

NHANES 1999-2000 Dietary Supplement Data Release

Documentation Date: 9/26/03

Documentation File Name: DSQ

Survey Years included in this file release: 1999-2000

DSQ section characteristics

Section Description:

The Dietary Supplements section (DSQ) provides personal interview data on use of vitamins, minerals, and other dietary supplements. These questions were asked for all participants during the household interview. The questions in the NHANES 1999-2000 DSQ section are basically the same as in NHANES III (1988-94), however in NHANES 1999-2000, participants were asked about use of all types of dietary supplements, not just vitamin and mineral supplements.

- Interview setting: Home
- Mode of administration: In-person
- Eligible Sample: All ages. Survey participants over 16 years of age answer for themselves; proxy respondents answer for participants 16 years or younger.

Topics included in this document

Sections

1. Comparison of this release with the first DSQ data release
2. Data collection
3. Data processing, editing, and file preparation
4. Development of the dietary supplement database
5. Data file structure
6. Quality control procedures
7. Analytic notes
8. Data access and analyses

Appendices

- Appendix 1: Handcard DSQ1
- Appendix 2: Matching Codes
- Appendix 3: Default Supplements and Antacids Assigned
- Appendix 4: Source of Supplement Information
- Appendix 5: Conversion Factors for Compounds
- Appendix 6: Formulation Type
- Appendix 7: Rules for Classifying Ingredients
- Appendix 8: Reported Serving Size Units
- Appendix 9: Label Serving Size Units
- Appendix 10: Ingredient Units
- Appendix 11: Ingredient Classification
- Appendix 12: Data File Structure and Relationships

1. Comparison of this DSQ data release with the first data release (June 2002)

The first release (June 2002): contained only preliminary, **unedited** data on whether a participant reported taking any dietary supplement (DSQ010), and the total number of supplements reported (DSDCOUNT). This second release contains **edited** data for DSD010 and DSDCOUNT, as well as data on the supplements themselves and details of the participant's use of the supplement.

2. Data collection

A. Data collection procedures

Participants are asked if they have taken a dietary supplement in the past month, and old to include prescription and non-prescription supplements. They are shown a hand card that lists examples of dietary supplements (Appendix 1: Handcard DSQ1). Those who answer "yes" are asked to show the supplement containers to the interviewer. If no container is available, the interviewer asks the participant for as detailed a name as possible. For each supplement reported, the interviewer enters the supplement's name and manufacturer into a computer. Recording the name can be a matter of judgment. A definitive name may not be obvious, as supplement labels may contain a variety of descriptive phrases, function claims, and quality claims, with wording in diverse places on the label and in various sizes and directions, including vertical. Interviewers are instructed to enter as complete a name as possible, including all qualifying words (such as "iron-free," "high potency," and "with lutein").

The interviewer then views a list of supplements on her/his computer and selects one if it is judged to be an exact match for the supplement entered; otherwise, no match is made. No ingredient information is recorded by the interviewer. However, if the supplement is a single ingredient supplement, the interviewer records the strength. Participants are asked about their use of the supplement: how long they have been taking it; how often in the last month; and how much each time they took it. Up to 20 supplements can be recorded. The exact questions the interviewer asks, and a short description of the other data recorded, are included in the DSQ codebook.

Some prescription supplements are mistakenly recorded in the prescription medicine section rather than the dietary supplement section. Strength and details of the person's usage are missing for these supplements. All supplements, including prescription supplements are released in the DSQ section only, not in the medication (RXQ) section.

Information on use of non-prescription antacids was sometimes recorded in the dietary supplement section; other times in the antacid sub-section of the medication section (RXQ). Because of their nutrient content, antacids that contain calcium or magnesium are released with the DSQ data, irrespective of where they were reported. Only these antacids are reported; this is not a complete accounting of all antacids. Data users should also be aware that the section in which an antacid is recorded (e.g. DSQ or RXQ) may not accurately represent the usage of that antacid. For example, some antacids reported with the RXQ (medications) section may have been used as a dietary supplement or vice versa, and some antacids may be used as both medications and calcium supplements. Thus, users are cautioned that analyses of these data to estimate the percentage of antacids used as dietary supplements would not be

appropriate.

B. Survey data collected by interviewers

- Taken any vitamin, mineral or other dietary supplements in past month?
- Supplement name entered and selected
- Supplement strength, if single ingredient
- Was the container was seen?
- Supplement manufacturer entered and selected
- How long supplement has been taken?
- How often supplement was taken in past month?
- How much was taken each time?

3. Data processing, editing and file preparation

A. Matching a reported supplement to known supplement

Trained nutritionists at NCHS match the product names entered or selected by the interviewer (including prescription supplements and antacids containing calcium or magnesium) to a known product when possible. These matches are made with varying degrees of precision, and a matching code (DSDMATCH) accompanies each match (Appendix 2: Matching Codes). Briefly, the codes are: 1) Exact or near exact match; 2) Probable match; 3) Generic match; 4) Reasonable match; and 5) Default match. In some cases no match can be made with any certainty. These products are coded 6) No match. Products whose names were reported as “Refused” (7777) or “Don’t know” (9999) have matching codes of 7 and 9, respectively.

NCHS communicates with many major manufacturing company representatives to determine when various product re-formulations become available. We match reported with known supplements based upon reported supplement name as entered by the interviewer and the product version on the market at that time, if known. Based upon manufacturer advice, we have used a lag time of 5 months after new product market entry in matching recorded products to these new products. Despite these precautions, there is no guarantee that the product taken was not an older or newer product than the one to which it was matched.

NCHS created generic and default dietary supplements and entered these into the supplement database. Reported supplements for which the strength of all ingredients were known were matched to a generic supplement, i.e. one which had no brand name. These were generally single ingredient supplements which included a strength (e.g. vitamin C 500 mg) or multiple vitamins and/or mineral supplements made by a private label manufacturer that was known to us and for which we had a label with identical ingredients and strengths (e.g. brand X all-purpose multivitamin was reported, and we had a label for brand Y, made by the same manufacturer). These matches are coded as 3. When all ingredient strengths were not known, the supplement was matched to a default supplement where possible. Defaults were created for single ingredient and multiple ingredient supplements where we had enough information from our own data or from sales data to be able to determine which was the best selling or most frequently reported supplement of that type. These matches were coded as 5. Created default and generic products and the actual products or strengths that were assigned to these defaults are listed in Appendix 3 (Assigned default supplements and antacids).

B. Variable creation

DSDANTA: (antacid reported in DSQ section). This is an indicator variable coded 1 if an antacid was recorded in the dietary supplement (DSQ) section of the questionnaire, 2 if the antacid was recorded in the antacid (RXQ) section of the questionnaire, and 0 if the product was a dietary supplement that was not an antacid. For a few participants, the same antacid was recorded in both questionnaire sections. In these instances, the antacid was considered to be in the DSQ section and coded as 1.

DSDMTCH: (matching code). These codes (see Appendix 2 and above, Matching a reported product to a known product) describe the basis for the match of product entered or selected by the interviewer to a known product.

