Bras and Breast Cancer by Ralph L. Reed, Ph.D.

Although I am an environmental chemist (Ph.D in biochemistry), I have been doing a lot of literature research on breast cancer since I saw an article on the National Library of Medicine database over a year ago. That article documented an increase in breast cancer rates between women who do wear bras versus those that do not.

That Harvard study fascinated me and I searched the medical literature for possible explanations. In January 1996, I discovered the book by Singer and Grismaijer and their explanation of impaired lymphatic flow intrigued me. I have since read everything that I can find on lymphatic flow. What I have found has amazed me, but that is another story. I can supply you with lots of info if you like. In essence, what Singer and Grismaijer found was that the odds of getting breast cancer dramatically increased with bra-wearing over 12 hours per day.

• Women who wore their bras 24 hours per day had a 3 out of 4 chance of developing breast cancer (in their study, n=2056 for the cancer group and n=2674 for the standard group).

• Women who wore bras more than 12 hour per day but not to bed had a 1 out of 7 risk.

• Women who wore their bras less than 12 hours per day had a 1 out of 152 risk.

• Women who wore bras rarely or never had a 1 out of 168 chance of getting breast cancer. The overall difference between 24 hour wearing and not at all was a 125-fold difference.

The results of this study are compelling, even considering that it was not a "controlled study" for other risk factors. Bear in mind that known (published in medical journals) risk factors for breast cancer are mostly in the range of less than three-fold differences. It should also be noted that Singer and Grismaijer surveyed bra-wearing behavior of the past, which is excellent for a disease with such a long development period. In their book, the authors show how most of the known risk factors can be related to bra-wearing behavior and/or the lymphatic system.

For example, breast feeding and pregnancy cause full development of the mammary lymphatics. Also, women of higher economic status have higher breast cancer rates, and one would expect that they would wear their bras more hours per day. Women who excercise have lower risk, which could relate to better lymphatic circulation (and I would add, more breast movement). To this discussion, I would like to add that lymphatic circulation in many tissues (especially the primary lymphatics) are highly dependent on MOVEMENT.

When you sit for a long time on an airplane flight, your feet and ankles can swell, because lymphatic circulation goes to near zero. Wearing a bra, especially a constricting one with underwires, and especially to bed, prevents normal lymphatic flow and would likely lead to anoxia (lower than normal oxygen content), which has been related to fibrosis, which has been linked to increased cancer risk.

Women evolved under conditions where there was BREAST MOVEMENT with every step that they took when they walked or ran. My reading of the scientific literature about lymphatic flow shows me that this may be as important as the constriction factor. Every subtle bounce of the breast while moving, walking, running, etc. gently massages the breast and increases lymphatic flow and thus cleans the breast of toxins and wastes that arise from cellular metabolism.

Of course, there may be other mechanisms for the damage that bras apparently cause. One such mechanism could be temperature. Breasts are external organs and have a naturally lower temperature. Cancers can be temperature-dependent. Breast cancer is hormone-dependent. Temperature can alter hormone function. Breast temperature changes throughout the monthly cycle.

All these facts are from the medical literature. By whatever mechanism, someone will eventually explain why Singer and Grismaijer found a 125-fold difference in cancer rates between bra-free breasts and those constricted by 24-hour-per-day bra-wearing.

If you haven't already done so, I suggest that you read the book by <u>Singer and</u> <u>Grismaijer</u>. (By the way, I have no connection to the authors; I think that they live in Canada.)

Also, just for an interesting experiment, the next time you walk down the street, notice visually how constricting bras are. On many women you can actually see "dents" around the sides of their chests where there bras are, even in something as opaque as a black t-shirt.

A physical therapist friend of mine, after reading <u>Dressed to Kill</u>, said that she was amazed at what she saw in her practice at a local medical clinic. She noticed how many women have red creases and grooves on the their bodies caused by their bras. Singer and Grismajer also suggest that you simply stop wearing one for two weeks and see how you feel.

By the way, I have heard that they are currently working on a new study. The

research is to study whether benign fibrocystic breast disease can be treated by stopping bra-wearing for eight weeks. That should be very interesting; this time they are involving medical doctors, from what I've heard.

Years ago, many people thought that the idea of cigarettes causing lung cancer was funny. Even if further research with highly controlled studies only shows a difference of 5-fold, or even 2-fold, it will be no laughing matter. The author, Ralph L. Reed, Ph.D. can be reached at reedr@ucs.orst.edu