

REFERENCE LIST FOR ISOFLAVONES DATABASE

1. Barnes, S., Kirk, M., and Coward, L.
Isoflavones and their conjugates in soy foods: Extraction conditions and analysis by HPLC-mass spectrometry.
J. Agric. Food Chem., 42(11), 1994, p.2466-2474.
soymilk, soy protein isolate, toasted soy flour
Daidzein, Genistein, Glycitein
2. Carrao-Panizzi, M., and Kitamura, K.
Isoflavone content in Brazilian soybean cultivars.
Breeding Science, 45(3), 1995, p.295-300.
Soybeans - early, intermediate and late maturing
Daidzein, Genistein
3. Choi, J-S., C., Kwon, T-W., and Kim, J-S.
Isoflavone contents in some varieties of soybean.
Foods and Biotechnology, 5(2), 1996, p.167-169.
soybeans (Korean- Black #1, Kwangan, Danbaik, Danyop, Manri, Moohan, Paikoon, Bokwang, Paldal, Sinpaldal, Janggyung, Jangsu, Janyop, Taekwang, Pureun, Hwaum, Hwangkeum, Sinpaldal #2)
Daidzein, Genistein
4. Coward, L., Kirk, M., Albin, N., and Barnes, S.
Analysis of plasma isoflavones by reversed-phase HPLC-multiple reaction ion monitoring-mass spectrometry.
Clinica Chimica Acta, 247 (1-2), 1996, p.121-142.
Soy protein isolate (beverages made with isolated soy proteins)
Daidzein, Genistein, Glycitein
5. Coward, L., Barnes, N., Setchell, K D R., and Barnes, S.
Genistein, Daidzein, and their β -glycoside conjugates: Antitumor isoflavones in soybean foods from American and Asian diets.
J. Agric. Food Chem., 41, 1993, p.1961-1967.
Soymilk, tofu (Tree of life), tofu (Mori-nu), soy flour, soy powder, soy nuts, tempeh, miso, rice miso, barley miso, shiro miso (soup mix), aka miso (soup mix), soybean paste, soybean paste (rice), soybean paste (wheat), soy sauce, soy cheese, toffuti, ice bean, soybean chips, soy flours (Nutrisoy, Nutrisoy B, baker's Nutrisoy, toasted Nutrisoy), soy concentrates (water extracted, Arcon F, Arcon S - alcohol extracted), soy isolate, soy fiber
Daidzein, Genistein
6. Dwyer, J. T., Goldin, B. R., Saul, N., Gualtieri, L., Barakat, S. and Adlercreutz, H.
Tofu and soy drinks contain phytoestrogens.
J. Am. Diet. Assoc., 94, 1994, p.739-743.
tofu (Kikkoman), tofu (Nasoya soft), tofu (Vitasoy silken), soy drink(first alternative), soy based formulas (Jevity isotonic, Enrich, Glucerna)

Daidzein, Genistein

7. Eldridge, A. C. and Kwolek, W. F.

Soybean isoflavones: Effect of environment and variety on composition.

J. Agric. Food Chem., 31, 1983, p.394-396.

Soybean flakes (fullfat and defatted, Tiger var.), soybeans (Hardin 1980, Clark, Amsoy, Amcor, Sprite, Century and Corsoy 1979 varieties)

Daidzein, Genistein, Glycitein

8. Farmakalidis, E., and Murphy, P. A.

Isolation of 6"-O-Acetylgénistin and 6"-O-Acetylđaidzin from toasted defatted soyflakes

J. Agric. Food Chem., 33, 1985, p.385-389.

soybeans (Amsoy 71-1982, Vinton 81-1982, Strayer, Weber)

Daidzein, Genistein

9. Fenner, G. P.

Low-temperature treatment of soybean (Glycine max) isoflavonoid aglycon extracts improves gas chromatographic resolution.

J. Agric. Food Chem., 44(12), 1996, p.3727-3729.

Soybean meal (glycine max)

Daidzein, Genistein

10. Franke, A. A., Custer, L. J., Wang, W., and Shi, C. Y.

HPLC analysis of isoflavonoids and other phenolic agents from foods and from human fluids.

Proc. Soc. Exp. Biol. Med., 217, 1998, p.263-273.

