



DR. SUSAN LOVE
RESEARCH FOUNDATION

MOVING BREAST CANCER BEYOND A CURE

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DR. SUSAN LOVE RESEARCH FOUNDATION PUBLISHES STUDY INVESTIGATING DRUG ABSORPTION IN NONLACTATING BREASTS AS A FIRST STEP TO DETERMINING POTENTIAL ENVIRONMENTAL EXPOSURES

Santa Monica, CA., December 1, 2011 –The Dr. Susan Love Research Foundation (DSLRF) focuses their research on understanding the normal breast. In the December 2011 issue of the *Journal of Physiology and Biochemistry* they reported on their study to look at the transport of drugs into the non-lactating breast.

“Most breastfeeding mothers understand that caffeine, alcohol or other drugs are absorbed and end up in their breast milk,” said Dr. Susan Love, president of the Dr. Susan Love Research Foundation. “What we wanted to know was whether the same drugs also get into breasts of women who are not lactating.”

In the study, 14 healthy, nonlactating women took two drugs that have been well-studied in lactating women, caffeine (NoDoz[®]) and cimetidine (Tagamet[®]). Blood and ductal fluid were collected at 5 time points over the next 12 hours, and drug levels in the fluid and in serum were measured at each time point and compared to known levels of the drugs in breast milk. Strikingly, drug concentrations in ductal fluid were significantly lower than those found in serum or breast milk. Importantly cimetidine, which is known to be actively transported and concentrated in breast milk, was present only at very low levels in ductal fluid, and in many cases was undetectable. The results indicate that the mechanisms that control transport of exogenous drugs into the ducts of nonlactating women are distinct from those at work in lactating women.

This study is significant because environmental carcinogens are often studied in breast milk as a surrogate for their presence in nonlactating breasts. This research suggests that lactation is a specialized situation and may not represent the exposure experienced by the nonlactating breast.

Dr. Love added, “Based on these results, our goal is now to further map the physiology of the normal breast so that we can determine which environmental carcinogens may enter the breast tissue and which just pass the breast by.”

To read the abstract or order a copy of the “The physiology of the normal human breast: an exploratory study,” go to <http://www.springerlink.com/content/j4532533507178h5/>

About the [Dr. Susan Love Research Foundation](http://www.dslrf.org)

The mission of Dr. Susan Love Research Foundation is to eradicate breast cancer and improve the quality of women’s health through innovative research, education and advocacy. For more information visit www.dslrf.org.

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