

History of breastfeeding associated with reduced risk of breast cancer recurrence

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Summary:

Women diagnosed with breast cancer who previously breastfed their babies had a 30 percent overall decreased risk of the disease recurring, according to a new Kaiser Permanente study published in the *Journal of the National Cancer Institute*. In addition, researchers found that the protective effect of breastfeeding was more pronounced for tumors of particular genetic subtypes, including the most commonly diagnosed of all breast cancers.

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The study involved 1,636 women with breast cancer who completed a questionnaire that included breastfeeding history. Additional medical data were obtained from medical chart reviews and Kaiser Permanente HealthConnect®, a comprehensive electronic health record.

"This is the first study we're aware of that examined the role of breastfeeding history in cancer recurrence, and by tumor subtype," said Marilyn L. Kwan, PhD, research scientist with the Kaiser Permanente Division of Research and lead author of the study.

The researchers found there to be benefits of breastfeeding on expected outcomes among women who were diagnosed with the luminal A subtype of breast cancer, while no significant associations were observed for those with other subtypes. Luminal A tumors include the estrogen-receptor positive (or ER+) breast tumors, which are the most commonly diagnosed of all breast cancers. These tumors are less likely to metastasize, are treatable with hormonal therapy such as tamoxifen and aromatase inhibitors, and generally have better outcomes.

In addition to decreased risk of breast cancer recurrence, women who breastfed were also 28 percent less likely to die from the disease.

There are a number of possible explanations for why breastfeeding could be associated with a better prognosis once a woman is diagnosed with breast cancer.

"Women who breastfeed are more likely to get the luminal A subtype of breast cancer, which is less aggressive, and breastfeeding may set up a molecular environment that makes the tumor more responsive to anti-estrogen therapy," Kwan said.

It is not entirely clear why women who breastfeed develop less aggressive tumors.

"Breastfeeding may increase the maturation of ductal cells in the breast, making them less susceptible to carcinogens or facilitate the excretion of carcinogens, and lead to slower growing tumors," explained Bette J. Caan, DrPH, senior research scientist with the Kaiser Permanente Division of Research and senior author of the study.

It is well established that breastfeeding is great for babies, Kwan noted, and research is now showing that it also has benefits for moms. "In fact, the protection was even stronger for women who had a history of breastfeeding for 6 months or more."

Story Source:

The above story is based on [materials](#) provided by [Kaiser Permanente](#). *Note: Materials may be edited for content and length.*

Journal Reference:

1. Marilyn L. Kwan, Philip S. Bernard, Candyce H. Kroenke, Rachel E. Factor, Laurel A. Habel, Erin K. Weltzien, Adrienne Castillo, Erica P. Gunderson, Kaylynn S. Maxfield, Inge J. Stjleman, Bryan M. Langholz, Charles P. Quesenberry, Jr, Lawrence H. Kushi, Carol Sweeney, and Bette J. Caan. **Breastfeeding, PAM50 Tumor Subtype, and Breast Cancer Prognosis and Survival.** *Journal of the National Cancer Institute*, April 2015 DOI: [10.1093/jnci/djv087](https://doi.org/10.1093/jnci/djv087)