Soy beans (raw, dry, Singapore), soy beans (roasted), soybeans (toasted), green soy bean pods, soy protein, soy bean sprouts, tofu (raw), tofu (fermented, Singapore), curd (fermented), soy milk, soy cheese, Foo Jook (skimmed , dry supernatant, raw, Singapore), Foo Jook (cooked), Tau Kwa, raw (pressed tofu, raw, Singapore), Tau Pok, raw (fried Tau Kwa, Singapore), bean curd (fried).

Daidzein, Genistein, Glycitein

11. Franke, A. A., Custer, L. J., Cerna, C. M., and Narala, K.

Rapid HPLC analysis of dietary phytoestrogens from legumes and from human urine.

Proc. Soc. Exp. Biol. Med., 208, 1995, p.18-26.

Soy beans (dry, U.S., Japan), Soy beans , roasted (Japan), Soy beans (fresh, raw), soy beans (boiled, U.S., Taiwan), Soy flour (U.S.), tofu, black soy beans (raw and boiled), red bean seeds (dry), broad beans (fried), small white beans (dry), kala chana seeds (dry), clover sprouts, alfalfa sprouts, black bean seeds, green beans (fresh raw and boiled), large lima beans (dry and boiled), garbanzo (dry), kidney beans (cooked), pinto beans (dry), white navy beans (dry), small lima beans (dry), great northern beans (dry), pink beans (dry), blackeyed beans (dry), yellow split beans (dry), mung beans (dry), red beans (boiled), lentils, urad dahl, masur dahl

Daidzein, Genistein, Coumestrol, Formononetin, Biochanin-A

12. Fukutake, M., Takahashi, M., Ishida, K., Kawamura, H., Sugimura, T., and Wakabayashi, K.

Quantification of genistein and genistin in soybeans and soybean products.
Food and Chemical Toxicology, 34(5), 1996, p.457-461.
Soybeans, soy nuts, fava beans, soy powder, soymilk, tofu, miso, natto, soy sauce
Genistein

13. Hutchins, A. M., Slavin, J. L., and Lampe, J. W.
Urinary isoflavonoid phytoestrogen and lignan excretion after consumption of fermented and unfermented soy products.
J. Am. Diet. Assoc., 95, 1995, p.545-551.
tempeh
Daidzein, Genistein

14. Jones, A. E., Price, K. R., and Fenwick, G. R.
Development and application of a high-performance liquid chromatographic method for the analysis of phytoestrogens.
J. Sci. Food Agric., 46, 1989, p.357-364.
soya milk, soya dessert, soya flakes
Daidzein, Genistein

15. Lu, L. W., Broemeling, L. D., Marshall, M. V., and Ramanujam, S.
A simplified method to quantify isoflavones in commercial soybean diets and human urine after legume consumption.
Cancer Epidemiology Biomarkers and Prevention, 4, 1995, p.497-503.
miso, soymilk (Banyan Foods, Plum Flower), Isomil
Daidzein, Genistein

16. Lu, L. W., Grady, J. J., Marshall, M. V., Ramanujam, V. M. S., and Anderson, K. E.
Altered time course of urinary daidzein and genistein excretion during chronic soya diet in healthy males.
Nutr. Cancer, 24, 1995, p.311-323.
soymilk (Banyan Foods)
Daidzein, Genistein

17. Mazur, W.M., Duke, J. A., Wähälä, k., Rasku, S., and Adlercreutz, H.
Isoflavonoids and lignans in legumes: Nutritional and health aspects in humans.
Nutritional Biochemistry, 9, 1998, p.193-200.
soy beans (Centennial, dry), soy beans (INIAP, dry), soy beans (Santa rosa, dry), soy beans (Chapman, dry), kidney beans (dry), red kidney beans (dry), pinto beans (dry), navy beans (Haricot, dry), White kidney beans (dry), lima beans (dry), American groundnuts (dry), pigeon peas (dry), chickpeas (Bengal gram, dry), spilt peas (green, yellow, chana dahl, dry), fenugreek, broad beans (dry), black gram(dry), cowpeas (blackeyed peas, dry), mung beans (green gram, dry), peanuts (groundnuts, dry), lentil (dry)
Daidzein, Genistein, Coumestrol, Formononetin, Biochanin-A, lignans (SECO, Matairesinol)

18. Mazur, W. M., Wähälä, K., Rasku, S., Salakka, A., Hase, T., and Adlercreutz, H.
Lignan and isoflavonoid concentrations in tea and coffee.

Brit. J. Nutr., 79(1), 1998, p.37-45.

