

## Flaxseed: A Good Idea for Reduction of Mastalgia (Breast Pain) and Risk of Breast Cancer

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DOI: 10.21859/focsci-03021410

Submitted: 01.15.2016

Accepted: 02.11.2017

### Keyword:

Flaxseed

Mastodynia

Breast Neoplasms

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Today, more half of women experience fibrocystic breast changed in their lives. This accrue most often in 20 to 50 years old women and it happens in response to the hormones made by the ovaries. It causes symptoms such as swelling, tenderness, pain and thickening in one or both breasts. Fibrosis is a fibrous tissue similar to scar tissue, and cysts are fluid-filled sacs. But this disease with proliferative epithelial cell has been associated with risk of breast cancer [1]. Breast cancer forms 22.9% of all cancer (excluding non-melanoma skin cancer) in women and made 458,503 deaths in 2008 [2]. So then the incidence of this, is increasing in the western women. Sex steroid hormones are important causes of breast cancer among women [3]. In some previous studies, anti-estrogen therapies suggested as a good way for breast cancer treatment, with approximately 50 percent of success [3]. A good diet containing Omega-3 fatty acid and Alpha tocopherol, Alpha linoleic acid and fiber and phytoestrogen, is effective in breast cancer [4, 5].

Flax is a food and dietary supplement commonly used for menopausal symptoms. Flax is known for its lignan,  $\alpha$ -linolenic acid, and fiber content, components that may possess phytoestrogenic, anti-inflammatory, and hormone modulating effects, respectively [4]. Flaxseed (*Linum unitatissimum*) of the flax plant is the best plant for decrease of pain (mastalgia) in the fibrocystic disease and during treatment with anticancer therapy.

We know that, estrogen regulates extracellular levels of leptin, adiponectine and VEGF in women normal breast tissue. The leptin element increase angiogenesis and vascular endotheli-

al growth factor (VEGF) [3]. Current evidence suggests that flax may be associated with decreased risk of breast cancer. Flax demonstrates antiproliferative effects in breast tissue of women at risk of breast cancer and may protect against primary breast cancer. Mortality risk may also be reduced among those living with breast cancer [4]. The studies offer, use of 25 g of flaxseed per day in premenopausal women [3].

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