

**Composition of Foods:  
Raw, Processed, Prepared**

**USDA National Nutrient Database for  
Standard Reference, Legacy (2018)**

**Documentation and User Guide**

**April 2018  
Slightly Revised July 2018**

US Department of Agriculture  
Agricultural Research Service  
Beltsville Human Nutrition Research Center  
Nutrient Data Laboratory  
10300 Baltimore Avenue  
Building 005, Room 107, BARC-West  
Beltsville, Maryland 20705

**Suggested Citation:**

US Department of Agriculture (USDA), Agricultural Research Service, Nutrient Data Laboratory. USDA National Nutrient Database for Standard Reference, Legacy. Version Current: April 2018. Internet: <http://www.ars.usda.gov/nutrientdata>

**Disclaimers:**

Reference to any product, service, process, or method by trade name, trademark, service mark, manufacturer or otherwise is for ease of identification only and does not imply recommendation, endorsement, or approval by, or an association with, the U.S. Department of Agriculture.

The US Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Issued April 2018

Slightly revised July 2018

The USDA National Nutrient Database for Standard Reference, Legacy was prepared by the following staff members of the US Department of Agriculture, Agricultural Research Service (ARS), Beltsville Human Nutrition Research Center, Nutrient Data Laboratory:

Co-Coordiators	David B. Haytowitz and Jaspreet K.C. Ahuja
Senior Scientists	Jaspreet K.C. Ahuja David B. Haytowitz Pamela R. Pehrsson Janet M. Roseland Xianli Wu
Scientists	Mona Khan Ying Li Melissa Nickle Quynhanh Nguyen Kris Patterson (Ret.) Meena Somanchi Denise Trainer Juhi Williams
Research Leader	Pamela R. Pehrsson
IT Support	Garry Dawkins Ermias Haile
Administrative Support	Amanda Moran

**Acknowledgements:** The authors gratefully acknowledge the constructive contributions of the peer reviewers: Lois Steinfeldt, Food Surveys Research Group, ARS, USDA; Judith H. Spungen, Food and Drug Administration, DHHS.

## Contents

1.	Introduction.....	4
1.1	About the National Nutrient Database for Standard Reference .....	4
1.2	About this Document.....	4
2.	SR-Legacy (Changes for SR28).....	5
2.1	Updated Nutrient Profiles.....	5
2.2	Food Items that Have Been Deleted .....	5
2.3	Other Changes .....	5
3.	Reports and Data Files.....	5
3.1	SR-Legacy Reports.....	5
3.2	Overview of Data Files.....	6
4.	Explanation of File Formats.....	7
4.1	Food Description (FOOD_DES) File .....	8
4.2	Food Group Description.....	10
4.3	LanguaL Factor (LANGUAL) File.....	10
4.4	LanguaL Factor Description (LANGDESC) File .....	11
4.5	Nutrient Data (NUT_DATA) File.....	11
4.6	Nutrient Definition (NUTR_DEF) File .....	13
4.7	Source Code (SRC_CD) File .....	14
4.8	Data Derivation Code Description (DERIV_CD) File .....	14
4.9	Weight (WEIGHT) File .....	15
4.10	Footnote (FOOTNOTE) File.....	16
4.11	Sources of Data Link (DATSRCLN) File .....	17
4.12	Sources of Data (DATA_SRC) File.....	17
	Appendix A. Abbreviations Used in Short Descriptions .....	1
	Appendix B. Abbreviations used in the Documentation and Users Guide.....	1

## July 2018 Revisions

Two manganese value have been updated:

NDB No. 23424 has been updated to 0.328 mg/100g.

NDB No. 23425 has been updated to 0.299 mg/100g.

# 1. Introduction

## 1.1 About the National Nutrient Database for Standard Reference

The US Department of Agriculture (USDA) National Nutrient Database for Standard Reference (SR; <http://www.ars.usda.gov/Services/docs.htm?docid=8964>) is the major source of food composition data in the United States and provides the foundation for most food composition databases in the public and private sectors. *This is the last release of the database in its current format. SR-Legacy will continue its preeminent role as a stand-alone food composition resource and will be available in the new modernized system currently under development.* SR-Legacy contains data on 7,793 food items and up to 150 food components that were reported in SR28 (2015), with selected corrections and updates. This release supersedes all previous releases.

SR data are used to develop nutrient values for the Food and Nutrient Database for Dietary Studies (FNDDS), which is used for assessment of nutrient intakes in the What We Eat in America component of the National Health and Nutrition Examination Survey used for national nutrition monitoring. SR data are also used in developing the Dietary Guidelines for Americans and Dietary Reference Intakes for a wide variety of nutrients, in creating meal plans in schools and day-care centers, in product development and labeling by manufacturers. Researchers in academia and government, dietitians advising their clients, and consumers interested in the nutrient content of their food also consult the database for their work.

