USDA Database for the Isoflavone Content of Selected Foods

Release 2.0

Prepared by the

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Release History

Release 1 - April 1999

- Release 1.1 contains a few minor corrections to descriptions for infant formula – (August 2000).
- Release 1.2 contains corrections to the values for formononetin and biochanin A in red clover – (March 2002).
- Release 1.3 contains corrections to one infant formula and adds data for another – (July 2002).
- Release 1.4 contains corrections to the values for soybean butter; soy flour, full fat, roasted; soybeans, immature seeds, raw (Edamame); and soybeans, mature seeds, dry roasted (soy nuts) – (April 2007).

Release 2 – September 2008

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Documentation

Isoflavones, a subclass of flavonoids, have weak estrogenic, as well as other biological properties that may contribute to the reduction of the risk of some chronic diseases. Soy isoflavones alone and along with soy proteins lower serum total and LDL cholesterol in humans (Taku et al., 2007). A review of clinical trials of soy isoflavones suggests some skeletal benefits in younger postmenopausal women (Messina et al., 2004). Although evidence for the beneficial role of isoflavones in breast cancer has become conflicted, results of clinical trials for prostate cancer are encouraging (Messina et al., 2006) and non-hormonal properties of isoflavones, including cell cycle arrest and cell apoptosis, may reduce the risk of some cancers (Sarkar and Li, 2004). The database for the isoflavone content of foods is necessary to assess the effects of the intake of isoflavones on various biological parameters. Since soybeans are a major source of dietary isoflavones and soybeans and soybean products are also a good source of protein, inclusion of soy foods in the diet is recommended.

The Nutrient Data Laboratory (NDL) of ARS/USDA, in collaboration with the Iowa State University, released a Special Interest Database on isoflavones in foods in 1999. Some values in the database were updated when the NDL received new values for certain foods from the industry or recognized the need for other changes (see Release History). With the approval of a health claim for soy proteins from the Food and Drug Administration (FDA) in 1999, the number of new soy products and their consumption has increased, thus increasing the need to update the 1999 database.

Methods and procedures for generating the database

Searches were conducted on various databases of scientific literature. Articles containing analytical data for isoflavones in foods and ingredients, published in refereed journals since 1999, were collected for the update. The analytical method for isolating and quantifying isoflavones described by Murphy, et al. (1997) was used as the reference method for evaluating analytical methodologies in the published articles. Only the free (aglycone) forms of the isoflavones are absorbed by the gut to exert their potentially protective effects (Murphy, et al., 1997). Therefore the values for glucoside forms were converted into aglycone (free) forms by using appropriate ratios of molecular weights and were added to their respective free-form values to generate values for each aglycone form: daidzein, genistein, and glycitein for each food sample analyzed in the published article. Simple addition of free and glucoside forms of isoflavone concentrations without this correction will overestimate true isoflavone aglycone concentration by almost a factor of two (Wang and Murphy, 1996). Values in the database are reported as mg/100g of fresh weight of edible portion of food. Values expressed on a dry weight basis were converted to wet weight basis by using either published moisture content or by moisture content reported in the USDA National Nutrient Database for Standard Reference (SR) for that particular food (NDL, 2007). Values for beverages were adjusted by their respective specific gravities and are reported as mg/100g. Zero values reported in the database and the coumestrol, formononetin, and biochanin A table are true zero values, indicating that analysts attempted to measure the compound/s in that food and did not

find it and reported as not detected (nd). Trace values were calculated by multiplying the limit of detection (LOQ) by 0.71 (Mangels et al., 1993) if the LOQs were available. The lack of a value for a particular isoflavone in a food in the database does not imply a zero value, but only that data were unavailable at that point in time. Many of the older reports of the soy food analyses did not report values for glycitein because of difficulties in detecting relatively small amounts present in the foods (5%-10% of total isoflavones).

Data quality evaluation

Data for only the most prominent isoflavones: daidzein, genistein, glycitein, and their glucosides were evaluated using the Data Quality Evaluation System (DQES) developed by NDL scientists (Holden et al., 2005, Holden et al., 2002). In Release 1 of the database, the data were evaluated by the expert system described by Mangels et al., (1993). This system was modified by Holden et al., (2002) to assess the documentation in greater detail. The five general categories of assessment—sampling plan, sample handling, analytical method, analytical quality control, and number of samples—were retained, but the rating point ranges for each category were expanded from 0-3 to 0-20 and the method of rating the categories at the point of aggregation was revised. Therefore, all the data in Release 1 of the database were re-evaluated according to the modified system before aggregating with the new data. The ratings for each of the five categories are summed to yield a quality index (QI) with the maximum possible score of 100 points. A confidence code (CC) is derived from the QI and is an indicator of the relative quality of the data and the reliability of a given mean. The confidence code of "A" implies the highest quality data.

Table 1.— QI ranges for Confidence Codes

QI	CC
75-100	A
74-50	B
49-25	C
<25	D

Data analysis

The data for foods and ingredients were aggregated and matched with the food descriptions in the SR, where possible. Each food was assigned a nutrient data bank (NDB) number (a five digit numerical code used in the SR) if the food matched the respective food in the SR. As the data came from various sources, both in the United States and other countries, there are data for a number of foods which are not included in the SR database. In these cases, a temporary NDB number was assigned. These numbers begin with "99" or "97" and are not unique to this database, as they may have been used in other special interest databases produced by NDL. Subsequently, the mean value (mg/100g), standard deviation (SD), minimum (Min.), and maximum (Max.) values were determined for each isoflavone in each food. Mean values were weighted to account for the different number of samples among the various studies used. The weighted mean was, in turn, used to calculate the standard error based on the total number of samples in

each aggregated food. These values, along with the CC and sources of data, are given in the database.

Isoflavones table

The foods in the table are organized using the same food groups as in the SR. The table contains mean values, standard deviation (SD), and minimum (Min) and maximum (Max) values for individual aglycone forms: daidzein, genistein, and glycitein and the total isoflavone content. Where the values for the individual isoflavones and the total isoflavones were zero for a particular food item, they are reported in a separate table (p. 38). As mentioned earlier, glycitein contributes about 5%-10% to the total isoflavone content. Therefore, total isoflavone values were calculated if values were available for at least daidzein and genistein. The values for total isoflavones may not agree with the simple addition of the mean values of the three individual isoflavones since the mean values represent the aggregation of values from different sources. Several articles did not report glycitein values. Some articles reported values for genistein only. For example, soy flour, defatted (NDB No. 16117) has 49 data points for daidzein, 79 data points for genistein, 27 data points for glycitein and 49 data points for total isoflavones. The value (150.94 mg/100g) for the Total Isoflavones for soy flour in the database is a mean of 49 data points. A simple addition of the means for daidzein, genistein and glycitein will be 166.94 mg/100g. The discrepancies created by this procedure were evaluated and the differences were, in most cases, minor.

The user is reminded that the variety, the crop year, and the location affect the isoflavone content of soybeans (Wang and Murphy, 1994) and contribute to the large variability in the isoflavone content of soybeans, as well as soy foods. The soybean data, therefore, are presented divided into individual items from the following countries/regions: Australia (NDB No. 99574), Brazil (NDB No.99030), China (NDB No. 99488), Europe (NDB No. 99575), Japan (NDB No. 99092), Korea (NDB No. 99093), Taiwan (NDB No. 99040), and the United States (NDB No. 99576). The “all sources” (NDB No.16108) item contains aggregated data from all of the aforementioned countries. Individual data records aggregated to calculate the mean values for each of the above items are also included in the isoflavone database in the file “Soybean Detail” (Table 8). The method of extracting proteins (alcohol .vs. aqueous) in the processing of various soy products also affects the isoflavone contents; alcohol extraction reducing the contents significantly.

Other phytoestrogens

Coumestrol (the most common coumestan), though not an isoflavone, has a similar structure and competes with estradiol for cytoplasmic receptors in mammary tumor cells. biochanin A and formononetin, 4-methyl ether derivatives of genistein and daidzein respectively, are reduced to genistein and daidzein by the gut bacteria. These three compounds share the estrogenic/antiestrogenic, antioxidant, and antiproliferative activities of the prominent isoflavones (Mazur et al., 1996). Very few articles contained values for these three compounds. Therefore a separate table for their contents in foods

was prepared (p. 43).

Format of the Database

The USDA Database for the Isoflavone Content of Selected Foods is presented as a PDF file. A user will need the Adobe® Acrobat® reader to view the report of the database. For the convenience of the user, the isoflavone database is imported into a Microsoft® Access database (Isoflav_R2.mdb). This database follows the same structure as that used for the SR. This will allow the user to use the database on his/her own computer with other applications that can read/access Microsoft® Access files.

This database contains values for individual isoflavone compounds for 557 foods and 245 foods with zero values. It also incorporates the values for coumestrol, biochanin A, and formononetin. The files in the database are as follows:

Food Description File (file name = FOOD_DES). This file (Table 2) contains the descriptions of the food items. For those items in the SR* additional information (e.g., common names, percentage, and description of refuse) can be obtained by linking this table to the corresponding table in SR.

- Links to the Food Group Description file by FdGrp_Cd
- Links to the Isoflavone Data file by NDB No.
- Links to the Soybean Detail file by NDB No.

Table 2.—Food Description File Format

Field Name	Description
NDB_No†	5-Digit Nutrient Databank number that uniquely identifies a food item. Foods in the USDA Database on the Isoflavone content of Foods which do not have corresponding entries in SR* are assigned NDB Nos. starting with either '99' or '97'.
FDGrp_Cd	4-digit code indicating food group to which the food item belongs
Long_Desc	Description of the food item

* For more information on SR, see the NDL Web site (http://www.ars.usda.gov/nutrientdata) or contact the Nutrient Data Laboratory, 10300 Baltimore Avenue, Bldg. 005, Rm. 107, BARC-WEST, Beltsville, MD 20705. Tel. No. 301-504-0630, e-mail: ndlinfo@ars.usda.gov.
†Primary key for the food description file

Food Group Description File (file name = FD_GROUP). This file (Table 3) contains a list of food groups used in the isoflavone database and their descriptions.

- Links to the Food Description file by FdGrp_Cd

Table 3.—Food Group Description File Format

Field Name	Description
FdGrp_Cd*	4-digit code identifying a food group. Only the first 2 digits are currently assigned. In the future, the last 2 digits may be used. Codes may not be consecutive
FdGrp_Desc	Name of food group

* Primary key for the Food Group Description file.

Isoflavone Data File (file name = ISFL_DAT)**.** This file (Table 4) contains the isoflavone values and information about the values, including statistical information, confidence codes, and sources of data. It also includes data presented in separate tables on "Foods Containing Zero Values for Isoflavones" and "Coumesterol, Formononetin, and Biochanin-A in Selected Foods".

- Links to the Food Description file by NDB No.
- Links to the Nutrient Definition file by Nutr. No.
- Links to the Sources of Data file by DataSrc_ID though the Data Source Link file

Table 4.—Isoflavone Data File Format

Field Name	Description
NDB No.*	5-Digit Nutrient Databank number
Nutr_No*	Unique 3-digit identifier code for each isoflavone
Isfl_Val	The isoflavone value (mg/100 g) edible portion
SD	Standard deviation of the mean; null if could not be calculated
n	Number of data points used in calculating the value and SE
Min	Minimum value (mg/100 g) from data points used
Max	Maximum value (mg/100 g) from data points used
CC	Confidence Code, designated as A, B, C, or D as determined through the DQES
DataSrc_ID	Sources of Data. The full citation for each data source can be accessed by linking to the "Sources of Data" file through the "Source of Data Link" file

* Primary keys for Isoflavone Data file.

Nutrient Definition File (file name = NUTR_DEF). This file (Table 5) the nutrient number and the description of the isoflavone.

- Links to the Nutrient Data file by Nutr_No.

Table 5.—Nutrient Definition File Format

Field Name	Description
Nutr_No*	Unique 3-digit identifier code for each isoflavone
Description	Name of the isoflavone
Unit	Units of measure (e.g. mg)

* Primary key for Nutrient Definition file.

Sources of Data Link File (file name = DATSRCLN). This file (Table 6) is used to link the Nutrient Data file with the Sources of Data file. It is needed to resolve the many-to-many relationship between the two files.

- Links to the Nutrient Data file by NDB No. and Nutr_No.
- Links to the Sources of Data file by DataSrc_ID.

Table 6.—Sources of Data Link File Format

Field Name	Description
NDB_No*	5-digit Nutrient Databank number
Nutr_No*	Unique 3-digit identifier code for a nutrient
DataSrc_ID*	Unique ID identifying the reference/source

* Primary keys for the Sources of Data Link file.

Sources of Data File (file name = DATA_SRC). This file (Table 7) provides a citation to the DataSrc_ID in the Sources of Data Link file.

- Links to Isoflavone Data file by NDB No. through the Sources of Data Link file

Table 7.—Sources of Data File Format

Field Name	Description
DataSrc_ID*	Unique number identifying the reference/source
Authors	List of authors for a journal article or name of sponsoring organization for other documents
Title	Title of article or name of document, such as a report from a company or trade association
Year	Year article or document was published

Journal	Name of the journal in which the article was published
Vol	Volume number for journal articles, books, or reports
Start_Page	Starting page number of article/document
End_Page	Ending page number of article/document

* Primary key for the Sources of Data file.

Soybean Detail File (file name – SYBN_DTL). The Soybean Detail file (Table 8) contains the individual data records aggregated to calculate the mean values for raw soybeans from different countries/regions presented in the Isoflavone Data file (Table 8)

Table 8 –Soybean Detail File Format

Field Name	Description
NDB No.*	5-Digit Nutrient Databank number. Can be linked to the Food Description file, to access the name used in the database for the aggregated data
Nutr_No*	Unique 3-digit identifier code for an isoflavone. Links to the Nutrient Definition Table for Nutrient Descriptions
DataSrc_ID*	A unique ID identifying the data source document. The full citation for each data source can be accessed by linking to the "Sources of Data" file through the "Source of Data Link" file
FoodNo*	A unique identifier indicating a specific food item within the data source document
Food_Detail_ Desc	The description of the specific food items used in the data source document
NutrVal	The isoflavone value (mg/100 g, edible portion) given in the data source, converted to the aglycone form
StdDev	The standard deviation of the mean given in the data source, converted to the aglycone form
Num_Data_Pts	The number of data points given in the data source
SampHand_Rtg	DQES rating for sample handling based on the evaluation of information published in the data source document
AnalMeth_Rtg	DQES rating for analytical method based on evaluation of information published in the data source document
SampPlan_Rtg	DQES rating for the sampling plan based on evaluation of information published in the data source document
AnalQC_Rtg	DQES rating for analytical quality control based on evaluation of information published in the data source document
NumSamp_Rtg	DQES rating for the number of samples based on evaluation of information published in the data source document

CC	Confidence Code indicating data quality, based on evaluation of sample plan, sample handling, analytical method, analytical quality control, and number of samples analyzed (DQES)

* Primary keys for Soybean Detail file.

Sources of data

A complete list of the data sources from which the isoflavone values in the database were obtained is provided and corresponds to the information provided in the "Sources of Data" file (Table 7). It is also referenced in the Reference No. column in the data tables. Published references list authors, title, journal citation, as well as foods and isoflavones analyzed. Sources of unpublished data are also provided.

References cited in the documentation:

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(Units = mg/100 g, edible portion for Mean, Standard Deviation, Min and Max; N = number samples analyzed; CC = Confidence Code)

NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
	01 - Dairy and Eggs								
01123	Egg, whole, raw, fresh	Daidzein	0.03	1				D	31
		Genistein	0.02	1				D	31
		Total isoflavones	0.05	1				D	31
43528	Ensure plus, liquid nutrition	Daidzein	0.20	2		0.10	0.30	C	91
		Genistein	0.35	2		0.20	0.50	C	91
		Glycitein	0.00	2		0.00	0.00	C	91
		Total isoflavones	0.60	2		0.40	0.80	C	91
99485	Ensure, liquid nutrition	Daidzein	1.40	4	1.34	0.20	2.80	C	91
		Genistein	2.58	4	2.53	0.40	5.10	C	91
		Glycitein	0.28	4	0.32	0.00	0.60	C	91
		Total isoflavones	4.33	4	4.16	0.70	8.50	C	91
99533	Non-dairy creamer, with added soy flour or soy protein	Daidzein	0.06	1				D	31
		Genistein	0.14	1				D	31
		Total isoflavones	0.21	1				D	31
	02 - Spices and Herbs								
02019	Spices, fenugreek seed	Daidzein	0.01	3	0.00	0.01	0.01	C	57
		Genistein	0.01	3	0.00	0.01	0.01	C	57
		Total Isoflavones	0.02	3	0.00	0.02	0.02	C	57
	03 - Baby Food								
03843	Infant formula, ABBOTT NUTRITION, SIMILAC, ISOMIL, with iron, powder, not reconstituted	Daidzein	6.03	6	0.00	6.03	6.03	B	69,70
		Genistein	12.23	6	0.51	11.43	13.03	B	69,70
		Glycitein	2.73	6	0.02	2.70	2.77	B	69,70
		Total Isoflavones	25.82	11	2.85	20.17	31.60	A	69,70,85
03841	Infant formula, ABBOTT NUTRITION, SIMILAC, ISOMIL, with iron, ready-to-feed	Daidzein	0.73	11	0.41	0.39	1.91	A	37,86
		Genistein	1.37	11	0.37	0.86	2.26	A	37,86
		Glycitein	0.12	10	0.02	0.09	0.14	A	37
		Total isoflavones	2.21	11	0.74	1.34	4.17	A	37,86
03931	Infant formula, ENFAMIL NEXT STEP, powder, soy formula, not reconstituted	Daidzein	7.23	4	0.06	7.15	7.30	B	69,70
		Genistein	14.75	4	0.20	14.50	15.00	B	69,70
		Glycitein	3.00	4	0.04	2.95	3.05	B	69,70
		Total Isoflavones	25.00	4	0.08	24.90	25.10	B	69,70
03891	Infant formula, PBM PRODUCTS, ULTRA BRIGHT BEGINNINGS, soy, liquid concentrate, (formerly WYETH-AYERST)	Daidzein	0.98	5	0.16	0.79	1.25	B	70,75
		Genistein	2.69	5	0.46	2.19	3.45	B	70,75
		Glycitein	0.35	2		0.35	0.35	B	70
		Total Isoflavones	3.81	5	0.75	2.98	5.05	B	70,75
03893	Infant formula, PBM PRODUCTS, ULTRA BRIGHT BEGINNINGS, Soy, powder, (formerly WYETH-AYERST)	Daidzein	5.70	2		5.70	5.70	B	70
		Genistein	13.55	2		13.55	13.55	B	70
		Glycitein	2.05	2		2.05	2.05	B	70
		Total Isoflavones	28.01	7	2.95	21.30	30.70	B	70,85

(Units = mg/100 g, edible portion for Mean, Standard Deviation, Min and Max; N = number samples analyzed; CC = Confidence Code)

NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
03890	Infant formula, PBM PRODUCTS, ULTRA BRIGHT BEGINNINGS, Soy, ready-to-feed, (formerly WYETH-AYERST)	Daidzein	0.75	4	0.00	0.75	0.75	B	69
		Genistein	1.60	4	0.00	1.60	1.60	B	69
		Glycitein	0.28	4	0.00	0.28	0.28	B	69
		Total Isoflavones	2.63	4	0.00	2.63	2.63	B	69
	04 - Fats and Oils								
42178	Mayonnaise, made with tofu	Daidzein	5.50	5	0.00	5.50	5.50	C	64
		Genistein	11.30	5	0.00	11.30	11.30	C	64
		Total isoflavones	16.80	5	0.00	16.80	16.80	C	64
99423	Olive oil, extra-virgin	Daidzein	0.01	1				C	89
		Genistein	0.03	1				C	89
		Glycitein	0.00	1				C	89
		Total isoflavones	0.04	1				C	89
	05 - Poultry Products								
05327	Chicken breast tenders, uncooked	Daidzein	0.20	2		0.10	0.30	C	91
		Genistein	0.25	2		0.20	0.30	C	91
		Glycitein	0.00	2		0.00	0.00	C	91
		Total isoflavones	0.55	2		0.40	0.70	C	91
05323	Chicken patty, frozen, uncooked	Daidzein	0.25	2		0.20	0.30	C	91
		Genistein	0.30	2		0.30	0.30	C	91
		Glycitein	0.00	2		0.00	0.00	C	91
		Total isoflavones	0.55	2		0.50	0.60	C	91
	06 - Soups, Sauces, and Gravies								
99503	Black bean, sauce	Daidzein	5.96	2		2.30	9.62	C	31,89
		Genistein	4.04	2		2.49	5.58	C	31,89
		Glycitein	0.53	1				C	89
		Total isoflavones	10.26	2		5.32	15.19	C	31,89
06125	Gravy, turkey, canned, ready-to-serve	Daidzein	0.15	2		0.00	0.30	C	91
		Genistein	0.15	2		0.00	0.30	C	91
		Glycitein	0.05	2		0.00	0.10	C	91
		Total isoflavones	0.35	2		0.00	0.70	C	91
99494	Miso soup	Daidzein	0.78	2		0.43	1.13	C	31,89
		Genistein	0.73	2		0.44	1.01	C	31,89
		Glycitein	0.03	1				C	89
		Total isoflavones	1.52	2		1.47	1.56	C	31,89
99002	Miso soup mix, dry	Daidzein	29.84	7	12.59	20.75	59.30	B	13,50
		Genistein	40.00	7	11.46	33.69	67.20	B	13,50
		Total isoflavones	69.84	7	24.01	54.44	126.50	B	13,50

(Units = mg/100 g, edible portion for Mean, Standard Deviation, Min and Max; N = number samples analyzed; CC = Confidence Code)

NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
99543	Sauce mix, Betty Crocker, Hamburger Helper	Daidzein	0.10	2		0.10	0.10	C	91
		Genistein	0.10	2		0.10	0.10	C	91
		Glycitein	0.00	2		0.00	0.00	C	91
		Total isoflavones	0.20	2		0.20	0.20	C	91
99544	Sauce mix, Scalloped potatoes	Daidzein	0.15	2		0.10	0.20	C	91
		Genistein	0.25	2		0.20	0.30	C	91
		Glycitein	0.00	2		0.00	0.00	C	91
		Total isoflavones	0.45	2		0.40	0.50	C	91
99547	Sauce mix, Rice-A-Roni, chicken flavor	Daidzein	1.40	1				C	91
		Genistein	1.10	1				C	91
		Glycitein	0.20	1				C	91
		Total isoflavones	2.70	1				C	91
06175	Sauce, hoisin, ready-to-serve	Daidzein	6.10	2		2.20	10.00	C	91
		Genistein	3.25	2		1.70	4.80	C	91
		Glycitein	0.55	2		0.20	0.90	C	91
		Total isoflavones	9.90	2		4.10	15.70	C	91
06971	Sauce, worcestershire	Daidzein	0.10	1				C	91
		Genistein	0.00	1				C	91
		Glycitein	0.00	1				C	91
		Total isoflavones	0.20	1				C	91
06016	Soup, cream of chicken, canned, condensed	Daidzein	0.00	1				C	91
		Genistein	0.10	1				C	91
		Glycitein	0.00	1				C	91
		Total isoflavones	0.10	1				C	91
06982	Soup, ramen noodle, beef flavor, dry	Daidzein	0.73	3	0.53	0.40	1.40	C	91
		Genistein	0.43	3	0.53	0.10	1.10	C	91
		Glycitein	0.07	3	0.11	0.00	0.20	C	91
		Total isoflavones	1.23	3	1.16	0.50	2.70	C	91
06983	Soup, ramen noodle, chicken flavor, dry	Daidzein	0.00	1				C	91
		Genistein	0.30	1				C	91
		Glycitein	0.00	1				C	91
		Total isoflavones	0.40	1				C	91
	07 - Sausages and Luncheon Meats								
07022	Frankfurter, beef	Daidzein	1.00	1				C	91
		Genistein	0.80	1				C	91
		Glycitein	0.10	1				C	91

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		Total isoflavones	1.90	1				C	91
07023	Frankfurter, beef and pork	Daidzein	0.05	2		0.00	0.10	C	89,91
		Genistein	0.05	2		0.00	0.10	C	89,91
		Glycitein	0.00	2		0.00	0.00	C	89,91
		Total isoflavones	0.15	2		0.00	0.30	C	89,91
99506	Frankfurter, beef, fat free	Daidzein	0.60	1				C	91
		Genistein	1.00	1				C	91
		Glycitein	0.10	1				C	91
		Total isoflavones	1.70	1				C	91
99507	Frankfurter, pork and chicken, lite	Daidzein	0.00	1				C	91
		Genistein	0.10	1				C	91
		Glycitein	0.00	1				C	91
		Total isoflavones	0.10	1				C	91
07075	Sausage, smoked link sausage, pork and beef	Daidzein	0.25	2		0.20	0.30	C	91
		Genistein	0.40	2		0.30	0.50	C	91
		Glycitein	0.00	2		0.00	0.00	C	91
		Total isoflavones	0.70	2		0.60	0.80	C	91
	08 - Breakfast Cereals								
08393	Cereals ready-to-eat, KASHI GOLEAN by Kellogg	Daidzein	8.40	1				C	91
		Genistein	7.70	1				C	91
		Glycitein	1.40	1				C	91
		Total isoflavones	17.40	1				C	91
99478	Cereals ready-to-eat, KELLOGG, KELLOGG'S COCO POPS (Purchased in the United Kingdom)	Daidzein	0.00	1				B	49
		Genistein	0.01	1				B	49
		Total isoflavones	0.01	1				B	49
99479	Cereals ready-to-eat, KELLOGG, KELLOGG'S CRUNCHY NUT CORN FLAKES (Purchased in the United Kingdom)	Daidzein	0.01	1				B	49
		Genistein	0.02	1				B	49
		Total isoflavones	0.03	1				B	49
99483	Cereals ready-to-eat, KELLOGG, KELLOGG'S START (Purchased in the United Kingdom)	Daidzein	0.01	1				B	49
		Genistein	0.01	1				B	49
		Total isoflavones	0.02	1				B	49
08385	Cereals ready-to-eat, KELLOGG'S, SMART START Soy Protein	Daidzein	41.90	1				C	91
		Genistein	41.90	1				C	91
		Glycitein	10.20	1				C	91
		Total isoflavones	93.90	1				C	91

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99532	Cereals ready-to-eat, NESTLES SHREDDIES (Purchased in the United Kingdom)	Daidzein	0.02	2		0.00	0.04	B	49
		Genistein	0.04	2		0.00	0.08	B	49
		Total isoflavones	0.06	2		0.00	0.11	B	49
99531	Museli	Daidzein	0.01	4	0.01	0.00	0.02	B	49
		Genistein	0.01	4	0.01	0.00	0.03	B	49
		Total isoflavones	0.02	4	0.02	0.00	0.05	B	49
	09 - Fruits and Fruit Juices								
09032	Apricots, dried, sulfured, uncooked	Daidzein	0.00	3	0.01	0.00	0.01	C	31,51,89
		Genistein	0.01	3	0.01	0.00	0.02	C	31,51,89
		Glycitein	0.00	1				C	89
		Total isoflavones	0.02	3	0.02	0.00	0.03	C	31,51,89
99521	Cranberries, boiled	Daidzein	0.00	1				D	89
		Genistein	0.01	1				D	89
		Glycitein	0.00	1				D	89
		Total isoflavones	0.01	1				D	89
99073	Currants, dried	Daidzein	0.00	1				D	89
		Genistein	0.01	1				D	89
		Glycitein	0.00	1				D	89
		Total isoflavones	0.01	1				D	89
09083	Currants, european black, raw	Daidzein	0.02	3	0.03	0.00	0.05	B	51,56,89
		Genistein	0.06	3	0.10	0.00	0.18	B	51,56,89
		Glycitein	0.00	1				C	89
		Total isoflavones	0.07	3	0.13	0.00	0.22	B	51,56,89
09087	Dates, deglet noor	Daidzein	0.00	2		0.00	0.00	C	51,89
		Genistein	0.01	2		0.00	0.01	C	51,89
		Glycitein	0.00	1				C	89
		Total isoflavones	0.01	2		0.00	0.01	C	51,89
09116	Grapefruit, raw, white, all areas	Daidzein	0.04	1				D	31
		Genistein	0.03	1				D	31
		Total isoflavones	0.06	1				D	31
09209	Orange juice, chilled, includes from concentrate	Daidzein	0.01	3	0.01	0.00	0.02	C	31,51,89
		Genistein	0.01	3	0.01	0.00	0.02	C	31,51,89
		Glycitein	0.00	1				C	89
		Total isoflavones	0.01	3	0.02	0.00	0.04	C	31,51,89
09231	Passion-fruit, (granadilla), purple, raw	Daidzein	0.01	1				B	51
		Genistein	0.01	1				B	51
		Total isoflavones	0.02	1				B	51
09292	Plums, dried (prunes),	Daidzein	0.00	1				B	51

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	stewed, without added sugar	Genistein	0.01	1				B	51
		Total isoflavones	0.02	1				B	51
09298	Raisins, seedless	Daidzein	0.03	3	0.03	0.00	0.06	C	31,51,89
		Genistein	0.05	3	0.06	0.01	0.12	C	31,51,89
		Glycitein	0.00	1				C	89
		Total isoflavones	0.08	3	0.09	0.01	0.18	C	31,51,89
	11 – Vegetables and Vegetable Products								
11001	Alfalfa seeds, sprouted, raw	Daidzein	0.02	8	0.05	0.00	0.15	B	24,31,66,89
		Genistein	0.02	8	0.04	0.00	0.12	B	24,31,66,89
		Glycitein	0.00	6	0.00	0.00	0.00	B	66,89
		Total isoflavones	0.04	8	0.09	0.00	0.27	B	24,31,66,89
11011	Asparagus, raw	Daidzein	0.03	2		0.00	0.06	C	31,50
		Genistein	0.00	2		0.00	0.00	C	31,50
		Total isoflavones	0.03	2		0.00	0.06	C	31,50
11053	Beans, snap, green, cooked, boiled, drained, without salt	Daidzein	0.01	4	0.01	0.00	0.01	B	24,50,89
		Genistein	0.02	4	0.02	0.00	0.03	B	24,50,89
		Glycitein	0.00	1				C	89
		Total isoflavones	0.03	4	0.02	0.00	0.04	B	24,50,89
11060	Beans, snap, green, frozen, all styles, unprepared	Daidzein	0.00	1		0.00	0.00	B	50
		Genistein	0.01	1		0.01	0.01	B	50
		Total isoflavones	0.02	1		0.02	0.02	B	50
11061	Beans, snap, green, frozen, cooked, boiled, drained without salt	Daidzein	0.01	1		0.01	0.01	B	50
		Genistein	0.02	1		0.02	0.02	B	50
		Total isoflavones	0.03	1		0.03	0.03	B	50
11052	Beans, snap, green, raw	Daidzein	0.01	4	0.01	0.00	0.01	B	24,31,50
		Genistein	0.01	4	0.01	0.00	0.03	B	24,31,50
		Total isoflavones	0.02	4	0.02	0.00	0.04	B	24,31,50
99549	Broccoli sprouts, raw	Daidzein	0.04	1				D	31
		Genistein	0.00	1				D	31
		Total isoflavones	0.04	1				D	31
99009	Clover sprouts, raw	Daidzein	0.04	2		0.00	0.07	C	24,31
		Genistein	0.21	2		0.07	0.35	C	24,31
		Total isoflavones	0.25	2		0.14	0.35	C	24,31
99571	Clover, red	Daidzein	11.00	13	0.00	11.00	11.00	B	46
		Genistein	10.00	13	0.00	10.00	10.00	B	46
		Total isoflavones	21.00	13	0.00	21.00	21.00	B	46
11215	Garlic, raw	Daidzein	0.01	2		0.00	0.01	C	31,89
		Genistein	0.02	2		0.01	0.02	C	31,89

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		Glycitein	0.00	1				C	89
		Total isoflavones	0.02	2		0.02	0.02	C	31,89
11043	Mung beans, mature seeds, sprouted, raw	Daidzein	0.06	11	0.12	0.00	0.39	B	31,50,64,73,89
		Genistein	0.08	11	0.15	0.00	0.42	B	31,50,64,73,89
		Glycitein	0.00	4	0.00	0.00	0.00	C	73,89
		Total isoflavones	0.10	10	0.24	0.00	0.81	B	31,64,73,89
11312	Peas, green, frozen, unprepared	Daidzein	0.00	1		0.00	0.00	B	50
		Genistein	0.01	1		0.01	0.01	B	50
		Total isoflavones	0.01	1		0.01	0.01	B	50
99489	Potatoes, new, raw	Daidzein	0.00	1		0.00	0.00	B	50
		Genistein	0.01	1		0.01	0.01	B	50
		Total isoflavones	0.01	1		0.01	0.01	B	50
11451	Soybeans, green, cooked, boiled, drained, without salt (includes edamame)	Daidzein	7.41	4	0.34	6.85	7.60	C	22,24
		Genistein	7.06	4	0.07	6.94	7.10	C	22,24
		Glycitein	4.60	3	0.00	4.60	4.60	C	22
		Total isoflavones	17.92	4	2.51	13.79	19.30	C	22,24
11450	Soybeans, green, raw (includes edamame)	Daidzein	20.34	35	12.80	0.01	54.90	B	2,24,34,68,73,87,100
		Genistein	22.57	35	16.92	0.04	62.07	B	2,24,34,68,73,87,100
		Glycitein	7.57	28	4.70	0.00	22.60	B	2,68,73,87,100
		Total isoflavones	48.95	35	30.32	0.05	120.94	B	2,24,34,68,73,87,100
11453	Soybeans, mature seeds, sprouted, cooked, steamed	Daidzein	5.00	2		5.00	5.00	C	22
		Genistein	6.70	2		6.70	6.70	C	22
		Glycitein	0.80	2		0.80	0.80	C	22
		Total isoflavones	12.50	2		12.50	12.50	C	22
11452	Soybeans, mature seeds, sprouted, raw	Daidzein	12.86	63	8.05	0.00	47.65	B	9,23,31,52,64,73,78,89,97
		Genistein	18.77	63	11.22	0.00	60.03	B	9,23,31,52,64,73,78,89,97
		Glycitein	2.88	49	1.59	0.00	8.41	B	52,73,89
		Total isoflavones	34.39	62	19.81	0.00	107.12	B	9,23,31,52,64,73,89,97
11507	Sweet potato, raw, unprepared	Daidzein	0.00	2		0.00	0.00	C	31,50
		Genistein	0.01	2		0.00	0.02	C	31,50
		Total isoflavones	0.01	2		0.00	0.02	C	31,50
11578	Vegetable juice cocktail, canned	Daidzein	0.00	1		0.00	0.00	D	89
		Genistein	0.01	1		0.01	0.01	D	89
		Glycitein	0.00	1		0.00	0.00	D	89
		Total isoflavones	0.01	1		0.01	0.01	D	89
	12 – Nuts and Seeds								
12061	Nuts, almonds	Daidzein	0.00	2		0.00	0.00	C	51,89
		Genistein	0.01	2		0.00	0.01	C	51,89

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		Glycitein	0.00	1				C	89
		Total isoflavones	0.01	2		0.00	0.02	C	51,89
12087	Nuts, cashew nuts, raw	Daidzein	0.00	1				D	89
		Genistein	0.01	1				D	89
		Glycitein	0.00	1				D	89
		Total isoflavones	0.01	1				D	89
12101	Nuts, chestnuts, european, boiled and steamed	Daidzein	0.00	2		0.00	0.00	C	51,89
		Genistein	0.01	2		0.00	0.02	C	51,89
		Glycitein	0.00	1				C	89
		Total isoflavones	0.01	2		0.00	0.02	C	51,89
12104	Nuts, coconut meat, raw	Daidzein	0.01	1				B	51
		Genistein	0.01	1				B	51
		Total isoflavones	0.02	1				B	51
12120	Nuts, hazelnuts or filberts	Daidzein	0.01	2		0.00	0.01	C	51,89
		Genistein	0.02	2		0.02	0.02	C	51,89
		Glycitein	0.00	1				C	89
		Total isoflavones	0.03	2		0.02	0.03	C	51,89
12151	Nuts, pistachio nuts, raw	Daidzein	1.88	2		0.07	3.68	C	29,89
		Genistein	1.75	2		0.10	3.40	C	29,89
		Glycitein	0.00	1				C	89
		Total isoflavones	3.63	2		0.18	7.08	C	29,89
12155	Nuts, walnuts, english	Daidzein	0.02	2		0.00	0.04	C	51,89
		Genistein	0.01	2		0.00	0.02	C	51,89
		Glycitein	0.00	1				C	89
		Total isoflavones	0.03	2		0.00	0.05	C	51,89
12220	Seeds, flaxseed	Daidzein	0.02	4	0.03	0.00	0.06	C	59,89
		Genistein	0.04	4	0.08	0.00	0.17	C	59,89
		Glycitein	0.06	1				C	89
		Total isoflavones	0.07	4	0.13	0.00	0.29	C	59,89
	13 – Beef Products								
23501	USDA Commodity, beef patties with VPP, frozen, cooked	Daidzein	0.67	5	0.33	0.30	1.05	B	66
		Genistein	1.09	5	0.42	0.50	1.65	B	66
		Glycitein	0.10	5	0.07	0.00	0.20	B	66
		Total Isoflavones	1.86	5	0.78	0.90	2.90	B	66
23506	USDA Commodity, beef patties with VPP, frozen, raw	Daidzein	0.35	5	0.17	0.20	0.55	B	66
		Genistein	0.77	5	0.28	0.35	1.10	B	66
		Glycitein	0.02	5	0.04	0.00	0.10	B	66

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		Total Isoflavones	1.14	5	0.46	0.55	1.75	B	66
	14 – Beverages								
14209	Coffee, brewed from grounds, prepared with tap water	Daidzein	0.03	2		0.00	0.05	C	31,89
		Genistein	0.01	2		0.00	0.02	C	31,89
		Glycitein	0.00	1				C	89
		Total isoflavones	0.04	2		0.00	0.07	C	31,89
99020	Lapacho tea (Tecoma heptaphylla)	Daidzein	0.02	3	0.00	0.02	0.02	C	59
		Genistein	0.03	3	0.00	0.03	0.03	C	59
		Total Isoflavones	0.05	3	0.00	0.05	0.05	C	59
99107	Tea, green, Japan	Daidzein	0.01	2		0.00	0.01	C	31,58
		Genistein	0.02	2		0.00	0.04	C	31,58
		Total Isoflavones	0.02	2		0.00	0.05	C	31,58
99106	Tea, jasmine, Twinings	Daidzein	0.01	1				C	58
		Genistein	0.03	1				C	58
		Total Isoflavones	0.05	1				C	58
	15 – Finfish and Shellfish Products								
15138	Crustaceans, crab, alaska king, imitation, made from surimi	Daidzein	0.05	2		0.00	0.10	C	91
		Genistein	0.05	2		0.00	0.10	C	91
		Glycitein	0.00	2		0.00	0.00	C	91
		Total isoflavones	0.10	2		0.00	0.20	C	91
15184	Fish, tuna, light, canned in water, without salt, drained solids	Daidzein	0.04	8	0.07	0.00	0.20	B	89,91
		Genistein	0.05	8	0.11	0.00	0.30	B	89,91
		Glycitein	0.00	8	0.00	0.00	0.00	B	89,91
		Total isoflavones	0.09	8	0.17	0.00	0.50	B	89,91
15185	Fish, tuna, white, canned in oil, without salt, drained solids	Daidzein	0.12	6	0.24	0.00	0.60	C	91
		Genistein	0.15	6	0.37	0.00	0.90	C	91
		Glycitein	0.02	6	0.04	0.00	0.10	C	91
		Total isoflavones	0.28	6	0.65	0.00	1.60	C	91
	16 – Legumes and Legume Products								
43212	Bacon bits, meatless	Daidzein	64.37	3	23.35	49.60	93.90	C	91
		Genistein	45.77	3	0.11	45.70	45.90	C	91
		Glycitein	8.33	3	1.32	7.50	10.00	C	91
		Total isoflavones	118.50	3	24.82	102.80	149.90	C	91
16104	Bacon, meatless	Daidzein	2.20	5	0.73	1.00	2.80	C	89,91,95
		Genistein	5.66	5	1.65	2.70	6.90	C	89,91,95
		Glycitein	1.50	5	1.06	0.10	2.40	C	89,91,95
		Total isoflavones	9.36	5	3.26	4.50	12.10	C	89,91,95
16001	Beans, adzuki, mature seeds, raw	Daidzein	0.36	9	0.16	0.00	0.57	B	61,73
		Genistein	0.23	9	0.10	0.00	0.36	B	61,73
		Glycitein	0.00	6	0.00	0.00	0.00	C	73

