

## Tracing the Origins of Breast Cancer

Women who enter puberty at an early age or who experience a late onset of menopause are particularly susceptible to breast cancer. Research has suggested that this susceptibility is due to long-term heightened levels of estrogen.

Rutgers researchers now also suspect that alcohol consumption is another factor that can raise levels of estrogen in the body, and consequently raise a woman's susceptibility to breast cancer. Pregnant women who drink may give birth to children with higher-than-normal levels of estrogen. In turn, these children may run increased risks of developing breast cancer later in life.

Drs. Wendie Cohick and Dipak Sarkar, professors at the Biotechnology Center for Agriculture and the Environment and Department of Animal Sciences, have data from animal studies that suggest that alcohol consumption by a pregnant woman may increase the risk of breast cancer in her offspring years down the road. They are also gaining new insights as to why this happens.

The findings of two pilot studies confirm that the offspring of laboratory animals that consumed alcohol while pregnant developed more malignant tumors, faster, than a control group. Furthermore, the researchers were able to pinpoint a critical time during pregnancy when maternal consumption of alcohol was most likely to create elevated levels of estrogen in the offspring and consequent breast cancer risk.

Cohick and Sarkar are planning additional studies to confirm the findings of their pilot studies. The new study will involve more animals, and will also investigate the effects of different levels of maternal alcohol consumption on the estrogen levels and breast cancer susceptibility of the offspring.

Your monetary support for this research could improve the chances of preventing breast cancer for the next generation of women. Please contact The Office of Development, at 732-932-9000, ext. 576 or [development@sebs.rutgers.edu](mailto:development@sebs.rutgers.edu) for more information.

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