

Soy Myths & Facts

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independent distributor

One negative thing about soy and that is that you need iodine in your diet to maintain healthy thyroid function when consuming large amounts of soy (far more than in Lean protein shakes). The only precaution is to not take soy within an hour of thyroid medicine to ensure proper absorption.

Here is a brief Myth to Fact sheet on Soy. All of the studies are cited below to back up the information and I have plenty more saved on my work computer if you would like them. That being said, I will say one negative thing about soy and that is that you need iodine in your diet to maintain healthy thyroid function when consuming large amounts of soy (far more than in Lean). The only precaution is to not take soy within an hour of thyroid medicine to ensure proper absorption.

Myth: Soy milk isn't as good for you as cow's milk

Reality: Soy milk delivers many of the same important nutrients as cow's milk, including calcium, vitamin D and protein. In addition, unlike many types of cow's milk, soy milk is very low in saturated fat and cholesterol-free.

Myth: Soy is a major cause of food allergy

Reality: Soy protein is one of the eight most common food allergens; a list that also includes proteins in milk, eggs, peanuts, tree nuts, fish, shellfish and wheat. However, these foods are not equally allergenic. In fact, soy allergy is relatively rare and much less common than milk and peanut allergies.^{1,2} If you know or suspect you are allergic to soy, consult your doctor for dietary guidelines and always read labels with care.

Myth: Minerals are not absorbed when soy is consumed

Reality: Soybeans—like other legumes and whole grains—contain phytate; a naturally-occurring plant compound that can reduce the absorption of minerals such as calcium and iron. However, research shows that calcium from soy milk is absorbed as well as calcium from cow's milk.³ In addition, new research indicates that in contrast to older thinking, iron absorption from soy is also very good.⁴

Myth: Soy protein is inferior because it comes from a plant

Reality: Unlike most plant proteins, soy protein is "complete," meaning that it contains all of the essential amino acids—the building blocks of protein—in sufficient quantities to meet the body's requirements.⁵ The medical and nutrition communities, as well as the FDA, recognize soy protein as equal in quality to animal protein.

Myth: Soy upsets your stomach

Reality: While any food can cause sensitivity in some people, clinical studies don't show soy causes more gastrointestinal disturbances than other commonly consumed foods. Furthermore, soy milk is a wholesome milk alternative for those who can't drink milk due to lactose intolerance. If you know or suspect you are allergic to soy, consult your doctor for dietary guidelines and always read labels with care.

Myth: Soy affects fertility

Reality: Human clinical studies show that soy does not impair male or female fertility.^{6,7,8}

Myth: Consuming soy affects men's sperm

Reality: There is no clinical data indicating soy consumption adversely affects sperm quality or quantity.^{9,10}

Myth: Soy is not safe for pregnant women

Reality: For centuries, Asian women have consumed soy while pregnant. Many human studies have also confirmed that soy is safe for pregnant women. In fact, fortified soy milk is a convenient source of many nutrients that are important in pregnancy, including calcium and high-quality protein. Soy milk is also lactose-free, which may be helpful to some pregnant women with lactose sensitivity. If you are pregnant, ask your doctor for advice about a healthy diet.

Myth: Soy is not an appropriate food for children

Reality: Soy milk and other soy foods can be a nutritious addition to a child's diet. For most children, soy milk can be introduced around the same time dairy milk is typically

introduced (usually around age one). Since all children are different, consult your doctor before changing your child's diet. Soy milk is a good source of high-quality protein and provides many of the same nutrients found in milk including calcium, vitamin D, potassium, riboflavin and vitamin B12. Soy milk and other milk alternatives should not be used as infant formula.

Myth: Soy doesn't support growth and development in children

Reality: The medical and nutrition communities, as well as government agencies, agree that soy can play a valuable role in a healthy balanced diet for men, women and children alike. Soy is a complete plant protein, meaning that it contains all of the amino acids necessary for optimal human health. Soy milk is also an excellent source of calcium and vitamin D: two nutrients especially important for growing kids.

Myth: Consuming soy affects sexual development

Reality: There is no human evidence showing that soy affects sexual development. Soy does not affect hormone levels nor does soy contain the hormone estrogen.^{9,10}

Myth: Soy contains estrogen

Reality: Soy does not contain the hormone estrogen. It does contain isoflavones, which are naturally occurring plant compounds. Isoflavones are classified as plant estrogens but isoflavones are very different from the hormone estrogen.

Myth: Consuming soy affects sexual orientation

Reality: There is no human evidence that soy consumption affects sexual orientation.

Myth: Soy causes or worsens thyroid problems

Reality: The overwhelming amount of clinical research shows that soy foods do not adversely affect thyroid function in people with normal-functioning thyroids.¹¹

Myth: Soy increases cancer risk

Reality: In fact, studies show that among those who

consume higher amounts of soy, such as Asian populations, cancer is less likely than in those who consume relatively little soy.^{13,14} Intriguing evidence in particular suggests that soy reduces risk of breast and prostate cancer.

