

# Women's Circle of Health Study News



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## Women's Circle of Health Study Updates

**Enrolled:**  
**Breast Cancer Patients:**  
1,150 African Americans  
772 Caucasian

**Women Without Breast Cancer:**  
1,020 African Americans  
715 Caucasian

**Total participants enrolled:** 3,657

We continue to enroll participants in New Jersey.



Roswell Park Cancer Institute \* Rutgers Cancer Institute of New Jersey  
New Jersey Department of Health \* Mount Sinai School of Medicine

## Moving Forward in Breast Cancer Research

Nine years ago, we began doing research on breast cancer to help unravel some of the mysteries surrounding this disease, particularly in African American women. While Caucasian women develop breast cancer more often than African American women, African Americans develop it much earlier in life and in a form that is harder to treat. Thanks to your participation in the Women's Circle of Health Study (WCHS), our team has now collected important data on nearly 3,500 women with and without breast cancer. Studies like the Women's Circle of Health Study are important because of the amount of information that we can collect on women with and without

this disease. With your participation we have been able to collect information on factors such as family health history, diet, exercise, having children, as well as obtain saliva samples, blood, and pathology reports and tumor tissue on breast cancer cases. This has allowed the WCHS research team to look at various types of breast cancer and what lifestyle behaviors might help in preventing women from getting this disease. We now know that breast cancer is not just one disease but is classified by many "types", and how factors affect each type is not well understood. The breast cancer subtype determines the kind of treatments used. Using the information that you provided in the WCHS, we

are now looking closely at these various types of breast cancer to better understand what causes these breast cancer subtypes. From the first phase of the WCHS we have been looking at genes obtained through saliva samples and how those combined with lifestyle and environment might predict the type of cancer a women will get. With the continuation of the study we will start to look at diet, obesity, pregnancy and breast feeding, as well as the role that vitamin D plays in breast cancer. Many of you asked us over the years whether we were going to conduct follow-up. We are glad to let you know that we are planning to start soon to study life after a cancer diagnosis.

## African American Breast Cancer Epidemiology and Risk ( AMBER)



African American Breast Cancer Epidemiology and Risk

We have begun the next phase in breast cancer research with a large grant from the National Cancer Institute. Investigators from the Women's Circle of Health Study, the Carolina Breast Cancer Study, the Black Women's Health Study, and the Multiethnic Cohort Study will pool existing data, for a study of 5,500 women with breast cancer and 5,500 women without cancer representing the largest study to date on this subject. The African American Breast Cancer Epidemiology and Risk Consortium (AMBER) will combine the efforts of researchers and data from each of these four leading studies on breast cancer in the United States. During the next 5 years we will continue recruiting women in the Women's Circle of Health Study through the Rutgers Cancer Institute of New Jersey and expand the target area from seven central and northern New Jersey Counties to ten. The cases of women with breast cancer will continue to be identified through the New Jersey State Cancer Registry and the women without breast cancer will be identified through community outreach efforts by local churches and civic groups. With the

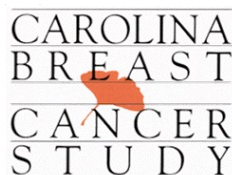
continuation of the WCHS we will have large enough numbers of participants to better look at the role that diet, obesity, pregnancy and breast feeding, as well as other risk factors, play in the development of breast cancer. Our long term goal is to prevent breast cancer. We hope to some day soon understand how a person's genes and environment affect the development of breast cancer. Learn more about AMBER at: [www.theamberproject.org](http://www.theamberproject.org)

## The Studies of the AMBER Consortium



The Women's Circle of Health Study led by Drs. Christine Ambrosone and Elisa Bandera, started with African-American and European-American women with breast cancer, recruiting from hospitals in the NYC metropolitan area and through NJ State Cancer Registry, and women without cancer similar in age, race, and where they live. Enrollment is now limited to NJ. Another 1000 case of breast cancer in African American women will be added over the next 4 years to contribute to the AMBER project.

The Black Women's Health Study led by Drs. Julie Palmer and Lynn Rosenberg, at Boston University, began in 1995 and continues today. BWHS is a prospective cohort study that started with 59,000 (ages 21-69 at baseline) healthy black women in 1995, enrolled through postal surveys sent to subscribers of Essence magazine. Data is updated every 2 years. As of today, 1,965 women in that study have developed breast cancer.