Not all food items contain all of the nutrients/components included in SR. However, the lack of a value for a particular nutrient in a given food or food product does not indicate that the value is zero; it means that no value for that nutrient in that food or food product is available in SR.

## 1.2 About this Document

This document is divided into the following chapters:

- Chapter 2. SR-Legacy Highlights: Changes made to SR-28 since the last release in 2015
- Chapter 3. Data Files and Reports: An overview of the files and data contained within SR-Legacy and the various reports available on NDL's web site and through the online Search Program
- Chapter 4. Explanation of File Formats: Information on the structure of each file in the SR Database and the relationships between the files.

The appendices are as follows:

- A. Abbreviations Used in Short Descriptions File: Abbreviations and their definitions

B. Other Abbreviations: Abbreviations used in files other than Short Descriptions and their definitions

## **2. SR-Legacy (Changes for SR28)**

### **2.1 Updated Nutrient Profiles**

Sodium values and those of related nutrients (proximates, sugars, potassium, and fatty acids) were updated for approximately 175 food items as part of an effort to monitor changes in sodium content of processed and prepared foods, termed “Sentinel Foods” which are major contributors of sodium to the diet. Other selected corrections and updates were also made.

### **2.2 Food Items that Have Been Deleted**

Several products (e.g., luncheon meats, mixed dishes, soups, breakfast cereals, and fast food items) that are no longer on the market or for which current data are not available have been removed. Where brand name food products are contained in the USDA Branded Food Products Database, data previously submitted for inclusion in SR by food manufacturers, have been removed from this database at their request

### **2.3 Other Changes**

Other changes were made to improve consistency in food descriptions, household weights and other information in the database. Detailed information in this document on each data file and on food groups contained in “Notes on Foods” has been removed, but is available in the Documentation and Users Guide accompanying SR28.

## **3. Reports and Data Files**

### **3.1 SR-Legacy Reports**

Using NDL’s search program (<http://ndb.nal.usda.gov/ndb/search>), users can look up the nutrient content of any food in the database as well as the USDA Branded Food Products Database. Foods may be selected by key terms, food group or manufacturer. Users have the option of viewing a basic report (containing a limited set of nutrients, based upon those contained in the nutrition facts panel on a food package, plus those frequently requested from NDL, and also have the option of viewing a “Full Report” containing all the nutrients found in SR for that food. In addition, the Full Report also contains calorie and nitrogen-to-protein conversion factors, scientific name, refuse, and LanguaL codes (if available) for each item. A “Statistics Report” containing all the statistical information contained in SR about a nutrient value is also available.

Users can also create customized reports for individual nutrients by clicking on the “Nutrients List” button at the top of this page (<http://ndb.nal.usda.gov/ndb/search>). They can select up to three nutrients and generate results for all foods in SR-Legacy or an abridged list (a shorter list of about 1,000 foods adapted from those in our consumer publication: “US Department of Agriculture Home and Garden Bulletin 72, Nutritive Value of Foods” (Gebhardt and Thomas, 2002). Results can be reported either per 100 grams or per common household measure of each food. These reports can be saved as either PDF files or as comma-delimited text (csv) files that can be opened in Excel or other programs.

An application program interface (API) is also available that developers can use to access the database with their own applications and be assured that they are linking to the most up-to-date version of the database. Details on using the API are provided on the SR-Legacy search site: (<http://ndb.nal.usda.gov/ndb/doc/index>).

### 3.2 Overview of Data Files

The data files for SR-Legacy are available from NDL’s web site: (<http://www.ars.usda.gov/Services/docs.htm?docid=25700>) in ASCII (ISO/IEC 8859-1) and Microsoft Access 2007 formats.

Descriptions of each field in these files and the relationships between them are available in Chapter 4, Explanation of File Formats, which start on p. 7. The data files consist of four content files and eight support files. Table 1 lists these files along with the number of records in each file. In a relational database, these files can be linked together in a variety of combinations to produce queries and generate reports.