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		Total isoflavones	0.59	9	0.25	0.00	0.91	B	61,73
16006	Beans, baked, canned, plain or vegetarian	Daidzein	0.00	4	0.00	0.00	0.00	B	50,89,99
		Genistein	0.01	4	0.01	0.00	0.01	B	50,89,99
		Glycitein	0.00	2	0.00	0.00	0.00	C	89,99
		Total isoflavones	0.01	4	0.01	0.00	0.01	B	50,89,99
16014	Beans, black, mature seeds, raw	Daidzein	0.01	3	0.01	0.00	0.02	C	2,24,31
		Genistein	0.00	3	0.00	0.00	0.00	C	2,24,31
		Glycitein	0.00	1				C	2
		Total Isoflavones	0.01	3	0.01	0.00	0.02	C	2,24,31
99486	Beans, common, raw (Phaseolus vulgaris)	Daidzein	0.29	9	0.25	0.01	0.80	C	2,82
		Genistein	0.30	9	0.17	0.04	0.60	C	2,82
		Glycitein	0.00	3	0.01	0.00	0.01	C	2
		Total isoflavones	0.59	9	0.42	0.09	1.40	C	2,82
16019	Beans, cranberry (roman), mature seeds, raw	Daidzein	0.00	1				C	2
		Genistein	0.00	1				C	2
		Glycitein	0.01	1				C	2
		Total Isoflavones	0.01	1				C	2
16033	Beans, kidney, red, mature seeds, cooked, boiled, without salt	Daidzein	0.01	2		0.00	0.01	B	24,50
		Genistein	0.01	2		0.00	0.01	B	24,50
		Total isoflavones	0.01	2		0.00	0.02	B	24,50
16032	Beans, kidney, red, mature seeds, raw	Daidzein	0.01	2		0.01	0.02	B	50,57
		Genistein	0.01	2		0.00	0.02	B	50,57
		Total isoflavones	0.02	2		0.01	0.04	B	50,57
16037	Beans, navy, mature seeds, raw	Daidzein	0.01	2		0.00	0.01	C	24,57
		Genistein	0.20	2		0.00	0.41	C	24,57
		Total Isoflavones	0.21	2		0.00	0.42	C	24,57
16042	Beans, pinto, mature seeds, raw	Daidzein	0.01	3	0.01	0.00	0.02	C	24,31,57
		Genistein	0.17	3	0.30	0.00	0.52	C	24,31,57
		Total Isoflavones	0.18	3	0.31	0.00	0.54	C	24,31,57
99026	Beans, red, mature seeds, raw	Daidzein	0.00	2		0.00	0.00	C	24,31
		Genistein	0.16	2		0.00	0.31	C	24,31
		Total Isoflavones	0.16	2		0.00	0.31	C	24,31
99493	Beans, scarlet runner, mature seeds, cooked	Daidzein	0.04	1				B	50
		Genistein	0.05	1				B	50
		Total isoflavones	0.09	1				B	50
99492	Beans, scarlet runner, mature seeds, raw	Daidzein	0.05	5	0.07	0.00	0.17	B	50,73
		Genistein	0.07	5	0.09	0.00	0.23	B	50,73
		Glycitein	0.00	3	0.00	0.00	0.00	C	73
		Total isoflavones	0.12	5	0.16	0.00	0.39	B	50,73

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NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
16045	Beans, small white, mature seeds, raw	Daidzein	0.00	2		0.00	0.00	C	24,31
		Genistein	0.37	2		0.00	0.74	C	24,31
		Total Isoflavones	0.37	2		0.00	0.74	C	24,31
16050	Beans, white, mature seeds, cooked, boiled, without salt	Daidzein	0.01	1				D	89
		Genistein	0.03	1				D	89
		Glycitein	0.00	1				D	89
		Total isoflavones	0.04	1				D	89
16049	Beans, white, mature seeds, raw	Daidzein	0.00	1				C	2
		Genistein	0.01	1				C	2
		Glycitein	0.01	1				C	2
		Total Isoflavones	0.02	1				C	2
16047	Beans, yellow, mature seeds, raw	Daidzein	0.26	7	0.12	0.00	0.40	C	2,82
		Genistein	0.17	7	0.07	0.00	0.20	C	2,82
		Glycitein	0.00	1				C	2
		Total isoflavones	0.43	7	0.19	0.00	0.60	C	2,82
99008	Broadbeans (fava beans), mature seeds, fried	Daidzein	0.00	1				C	24
		Genistein	1.29	1				C	24
		Total Isoflavones	1.29	1				C	24
16052	Broadbeans (fava beans), mature seeds, raw	Daidzein	0.33	10	1.00	0.00	3.27	B	2,50,57,61,73
		Genistein	0.15	13	0.52	0.00	1.93	B	2,25,50,57,61,73
		Glycitein	0.28	4	0.50	0.00	1.10	B	2,73
		Total isoflavones	0.63	10	1.93	0.00	6.30	B	2,50,57,61,73
16173	Chicken nuggets, meatless, canned, prepared (WORTHINGTON FriChik)	Daidzein	4.35	1				B	66
		Genistein	9.35	1				B	66
		Glycitein	0.90	1				B	66
		Total Isoflavones	14.60	1				B	66
16513	Chicken nuggets, meatless, canned, unprepared (WORTHINGTON FriChik)	Daidzein	3.45	1				B	66
		Genistein	7.90	1				B	66
		Glycitein	0.85	1				B	66
		Total Isoflavones	12.20	1				B	66
16557	Chicken patties, meatless (MORNINGSTAR FARMS Chik Patties Original)	Daidzein	1.80	1				C	91
		Genistein	2.20	1				C	91
		Glycitein	0.40	1				C	91
		Total isoflavones	4.40	1				C	91
16057	Chickpeas (garbanzo beans, bengal gram), mature seeds, cooked, boiled, without salt	Daidzein	0.00	1				B	50
		Genistein	0.02	1				B	50
		Total isoflavones	0.02	1				B	50

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NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
16056	Chickpeas (garbanzo beans, bengal gram), mature seeds, raw	Daidzein	0.23	10	0.20	0.00	0.65	B	2,24,31,50,57,73
		Genistein	0.06	10	0.04	0.00	0.14	B	2,24,31,50,57,73
		Glycitein	0.22	4	0.41	0.00	0.89	B	2,73
		Total isoflavones	0.38	10	0.31	0.00	1.06	B	2,24,31,50,57,73
16062	Cowpeas, common (blackeyes, crowder, southern), mature seeds, raw	Daidzein	0.01	4	0.01	0.00	0.03	C	24,31,57
		Genistein	0.02	4	0.02	0.00	0.03	C	24,31,57
		Total Isoflavones	0.03	4	0.03	0.00	0.06	C	24,31,57
43130	Frankfurter, meatless (purchased in Germany)	Daidzein	5.78	6	0.00	5.78	5.78	C	81
		Genistein	6.43	6	0.00	6.43	6.43	C	81
		Glycitein	0.06	6	0.00	0.06	0.06	C	81
		Total isoflavones	12.27	6	0.00	12.27	12.27	C	81
22116	Franks, meatless, canned, prepared (LOMA LINDA Big Franks)	Daidzein	1.35	1				B	66
		Genistein	2.00	1				B	66
		Glycitein	0.40	1				B	66
		Total Isoflavones	3.75	1				B	66
22126	Franks, meatless, canned, unprepared (LOMA LINDA Big Franks)	Daidzein	1.00	1				B	66
		Genistein	2.05	1				B	66
		Glycitein	0.30	1				B	66
		Total Isoflavones	3.35	1				B	66
16158	Hummus, commercial	Daidzein	0.00	1				D	89
		Genistein	0.01	1				D	89
		Glycitein	0.00	1				D	89
		Total isoflavones	0.01	1				D	89
99018	Instant beverage, soy, powder, not reconstituted	Daidzein	40.07	18	8.23	29.50	70.00	B	13,95,101
		Genistein	62.18	18	3.69	55.00	73.15	B	13,95,101
		Glycitein	10.90	12	0.15	10.50	11.10	B	95
		Total Isoflavones	109.51	18	5.46	100.10	125.00	B	13,95,101
99019	Kala chana, mature seeds, raw	Daidzein	0.00	1				C	24
		Genistein	0.64	1				C	24
		Total Isoflavones	0.64	1				C	24
16069	Lentils, raw	Daidzein	0.01	8	0.02	0.00	0.06	B	2,24,31,50,57
		Genistein	0.05	8	0.12	0.00	0.36	B	2,24,31,50,57
		Glycitein	0.00	2		0.00	0.00	C	2
		Total isoflavones	0.06	8	0.14	0.00	0.42	B	2,24,31,50,57
16072	Lima beans, large, mature seeds, cooked, boiled, without salt	Daidzein	0.01	3	0.02	0.00	0.03	B	24,50
		Genistein	0.03	3	0.05	0.00	0.08	B	24,50
		Total isoflavones	0.01	2		0.00	0.01	B	24,50
16076	Lupins, mature seeds, raw	Daidzein	0.10	1				C	2
		Genistein	0.15	1				C	2

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		Glycitein	0.00	1				C	2
		Total Isoflavones	0.25	1				C	2
16112	Miso	Daidzein	16.43	72	7.69	1.81	47.12	B	8,13,22,55,61,66,74,89,90,95,102
		Genistein	23.24	78	8.37	1.45	52.40	B	8,13,22,25,55,61,66,74,89,90,95,102
		Glycitein	3.00	41	0.81	0.80	5.34	B	22,66,74,89,90,95
		Total isoflavones	41.45	72	16.17	3.26	99.52	B	8,13,22,55,61,66,74,89,90,95,102
16081	Mung beans, mature seeds, cooked, boiled, without salt	Daidzein	0.01	2		0.00	0.01	C	50,89
		Genistein	0.01	2		0.00	0.01	C	50,89
		Glycitein	0.00	1				C	89
		Total isoflavones	0.01	2		0.00	0.02	C	50,89
16080	Mung beans, mature seeds, raw	Daidzein	0.00	13	0.00	0.00	0.01	B	24,50,57,64,73
		Genistein	0.09	13	0.09	0.00	0.37	B	24,50,57,64,73
		Glycitein	0.00	3	0.00	0.00	0.00	B	73
		Total isoflavones	0.09	13	0.10	0.00	0.38	B	24,50,57,64,73
16083	Mungo beans, mature seeds, raw	Daidzein	0.01	7	0.01	0.00	0.02	B	24,57,73
		Genistein	0.01	7	0.01	0.00	0.03	B	24,57,73
		Glycitein	0.00	3	0.00	0.00	0.00	C	73
		Total isoflavones	0.02	7	0.02	0.00	0.05	B	24,57,73
16113	Natto	Daidzein	33.22	21	9.48	16.02	55.30	B	9,22,66,68,74,90
		Genistein	37.66	27	7.85	21.52	59.37	B	9,22,25,66,68,74,90
		Glycitein	10.55	18	3.74	3.67	19.80	A	22,66,68,74,90
		Total isoflavones	82.29	21	18.60	46.40	124.10	B	9,22,66,68,74,90
99498	Oncom	Daidzein	6.60	3	0.00	6.60	6.60	B	34
		Genistein	3.10	3	0.00	3.10	3.10	B	34
		Total isoflavones	9.70	3	0.00	9.70	9.70	B	34
99499	Oncom, fried	Daidzein	5.50	3	0.00	5.50	5.50	B	34
		Genistein	1.00	3	0.00	1.00	1.00	B	34
		Total isoflavones	6.50	3	0.00	6.50	6.50	B	34
16098	Peanut butter, smooth style, with salt	Daidzein	0.00	2		0.00	0.00	C	31,51
		Genistein	0.01	2		0.00	0.01	C	31,51
		Total isoflavones	0.01	2		0.00	0.01	C	31,51
16150	Peanut butter, smooth, reduced fat	Daidzein	1.30	4	0.93	0.00	2.20	C	89,91
		Genistein	0.69	4	0.67	0.04	1.60	C	89,91
		Glycitein	0.08	4	0.05	0.00	0.10	C	89,91
		Total isoflavones	2.09	4	1.62	0.04	4.00	C	89,91
16090	Peanuts, all types, dry-roasted, with salt	Daidzein	0.00	1				B	51
		Genistein	0.02	1				B	51
		Total isoflavones	0.02	1				B	5
16087	Peanuts, all types, raw	Daidzein	0.02	9	0.01	0.01	0.05	B	51,57

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NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
		Genistein	0.24	9	0.11	0.02	0.39	B	51,57
		Total isoflavones	0.26	9	0.11	0.02	0.39	B	51,57
16086	Peas, split, mature seeds, cooked, boiled, without salt	Daidzein	0.00	2		0.00	0.00	B	50
		Genistein	0.01	2		0.01	0.01	B	50
		Total isoflavones	0.02	2		0.01	0.02	B	50
16085	Peas, split, mature seeds, raw	Daidzein	0.33	22	1.53	0.00	7.26	B	24,31,50,57,61,73
		Genistein	0.11	22	0.17	0.00	0.80	B	24,31,50,57,61,73
		Glycitein	0.00	9	0.00	0.00	0.00	B	73
		Total isoflavones	0.44	22	1.52	0.00	7.26	B	24,31,50,57,61,73
16101	Pigeon peas (red gram), mature seeds, raw	Daidzein	0.02	3	0.00	0.02	0.02	C	57
		Genistein	0.54	3	0.00	0.54	0.54	C	57
		Total Isoflavones	0.56	3	0.00	0.56	0.56	C	57
99573	Sausage links, meatless, prepared (MORNINGSTAR FARMS Veggie Sausage Links)	Daidzein	0.75	3	0.00	0.75	0.75	B	66
		Genistein	2.70	3	0.00	2.70	2.70	B	66
		Glycitein	0.30	3	0.00	0.30	0.30	B	66
		Total Isoflavones	3.75	3	0.00	3.75	3.75	B	66
16546	Sausage links, meatless, unprepared (MORNINGSTAR FARMS Veggie Sausage Links)	Daidzein	1.18	3	0.00	1.18	1.18	B	66
		Genistein	2.45	3	0.00	2.45	2.45	B	66
		Glycitein	0.30	3	0.00	0.30	0.30	B	66
		Total Isoflavones	3.93	3	0.00	3.93	3.93	B	66
22122	Sausage patties, meatless (MORNINGSTAR FARMS Veggie Sausage Patties)	Daidzein	2.00	1				C	91
		Genistein	2.30	1				C	91
		Glycitein	0.30	1				C	91
		Total isoflavones	4.60	1				C	91
16107	Sausage, meatless	Daidzein	4.46	7	1.52	3.60	8.0	B	64,99
		Genistein	9.23	7	1.50	8.30	12.50	B	64,99
		Glycitein	2.30	2	0.74	1.80	2.80	C	99
		Total isoflavones	14.34	7	4.02	11.90	23.30	B	64,99
99472	Soy cheese, American	Daidzein	5.75	2		1.70	9.80	C	22
		Genistein	8.70	2		2.40	15.00	C	22
		Glycitein	3.50	2		1.70	5.30	C	22
		Total isoflavones	17.95	2		5.80	30.10	C	22
99041	Soy cheese, cheddar	Daidzein	1.83	7	0.93	0.20	3.40	B	22,95
		Genistein	2.11	7	1.07	0.50	4.00	B	22,95
		Glycitein	2.93	7	0.49	1.90	3.50	B	22,95
		Total isoflavones	6.87	7	2.28	3.40	10.90	B	22,95
99535	Soy cheese, Monterey Jack, fat-free	Daidzein	7.80	1				C	22
		Genistein	8.80	1				C	22
		Glycitein	2.10	1				C	22
		Total isoflavones	18.70	1				C	22

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99054	Soy cheese, mozzarella	Daidzein	1.14	5	0.64	0.30	2.10	B	22,95
		Genistein	2.60	5	1.30	0.30	3.60	B	22,95
		Glycitein	2.28	5	1.06	0.30	3.00	B	22,95
		Total isoflavones	6.02	5	2.69	0.90	7.70	B	22,95
99056	Soy cheese, parmesan	Daidzein	1.50	3	0.00	1.50	1.50	C	95
		Genistein	0.80	3	0.00	0.80	0.80	C	95
		Glycitein	4.10	3	0.00	4.10	4.10	C	95
		Total Isoflavones	6.40	3	0.00	6.40	6.40	C	95
99471	Soy cheese, swiss	Daidzein	1.80	1				C	22
		Genistein	4.40	1				C	22
		Glycitein	1.70	1				C	22
		Total isoflavones	7.90	1				C	22
99042	Soy cheese, unspecified	Daidzein	5.79	8	6.41	0.00	21.10	B	13,23,34
		Genistein	11.14	8	11.31	1.95	38.20	B	13,23,34
		Total Isoflavones	25.72	5	20.18	3.33	59.30	C	13,23
99043	Soy drink	Daidzein	2.75	5	1.23	0.70	4.12	C	16,75
		Genistein	5.10	5	1.80	2.10	7.10	C	16,75
		Total Isoflavones	7.85	5	3.04	2.80	11.22	C	16,75
99045	Soy fiber	Daidzein	18.80	6	1.41	16.58	21.03	B	13,67
		Genistein	21.68	6	2.89	17.11	26.26	B	13,67
		Glycitein	7.90	3	0.00	7.90	7.90	B	67
		Total Isoflavones	44.43	6	3.98	38.13	50.73	B	13,67
99080	Soy flour (textured)	Daidzein	67.69	35	19.25	24.80	123.25	B	11,28,42,50,65,67,75,83,86,91,95
		Genistein	89.42	35	26.96	33.50	150.00	B	11,28,42,50,65,67,75,83,86,91,95
		Glycitein	20.02	27	6.77	3.90	30.30	B	11,28,42,65,67,83,91,95
		Total isoflavones	172.55	35	50.01	68.60	295.55	B	11,28,42,50,65,67,75,83,86,91,95
16117	Soy flour, defatted	Daidzein	64.55	49	20.20	22.60	149.60	B	11,13,22,42,49,64,65,76,77,81,83,93,94,95
		Genistein	87.31	79	21.80	40.96	174.90	B	11,13,14,22,42,49,64,65,76,77,81,83,93,94,95
		Glycitein	15.08	27	11.75	2.70	59.30	B	11,22,42,65,81,83,93,94,95
		Total isoflavones	150.94	49	41.02	73.72	324.40	B	11,13,22,42,49,64,65,76,77,81,83,93,94,95
16115	Soy flour, full-fat, raw	Daidzein	72.92	60	19.02	18.20	130.92	B	18,23,24,59,67,71,75,77,91,94
		Genistein	98.77	60	20.21	36.80	145.23	B	18,23,24,59,67,71,75,77,91,94
		Glycitein	16.12	25	4.33	4.80	24.83	B	18,23,67,71,91,94
		Total Isoflavones	178.10	60	37.06	59.80	264.84	B	18,23,24,59,67,71,75,77,91,94
16116	Soy flour, full-fat, roasted	Daidzein	89.46	6	19.72	57.00	119.20	C	3,13,62,66
		Genistein	85.12	6	21.36	70.74	126.90	C	3,13,62,66

