## LAY ABSTRACT

TITLE: Partnering with Mommy Bloggers to Disseminate Breast Cancer Risk Information: A Social Media Intervention

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We developed and evaluated a social media intervention as a way to disseminate breast cancer and environmental risk information to mothers about healthy behaviors they could engage in with their daughters to reduce disease risk. We teamed with "mommy bloggers" who wrote a blog about the topic that incorporated a scientifically informed infographic that we developed for social media dissemination and tailored specifically for mothers and daughters based on scientific evidence from the Breast Cancer and the Environment Research Program (BCERP). BCERP is a network funded by the National Institutes of Health / National Institute of Environmental Health Sciences that supports a multidisciplinary network of scientists, clinicians, and community partners to examine the effects of environmental exposures that may predispose a woman to breast cancer throughout her life. Mommy bloggers were an ideal partner and community stakeholder for the study because of their ability to reach large numbers of women with children and because they are considered a credible source of information for women when making decisions about health. We recruited culturally diverse 75 mommy bloggers to disseminate the infographic on their respective blogs during breast

cancer awareness month. We examined the impact of the intervention on (a) women/readers in the intervention group who saw the blog with the infographic/message disseminated by mommy bloggers (n = 445); and (b) women/readers in the control group not exposed to the blogs (n = 353). Following the intervention, women in both groups completed an online survey that measured several factors, such as satisfaction with the environmental breast cancer prevention information contained in the infographic, influence/behavioral intention to reduce environmental breast cancer risk, and likelihood to share the information with other people, like their daughters. Readers in the intervention group who recalled the infographic were more satisfied with the information and more likely to engage in behavior to reduce their risk compared to women who did not see the blogs. Blog readers in the intervention group were also more likely to share the environmental breast cancer risk information with others, specifically with their daughters. Finally, the study provided evidence that women in the intervention group shared the infographic across multiple social media platforms, including Facebook, Twitter, and Instagram. The intervention demonstrated the potential value of teaming with mommy bloggers to disseminate risk information to mothers in a way that influenced their perceptions, intentions to engage in lifestyle changes to reduce risk, and to share that information with their family namely their daughters. Using social media interventions can be key to exposing more mothers and families to critical information to reduce breast cancer incidences.