DSDCOUNT: (number of supplements taken). All supplements, whether reported in the DSQ or RXQ section, as well as the antacids recorded in the DSQ section of the interview (DSDANTA=1) count as 1 supplement in DSDCOUNT. Antacids that were not reported in the DSQ section of the interview (i.e. were reported as antacids in the RXQ section only; DSDANTA=2) do not count as supplements and are not included in this count. Non-supplements that were reported in the DSQ section do not count. Products whose names were entered as 7777 or 9999, that is, don't know or refused, are counted as supplements, since there is no clear evidence that they are not and they were reported by the participant as a supplement.

DSDCNT variables give the number of ingredients of each type in the supplement, including in blends. The specific variables are DSDCNTV, DSDCNTM, DSDCNTA, DSDCNTB, DSDCNTO, which provide the number of vitamins, minerals, amino acids, botanicals, and other ingredients, respectively, in each supplement.

C. Data editing

As a result of data editing, the data in this second release for the variables DSD010 (indicator of any supplement use) and for DSD130 (number of supplements used), now called DSD010 and DSDCOUNT, may differ slightly from the data that were contained in the first DSQ release of the NHANES 1999-2000 data.

DSD010: Indicator of any dietary supplement use

Participants with a record of having taken a product determined to be a supplement in the last 30 days are coded 1. Some such products were mistakenly recorded in the RXQ section, either as antacids or prescription medicines. These data have been moved to the DSQ section and are counted as supplements for DSD010 and DSDCOUNT. Participants who reported taking an antacid containing calcium or magnesium in the last 30 days that was recorded only in the RXQ antacid section (DSDANTA=2), but did not take any dietary supplement are coded 2. Participants who did not take any product that was determined to be a dietary supplement in the last 30 days are also coded 2, even if they originally reported having taken a supplement. Examples of products that were determined not to be supplements included foods (garlic cloves, raisin bran cereal, PowerBar[®]), drinks (Ensure[®], Gatorade[®], tea), over the counter drugs (aspirin, laxatives, electrolyte replacement fluids), homeopathic medicines, and prescription medicines. Prescription medicines and analgesics were removed from DSQ to the appropriate RXQ section.

DSDSUPP: Name of supplement

The name that is assigned is the name of a known supplement for which ingredient information is available which was matched to the name that was keyed or selected by the interviewer, based upon the supplement label or, if no container was available, the supplement name given by the participant. As described above, these matches were made with varying degrees of certainty. When no match could be made, then the product was given a match of 6, “unknown.” For these matches, the 10 digit supplement ID begins with a 6 and the phrase “no product information” is assigned as the name. Products with brand names that are available only in a limited region of the country are released with a generic name, not a brand name, to ensure participant confidentiality. Product names that were entered as “refused” or “don’t know” are named “7777” and “9999”, respectively.

DSD090: How long has the supplement been taken? (days)

Responses were recorded in days, weeks, months, or years. To facilitate analysis, all answers are converted to days, using conversion factors of 365 days per year, 30.4 days per month, and 7 days per week, and rounded to the nearest integer. For two participants, the amount of time recorded was slightly longer (1-2 months) than a child had been alive so the data were adjusted to the length of the child’s life.

4. Development of the dietary supplement database

As described in Section 1, interviewers record the name of the supplement that the participant reported taking, either from the supplement container or from the person’s report. Recording the name can be a matter of judgment. A definitive name may not be obvious, as supplement labels may contain a variety of descriptive phrases, function claims, and quality claims, with wording in diverse places on the label and in various sizes and directions, including vertical. The interviewer then views a list of supplements on her/his computer and selects one only if it is judged to be an exact match for the supplement entered, otherwise, no match is made. No ingredient information is recorded by the interviewer.

NCHS attempts to obtain a label for each supplement reported by a participant from sources such as the manufacturer or retailer, the Internet, company catalogs, and the Physician’s Desk Reference (PDR). Selected label information is then entered into the NHANES Dietary Supplement Database including: supplement name; manufacturer; serving size; form of serving size; ingredients and amounts, including an operator to indicate that the amount is less than, more than or equal to the amount. The ingredient information entered into the database is taken directly from the supplement facts box on the label or carton, if available, or the equivalent from other sources.

NCHS does not verify the actual composition of supplements reported: the database is based on label information, not testing. The best information source is the label itself, but when this cannot be obtained, other sources are used. Information from other sources may not always be an accurate reflection of what is actually on the supplement label. This is true for the supplement’s apparent name as well as for the ingredients. The apparent name on the container is most important, since interviewers see the supplement container and record the name as it appears to them. Differences from what appears on the label are particularly noted for information from the Internet

(name and ingredients), the PDR (name), and supplement carton (name). In addition, supplements may change the appearance of a label and thus the apparent name without changing the content or may change content with minimal change to the label, or may change both. NCHS attempts to obtain updated labels as they come onto the market, but cannot guarantee complete success. The source of the supplement information is included in the data release. (See Appendix 4: Source of Supplement Information)

Ingredients may be listed in various ways, for example: in their elemental form (e.g. calcium); as compounds (e.g. calcium citrate); as plant forms (e.g. extract, concentrate, oil) or plant parts (e.g. root, leaf); as percentages (e.g. beta carotene- % of vitamin A); and as blends or complexes (e.g. bioflavonoid complex; proprietary blend). Suggestions for conversion of compounds are contained in Appendix 5. These are based upon literature searches, but may contain errors. Users should verify these conversions. Note especially that there are a number of conversions for ferrous sulfate depending upon its form, which was not always specified.

Some supplements contain proprietary blends of ingredients, generally non-nutrients. Usually an amount is specified for the blend but not individual ingredients. In such cases, the blend and its amount are entered into the database, but the individual ingredients of the blend are listed without any amounts. A few supplement labels list ingredients but no amounts at all, so the amounts are missing.

Additional information about the supplement is entered by NCHS staff into the database.

1) Supplement formulation type (prenatal; infant/child; standard; and mature: Appendix 6) is based upon the appearance of the label or specific wording indicating the targeted users.

2) Ingredients are classified as vitamin; mineral; amino acid; botanical; other (Appendix 7: Rules for classifying ingredients). Of particular note is that we have classified the ingredient beta-carotene as "other," not a vitamin. This ingredient information is later tallied to provide the number of ingredients of each type in the supplement (See above, Section 3: Data Processing).

3) Generic and default supplements are also entered into the database to be matched with supplements for which brand-specific matches cannot be made. The use of these is described in the data processing and analytic sections.

4) Supplement names and ID numbers; serving size amount and unit; ingredient names, ID numbers, quantity, unit and category; blend flag; blend name and id number; source of information; and formulation type classifications that are included in this data release are all drawn from the NHANES supplement database.

5. Data file structure

The data relating to dietary supplements are being released in five separate files, which can be linked by a participant id, a supplement id, or an ingredient id. This structure is used to avoid unwieldy record length. The content of each file is described below. To minimize the size of the files for downloading, names of supplements, ingredients, etc are included in a format library (DSQFMT) rather than in the variables. For instructions on formatting these files, refer to the DSQ Readme file.