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		Glycitein	16.40	2		14.40	18.40	C	3,66
		Total isoflavones	165.04	6	51.03	130.00	260.50	C	3,13,62,66
99111	Soy hot dog, frozen, unprepared	Daidzein	0.40	1				C	91
		Genistein	0.60	1				C	91
		Glycitein	0.00	1				C	91
		Total isoflavones	1.00	1				C	91
99511	Soy lecithin	Daidzein	5.40	5	0.00	5.40	5.40	C	64
		Genistein	10.30	5	0.00	10.30	10.30	C	64
		Total isoflavones	15.70	5	0.00	15.70	15.70	C	64
16119	Soy meal, defatted, raw	Daidzein	80.77	8	9.17	57.47	87.45	C	1,97
		Genistein	114.71	8	18.42	68.35	127.38	C	1,97
		Glycitein	16.12	7	1.02	13.69	16.61	C	1
		Total isoflavones	209.58	8	32.71	125.82	225.15	C	1,97
99049	Soy noodles, flat	Daidzein	0.90	3	0.00	0.90	0.90	C	95
		Genistein	3.70	3	0.00	3.70	3.70	C	95
		Glycitein	3.90	3	0.00	3.90	3.90	C	95
		Total Isoflavones	8.50	3	0.00	8.50	8.50	C	95
99038	Soy paste	Daidzein	19.71	33	5.32	3.00	27.60	B	13,34,91,95,97
		Genistein	17.79	33	5.75	0.31	29.98	B	13,34,91,95,97
		Glycitein	6.05	4	3.01	1.10	7.70	B	91,95
		Total isoflavones	38.24	33	11.25	3.31	59.40	B	13,34,91,95,97
99060	Soy protein concentrate, aqueous washed	Daidzein	38.25	11	18.81	16.68	91.05	B	13,67
		Genistein	52.81	11	8.35	40.29	75.95	B	13,67
		Glycitein	4.94	8	0.49	4.27	6.05	B	67
		Total Isoflavones	94.65	11	25.75	61.23	167.00	B	13,67
16121	Soy protein concentrate, produced by alcohol extraction	Daidzein	5.78	21	3.83	0.79	21.09	B	13,67,75
		Genistein	5.26	21	1.78	1.29	10.73	B	13,67,75
		Glycitein	1.57	6	0.00	1.57	1.57	B	67
		Total Isoflavones	11.49	21	5.50	2.08	31.82	B	13,67,75
99560	Soy Protein Drink	Daidzein	27.98	8	18.19	8.70	64.10	B	22
		Genistein	42.91	8	25.44	14.20	84.50	B	22
		Glycitein	10.76	8	3.65	4.70	14.90	B	22
		Total isoflavones	81.65	8	46.04	27.60	163.50	B	22
16122	Soy protein isolate	Daidzein	30.81	49	12.73	7.70	68.89	B	1,3,11,12,13,19,23,67,84, 93,94,95
		Genistein	57.28	55	14.17	27.17	105.10	B	1,3,11,12,13,14,19,23,67, 84,93,94,95
		Glycitein	8.54	42	3.22	5.40	26.40	B	1,3,11,12,19,67,93,94,95
		Total isoflavones	91.05	49	26.00	46.50	199.25	B	1,3,11,12,13,19,23,67,84, 93,94,95
16125	Soy sauce made from hydrolyzed vegetable protein	Daidzein	0.10	1				B	66
		Genistein	0.00	1				B	66
		Glycitein	0.00	1				B	66

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NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
		Total Isoflavones	0.10	1				B	66
16123	Soy sauce made from soy and wheat (shoyu)	Daidzein	0.78	50	0.30	0.02	2.30	B	13,31,34,42,61,66,74,81,89,90,97
		Genistein	0.39	56	0.22	0.00	1.54	B	13,25,31,34,42,61,66,74,81,89,90,97
		Glycitein	0.14	39	0.07	0.00	0.45	B	42,66,74,81,89,90
		Total isoflavones	1.18	50	0.40	0.13	2.80	B	13,31,34,42,61,66,74,81,89,90,97
99510	Soy yogurt	Daidzein	13.77	5	12.39	3.36	30.90	B	22,89,99
		Genistein	16.59	5	9.83	6.57	29.80	B	22,89,99
		Glycitein	2.80	5	4.12	0.00	9.40	B	22,89,99
		Total isoflavones	33.17	5	26.16	10.23	70.10	B	22,89,99
99063	Soy-based liquid formula for adults, ABBOTT NUTRITION, ENRICH	Daidzein	0.14	2		0.14	0.14	C	16
		Genistein	0.40	2		0.40	0.40	C	16
		Total Isoflavones	0.54	2		0.54	0.54	C	16
99064	Soy-based liquid formula for adults, ABBOTT NUTRITION, GLUCERNA	Daidzein	0.21	4	0.21	0.02	0.50	C	16,91
		Genistein	0.33	4	0.32	0.06	0.80	C	16,91
		Glycitein	0.10	2		0.10	0.10	C	91
		Total isoflavones	0.57	4	0.56	0.08	1.40	C	16,91
99065	Soy-based liquid formula for adults, ABBOTT NUTRITION, JEVITY ISOTONIC	Daidzein	0.03	2		0.03	0.03	C	16
		Genistein	0.31	2		0.31	0.31	C	16
		Total Isoflavones	0.34	2		0.34	0.34	C	16
99105	Soybean butter, full fat, Worthington Foods, Inc.	Daidzein	0.22	1				B	68
		Genistein	0.30	1				B	68
		Glycitein	0.05	1				B	68
		Total Isoflavones	0.57	1				B	68
99072	Soybean chips	Daidzein	26.71	3	0.00	26.71	26.71	C	13
		Genistein	27.45	3	0.00	27.45	27.45	C	13
		Total Isoflavones	54.16	3	0.00	54.16	54.16	C	13
99034	Soybean, curd, fermented	Daidzein	12.18	5	1.91	9.00	14.30	C	23,95
		Genistein	21.12	5	1.15	19.20	22.40	C	23,95
		Glycitein	2.30	3	0.00	2.30	2.30	C	95
		Total Isoflavones	34.68	5	3.89	28.20	39.00	C	23,95
99035	Soybeans, flakes, defatted	Daidzein	37.47	10	24.37	13.92	88.04	C	18,20,38,80,84
		Genistein	91.22	10	41.85	44.41	156.06	C	18,20,38,80,84
		Glycitein	14.23	2		1.71	26.76	C	18,80
		Total Isoflavones	131.53	10	64.64	61.34	244.10	C	18,20,38,80,84
99036	Soybeans, flakes, full-fat	Daidzein	21.75	9	23.03	7.01	74.35	B	18,42,81,86
		Genistein	39.57	9	43.82	13.19	131.96	B	18,42,81,86
		Glycitein	1.12	8	0.35	0.92	1.90	B	18,42,81
		Total isoflavones	62.31	9	67.07	21.12	207.89	B	18,42,81,86
99100	Soybeans, green, mature	Daidzein	61.70	15	5.84	53.69	75.35	B	68,73,74,95

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NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
	seeds, raw	Genistein	60.07	15	12.13	33.50	91.72	B	68,73,74,95
		Glycitein	7.07	15	3.60	3.87	19.69	B	68,73,74,95
		Total isoflavones	128.83	15	18.66	100.93	186.76	B	68,73,74,95
99520	Soybeans, mature seeds, canned	Daidzein	26.15	4	0.64	25.80	27.20	B	34,42
		Genistein	25.15	4	12.87	18.10	46.30	B	34,42
		Glycitein	6.1	1				B	34,42
		Total isoflavones	52.82	4	16.29	43.90	79.60	B	34,42
16109	Soybeans, mature seeds, cooked, boiled, without salt	Daidzein	30.76	28	10.64	9.66	64.90	B	8,22,24,50,74,89,90
		Genistein	31.26	28	8.83	4.10	54.10	B	8,22,24,50,74,89,90
		Glycitein	3.75	23	1.53	0.85	9.20	B	22,74,89,90
		Total isoflavones	65.11	28	19.57	22.66	128.20	B	8,22,24,50,74,89,90
16111	Soybeans, mature seeds, dry roasted (includes soy nuts)	Daidzein	62.14	16	28.04	0.54	97.00	B	13,22,23,24,68,74,89,95
		Genistein	75.78	25	25.18	1.10	110.55	B	13,14,22,23,24,25,68,74,89,95
		Glycitein	13.33	12	8.69	0.00	30.70	B	22,23,68,74,89,95
		Total isoflavones	148.50	16	63.12	1.66	201.90	B	13,22,23,24,68,74,89,95
16108	Soybeans, mature seeds, raw (all sources)	Daidzein	62.07	1000	20.01	2.64	191.43	B	2,4,5,6,8,9,10,11,15,18,21,22,23,24,26,27,31,32,33,34,36,39,40,41,42,44,45,47,48,50,52,53,57,60,61,62,64,73,74,78,88,90,94,95,96,97,99,98,100,102,103,104
		Genistein	80.99	1003	22.64	5.56	276.21	B	2,4,5,6,8,9,10,11,15,18,21,22,23,24,25,26,27,31,32,33,34,36,39,40,41,42,44,45,47,48,50,52,53,57,60,61,62,64,73,74,78,88,90,94,95,96,97,99,98,100,102,103,104
		Glycitein	14.99	753	7.45	0.00	121.69	B	2,4,6,11,15,18,22,23,26,27,32,33,36,40,41,42,44,47,48,52,53,60,73,74,90,94,95,96,99,98,100,103,104
		Total isoflavones	154.53	999	43.07	10.04	440.72	B	2,4,5,6,8,9,10,11,15,18,21,22,23,24,26,27,31,32,33,34,36,39,40,41,42,44,45,47,48,50,52,53,57,60,61,62,64,73,74,88,90,94,95,96,97,99,98,100,102,103,104
99574	Soybeans, mature seeds, raw (Australia)	Daidzein	39.88	57	16.98	7.30	112	B	34,42,73
		Genistein	65.64	57	19.35	26.40	175	B	34,42,73
		Glycitein	17.12	51	4.10	7.29	42.4	B	42,73
		Total isoflavones	120.84	57	34.12	50.80	305.8	B	34,42,73
99030	Soybeans, mature seeds, raw (Brazil)	Daidzein	29.09	58	12.70	9.89	87.42	B	5,27
		Genistein	67.57	58	13.69	25.88	110.98	B	5,27
		Glycitein	13.10	14	3.58	4.56	20.49	B	27
		Total isoflavones	99.82	58	21.22	42.54	188.00	B	5,27
99488	Soybeans, mature seeds, raw (China)	Daidzein	53.38	22	13.89	24.40	96.00	B	9,73,74,104
		Genistein	57.98	22	5.60	43.35	72.30	B	9,73,74,104
		Glycitein	11.71	13	2.35	5.56	15.08	B	73,74,104
		Total isoflavones	118.28	22	21.20	77.67	182.80	B	9,73,74,104

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NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
99575	Soybeans, mature seeds, raw (Europe)	Daidzein	45.44	44	10.54	2.64	69.69	B	2,44,45,50,64,78,99
		Genistein	39.78	44	14.46	9.70	109.25	B	2,44,45,50,64,78,99
		Glycitein	22.37	32	8.19	0.00	50.58	A	2,44,99
		Total isoflavones	103.56	43	18.71	45.38	161.22	A	2,44,45,50,64,99
99092	Soybeans, mature seeds, raw (Japan)	Daidzein	45.95	49	22.47	7.45	113.80	B	24,61,62,73,74,96,102
		Genistein	74.33	52	23.56	13.00	156.70	B	24,25,61,62,73,74,96,102
		Glycitein	9.01	36	3.21	2.70	20.40	B	73,74,96
		Total isoflavones	130.65	49	41.17	34.22	253.09	B	24,61,62,73,74,96,102
99093	Soybeans, mature seeds, raw (Korea)	Daidzein	78.86	314	19.72	7.51	144.92	C	9,10,40,41,48,73,74,103
		Genistein	89.32	314	24.68	10.13	221.85	C	9,10,40,41,48,73,74,103
		Glycitein	18.76	178	7.13	1.25	47.82	C	40,41,48,73,74,103
		Total isoflavones	178.81	314	47.16	20.02	380.90	C	9,10,40,41,48,73,74,103
99040	Soybeans, mature seeds, raw (Taiwan)	Daidzein	27.77	22	18.10	3.31	94.75	B	24,33,39,52,98
		Genistein	45.88	22	16.78	5.56	83.55	B	24,33,39,52,98
		Glycitein	13.24	20	5.17	1.17	24.75	B	33,52,98
		Total isoflavones	85.68	22	33.42	10.04	196.60	B	24,33,39,52,98
99576	Soybeans, mature seeds, raw (United States)	Daidzein	61.33	399	21.48	9.88	191.43	B	4,6,8,11,15,18,21,22,24,26,31,32,47,53,57,60,73,74,88,94,95,96,97,98,100
		Genistein	86.33	399	20.30	19.79	180.19	B	4,6,8,11,15,18,21,22,24,26,31,32,47,53,57,60,73,74,88,94,95,96,97,98,100
		Glycitein	13.33	381	8.89	1.16	121.69	B	4,6,11,15,18,22,26,32,47,53,60,73,74,94,95,96,98,100
		Total Isoflavones	159.98	399	43.58	18.08	388.08	B	4,6,8,11,15,18,21,22,24,26,31,32,47,53,57,60,73,74,88,94,95,96,97,98,100
16229	Soymilk (All flavors), lowfat, with added calcium, vitamins A and D	Daidzein	1.01	1				C	11
		Genistein	1.51	1				C	11
		Glycitein	0.04	1				C	11
		Total isoflavones	2.56	1				C	11
16230	Soymilk (all flavors), nonfat, with added calcium, vitamins A and D	Daidzein	0.30	1				C	11
		Genistein	0.41	1				C	11
		Glycitein	0.00	1				C	11
		Total isoflavones	0.70	1				C	11
99568	Soymilk curd, dried	Daidzein	40.85	6	1.42	38.60	43.10	B	34
		Genistein	42.45	6	0.54	41.60	43.30	B	34
		Total isoflavones	83.30	6	0.89	81.90	84.70	B	34
99096	Soymilk skin or film (Foo jook or yuba), cooked	Daidzein	17.81	11	2.98	10.10	23.20	B	22,23
		Genistein	25.15	11	5.31	10.50	32.50	B	22,23
		Glycitein	2.69	7	0.55	1.60	3.50	B	22
		Total isoflavones	44.67	11	8.12	22.20	55.50	B	22,23
99053	Soymilk skin or film (Foo jook or yuba), raw	Daidzein	80.03	19	21.28	16.10	116.00	B	22,23,74,90,97
		Genistein	101.40	19	21.98	23.60	131.70	B	22,23,74,90,97
		Glycitein	15.43	18	2.99	4.09	18.40	B	22,23,74,90
		Total isoflavones	196.05	19	46.55	43.79	266.10	B	22,23,74,90,97

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NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
16168	Soymilk, fluid, chocolate, with added caclium, vitamins A and D	Daidzein	3.40	2		2.40	4.40	C	22,99
		Genistein	4.15	2		3.10	5.20	C	22,99
		Glycitein	0.25	2		0.00	0.50	C	22,99
		Total isoflavones	7.80	2		6.00	9.60	C	22,99
99014	Soymilk, iced	Daidzein	1.90	6	0.98	0.34	3.45	C	13
		Genistein	2.81	6	0.66	1.78	3.85	C	13
		Total Isoflavones	4.71	6	1.64	2.12	7.31	C	13
99559	Soymilk, made from soy isolate (purchased in Australia)	Daidzein	2.80	3	0.00	2.80	2.80	B	34
		Genistein	3.10	3	0.00	3.10	3.10	B	34
		Total isoflavones	5.90	3	0.00	5.90	5.90	B	34
99572	Soymilk, original and vanilla, fortified or unfortified	Daidzein	4.84	156	1.71	0.50	12.60	B	3,,9,11,13,17,22,23,31,34,38,42,45,54,55,61,63,66,74,79,81,89,90,94,97,99
		Genistein	6.07	162	0.47	0.40	16.80	B	3,7,9,11,13,17,22,23,25,31,34,38,42,45,54,55,61,63,66,74,79,81,89,90,94,97,99
		Glycitein	0.93	73	0.00	3.57	3.57	B	3,7,11,22,42,66,74,79,81,89,90,94,99
		Total isoflavones	10.73	156	3.99	1.10	31.03	B	3,7,9,11,13,17,22,23,31,34,38,42,45,54,55,61,63,66, 74,79,81,89,90,94,97,99
99497	Sufu	Daidzein	7.50	12	2.77	3.45	11.50	C	92,104
		Genistein	5.46	12	2.32	1.69	9.81	C	92,104
		Glycitein	0.78	12	0.46	0.23	1.96	C	92,104
		Total isoflavones	13.75	12	4.86	6.34	22.32	C	92,104
16114	Tempeh	Daidzein	22.66	28	8.99	4.67	59.69	B	13,34,35,65,66,72,75,94,95
		Genistein	36.15	28	17.64	1.11	112.21	B	13,34,35,65,66,72,75,94,95
		Glycitein	3.82	13	1.45	0.90	7.30	B	65,66,72,94,95
		Total isoflavones	60.61	28	27.44	6.88	179.20	B	13,34,35,65,66,72,75,94,95
99081	Tempeh burger	Daidzein	6.40	3	0.00	6.40	6.40	C	95
		Genistein	19.60	3	0.00	19.60	19.60	C	95
		Glycitein	3.00	3	0.00	3.00	3.00	C	95
		Total Isoflavones	29.00	3	0.00	29.00	29.00	C	95
16174	Tempeh, cooked	Daidzein	13.12	2		6.98	19.25	C	66,89
		Genistein	21.14	2		10.73	31.55	C	66,89
		Glycitein	1.39	2		0.57	2.20	C	66,89
		Total isoflavones	35.64	2		18.28	53.00	C	66,89
99500	Tempeh, fried	Daidzein	32.90	3	0.00	32.90	32.90	B	34
		Genistein	39.90	3	0.00	39.90	39.90	B	34
		Total isoflavones	72.80	3	0.00	72.80	72.80	B	34
43476	Tofu yogurt	Daidzein	5.70	3	0.00	5.70	5.70	C	95
		Genistein	9.40	3	0.00	9.40	9.40	C	95

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NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
		Glycitein	1.20	3	0.00	1.20	1.20	C	95
		Total Isoflavones	16.30	3	0.00	16.30	16.30	C	95
99084	Tofu, AZUMAYA, extra firm, cooked (steamed)	Daidzein	8.00	1				B	66
		Genistein	12.75	1				B	66
		Glycitein	1.95	1				B	66
		Total Isoflavones	22.70	1				B	66
99085	Tofu, AZUMAYA, firm, cooked	Daidzein	12.80	2		12.80	12.80	B	66
		Genistein	16.15	2		16.15	16.15	B	66
		Glycitein	2.40	2		2.40	2.40	B	66
		Total Isoflavones	31.35	2		31.35	31.35	B	66
16128	Tofu, dried-frozen (koyadofu)	Daidzein	29.59	4	2.58	25.34	31.00	C	74,97
		Genistein	51.04	4	5.41	42.15	54.00	C	74,97
		Glycitein	3.44	3	0.00	3.44	3.44	C	74
		Total isoflavones	83.20	4	9.56	67.49	88.44	C	74,97
16159	Tofu, extra firm, prepared with nigari	Daidzein	8.23	2		7.35	9.10	B	66
		Genistein	12.45	2		11.10	13.80	B	66
		Glycitein	1.95	2		1.70	2.20	B	66
		Total Isoflavones	22.63	2		20.15	25.10	B	66
99540	Tofu, firm, braised	Daidzein	7.28	4	0.00	7.28	7.28	C	79
		Genistein	8.22	4	0.00	8.22	8.22	C	79
		Glycitein	1.28	4	0.00	1.28	1.28	C	79
		Total isoflavones	16.79	4	0.00	16.79	16.79	C	79
99529	Tofu, firm, cooked	Daidzein	10.26	7	2.48	5.36	12.40	B	22,30,89
		Genistein	10.83	7	3.98	5.36	17.05	B	22,30,89
		Glycitein	1.35	5	0.32	0.73	1.50	C	22,89
		Total isoflavones	22.05	7	6.36	11.15	27.12	B	22,30,89
16126	Tofu, firm, prepared with calcium sulfate and magnesium chloride (nigari)	Daidzein	12.31	105	4.72	0.90	48.59	B	11,16,22,23,31,33,34,39,42,61,64,65,66,74,79,81,90,97,104
		Genistein	16.10	108	7.70	2.22	81.51	B	11,16,22,23,25,31,33,34,39,42,61,64,65,66,74,79,81,90,97,104
		Glycitein	2.75	70	1.28	0.57	12.20	B	11,22,23,33,42,65,66,74,79,81,90,104
		Total isoflavones	30.41	105	13.30	3.12	142.30	B	11,16,22,23,31,33,34,39,42,61,64,65,66,74,79,81,90,97,104
16129	Tofu, fried	Daidzein	13.80	39	2.70	7.20	24.70	B	22,23,34,66,74,79,90
		Genistein	18.43	39	4.67	8.30	35.10	B	22,23,34,66,74,79,90
		Glycitein	2.93	34	1.13	0.70	7.57	B	22,23,66,74,79,90
		Total isoflavones	34.78	39	7.32	16.20	65.10	B	22,23,34,66,74,79,90
16162	Tofu, MORI-NU, silken, firm	Daidzein	12.42	4	2.36	8.55	13.71	B	13,66
		Genistein	16.95	4	2.49	12.85	18.31	B	13,66