**Table 1. – Number of Records in Content and Support Files**

<b>File name (page numbers for descriptions of these files)</b>	<b>Table name</b>	<b>Number of records</b>
Content files		
Food Description (p. 10)	FOOD_DES	7,793
Nutrient Data (p. 11)	NUT_DATA	644,125
Household Weights and Measures (p. 15)	WEIGHT	14,449
Footnote (p. 16)	FOOTNOTE	537
Support files		
Food Group Description (p. 10)	FD_GROUP	25
LanguaL Factors (p. 11)	LANGUAL	37,910
LanguaL Factor Description (p. 10)	LANGDESC	773
Nutrient Definitions (p. 13)	NUTR_DEF	149

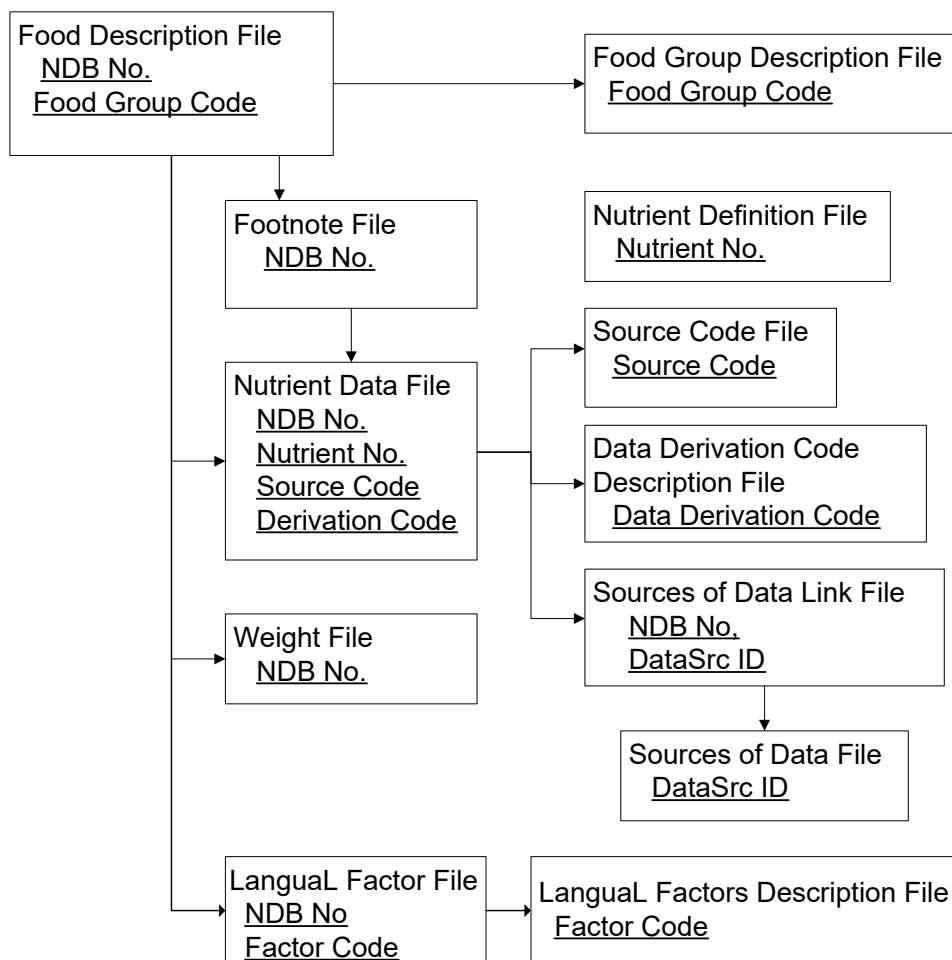
Source Code (p. 14)	SRC_CD	10
Data Derivation Code Description (p. 14)	DERIV_CD	56
Sources of Data Link (p. 17)	DATSRCLN	228,457
Sources of Data (p. 17)	DATA_SRC	606

---

#### 4. Explanation of File Formats

The data files for SR-Legacy are available from NDL's web site: (<http://www.ars.usda.gov/Services/docs.htm?docid=25700>) in ASCII (ISO/IEC 8859-1) and Microsoft Access 2007 formats. The Access database contains all of the SR-Legacy files and relationships, with a few sample queries and reports. The Microsoft Access files are compatible with later releases of the same software package and are generally compatible with other software packages released at the same time. The ASCII files are delimited as follows: All fields are separated by carets (^), and text fields are surrounded by tildes (~). A double caret (^) or two carets and two tildes (~) appear when a value is null or a field is blank. Format descriptions include the name of each field, its type [N = numeric with width and number of decimals (w.d) and A = alphanumeric], and maximum record length. The size of the fields in the data files can be less than indicated in the description of each file and may change in later releases. The four content files in the database are the Food Description file, Nutrient Data file, Gram Weight file, and Footnote file. The eight support files are the Food Group Description file, LanguaL Factor file, LanguaL Factor Description file, Nutrient Definition file, Source Code file, Data Derivation Code Description file, Sources of Data file, and Sources of Data Link file. Figure 1 shows the relationships between files and their key fields.





**Figure 1. Relationships among Files in SR-Legacy\***

\* Underlined items are key fields.

