LanguaL

AN

AUTOMATED METHOD

FOR

DESCRIBING, CAPTURING AND RETRIEVING DATA

ABOUT

FOOD

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LanguaL, a food description system

Introduction

LanguaL, which stands for "**Langua aL**imentaria or language of food", is an automated method for describing, capturing and retrieving data about food. It has been developed by the Center for Food Safety and Applied Nutrition (CFSAN) of the U.S. Food and Drug Administration (FDA) over the last almost twenty years as an ongoing cooperative effort of specialists in food technology, information science and nutrition.

LanguaL is based on the concept that:

- Any food (or food product) can be systematically described by a combination of characteristics

- These characteristics can be categorized into viewpoints and coded for computer processing

- The resulting viewpoint/characteristic codes can be used to retrieve data about the food from external data bases.

However, a problem concerning 'descriptor making' is the multiplicity of natural languages: corresponding terms of different languages are not always semantically equivalent.
A first approach would be to limit the terms of different languages in which the descriptors are provided. Another is to render it language-independent. This approach was chosen by the **LANGUAL System**, which is used in the US and Europe for numeric data banks on food composition (nutrients and contaminants), food consumption and legislation.
As constructed, it is a thesaural system using facetted classification. The same descriptor code points to terms in different languages (English, French, Danish, Hungarian, Spanish and Catalan). Despite its shortcomings, the LANGUAL system remains a good starting point for development of a truly international and flexible faceted thesaurus.

This paper will describe LanguaL in some detail. It will then present an in-depth example of how LanguaL can be applied. Finally, it will review LanguaL's use internationally and postulate its acceptance as a world-wide standard.

How is food described

One can systematically describe any food or food product using carefully selected points of view, in order to categorize its:

- Food group
- Origin
- Physical attributes
- Processing
- Packaging
- Dietary uses
- Miscellaneous characteristics.

Each viewpoint is called a **factor**, and the descriptive terms or characteristics under it are called **factor terms** or **factor values.** The factors included in the vocabulary have been selected for their importance.

There are presently fourteen (14) factors in LanguaL. The sequence of factors was chosen to facilitate writing and reading food product descriptions and also to aid in the comprehension of the vocabulary.

After characterizing the food product as a whole (Factors A-E), the factor sequence follows stages of processing (F - J), packing and packaging (K - N), consumption (P) and adjunct characteristics (Z). Each factor answers a question:

? **To what food group does the product belong?**

This question is answered by the appropriate value from A. Product Type.

? **What is the origin of the food product?**

A food product can be specified by an appropriate combination of factor values from B. Food Source and C. Part of Plant or Animal. A detailed product description can specify all ingredients; a simplified product description may specify only the first ingredient.

? **What are the physical characteristics?**

A value from E. Physical State, Shape or Form is used to answer this question. The physical characteristics of food products may be inherent (*example*) or may be the result of processing (*example*). Both of these affect heat transfer and food safety.

? **What processing operations have been performed to transform the food or ingredients into the final product?**

The factors primarily concerned with processing are F. Extent of Heat Treatment, G. Cooking Method, H. Treatment Applied, and J. Preservation Method. In addition, preliminary processing may be implied by C. Part of Plant or Animal (e.g., hulling or extracting) and by E. Physical State, Shape or Form (e.g., divided or disintegrated). Final processing may also be implied by E. Physical State, Shape or Form (e.g., forming, moulding, extruding).

? **What is the product's packing medium? How is it packaged?**

The packing characteristics are found in K. Packing Medium. Packaging description is simplified to consist only of M. Container or Wrapping and N. Food Contact Surface.

? **Who uses the food product? What are its special dietary characteristics?**

These questions are answered by appropriate terms from P. Consumer Group/-Dietary Use.

? **What further characteristics describe the food product?**

Further characteristics of the food, such as cut of meat, grade of meat or degree of plant maturity, may be described by factor terms found in Z.

The list of specifying factors included in the vocabulary is limited. For example, under A. Product Type, ethnic characteristics are not considered. Physical state and physical shape or form are combined into a single factor. The same is true of user groups and dietary characteristics. Certain aspects of M. Container or wrapping could be considered as separate factors.
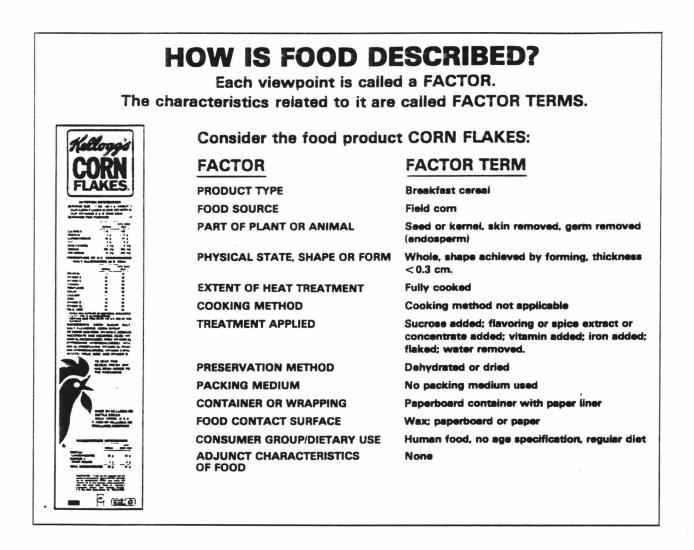
The specificity of the vocabulary is also limited. For example, B. Food Source does not include animal breeds or plant cultivars. J. Preservation Method does not include individual antimicrobial agents or enzyme inhibitors.