Jasmine tea, green tea (Japan).

Daidzein, Genistein, Coumestrol, lignans (SECO, Matairesinol)

19. Mazur, W., Fotsis, T., Wähälä, K., Ojala, S., Salakka, A. and Adlercreutz, H.

Isotope dilution gas chromatographic-mass spectrometric method for the determination of isoflavonoids, coumestrol, and lignans in food samples.

Anal. Biochem., 233(2), 1996, p.169-180.

granola candy bar (USA), 9-grain bread, crisp bread, Finn crisp bread, sunflower seeds, country rye bread, lapacho tea (Tacoma heptaphylla), flax seed, soy flour (soyolk flour, Spillers, UK)
Daidzein, Genistein, Coumestrol, Formononetin, Biochanin-A, lignans (SECO, Matairesinol)

20. Murphy, P.A., Barua, K., and Song, T.

Soy isoflavones in foods: Database development.

In: American Chemical Society Symposium Series: Functional Foods: Overview and Diseases Prevention, ed. T. Shibamoto. In press.

Soy flour, soy isolate, soy concentrate (aqueous washed, alcohol washed), TVP (texturized vegetable protein), soy fiber

Daidzein, Genistein, Glycitein

21. Murphy, P. A., Song, T., Buseman, G., Barua, K., Beecher, G. R., Trainer, D., and Holden, J.

Isoflavones in retail and institutional soy foods.

J. Agric. Food Chem. In press.

Daidzein, Genistein, Glycitein

22. Murphy, P. A., Song, T., Buseman, G., and Barua, K.

Isoflavones in soy-based infant formulas.

J. Agric. Food Chem., 45, 1997, 4635-4638.

infant formulas: Gerber (powder), Prosobee (powder), Isomil (powder), Nursoy soy protein (powder and liquid concentrate), Enfamil next step (powder)

Daidzein, Genistein, Glycitein

23. Murphy, P.A. (Unpublished data)

infant formulas: Prosobee (powder), Gerber (powder), Isomil (powder), Nursoy soy protein (ready to feed), Enfamil next step (powder)

Daidzein, Genistein, Glycitein

24. Murphy, P.A. (Unpublished data)
green soy beans (Edame, dry), soy beans (small Jade Black), natto (DHA), natto (fermented soy beans), soy bean butter (full fat), natto Kibun, soy nuts (full fat), soy nuts (plain halves), soy flakes (white, not roasted), green soy beans (Edame, fresh)
Daidzein, Genistein, Glycitein
25. Naim, M., Gestetner, B., Zilkah, S., Birk, Y., and Bondi, A.
Soybean isoflavones, characterization, determination, and antifungal activity.
J. Agric. Food Chem., 22, 1976, p.806-810.
soybean flour (Wayne var.-1969)
Daidzein, Genistein, glycitein
26. Nguyenle, T., Wang, E., and Cheung, A. P.
An investigation on the extraction and concentration of isoflavones in soy-based products.
J. Pharmaceutical and Biomedical Analysis, 14, 1995, p.221-232.
Infant formulas: Isomil (ready to feed), Nursoy (liquid concentrate), Prosobee (liquid concentrate), soy flours (Central soya - Soyafluffy), Centex, Promax, Promax plus, ADM - Nutrisoy, TVP, Acron-F, Acron-S, Cargill Protein Products -200/20, 200/70, Arrowhead, Molly farm, Sun Ridge Farm, soy drink, tempeh, soy concentrates (Procon, Promine), TVP (Response)
Daidzein, Genistein
27. Padgette, S. R., Taylor, N. B., Nida, D. L., Bailey, M. R., MacDonald, J., Holden, L. R., and Fuchs, R. L.
The composition of glyphosate-tolerant soybean seeds is equivalent to that of conventional soybeans.
J. Nutr., 126(3), 1996, p.702-716.
soybean meal (A5403, Asgrow maturity group V, 1993)
Daidzein, Genistein
28. Petterson, H., and Kiessling, K-H.
Liquid chromatographic determination of the plant estrogens coumestrol and isoflavones in animal feed.
J. Assoc. Off. Anal. Chem., 67(3), 1984, p.503-506.
defatted soybean meal and whole soybean meal in animal feed
Daidzein, Genistein, Formononetin, Biochanin-A
29. Pratt, D. E., and Birac, P. M.
Source of antioxidant activity of soybeans and soy products.
J. Food Sci., 44, 1979, p.1720-1722.
soybeans, Corsoy var., Glycine max
Daidzein, Genistein, Glycitein, Cinnamic acids (Chlorogenic, Caffeic, p-coumeric, Ferulic)

