

BCFR NEWSLETTER

Keeping you up to date on the Breast Cancer Family Registry

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PUBLICATIONS & NEWS

Recreational Physical Activity and Outcomes After Breast Cancer in Women at High Familial Risk

Many breast cancer research studies support the idea that recreational physical activity can lower breast cancer risk and outcomes. However, most of these studies only give evidence for improved survival after breast cancer in women who do not have a family history of breast cancer or do not have pathogenic variants (disease-related changes) in *BRCA1* or *BRCA2* genes, which play a role in preventing cancer from developing. A crucial research gap is whether recreational physical activity also helps women at higher familial or genetic risk of breast cancer.

A recent study published in *JCNI Cancer Spectrum* looks at the relationship between recreational physical activity and breast cancer survivorship in women in the Breast Cancer Family Registry. Specifically, we investigated how recreational physical activity plays a role in all-cause mortality (deaths from any cause) and breast cancer recurrence or new primary breast cancer (new cancer that is different from the first, original cancer) in women with a familial or genetic risk. This builds on past work done by the Breast Cancer Family Registry research team and a study in which we found that recreational physical activity is associated with a reduced risk of breast cancer in women with a high breast cancer risk due to a family history of the disease or a *BRCA1* or *BRCA2* pathogenic variant, as well as in women who are not at a high familial or genetic risk. In this new study, using a selection of 4,610 women, we found that women who were physically active before their breast cancer diagnosis had a 16% lower risk of all-cause mortality compared with women who were inactive before diagnosis. The reduction in all-cause mortality risk was even stronger in women with a *BRCA1* or *BRCA2* pathogenic variant (48% lower risk). An association between recreational physical activity and all-cause mortality was also found in women diagnosed before the age of 40 years. This further highlights the benefit of recreational physical activity in lowering mortality risk, including for women with early-onset breast cancer and in women with familial/genetic risk.

The article published in *JCNI Cancer Spectrum* provides new insights on how lifestyle changes such as engaging in recreational physical activity can impact those at a higher risk of breast cancer. As more research is done on modifiable lifestyle factors that may improve outcomes after breast cancer diagnosis, studying the impact of recreational physical activity on breast cancer risk becomes increasingly important.

Read the full studies:

"Recreational Physical Activity and Outcomes After Breast Cancer in Women at High Familial Risk"

"Recreational Physical Activity Is Associated with Reduced Breast Cancer Risk in Adult Women at High Risk for Breast Cancer"

COVID-19 Vaccine Information for Cancer Patients, Survivors, and Caregivers

As vaccines and booster shots are now widely available to help protect against COVID-19, you may have questions as a cancer patient, survivor, or caregiver. Please visit the [American Cancer Society](https://www.cancer.gov/cancer-topics/covid-19) for more information about vaccines.



MEET A RESEARCHER

Rebecca Kehm, PhD

Dr. Kehm is an Associate Research Scientist at Columbia University Mailman School of Public Health. She received both her Master of Public Health in Epidemiology and PhD in Epidemiology from the University of Minnesota. Dr. Kehm's research focus has been on how environmental exposures and lifestyle factors play a role in breast cancer risk, especially when considering genetic predispositions for breast cancer. She is examining how certain modifiable risk factors may be related to breast cancer risk. These modifiable risk factors include physical activity, aspirin use, and exposure to polycyclic aromatic hydrocarbons (chemicals that can be found in the air as a result of burning coal, oil, gas, tobacco, and other substances). She is studying these modifiable risk factors during critical time windows, including pregnancy and adolescence, using family-based approaches. She is particularly interested in how these exposures relate to early-onset breast cancer risk. Two of her articles, featured above, focus on the association between physical activity and breast cancer survival and general risk reduction. Learn more about Dr. Kehm's work in the articles linked above.

