

# SOY

## WHAT IS IT?

Soy is a subtropical plant native to southeastern Asia. It is a member of the pea family (Fabaceae). Soy has been a dietary staple in Asian countries for thousands of years

Soy and components of soy called "isoflavones" have been studied for many health conditions. Isoflavones are believed to have estrogen-like effects in the body, and as a result, they are sometimes called "phytoestrogens." In laboratory studies, it is not clear if isoflavones stimulate or block the effects of estrogen or both. In recent years, isoflavones have increased in popularity as an alternative to estrogen therapy.

The amount of soy found in foods is generally considered safe (Miso, tofu, soy milk). The soy beans can be processed into soy protein which is a powder, milk, or fiber.

## WHAT IS IT USED FOR?

Menopause (Possibly effective)

Hot Flashes (May be effective)

Prevent Osteoporosis (Possibly effective)

## RESEARCH/STUDIES

- It is unclear if soy stimulates or blocks estrogen, or if it does both.
- Some studies claim soy helps hot flashes, other studies say it does not help.
- Consuming soy protein 20-60 grams providing 34-76 mg of isoflavones daily seems to modestly decrease the frequency and severity of hot flashes in some menopausal women.

## IS IT SAFE?

Consuming soy foods is safe. Soy supplements seem safe when used short term. Long term use of dietary supplements may not be safe.

## SIDE EFFECTS WARNINGS AND PRECAUTIONS

Allergic reactions

Constipation

Insomnia

Nausea

Migraine headaches

Food allergy could appear in people allergic to TREENUTS, MILK, EGGS, PEANUTS, FISH AND WHEAT-DO NOT USE IF YOU ARE ALLERGIC TO THESE PRODUCTS.

Soy may have estrogen-like effects and the potential for side effects and interactions.

#### THINGS TO REMEMBER

- The effects of soy in patients with breast cancer are unclear.
- Use whole soy foods instead of soy supplements contain different amounts of isoflavones and high intake could increase risk of side effects.

# FLAXSEED

## WHAT IS IT?

Flaxseed is the seed from the plant *Linum usitatissimum*. The seed or the seed oil is used to make medicine. Flaxseed and flaxseed oil/linseed oil are rich sources of the essential fatty acid alpha-linolenic acid (omega-6). Alpha-linolenic acid is a building block in the body for omega-3 fatty acids. Eating flaxseed regularly may reduce the risk of certain cancers. Flaxseed is a source of phytoestrogens (plant-based compounds similar to estrogen) called lignans. These lignans can have hormone-like effects on the body. Flaxseed is a source of fiber. Drink plenty of water or other fluids every day to prevent a blockage in your bowel.

## WHAT IS IT USED FOR?

Menopausal symptoms (likely effective)

Osteoporosis (possibly ineffective)

Breast cancer

Constipation

High cholesterol

### *Menopausal symptoms:*

- Studies have shown that taking flaxseed orally 40 grams per day significantly reduced symptoms of hot flashes by about 35% and night sweats by about 44% in women with mild menopausal symptoms.
- In one clinical trial, flaxseed was comparable to hormone therapy for reducing symptoms but in another trial, flaxseed was no better than wheat germ.
- Another study that used a lower dose of flaxseed, 25 grams daily, found that this dose of flaxseed does not significantly improve hot flashes or measures of quality of life in postmenopausal women.

### *Breast cancer:*

- Early research shows that eating a muffin containing flaxseed 25 grams every day for about 40 days significantly reduced signs of tumor growth in women newly diagnosed with breast cancer.
- The effect of eating flaxseed on breast cancer outcomes is not known.
- Research on the effect of dietary intake of flaxseed on breast cancer risk is conflicting. Most research looks at the effect of dietary lignan intake on breast cancer risk, but does not specifically look at flaxseed intake. (Flaxseed is one source of dietary lignans).

- Some large studies suggest that high intake of dietary lignans are associated with a significantly reduced risk of developing breast cancer but other studies did not find any connection between dietary lignan intake and breast cancer risk.

### IS IT SAFE?

- Flaxseed is safe for most people when used orally

### SIDE EFFECTS WARNINGS AND PRECAUTIONS

Flaxseed may have a laxative effect. Higher doses may cause more side effects:

Bloating, abdominal pain

Constipation, diarrhea, gas

Nausea

Hormone changes

Skin rash

Increased risk of bleeding

Changes in blood sugar levels

AVOID if allergic to flaxseed, flaxseed oil or other plants of the Linaceae family:

- Flaxseed should be taken with plenty of water to prevent blockage in your gut. DO NOT USE flaxseed if you have had a bowel obstruction or an ileus (temporary paralysis of a portion of the intestines).
- Flaxseed can lower blood sugar levels. If you are taking medications for blood sugar-Monitor your blood sugars closely.
- Flaxseed might slow blood clotting and increase risk of bleeding.
- Flaxseed can have effects like estrogen so it is unknown the long term safety of flaxseed and people with hormone receptor positive types of breast cancer

# RED CLOVER

## WHAT IS IT?

Red clover is a plant. The flowering tops of the red clover plant are used to make medicine in tablet, capsule, tea, or tincture forms. Historically, red clover has been used for cancer and respiratory problems such as whooping cough, asthma, and bronchitis. Red clover is most frequently studied for the treatment of menopausal symptoms such as hot flashes.

