

# SOYA ISOFLAVONS

## *Natural source of youth*



In old chinese texts, the medicinal properties of soya have been showed. Soya was considered as a powerful healthy food. It can be implied for preventing some cancers and limit cardiovascular problems.

Soya plays also an important role during menopause for balance the oestrogen decrease. Its effect is associated to the presence of compounds with oestrogen activity as isoflavons. Isoflavons which are naturally contained in seeds, have a detoxifying effect inside the plant.

By oral use, isoflavons have estrogen like effects. They act as oestrogen and can selectively modulate oestrogen receptors. They are able to increase the time of menstrual and follicular cycles. Soya isoflavons are also recognized for preventing osteoporosis problems.

Soya isoflavons can be considered as Phyto-oestrogens. This term corresponds to plant constituents or phyto-compounds with agonist or antagonist activities of oestrogens. In fact Isoflavons have oestrogen like activity. Furthermore, they have antiradicalar properties.

● <b>DEFINITION</b>	Soya isoflavons	40%
	with Glycoside Genistein	24 - 30%
	Glycoside Daidzein	10 - 15%
	Glycoside Glycitéine	0.5 - 5%

*Genistein and daidzein have the most therapeutic activity.*

## ● **ACTIVITY**

**Soya Isoflavons** complex contribute to :

- **Collagen synthesis stimulation**
- **Anti-inflammatory activity**
- **Free radicals inhibition**

Diphenolic structure of isoflavons is similar to the 17  $\beta$ -oestradiol. Isoflavons and more particularly, genistein are able to bind to hormon receptors that imply an hormone like activity. Consequently, they have a preventing effect on the cutaneous aging and limit the hormonal unbalance.

Hormone have very important functions at the cutaneous level. During aging, the elastic network of skin is broken and the fibers densify, and becomes more rigid. The content in macromolecules which participate to cohesion and moisturiziing of tissues as proteoglycans and glucosaminoglycans disappear with age implying skin drying.

By an oestrogen like effect, soya isoflavons should help the skin to preserve its elasticity and the content in essential macromolecules. These properties are very important for limiting the wrinkles apparition. The skin drying is limited and the aging cutaneous process is delayed.

It has been shown that soya isoflavons showed a significative antiradicalar activity. Isoflavons neutralize the effect of peroxides radicals and have a protective activity on the membranes.



GREENTECH S.A  
Biopôle Clermont-Limagne  
63360 Saint-Beauzire - France  
Tel : 33 4 73 33 99 00 Fax : 33 4 73 33 91 32  
E-mail : greentech@greentech.fr - web site : www.greentech.fr

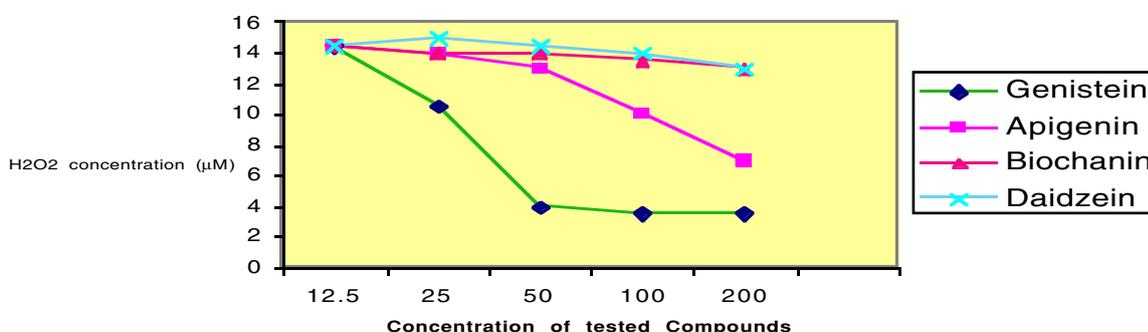
Ed march 05

**PHYTOBIOACTIVES**

# SOYA ISOFLAVONS

*Natural source of youth*

**Inhibition of free radical formations (test on cell culture)**



## Compounds contained in soya isoflavons decrease significantly the free radicals (H<sub>2</sub>O<sub>2</sub>) production

By decreasing the free radical damages, soya isoflavons play a protective role against external aggressions and are favourable for limiting the aging process.

It has also been showed that isoflavons have anti-inflammatory activity by decreasing the interleukin production induced by UVA (Noszczyk M., Jablonska S.)

- **FORMULATION** 0,5 to 1%
- **INCI NAME** Soybean (Glycine soja) Extract
- **CARACTERISTICS**

Organoleptics : Color brown

Solubility :  
Water low solubility  
Alcohol partially soluble

- **TOXICOLOGICAL TESTS**  
Cutaneous irritation No irritant
- **COSMETIC USES**

Soya Isoflavons is recommended to :

- Anti-aging cream for mature skin
- Protective cream
- Anti-aging cream



GREENTECH S.A  
Biopôle Clermont-Limagne  
63360 Saint-Beuzire - France  
Tel : 33 4 73 33 99 00 Fax : 33 4 73 33 91 32  
E-mail : greentech@greentech.fr - web site : www.greentech.fr

Ed march 05

**PHYTOBIOACTIVES**