Tables 2 through 13 describe the formats of the support files as well as the relationships that can be made among these files. Fields that always contain data and fields that can be left blank or null are identified in the “blank” column; N indicates a field that is always filled, and Y indicates a field that might be blank (null). An asterisk indicates primary key(s) for the file. Although keys are not identified for the ASCII files, the file descriptions show where keys would be used to identify relationships between the various files when the ASCII files are imported into a DB. It is important to use the keys listed here, particularly with the Nutrient Data file, which uses two keys.

#### 4.1 Food Description (FOOD\_DES) File

The Food Description file (Table 2) contains long and short descriptions and food group designators for all food items, along with common names, manufacturer name, scientific name, percentage and description of refuse, and factors used for calculating protein and kilocalories, if applicable. Items used in the FNDDS are identified by “Y” in the Survey field. A number of fields in this table were added and/or changed in the 2001 revision

of NDL's Nutrient Databank System. Only those food items processed through the system since then will contain information in those fields.

Relationships between the Food Description file and other SR files:

- Links to the Food Group Description file by the FdGrp\_Cd field
- Links to the Nutrient Data file by the NDB\_No field
- Links to the Weight file by the NDB\_No field
- Links to the Footnote file by the NDB\_No field
- Links to the LanguaL Factor file by the NDB\_No field

**Table 2. Food Description File Format**

Field name	Type	Blank	Description
NDB_No	A 5*	N	5-digit Nutrient Database number that uniquely identifies a food item. If this field is defined as numeric, the leading zero is lost.
FdGrp_Cd	A 4	N	4-digit code indicating the food group to which a food item belongs
Long_Desc	A 200	N	200-character description of food item
Shrt_Desc	A 60	N	60-character abbreviated description of food item; generated from the 200-character description using abbreviations in Appendix A; includes additional abbreviations if the short description is longer than 60 characters
ComName	A 100	Y	Other names commonly used to describe a food, including local or regional names, such as "soda" or "pop" for "carbonated beverages"
ManufacName	A 65	Y	The company that manufactured the product, when appropriate
Survey	A 1	Y	Whether the food item is used in the FNDDS; has a complete nutrient profile for the 65 FNDDS nutrients
Ref_desc	A 135	Y	Description of inedible parts of a food item (refuse), such as seeds or bone
Refuse	N 2	Y	Percentage of refuse by weight
SciName	A 65	Y	Scientific name of the food item for the least processed form of the food (usually raw), if applicable
N_Factor	N 4.2	Y	Factor for converting nitrogen to protein amounts)

Field name	Type	Blank	Description
Pro_Factor	N 4.2	Y	Factor for calculating calories from protein amounts
Fat_Factor	N 4.2	Y	Factor for calculating calories from fat levels
CHO_Factor	N 4.2	Y	Factor for calculating calories from carbohydrate values

\* Primary key for the Food Description file

## 4.2 Food Group Description (FD\_GROUP) File

The Food Group Description file (Table 3) is a support file for the Food Description file and lists the food groups used in SR-Legacy and their descriptions.

Relationships between the Food Group Description file and other SR files:

- Links to the Food Description file by FdGrp\_Cd

**Table 3. Food Group Description File Format**

Field name	Type	Blank	Description
FdGrp_Cd	A 4*	N	4-digit code identifying a food group
FdGrp_Desc	A 60	N	Name of food group

\* Primary key for the Food Group Description file

## 4.3 LanguaL Factor (LANGUAL) File

The LanguaL Factors file (Table 4) is a support file for the Food Description file and contains the factors from the LanguaL thesaurus used to code each food.

Relationships between the LanguaL Factors file and other SR files:

- Links to the Food Description file by the NDB\_No field
- Links to LanguaL Factors Description file by the Factor\_Code field

**Table 4. LanguaL Factor File Format**

Field name	Type	Blank	Description
NDB_No	A 5*	N	5-digit Nutrient Databank number that uniquely identifies a food item; leading zero is lost if this field is defined as numeric
Factor_Code	A 5*	N	LanguaL factor from the LanguaL thesaurus

\* Primary keys for the LanguaL Factor file

#### 4.4 LanguaL Factor Description (LANGDESC) File

The LanguaL Factors Description file (Table 5) is a support file for the LanguaL Factor file and contains descriptions of the factors used to assign selected food items codes in SR-Legacy.

Relationships between the LanguaL Factor Descriptions file and other SR files:

- Links to the *LanguaL Factor file by the Factor\_Code field*

**Table 5. LanguaL Factor Description File Format**

Field name	Type	Blank	Description
Factor_Code	A 5*	N	LanguaL factor from the LanguaL thesaurus; includes only codes used to assign factor to foods in the LanguaL Factor file
Description	A 140	N	Description of the LanguaL factor code from the LanguaL thesaurus

\* Primary key for the LanguaL Factor Description file

#### 4.5 Nutrient Data (NUT\_DATA) File

The Nutrient Data file (Table 6) contains the nutrient values and information about these values, including statistical information. A number of fields in this table were added in the 2001 revision of NDL's Nutrient Databank System. Only those items processed through the system since then will contain information in those fields.