30. Seo, A., and Morr, C.V.
Improved high-performance liquid chromatographic analysis of phenolic acids and isoflavonoids from soybean protein products.
J. Agric. Food Chem., 32, 1984, p.530-533.
defatted soy flakes, soy protein isolates (Ralston Purina co.)
Daidzein, Genistein, some phenolic compounds
31. Setchell, K. D. R., Zimmer-Nechemias, L., Cai, J., and Heubi, J. E.
Exposure of infants to phyto-oestrogens from soy-based infant formula.
Lancet, 350, 1997, p.23-27.
infant soy formula: Nursoy (powder), Isomil (powder), Prosobee (liquid concentrate)
Total isoflavones
32. Setchell, K. D. R., and Welsh, M. B.
High-performance liquid chromatographic analysis of phytoestrogens in soy protein preparations with ultraviolet, electrochemical and thermospray mass spectrometric detection.
J. Chromatography, 386, 1987, p.315-323.
textured soy protein, soy flakes, Prosobee (ready to feed), Isomil (ready to feed)
Daidzein, Genistein
33. Wang, C., Ma, Q., Pagadala, S., Sherrad, MS., and Krishnan, PG.
Changes of isoflavones during processing of soy protein isolates.
J. Am. Oil Chemists Society, 75(3), 1998, p.337-341.
Soy flour (defatted), soy protein isolate (made in lab)
Daidzein, Genistein, Glycitein
34. Wang, G., Kuan, S. S., Francis, O. J., Ware, G. M., and Carman, A. S.
A simplified HPLC method for the determination of phytoestrogens in soybean and its processed products.
J. Agric. Food Chem., 38, 1990, p.185-190.
soybeans, defatted soy meal, tofu-hard, tofu-soft, tofu-dry-spiced, soymilk skin(film), soymilk, soy sauce, soy paste-hot, soy paste-sweet, tofu-fermented, soy sprouts (homemade), soy sprouts (grocery)
Daidzein, Genistein, Formononetin, Coumestrol
35. Wang, H-J., and Murphy, P. A.
Mass balance study of isoflavones during soybean processing.
J. Agric. Food Chem., 44(8), 1996, p.2377-2383.
soybeans (Vinton 81, 1992), soybeans (Vinton 81, 1993), soybean flour, products made in the lab - tempeh, soymilk, okara, tofu (momen or cotton, CaSo₄ coag.), whey, soy protein isolate, defatted soy flour
Daidzein, Genistein, Glycitein

36. Wang, H-J., and Murphy, P. A.

Isoflavone content in commercial soybean foods.

J. Agric. Food Chem., 42, 1994, p.1666-1673.

soybean (Vinton 81 90H), soybean (Vinton 81, 91I), green soybeans, defatted soy flour, soy granule, TVP, soy isolate, roasted soybeans, instant beverage (dry samples), tofu (CaSO₄ ppt), tempeh, bean paste, fermented bean curd, Honzukuri miso (rice and soybeans), soy hot dog, soy bacon, Tempeh burger, tofu yogurt, soy Parmesan, cheddar cheese, mozzarella cheese, flat noodles

Daidzein, Genistein, Glycitein

37. Wang, H-J., and Murphy, P. A.

Isoflavone composition of American and Japanese soybeans in Iowa: Effects of variety, crop year, and location.

J. Agric. Food Chem., 42, 1994, p.1674-1677.

soybeans (Vinton 81-1989, 1990, 1991 at 3 locations), 1989 crops of Pioneer II, Strayer 2233, Pioneer 9202, Prize, HP 204, LS301, XL72

Daidzein, Genistein, Glycitein

38. Xu, X., Wang, H-J., Murphy, P. A., Cook, L., and Hendrich, S.

Daidzein is a more bioavailable soymilk isoflavone than is genistein in adult women.

J. Nutr., 124, 1994, p.825-832.

soymilk (powder, Now Foods)

Daidzein, Genistein

39. International Formula Council. Calculated "As Fed" values for individual and total isoflavones in 100 g Ross Isomil Formula, reconstituted from powder. Unpublished data. 2001. Infant formula (Isomil)

Daidzein, Genistein, Glycitein, total isoflavones