



## **Fibrocystic Breast Disease**

30% of American women have fibrocystic breast disease, a benign (noncancerous) condition characterized by round lumps that move freely within the breast tissue. The lumps are usually tender to the touch. In contrast, a cancerous growth in the breast is often not tender or freely movable when touched. The texture of the lumps can vary from soft to firm. For many women, the tenderness may increase as menstruation approaches. Often the cysts fill with fluid and can enlarge premenstrually in response to the increase in hormonal levels during this time.

The main hormones implicated in the worsening of breast symptoms premenstrually include estrogen, the main female hormone, and prolactin, the milk release hormone secreted by the pituitary gland. Dietary factors have also been implicated. These include caffeine intake from coffee, black teas, colas, and chocolate, as well as excessive saturated fat and salt. Usually the symptoms of pain and swelling do not persist once menstruation begins, and most women notice significant relief at this time. The difference in the breast swelling can be so marked between the first and second half of the menstrual cycle that some women actually change bra size.

With repeated cycles of hormonal stimulation, the breast cysts may become chronically inflamed and surrounded by fibrous tissue which can harden and thicken the cysts. It is then more difficult for the fluid trapped in the cysts to escape and be reabsorbed by the body. This condition occurs most frequently in women in their late thirties and forties. To distinguish these hardened cysts from cancer, physicians often perform a simple office procedure called a needle aspiration. In this procedure, a needle is used to remove fluid from the cyst. This helps relieve pressure from the cyst on the surrounding tissue if it is causing pain, as well as rule out breast cancer. A mammogram will also help distinguish a breast cyst from breast cancer.

However, if there is a lingering concern about making an accurate diagnosis, a surgical biopsy might be performed. This is done under a local anesthetic in a physician's office or clinic or under general anesthesia in a hospital setting. A biopsy allows the physician to remove the entire breast mass so that the cells can be examined microscopically for any cancerous changes. Fortunately, most masses are benign.

Besides eliminating certain foods from the diet (caffeine, saturated fats, and salt), a high-fiber diet, including many plant-based foods, fruits and vegetables, beans and peas, raw seeds and nuts, and whole grains may help prevent cyclical fluctuations in cyst size and tenderness. The addition of seafood to the diet, particularly fish, may be useful in preventing breast cysts due to the iodine content and healthy oils contained in certain fish. The best fish for female health include those high in the Omega-3 fatty acids like salmon, trout, and mackerel.

**Vitamins and Minerals for Breast Cysts - The following vitamins and minerals can be helpful in reducing and preventing breast cysts:**



## **Vitamin A**

Vitamin A has been found to be useful in reducing both the pain symptoms and the size of the breast lesions in women with fibrocystic breast disease. At the University of Montreal Medical School, where high doses of vitamin A were administered (150,000 IU daily) to a small research group of volunteer women. The women studied had documented benign breast disease with moderate to severe pain symptoms. Their breast tenderness had not previously responded to mild analgesic medication (painkillers) or cessation of caffeine use. 80% of the women tested had beneficial results with vitamin A and a dramatic reduction in the level of pain. The lessening of breast pain was still evident eight months after the study ended. Forty percent of the women had at least a 50 percent decrease in the size of their breast lumps. One drawback, though, is that vitamin A in high doses can cause toxic symptoms. Vitamin A derived from fish sources is an oil-based product which can accumulate to high levels in the liver, where it is stored. Several women in this study had severe headaches from the high dosage of vitamin A taken, and several other women had more mild side effects.

To avoid the risk of side effects from fish oil-based vitamin A, it is safer for most women to use the provitamin A, beta carotene. Beta carotene is found abundantly in many yellow, orange, red, and dark green fruits and vegetables. It is converted to vitamin A by the liver and intestines as needed by the body. In fact, many women who eat a plant-based diet can easily ingest 50,000 to 100,000 IU of beta carotene on a daily basis. (One cup of carrot juice or one sweet potato contains 20,000 IU of beta carotene). Supplements of beta carotene are also readily available in health food stores.

## **Vitamin E**

In several controlled studies, vitamin E was found to be quite helpful in reducing the pain and tenderness, as well as the size, of breast lumps. In one study, where subjects were given 600 IU of vitamin E for two menstrual cycles, 80 percent showed a positive response. Another study of 29 women with fibrocystic breast lumps, which worsen premenstrually, showed again a good response to vitamin E treatments. At doses of 500 or 600 IU per day, 16 women had moderate to total symptom relief. The other 13 women had reduction of cyst size or complete disappearance of the cysts.

## **Iodine**

In animal studies, iodine deficient rats were found to develop breast changes similar to human fibrocystic disease. Human studies have also suggested that women who are iodine deficient may have a predisposition towards developing breast cysts. Iodine is needed by the body for the production of the thyroid hormone. Lack of adequate thyroid hormone also affects the menstrual cycle.

Sea vegetables such as Nori, kelp, and dulse, found in the produce section of health food stores, are good sources of iodine. Dulse is also available in liquid drops, while kelp is available in tablets. Kelp also comes in powdered form and can be used in cooking as a good salt substitute.

## **Essential Fatty Acids**

Several studies have looked at the beneficial effects of evening primrose oil on fibrocystic breast disease. Evening primrose oil is an excellent source of the essential fatty acid, linoleic acid, and its chemical derivative, gamma linolenic acid (GLA). In one study of 291 women with severe breast pain, 45 percent of the women had symptom relief with the use of evening primrose oil. Another study of 41



women showed equally good symptom relief. The beneficial results were maintained in women who continued to use evening primrose oil after the study ended. Typical dosages used were 1500 mg twice a day. (This would amount to taking 6 of the 500 mg capsules commonly available.) In my experience, some women need to go as high as 9 to 12 capsules per day for relief of severe symptoms. Borage oil and black currant oil are more concentrated sources of GLA, so the number of capsules necessary is reduced. For example, 3 or 4 capsules per day of borage oil may be sufficient