File 1: Supplement counts	
Variable Name	Label
SEQN	Respondent sequence number
DSD010	Any dietary supplements taken?
DSDCOUNT	Total # of dietary supplements taken

This file includes variables that indicate whether a person took a dietary supplement and how many supplements were taken in the past month. They are edited versions of the DSQ data previously released.

File 2: Supplement records	
Variable Name	Label
SEQN	Respondent sequence number
DSDSUPID	Supplement ID number
DSDSUPP	Supplement name
DSD070	Was container seen?
DSDMTCH	Matching code (Appendix 2)
DSD090	How long supplement taken (days)?
DSD100Q	How often taken past month? (quantity)
DSD100U	How often taken past month? (unit)
DSD120Q	How much taken each time? (quantity)
DSD120U	How much taken each time? (unit) (Appendix 8)
DSDANTA	Antacid reported as a dietary supplement

This file includes variables with the name and ID number of the supplement that was assigned by NCHS, the matching code (see Appendix 2) assigned, whether the supplement container was seen, how long the person has been taking this supplement, how often in the last month, and how much was taken each time. There is a separate record for each supplement a person took as these data are supplement specific. The text descriptions of the supplement name are in a format library (DSQFMT).

File 3: Supplement information	
Variable Name	Label
DSDSUPID	Supplement ID number
DSDSUPP	Supplement name
DSDSRCE	Supplement information source (Appendix 4)
DSDTYPE	Formulation type (Appendix 6)
DSDSERVQ	Serving size quantity
DSDSERVU	Serving size unit (Appendix 9)
DSDSERVA	Alternative serving size
DSDCNTV	Count of vitamins in the supplement
DSDCNTM	Count of minerals in the supplement
DSDCNTA	Count of amino acids in the supplement
DSDCNTB	Count of botanicals in the supplement
DSDCNTO	Count of other ingredients in the supplement

This file contains general information about the supplement from the NCHS database derived from the supplement label: the source of the label information (see Appendix 4: Source of supplement Information), the type of supplement formulation (Appendix 6), a count of the number of each type of ingredient (vitamin, mineral, amino acid, botanical, or other) listed on the supplement label (see Appendix 7: Ingredient classification), the serving size upon which the amounts in the Supplement or Nutrition Facts box are based, and the form of the serving size (e.g. tablet, softgel, spray, teaspoon, ml, etc, see Appendix 9: Label Serving Size Units). If a supplement label indicated additional information for serving size (e.g. 1 dropperful = 1 mL), this information is included in alternative serving size. The text descriptions of the supplement name, information source, formulation type, and serving size unit are in a format library (DSQFMT).

File 4: Ingredient information	
Variable Name	Label
DSQSUPID	Supplement ID number
DSQSUPP	Supplement name
DSDINGID	Ingredient ID
DSDINGR	Ingredient name
DSDOPER	Ingredient operator (<, =, >)
DSDQTY	Ingredient quantity
DSDUNIT	Ingredient unit (Appendix 10)
DSDCAT	Ingredient category (Appendices 7 and 11)
DSDBLFLG	Blend flag

This file contains information on the ingredients that are in each supplement reported by a participant for which the amount of the ingredient is known, including blends. Ingredients in blends which have no amounts are listed in a separate file (File 5), which can be linked to this file. The ingredients are listed basically as they appear

on a particular label, thus one ingredient type (e.g. calcium, echinacea) may be listed in many ways on different labels. The ingredient information includes an operator (equals, less than, or more than), a quantity, and a unit (e.g. mg, mcg, IU See Appendix 10). Each ingredient is categorized as a vitamin, mineral, amino acid, botanical, or other (See Appendix 7: Rules for Classifying Ingredients, and Appendix 11: Ingredient Classification). There is also an indicator (yes/no) as to whether the supplement includes a proprietary blend that contains ingredients without quantities (See File 5). The text descriptions of ingredient name, ingredient unit, and ingredient category are in a format library (DSQFMT).

File 5: Supplement blend	
Variable Name	Label
DSDINGID	Ingredient ID number
DSDINGR	Ingredient name
DSDBCID	Blend component ID
DSDBCNAM	Blend component name
DSDBCCAT	Blend component category

This file includes the ID numbers and names of proprietary blends, which are also listed as ingredients in File 4: Ingredient information file. The ingredient name and the ingredient number remain the same. The components of the blend, which have no amounts, are included in this file. Virtually all blend components are botanicals or “other” ingredients, not vitamins, minerals, or amino acids. The text descriptions of the ingredient name, blend component name and blend component category are in a format library (DSQFMT).

6. Quality control procedures

Trained nutritionists reviewed incoming data and matched reported to known supplements from the NHANES database, where possible; sought additional supplement labels if feasible; assigned generic or default supplements as appropriate; transferred or removed inappropriate products; and assigned matching codes as described in Appendix 7: Matching Codes. Weekly coding meetings were held with the coding supervisor and project officer to discuss coding questions. All coding was reviewed by the coding supervisor and adjusted as necessary, and half were then reviewed by the project officer. Additionally, a ten percent sample of coding for the first year of data was re-coded by a second coder to assess coding reliability. Agreement in supplement matching was 94%.

7. Analytic notes

Differences between this release and the first release

DSD010 and DSDCOUNT: These variable responses may differ from the last release as a result of the following determinations: a product was determined not to have been taken in the last 30 days; a product was determined not to be a supplement; a product recorded in the antacid section was a supplement; or a product reported in the prescription medicine section was a supplement.

Matching codes

These are described in the data processing section and Appendix 2. Analysts should be aware that for default matches and matches that chose between several similarly named supplements, there is less certainty that the ingredients and ingredient amounts in the supplement assigned exactly match those in the supplement actually taken. Additionally, NCHS cannot guarantee in any case that the matched product was the exact product taken or even that any product actually was taken, as these data are self-reported.

Entries of refused and don't know

If a respondent "refused" or answered "don't know" to DSQ010, the codes 7777 or 9999, respectively, are used in both DSD010 and DSDCOUNT and all other variables are coded as missing. If a respondent "refused" or answered "don't know" to a supplement name, the name of the variable is 7777 or 9999 and matching codes are 7 and 9, respectively. Other information on use of the supplement given by the participant is retained.

DSD070: Was the container seen?

A more precise name for a supplement can be recorded by the interviewer, and thus a more precise match to a known supplement can be made, when the interviewer sees the supplement container rather than recording the participant's report of the supplement name (for example, multivitamin/multiminerals are often reported as multivitamins). In general, this is reflected in the matching code, but analysts should be aware that precision is greater when a container is seen.