Due to its flexible structure the vocabulary can be amended by adding new viewpoints for food description or by including more detail within factors.

The basic food vocabulary consists of factor terms, which are used to build food product descriptions.

In the following each factor is presented by category together with a brief description (where appropriate) and examples of factor terms.

CHARACTERISTIC	FACTOR
FOOD GROUP	**A. Product Type** Derived from a combination of consumption, functional and manufacturing characteristics Ex.: Dairy product, poultry/poultry product, beverage, gravy or sauce, sweetener etc.
FOOD ORIGIN	**B. Food Source** Species of plant or animal, or chemical food source Ex.: Cattle, abalone, wheat, carob, bean, garlic
	C. Part of Plant or Animal Ex.: Leaf, fruit, skeletal meat, organ meat
PHYSICAL ATTRIBUTES	**E. Physical State, Shape or Form** Ex.: Liquid, semi liquid, solid, whole natural shape, divided into pieces
PROCESSING	**F. Extent of Heat Treatment** Ex.: Fully cooked, partially cooked, uncooked, raw
	G. Cooking method Cooked by dry or moist heat; cooked with fat; cooked by microwave Ex.: Sauteed, baked or roasted, griddled, toasted, popped, deep-fried
	H. Treatment Applied Additional processing steps, including adding, substituting, or removing components Ex.: Enriched, sweetened, egg added, fat or oil added, fat removed, decaffeinated
	J. Preservation Method Primary preservation method Ex.: Dehydrated or fried, frozen, preserved by adding chemicals
PACKAGING	**K. Packing Medium** Ex.: Packed in broth, packed in gelatin, packed in gravy or sauce
	M. Container or Wrapping Container material, form, and possibly other characteristics Ex.: Paperboard tray with wrapper, plastic boil-in-bag, glass container, Aluminum lid, plastic lining
	N. Food Contact The surface(s) with which the food is in contact Ex.: Ceramic, paperboard, glass, metal, plastic
DIETARY USES	**P. Consumer Group/Dietary use** Human or animal; special dietary characteristics Ex.: Human food low fat, human food sodium free, human food very low sodium, human food reduced calorie
GEOGRAPHIC ORIGIN	**R. Country/Region of Origin** ISO-code (ISO 3166) for country of origin, local codes for region
MISCELLANEOUS CHARACTERISTICS	**Z. Adjunct Characteristics of Food** Additional miscellaneous descriptors Ex.: Pink fish flesh, shoulder (meat cut), choice (grade), edible sausage casing, mould rind, dry mix

HOW IS FOOD DESCRIBED?

Each viewpoint is called a FACTOR.
The characteristics related to it are called FACTOR TERMS.

Consider the food product CORN FLAKES:

FACTOR	FACTOR TERM
PRODUCT TYPE	Breakfast cereal
FOOD SOURCE	Field corn
PART OF PLANT OR ANIMAL	Seed or kernel, skin removed, germ removed (endosperm)
PHYSICAL STATE, SHAPE OR FORM	Whole, shape achieved by forming, thickness < 0.3 cm.
EXTENT OF HEAT TREATMENT	Fully cooked
COOKING METHOD	Cooking method not applicable
TREATMENT APPLIED	Sucrose added; flavoring or spice extract or concentrate added; vitamin added; iron added; flaked; water removed.
PRESERVATION METHOD	Dehydrated or dried
PACKING MEDIUM	No packing medium used
CONTAINER OR WRAPPING	Paperboard container with paper liner
FOOD CONTACT SURFACE	Wax; paperboard or paper
CONSUMER GROUP/DIETARY USE	Human food, no age specification, regular diet
ADJUNCT CHARACTERISTICS OF FOOD	None

As an example, consider the commercial food product "Corn Flakes" (see Figure 1).

Its **Product Type** factor term, which identifies the food group it belongs to based on common consumption, functional or manufacturing characteristics, is "Breakfast cereal".

The **Food Source** factor term, which identifies the individual plant or animal from which the food product (or its major ingredient) is derived, would be "Field corn".

The **Part of Plant or Animal** factor term, which describes the anatomical part of the plant or animal from which the food product (or its major ingredient) is derived, is "Seed or kernel, skin removed, germ removed (endosperm)".

Its **Physical State, Shape or Form** factor term, which distinguishes between liquids and solids and further describes solids in terms of shape or form, is "Whole, shape achieved by forming, thickness less than 0.3 cm".

The **Extent of Heat Treatment** factor term, which is used to broadly characterize a food product based on the amount of heat applied, is "Fully cooked".

The **Cooking Method** factor term, which identifies the way food products are cooked,

reheated or warmed, is "Not applicable" because heat treatment is inherent in the process of making Corn Flakes.

The **Treatment Applied** factor term, which is used to describe components added or subtracted as well as processes involved in producing the food product and can have multiple values, includes:

- Sucrose added
- Flavouring or spice extract or concentrate added Vitamin added
- Iron added
- Flaked
- Water removed.

The **Preservation Method** factor term, which identifies the primary method for preventing or retarding microbial or enzymatic spoilage of a food product, is "Dehydrated or dried".

The **Packing Medium** factor term, which describes the medium in which the food is packed for preservation, handling and/or palatability, is "No packing medium used" in this example.

The **Container or Wrapping** factor term, which identifies the material comprising the main container as well as any liners, lids or ends, is "Paperboard container with paper liner".

