

Breast health: Article One

In New Zealand we are blessed with a high level of awareness on breast health issues due to the considerable work done by Breast Screening Units, the Cancer Society, the Ministry of Health publicity campaigns and General Practice doctors. For women with breast cancer, the focus on early detection is vital and usually serves them well. However, the main focus is exactly that; early detection rather than prevention. Think about the fact that the average time span taken from the formation of the first cancer cell to detection through a mammogram is around 10 years. To me, prevention is the best option and this is the main subject I'd like to tackle. There are specifics which are fundamental to breast health. These are good nutrition, the ability to maintain hormonal balance through correct estrogen metabolism, good thyroid function and good lymphatic and blood circulation.

Most people will be familiar with the role of iodine in thyroid health. What is not commonly understood is that iodine is also vital to the health of the breasts, ovaries, prostate gland and a number of other tissues. The difference between the thyroid and other tissues however, is that the thyroid uses a different form of iodine called iodide and the breasts, prostate and other tissues use plain iodine. Both of these forms are present in Lugol's solution, fish and seaweeds, but most supplements have only the iodide form because their focus is usually on the thyroid health and the requirement for both forms is not often understood. New Zealand appears to be having an increasing problem with iodine deficiency; a situation confirmed by a recent study done on 5000 blood bank samples from the Waikato and Otago. Testing of these samples for iodine revealed a 92% incidence of iodine deficiency ranging from mild to severe. The implications for both thyroid and breast or prostate health are enormous.

The therapeutic use of iodine in treating breast cancer was first described in 1896 by G. Beatson. There has since been wide documentation in medical journals of the use of iodine in the prevention and treatment of both fibrocystic breast disease and breast cancer. There exists a high rate of breast cancer in women with thyroid abnormalities, suggesting there is a correlation. However, recent evidence indicates that the main impact of iodine on the breast tissue is independent of thyroid function; that is, that it is an iodine deficiency, not a thyroid malfunction that drives the progression of breast disease. This has been reinforced by further studies which show that the administration of thyroid hormone has no impact on the progression of breast disease, but that the introduction of therapeutic iodine can in many cases reverse fibrocystic breast disease and inhibit very early cancer progression through an inhibitory effect on cancer-initiating cells. However, the fact that many women with thyroid issues also have breast health concerns is reflective of the total role of both forms of iodine in the body.

There is evidence that iodine alters the gene expression in breast tissue, having an anti-estrogenic effect as a result. This is interesting because it has long been recognized that too much estrogen (specifically estradiol) in the breast tissue is a major contributing factor to the development of many breast cancers, and drugs like Tamoxifen are used to specifically block the effects of estrogen in the breast for women who have been treated for breast cancer. Iodine also appears to promote the production of estriol (the "good" estrogen) rather than estradiol. In an iodine deficient state, research has shown that the ovarian production of estradiol increases and that breast sensitivity to estradiol increases. When the body is well supplied with iodine, the estrogen production will favour estriol

which supports good breast and reproductive health. Other contributors to faulty estrogen metabolism include poor liver function, the presence of chronic inflammatory conditions such as arthritis, allergies, auto-immune disease and irritable bowel syndrome, and over-exposure to synthetic estrogens or xenoestrogens.

The best source of dietary iodine is seaweed but you need to eat a lot of it! A sprinkle of kelp won't be enough. Too much iodine however, can be just as bad as not enough so if you are thinking of using Lugol's solution get some advice from us as to dosage. We have other options available in the dispensary as well as Lugol's, including some drops which support both the thyroid and breast or prostate health. It is interesting to note that the level of iodine in a healthy lactating breast will be 4 times higher than that concentrated in the thyroid gland. However in deficiency, the thyroid will have first option on any iodine available which means that the breast may miss out, as then does the breast fed child.

Now, on to the matter of bras! The breast is largely fatty tissue with a number of glands for the production of milk and these glands have ducts which converge at the nipple. The breast is well supplied with blood vessels which supply the cells with oxygen and nutrients and lymphatic vessels which act to carry away the cellular wastes. Because the breast has such a high proportion of fat in its structure, it is susceptible to holding on to excess hormones (primarily estrogens) and fat soluble toxins if the circulation is constricted. For this reason it is important to make sure that any bras you wear fit properly. A bra which is too tight can inhibit the circulation of blood and lymphatic fluid through the breast tissue, leading to a build up of wastes within the breast cells which increases the risk of cell damage within the breast. If the shoulder straps leave indentations on your shoulders or you have noticeable bra lines under the breasts or around your back you would be advised to have your next bra fitted properly, or at the very least see whether the ones you have can be adjusted to fit better. A bra which is too loose can also create problems. It can fail to support the breast properly, which can lead to stretched breast ligaments and the increased risk of fungal infections in the crease under the breast due to perspiration. (Tina Dunlop at Shalari Lingerie in Greytown is particularly good at helping women to get the correct fit when purchasing a new bra).

The type of deodorant you use is also important. The ones sold in supermarkets usually use aluminium as their active ingredient and stop any perspiration from occurring. We are designed to perspire for a good reason; it is one of our body's mechanisms for ensuring that wastes do not build up in the lymph nodes under the arms and is part of our cooling system. Aluminium stops the pores in the skin under the arms from being able to release perspiration, so the wastes that would normally be excreted through the skin then have to be dealt with another way. If an aluminium deodorant is combined with a bra which inhibits circulation, the potential for wastes to build up in the breast tissue increases substantially. There are now aluminium-free deodorants available which work very well; we have a couple of options in the dispensary which have been well trialed. These allow natural perspiration to occur but inhibit the bacteria on the skin which are responsible for the unpleasant smell associated with underarms. (The link between Alzheimer's and aluminum is another reason to avoid aluminium-containing deodorants).

If you have any queries regarding the information in this article or would like to address some health issues of your own, we encourage you to call us on 06 304 8177.

The dispensary is open 9.30am – 4pm Tuesday, Thursday, Friday and 10.30am – 4pm Saturday.