Supplement ID numbers

Supplement ID numbers are 10 digits long; all Supplement IDs begin with the number '1'. The next 3 digits (positions 2-4) are '888' if the supplement was created by NCHS as a generic or default product; otherwise the digits in positions 2-4 are coded '000'. The next 4 digits (positions 5-8) are assigned by the database and do not indicate anything about the product. The last 2 digits (positions 9-10) indicate formulations of the same supplement: the first formulation entered into the database = 00, the first reformulation = 01, the next = 02, etc. Note that these are reformulations of the same product: different versions (e.g. liquid vs. tablet, with iron vs. without iron, regular vs. high potency) have different 4 digit numbers (positions 5-8). When a product name was entered as "refused" or "don't know", the ID number is a string of 7's or 9's.

Unidentifiable products

For some entries made by interviewers, no corresponding product label could be found nor could a reasonable default product be assigned. These entries are counted as supplements, since there is no evidence that they are not supplements, but only the words “no product information available” are used in place of a name in this public data release.

Using self-reported data

NHANES data are self-reported and recorded by interviewers, and thus may contain inconsistencies or errors. Unless a data entry is clearly mis-recorded and the correct response can be confidently identified, possible errors or inconsistencies are not edited. Users will note that some records may indicate a person had been taking a supplement for a short time, e.g. only one day (DSD090), but report a frequency of taking it that is longer (DSD100), e.g. twice a week. Such apparent inconsistencies are not edited, as there is no obvious basis for editing. Users are advised to assess the data and edit it as deemed appropriate for the analyses being undertaken.

Special notes on DSD090, 100, and 120

Before entering values for DSD100 (how often taken) and DSD120 (how much taken), interviewers first indicated whether they were a) going to enter a number, b) the amount varied, or c) the respondent didn't know or refused to answer the question. Responses other than “enter a number” have missing values for DSD100Q, DSD100U, DSD120Q and DSD120U. Also, supplements recorded in the prescription medicine section have missing values for DSD100Q and DSD120Q, since these questions are not asked in this section. However, most of the missing values in these fields are because the person said that the amount they took or the frequency of taking it varied. Additionally, for variables DSD090, DSD100Q, and DSD120Q, zeros were sometimes entered. There was no information about why a zero was entered - for example whether the zero was an error, was meant to be a decimal, or that a participant decided that they had not taken the supplement at all. Since there is no additional information, these zeros are included in the data release, for the analyst to use as deemed appropriate.

Release and use of supplement brand names

NCHS collects brand name information on supplements whenever feasible, to ensure as much accuracy as possible in finding the label information for the exact product taken, and providing exact ingredient information for this product to data users. Products with very similar names but manufactured by different companies may contain different ingredient strengths. Brand names are released for supplements matched with a high degree of product or brand certainty, as this information may be useful in the design of other surveys. However matching of brand names to reported products may contain errors, and many matches are made to generic or default products, especially for private label brands. Thus, analyses of consumer usage by brand name using NHANES data may not be accurate and is not recommended. Brand names that are available in a limited geographic area of the U.S. are not released; generic names are used for these products.

Serving size

When calculating the amount of a nutrient consumed from supplements, it is important to take serving size into consideration. For some supplements, the serving size may be more than one tablet, drop, teaspoon, etc. In such cases, a person taking only one tablet, for example, would only be getting a percentage of the amount listed for that ingredient. In addition, the ingredient listed may be a compound (e.g. calcium carbonate), and the amount of elemental calcium needs to be calculated. Appendix 5 contains suggestions for conversions, but analysts are advised to confirm these.

Counts of ingredients in supplements

For each supplement, this is the number (count) of ingredients in each ingredient category (vitamin, mineral, amino acid, botanical, other) listed in the facts box on the label, including ingredients listed within blends. In a few products with blends, the same vitamin or mineral was listed as both an ingredient with an amount and as part of a blend. In these cases, only the vitamin or mineral was only counted as one.

Use of format libraries

The text labels for supplements, ingredients, units, etc. are provided in a separate data file called "Supplement Format File (DSQFMT)" in order to keep the data files a reasonable length. Please refer to the DSQ Readme file for DSQFMT for details. SAS code to link the Supplement Format File with the data files or to obtain a list of formatted text labels is provided in the documentation. A list of the supplement and ingredient ID numbers and names can be made by running a proc freq of these variables and using the format library to link the name to the ID number.

8. Data access and analysis

The five data files described in these notes are located on the NHANES website at: http://www.cdc.gov/nchs/about/major/nhanes/NHANES99_00.htm

For instructions general information about this data release, as well as how to access the SAS transport files, refer to: <http://www.cdc.gov/nchs/data/nhanes/gendoc.pdf>

Additional general information about the release, including data analysis, is found at the following URL:
<http://www.cdc.gov/nchs/about/major/nhanes/NHANES19992000FAQS.htm>

The NHANES 1999-2000 Analytic guidelines give guidance on how to analyze data and sample programs. Check <http://www.cdc.gov/nchs/data/nhanes/guidelines1.pdf>

Another SAS program sample is given at the following URL:
<http://www.cdc.gov/nchs/data/nhanes/examrgcd.txt>

APPENDIX 1: HANDCARD DSQ1

ANTACIDS TAKEN AS A CALCIUM SUPPLEMENT	Tums Antacid/Calcium Supplement™, Tums E-X Antacid/Calcium Supplement™
BOTANICALS, HERBS, AND HERBAL MEDICINE PRODUCTS	Echinacea, ginseng, ginkgo, St. John's Wort, kava kava, dong quai, saw palmetto
FIBER TAKEN AS A DIETARY SUPPLEMENT	Fiberwafers™, Florafiber™, Herb-lax™, Psyllium™, Metamucil™, Fibercon™
INDIVIDUAL OR SINGLE VITAMINS	Vitamin A, vitamin C, or vitamin E
MULTIPLE VITAMINS (2 OR MORE COMBINED)	B complex, Centrum™, Flintstones™, vitamins C and E
INDIVIDUAL OR SINGLE MINERALS	Calcium, copper, iron, or zinc
MULTIPLE MINERALS (2 OR MORE COMBINED)	Iron and zinc, or calcium and magnesium
VITAMIN AND MINERAL COMBINATIONS	Centrum™ with minerals, Flintstones with iron™, Calcium plus Vitamin D
COMBINATIONS OF VITAMINS, MINERALS AND OTHER PRODUCTS	One-a-Day™ with Ginkgo
AMINO ACIDS	Lysine, methionine, and tryptophan
FISH OILS	Omega-3 fatty acids
GLANDULARS	Pancreas, liver, and organ extracts
ZINC LOZENGES	Coldeeze™

Include products formulated to improve athletic performance, muscle strength, memory, increase energy, etc.