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NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
		Glycitein	2.40	1				B	66
		Total Isoflavones	29.97	4	3.75	23.80	32.02	B	13,66
16130	Tofu, okara	Daidzein	3.62	7	2.98	0.57	10.20	B	66,74,94
		Genistein	4.47	7	2.86	1.95	11.00	B	66,74,94
		Glycitein	1.30	7	0.38	1.09	2.20	B	66,74,94
		Total isoflavones	9.39	7	6.20	3.61	23.40	B	66,74,94
99097	Tofu, pressed (Tau kwa), raw	Daidzein	15.59	18	2.16	13.60	23.80	B	22,23,34
		Genistein	16.01	18	2.35	13.90	25.00	B	22,23,34
		Glycitein	2.77	15	0.85	2.00	5.70	B	22,23
		Total isoflavones	33.91	18	5.38	29.50	54.50	B	22,23,34
16427	Tofu, raw, regular, prepared with calcium sulfate	Daidzein	8.56	10	3.32	1.15	14.60	B	13,24,94,95
		Genistein	12.99	10	4.19	2.89	18.66	B	13,24,94,95
		Glycitein	1.98	6	0.59	1.05	2.90	C	94,95
		Total Isoflavones	22.73	10	7.33	5.09	33.70	B	13,24,94,95
16132	Tofu, salted and fermented (fuyu)	Daidzein	20.72	5	9.09	3.58	25.00	C	22,23,97
		Genistein	23.83	5	10.54	3.96	28.80	C	22,23,97
		Glycitein	4.95	4	0.04	4.90	5.00	C	22,23
		Total isoflavones	48.51	5	21.73	7.54	58.80	C	22,23,97
99495	Tofu, silken	Daidzein	9.15	25	2.32	2.94	16.60	B	34,36,79
		Genistein	8.42	25	1.50	4.95	13.60	B	34,36,79
		Glycitein	0.92	13	0.22	0.21	1.23	B	36,79
		Total isoflavones	18.04	25	3.47	8.10	26.90	B	34,36,79
99541	Tofu, smoked	Daidzein	7.50	3	0.00	7.50	7.50	B	34
		Genistein	5.60	3	0.00	5.60	5.60	B	34
		Total isoflavones	13.10	3	0.00	13.10	13.10	B	34
16127	Tofu, soft, prepared with calcium sulfate and magnesium chloride (nigari)	Daidzein	9.49	18	2.19	3.44	14.00	B	16,22,66,79,97
		Genistein	11.91	18	3.82	5.26	21.59	B	16,22,66,79,97
		Glycitein	1.68	13	0.53	1.03	3.00	B	22,66,79
		Total isoflavones	22.61	18	5.43	8.70	32.40	B	16,22,66,79,97
99086	Tofu, soft, VITASOY-silken	Daidzein	8.59	2		8.59	8.59	C	16
		Genistein	20.65	2		20.65	20.65	C	16
		Total Isoflavones	29.24	2		29.24	29.24	C	16
16147	Veggie burgers or soyburgers, unprepared	Daidzein	2.36	31	1.04	0.2	4.55	B	14,22,32,46,67,81,89,91,99
		Genistein	5.01	37	2.91	0	13.2	B	14,22,32,46,67,81,89,91,99
		Glycitein	0.55	25	0.45	0.00	1.70	B	22,66,81,89,91,99
		Total Isoflavones	6.39	31	2.86	0.3	12.4	B	22,32,46,67,81,89,91,99
	18 - Baked Products								
99001	9-grain bread	Daidzein	0.01	3	0.00	0.01	0.01	C	59
		Genistein	0.01	3	0.00	0.01	0.01	C	59
		Total Isoflavones	0.02	3	0.00	0.02	0.02	C	59
18079	Bread crumbs, dry, grated,	Daidzein	0.40	1				C	91

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NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
	plain	Genistein	0.30	1				C	91
		Glycitein	0.00	1				C	91
		Total isoflavones	0.70	1				C	91
18081	Bread stuffing, bread, dry mix	Daidzein	0.20	2		0.10	0.30	C	91
		Genistein	0.20	2		0.20	0.20	C	91
		Glycitein	0.00	2		0.00	0.00	C	91
		Total isoflavones	0.40	2		0.30	0.50	C	91
99523	Bread, brown (Purchased in the United Kingdom)	Daidzein	0.30	1				B	49
		Genistein	0.23	1				B	49
		Total isoflavones	0.52	1				B	49
99518	Bread, flax, commercially prepared	Daidzein	0.09	1				D	89
		Genistein	0.21	1				D	89
		Glycitein	0.00	1				D	89
		Total isoflavones	0.30	1				D	89
99524	Bread, granary (Purchased in the United Kingdom)	Daidzein	0.11	1				B	49
		Genistein	0.22	1				B	49
		Total isoflavones	0.34	1				B	49
18035	Bread, Multi-Grain (includes whole-grain)	Daidzein	0.20	4	0.23	0.00	0.40	C	89,91
		Genistein	0.15	4	0.17	0.00	0.30	C	89,91
		Glycitein	0.00	4	0.00	0.00	0.00	C	89,91
		Total isoflavones	0.38	4	0.43	0.00	0.80	C	89,91
99534	Bread, soy and linseed (purchased in Australia)	Daidzein	4.87	3	2.51	2.10	7.00	B	42
		Genistein	9.13	3	3.09	5.80	11.90	B	42
		Glycitein	0.67	3	0.70	0.00	1.40	B	42
		Total Isoflavones	14.67	3	5.46	8.50	18.90	B	42
99468	Bread, sweet (King's Hawaiian)	Daidzein	0.50	2		0.50	0.50	C	91
		Genistein	0.50	2		0.50	0.50	C	91
		Glycitein	0.05	2		0.00	0.10	C	91
		Total isoflavones	1.05	2		1.00	1.10	C	91
99476	Bread, taro rolls	Daidzein	0.45	2		0.40	0.50	C	91
		Genistein	0.35	2		0.30	0.40	C	91
		Glycitein	0.05	2		0.00	0.10	C	91
		Total isoflavones	0.90	2		0.80	1.00	C	91
18068	Bread, wheat germ	Daidzein	0.25	1				B	49
		Genistein	0.23	1				B	49
		Total isoflavones	0.49	1				B	49
18069	Bread, white, commercially	Daidzein	0.06	10	0.09	0.00	0.20	B	42,49,89,91,99

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NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
	prepared (includes soft bread crumbs)	Genistein	0.13	10	0.17	0.00	0.50	B	42,49,89,91,99
		Glycitein	0.00	9	0.00	0.00	0.00	B	42,89,91,99
		Total Isoflavones	0.19	10	0.25	0.00	0.70	B	42,49,89,91,99
99515	Bread, white, commercially prepared, with added soy flour or soy protein	Daidzein	0.74	3	0.23	0.60	1.00	C	31,91
		Genistein	0.68	3	0.24	0.40	0.83	C	31,91
		Glycitein	0.10	2		0.10	0.10	C	91
		Total isoflavones	1.48	3	0.40	1.10	1.90	C	31,91
99516	Bread, whole grain, commercially prepared, with added soy flour or soy protein	Daidzein	0.16	1				D	31
		Genistein	0.14	1				D	31
		Total isoflavones	0.30	1				D	31
99517	Bread, whole meal, commercially prepared, with added soy flour or soy protein	Daidzein	0.29	2		0.20	0.37	C	49,99
		Genistein	0.28	2		0.10	0.46	C	49,99
		Glycitein	0.00	1		0.00		C	99
		Total isoflavones	0.57	2		0.30	0.83	C	49,99
18127	Cake, snack cakes, creme-filled, chocolate with frosting	Daidzein	0.13	4	0.25	0.00	0.50	C	91
		Genistein	0.15	4	0.24	0.00	0.50	C	91
		Glycitein	0.00	4	0.00	0.00	0.00	C	91
		Total isoflavones	0.28	4	0.49	0.00	1.00	C	91
18133	Cake, sponge, commercially prepared	Daidzein	0.10	1				C	99
		Genistein	0.10	1				C	99
		Glycitein	0.00	1				C	99
		Total isoflavones	0.20	1				C	99
18150	Cookies, animal crackers (includes arrowroot, tea biscuits)	Daidzein	0.01	1				B	49
		Genistein	0.01	1				B	49
		Total isoflavones	0.03	1				B	49
18216	Crackers, crispbread, rye	Daidzein	0.01	10	0.00	0.00	0.01	B	49,59
		Genistein	0.01	10	0.00	0.00	0.01	B	49,59
		Total isoflavones	0.01	10	0.01	0.00	0.02	B	49,59
18217	Crackers, matzo, plain	Daidzein	0.00	1				B	49
		Genistein	0.01	1				B	49
		Total isoflavones	0.01	1				B	49
99550	Crispbread, multigrain (purchased In the Untied Kingdom)	Daidzein	0.61	1				B	49
		Genistein	0.58	1				B	49
		Total isoflavones	1.19	1				B	49
99551	Crispbread, wheat (purchased in the United Kingdom)	Daidzein	0.01	2		0.01	0.01	B	49
		Genistein	0.02	2		0.01	0.02	B	49
		Total isoflavones	0.02	2		0.02	0.02	B	49
18248	Doughnuts, cake-type, plain	Daidzein	2.58	7	1.33	1.06	4.70	B	89,91

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NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
	(includes unsugared, old-fashioned)	Genistein	2.44	7	1.11	1.60	4.40	B	89,91
		Glycitein	0.29	7	0.17	0.04	0.50	B	89,91
		Total isoflavones	5.31	7	2.57	2.87	9.60	B	89,91
18249	Doughnuts, cake-type, plain, chocolate-coated or frosted	Daidzein	1.90	2		1.70	2.10	C	91
		Genistein	1.65	2		1.50	1.80	C	91
		Glycitein	0.20	2		0.20	0.20	C	91
		Total isoflavones	3.70	2		3.30	4.10	C	91
18250	Doughnuts, cake-type, plain, sugared or glazed	Daidzein	0.50	1				C	91
		Genistein	0.50	1				C	91
		Glycitein	0.10	1				C	91
		Total isoflavones	1.10	1				C	91
99509	Doughnuts, with added soy lfour or soy protein	Daidzein	1.30	1				D	31
		Genistein	3.22	1				D	31
		Total isoflavones	4.52	1				D	31
18255	Doughnuts, yeast-leavened, glazed, enriched (includes honey buns)	Daidzein	0.30	1				C	91
		Genistein	0.20	1				C	91
		Glycitein	0.00	1				C	91
		Total isoflavones	0.60	1				C	91
99508	English muffins, with added soy flour or soy protein	Daidzein	0.23	3	0.25	0.00	0.50	C	31,91
		Genistein	0.21	3	0.20	0.00	0.40	C	31,91
		Glycitein	0.00	2		0.00	0.00	C	91
		Total isoflavones	0.47	3	0.40	0.10	0.90	C	31,91
18356	Sweet rolls, cinnamon, commercially prepared with raisins	Daidzein	0.70	2		0.60	0.80	C	91
		Genistein	0.65	2		0.60	0.70	C	91
		Glycitein	0.10	2		0.10	0.10	C	91
		Total isoflavones	1.50	2		1.40	1.60	C	91
	19 - Sweets								
99564	Desserts, frozen, Glace Soymilk	Daidzein	7.00	1				C	91
		Genistein	6.20	1				C	91
		Glycitein	0.90	1				C	91
		Total isoflavones	14.00	1				C	91
99563	Desserts, frozen, Tofutti Nondairy Original Premium	Daidzein	1.10	1				C	91
		Genistein	1.70	1				C	91
		Glycitein	0.10	1				C	91
		Total isoflavones	2.90	1				C	91
99474	Licorice, black, soft candy	Daidzein	0.16	2		0.02	0.29	C	31,89
		Genistein	0.31	2		0.02	0.60	C	31,89

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NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
		Glycitein	0.00	1				C	89
		Total isoflavones	0.47	2		0.05	0.89	C	31,89
99504	Pudding, made with soymilk	Daidzein	3.50	3	0.98	2.70	4.60	C	99
		Genistein	5.63	3	1.45	4.20	7.10	C	99
		Glycitein	0.00	3	0.00	0.00	0.00	C	99
		Total isoflavones	9.13	3	2.42	6.90	11.70	C	99
	20 - Cereal Grains and Pasta								
20005	Barley, pearled, raw	Daidzein	0.00	1				B	49
		Genistein	0.01	1				B	49
		Total isoflavones	0.01	1				B	49
20016	Corn flour, whole-grain, yellow	Daidzein	0.01	1				B	49
		Genistein	0.01	1				B	49
		Total isoflavones	0.01	1				B	49
20020	Cornmeal, whole-grain, yellow	Daidzein	0.01	1				B	49
		Genistein	0.01	1				B	49
		Total isoflavones	0.02	1				B	49
20029	Couscous, cooked	Daidzein	0.01	1				D	89
		Genistein	0.00	1				D	89
		Glycitein	0.00	1				D	89
		Total isoflavones	0.01	1				D	89
99553	Flour, wheat, various types (Purchased in the United Kingdom)	Daidzein	0.02	3	0.01	0.01	0.03	B	49
		Genistein	0.01	3	0.01	0.00	0.02	B	49
		Total isoflavones	0.03	3	0.02	0.01	0.04	B	49
20109	Noodles, egg, dry, enriched	Daidzein	0.01	1				B	49
		Genistein	0.01	1				B	49
		Total isoflavones	0.02	1				B	49
20095	Pasta, fresh-refrigerated, spinach, as purchased	Daidzein	0.00	1				B	49
		Genistein	0.01	1				B	49
		Total isoflavones	0.01	1				B	49
20036	Rice, brown, long-grain, raw	Daidzein	0.03	2		0.00	0.06	C	31,49
		Genistein	0.04	2		0.00	0.07	C	31,49
		Total isoflavones	0.07	2		0.00	0.13	C	31,49
20066	Semolina, enriched	Daidzein	0.01	1				B	49
		Genistein	0.02	1				B	49
		Total isoflavones	0.02	1				B	49
20121	Spaghetti, cooked, enriched, without added salt	Daidzein	0.00	1				B	49
		Genistein	0.01	1				B	49

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NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
		Total isoflavones	0.01	1				B	49
20120	Spaghetti, dry, enriched	Daidzein	0.01	1				B	49
		Genistein	0.01	1				B	49
		Total isoflavones	0.01	1				B	49
20124	Spaghetti, whole-wheat, dry	Daidzein	0.01	2		0.00	0.01	B	49
		Genistein	0.01	2		0.01	0.01	B	49
		Total isoflavones	0.02	2		0.01	0.02	B	49
20080	Wheat flour, whole-grain	Daidzein	0.00	1				B	49
		Genistein	0.01	1				B	49
		Total isoflavones	0.02	1				B	49
	21 - Fast Foods								
99554	Fast Food, Pizza chain, meat topping	Daidzein	0.15	2		0.10	0.20	C	91
		Genistein	0.20	2		0.10	0.30	C	91
		Glycitein	0.00	2		0.00	0.00	C	91
		Total isoflavones	0.35	2		0.20	0.50	C	91
99555	JACK IN THE BOX, Beef Monster Taco	Daidzein	2.60	1				C	91
		Genistein	13.10	1				C	91
		Glycitein	0.20	1				C	91
		Total isoflavones	15.90	1				C	91
21322	McDONALD'S, Warm Cinnamon Roll	Daidzein	4.40	1				C	91
		Genistein	0.90	1				C	91
		Glycitein	0.70	1				C	91
		Total isoflavones	6.00	1				C	91
22903	Pizza, pepperoni topping, regular crust, frozen, cooked	Daidzein	0.01	1				D	89
		Genistein	0.01	1				D	89
		Glycitein	0.00	1				D	89
		Total isoflavones	0.01	1				D	89
99569	Pizza, with added soy flour or soy protein	Daidzein	0.23	1				D	31
		Genistein	0.24	1				D	31
		Total isoflavones	0.47	1				D	31
99557	Subway, meatball sandwich	Daidzein	3.00	1				C	91
		Genistein	2.70	1				C	91
		Glycitein	0.30	1				C	91
		Total isoflavones	6.00	1				C	91
	22 - Meals, Entrees, and Sidedishes								

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NDB No.	Food Description	Nutrient	Mean	n	SD	Min	Max	CC	Reference No.
22932	CAMPBELL Soup Company, SPAGHETTIOS, SpaghettiOs A to Z's	Daidzein	0.20	1				C	91
		Genistein	0.30	1				C	91
		Glycitein	0.00	1				C	91
		Total isoflavones	0.60	1				C	91
22904	Chili con carne with beans, canned entree	Daidzein	1.25	4	1.48	0.00	3.40	C	91
		Genistein	1.03	4	0.98	0.10	2.40	C	91
		Glycitein	0.15	4	0.17	0.00	0.40	C	91
		Total isoflavones	2.43	4	2.57	0.10	6.10	C	91
22911	Chili, no beans, canned entree	Daidzein	1.00	3	0.82	0.10	1.70	C	91
		Genistein	1.10	3	0.66	0.40	1.70	C	91
		Glycitein	0.17	3	0.15	0.00	0.30	C	91
		Total isoflavones	2.20	3	1.57	0.50	3.60	C	91
22720	HORMEL Vegetarian Chili with Beans, canned entree	Daidzein	1.90	1				C	91
		Genistein	1.20	1				C	91
		Glycitein	0.20	1				C	91
		Total isoflavones	3.30	1				C	91
99491	Ravioli, canned with beef in tomato sauce	Daidzein	0.43	4	0.29	0.00	0.60	C	91
		Genistein	0.38	4	0.26	0.00	0.60	C	91
		Glycitein	0.08	4	0.05	0.00	0.10	C	91
		Total isoflavones	0.83	4	0.56	0.00	1.20	C	91
	25 Snacks								
99528	Bar, TIGER'S MILK PROTEIN RICH	Daidzein	4.90	1				C	91
		Genistein	5.90	1				C	91
		Glycitein	0.70	1				C	91
		Total isoflavones	11.50	1				C	91
99565	Formulated bar, Balance Yogurt Honey Peanut Flavor	Daidzein	11.80	1				C	91
		Genistein	13.60	1				C	91
		Glycitein	1.20	1				C	91
		Total isoflavones	26.60	1				C	91
99538	Formulated bar, Cliff Bar Crunchy Peanut Butter Flavor	Daidzein	13.30	1				C	91
		Genistein	13.00	1				C	91
		Glycitein	0.60	1				C	91
		Total isoflavones	26.90	1				C	91
99539	Formulated bar, Cliff Luna Nuts Over Chocolate Flavor	Daidzein	8.10	1				C	91
		Genistein	8.40	1				C	91
		Glycitein	1.20	1				C	91
		Total isoflavones	17.70	1				C	91
25017	Formulated bar, POWER	Daidzein	1.80	1				D	31

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	BAR, chocolate	Genistein	3.27	1				D	31
		Total isoflavones	5.07	1				D	31
25013	Snacks, FRITOLAY, SUNCHIPS, Multigrain Snack, original flavor	Daidzein	0.10	1				C	91
		Genistein	0.00	1				C	91
		Glycitein	0.00	1				C	91
		Total isoflavones	0.10	1				C	91
19015	Snacks, granola bars, hard, plain	Daidzein	0.05	3	0.00	0.05	0.05	C	59
		Genistein	0.08	3	0.00	0.08	0.08	C	59
		Total Isoflavones	0.13	3	0.00	0.13	0.13	C	59