The Carolina Breast Cancer Study is a population-based case-control study headed by Dr. Andrew Olshan. Now in Phase 3 of the study there are 894 African American cases and 788 controls. This study involves in-home interviews, blood or saliva samples. And collection of tumor tissue blocks. This population-based case-only design is recruiting 250 African-American cases per year in NC.

The Multiethnic Cohort Study headed by Drs. Laurence Kolonel and Brian Henderson has 215,251 adult men and women (age 45-75) enrolled. The study participants, who are residents of Hawaii and California (LA County), completed a 26-page, self-administered questionnaire. This questionnaire contained a food and diet history and a demographic and cancer risk information.




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By combining all of the information from these four studies, we will be able to look at what factors may be causing more aggressive breast cancer at an earlier age in African American women.

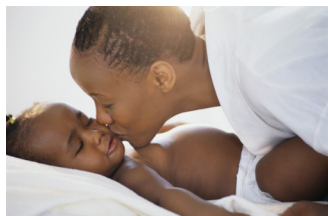
## Women's Circle of Health Follow-Up Study

As we continue enrolling women in the WCHS, we want to know how the women with breast cancer who we interviewed for this study are doing now. We are learning so much about what causes breast cancer from the information that you and thousands of women like you provided. Now we would like to follow-up with the women with breast cancer to try to find out how what happens during treatment and afterwards may affect your life and how you do. We will be re-contacting some of the women who were diagnosed more recently and participated in our study, and then asking new participants to help us with this study.

The new follow-up study will involve some

questionnaires about how women feel and their activities since their diagnosis and treatment. This will be asked about one and one-half years after diagnosis. We will also be collecting blood samples; women will receive \$50 for completing both the blood draw and answering some questions. We hope that if you are re-contacted you will say:

*"YES! I want to help cancer researchers find out how to improve women's lives after they are diagnosed with breast cancer".*



### Breast feeding reduces cancer risk...

We now know that there are different types of breast cancer, and the treatment that women receive will depend upon the tumors. The main way that tumors are classified is by estrogen receptor (ER) status – tumors that are positive for ER can be treated with anti-estrogens like tamoxifen, and women with these types of tumors generally do better than those with breast cancer that are negative for ER. These negative tumors occur more often in younger women and in African-Americans. Researchers are trying to figure out why some women get breast cancer that is ER negative and often do more poorly - that has been the purpose of the WCHS.

The WCHS and other studies, especially the CBCS and the BWHS, members of AMBER, are finding that having children has different effects on breast cancer types – having more children and having them at a younger age reduces risk of estrogen receptor positive breast cancer, but actually *increases* risk of ER negative tumors. Of course, women can't make decisions about having children based upon what type of breast cancer they *may* get, but almost all studies now, including WCHS, have shown that breastfeeding reduces risk of both types of breast cancer. Even though risk of ER negative breast cancer is increased with having children, breastfeeding takes away that increased risk. We have published our WCHS results in science journals and presented this information at the American Association for Cancer Research.

We know that breastfeeding is the best way to give your baby a great start on life, here is another reason for us to encourage our daughters and granddaughters to breastfeed their babies.



*"You gain strength, courage and confidence by every experience in which you really stop to look fear in the face." -Eleanor Roosevelt*



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## What vitamin D can do for you...

There has been a lot of interest in the scientific community about the role that vitamin D may play in protecting against cancer. Our group has been looking at vitamin D and breast cancer. When we first started WCHS in NY City, we collected blood samples from participants. Using these samples and data from WCHS, we measured vitamin D levels in women without cancer. Most of the women in the study had vitamin D levels lower than what is recommended. African-American women had the lowest levels of all. By looking at common differences in genes, we also found that the way a person processes vitamin D is related to breast cancer risk.

**Vitamin D**  
 The body makes vitamin D when it is exposed to Ultraviolet (UV) rays from the sun.

**FOOD SOURCES:**  
 Cheese  
 Margarine  
 Butter  
 Fortified Milk  
 Healthy Cereals  
 Fatty Fish

In another study, some of our research team also showed that women with ER negative breast cancer had lower vitamin D levels than those with tumors that were ER positive. It is probably a good idea for women to talk to their doctors about their vitamin D levels and, if they are low, whether or

not they should take vitamin D supplements. Based upon our research, it is possible that vitamin D may reduce risk of more aggressive cancers, especially among African-American women. These findings from this study have been published in science journals and presented at the American Association for Cancer Research.