APPENDIX 2: MATCHING CODES

1. Exact or near exact match; this is the only product that could match this entry.
2. Probable match; the match is not exact, but knowledge of the company's products strongly suggests that this is the only possible match choice. For example the entry may not specify strength or include words such as timed release, but no other options are available for this brand according to manufacturer or retailer information.
3. Generic match; product has known strength for all ingredients, either a) as part of name (e.g. vitamin C 500 mg) or b) because the manufacturer is known and NCHS has an identical product made by this manufacturer for a different distributor or retailer. Thus the ingredients and amounts are considered to be accurate despite an exact brand match.
4. Reasonable match; the product name may be incomplete or could be complete but other products of this brand also start with these same words so this cannot be assured. In these cases, the entered name is matched to either: a) the most frequently reported of these products in the NHANES 1999-2000 data, if this could be determined; b) the best selling product by this company that matches the entered name; or c) the most basic product by this company, as assessed by label wording.
5. Default match; the exact product could not be obtained because the name was imprecise or the exact brand product could not be located and no generic could be assigned. In these cases, the entered product was matched to a created default product based upon: a) the most commonly reported strengths for single ingredients; b) the most commonly reported brands for major multiple ingredient products such as multivitamins and multivitamin/multiminerals for children, seniors, or adults, if available; or c) products manufactured by a large, private-label manufacturer. Because NHANES 1999-2000 data and sales data indicate that far more people take multivitamin/multiminerals rather than just multivitamins; that numerous supplement labels calling a product a multivitamin actually also contain minerals; and that products that only exist as multivitamin/minerals are often named by NHANES participants as multivitamins, supplements recorded as multivitamins without further identifying information are matched to multivitamin/multiminerals, not multivitamins.
6. No match; no product could be found and there was not enough detail in the name to assign a generic or default match with any confidence. The words "no product information available" are listed as the product name.

APPENDIX 3: ASSIGNED DEFAULT SUPPLEMENTS AND ANTACIDS

Default Supplement	Assigned Strength or Supplement
Alfalfa	500 mg
Aloe Vera Gel	Carlson Golden Aloe Vera Gel Concentrate
Alpha-Lipoic Acid	50 mg
Antioxidant Vitamin and Mineral Formula	Naturite Antioxidant Vitamin and Mineral Formula
Astragalus Extract	500 mg
B 50 B-Complex	Vitasmart B 50 B-Complex
B-Complex with Vitamin C	The Medicine Shoppe B-Complex with Vitamin C
Balanced B 100 B-Complex	Vitasmart Balanced B 100 B-Complex
Bee Pollen	500 mg
Bee Propolis	500 mg
Beta Carotene	25,000 IU
Borage Oil	Spectrum Essentials Organic Borage Oil (1000 mg)
Burdock Root	Nature's Way Burdock Root 540 mg
Calcium	500 mg
Calcium 600 mg with Vitamin D	Calcium 600 mg, Vitamin D 200 mg
Calcium 600 with D and Zinc	Spring Valley Calcium 600 with D and Zinc
Calcium 250 mg with vitamin D	Calcium 250 mg, Vitamin D 125 mg
Calcium & Magnesium	Calcium 334 mg, Magnesium 167 mg
Calcium with Vitamin D & Minerals	Caltrate 600 Plus Calcium with Vitamin D & Minerals
Calcium Magnesium Phosphorus Liquid	Nature's Life Calcium Magnesium Phosphorus Liquid
Calcium Magnesium & Zinc	Vitasmart Calcium Magnesium & Zinc
Calcium Citrate	Citracal Calcium Citrate (Calcium 200 mg)
Calcium 500 mg with Vitamin D	Calcium 500 mg, Vitamin D 200 mg
Cascara Sagrada	450 mg
Cat's Claw (Una de Gato)	250 mg
Cayenne	25 mg
Chewable Multivitamin with Fluoride	Copley Chewable Multivitamin with Fluoride (1mg)
Chewable Vitamin C Plus Echinacea	Nutrition Now Chewy C Plus Echinacea Gummy Bears
Chewable Multivitamin with Fluoride (1 mg) and Iron	Copley Chewable Multivitamin with Fluoride (1mg) and Iron
Chickweed	500 mg

Children's Liquid Vitamin with Iron and Fluoride	Enfamil Tri-Vi-Flor 0.25 mg with Iron
Children's Multivitamin/Multimineral	Vitasmart Children's Multivitamin/Multimineral Complete
Children's Multivitamins Plus Iron	Vitasmart Children's Multivitamins Plus Iron
Chondroitin Sulfate	250 mg
Chromium Picolinate	Chromium 200 mcg
Cod Liver Oil Softgels	Vitasmart Cod Liver Oil Softgels
Coenzyme Q-10	30 mg
Colostrum	Symbiotics New Life Colostrum 480 mg
Cranberry	307 mg
Creatine Monohydrate	5000 mg (5 g)
Daily Multiple Vitamins Plus Iron	The Medicine Shoppe Daily Multiple Vitamins Plus Iron
DHEA	25 mg
Echinacea Chewable Tablets	Nutrition Now Rhino Echinacea Chewable Tablets
Echinacea	400 mg
Echinacea & Goldenseal	Echinacea 113 mg, Goldenseal 25 mg
Ester-C	Your Life Ester-C 500 mg with Bioflavonoids
Evening Primrose Oil	500 mg
Eye Multi-Vitamin and Mineral	Alcon Icaps Original Icaps Plus Formula High Potency Antioxidant
Eyebright	454 mg
Ferrous Gluconate	Ferrous Gluconate 240 mg (27 mg elemental iron)
Ferrous Sulfate Iron Tablets	325 mg (65 mg elemental Iron)
Fish Oil	1000 mg
Flax Seed Oil	1000 mg
Fluoride Tabs	Sodium Fluoride 1.1 mg
Folic Acid	400 mcg
Garlic	500 mg
Garlic and Parsley	Garlic 100 mg, Parsley 50 mg
Garlic Oil	2 mg
Gelatin	Solgar Natural Gelatin with Calcium Lactate
Ginger Root	150 mg
Ginkgo Biloba	60 mg
Ginseng	500 mg

Glucomannan	665 mg
Glucosamine	Vitasmart Glucosamine Sulfate Complex 500 mg
Glucosamine & MSM	Glucosamine 250 mg, MSM 250 mg
Glucosamine Chondroitin	CVS Regular Strength Glucosamine Chondroitin
Goldenseal Root	250 mg
Grapeseed Extract	60 mg
Hawthorn	450 mg
Iron	65 mg
Iron from Ferrous Fumarate	Ferrous Fumarate 82 mg (elemental Iron 27 mg)
Iron Free Multi Super One Daily	Vitamer Labs Iron Free Multi Super One Daily
Juniper Berry	Nature's Way Juniper Berries
Kava Kava (Root)	250 mg
Kelp	GNC Natural Brand Kelp (Iodine 150 mcg)
Kelp, Lecithin and Vitamin B6	Nature Made Kelp, Lecithin and Vitamin B6 with Cider Vinegar
Korean Ginseng	100 mg
L-Carnitine	250 mg
Lactobacillus Acidophilus	10 mg
Lecithin	1200 mg
Licorice Root	396 mg
Liquid Colloidal Minerals	GNC Liquid Multi Colloidal Minerals
Lysine	500 mg
Magnesium	250 mg
Manganese	10 mg
Men's Multivitamin/Multimineral	One A Day Men's High Potency Multivitamin / Multimineral
Milk Thistle	140 mg
MSM	1000 mg
Multimineral	Twinlab Multimineral Caps
Multivitamin Plus Iron	The Medicine Shoppe Daily Multiple Vitamins Plus Iron
Multivitamin with Herbs	Eckerd Daily Impact Multivitamin with Herbs
Multivitamin and Fluoride Drops	Enfamil Poly-Vi-Flor 0.25 mg Multivitamin and Fluoride Drops
Multivitamin / Multimineral	Centrum Advance Formula High Potency Multivitamin Multimineral
N-Acetyl Cysteine (NAC)	600 mg