List of Foods Containing Zero Values for Isoflavones

NDB No	Ref. No.	Description
	01 – Dairy and Eggs	
01056	31	Cream, sour, cultured
01079	89	Milk, reduced fat, fluid, 2% milkfat, with added vitamin A
01077	31,43	Milk, whole, 3.25% milkfat
01116	31	Yogurt, plain, whole milk, 8 grams protein per 8 ounce
	02 –Spices and Herbs	
02046	31	Mustard, prepared, yellow
	04 – Fats and Oils	
42299	66	Oil, canola and soybean
04044	66	Oil, soybean, salad or cooking
	06 – Soups, Sauces and Gravies	
06118	91	Gravy, brown, dry
06119	91	Gravy, chicken, canned, ready-to-serve
06121	91	Gravy, mushroom, canned
06122	91	Gravy, mushroom, dry, powder
99545	91	Sauce mix, Betty Crocker, Tuna Helper
99546	91	Sauce mx, Rice-A-Roni, beef flavor
06075	91	Soup, beef broth or bouillon, powder, dry
06183	91	Soup, chicken broth, canned, less/reduced sodium
06194	91	Soup, chicken broth, canned, ready-to-serve
06019	91	Soup, chicken noodle, canned, condensed
06419	89	Soup, chicken noodle, canned, prepared with equal volume water
06043	91	Soup, cream of mushroom, canned, condensed
99501	91	Soup, New England clam chowder
99502	89	Soup, pea, reheated
06065	91	Soup, turkey noodle, canned, condensed
06071	91	Soup, vegetable beef, canned, condensed
06468	89	Soup, vegetarian vegetable, canned, prepared with equal volume water
99496	34	Sweet sauce, fermented (Kecap manis, purchased in Indoensia)
	07 – Sausages and Luncheon Meats	
07956	89	Beef sausage, fresh, cooked
07905	91	Frankfurter, beef, pork, and turkey, fat free
07029	89	Ham, sliced, regular (approximately 11% fat)
07083	91	Sausage, Vienna, canned, chicken, beef, pork
	08 – Breakfast Cereals	
08013	89	Cereals ready-to-eat, GENERAL MILLS, CHEERIOS
08390	91	Cereals ready-to-eat, KASHI Good Friends by Kellogg
08001	49	Cereals ready-to-eat, KELLOGG, KELLOGG'S ALL-BRAN Original
99477	49	Cereals ready-to-eat, KELLOGG, KELLOGG'S BRAN FLAKES (Purchased in the United Kingdom)
08020	49	Cereals ready-to-eat, KELLOGG, KELLOGG'S Corn Flakes
99480	49	Cereals ready-to-eat, KELLOGG, KELLOGG'S FROSTIES (Purchased in the United Kingdom)
99481	49	Cereals ready-to-eat, KELLOGG, KELLOGG'S FRUIT AND FIBER (Purchased in the United Kingdom)
08065	49	Cereals ready-to-eat, KELLOGG, KELLOGG'S RICE KRISPIES
99482	49	Cereals ready-to-eat, KELLOGG, KELLOGG'S RICICLES (Purchased in the United Kingdom)
08067	49	Cereals ready-to-eat, KELLOGG, KELLOGG'S SPECIAL K
99484	49	Cereals ready-to-eat, KELLOGG, KELLOGG'S SULTANA BRAN (Purchased in the United Kingdom)
99561	49	Cereals ready-to-eat, QUAKER, Sugar Puffs (Purchased in the United Kingdom)
99522	49	Cereals ready-to-eat, Ready Brek (Purchased in the United Kingdom)
42237	49	Cereals ready-to-eat, WEETABIX WHOLE WHEAT CEREAL
08090	31	Cereals, corn grits, white, regular and quick, enriched, dry
08102	31	Cereals, CREAM OF WHEAT, regular, dry
99562	49	Cereals, Scots Porridge oats, raw (purchased in the United Kingdom)
	09 – Fruits and Fruit Juices	
09016	31	Apple juice, canned or bottled, unsweetened, without added ascorbic acid
97069	51	Apples, Golden Delicious, raw, with skin
97068	51	Apples, Golden Delicious, raw, without skin
97070	51	Apples, Granny Smith, raw, with skin
09003	31,51,89	Apples, raw, with skin
09004	51	Apples, raw, without skin
09005	51	Apples, raw, without skin, cooked, boiled
09024	51	Apricots, canned, juice pack, with skin, solids and liquids
09032	89	Apricots, dried, sulfured, uncooked
09021	31,51	Apricots, raw

List of Foods Containing Zero Values for Isoflavones

NDB No	Ref. No.	Description
09037	31,51	Avocados, raw, all commercial varieties
09040	31,51,89	Bananas, raw
09042	56	Blackberries, raw
09050	56,89	Blueberries, raw
09070	51	Cherries, sweet, raw
09433	51	Clementines, raw
99337	56	Cloudberries, raw
09078	51,56	Cranberries, raw
99044	56	Currants, red, raw
09094	51	Figs, dried, uncooked
09089	51	Figs, raw
09099	51	Fruit cocktail, (peach and pineapple and pear and grape and cherry), canned, light syrup, solids and liquids
09107	51	Gooseberries, raw
09123	31	Grapefruit juice, white, canned, unsweetened
09112	89	Grapefruit, raw, pink and red, all areas
09120	51	Grapefruit, sections, canned, juice pack, solids and liquids
99048	51	Grapes, black
99047	31,51,89	Grapes, white or green, raw
09148	51	Kiwi fruit, (chinese gooseberries), fresh, raw
09152	51	Lemon juice, raw
99021	56	Lingonberries (cowberries), raw
99513	51	Lychees, canned, syrup
99526	51	Mango, canned, syrup pack
09176	31,51	Mangos, raw
09181	31,51,89	Melons, cantaloupe, raw
99505	51	Melons, galia, raw
09184	51	Melons, honeydew, raw
09191	51	Nectarines, raw
09194	51,89	Olives, ripe, canned (jumbo-super colossal)
09200	31,51	Oranges, raw, all commercial varieties
09202	89	Oranges, raw, navels
09226	31	Papayas, raw
09240	51	Peaches, canned, light syrup pack, solids and liquids
09236	31,51,89	Peaches, raw
99029	51	Pears without skin, raw
09256	51	Pears, canned, light syrup pack, solids and liquids
09252	31,51	Pears, raw
09268	51	Pineapple, canned, juice pack, solids and liquids
09266	31,51	Pineapple, raw, all varieties
09278	50	Plantains, cooked
09277	50	Plantains, raw
09291	89	Plums, dried (prunes), uncooked
99395	51	Plums, Greengage, raw
09286	51	Pomegranates, raw
09304	51	Raspberries, canned, red, heavy syrup pack, solids and liquids
09302	51,56,89	Raspberries, raw
99052	51	Rhubarb stalks, cooked
09307	51	Rhubarb, raw
99527	51	Stawberries, canned in syrup
09316	31,51,56,89	Strawberries, raw
09219	51	Tangerines, (mandarin oranges), canned, juice pack
09218	51	Tangerines, (mandarin oranges), raw
09326	31,51,89	Watermelon, raw
	11 – Vegetables and Vegetable Products	
99003	66	Alfalfa seeds, sprouted, raw, mixed with clover seeds, sprouted, raw
11697	49	Arrowroot, raw
11012	50	Asparagus, cooked, boiled, drained
11053	89	Beans, snap, green, cooked, boiled, drained, without salt
11081	50	Beets, cooked, boiled, drained
11080	31	Beets, raw
11088	73	Broadbeans, immature seeds, raw
11091	89	Broccoli, cooked, boiled, drained, without salt
99470	50	Broccoli, green sprouting (calabrese), cooked

List of Foods Containing Zero Values for Isoflavones

NDB No	Ref. No.	Description
99469	50	Broccoli, green sprouting (calabrese), raw
11090	31	Broccoli, raw
11099	50	Brussels sprouts, cooked, boiled, drained, without salt
11098	50	Brussels sprouts, raw
11116	31	Cabbage, chinese (pak-choi), raw
11110	50	Cabbage, cooked, boiled, drained, without salt
11109	31,50,89	Cabbage, raw
11113	50	Cabbage, red, cooked, boiled, drained, without salt
11112	50	Cabbage, red, raw
11115	50	Cabbage, savoy, cooked, boiled, drained, without salt
11114	50	Cabbage, savoy, raw
11126	50	Carrots, canned, regular pack, solids and liquids
11125	50,89	Carrots, cooked, boiled, drained, without salt
11124	31,50,89	Carrots, raw
11935	31	Catsup
11136	50	Cauliflower, cooked, boiled, drained, without salt
11135	50	Cauliflower, raw
11142	50	Celeriac, cooked, boiled, drained, without salt
11141	50	Celeriac, raw
11144	50	Celery, cooked, boiled, drained, without salt
11143	50	Celery, raw
11152	50	Chicory greens, raw
11162	89	Collards, cooked, boiled, drained, without salt
11161	31	Collards, raw
11168	50,89	Corn, sweet, yellow, cooked, boiled, drained, without salt
11167	31,50	Corn, sweet, yellow, raw
11203	50	Cress, garden, raw
11206	31,50	Cucumber, peeled, raw
11205	50	Cucumber, with peel, raw
11210	50	Eggplant, cooked, boiled, drained, without salt
11209	50	Eggplant, raw
11957	50	Fennel, bulb, raw
11233	31	Kale, raw
11247	50	Leeks, (bulb and lower leaf-portion), cooked, boiled, drained, without salt
11246	50	Leeks, (bulb and lower leaf-portion), raw
11251	89	Lettuce, cos or romaine, raw
11252	31,50	Lettuce, iceberg (includes crisphead types), raw
11038	89	Lima beans, immature seeds, frozen, fordhook, cooked, boiled, drained, without salt
11043	31,64,73,89	Mung beans, mature seeds, sprouted, raw
11261	50	Mushrooms, cooked, boiled, drained, without salt
11260	31,50	Mushrooms, white, raw
11963	31	Nopales, raw
11278	31,50	Okra, raw
11283	50,89	Onions, cooked, boiled, drained, without salt
11282	31,50	Onions, raw
11292	50	Onions, young green, tops only
11299	50	Parsnips, cooked, boiled, drained, without salt
11298	50	Parsnips, raw
11300	73	Peas, edible-podded, raw
11306	50	Peas, green, canned, regular pack, solids and liquids
11305	50	Peas, green, cooked, boiled, drained, without salt
11313	50	Peas, green, frozen, cooked, boiled, drained, without salt
11304	73	Peas, green, raw
11670	31	Peppers, hot chili, green, raw
11333	31,50	Peppers, sweet, green, raw
99490	50	Potaotes, new, cooked
11352	31,50	Potato, flesh and skin, raw
11365	50	Potatoes, boiled, cooked in skin, flesh, without salt
11367	89	Potatoes, boiled, cooked without skin, flesh, without salt
11360	31,89	Potatoes, french fried, crinkle or regular cut, salt added in processing, frozen, oven-heated
11358	50	Potatoes, red, flesh and skin, baked
11355	50	Potatoes, red, flesh and skin, raw
11423	89	Pumpkin, cooked, boiled, drained, without salt
11422	50	Pumpkin, raw

List of Foods Containing Zero Values for Isoflavones

NDB No	Ref. No.	Description
11429	50	Radishes, raw
11436	50	Rutabagas, cooked, boiled, drained, without salt
11435	50	Rutabagas, raw
11458	50,89	Spinach, cooked, boiled, drained, without salt
11457	31,50,89	Spinach, raw
11457	89	Spinach, raw
11478	50	Squash, summer, zucchini, includes skin, cooked, boiled, drained, without salt
11477	50	Squash, summer, zucchini, includes skin, raw
99514	89	Squash, summer, zucchini, without skin, cooked
11486	89	Squash, winter, butternut, cooked, baked, without salt
11510	50,89	Sweet potato, cooked, boiled, without skin
11529	31,50,89	Tomatoes, red, ripe, raw, year round average
11565	50	Turnips, cooked, boiled, drained, without salt
11564	31,50	Turnips, raw
11591	50	Watercress, raw
	12 – Nuts and Seeds	
12078	51	Nuts, brazilnuts, dried, unblanched
12097	51	Nuts, chestnuts, european, raw, unpeeled
12108	51	Nuts, coconut meat, dried [desiccated], not sweetened
12142	89	Nuts, pecans
12023	51,89	Seeds, sesame seeds, whole, dried
12038	31,51,89	Seeds, sunflower seed kernels, oil roasted, without salt
	13 – Beef Products	
23567	31	Beef, ground, 85% lean meat / 15% fat, raw
	14- Beverages	
14006	89	Alcoholic beverage, beer, light
14003	31	Alcoholic beverage, beer, regular, all
14602	89	Alcoholic Beverage, wine, table, red, Merlot
14106	89	Alcoholic beverage, wine, table, white
14201	89	Coffee, brewed from grounds, prepared with tap water, decaffeinated
14242	89	Cranberry juice cocktail, bottled
14355	31,89	Tea, brewed, prepared with tap water
99070	89	Tea, green, brewed
	16 – Legume and Legume Products	
99512	89	Beans, adzuki, mature seeds, canned
16018	89	Beans, black turtle soup, mature seeds, canned
16014	2	Beans, black, mature seeds, raw
16024	24,31	Beans, great northern, mature seeds, raw
16028	24	Beans, kidney, all types, mature seeds, cooked, boiled, without salt
16027	73	Beans, kidney, all types, mature seeds, raw
16034	89	Beans, kidney, red, mature seeds, canned
16040	24	Beans, pink, mature seeds, raw
16047	2	Beans, yellow, mature seeds, raw
16054	89	Broadbeans (fava beans), mature seeds, canned
16053	50	Broadbeans (fava beans), mature seeds, cooked, boiled, without salt
16058	89	Chickpeas (garbanzo beans, bengal gram), mature seeds, canned
16070	50,89	Lentils, mature seeds, cooked, boiled, without salt
16071	73	Lima beans, large, mature seeds, raw
16074	24	Lima beans, thin seeded (baby), mature seeds, raw
99548	91	Peanut butter spread, reducd fat
16089	89	Peanuts, all types, oil-roasted, with salt
	18 – Baked Products	
18376	91	Bread crumbs, dry, grated, seasoned
18029	91	Bread, french or vienna (includes sourdough)
18037	89	Bread, oat bran
18060	89	Bread, rye
99519	89	Bread, sesame, commercially prepared
18064	91	Bread, wheat
18075	89	Bread, whole-wheat, commercially prepared
18101	89	Cake, chocolate, prepared from recipe without frosting
18128	91	Cake, snack cakes, creme-filled, sponge
18159	89	Cookies, chocolate chip, commercially prepared, reg, higher fat, enriched
18290	89	Pancakes, plain, dry mix, complete, prepared

List of Foods Containing Zero Values for Isoflavones

NDB No	Ref. No.	Description
18326	89	Pie, pumpkin, commercially prepared
18342	91	Rolls, dinner, plain, commercially prepared (includes brown-and-serve)
18364	31	Tortillas, ready-to-bake or -fry, flour
	19 – Sweets	
19205	99	Egg custards, dry mix, prepared with 2% milk
19314	51	Pie fillings, canned, cherry
19218	49	Puddings, tapioca, ready-to-eat
	20 – Cereal Grains and Pasta	
20100	49	Macaroni, cooked, enriched
20110	49	Noodles, egg, cooked, enriched
20038	49	Oats
99567	49	Pasta, Lasagne, boiled
99566	49	Pasta, Lasagne, raw
20037	49	Rice, brown, long-grain, cooked
20047	89	Rice, white, long-grain, parboiled, enriched, cooked
20045	49	Rice, white, long-grain, regular, cooked
20044	31,49	Rice, white, long-grain, regular, raw, enriched
99542	49	Sago
20125	49	Spaghetti, whole-wheat, cooked
20077	49	Wheat bran, crude
20081	49	Wheat flour, white, all-purpose, enriched, bleached
20088	31	Wild rice, raw
	21 – Fast Foods	
99556	91	SUBWAY, Chicken teriyaki strips sandwich
	22 – Meals, Entrees, and Sidedishes	
22518	91	CHEF BOYARDEE Spaghetti and Meatballs in tomato Sauce, canned entree
22910	89	Lasagna, Cheese, frozen, prepared
99536	99	Lasagna, vegetable, commercially prepared (Purchased in the United Kingdom)
	25 - Snacks	
99475	91	Chips, potato, sweet onion
19033	91	Snacks, CHEX mix
19016	89	Snacks, granola bars, hard, almond
19042	91	Snacks, potato chips, barbecue-flavor
19411	31	Snacks, potato chips, plain, salted
19056	31	Snacks, tortilla chips, plain, white corn

NDB No.	Description	Reference No.	Coumestrol	Formononetin	Biochanin A
01 – Dariy and Eggs					
01079	Milk, reduced fat, fluid, 2% milkfat, with added vitamin A	89	0.00	0.00	
01123	Egg, whole, raw, fresh	31	0.00	0.05	0.05
99533	Non-dairy creamer, with added soy flour or soy protein	31	0.05	0.00	0.00
02 – Spices and Herbs					
02019	Spices, fenugreek seed	57	0.00	0.01	0.01
04 – Fats and Oils					
42178	Mayonnaise, made with tofu	64	0.00		
99423	Olive oil, extra-virgin	89	0.00	0.00	
06 – Soups, Sauces and Gravies					
99503	Black bean, sauce	31, 89	0.15	0.00	0.00
99494	Miso soup	31, 89	0.04	0.01	0.00
06419	Soup, chicken noodle, canned, prepared with equal volume water	89	0.00	0.00	
99502	Soup, pea, reheated	89	0.00	0.00	
06468	Soup, vegetarian vegetable, canned, prepared with equal volume water	89	0.00	0.00	
07- Sausages and Luncheon Meats					
07956	Beef sausage, fresh, cooked	89	0.00	0.00	
07023	Frankfurter, beef and pork	89	0.00	0.00	
07029	Ham, sliced, regular (approximately 11% fat)	89	0.00	0.00	
08 – Breakfast Cereals					
08013	Cereals ready-to-eat, GENERAL MILLS, CHEERIOS	89	0.00	0.00	
08060	Cereals ready-to-eat, KELLOGG, KELLOGG'S RAISIN BRAN	89	0.00	0.00	
08234	Cereals, QUAKER, oatmeal, instant, low sodium, prepared with water	89	0.00	0.00	
09 – Fruit and Fruit Juices					
09003	Apples, raw, with skin	89	0.00	0.00	
09032	Apricots, dried, sulfured, uncooked	31, 89	0.00	0.00	0.05
09040	Bananas, raw	89	0.00	0.00	
09050	Blueberries, raw	89	0.00	0.00	
99521	Cranberries, boiled	89	0.00	0.00	
99073	Currants, dried	89	0.00	0.00	
09083	Currants, european black, raw	89	0.00	0.00	
09087	Dates, deglet noor	89	0.00	0.00	
09112	Grapefruit, raw, pink and red, all areas	89	0.00	0.00	
09116	Grapefruit, raw, white, all areas	31	0.05	0.05	0.05
99047	Grapes, white or green, raw	89	0.00	0.00	
09181	Melons, cantaloupe, raw	89	0.00	0.00	
09194	Olives, ripe, canned (jumbo-super colossal)	89	0.00	0.00	
09209	Orange juice, chilled, includes from concentrate	31, 89	0.03	0.03	0.05
09202	Oranges, raw, navels	89	0.00	0.00	
09236	Peaches, raw	31, 89	0.00	0.00	0.00
09291	Plums, dried (prunes), uncooked	31, 89	0.00	0.00	0.00