Myth: Soy is not safe for breast cancer patients and survivors

Reality: According to the American Cancer Society, breast cancer patients can consume soy foods like soy milk, tofu and edamame.¹⁵ In fact, a recently published study involving nearly 10,000 breast cancer patients found that higher soy consumption was associated with a 25% reduction in cancer recurrence.¹⁶

Myth: Soy increases the risk of heart disease

Reality: In fact, according to the FDA, consuming 25 grams of soy protein per day, as part of a healthy diet low in saturated fat and cholesterol, may help reduce the risk of heart disease.¹⁷ Clinical research shows that soy protein directly lowers LDL ("bad") cholesterol.¹⁸ Soy also contains omega-3 fatty acids, which have been studied for their role in heart health. Furthermore, plant-based foods like soy milk are often lower in saturated fat and cholesterol than their animal-based counterparts, making them an especially smart choice for a heart-healthy lifestyle. It is clear that soy foods work through many ways to promote heart health.

Myth: Soy damages the immune system

Reality: Clinical evidence shows that soy foods do not adversely impact the immune system.¹⁹

All studies cited on page two.

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SOURCES CITED (continued from page one)



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Japan Public Health Center (2003)
The Japan Public Health Center-Based Prospective Study on Cancer and Cardiovascular Diseases found that people in the highest one-fourth of genistein intake of 24 mg/day had only half the risk of breast cancer compared to those in the lowest genistein intake of 7 mg/day (26). Those in the highest soyfoods

intake category ("almost every day") didn't have a lower risk compared to those in the lowest ("less than 2 times per week"). Upon further analysis, the finding for isoflavones being protective was limited to post-menopausal women, for whom there was a 68% lower risk in the highest isoflavone intake category.

Life Span Study, Japan (1999)

The Life Span Study cohort in Hiroshima and Nagasaki found no association between tofu and miso with breast cancer risk. The highest soy intake category was 5 or more servings per week (30).

Women's Healthy Eating and Living Study, USA (2011)

The Women's Healthy Eating and Living (WHEL) study is a randomized controlled trial of a high fruit-vegetable-fiber and low fat dietary intervention in early stage breast cancer survivors (121). It had a median follow-up of 7.3 years from the time of enrollment. Soy intake was measured post-diagnosis (median 2 years, range: 2 months to 4 years) using a food frequency questionnaire that included specific items for "Meat Substitutes (such as Tofu, Veggie Burgers)," and "Soy Milk", as well as an opportunity to include other soy foods and supplements.

Isoflavone intake (the marker for soy) was unrelated to the risk of recurrence regardless of hormone receptor status or Tamoxifen use. No significant increased or decreased risk was associated with any specific level of intake. Risk of death tended to be lower as isoflavone intake increased (p for trend=0.02). Women at the highest levels of isoflavone intake (>16.3 mg/day isoflavones; equivalent to at least 1/2 cup soymilk or 2 oz tofu) had a non-significant 54% reduction in risk of death compared to the lowest one-fifth of soy intake. The authors state:

Our study is the third epidemiological study to report no adverse effects of soy foods on breast cancer prognosis. These studies, taken together, which vary in ethnic composition (two from the US and one from China) and by level and type of soy consumption, provide the necessary epidemiological evidence that clinicians no longer need to advise against soy

consumption for women diagnosed with breast cancer.

Cancer Hospital of Harbin Medical University, China (2010)

In this prospective study, women diagnosed with breast cancer were divided into 4 quartiles of isoflavone intake (31). The highest one-fourth was 42 mg/day (close to 2 servings) or more, and the lowest was less than 15 mg/day or less. There was no association with isoflavones for risk of recurrence of breast cancer or death for pre-menopausal women. However, post-menopausal women in the 3rd and 4th highest quartiles of isoflavone intake had a lower risk of breast cancer recurrence than the lowest quartile (there was no association for death).

Shanghai Breast Cancer Survival Study (2009)

A 2009 report from the Shanghai Breast Cancer Survival Study showed that women with a prior diagnosis of breast cancer (including estrogen-positive), who ate more soy, had lower rates of death and cancer recurrence (11). The study followed women for an average of 3.9 years after a diagnosis of breast cancer. The researchers measured a beneficial effect of up to 11 grams of soy protein per day.

Among post-menopausal women, there was a lower risk of recurrence among women with estrogen or progesterone receptor positive cancers, and among those who were receiving anastrozole as endocrine therapy.

Long Island Breast Cancer Study (2007)

Although the isoflavone intakes were very small, a study of women with breast cancer living in Long Island showed that those in the highest one-fifth of isoflavone intake (7.5 mg or more per day) had lower overall mortality than those in the lowest (32). These intakes were based on their diet pre-diagnosis. There was no association between isoflavones and death from breast cancer (as distinct from overall death). Cow's milk, soymilk is very low in saturated fat and cholesterol-free.