Natural B-Complex with Vitamin C	The Medicine Shoppe Natural B-Complex with Vitamin C
Nettle	250 mg
Niacin (Vitamin B-3)	500 mg
Omega-3	Great Earth Cholesterol-Free Omega-3 625 mg
Oyster Shell Calcium + Vitamin D	Calcium 500 mg, Vitamin D 200 mg
Oyster Shell Calcium	500 mg
Parsley	424 mg
Pediatric Iron Drops	Fer-In-Sol Iron Drops
Poly-Vitamin Drops	Enfamil Poly-Vi-Sol Vitamin Drops
Potassium	99 mg
Prenatal Vitamins	Vitasmart Prenatal Vitamins
Psyllium Fiber	Metamucil Powder Original Texture Regular Flavor Dietary Fiber
Saw Palmetto	160 mg
Scullcap	425 mg
Selenium	100 mcg
Senior Multivitamin / Multimineral	Centrum Silver Multivitamin / Multimineral for Adults 50+ From A to Zinc
Shark Cartilage	500 mg
Siberian Ginseng	500 mg
Sodium Fluoride Drops	Teva Sodium Fluoride Drops Rx Only (0.25 mg)
Soy Protein	Shaklee Energizing Soy Protein
St. John's Wort	300 mg
Stress Formula Daily Pak	Your Life Stress Formula Daily Pak
Tri-Vitamin with Fluoride Drops	Enfamil Tri-Vi-Flor 0.25 mg Vitamins A, D, C and Fluoride Drops
Tri-Vitamin Drops	Enfamil Tri-Vi-Sol Vitamins A, D, & C Drops
Tribulus Terrestris Extract	625 mg
Uva Ursi	455 mg
Valerian Root	100 mg
Vitamin A & D	Vitamin A 8000 IU, Vitamin D 400 IU
Vitamin A	8000 IU
Vitamin B-1 (Thiamin)	100 mg
Vitamin B-6	100 mg
Vitamin B-12	500 mcg

Vitamin B-Complex	Your Life Vitamin B-Complex
Vitamin C	500 mg
Vitamin C Chewable	Vitasmart Vitamin C Chewable 500 mg
Vitamin C with Rose Hips	Vitasmart Vitamin C with Rose Hips 500 mg
Vitamin D	400 IU
Vitamin E	400 IU
Vitamin E 400 IU + Selenium	Vitamin E 400 IU, Selenium 50 mcg
Vitamins C & E	Vitamin C 500 mg, Vitamin E 400 IU
Whey Protein	GNC Pro Performance 100% Whey Protein Instantized, Chocolate Powder
White Willow Bark	Nature's Way White Willow Bark 400 mg
Wild Yam	375 mg
Women's Multivitamin / Multimineral	One A Day Women's High Potency Multivitamin / Multimineral
Women's Ultra Multivitamin/Multimineral	GNC Women's Ultra Mega
Zinc	50 mg
Default Antacid	Antacid assigned
Default Antacid Plus Tablets	Maalox Plus Tablets
Default Antacid Plus Liquid	Maalox Plus Liquid
Default Antacid Anti-gas Liquid	Mylanta Regular Strength Antacid Anti-gas Liquid
Default Calcium Antacid	Tums Regular Strength
Default Antacid Liquid	Maalox Antacid Liquid

APPENDIX 4: SOURCE OF SUPPLEMENT INFORMATION

- 1 Directly from manufacturer
- 2 Directly from distributor
- 4 Inferred from supplement name
- 5 Physician's Desk Reference (PDR)
- 7 Product catalog
- 8 Internet listing
- 9 Supplement label or carton
- 10 Supplement from same manufacturer

If there is no designation, the supplement was a generic supplement (e.g. vitamin C 500 mg) or a default supplement (e.g. default daily multivitamin) created at NCHS. Some numbers are skipped intentionally as the associated sources weren't used.

APPENDIX 5: CONVERSION FACTORS FOR COMPOUNDS

INGREDIENT	INGREDIENT_ID	CONVERSION FACTOR
ALPHA CAROTENE	10000656	12 mcg = 1 RE Vitamin A
ASCORBYL PALMITATE	10001684	43% Vitamin C
BETA CAROTENE	10000433	6 mcg = 1 RE Vitamin A
CALCIUM CARBONATE	10000611	40% elemental calcium
CALCIUM CITRATE	10001394	21% elemental calcium
CALCIUM D-GLUCARATE	10001144	12.5% elemental calcium
CALCIUM GLUCONATE	10000584	9% elemental calcium
CALCIUM PANTOTHENATE	10000437	91.6% pantothenate
CALCIUM PHOSPHATE	10000795	30% elemental calcium
CHOLINE BITARTRATE	10000091	41% choline
CHROMIUM PICOLINATE	10000541	14.3% elemental chromium
CHROMIUM POLYNICOTINATE	10002091	14% elemental chromium
COPPER GLUCONATE	10000587	14% elemental copper
COPPER SULFATE	10001817	24.5% elemental copper
CREATINE MONOHYDRATE	10000533	88% creatine
D-CALCIUM PANTOTHENATE	10000521	91.6% pantothenate
D-GLUCOSAMINE SULFATE.2	10001109	31.3% glucosamine
DOCUSATE CALCIUM	10000757	4.6% elemental calcium
DOCUSATE SODIUM	10000122	5% sodium
DRY BETA-CAROTENE	10001772	6 mcg= 1 RE Vitamin A
FERRIC AMMONIUM CITRATE	10002217	17.5% elemental iron
FERROUS FUMARATE	10000863	33% elemental iron
FERROUS GLUCONATE	10000511	12.5 % elemental iron
FERROUS SULFATE	10000436	20% elemental iron
GLUCOSAMINE	10000453	83.0% glucosamine
GLUCOSAMINE SULFATE	10000157	65% glucosamine
GLUCOSAMINE SULFATE . 2 KCL	10000935	29.6% glucosamine
GLUTAMIC ACID	10000725	80.1% glutamic acid
L-ARGININE HCL	10000551	82.7% arginine
L-CARNITINE TARTRATE	10001014	68.2% carnitine
L-CYSTEINE HCL	10000542	69.0% cysteine
MAGNESIUM CARBONATE	10000625	28.9% elemental magnesium
MAGNESIUM GLUCONATE	10000585	5.8% elemental magnesium
MAGNESIUM HYDROXIDE	10000612	41% elemental magnesium
MAGNESIUM OXIDE	10000641	60% elemental magnesium
MAGNESIUM PHOSPHATE	10000688	28% elemental magnesium
MAGNESIUM SULFATE	10000519	20% elemental magnesium
MANGANESE CHLORIDE	10000522	24.4% elemental manganese
MANGANESE GLUCONATE	10000513	12.2% elemental manganese
POTASSIUM CHLORIDE	10000305	52.45% elemental potassium
POTASSIUM GLUCONATE	10000306	16.7% elemental potassium
SODIUM CHLORIDE	10001659	40% sodium, 60% chlorine
SODIUM FLUORIDE	10002151	45.45% elemental fluoride
ZINC ACETATE	10001442	29.8% elemental zinc
ZINC GLUCONATE	10000586	14.3% elemental zinc
ZINC OXIDE	10001620	80.34% elemental zinc
ZINC SULFATE	10000518	25% elemental zinc