NDB No.	Description	Reference No.	Coumestrol	Formononetin	Biochanin A
09298	Raisins, seedless	31, 89	0.00	0.00	0.00
09302	Raspberries, raw	89	0.00	0.00	
09316	Strawberries, raw	89	0.00	0.00	
09326	Watermelon, raw	89	0.00	0.00	
11- Vegetables and Vegetable Products					
11001	Alfalfa seeds, sprouted, raw	24, 31, 89	1.60	1.43	0.04
11011	Asparagus, raw	31	0.05	0.00	0.00
11053	Beans, snap, green, cooked	24			
11053	Beans, snap, green, cooked, boiled, drained, without salt	24, 89	0.00	0.01	0.04
11052	Beans, snap, green, raw	24	0.00	0.15	0.04
11088	Broadbeans, immature seeds, raw	73	0.00	0.00	0.00
99549	Broccoli sprouts, raw	31	0.00	0.00	0.00
11091	Broccoli, boiled in water, drained, without salt	89	0.00	0.00	
11109	Cabbage, raw	89	0.00	0.00	
11125	Carrots, cooked, boiled, drained, without salt	89	0.00	0.00	
11124	Carrots, raw	31, 89	0.00	0.00	0.00
99009	Clover sprouts, raw	24, 31	14.08	3.15	0.59
11162	Collards, cooked, boiled, drained, without salt	89	0.00	0.00	
11168	Corn, sweet, yellow, cooked, boiled, drained, without salt	89	0.00	0.00	
11215	Garlic, raw	31, 89	0.00	0.00	0.05
11251	Lettuce, cos or romaine, raw	89	0.00	0.00	
11038	Lima beans, immature seeds, frozen, fordhook, cooked, boiled, drained, without salt	89	0.00	0.00	
11043	Mung bean, mature seeds, sprouted, raw	24, 31, 64, 73, 89	0.93	0.01	0.01
11283	Onions, cooked, boiled, drained, without salt	89	0.00	0.00	
11300	Peas, edible-podded, raw	73	0.00	0.00	0.00
11304	Peas, green, raw	73	0.00	0.00	0.00
11367	Potatoes, boiled, cooked without skin, flesh, without salt	89	0.00	0.00	
11360	Potatoes, french fried, crinkle or regular cut, salt added in processing, frozen, oven-heated	89	0.00	0.00	
11423	Pumpkin, cooked, boiled, drained, without salt	89	0.00	0.00	
99571	Red clover	77	1322.00	833.00	
11667	Seaweed, spirulina, dried	89	0.00	0.00	
11451	Soybeans, green, cooked, boiled, drained, without salt	24	0.00	0.00	0.00
11450	Soybeans, green, raw (includes edamame)	2, 24, 73	0.00	0.00	0.00
11452	Soybeans, mature seeds, sprouted, raw	31, 64, 73, 89, 97	0.34	0.03	0.00
11458	Spinach, cooked, boiled, drained, without salt	89	0.00	0.00	
11457	Spinach, raw	89	0.00	0.00	
99514	Squash, summer, zucchini, without skin, cooked	89	0.00	0.00	

NDB No.	Description	Reference No.	Coumestrol	Formononetin	Biochanin A
11468	Squash, winter, butternut, cooked, baked, without salt	89	0.00	0.00	
11507	Sweet potato, raw, unprepared	31	0.00	0.00	0.00
11510	Sweet potatoes, without skin, boiled in water, drained	89	0.00	0.00	
11529	Tomatoes, red, ripe, raw, year round average	89	0.00	0.00	
11578	Vegetable juice cocktail, canned	89	0.00	0.00	
12 – Nuts and Seeds					
12061	Nuts, almonds	89	0.02	0.00	
12087	Nuts, cashew nuts, raw	89	0.00	0.01	
12101	Nuts, chestnuts, european, boiled and steamed	89	0.00	0.00	
12120	Nuts, hazelnuts or filberts	89	0.00	0.00	
12142	Nuts, pecans	89	0.00	0.00	
12151	Nuts, pistachio nuts, raw	89	0.01	0.00	
12155	Nuts, walnuts, english	89	0.00	0.00	
12220	Seeds, flaxseed	59, 89	0.03	0.01	0.00
12023	Seeds, sesame seeds, whole, dried	89	0.00	0.00	
12036	Seeds, sunflower seed kernels, dried	59	0.01	0.03	0.01
12038	Seeds, sunflower seed kernels, oil roasted, without salt	31, 89	0.00	0.00	0.00
14 - Beverages					
14006	Alcoholic beverage, beer, light	89	0.00	0.00	
14602	Alcoholic Beverage, wine, table, red, merlot	89	0.00	0.01	
14106	Alcoholic beverage, wine, table, white	89	0.00	0.00	
14209	Coffee, brewed from grounds, prepared with tap water	31, 89	0.03	0.00	0.00
14201	Coffee, brewed from grounds, prepared with tap water, decaffeinated	89	0.00	0.00	
14242	Cranberry juice cocktail, bottled	89	0.00	0.00	
99020	Lapacho tea (Tecoma heptaphylla)	59	0.00	0.01	0.04
14355	Tea, brewed, prepared with tap water	89	0.00	0.00	
99070	Tea, green, brewed	89	0.00	0.00	
99107	Tea, green, Japan (infusion)	57	0.03		
99106	Tea, jasmine, Twinings (infusion)	57	0.03		
15 – Finfish and Shellfish Products					
15184	Fish, tuna, light, canned in water, without salt, drained solids	89	0.00	0.00	
16 – Legumes and Legume Products					
16104	Bacon, meatless	89	0.00	0.00	
99512	Beans, adzuki, mature seeds, canned	89	0.00	0.00	
16001	Beans, adzuki, mature seeds, raw	73	0.00	0.00	0.00
16009	Beans, baked, canned, with pork	89	0.00	0.00	
16018	Beans, black turtle soup, mature seeds, canned	89	0.00	0.00	
16014	Beans, black, mature seeds, raw	2	0.00	0.00	0.00
99486	Beans, common, raw (Phaseolus vulgaris)	2	0.01	0.00	0.00
16019	Beans, cranberry (roman), mature seeds, raw	2	0.00	0.00	0.00

NDB No.	Description	Reference No.	Coumestrol	Formononetin	Biochanin A
16024	Beans, great northern, mature seeds, raw	24	0.00	0.00	0.60
16028	Beans, kidney, all types, mature seeds cooked, boiled, without salt	24	0.00	0.00	0.41
16027	Beans, kidney, all types, mature seeds, raw	57, 73	0.00	0.00	0.04
16034	Beans, kidney, red, mature seeds, canned	89	0.00	0.00	
16032	Beans, kidney, red, mature seeds, raw	57	0.00	0.00	0.01
16037	Beans, navy, mature seeds, raw	24, 57	0.00	0.00	0.02
16040	Beans, pink, mature seeds, raw	24	0.00	1.05	0.00
16042	Beans, pinto, mature seeds, raw	24, 57	1.80	0.01	0.28
99026	Beans, red, mature seeds, raw	24	0.07	0.00	0.00
16045	Beans, small white, mature seeds, raw	24	0.00	0.82	0.00
16050	Beans, white, mature seeds, cooked, boiled, without salt	89	0.00	0.00	
16049	Beans, white, mature seeds, raw	2	0.00	0.00	0.01
16047	Beans, yellow, mature seeds, raw	2	0.00	0.00	0.00
99008	Broad beans, fried	24	0.00	0.21	0.00
16054	Broadbeans (fava beans), mature seeds, canned	89	0.00	0.00	
16052	Broadbeans (fava beans), mature seeds, raw	2, 57, 73	0.00	0.01	0.12
16058	Chickpeas (garbanzo beans, bengal gram), mature seeds, canned	89	0.00	0.00	
16056	Chickpeas (garbanzo beans, bengal gram), mature seeds, raw	2, 24, 31, 57, 73	0.01	0.12	1.54
16062	Cowpeas, common, (blackeyes, crowder, southern), mature seeds, raw	24, 57	0.01	0.00	0.58
16158	Hummus, commercial	89	0.00	0.00	
99019	Kala chana, mature seeds, raw	24	6.13	0.00	1.26
16070	Lentils, mature seeds, cooked, boiled, without salt	89	0.00	0.01	
16069	Lentils, raw	2, 57	0.00	0.00	0.00
16072	Lima beans, large, mature seeds, cooked, boiled without salt	24	0.00	0.01	0.00
16071	Lima beans, large, mature seeds, raw	24, 57, 73	0.14	0.32	0.27
16074	Lima beans, thin seeded (baby), mature seeds, raw	24	0.00	0.55	0.37
16076	Lupins, mature seeds, raw	2	0.00	0.00	0.00
16112	Miso	89	0.00	0.01	
16081	Mung beans, mature seeds, cooked, boiled, without salt	89	0.00	0.00	
16080	Mung beans, mature seeds, raw	24, 57, 64, 73	0.00	0.21	0.00
16083	Mungo beans, mature seeds, raw	57, 73	0.00	0.00	0.02
16150	Peanut butter, smooth, reduced fat	89	0.00	0.00	
16089	Peanuts, all types, oil-roasted, with salt	89	0.00	0.00	
16087	Peanuts, all types, raw	57	0.00	0.00	0.01
16085	Peas, split, mature seeds, raw	2, 24, 57, 730.81	0.00	0.09	
99457	Peas, yellow, mature seeds, raw	73	0.00	0.00	0.00
16101	Pigeon peas (red gram), mature seeds, raw	57	0.01	0.02	0.10
16107	Sausage, meatless	64	0.00		
99492	Scarlet runner bean, mature seeds, raw	73	0.00	0.00	0.00
16117	Soy flour, defatted	64, 77	0.00	0.00	0.00
16115	Soy flour, full-fat, raw	24, 59, 77	0.00	0.01	0.02

NDB No.	Description	Reference No.	Coumestrol	Formononetin	Biochanin A
99511	Soy lecithin	64	0.00		
16119	Soy meal, defatted, raw	97	0.00	0.00	
16120	Soy milk, original and vanilla, unfortified	34, 97	0.81	0.00	
16139	Soy milk, original and vanilla, with added caclium, vitamins A and D	31, 89	0.12	0.00	0.00
99038	Soy paste	97	0.00	0.00	
16123	Soy sauce made from soy and wheat (shoyu)	31, 89, 97	0.02	0.00	0.00
99510	Soy yogurt	89	0.00	0.00	
99100	Soybeans, green, mature seeds, raw	73	0.00	0.00	0.00
16109	Soybeans, mature seeds, cooked, boiled, without salt	89	0.00	0.00	0.00
16111	Soybeans, mature seeds, dry roasted	24, 89	0.02	0.03	0.00
16108	Soybeans, mature seeds, raw	2, 24, 31, 44, 57, 64, 73, 88, 89	0.02	8.46	0.00
99488	Soybeans, mature seeds, raw (China)	73	0.00	0.00	0.00
99092	Soybeans, mature seeds, raw (Japan)	24, 73	0.00	0.00	0.00
99093	Soybeans, mature seeds, raw (Korea)	73	0.00	0.00	0.00
99040	Soybeans, mature seeds, raw (Taiwan)	24, 73	0.00	0.00	0.00
99091	Soybeans, mature seeds, raw (US, commodity grade)	24, 97	0.00	0.00	0.00
99053	Soymilk skin or film (Foo jook or yuba), raw	97	0.00	0.00	
99559	Soymilk, made from soy isolate (purchased in Australia)	34	0.00		
16174	Tempeh, cooked	89	0.00	0.00	
16128	Tofu, dried-frozen (koyadofu)	97	0.00	0.00	
99529	Tofu, firm, cooked	89	0.00	0.00	
16126	Tofu, firm, prepared with calcium sulfate and magnesium chloride (nigari)	31, 64, 97	0.12	0.00	0.00
16427	Tofu, raw, regular, prepared with calcium sulfate	24	0.00	0.00	0.00
16132	Tofu, salted and fermented (fuyu)	97	0.00	0.00	
16127	Tofu, soft, prepared with calcium sulfate and magnesium chloride (nigari)	97	0.00	0.00	
16147	Veggie burgers or soyburgers, unprepared	31, 89	0.00	0.00	0.00
18 – Baked Products					
99001	9-grain bread	59	0.00	0.00	0.00
99010	Bread, country rye, Finland	59	0.00	0.01	0.00
99518	Bread, flax, commercially prepared	89	0.00	0.00	
18035	Bread, multi-Grain (includes whole-grain)	89	0.00	0.00	
18037	Bread, oat bran	89	0.00	0.00	
18060	Bread, rye	89	0.00	0.00	
99519	Bread, sesame, commercially prepared	89	0.00	0.00	
18069	Bread, white, commercially prepared (includes soft bread crumbs)	89	0.00	0.00	
99515	Bread, white, commercially prepared, with added soy flour or soy protein	31	0.09	0.00	0.00
99516	Bread, whole grain, commercially prepared, with added soy flour or soy protein	31	0.05	0.00	0.00
18075	Bread, whole-wheat, commercially prepared	89	0.00	0.00	

NDB No.	Description	Reference No.	Coumestrol	Formononetin	Biochanin A
18101	Cake, chocolate, prepared from recipe without frosting	89	0.00	0.00	
18159	Cookies, chocolate chip, commercially prepared, reg, higher fat, enriched	89	0.00	0.00	
18216	Crackers, crispbread, rye	59	0.01	0.00	0.00
18248	Doughnuts, cake-type, plain (includes unsugared, old-fashioned)	89	0.00	0.00	
99509	Doughnuts, with added soy lfour or soy protein	31	0.24	0.00	0.05
99508	English muffins, with added soy flour or soy protein	31	0.00	0.00	0.00
18290	Pancakes, plain, dry mix, complete, prepared	89	0.00	0.00	
18326	Pie, pumpkin, commercially prepared	89	0.00	0.00	
19 – Sweets					
99474	Licorice, black, soft candy	31, 89	0.00	0.95	0.00
20 – Cereal grains and Pasta					
20029	Couscous, cooked	89	0.00	0.00	
20047	Rice, white, long-grain, parboiled, enriched, cooked	89	0.00	0.00	
22903	Pizza, pepperoni topping, regular crust, frozen, cooked	89	0.00	0.00	
22910	Lasagna, Cheese, frozen, prepared	89	0.00	0.00	
25 - Snacks					
25017	Formulated bar, POWER BAR, chocolate	31	0.09	0.00	0.00
19016	Snacks, granola bars, hard, almond	89	0.00	0.00	
19015	Snacks, granola bars, hard, plain	59	0.01	0.00	0.00

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Daidzein, Genistein, Glycitein.

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Determination of isoflavones in ready-to-feed soy-based infant formula.
J. AOAC Int., 2003, 86, 72-78.
Ready-to-feed soy-based infant formula (Isomil).
Daidzein, Genistein, Glycitein.

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Development and application of a high-performance liquid chromatographic method for the analysis of phytoestrogens.
J. Sci. Food Agric., 1989, 46, 357-364.
Soya milk, Soya dessert, Soya flakes
Daidzein, Genistein.

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Effect of water-to-bean ratio on the contents and compositions of isoflavones in tofu.
J. Agric. Food Chem., 2004, 52, 2277-2281.
Soybeans, Tofu.
Daidzein, Genistein.

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Changing soybean isoflavone composition and concentrations under two different storage conditions over three years.
Food Res. Int., 2005, 38, 435-444.
Soybeans from Korea (cultivars Muhan, Daweon, Myeongiunamul, Jinpum2, Taekwang, Geomjeong1, Pureun, Hannam).
Daidzein, Genistein, Glycitein.

41. Kim, K-S., Kim, M-J., Park, J-S., Sohn, H-S., and Kwon, D. Y.
Compositions of functional components of traditional Korean soybeans.
Food Sci. Biotechnol., 2003, 12, 157-160.
Soybeans from Korea (cultivars Cheongtae, Seoritae, Jinjoori, Subaktae, Yutae).
Daidzein, Genistein, Glycitein.

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Concentrations of isoflavone phytoestrogens and their glucosides in Australian soya beans and soya foods.
Aust. J. Nutr. Diet., 2000, 57, 70-78.
Soybeans (6 cultivars planted in Jan. 1998 and Dec. 1998), Soybeans (4 cultivars), Canned soybeans, Soy and linseed breads, White breads, Powdered soy drink mixes, Soy flakes, Soy flour, Soy grits, Soymilk, Soy sauce, Tofu, Tofu mix, Textured vegetable protein.
Daidzein, Genistein, Glycitein.

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Assessment of isoflavonoid concentrations in Australian bovine milk samples.
J. Dairy Res., 1998, 65, 479-489.
Cow milk (different seasons).
Genistein.

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Evaluation of isoflavone aglycon and glycoside distribution in soy plants and soybeans by fast column high-performance liquid chromatography coupled with a diode-array detector.
J. Agric. Food Chem., 2005, 53, 5848-5852.
Soybeans (varieties Korada, Quito, Rita, OAC Erin, OAC Vision).
Daidzein, Genistein, Glycitein, Biochanin A, Formononetin.

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Determination of isoflavones in soybean food and human urine using liquid chromatography with electrochemical detection.
J. Chromatgr B., 2004, 806, 101-111.
Soybeans, Soy farina, Soy meat, Soymilk.
Daidzein, Genistein, Biochanin A, Formononetin.

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Quantification of isoflavones in red clover by high-performance liquid chromatography.
J. Chromatgr B., 2002, 777, 123-128.
Red clover.
Daidzein, Genistein, Biochanin A, Formononetin.

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Isoflavone characterization and antioxidant activity of Ohio soybeans.
J. Agric. Food Chem., 2004, 52, 2647-2651.
Soybeans from Ohio (17 varieties).
Daidzein, Genistein, Glycitein.

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Variation in isoflavone of soybean cultivars with location and storage duration.
J. Agric. Food Chem., 2003, 51, 3382-3389.
Soybeans from Korea (15 cultivars grown in Seoul, Suwon, and Kyongsan each in 1998, 1999 and 2000).
Daidzein, Genistein, Glycitein.

49. Liggins, J., Mulligan, A., Runswick, S., and Bingham, S. A.
Daidzein and genistein content of cereals.
Euro. J. Clin. Nutr., 2002, 56, 961-966.
Arrowroot, Pearl barley, Wheat bran, Corn flour, Maize meal, Oatmeal, Oatmeal quick cook, Oats rolled, Sago, Semolina, Soy flour, Tapioca, Flours (brown breadmaking, self-rising, granary, wholewheat, wholemeal), Wheat flakes, Rice – brown, raw and cooked; long grain, white, raw and cooked; Pasta – lasagna, white, green, white, wholewheat; Macaroni, Egg noodles, Spaghetti (white, whole wheat), Bread (brown, granary, wheatgerm, wholemeal, white), Breakfast cereals (23 varieties), Biscuits (10 varieties), Crispbread (rye, wheat, wholemeal).
Daidzein, Genistein.

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Daidzein and genistein content of vegetables.
Brit. J. Nutr., 2000, 84, 717-725.
Potatoes, new, raw and cooked; Potatoes, old, raw and cooked; Potatoes, red, raw and cooked; Baked beans; Mung bean sprouts, raw and cooked; Broad beans, raw and cooked; Butter beans, dried, raw and cooked; Chickpeas, dried, raw and cooked; French beans, raw and cooked; French beans, sliced, frozen, raw and cooked; Haricot beans, raw and cooked; Lentils, red, split, dried, raw and cooked; Mung beans, dried, raw and cooked; Red kidney beans, raw and cooked; Runner beans, raw and cooked; Soybeans, dried, raw and cooked; Miso; Textured vegetable protein, Peas, fresh, raw and cooked; Peas, dried, raw and cooked; Peas, frozen, raw and cooked; Peas, canned; Split peas,

green, raw and cooked; Asparagus, raw and cooked; Aubergine, raw and cooked; Beetroot precooked; Calabrese, raw and cooked; Broccoli sprouts, raw and cooked; Brussels sprouts, raw and cooked; Cabbage, green, red, Savoy and white, raw and cooked; Carrots, raw and cooked; Cauliflower, raw and cooked; Celeriac, raw and cooked; Celery, raw and cooked; Chicory raw; Courgette, raw and cooked; Cucumber with and without skin; Fennel, raw and cooked; Leeks, raw and cooked; Lettuce, round and Iceberg; Marrow, raw and cooked; Mushrooms, common, raw and cooked; Okra raw; Onion, raw and cooked; Parsnip, raw and cooked; Green pepper; Plantain, raw and cooked; Pumpkin; Radish raw; Spinach, raw and cooked; Spring greens, raw and cooked; Sweet potato, raw and cooked; Sweet corn on the cob, raw and cooked; Tomato raw; Turnip, raw and cooked; Salad cress, Watercress.
Daidzein, Genistein.