Relationships between the Nutrient Data Description file and other SR files:

- Links to the Food Description file by NDB\_No
- Links to the Food Description file by Ref\_NDB\_No
- Links to the Weight file by NDB\_No
- Links to the Footnote file by NDB\_No and when applicable, Nutr\_No
- Links to the Sources of Data Link file by NDB\_No and Nutr\_No
- Links to the Nutrient Definition file by Nutr\_No
- Links to the Source Code file by Src\_Cd
- Links to the Data Derivation Code Description file by Deriv\_Cd

**Table 6. Nutrient Data File Format**

Field name	Type	Blank	Description
NDB_No	A 5*	N	5-digit Nutrient Database number that uniquely identifies a food item; leading zero is lost if this field is defined as numeric

Field name	Type	Blank	Description
Nutr_No	A 3*	N	Unique 3-digit identifier code for a nutrient
Nutr_Val	N 10.3	N	Amount in 100 g, edible portion <sup>†</sup>
Num_Data_Pts	N 5.0	N	Number of analyses used to calculate the nutrient value; values of zero are sometimes reported for older (before SR14, 2001) nutrient values and can indicate if they were calculated or imputed
Std_Error	N 8.3	Y	Standard error of the mean; value is null if it cannot be calculated or if the number of data points is less than 3
Src_Cd	A 2	N	Type of data (e.g., analytical, calculated, imputed, assumed zero)
Deriv_Cd	A 4	Y	Information on how the value is determined, populated only for items added or updated since SR14 (2001), might not be populated if older records were used to calculate the mean value
Ref_NDB_No	A 5	Y	NDB number of the item used to calculate a missing value; populated only for items added or updated since SR14
Add_Nutr_Mark	A 1	Y	Vitamin or mineral added for fortification or enrichment; populated for ready-to-eat breakfast cereals and many brand-name hot cereals in food group 08
Num_Studies	N 2	Y	Number of studies
Min	N 10.3	Y	Minimum value
Max	N 10.3	Y	Maximum value
DF	N 4	Y	Degrees of freedom. The displayed degrees of freedom were computed using Satterthwaite's approximation (Kotz <i>et al.</i> , 1988)
Low_EB	N 10.3	Y	Lower 95% error bound. Occasionally values less than zero are reported here due to the calculation of the confidence intervals around the mean
Up_EB	N 10.3	Y	Upper 95% error bound
Stat_cmt	A 10	Y	Statistical comments (described below this table)
AddMod_Date	A10	Y	When value was added to the database or was last modified

\* Primary keys for the Nutrient Data file

† Nutrient values have been rounded to a specified number of decimal places for each nutrient. The number of decimal places is listed in the Nutrient Definition file.

The statistical comments included in the Nutrient Data table are as follows:

- The displayed summary statistics were computed from data containing a verbally described value, such as “less than,” “trace,” or “not detected,” to carry out mathematical computations. The definition of the verbal value is always used to derive numeric values. By definition, the verbal definition must be a value that falls between two or more numeric values based on a simple linear interpolation. This process results in the most likely numeric location for the verbally described value by the simplest and least computationally intense imputation procedures. Little *et al.* (2002) describe a procedure to use when the added variance needs to be accounted for due to the imputation of the summary value. Additional information on the calculation of these values is provided in Appendices D and E.
- The procedure used to estimate the reliability of the generic mean requires the data associated with each study to be a simple random sample from all products associated with the given data source (for example, manufacturer, variety, cultivar, and species). For the specific nutrient, one or more data sources had only one observation. Therefore, the standard errors, degrees of freedom, and error bounds were computed from the between-group standard deviation of the weighted groups that have only one observation.

#### 4.6 Nutrient Definition (NUTR\_DEF) File

The Nutrient Definition file (Table 7) is a support file for the Nutrient Data file. It provides the three-digit nutrient code, unit of measure, International Network of Food Data Systems tagname, and description for each nutrient or food component.

Relationships between the Nutrient Definition file and other SR files:

- Links to the Nutrient Data file by Nutr\_No

**Table 7. Nutrient Definition File Format**

Field name	Type	Blank	Description
Nutr_No	A 3*	N	Unique 3-digit identifier code for a nutrient
Units	A 7	N	Units of measure (e.g., mg, g, and µg)
Tagname	A 20	Y	International Network of Food Data Systems tagname <sup>†</sup> (unique abbreviation for a nutrient/food component developed to support data exchange)
NutrDesc	A 60	N	Name of nutrient/food component

Field name	Type	Blank	Description
Num_Dec	A 1	N	Number of decimal places to which a nutrient value is rounded
SR_Order	N 6	N	Used to sort nutrient records in the same order as various reports produced from SR-Legacy

\* Primary key for the Nutrient Definition file

† INFOODS, 2014

#### 4.7 Source Code (SRC\_CD) File

The Source Code file (Table 8) contains codes indicating the type of data (e.g., analytical, calculated, or assumed zero) in the Nutrient Data file.