## WHAT IS IT USED FOR?

Menopausal symptoms

High blood pressure

High cholesterol

Osteoporosis

## RESEARCH/STUDIES

- Several small studies on the effectiveness of Red clover for menopausal symptoms had mixed results. A large study found that red clover did not have any effect on menopausal symptoms.
- Promensil® is a Red clover product and was found not to be any more effective than placebo in relieving menopausal symptoms-it relieved flashes more quickly but not more frequently.
- Another study suggests that taking Promensil® 40 mg isoflavones every day did not increase breast tissue density on mammography. This suggests that taking red clover orally might not significantly affect breast cancer risk.
- Studies have been too short (less than 6 months) to determine if Red clover has “estrogen-like” effects on the uterus.
- It is not known if taking red clover isoflavones has any effect on breast cancer risk.
- One “*in vitro*” (test tube) study found that estrogen-receptor positive breast cancer cells were stimulated by red clover.

## IS IT SAFE?

- Red clover contains isoflavones that are changed in the body to “phytoestrogens” which are plant-based compounds similar to estrogen. They are capable of binding to estrogen receptors which may increase estrogen levels and possibly increase risk of breast cancer in women with hormone receptor positive breast cancer.
- No serious side effects have been reported in people using red clover for up to one year.
- Red clover seems safe for most adults when used for short periods of time.

## SIDE EFFECTS

Breast tenderness

Weight gain

Muscle ache

Nausea

Headache

Vaginal spotting in some women

Potential increased risk of bleeding

## WARNINGS AND PRECAUTIONS

- AVOID if allergic to red clover or other isoflavones.
- Red clover may increase risk of bleeding and slow blood clotting so you may need to stop taking it before surgery.
- Based on the available evidence, it is believed that red clover has effects like estrogen-this is important for women with estrogen positive cancers.

# BLACK COHOSH

## WHAT IS IT?

Black cohosh is one of the highest selling herbs in the United States and is popular as an alternative to hormonal therapy in the treatment of menopausal symptoms such as hot flashes, mood disturbances, diaphoresis, palpitations, and vaginal dryness. It does not bind to estrogen receptors. Black cohosh seems to have effects like the hormone estrogen, but it is not known exactly how it works. The root is used to make medicine.

## WHAT IS IT USED FOR?

Hot flashes-breast cancer survivors (possibly effective)

Nervous tension

Menopause (hot flashes)

Osteoporosis

Painful menstruation

Rheumatism

## RESEARCH/STUDIES

- Study results are mixed on whether or not Black cohosh relieves hot flashes.
- Most studies have been done in Europe using the product Remifemin which have had positive results.
- Difficult to compare results of studies because different doses and products were used and the studies were conducted over different time periods-some lasted 8 weeks, others 12 weeks.

## IS IT SAFE?

- There have been case reports on black cohosh and liver damage but evidence is not conclusive.
- Black cohosh has been used safely for up to 6 months. Long term safety information is not available.

## SIDE EFFECTS

- Generally well tolerated in doses up to 6 months
- Stomach discomfort/upset
- Rash
- Tiredness
- Headache
- Dizziness

- Weight gain
- Leg heaviness
- Breast discomfort
- Vaginal spotting or bleeding

#### WARNINGS AND PRECAUTIONS

- AVOID if allergic to black cohosh, buttercup, or crowfoot.
- May affect actions of Tamoxifen and Raloxifene (Evista).
- Black cohosh may lower blood pressure.



# EVENING PRIMROSE OIL

## WHAT IS IT?

EPO is from the seed of the evening primrose plant and contains an omega-6 essential fatty acid called gamma-linolenic acid (GLA) which is believed to be its active ingredient.

## WHAT IS IT USED FOR?

Hot flashes (possibly ineffective)

Breast pain

PMS

Eczema

High Cholesterol

Osteoporosis

Diabetic Neuropathy

## RESEARCH/STUDIES

- There is mixed data on the effects of EPO on breast cancer cells
- Studies combining EPO and Tamoxifen for the treatment of breast cancer have shown quicker tumor response to the Tamoxifen.
- One clinical trial found that EPO was not any better than a placebo in relieving hot flashes.
- Some studies indicate EPO may decrease the risk of seizures, other studies show it may increase the risk of seizures, especially in patients with schizophrenia on phenothiazines.

## IS IT SAFE?

- EPO is likely safe when used orally in recommended doses for up to one year.
- Long term safety information greater than 1 year is not available.

## SIDE EFFECTS WARNINGS AND PRECAUTIONS

Generally well tolerated; other side effects include:

Headache

Low Blood pressure

Nausea

Bloating

Gas

Seizures

Increased bowel movements (diarrhea)

Skin Rash

Stomach pain

#### THINGS TO REMEMBER

- EPO does not appear to affect menopausal symptoms but more studies are needed
- EPO may enhance the effects of Tamoxifen.