APPENDIX 6: FORMULATION TYPE

1. infant/pediatric formulation
2. prenatal formulation
3. mature formulation
4. standard formulation

APPENDIX 7: RULES FOR CLASSIFYING INGREDIENTS

VITAMINS

An ingredient is classified as a vitamin if it is:

- a single vitamin listed by its name (e.g. vitamin A)
- a standard chemical form (synthetic or natural) of the vitamin (retinol, retinal, retinoic acid)
- a compound that is a source of a vitamin

An ingredient is not classified as a vitamin but as “Other” when it exists as:

- a precursor or provitamin to the active form of the vitamin (e.g. 7-dehydrocholesterol, a precursor to Vitamin D)
- a complex, since the ingredient content is unclear (e.g. B-complex)

The following appear in supplements as a source of vitamins and are therefore classified as a vitamin:

Vitamin A

palmitate, vitamin A acetate, vitamin A palmitate,

Vitamin B-1/Thiamin

thiamin monophosphate or TMP, thiamin mononitrate, thiamin hydrochloride

Vitamin B-2/Riboflavin

riboflavin mononitrate, riboflavin-5-phosphate sodium

Vitamin B-3/Niacin

Vitamin B-5/Pantothenic Acid

pantothenate, calcium pantothenate

Vitamin B-6

pyridoxine hydrochloride, vitamin B₆ hydrochloride

Vitamin B-12/Cobalamin

cyanocobalamin, methyl cobalamin

Vitamin C/Ascorbic Acid

ascorbyl palmitate, sodium ascorbate

Vitamin D/Calciferol

cholecalciferol, ergocalciferol, calcitriol

Vitamin E/Tocopherol

d-alpha tocopheryl acid succinate, dl-alpha tocopheryl acetate, d-alpha tocopheryl acetate, d-alpha tocopherol, d-alpha tocopheryl, tocopherols, mixed tocopherols, vitamin E acetate, tocotrienol

Vitamin K/Menadione

phytonadione, menadiol

Biotin

choline

choline bitartrate

Folic Acid/Folate

MINERALS

An ingredient is classified as a mineral if it is a macro or micromineral (trace element):

- in its elemental form (e.g. iron)
- that is the source of the mineral in a supplement (e.g. ferrous gluconate, potassium iodide, nickel chloride, selenium amino acid chelate).

An ingredient containing a mineral is not classified as a mineral but as “Other” when it is:

- an enzyme (e.g. boron protease)
- a complex, since the ingredient content is unclear (e.g. Trace Mineral Complex)
- used as an electrolyte (e.g. chloride, potassium, sodium)

The following are classified as minerals:

Arsenic	Copper	Phosphorus
Barium	Fluoride	Selenium
Boron	Iodine	Silicon
Bromine	Iron	Strontium
Cadmium	Magnesium	Sulfur
Calcium	Manganese	Tin
Chromium	Molybdenum	Vanadium
Cobalt	Nickel	Zinc

BOTANICALS

An ingredient is classified as a botanical if it is:

- part of a plant, tree, shrub, herb, etc.
- a component of a botanical that specifically names it as being from the plant (e.g. soy isoflavones, citrus bioflavonoids)

Botanicals may include the following words: Extract, Powder, Leaf, Root, Flower, Stem, Peel, Fruit

An ingredient is not classified as a botanical but as "Other" if:

- it is listed only as an unspecified blend
- it is a chemical structure derived originally from a botanical (e.g. bromelain, the enzyme found in pineapple; alliin, a phytochemical in garlic; apple cider vinegar)

AMINO ACIDS

An ingredient is classified as an amino acid if it is an essential or nonessential amino acid. It can exist in:

- its free form (e.g. lysine, glutamine)
- its post-translational form (cystine, hydroxylysine, hydroxyproline, and 3-methylhistidine)
- one of its isomeric forms (e.g. l-tyrosine)
- the source of an amino acid in a supplement (e.g. l-lysine monohydrochloride, glutamic acid hydrochloride)

An ingredient would not be classified as amino acid but as "Other" if it is:

- an alpha-keto acid (an amino acid with its amino group, NH₃, replaced by a keto group) (e.g. α-ketoglutarate)
- a residue of an amino acid (e.g. (-carboxyglutamic acid also known as GLA)
- as a complex of amino acids (e.g. natural amino acid complex), since the ingredient content is unclear

The following are classified as amino acids:

Alanine	Glycine	Proline	Carnitine
Arginine	Histidine	Serine	Citrulline
Asparagine	Isoleucine	Taurine	Ornithine
Aspartic Acid	Leucine	Threonine	Theanine
Cysteine	Lysine	Tryptophan	SAM-e
Glutamic Acid	Methionine	Tyrosine	N-acetyl-cysteine
Glutamine	Phenylalanine	Valine	Dimethylglycine

OTHER

The following are examples of ingredients that would be classified as other:

- an electrolyte (e.g. chloride, potassium, sodium)
- a hormone (e.g. DHEA, cholesterol), unless if it is the active form of a vitamin (calcitriol)
- an enzyme (e.g. cellulase, glucoamylase)
- complexes and blends (unless all components are of the same type ex. amino acid blend)
- bioflavonoids and isoflavones (if not associated with a plant, in which case it would be classified as a Botanical)
- vinegars
- phytochemicals (e.g. lutein, allin)
- vitamin precursors, e.g. some carotenoids

APPENDIX 8: REPORTED SERVING SIZE UNITS

- | | | | |
|-----|--|-----|-----------------|
| 1. | Tablets, capsules, pills, caplets, softgels, gelcaps | 14. | Weight ounces |
| 2. | Droppers | 15. | Can |
| 3. | Drops | 16. | Grams |
| 4. | Fluid ounces | 17. | Dots |
| 5. | Injections/shots | 18. | Cups |
| 6. | Lozenges | 19. | Spray/squirts |
| 7. | Milliliters | 20. | Chews/chewables |
| 8. | Packages | 21. | Scoop |
| 9. | Packets | 22. | CC |
| 10. | Powder/granules | 23. | Capful |
| 11. | Tablespoons | 24. | MG |
| 12. | Teaspoons | 25. | Units |
| 13. | Wafers | 26. | Gulp |