The **Food Contact Surface** factor term, which identifies the specific container materials in direct contact with the food product and can have multiple values, includes:
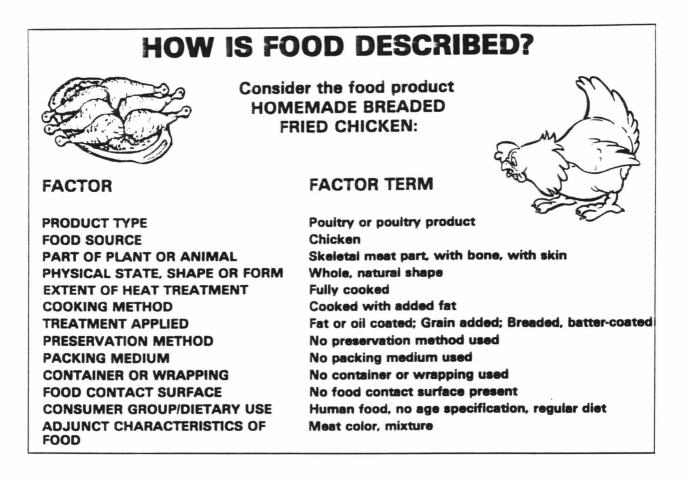
- Wax
- Paperboard or paper.

The **Consumer Group/Dietary Use** factor term, which specifies who uses the food product, is "Human food, no age specification, regular diet".

The **Adjunct Characteristics of Food** factor term, which allows for miscellaneous descriptions, does not have any value for Corn Flakes.

As another example, consider the home-made food product "Breaded, Fried Chicken". The following figure displays its factors and factor terms. As can be seen from these examples, virtually any food or food product can be categorized and characterized in this systematic fashion.

HOW IS FOOD DESCRIBED?

Consider the food product
HOMEMADE BREADED
FRIED CHICKEN:

FACTOR	FACTOR TERM
PRODUCT TYPE	Poultry or poultry product
FOOD SOURCE	Chicken
PART OF PLANT OR ANIMAL	Skeletal meat part, with bone, with skin
PHYSICAL STATE, SHAPE OR FORM	Whole, natural shape
EXTENT OF HEAT TREATMENT	Fully cooked
COOKING METHOD	Cooked with added fat
TREATMENT APPLIED	Fat or oil coated; Grain added; Breaded, batter-coated
PRESERVATION METHOD	No preservation method used
PACKING MEDIUM	No packing medium used
CONTAINER OR WRAPPING	No container or wrapping used
FOOD CONTACT SURFACE	No food contact surface present
CONSUMER GROUP/DIETARY USE	Human food, no age specification, regular diet
ADJUNCT CHARACTERISTICS OF FOOD	Meat color, mixture

HOW ARE FACTOR TERMS IDENTIFIED?

In order to facilitate computer processing, each factor term is assigned an alphanumeric code identifying the factor and the unique characteristic (e.g., A258 = Product Type "Breakfast cereal", A273 = Product Type "Poultry or poultry product"). The following two figures show this coding schema for the Corn Flakes and Fried Chicken examples described above.

HOW IS INFORMATION STORED?

A computer record contains the food (product) name and assigned factor term codes, as well as product identification codes (e.g., Universal Product Code or UPC) for accessing external data bases. FIGURES V and VI depict these data for the Corn Flakes and Fried Chicken examples described above.

Thus, if the Corn Flakes record were selected as part of a search, it would "point" the user to additional information in the following data bases:
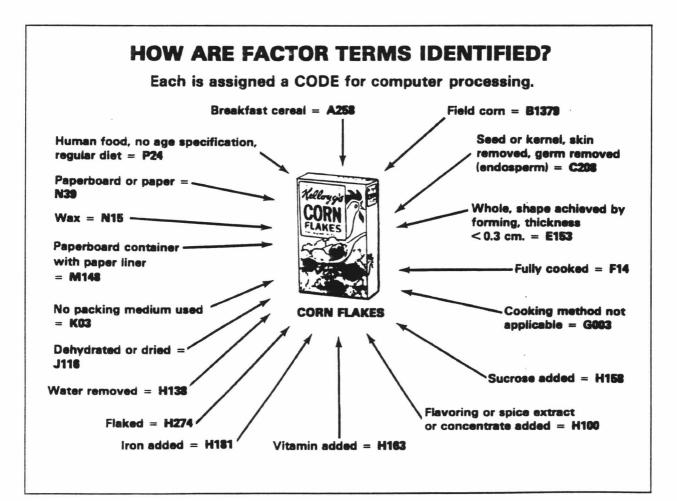
- FDA SIREN (1)
- FDA Total Diet (2)
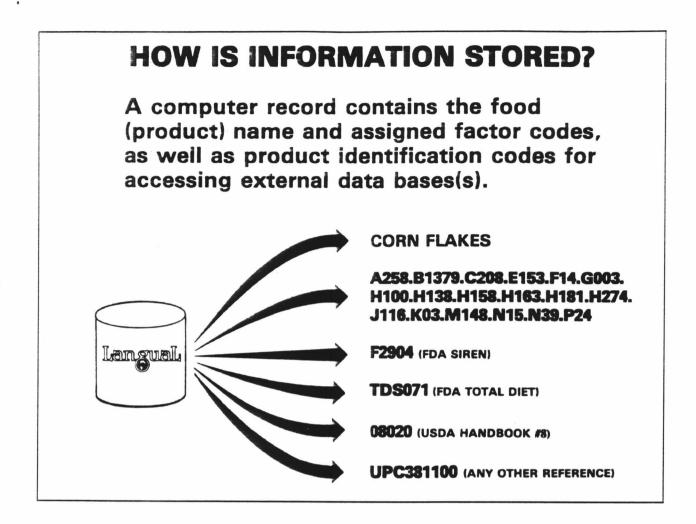- USDA Nutrient Data Base (Handbook #8) (3)