Relationships between the Source Code file and other SR files:

- Links to the Nutrient Data file by Src\_Cd

**Table 8. Source Code File Format**

Field name	Type	Blank	Description
Src_Cd	A 2*	N	2-digit code indicating type of data
SrcCd_Desc	A 60	N	Description of source code that identifies the type of nutrient data

\* Primary key for the Source Code file

#### 4.8 Data Derivation Code Description (DERIV\_CD) File

The Data Derivation Code file (Table 9) provides information on the derivation codes, and their descriptions.

Relationships between the Data Derivation Code Description file and other SR files:

- Links to the Nutrient Data file by Deriv\_Cd

**Table 9. Data Derivation Code Description File Format**

Field name	Type	Blank	Description
Deriv_Cd	A 4*	N	Derivation code
Deriv_Desc	A 120	N	Description of derivation code and how the value was determined

\*Primary key for the Data Derivation Code file

As an example, the data derivation code that indicates how  $\alpha$ -tocopherol (Nutrient No. 323) in emu, fan fillet, raw (NDB No. 05623) was calculated is BFSN. The breakdown of the code is as follows:

B = based on another form of the food or a similar food;  
F = concentration adjustment used;  
S = solids, the specific concentration adjustment used; and  
N = retention factors not used.

The Ref\_NDB\_No is 05621 for Emu, ground, raw. This means that the analytical  $\alpha$ -tocopherol value in the total solids of emu, ground, raw is used to calculate the  $\alpha$ -tocopherol level in the total solids of emu, fan fillet, raw.

$$N_t = (N_s * S_s) / S_t$$

where:

$N_t$  = the nutrient content of the target item,  
 $N_s$  = the nutrient content of the source item  
For NDB No. 05621, amount of  $\alpha$ -tocopherol = 0.24 mg/100 g  
 $S_s$  = the total solids content of the source item, and  
For NDB No. 05621, solids = 27.13 g/100 g  
 $S_t$  = the total solids content of the target item.  
For NDB No. 05623, solids = 25.38 g/100 g

The formula for this example is:

$$N_t = (0.24 \times 27.13) / 25.38 = 0.26 \text{ mg/100 g } \alpha\text{-tocopherol in emu, fan fillet, raw}$$

Only items whose values were imputed since SR14 (2001) have both derivation codes and reference NDB numbers. Other items in the NDBS with values imputed before 2014 or outside the NDBS have data derivation codes, but their Ref\_NDB\_No field is blank.

#### 4.9 Weight (WEIGHT) File

The Weight file (Table 10) contains the weights in grams of several common measures for each food item.

Relationships between the Weight file and other SR files:

- Links to Food Description file by NDB\_No
- Links to Nutrient Data file by NDB\_No



**Table 10. Weight File Format**

Field name	Type	Blank	Description
NDB_No	A 5*	N	5-digit NDB number that uniquely identifies a food item; leading zero is lost when this field is defined as numeric
Seq	A 2*	N	Sequence number
Amount	N 5.3	N	Unit modifier (for example, 1 in “1 cup”)
Msre_Desc	A 84	N	Description (for example, “cup, diced,” or “1-inch pieces”)
Gm_Wgt	N 7.1	N	Weight in grams
Num_Data_Pts	N 3	Y	Number of data points
Std_Dev	N 7.3	Y	Standard deviation

\* Primary keys for the Weight file

#### 4.10 Footnote (FOOTNOTE) File

The Footnote file (Table 11) contains additional information about each food item, its household weight and/or nutrient value.

Relationships between the Footnote file and other SR files:

- Links to the Food Description file by NDB\_No
- Links to the Nutrient Data file by NDB\_No and when applicable, Nutr\_No
- Links to the Nutrient Definition file by Nutr\_No, when applicable

**Table 11. Footnote File Format**

Field name	Type	Blank	Description
NDB_No	A 5	N	5-digit NDB number that uniquely identifies a food item; leading zero is lost when this field is defined as numeric
Footnt_No	A 4	N	Sequence number; same footnote is used if it applies to more than one nutrient number, so this file cannot be indexed and it has no primary key
Footnt_Typ	A 1	N	Role of footnote: D: adds information to the food description M: adds information to the measure description N: provides additional information on a nutrient value; the Nutr_No is also provided for this type of footnote
Nutr_No	A 3	Y	Unique 3-digit identifier code for a nutrient to which the footnote applies

Field name	Type	Blank	Description
Footnt_Txt	A 200	N	Footnote text

#### 4.11 Sources of Data Link (DATSRCLN) File

The Sources of Data Link file (Table 12) links the Nutrient Data file with the Sources of Data table. It is needed to resolve the many-to-many relationship between the two tables.

