



AICR

InDepth

by Karen Collins, MS, RD, CDN
March 2010

**Flaxseed and Breast Cancer:
The Take-Home**

General Summary

- Because human studies are extremely limited, research does not provide a basis to recommend use of flaxseed for the explicit purpose of cancer protection at this time.
- For people who wish to consume flaxseed as a source of omega-3 fat or dietary fiber, studies do not support fears that flaxseed could increase incidence or recurrence of breast cancer.
- Because there are no studies regarding the effects of flaxseed in children or women who are pregnant or breastfeeding, researchers suggest caution.

Research Specifics

- Animal studies suggest that flaxseed may decrease growth of both estrogen receptor-negative and estrogen receptor-positive breast cancers.
- In animal studies, flaxseed did not interfere with tamoxifen's actions and may have enhanced effectiveness. However, with no results of clinical trials of flaxseed use during tamoxifen or aromatase inhibitor treatment, decisions about flaxseed use should be discussed carefully with a patient's physician.
- Flaxseed's effects vary with individual differences including diet, hormones and genetics.
- In limited short-term human studies using 5 to 30 g flaxseed per day (corresponding to 1 to 4 level tablespoons of ground flaxseed), consumption altered estrogen metabolism in ways that may protect against breast cancer.



AICR InDepth

by Karen Collins, MS, RD, CDN
March 2010

Flaxseed and Breast Cancer FAQs

Does flaxseed lower risk for cancer?

- Flaxseed may contribute to lower cancer risk, but research is too limited to recommend it for cancer protection.
- Flaxseed's effects vary depending on diet, hormones, genetics and more.
- 1 to 4 tablespoons of ground flaxseed per day appears to be safe and potentially protective against breast cancer based on studies using those amounts.

I heard that flaxseed might increase risk for getting breast cancer.

- Studies have not shown that flaxseed increases incidence or recurrence of breast cancer.

Is it safe to take flaxseed if I'm on tamoxifen or aromatase inhibitor treatment?

- Although in animal studies flaxseed did not interfere with tamoxifen's actions, there are no clinical study results available.
- Research with aromatase inhibitors is not yet available.
- It is best to discuss flaxseed use with your physician.

Does flaxseed interfere with any medications or supplements?

- Flaxseed may slow or decrease absorption of medications, so discuss with your doctor. (You may need to take it at different times than your prescription or nonprescription medicine.)
- It is also important to talk with your doctor before taking flaxseed if you take fish oil, EPA + DHA supplements or anticoagulant medications (aspirin or blood thinners such as clopidogrel (Plavix), heparin and warfarin (Coumadin)).

Can pregnant women and children take flaxseed?

- The effects of flaxseed supplements in pregnant and breastfeeding women and children are not known, so caution is advised. Talk with your doctor.

If I decide to take flaxseed, what's the best way to get started?

- Start with one tablespoon of ground flaxseed at a time; wait a few days to get used to the increased fiber before adding more.
- Use ground flaxseed (“flaxseed meal”) so you’ll absorb more omega-3 fats and the cancer-fighting lignans.
- Buy flaxseed pre-ground or grind the whole seeds in a coffee grinder or food processor.
- Drink at least 64 ounces of liquids daily to help move the fiber through your digestive system.
- Add to cereal, yogurt or salads. Include in baked muffins or quick breads as cooking does not change lignan content significantly.
- Bars and cereals with flaxseeds often contain small amounts of the omega-3 fats.
- Refrigerate in a closed container; it will stay fresh for three to four months.

What about taking flaxseed oil?

- Flaxseed oil provides omega-3 fat, but no fiber or lignans (unless they have been added to the oil), so effects may be different than those of ground flaxseed.
- The oil may be an attractive option if the fiber content of flaxseed causes discomfort for you, or if you are in one of the groups where research about safety of regular flaxseed is lacking (pregnant women and children).
- Flaxseed oil should not be used in cooking, but you can use about 1 tablespoon daily to be drizzled over vegetables after cooking or used in salad dressings. It is essential to store it in the refrigerator.

Information excerpted from:

AICR InDepth: Flaxseed and Breast Cancer. Published by the American Institute for Cancer Research, March 2010.