so that you can take full advantage of all the many offerings that are now available. If you are already a technology pro, then you know there is always more to explore and new digital advances are happening all the time.

Did you know? There are many things you can now do with a computer, smart phone, and/or Internet connection, including:

• Send or receive e-mail and text messages
• Keep in touch with friends and family, either through social media, phone calls, or video chats
• Make new friends by joining an online meet-up group, such as a book club
• Go shopping, including for groceries
• Order food for home delivery
• Practice yoga, meditation, Tai Chi, or any exercise of your choosing
• Do puzzles, such as crosswords or Sudoku,
or play video games
• Take a tour of a museum or historical site
• Check out library books
• Watch movies, television, stage theatre, a concert
• Listen to music, an audiobook, or a podcast
• Learn a new skill, hobby, or language

Organizations that in the past have offered classes designed to teach older adults how to navigate the digital world have recently expanded their outreach and their learning curricula to accommodate all skill levels and interests. There are also various modes of teaching, such as online tutorials that you can read, pre-recorded videos that you can watch, or live real-time classes that you can virtually attend. You can pick the learning style that works best for you based on what you want to learn or how you like to be taught.

Here are a few good websites to get you started…

Seniorplanet.org
Launched by OATS (Older Adults Technology Services), whose purpose is to enable older adults to “come together and find ways to learn, work, create, and thrive in today’s digital age.” They offer a variety of online courses and a hotline you can call if you have a specific technology question.

Techboomers.com
There are over 100 free how-to courses organized by area of interest, including shopping, entertainment, social media, and technology basics.

Learn.aarp.org
Supported by the AARP, their learning library has a number of technology-related tools as well as resources on other topics relevant to older adults.

These web links along with any new online resources we discover are also available on our new website in the WHI Matters Online section. Visit us there at www.whi.org/participants.

The Internet can be intimidating if you not familiar with it! Don’t be afraid to ask for help from friends or family. Local libraries and senior community centers also have staff willing to help. If the local library is open in your community, it’s a good place to access a computer, if one is not available in your home.

In a 2014 survey completed by nearly 75,000 WHI women…

Type of computer usage among WHI women

- EMAIL/INTERNET - OWN CELL PHONE - USE COMPUTER

- 90% 78% 6%

We hope you will explore our new WHI website!

Online WHI Forms Are Now Available

Early in 2020, the WHI began offering participants the option to complete the Medical History and Activities of Daily Life forms electronically, instead of on paper. By the end of the year, WHI expects to have electronic versions of several other study forms, such as those from the WHISH (Women’s Health Initiative Strong and Healthy) study, available to complete online too.

As a WHI participant, if you provided your e-mail address to the WHI, you will receive an e-mail message containing a web link to your WHI forms. The message is e-mailed on the month you were due to receive your forms by mail. The forms from the web link are available to complete for 4 weeks, with a reminder e-mail sent after 2 weeks. If the web version is not completed within the 4-week period, a paper version will be mailed to you.

If this new way of filling out your forms appeals to you, please sign up for this option by contacting the WHI Clinical Coordinating Center at 1-800-218-8425 or e-mailing them at participant@whi.org. You may choose to go back to completing the paper forms at any time.

CORRESPONDENCE

Send your feedback on the newsletter and the new participant’s webpage!

E-mail us at: whimatters@whi.org
Or, send letters to: Fred Hutchinson Cancer Research Center 1100 Fairview Ave. N M3-A410 P.O. Box 19024 Seattle, WA 98109

Due to the volume of correspondence we receive, we will not be able to respond to everyone individually. We also regret that we cannot answer questions about individual medical conditions.

Staff Information: WHI Matters is produced by the WHI Coordinating Center at the Fred Hutchinson Cancer Research Center.
**Stay in Touch**

Please call your Regional Center if your address or phone number changes.

To locate your Regional Center, find the name of your WHI clinic center on the list below. The Regional Center and phone number for each center is shown in the right-hand column.

### WESTERN REGIONAL CENTERS
- Kaiser Permanente/Bay Area Clinic, Oakland, CA
- South Bay WHI Program, Torrance, CA
- Stanford University/San Jose Clinical Center, Palo Alto, CA
- UCLA Center for Health Sciences, Los Angeles, CA
- University of California, Davis, CA
- WHI-UC Irvine Clinical Center, Orange, CA
- Center for Health Research, Portland, OR
- University of Arizona, Phoenix, AZ
- University of Arizona, Tucson, AZ
- University of Hawaii, John A. Burns School of Medicine, Honolulu, HI
- University of Nevada, Reno, NV
- UC San Diego Clinical Center, Seattle, WA
- Seattle Clinical Center, Seattle, WA
- University of Alabama, Birmingham, AL
- Emory University, Decatur, GA
- University of Florida Clinical Center, Gainesville, FL
- University of Florida Clinical Center, Jacksonville, FL
- University of Miami School of Medicine, Miami, FL

### NORTHEASTERN REGIONAL CENTERS
- Stanford University  
  (888) 729-8442
- University at Buffalo  
  (855) 944-2255
  (716) 829-3128
- Brigham and Women’s Hospital, Boston, MA
- Charlestown Memorial Hospital, Fall River, MA
- Memorial Hospital of Rhode Island, Pawtucket, RI
- UMASS/FALLON Women’s Health, Worcester, MA

### MIDWESTERN REGIONAL CENTERS
- Evanston Hospital (Northwestern University), Evanston, IL
- Northwestern University, Chicago, IL
- Medical College of Wisconsin, Milwaukee, WI
- Rush-Presbyterian-St. Luke’s Medical Center, Chicago, IL
- Ohio State University, Columbus, OH
- University of Cincinnati College of Medicine, Cincinnati, OH
- Detroit Clinical Center, Detroit, MI
- University of Pittsburgh, Pittsburgh, PA
- Berman Center for Outcomes and Clinical Research, Minneapolis, MN
- University of Iowa, Davenport, IA
- University of Iowa, Des Moines, IA
- University of Iowa, Iowa City, IA
- University of Wisconsin, Madison, WI

### SOUTHEASTERN REGIONAL CENTERS
- UNC Women’s Health Initiative, Chapel Hill and Durham, NC
- Women’s Health Initiative of the Triad, Greensboro, NC
- Women’s Health Initiative, Winston-Salem, NC
- University of Tennessee, Germantown, TN
- University of Tennessee – Medical Center, Memphis, TN
- Baylor College of Medicine, Houston, TX
- University of Texas Health Science Center, San Antonio, TX

### Wake Forest University School of Medicine  
(877) 736-4962

### Fred Hutchinson Cancer Research Center  
(800) 514-0325

### University at Buffalo  
(855) 944-2255  
(716) 829-3128

### Brigham and Women’s Hospital  
(800) 510-4858  
(617) 278-0791

### Ohio State University  
(800) 251-1175  
(614) 688-3563

**Contact Information**

Fred Hutchinson Cancer Research Center, Seattle, WA (message line): (800) 218-8415  
E-mail address: participant@whi.org