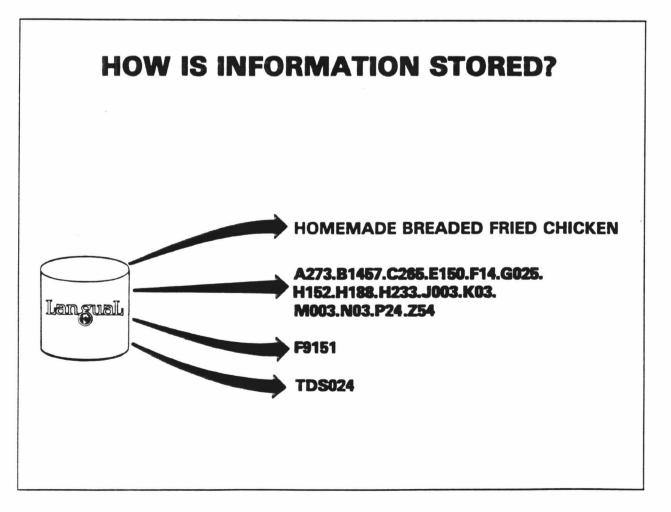(1) Scientific Information Retrieval and Exchange Network, FDA/CFSAN
(2) Total Diet Study, FDA/CFSAN
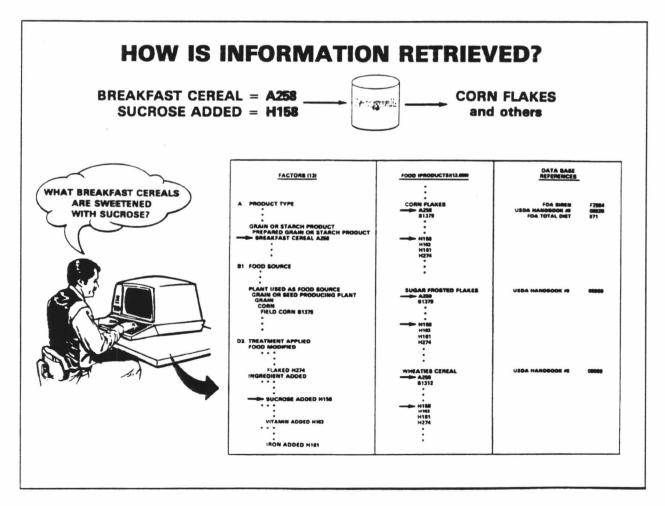(3) Nutrient Data Base for Standard Reference, U.S. Department of Agriculture (USDA)

HOW ARE FACTOR TERMS IDENTIFIED?

Poultry or poultry product = A273

Chicken = B1457

Meat color, mixture = Z54

Human food, no age specification, regular diet = P24

Skeletal meat part, with bone, with skin = C265

No food contact surface present = N03

HOMEMADE BREADED FRIED CHICKEN

Whole, natural shape = E150

No container or wrapping used = M003

Fully cooked = F14

No packing medium used = K03

Cooked with added fat = G025

Fat or oil coated = H233

No preservation method used = J003

Grain added = H152

Breaded, batter-coated = H188

HOW ARE FACTOR TERMS IDENTIFIED?

Each is assigned a CODE for computer processing.

Breakfast cereal = A258

Field corn = B1379

Human food, no age specification, regular diet = P24

Seed or kernel, skin removed, germ removed (endosperm) = C208

Paperboard or paper = N39

Wax = N15

Whole, shape achieved by forming, thickness < 0.3 cm. = E153

Paperboard container with paper liner = M148

Fully cooked = F14

No packing medium used = K03

Cooking method not applicable = G003

Dehydrated or dried = J116

Water removed = H138

Sucrose added = H158

Flaked = H274

Flavoring or spice extract or concentrate added = H100

Iron added = H181

Vitamin added = H163

CORN FLAKES

Kellogg's CORN FLAKES

HOW IS INFORMATION STORED?

A computer record contains the food
(product) name and assigned factor codes,
as well as product identification codes for
accessing external data bases(s).

CORN FLAKES

**A258.B1379.C208.E153.F14.G003.
H100.H138.H158.H163.H181.H274.
J116.K03.M148.N15.N39.P24**

F2904 (FDA SIREN)

TDS071 (FDA TOTAL DIET)

08020 (USDA HANDBOOK #8)

UPC381100 (ANY OTHER REFERENCE)

HOW IS INFORMATION STORED?

HOMEMADE BREADED FRIED CHICKEN

**A273.B1457.C265.E150.F14.G025.
H152.H188.H233.J003.K03.
M003.N03.P24.Z54**

F9151

TDS024

as well as any other references (e.g. UPC or EAN where applicable). The Fried Chicken record would have similar "pointers" to additional data. This means that a wide variety of food composition and food consumption databases can be referenced to by a single LanguaL search, using their existing coding schemes without change. Concomitantly, there is no need to know the codes or structure of the data bases being simultaneously searched by LanguaL.

