ABSTRACT

Isoflavones are secondary vegetable substances, which can act as estrogens in the body and have protective functions. The estrogen effects of isoflavones are much less powerful than the estrogen hormones (it’s effectiveness represents around 1/1000 of the estrogen hormones). This is why isoflavones and phyto-estrogens exercise a balancing effect when the level of estrogens is low, such as during the menopause, and cause less menopause symptoms. Isoflavones can also reduce the effect of the estrogen on cells and skin layers when the hormone levels are high, and then essentially reduce the risk of estrogen linked cancers. Isoflavones are transformed by bacteria in the intestinal flora during digestion. It is only once this transformation has been completed that the isoflavones exercise their beneficial effects in the body. Lower absorption in the intestine has been observed following a lengthy intake of antibiotics or in the case of diarrhea. This can result in a reduction of the protective functions of these substances for the body. In order to obtain a regular absorption of isoflavones, the intake isoflavones rich foods or isoflavones supplements must be spread during the day.

Introduction

Isoflavones are secondary vegetable substances, which can act as estrogens in the body and have protective functions. The estrogen effects of isoflavones are much less powerful than the estrogen hormones (it’s effectiveness represents around 1/1000 of the estrogen hormones). This is why isoflavones and phyto-estrogens exercise a balancing effect when the level of estrogens is low, such as during the menopause, and cause less menopause symptoms. Isoflavones can also reduce the effect of the estrogen on cells and skin layers when the hormone levels are high, and then essentially reduce the risk of estrogen linked cancers. Isoflavones are transformed by bacteria in the intestinal flora during digestion. It is only once this transformation has been completed that the isoflavones exercise their beneficial effects in the body. Lower absorption in the intestine has been observed following a lengthy intake of antibiotics or in the case of diarrhea. This can result in a reduction of the protective functions of these substances for the body. In order to obtain a regular absorption of isoflavones, the intake isoflavones rich foods or isoflavones supplements must be spread during the day.

Ease Menopause Symptoms:

The benefits of soy go beyond reducing long-term cancer risk. Recent studies have found that soy isoflavones can reduce menopause symptoms such as hot flushes and increase bone density in women. Indeed, many menopausal and post-menopausal health problems may result from a lack of isoflavones in the typical Western diet. Although study results are not entirely consistent, isoflavones from soy or red clover may be helpful for symptoms of menopause.
Reduce Heart Disease Risk:

Soy isoflavones also appear to reduce cardiovascular disease risk via several distinct mechanisms. Isoflavones inhibit the growth of cells that form artery clogging plaque. These arteries usually form blood clots which can lead to a heart attack. A review of 38 controlled studies on soy and heart disease concluded that soy is definitely effective for improving cholesterol profile. There is some evidence that isoflavones are the active ingredients in soy responsible for improving cholesterol profile.

Protect Against Prostate Problems:

Eating isoflavones rich products may protect against enlargement of the male prostate gland. Studies show isoflavones slowed prostate cancer growth and caused prostate cancer cells to die. Isoflavones act against cancer cells in a way similar to many common cancer-treating drugs.

Isoflavones Improve Bone Health:

Soy Isoflavones help in the preservation of the bone substance and fight osteoporosis. This is the reason why people in China and Japan very rarely have osteoporosis, despite their low consumption of dairy products, whereas in Europe and North America the contrary happens. Unlike estrogen, which helps prevent the destruction of bone, evidence suggests that isoflavones may also assist in creating new bone. Other studies are not entirely consistent, but evidence suggests that genistein and other soy isoflavones can help prevent osteoporosis.

Reduce Cancer Risk:

Isoflavones act against cancer cells in a way similar to many common cancer-treating drugs. Population-based studies show a strong association between consumption of isoflavones and a reduced risk of breast and endometrial cancer. Women who ate the most soy products and other foods rich in isoflavones reduced their risk of endometrial cancer by 54%.

Isoflavones Are Natural Plant Hormones:

Isoflavones can be found in many foods but the best known source of isoflavones is the soy bean (Glycine max). The soy isoflavones are responsible for most of the soy health benefits. The Soy bean is a plant cultivated as foodstuff whose health properties have recently been discovered. Thorough studies have revealed that the consumption of the soy beans or soy foods containing isoflavones have favorable effects on people's health. Another source of isoflavones is red clover. As opposed to soy beans, red clover is normally not eaten but the isoflavones are extracted in industrial processes and used to make isoflavones supplements.

Isoflavones Are Natural Antioxidants:

A recent study has demonstrated that isoflavones have potent antioxidant properties, comparable to that of the well known antioxidant vitamin E. The anti-oxidant powers of isoflavones can reduce the long-term risk of cancer by preventing free radical damage to DNA. Genistein is the most potent antioxidant among the soy isoflavones, followed by daidzein.

References