APPENDIX 9: LABEL SERVING SIZE UNITS

- | | | | |
|-----|--------------|-----|----------------|
| 1. | Caplets | 16. | Softgels |
| 2. | Capsules | 17. | Tablespoons |
| 3. | Droppers | 18. | Tablets |
| 4. | Drops | 19. | Teaspoons |
| 5. | Fluid Ounces | 20. | Wafers |
| 6. | Gel Caps | 24. | Scoop |
| 9. | Lozenges | 25. | Cup |
| 10. | Milliliters | 27. | Chewable/Chews |
| 11. | Packages | 29. | Vegicaps |
| 12. | Packets | 31. | Capful |

APPENDIX 10: INGREDIENT UNITS

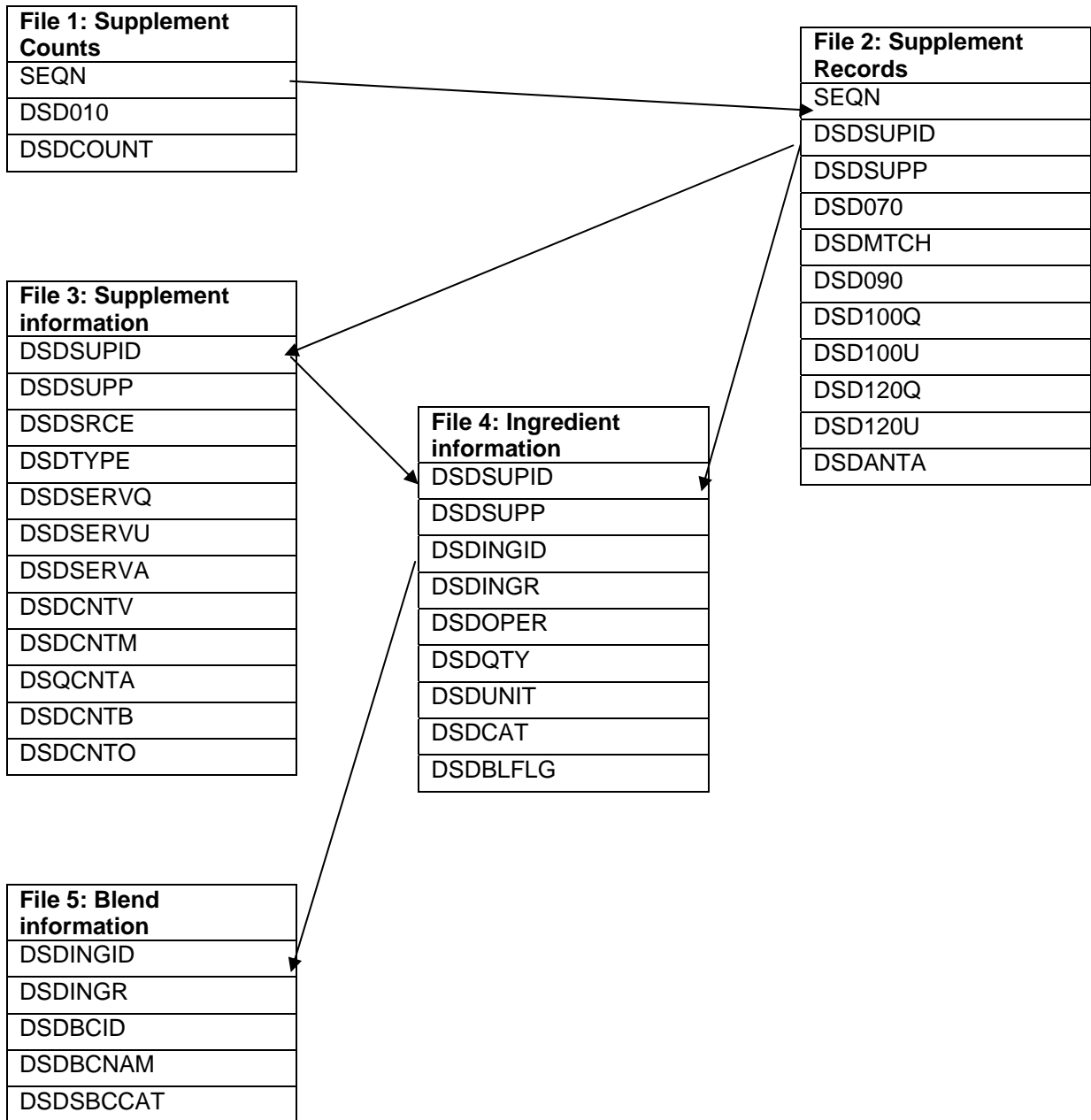
- | | |
|---------|--------------|
| 1. mg | 10. LU |
| 2. IU | 11. CU |
| 3. % | 12. endo-PGO |
| 4. mcg | 13. AGU |
| 5. gm | 14. PPM |
| 6. mL | 15. Million |
| 7. kcal | 16. Billion |
| 8. DU | 17. LacU |
| 9. HUT | |

APPENDIX 11: INGREDIENT CLASSIFICATION

1. Vitamin
2. Mineral
3. Botanical
4. Other
5. Amino acid

APPENDIX 12: DATA FILE STRUCTURE AND RELATIONSHIPS

Diagram of relationship between the five files



EXAMPLE OF DATA FILE INFORMATION AND RELATIONSHIPS:

File 1:

SEQN	DSD010	DSDCOUNT
101 (Steve)	1 (Yes)	2
102 (Bob)	2 (No)	0
103 (Mary)	1 (Yes)	1

File 2:

SEQN	DSDSUPID	DSDSUPP	DSD070
101 (Steve)	1888340200	Calcium 600 mg + Vitamin D 200 IU	1 (Yes)
101 (Steve)	1000228800	Brand X Fat Reducer	1 (Yes)
103 (Mary)	1888340200	Calcium 600 mg + Vitamin D 200 IU	2 (No)

File 3:

DSDSUPID	DSDSUPP	DSDCNTV	DSDCNTM	DSDCNTO
1888340200	Calcium 600 mg + Vitamin D 200 IU	1	1	0
1000228800	Brand X Fat Reducer	0	0	2

File 4:

DSDSUPID	DSDSUPP	DSDINGID	DSDINGR	DSDQTY	DSDUNIT	DSDBLFLG
1888340200	Calcium 600 mg + Vitamin D 200 IU	10000070	Calcium	600.000	1 (mg)	2 (not a blend)
1888340200	Calcium 600 mg + Vitamin D 200 IU	10000385	Vitamin D	200.000	2 (IU)	2 (not a blend)
1000228800	Brand X Fat Reducer	10001227	Chitozyme	1200.000	1 (mg)	1 (blend)

File 5:

DSDINGID	DSDINGR	DSDBCID	DSDBCNAM
10001227	Chitozyme	10000317	Psyllium Seed Husks
10001227	Chitozyme	10000642	Chitosan