Relationships between the Sources of Data Link file and other SR files:

- Links to the Nutrient Data file by NDB No. and Nutr\_No
- Links to the Nutrient Definition file by Nutr\_No
- Links to the Sources of Data file by DataSrc\_ID

**Table 12. Sources of Data Link File Format**

Field name	Type	Blank	Description
NDB_No	A 5*	N	5-digit NDB number that uniquely identifies a food item; leading zero is lost when this field is defined as numeric
Nutr_No	A 3*	N	Unique 3-digit identifier code for a nutrient
DataSrc_ID	A 6*	N	Unique identification number for the reference/source

\* Primary key for the Sources of Data Link file

#### 4.12 Sources of Data (DATA\_SRC) File

The Sources of Data file (Table 13) provides a connection to the DataSrc\_ID in the Sources of Data Link file.

Relationships between the Sources of Data file and other SR files:

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

**Table 13. Sources of Data File Format**

Field name	Type	Blank	Description
DataSrc_ID	A 6*	N	Unique identification number for the reference/source
Authors	A 255	Y	Authors of journal articles or name of sponsoring organization for other documents

<b>Field name</b>	<b>Type</b>	<b>Blank</b>	<b>Description</b>
Title	A 255	N	Title of article or name of other document
Year	A 4	Y	Year of publication of article or other document
Journal	A 135	Y	Name of the journal in which the article was published
Vol_City	A 16	Y	Volume number for journal articles, books, or reports or city of sponsoring organization
Issue_State	A 5	Y	Issue number for journal articles or state in which the sponsoring organization is located
Start_Page	A 5	Y	Starting page number of article/document
End_Page	A 5	Y	Ending page number of article/document

\* Primary key for the Sources of Data file

## References

Kotz S, Johnson NL, ed. Encyclopedia of Statistical Sciences. New York, NY: John Wiley and Sons; 1988.

Little RA, Rubin DB. Statistical analysis with missing data. Hoboken, NJ: John Wiley and Sons; 2002.

## Appendix A. Abbreviations Used in Short Descriptions

All purpose	ALLPURP	Coated	COATD
Aluminum	AL	Coconut	COCNT
And	&	Commercial	COMM
Apple	APPL	Commercially	COMMPLY
Apples	APPLS	Commodity	COMDTY
Applesauce	APPLSAUC	Composite	COMP
Approximate	APPROX	Concentrate	CONC
Approximately	APPROX	Concentrated	CONCD
Arm and blade	ARM&BLD	Condensed	COND
Artificial	ART	Condiment, condiments	CONDMNT
Ascorbic acid	VIT C	Cooked	CKD
Aspartame	ASPRT	Cottonseed	CTTNSD
Aspartame-sweetened	ASPRT-	Cream	CRM
SWTND		Creamed	CRMD
Baby food	BABYFD	Dark	DK
Baked	BKD	Decorticated	DECORT
Barbequed	BBQ	Dehydrated	DEHYD
Based	BSD	Dessert, desserts	DSSRT
Beans	BNS	Diluted	DIL
Beef	BF	Domestic	DOM
Beverage	BEV	Drained	DRND
Boiled	BLD	Dressing	DRSNG
Boneless	BNLESS	Drink	DRK
Bottled	BTLD	Drumstick	DRUMSTK
Bottom	BTTM	English	ENG
Braised	BRSD	Enriched	ENR
Breakfast	BRKFST	Equal	EQ
Broiled	BRLD	Evaporated	EVAP
Buttermilk	BTTRMLK	Except	XCPT
Calcium	CA	Extra	EX
Calorie, calories	CAL	Flank steak	FLANKSTK
Canned	CND	Flavored	FLAV
Carbonated	CARB	Flour	FLR
Center	CNTR	Food	FD
Cereal	CRL	Fortified	FORT
Cheese	CHS	French fried	FRENCH FR
Chicken	CHICK	French fries	FRENCH FR
Chocolate	CHOC	Fresh	FRSH
Choice	CHOIC	Frosted	FRSTD
Cholesterol	CHOL	Frosting	FRSTNG
Cholesterol-free	CHOL-FREE	Frozen	FRZ
Chopped	CHOPD	Grades	GRDS
Cinnamon	CINN	Gram	GM