HOW IS INFORMATION RETRIEVED?

In general, a LanguaL search is conducted to answer a specific question. The records selected as a result of this search contain pointers to outside data bases. These data bases may then be accessed (using the pointers) to obtain very detailed information related to the original query.

For example, consider the question: "What Breakfast Cereals are Sweetened with Sucrose"?

By conducting a boolean search of all the coded foods for those whose LanguaL Product Type factor is "Breakfast cereal" (A258) and whose Treatment Applied factor (multiple occurrence) includes "Sucrose added", a number of food (product) records will be selected, including the Corn Flakes example described above. The following figures depict this process.

HOW IS INFORMATION RETRIEVED?

LanguaL → CORN FLAKES and others → POINTERS TO EXTERNAL DATA BASES

Data Bases

FDA SIREN
- Precedent
- Compliance
- Toxicity

USDA Handbook #8
- Composition
- Nutrients

FDA Total Diet
- Contaminants
- Pesticides
- Nutrients

- **LABELING**
- **RECOMMENDED DIETARY ALLOWANCE**
- **REGULATORY STATUS**

Each selected record contains at least one pointer to an external data base where additional information related to the original query can be obtained. Perhaps data about regulatory (compliance) activities related to sucrose sweetened breakfast cereal from FDA's SIREN data base might be of interest. On the other hand, food composition and nutrient data for sucrose sweetened breakfast cereals from USDA's Nutrient Data Base (Handbook #8) could be obtained. Moreover, information on residues from contaminants and pesticides as well as additional nutritional data could be readily accessed in FDA's Total Diet Study data base. Thus, this one LanguaL query would turn up a wealth of information about sucrose sweetened breakfast cereals. Such information would be difficult (if not impossible) to obtain in any other way.

PRECOMBINED TERMS

The vocabulary has been clarified by including **precombined terms** (PCT's), which are food product names to which factor terms have been assigned. These are not to be used for indexing. They are included for either of these reasons:

(1)   The precombined term explains or illustrates the use of the factor terms, e.g., corned beef hash as an example of a food whose physical state is *Semisolid with solid pieces*.

(2)   For some foods it is difficult for an indexer to select the proper combination of factor terms. For example, it might be obvious that "Rhine wine" is *Light wine, 7-14% alcohol*, but the indexer might not realize that *Alcohol fermented* should be used in H. Treatment Applied to describe the fermentation.

For precombined terms the vocabulary always shows the factor values appropriate for A. Product Type, B. Food Source, C. Part of Plant or Animal and E. Physical State, Shape or Form. Additional descriptors from other factors are shown as needed to index the product information. PCT's,

HIERARCHY

Equally as important as the identification of meaningful characteristics is the arrangement of factor terms in a hierarchic structure so that information can be retrieved at varying levels of specificity. In a particular search one might be interested in all products with peanut as the food source. In another, one might need products with any nut as the food source. Or one might search specifically for *Vitamin A added*, more broadly for *Vitamin added*, or, still more broadly, for *Nutrient or dietary substance added*. These are all examples of hierarchical relationships among factor terms.

Hierarchical relationships are extremely important for searching. Hierarchy is also a useful tool for displaying the vocabulary in a logical way so that it can be easily comprehended by both searcher and indexer. And finally it underlies the aggregation of numerical values when the food vocabulary is used in compiling data.

For these reasons all of the factors were fully structured. Care was taken to include all useful hierarchical relationships. Corresponding to its many uses, for instance, *Field corn* appears under several broader terms:

    under *Grain*
    under *Starch-producing plant*
    under *Sugar-producing plant*
    and under *Oil-producing plant*

Except in A. Product Type, a descriptor may be placed in the hierarchy wherever it describes a useful subset of a factor term. In the hierarchy of A. Product Type, however, a descriptor may appear only once; if that descriptor seems appropriate in more than one context (as in the example of *Field corn*, above), a choice must be made as to which is the more important. (See Factor A. Product Type for the reasons for this restriction and the example, *Potato chip*).

Broad terms can be used to describe very general groups of food products, such as frozen vegetables. Such a general description can be made more specific by using narrower terms and/or adding terms from additional factors.

The hierarchical relationships are complemented by additional cross references among factor terms, e.g., *Protein-producing plant*:

```
Narrower term    *Alfalfa*
Narrower term    *Soybean*
Narrower term    *Field corn*
Narrower term    *Sesame*
```

This indicates that any search for plant protein sources should employ *Alfalfa* and *Soybean* and a very thorough search should use in addition *Field corn* and *Sesame*.

SCOPE NOTES

The language of the food field is not always precise. Moreover, a factored vocabulary contains many general terms that require definition. Scope notes are therefore provided for many descriptors in order to achieve consistency in indexing and searching and, perhaps more importantly, to achieve the purpose of a common language for the description of foods.

WHERE DOES THIS LEAD?

LanguaL can facilitate direct links to many different food consumption and analytical databases as well as bibliographic files, worldwide. In addition to the FDA and USDA linkages discussed above, LanguaL is also being used by the National Cancer Institute (NCI) in its studies of diet's relationship to cancer incidence. Furthermore, LanguaL is being applied on an international level, with government agencies in Denmark, France and the United Kingdom using it for their endeavors.