51. Liggins, J., Bluck, L. J. C., Runswick, S., Atkinson, C., Coward, W. A., Bingham, S. A.
Daidzein and genistein content of fruits and nuts.
J. Nutr. Biochem., 2000, 11, 326-331.
Apples (cooking, raw and cooked; Cox, Golden delicious, Granny Smith, Red with and without skin), Apricots (raw, dried, canned), Avocado, Banana, Cherries, Clementines, Cranberries, Currants, Dates (dried), Figs (raw and dried), Fruit cocktail in syrup, Gooseberries, Grapefruit canned in natural juice, Grapes (Black, White), Greengage, Kiwi fruit, Lychees canned in syrup. Mandarin oranges canned, Mango canned and raw, Melons (Cantaloupe, Galia, Honeydew), Watermelon, Nectarines, Olives canned in brine, Oranges, Passion fruit, Peaches (raw, canned in heavy and light syrup), Pears (Comice, Conference with and without skin), Pineapple raw and canned, Plums (Red, Victoria), Pomegranates, Prunes dried and cooked, Raisins, Raspberries raw and canned, Rhubarb, Satsumas, Strawberries raw and canned, Lemon juice raw, Orange juice, Almonds, Brazil nuts, Chestnuts raw and cooked, Coconut raw and dried, Hazelnuts, Peanut butter, Peanuts, Sesame seeds, Sunflower seeds, Walnuts, Pie fillings (canned black cherries, black currants, red cherries).
Daidzein, Genistein.

52. Lin, P-Y. and Lai, H-M.
Bioactive compounds in legumes and their germinated products.
J. Agric. Food Chem., 2006, 54, 3807-3814.
Black soybeans (4 varieties) and Soybeans (3 varieties) raw and germinated for 1 and 4 days.
Daidzein, Genistein, Glycitein.

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Effects of solvent polarity and acidity on the extraction efficiency of isflavones from soybeans (Glycine max).
J. Agric. Food Chem., 2005, 53, 3795-3800.
Soybeans.
Daidzein, Genistein, Glycitein

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Altered time course of urinary daidzein and genistein excretion during chronic soya diet in healthy males.
Nutr. Cancer, 1995, 24, 311-323.
Soymilk (Banyan Foods).
Daidzein, Genistein.

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A simplified method to quantify isoflavones in commercial soybean diets and human urine after legume consumption.
Cancer Epidemiology Biomarkers and Prevention, 1995, 4, 497-503.
Miso, Soymilk (Banyan Foods, Plum Flower), Isomil.
Daidzein, Genistein.

56. Mazur, W. M., Uehara, M., Wähälä, K., and Adlercreutz, H.
Phyto-oestrogen content of berries, and plasma concentrations and urinary excretion of enterolactone after a single strawberry-meal in human subjects.
Brit. J. Nutr., 2000, 83, 381-387.
Blackberries, Strawberries, Cloudberries, Raspberries, Lingonberries, Cranberries, Blueberries, Black currants, Red currants.
Daidzein, Genistein, Secoisolariciresinol, Matairesinol.

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Isoflavonoids and lignans in legumes: Nutritional and health aspects in humans.
Nutritional Biochemistry, 1998, 9, 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),L 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).

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Lignan and isoflavonoid concentrations in tea and coffee.
Brit. J. Nutr., 1998,79, 37-45.
Jasmine tea, Green tea (Japan).
Daidzein, Genistein, Coumestrol, lignans (SECO, Matairesinol).

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Isotope dilution gas chromatographic-mass spectrometric method for the determination of isoflavonoids, coumestrol, and lignans in food samples.
Anal. Biochem., 1996, 233,169-180.

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).

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Glyphosate- tolerant soybeans remain compositionally equivalent to conventional soybeans (Glycine max L.) during three years of field testing.
J. Agric. Food Chem., 2005, 53, 5331-5335.
Soybeans (conventional and glyphosate tolerant).
Daidzein, Genistein, Glycitein.

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Determination of daidzein and genistein in soybean foods by automated on-line in-tube solid-phase microextraction coupled to high-performance liquid chromatography.
J. Chromatogr. A, 2003, 986, 169-177.
Soybeans, Black soybeans, Field peas, Dried broad beans, Dried adzuki beans, Fermented soybeans, Tofu, Soy sauce, Soymilk.
Daidzein, Genistein.

62. Morton, M., Arisaka, O., Miyake, A., and Evans, B.
Analysis of phyto-oestrogens by gas chromatography-mass spectrometry.
Envron. Toxicol. Pharmacol., 1999, 7, 221-225.
Soybean hypocotyl, Coarse soya grit, Dragon soybeans, Dehusked soya bean cotyledon, Soybean hulls, Toasted soya hulls, Fine soya grit, ADM novasoy.
Daidzein, Genistein.

63. Müllner, C. and Sontag, G.
HPLC with coulometric electrode array detection. Determination of daidzein and genistein in soy based infant food, soy milk and soybased supplements.
Eur. Food Res. Technol., 2000, 211, 301-304.
Soymilk, Soy based infant formula, Soybased supplements.
Daidzein, Genistein.

64. Müllner, C. and Sontag, G.
Determination of some phytoestrogens in soybeans and their processed products with HPLC and coulometric electrode array detection.
Fresnius J. Anal. Chem., 1999, 363, 261-265.
Yellow soybeans, Soy flour, Soy granulate, Tofu, Soy cubes, Soy sausages, Soy sprout, Mung beans, Mung bean sprouts, Tofunaise, Soy dessert, Lecithine, Brain food.
Daidzein, Genistein, Biochanin A.

65. Murphy, P. A., Barua, K., and Hauck, C. C.
Solvent extraction selection in the determination of isoflavones in soy foods.
J. Chromatogr. B, 2002, 777, 129-138.

Soy flour, Tempeh, Tofu, TVP, Soy germ.
Daidzein, Genistein, Glycitein.

66. 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., 1999, 47, 2697-2704.
Soymilk, Tofus different kinds (raw and cooked), Soy sauce, Miso (white and red), Tempeh (raw and cooked), FriChik (soy chicken, raw and cooked), Meatless frank (raw and cooked), Harvest burger (raw and cooked), Meatless links (raw and cooked), Soy/beef burgers (raw and cooked).
Daidzein, Genistein, Glycitein.

67. Murphy, P.A., Barua, K., and Song, T.
Soy isoflavones in foods: Database development.
In: American Chemical Society Symposium Series, 701, 1998: Functional Foods: Overview and Diseases Prevention , ed. T.Shibamoto, 138-149.
Soy flour, Soy isolate, Soy concentrate (aqueous washed, alcohol washed), TVP (texturized vegetable protein), Soy fiber.
Daidzein, Genistein, Glycitein.

68. 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.

69. Murphy, P. A. (Unpublished data)
Isoflavones in soy-based infant formulas.
Infant formulas.
Daidzein, Genistein, Glycitein.

70. Murphy, P. A., Song, T., Buseman, G., and Barua. K.
Isoflavones in soy-based infant formulas.
J. Agric. Food Chem., 1997, 45, 4635-4638.
Infant formulas.
Daidzein, Genistein, Glycitein.

71. Naim, M., Gestetner, B., Zilkah, S., Birk, Y., and Bondi, A.
Soybean isoflavones. Characterization, determination, and antifungal activity.
J. Agric. Food Chem., 1976, 22, 806-810.
Soybean flour (Wayne var.-1969)
Daidzein, Genistein, Glycitein.

72. Nakajima, N., Nozaki, N., Ishihara, K., Ishikawa, A., and Tsuji, H.
Analysis of isoflavone content in tempeh, a fermented soybean, and preparation of a new

isoflavone-enriched tempeh.
J. Biosci. Bioeng., 2005, 100, 685-687.
Tempeh (made from yellow soybeans, black soybeans, defatted-yellow-soybean-germ, isoflavone-enriched tempeh).
Daidzein, Genistein, Glycitein.
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73. Nakamura, Y., Kaihara, A., Yoshii, K., Tsumura, Y., Ishimitsu, S., and Tonogai, Y.
Content and composition of isoflavones in mature or immature beans and bean sprouts consumed in Japan.
J. Health Sci., 2001, 47, 394-406.
Soybeans (Japan, China, Australia, U.S.A., Canada), Small black soybeans (China), Black soybeans (Japan, Korea), Green soybeans (Japan, Canada), Kidney beans (U.S.A.; Japan-daifuku-mame, uzura-mame, taisho-kintoki; Canada-kintoki-mame; Scarlet runner bean (Japan-shirohana-mame); Lima beans (U.S.A.); Butter beans (Myanmar); Saltapia beans (Myanmar); Yellow peas (Canada); Green peas (China); Red peas (New Zealand); Azuki beans (Japan-dainagon); Black mappes (Thailand); Green grams (China); Chick peas (U.S.A.); Broad beans (China); Peanuts (South Africa); Immature beans from Japan, (Soybeans, Black soybeans, Broad beans, Green peas, Green pea pods, Kidney bean pods); Sprouts (Soybeans, Green peas, Black mappes, Green grams).
Daidzein, Genistein, Glycitein, Formononetin, Biochannin A, Coumestrol.

74. Nakamura, Y., Tsuji, S., and Tonogai, Y.
Determination of the levels of isoflavonoids in soybeans and soy-derived foods and estimation of isoflavonoids in the Japanese daily intake.
J. AOAC Int., 2000, 83, 635-650.
Soybeans (Japan-Tsurunoko, U.S.A., Canada, Australia, China), Black soybeans (Japan, Korea), Green soybeans (Japan, Canada), Cooked soybeans (Japan), Cooked black soybeans (Japan), Roasted soybeans, Kinako (soybeans, black soybeans), Tofu (Kinukoshi, Momen, Yaki, packed), Freeze-dried tofu(kori-tofu), Okara, Tofu-derived processed foods (Astu-age, Usu-age, Ganmodoki), Natto (soybean, black soybean), Miso (Rice-koji, Shiro, Akadashi mixed, Koji, salt-reduced rice-koji, Barley-koji, Soybean-koji, Kinzanji), Soy sauce-shoyu (Koikuchi, Usukuchi, Tosa, Tamari, Sashimi, salt-reduced), Soymilk, Soy drink, Yuba (dried, raw).
Daidzein, Genistein, Glycitein.

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An investigation on the extraction and concentration of isoflavones in soy-based products.
J. Phamaceutical and Biomedical Analysis, 1995, 14, 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.

76. 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, 1996, 126, 702-716.
Soybean meal (A5403, Asgrow maturity group V, 1993).
Daidzein, Genistein.

77. Petterson, H. and Kiessling, K-H.
Liquid chromatographic determination of the plant estrogens coumestrol and isoflavones in animal feed.
J. Assoc. Off. Anal. Chem., 1984, 67, 503-506.
Defatted soybean meal and whole soybean meal in animal feed.
Daidzein, Genistein, Formononetin, Biochanin-A.

78. Plaza, L., de Ancos, B., and Cano, M. P.
Nutritional and health related compounds in sprouts and seeds of soybean (Glycine max), wheat (Triticum aestivum. L) and alfalfa (Medicago sativa) treated by a new drying method.
Eur. Food Res. Technol., 2003, 216, 138-144.
Soybeans, Soybean sptouts.
Daidzein, Genistein.

79. Prabhakaran, M. P., Perera, C. O, and Valiyaveettil, S.
Quantification of isoflavones in soymilk and tofu from South East Asia.
Int. J. Food Properties, 2005, 8, 113-123.
Soymilk, Tofu (Soft, Firm, Silken, Chinese, Organic), Fried tofu.
Daidzein, Genistein, Glycitein.

80. Pratt, D. E. and Birac, P. M.
Source of antioxidant activity of soybeans and soy products.
J. Food Sci., 1979, 44, 1720-1722.
Soybeans, Corsoy var., Glycine max.
Daidzein, Genistein, Glycitein,Cinnamic acids (Chlorogenic, Caffeic, p-coumeric, Ferulic).

81. Preinerstorfer, B. and Sontag, G.
Determination of isoflavones in commercial soy products by HPLC and coulometric electrode array detection.
Eur. Food Res. Technol., 2004, 219, 305-310.
Soy flour, Soy flakes, Soymilk, Tofu, Soy pie, Soy sauce, Soy sausage, Soy instant, Soy hot dog, Soy noodle sauce, Soy dessert, Soy meat.
Daidzein, Genistein, Glycitein.

82. Romani, A., Vognolini, P., Galardi, C., Mulinacci, N., Benedettelli, S., and Heimler, D.

Germplasm characterization of zolfino landraces (Phaseolus vulgaris L.) by flavonoid content.
J. Agric. Food Chem., 2004, 52, 3838-3842.
Zolfino beans (Zolfino A-Yellow seed coat, Querceto-Aezzo, Zolfino B-tobacco seed coat, Zolfino C-black seed coat, Zolfino D-yellow seed coat.
Daidzein, Genistein, Flavonols (quercetin, Kaempferol), Anthocyanins (delphinidin, Petunidin, Malvidin).

83. Rostagno, M. A., Palma, M., and Barroso, C. G.
Fast analysis of soy isoflavones by high-performance liquid chromatography with monolithic columns.
Anal. Chim. Acta, 2007, 582, 243-249.
Soy flour, TSP, Soy fiber, Soymilk powder, Soy drink.
Daidzein, Genistein, Glycitein.

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Improved high-performance liquid chromatographic analysis of phenolic acids and isoflavonoids from soybean protein products.
J. Agric. Food Chem., 1984, 32, 530-533.
Defatted soy flakes, Soy protein isolates (Ralston Purina co.).
Daidzein, Genistein, some phenolic componds.

85. 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, 1997, 350, 23-27.
Infant soy formula: Nursoy (powder), Isomil (powder), Prosobee (liquid concentrate).
Total isoflavones

86. 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. Chromatogr., 1987, 386, 315-323.
Textured soy protein, Soy flakes, Prosobee (ready to feed), Isomil (ready to feed).
Daidzein, Genistein.

87. Simonne, A. H., Smith, M., Weaver, D. B., Vail, T., Barnes, S., and Wei, C. I.
Retention and changes of soy isoflavones and carotenoids in immature soybean seeds (Edamame) during processing.
J. Agric. Food Chem., 2000, 48, 6061-6069.
Edamame (5 varieties).
Daidzein, Genistein, Glycitein.

88. Taylor, N. B., Fuchs, R. L., MacDonald, J., Shariff, A. R., and Padgette, S. R.
Compositional analysis of glyphosate-tolerant soybeans treated with glyphosate.
J. Agric. Food Chem., 1999, 47, 4469-4473.

Soybeans.
Daidzein, Genistein, Coumestrol, Biochanin A.

89. Thompson, L. U., Boucher, B. A., Liu, Z., Cotterchio, M., and Kreiger, N.
Phytoestrogen content of foods consumed in Canada, including isoflavones, lignans, and coumestan.
Nutr. Cancer, 2006, 54, 184-201.
Soy products, Legumes, Nuts and oil seeds, Vegetables, Fruits, Cereals and breads, Meat products and other processed foods, Beverages (non-alcoholic and alcoholic).
Daidzein, Genistein, Glycitein, Formononetin, Coumestrol, Matairesinol, Lariciresinol, Pinoresinol, Secoisolaricirsinol.

90. Toda, T., Sakamoto, A., Takayanagi, T., and Yokotsuka, K.
Changes in isoflavone composition of soybean foods during cooking process.
Food Sci. Technol., 2000, 6, 314-319.
Soybeans, Soymilk, Tofu, Yuba, Abura-age, Cooked soybeans, Kinako, Natto, Miso, Soy sauce.
Daidzein, Genistein, Glycitein.

91. Umpress, S. T., Murphy, S. P., Franke, A. A., Custer, L. J., and Blitz, C. L.
Isoflavone content of foods with soy additives.
J. Food Comp. Anal., 2005, 18, 533-550.
Bread and grain products, Gravies and sauces, Meat and poultry products, Meat substitutes, Nutritional bars, Nutritional beverages, Peanut butters, Seafood products, Snacks, Soups and soup bases, Soybean products.
Daidzein, Genistein, Glycitein.

92. Wang, L., Lite, L., Junfeng, F., Saito, M., and Tatsumi, F.
Radical-scanvenging activity and isoflavone content of sufu (fermented tofu) extracts from various regions in China.
Food Sci. Technol. Res., 2004, 10, 324-327.
Sufu-fermented tofu (various regions of China).
Daidzein, Genistein, Glycitein.

93. Wang, C., Ma, Q., Pagadala, S., Sherrad, M. S., and Krishnan, P. G.
Changes of isoflavones during processing of soy protein isolates.
J. Am. Oil Chem. Soc., 1998, 75, 337-341.
Soy flour (defatted), Soy protein isolate (made in lab).
Daidzein, Genistein, Glycitein.

94. Wang, H-J. and Murphy, P. A.
Mass balance study of isoflavones during soybean processing.
J. Agric. Food Chem., 1996, 44, 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.

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Isoflavone content in commercial soybean foods.
J. Agric. Food Chem., 1994, 42, 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 ($CaSO_4$ ppt),Tempeh, Bean paste, Fermented bean curd, Honzukuri miso (rice and soybeans), Soy hot dog, Soy bacon, Tempeh burger, Tofu yogurt, Soy -Parmesan, Cheddar, Mozzarella cheese, Flat noodles.
Daidzein, Genistein, Glycitein.

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Isoflavone composition of American and Japanese soybeans in Iowa: Effects of variety, crop year, and location.
J. Agric. Food Chem., 1994, 42, 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.

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A simplified HPLC method for the determination of phytoestrogens in soybean and its processed products.
J. Agric. Food Chem., 1990, 38, 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.

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Study on isoflavone isomers contents in Taiwan's soybean and GM soybean.
J. Food Drug Anal., 2004, 12, 324-331.
Soybeans from Taiwan, regular and GM.
Daidzein, Genistein, Glycitein.

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Isoflavone aglycon and glucoconjugate content of high- and low-soy U.K. foods used in nutritional studies.
J. Agric. Food Chem., 2002, 50, 1404-1410.
High-Soy foods: (Spaghetti bolonaise, Lamb stew, Turkey chilli with soy and kidney beans, Baked soy and bakes beans, Soybeans-red kidney beans and vegetables, Soy sausage and batter dish, Soy meatcalls and spaghetti, Turkey and soybean casserole, Hazelnut soybean pudding, Chocolate soybean pudding, Soymilk drinks (Chocolate, Strawberry, Banana, Plain), Soy milk yogurts (Vanilla, Cherry), Vanilla soymilk dessert, Soymilk custard, Bananacake with soy flour, Soy sausages, Soy burgers, Soybeans.
Low-soy foods (without added soy): some of the above, vegetable lasagna, Wholemeal

bread, White bread, Apple pie, Sponge cake, Custard, Currant bun.
Daidzein, Genistein, Glycitein.

100. Wu, Q., Wang, M., Sciarappa, W. J., and Simon, J. E.
LC/UV/ESI-MS analysis of isoflavones in edamame and tofu soybeans.
J. Agric. Food Chem., 2004, 52, 2763-2769.
Edamame (Taiwan), Soybeans (Minnesota and Iowa).
Daidzein, Genistein, Glycitein.

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Daidzein is a more bioavailable soymilk isoflavone than is genistein in adult women.
J. Nutr., 1994, 124, 825-832.
Soymilk powder.
Daidzein, Genistein.

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Effect of soybean varieties on the content and composition of isoflavone in rice-koji miso.
Food Chem., 2007, 100, 369-374.
Soybeans from Japan and China, Rice-koji from different soybeans, Commercial rice-koji.
Daidzein, Genistein, Glycitein.

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Changes in isoflavone contents during maturatin of soybean seed.
J. Food Sci. Nutr., 1997, 2, 255-258.
Soybeans.
Daidzein, Genistein, Glycitein.

104. Yin, L-J., Li, L-T., Li, Z-G., Tatsumi, E., and Saito, M.
Changes in isoflavone contents and composition of sufu (fermented tofu) during manufacturing.
Food Chem., 2004, 87, 587-592.
Soybeans raw, Tofu, Sufu.
Daidzein, Genistein, Glycitein.