Green	GRN	Par fried	PAR FR
Greens	GRNS	Parboiled	PARBLD
Heated	HTD	Partial	PART
Heavy	HVY	Partially	PART
Hi-meat	HI-MT	Partially fried	PAR FR
High	HI	Pasteurized	PAST
Hour	HR	Peanut	PNUT
Hydrogenated	HYDR	Peanuts	PNUTS
Imitation	IMITN	Phosphate	PO4
Immature	IMMAT	Phosphorus	P
Imported	IMP	Pineapple	PNAPPL
Include, includes	INCL	Plain	PLN
Including	INCL	Porterhouse	PRTRHS
Infant formula	INF FORMULA	Potassium	K
Ingredient	ING	Powder	PDR
Instant	INST	Powdered	PDR
Juice	JUC	Precooked	PRECKD
Junior	JR	Preheated	PREHTD
Kernels	KRNLS	Prepared	PREP
Large	LRG	Processed	PROC
Lean	LN	Product code	PROD CD
Lean only	LN	Propionate	PROP
Leavened	LVND	Protein	PROT
Light	LT	Pudding, puddings	PUDD
Liquid	LIQ	Ready-to-bake	RTB
Low	LO	Ready-to-cook	RTC
Low fat	LOFAT	Ready-to-drink	RTD
Marshmallow	MARSHMLLW	Ready-to-eat	RTE
Mashed	MSHD	Ready-to-feed	RTF
Mayonnaise	MAYO	Ready-to-heat	RTH
Medium	MED	Ready-to-serve	RTS
Mesquite	MESQ	Ready-to-use	RTU
Minutes	MIN	Reconstituted	RECON
Mixed	MXD	Reduced	RED
Moisture	MOIST	Reduced-calorie	RED-CAL
Natural	NAT	Refrigerated	REFR
New Zealand	NZ	Regular	REG
Noncarbonated	NONCARB	Reheated	REHTD
Nonfat dry milk	NFDM	Replacement	REPLCMNT
Nonfat dry milk solids	NFDMS	Restaurant-prepared	REST-PREP
Nonfat milk solids	NFMS	Retail	RTL
Not Further Specified	NFS	Roast	RST
Nutrients	NUTR	Roasted	RSTD
Nutrition	NUTR	Round	RND
Ounce	OZ	Sandwich	SNDWCH
Pack	PK	Sauce	SAU

Scalloped	SCALLPD	Vitamin A	VIT A
Scrambled	SCRMBLD	Vitamin C	VIT C
Seed	SD	Water	H2O
Select	SEL	Whitener	WHTNR
Separable <sup>1</sup>		Whole	WHL
Shank and sirloin	SHK&SIRL	Winter	WNTR
Short	SHRT	With	W/
Shoulder	SHLDR	Without	WO/
Simmered	SIMMRD	Yellow	YEL
Skin	SKN		
Small	SML		
Sodium	NA		
Solids	SOL		
Solution	SOLN		
Soybean	SOYBN		
Special	SPL		
Species	SP		
Spread	SPRD		
Standard	STD		
Steamed	STMD		
Stewed	STWD		
Stick	STK		
Sticks	STKS		
Strained	STR		
Substitute	SUB		
Summer	SMMR		
Supplement	SUPP		
Sweet	SWT		
Sweetened	SWTND		
Sweetener	SWTNR		
Teaspoon	TSP		
Thousand	1000		
Toasted	TSTD		
Toddler	TODD		
Trimmed <sup>1</sup>			
Trimmed to <sup>1</sup>			
Uncooked	UNCKD		
Uncreamed	UNCRMD		
Undiluted	UNDIL		
Unenriched	UNENR		
Unheated	UNHTD		
Unprepared	UNPREP		
Unspecified	UNSPEC		
Unsweetened	UNSWTND		
Variety, varieties	VAR		
Vegetable, vegetables	VEG		

---

<sup>1</sup> Removed in short description

## Appendix B. Abbreviations used in the Documentation and Users Guide

ap	as purchased
ARS	Agricultural Research Service
DFE	dietary folate equivalent
dia	diameter
DRI	dietary reference intakes
fl oz	fluid ounce
FNDDS	USDA Food and Nutrient Database for Dietary Studies
INFOODS	International Network of Food Data Systems
IU	international unit
kcal	kilocalorie
kJ	kilojoule
NAM	National Academy of Medicine (formerly Institute of Medicine)
NDB	Nutrient Databank
NDBS	Nutrient Databank System
NDL	Nutrient Data Laboratory
NFNAP	National Food and Nutrient Analysis Program
NLEA	Nutrition Labeling and Education Act
RAE	retinol activity equivalent
RE	retinol equivalent
RDA	recommended dietary allowance
SR	USDA National Nutrient Database for Standard Reference
UL	tolerable upper intake level