At FDA/CFSAN a conscientious effort is being made to expand the number and variety of outside data bases accessible using LanguaL. For example, all 1988 USDA Nation-wide Food Consumption Survey (NFCS) foods have been incorporated, thus providing a valuable link to up-to-date food consumption data for the U.S. Also, foods and food products whose standards are specified by Title 21 (Foods and Drugs) of the Code of Federal Regulations (CFR) have been coded. This allows access to any data base with CFR food references.

In addition, all Codex Alimentarius food standards (analogous to CFR standards discussed above) have been coded so that any data base with Codex references can be easily accessed. This should prove useful in international trade.

With the advent of the European Economic Community (EEC) in the early 1990's, there will be a need for standardized food descriptions as an adjunct to "harmonized" tariff schedules. LanguaL could prove very useful in satisfying this need. In fact, it may provide the only effective way for linking with data bases from the Eastern Bloc nations as they become a force in international commerce. With more widespread use, LanguaL could well become an international standard.

A: Product type

```
PRODUCT TYPE                                               A289
  BEVERAGE                                                 A229
    ALCOHOLIC BEVERAGE                                     A278
      DISTILLED SPIRITS                                    A277
        DISTINCTIVE DISTILLED SPIRITS                      A200
          LIQUEUR                                          A240
        NEUTRAL DISTILLED SPIRITS                          A120
      MALT BEVERAGE                                        A195
      WINE                                                 A205
        APERITIF WINE                                      A224
        DESSERT WINE                                       A174
        SPARKLING OR CARBONATED WINE                       A177
        TABLE WINE                                         A252
    NONALCOHOLIC BEVERAGE                                  A112
      SOFT DRINK                                           A241
      STEEPED BEVERAGE                                     A268
  CACAO OR CHOCOLATE PRODUCT                               A272
    CACAO OR CHOCOLATE PRODUCT ANALOG                      A158
  CHEWING GUM                                              A176
  COLOR ADDITIVE                                           A166
  CONFECTIONERY                                            A188
    CANDY                                                  A204
      FRUIT OR NUT CANDY                                   A161
      HARD CANDY                                           A216
        BRITTLE                                            A226
      SOFT CANDY                                           A293
        AERATED CONFECTIONERY                              A141
        CARAMEL CANDY                                      A173
        CHOCOLATE CANDY                                    A288
        FONDANT                                            A244
        FUDGE                                              A213
        JELLY CANDY                                        A162
          JAP OR AGAR JELLY CANDY                          A146
          PECTIN JELLY CANDY                               A255
          STARCH JELLY CANDY                               A256
    DECORATION                                             A246
    ICING, FROSTING                                        A269
    SWEET SAUCE OR TOPPING                                 A287
  DAIRY PRODUCT                                            A164
    CHEESE OR CHEESE PRODUCT                               A115
      CHEESE PRODUCT ANALOG                                A128
      GRATED CHEESE FOOD                                   A291
      NATURAL CHEESE                                       A187
        CURED CHEESE                                       A168
          HARD CHEESE                                      A186
          HARD GRATING CHEESE                              A290
          MOLD-RIPENED CHEESE                              A265
          SEMI-SOFT CHEESE                                 A281
          SOFT-RIPENED CHEESE                              A138
        UNCURED CHEESE                                     A185
      PROCESSED CHEESE PRODUCT                             A282
        COLD-PACK CHEESE PRODUCT                           A116
          COLD-PACK CHEESE                                 A280
          COLD-PACK CHEESE FOOD                            A126
        PASTEURIZED CHEESE PRODUCT                         A117
          PASTEURIZED BLENDED CHEESE                       A145
          PASTEURIZED CHEESE SPREAD                        A266
          PASTEURIZED PROCESS CHEESE                       A110
          PASTEURIZED PROCESS CHEESE FOOD                  A111
          PASTEURIZED PROCESS CHEESE SPREAD                A109
    FROZEN DAIRY DESSERT                                   A114
      FROZEN YOGURT                                        A211
      ICE CREAM OR FROZEN CUSTARD                          A137
        FROZEN CUSTARD                                     A165
        ICE CREAM                                          A227
      ICE CREAM PRODUCT ANALOG                             A159
        MELLORINE                                          A232
      ICE MILK                                             A233
      SHERBET                                              A245
    MILK OR MILK PRODUCT                                   A148
      CULTURED MILK PRODUCT                                A101
      MILK OR MILK PRODUCT ANALOG                          A147
        BUTTER PRODUCT ANALOG                              A294
          MARGARINE                                        A231
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        PIE, PASTRY OR PIZZA                                 A100
        PREPARED EGG DISH                                    A284
        SALAD                                                A208
        SANDWICH                                             A218
        SOUP                                                 A198
           SOUP, THICK                                       A180
           SOUP, THIN                                        A243
        STEW OR HASH                                         A212
PRODUCT TYPE NOT KNOWN                                       A001
PRODUCT TYPE, OTHER                                          A004
REFINED OR PARTIALLY-REFINED FOOD PRODUCT                    A129
SNACK FOOD                                                   A228
SWEETENER                                                    A237
   NONNUTRITIVE SWEETENER                                    A142
   NUTRITIVE SWEETENER                                       A118
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B. Food source

