



THE

# SISTER STUDY

BREAST CANCER RESEARCH

WOMAN BY WOMAN, SISTER BY SISTER, WE CAN MAKE A DIFFERENCE!

SUMMER 2022

## Dear Sisters —

To help you keep up with the latest Sister Study news, we plan to send you periodic flyers with our latest updates. You will also find the latest news on our Sister Study website [sisterstudy.niehs.nih.gov/English/new.htm](https://sisterstudy.niehs.nih.gov/English/new.htm) and on our Sister Study Facebook group page. To join our Facebook group, search for “NIEHS Sister Study” on Facebook, scroll to the right of the top bar, click “Groups”, and ask to join our private group. You may also follow this direct link [www.facebook.com/groups/niehsisterstudy](https://www.facebook.com/groups/niehsisterstudy). Thank you for helping our researchers continue to advance breast cancer research!

### Findings Link Sufficient Vitamin D Blood Levels with Lower Breast Cancer Rates, Particularly Among Latinas

Among women who identified as Black/African American or Hispanic/Latina, those with low blood levels of vitamin D were more likely to develop breast cancer than those with adequate levels. In the study published by Wiley online in *CANCER*, a peer-reviewed journal of the American Cancer Society, **the link between low vitamin D and breast cancer was particularly evident among Hispanic/Latina women.** Black/African American or Hispanic/Latina have lower average vitamin D levels than non-Hispanic white women. Although research suggests that vitamin D may protect against breast cancer, few studies have considered the role of race/ethnicity in this link: <https://bit.ly/37hPa1B>



### Sleep and Hypertension

Sister Study investigators and researchers from Duke University examined the association between poor sleep patterns and risk of developing hypertension (high blood pressure). They **found that women with insomnia (difficulty falling or staying asleep) or insomnia plus short sleep (<7 hours per night) were more likely to develop hypertension.** These associations were stronger among younger and premenopausal women but did not differ by race/ethnicity. This research demonstrates how poor sleep may impact other aspects of health. Read more: <https://bit.ly/3sgBU85>

**Please remember to complete your latest Health Update**

**Thank you if you have already completed it! If not, please check your emails and/or mailbox.**



## Can Dying Your Hair Raise Your Risk for Breast Cancer? Sister Study Experts Explain

In a 2019 study in the International Journal of Cancer, researchers from the National Institutes of Health crunched the numbers from the Sister Study, which followed more than 46,000 women who had at least one sister who had been diagnosed with breast cancer but who had no history of breast cancer themselves. **"Our findings for any use of permanent hair dye in the past year suggested a slight increase in risk for breast cancer, although associations were stronger for chemical straightener use and for hair dye use among Black women,"** says the study's co-author, Alexandra J. White, PhD, an investigator in the Epidemiology Branch of the National Institute of Environmental Health Sciences.

Read more: <https://bit.ly/3FrFHoE>



Please welcome Sister Study researcher **Dr. Che-Jung Chang!** Dr. Chang recently received her PhD in Environmental Health Science from Rollins School of Public Health, Emory University. She joined Dr. Alexandra White's group in September 2021 as a post-doctoral research fellow at the National Institute of Environmental Health Sciences. Her research will focus on how exposure to environmental pollutants play a role in developing and progressing reproductive cancers in women. For her first Sister Study research project, Dr. Chang will examine how personal care products, which may contain endocrine-disrupting chemicals, are related to female reproductive cancers.

## A Big Thanks to Our Generous Sister Study Sisters!

Since we began analyzing the data provided by our generous Sisters, **our researchers have published over 200 scientific papers!** These findings contribute to improvements in our understanding of the environmental and genetic causes of breast cancer and other important issues in women's health. We are proud of what we have accomplished together with our study sisters! Thank you for sticking with us!

To view our study findings, please visit our Sister Study website: <https://sisterstudy.niehs.nih.gov/English/articles.htm>



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As always, please contact us at the Sister Study helpdesk toll-free at 877-4SISTER (877-474-7837) or email us at [update@sisterstudy.org](mailto:update@sisterstudy.org) if you have updates or questions.