SMALL WAYS TO GET ACTIVE WHEN YOU HAVE A BUSY LIFESTYLE

Physical activity can reduce a person's lifetime risk of cancer and can provide a range of other benefits such as lowering risk of other health conditions like heart disease, high blood pressure, and diabetes. The American Cancer Society recommends that adults should get 150-300 minutes of moderate intensity or 75-100 minutes of vigorous intensity activity each week.

Going for a walk is a simple and enjoyable type of moderate intensity exercise! With the growing popularity of a remote working style, however, it can be challenging to find time to exercise in a given week. Luckily, there are creative ways to stay active, even when you're sitting at your desk for meetings or classes.

Source: [American Cancer Society](#)

See this list of simple exercises that can be done while seated:

1. Arm Circles
2. Bicep Towel Hold
3. Overhead Tricep Extension
4. Punches
5. Overhead Press
6. Gluteal Squeeze
7. Seated Marches
8. Straight-Leg Circles
9. Calf Raises



[For more information on how to do these exercises or how to use the perfect technique or form, check out this Bustle article!](#)

BREAST CANCER FAMILY REGISTRY FEATURE

Meet the public health graduate students on our team



Alyssa Watson, MPH - Epidemiology (Certificate in Health Communication)

"Breast cancer research is an act of defiance. I am passionate about how we communicate disease trends in data to those who aren't involved in clinical or academic research. I currently reach out to participants of the Registry to let them know about our 25-year follow-up survey and contribute to communications about the study. Breast cancer has touched the lives of many women I know personally, and advances in research have been so significant in the prevention and treatment of all types and stages of breast cancer. The information we collect from the Registry will continue to have an impact for many years to come. My hope is that whether or not someone's life has been touched by breast cancer, people will see our dedication and the importance of being involved in research to improve the quality of life for cancer patients, survivors, and caregivers."

Josie Daaboul, 2nd Year MPH Student, Sociomedical Sciences (Certificate in Public Health Research Methods)

"For me, the most compelling information I have learned while studying breast cancer is that there are modifiable behaviors we can all engage in to lower our lifetime risk of having breast cancer. Interning for Breast Cancer Prevention Partners, I learned about how our environment, and the places we live and work in, can influence our health. Through connection with each other and our communities, I have learned that we can raise awareness about breast cancer and work together to improve the health of everyone. The registry study is an important way to grow our knowledge base and understand how the lifestyles and life events of our participants, with or without a history of breast cancer, have influenced their current health status."



Veronica Whitman, 2nd Year MPH Student, Epidemiology (Certificate in Molecular Epidemiology)

"I'm a first-year graduate student from Southern California currently living in NYC. I'm interested in breast cancer research and the registry because I'm passionate about topics surrounding women's health and cancer epidemiology. Like so many others, my own family has been impacted by breast cancer. This experience spurred my passion for these topics and my desire to advance knowledge and research in this field. I believe it is imperative that we elucidate the underlying risk factors for breast cancer in order to develop appropriate prevention strategies for future generations."

Mikaela Cortes, 2nd Year MPH Student, Sociomedical Sciences (Certificate in Chronic Disease Epidemiology)

"I chose to work at the BCFR because I am passionate about working closely with patients, families, communities, and other professionals to improve health for all and reduce inequities. Though breast cancer does not discriminate based on age, gender, or race, we are still witnessing disparities because social and economic factors create barriers to diagnosis and treatment. As long as these aspects are taken into consideration, we can make huge strides in our study of cancer. It's amazing what a difference research can make, from understanding the causes and prevention of breast cancer to empowering families to feel more engaged and informed in their own health and well-being. However, the work we perform here at BCFR reaches far beyond the walls of our facilities—the strong sense of community, selfless involvement, and heartwarming stories from all over the world are what inspire me to keep looking for answers. At BCFR, everyone can be part of the solution."



Meet the Team

CONTACT US

Select your BCFR site to be directed to your Research Team. Or, select BCFR to visit our website.



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