```
FOOD SOURCE                                                  B1564
   ANIMAL USED AS FOOD SOURCE                                B1297
      AMPHIBIAN                                              B1624
         FROG                                                B1252
      FISH OR LOWER WATER ANIMAL                             B1021
         AQUATIC ANIMAL                                      B1142
            CUTTLEFISH                                       B1644
            OCTOPUS                                          B1514
            SQUID                                            B1205
         FISH                                                B1222
            FISH, BONY                                       B1365
               FISH, ACIPENSERIFORM                          B1020
                  PADDLEFISH FAMILY                          B1896
                     PADDLEFISH                              B1412
                  STURGEON FAMILY                            B1897
                     STURGEON                                B1465
               FISH, ANGUILLIFORM                            B1574
                  EEL                                        B1278
               FISH, ATHERINIFORM                            B1573
                  FLYING FISH FAMILY                         B1886
                     FLYING FISH                             B1144
                  NEEDLEFISH FAMILY                          B1887
                     NEEDLEFISH                              B1411
                        CALIFORNIA NEEDLEFISH               B1417
                  SAURY FAMILY                               B1888
                     ATLANTIC SAURY                          B1889
                     PACIFIC SAURY                           B1890
                  SILVERSIDE FAMILY                          B1884
                     SOUTH AMERICAN SILVERSIDE              B1885
               FISH, CLUPEIFORM                              B1601
                  ANCHOVY FAMILY                             B1854
                     ANCHOVY                                 B1554
                        NORTHERN ANCHOVY                     B1855
                  HERRING FAMILY                             B1123
                     BLUEBACK HERRING                        B1852
                     HERRING                                 B1414
                        ATLANTIC HERRING                     B1586
                        PACIFIC HERRING                      B1575
                        ROUND HERRING                        B1850
                     MENHADEN                                B1396
                        ATLANTIC MENHADEN                    B1849
                        GULF MENHADEN                        B1848
                     SARDINE, PILCHARD                       B1558
                        EUROPEAN PILCHARD                    B1853
                        PACIFIC SARDINE                      B1847
                     SARDINELLA                              B1392
                        SPANISH SARDINE                      B2003
                     SHAD                                    B1348
                        ALEWIFE                              B1402
                        AMERICAN SHAD                        B1147
                     SPRAT                                   B1235
                     THREAD HERRING                          B1239
                        ATLANTIC THREAD HERRING             B1851
                  MILKFISH                                   B1909
               FISH, CYPRINIFORM                             B1594
                  CARP OR MINNOW FAMILY                      B1921
                     CARP                                    B1228
                     MINNOW                                  B1922
                     ROACH (FISH)                            B1925
                     SHINER                                  B1908
                     TENCH                                   B1906
                  SUCKER FAMILY                              B1892
                     BUFFALO FISH                            B1085
                     SUCKER                                  B1319
               FISH, GADIFORM                                B1157
                  CODFISH FAMILY                             B1835
                     BURBOT                                  B1627
                     CODFISH                                 B1423
                        ATLANTIC COD                         B1842
                        PACIFIC COD                          B1841
                     HADDOCK                                 B1441
                     HAKE                                    B1291
                        PACIFIC HAKE                         B1137
                        RED HAKE                             B1442
                        WHITE HAKE                           B1840
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HOKI	B1838
POLLOCK	B1440
POUTASSOU	B1837
WALLEYE POLLOCK	B1843
WHITING (FISH)	B1640
SOUTHERN BLUE WHITING	B1836
CUSK EEL FAMILY	B1844
BLACK KINGKLIP	B1857
GOLDEN KINGKLIP	B1858
RED KINGKLIP	B1859
EELPOUT FAMILY	B1846
OCEAN POUT	B1845
FISH, PERCIFORM	B1581
BARRACUDA FAMILY	B1829
BARRACUDA	B1540
BILLFISH FAMILY	B1518
MARLIN	B1243
SAILFISH	B1521
BLUEFISH FAMILY	B1810
BLUEFISH	B1512
BUTTERFISH FAMILY	B1827
BUTTERFISH	B1410
CICHLID FAMILY	B1831
BLUE TILAPIA	B1832
MOZAMBIQUE TILAPIA	B1833
NILE TILAPIA	B1834
CUTLASSFISH FAMILY	B1828
CUTLASSFISH	B1154
DOLPHIN FAMILY	B1918
DOLPHIN (FISH)	B1917
DRUM (FISH) FAMILY	B2005
CROAKER	B1794
ATLANTIC CROAKER	B1795
PERUVIAN CROAKER	B1797
DRUM (FISH)	B1204
FRESHWATER DRUM	B1796
SPOT	B1256
WEAKFISH	B1526
SAND SEATROUT	B1104
SPOTTED SEATROUT	B1615
WHITE SEA BASS	B1187
FLATHEAD FAMILY	B1809
FRESH WATER PERCH FAMILY	B2004
PERCH, FRESH WATER	B1557
PIKE PERCH	B1399
BLUE PIKE	B1424
SAUGER	B1670
WALLEYE	B1398
YELLOW PERCH	B1177
GREENLING FAMILY	B1811
GREENLING	B1431
LINGCOD	B1384
GRUNT FAMILY	B1812
GRUNT	B1813
CHILEAN GRUNT	B1814
JACK FAMILY	B1755
BLUE RUNNER	B1778
HORSE OR JACK MACKEREL	B1044
HORSE MACKEREL	B1166
JACK MACKEREL	B1090
POMPANO	B1475
FLORIDA POMPANO	B1780
YELLOWTAIL	B1534
CALIFORNIA YELLOWTAIL	B1779
JACKASS MORWONG	B1910
MACKEREL FAMILY	B1426
BONITO	B1264
ATLANTIC BONITO	B1792
PACIFIC BONITO	B1791
MACKEREL, KINGMACKEREL	B1043
ATLANTIC MACKEREL	B1790
FRIGATE MACKEREL	B1787
KINGMACKEREL	B1516
PACIFIC MACKEREL	B1570
SPANISH MACKEREL 1	B1571
PACIFIC SIERRA	B1793
TUNA	B1269
ALBACORE	B1506
BIG-EYED TUNA	B1069
BLACK SKIPJACK	B1112

BLACKFIN TUNA	B1070
KAWAKAWA	B1546
LITTLE TUNNY	B1111
NORTHERN BLUEFIN TUNA	B1004
ORIENTAL TUNA	B1066
SKIPJACK	B1376
SOUTHERN BLUEFIN TUNA	B1003
YELLOWFIN TUNA	B1074
WAHOO (FISH)	B1630
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MULLET	B1287
FANTAIL MULLET	B1784
REDEYE MULLET	B1785
STRIPED MULLET	B1783
WHITE MULLET	B1786
PORGY FAMILY	B1808
PORGY	B1234
RED HAWAIIAN PORGY	B1815
SHEEPSHEAD	B1422
SABLEFISH FAMILY	B2006
SABLEFISH	B1437
SKILFISH	B1807
SAND LANCE FAMILY	B1830
SAND LANCE	B1354
SCORPIONFISH FAMILY	B1084
BANK ROCKFISH	B1772
BLACK ROCKFISH	B1770
BOCACCIO	B1682
CANARY ROCKFISH	B1774
CHILIPEPPER (FISH)	B1769
COWCOD	B1767
LABRADOR REDFISH	B1768
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PACIFIC OCEAN PERCH	B1034
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SPECKLED ROCKFISH	B1775
VERMILION ROCKFISH	B1766
WIDOW ROCKFISH	B1776
YELLOWEYE ROCKFISH	B1773
YELLOWTAIL ROCKFISH	B1777
SCULPIN FAMILY	B1789
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SEA BASS FAMILY	B1524
ARGENTINE SEA BASS	B1762
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PERSIAN GROUPER	B1758
RED GROUPER	B1757
TAUVINA GROUPER	B1759
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SNAPPER	B1510
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BLACK SNAPPER	B1099
BLACKFIN SNAPPER	B1799
COLORADO SNAPPER	B1804
GRAY SNAPPER	B1168
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MALABAR RED SNAPPER	B1805
MUTTON SNAPPER	B1802
RED SNAPPER	B1089
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SNOOK FAMILY	B1824
SNOOK	B1825
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BLACK CRAPPIE	B1819
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SUNFISH	B1419
SWORDFISH FAMILY	B1383
SWORDFISH	B1427

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TILEFISH FAMILY	B1923
TILEFISH	B1520
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WOLFFISH	B1519
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LEFTEYE FLOUNDER FAMILY	B1879
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SUMMER FLOUNDER	B1883
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RIGHTEYE FLOUNDER FAMILY	B1856
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ARROWTOOTH FLOUNDER	B1866
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DOVER SOLE	B1511
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EUROPEAN PLAICE	B1861
EUROPEAN SOLE	B1878
FLATHEAD SOLE	B1871
GREENLAND TURBOT	B1589
HALIBUT	B1532
ATLANTIC HALIBUT	B1877
PACIFIC HALIBUT	B1876
INDIAN OCEAN FLOUNDER	B1873
KAMCHATKA FLOUNDER	B1875
LONGHEAD DAB	B1860
PETRALE SOLE	B1863
REX SOLE	B1864
ROCK SOLE	B1868
SAND SOLE	B1870
SLENDER SOLE	B1865
STARRY FLOUNDER	B1874
WITCH FLOUNDER	B1867
YELLOWTAIL FLOUNDER	B1872
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COMMON SOLE	B1160
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FISH, SALMONIFORM	B1592
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ARGENTINE	B1430
PIKE FAMILY	B1826
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PIKE	B1293
NORTHERN PIKE	B1143
SMELT FAMILY	B1904
CAPELIN	B1903
SMELT	B1310
RAINBOW SMELT	B1905
TROUT FAMILY	B1129
ATLANTIC SALMON	B1587
CHAR	B1332
BROOK TROUT	B1077
LAKE TROUT	B1503
DANUBE SALMON	B1612
DOLLY VARDEN	B1683
PACIFIC SALMON	B1126
BLUEBACK SALMON	B1128
CHINOOK SALMON	B1132
CHUM SALMON	B1115
COHO SALMON	B1117
MASOU SALMON	B1108
PINK SALMON	B1116
TROUT	B1258
RAINBOW TROUT	B1109
SEA TROUT	B1479
WHITEFISH OR CISCO	B1565
LAKE HERRING	B1118
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BULLHEAD	B1357
BULLHEAD CATFISH	B2007
CHANNEL CATFISH	B1899
LABYRINTH CATFISH FAMILY	B1901
WALKING CATFISH	B1902
SEA CATFISH FAMILY	B1155
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DORY FAMILY	B1891
FISH, CARTILAGINOUS	B1007
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FISH, SQUALIFORM	B1911
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ANGEL SHARK	B1138
DOGFISH SHARK FAMILY	B1912
DOGFISH SHARK	B1195
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MACKEREL SHARK FAMILY	B1915
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SHARK	B1342
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SKATE	B1340
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CRUSTACEAN	B1374
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KING CRAB	B1498
SNOW CRAB	B1497
TANNER CRAB	B1182
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ABALONE	B1408
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COCKLE	B1317
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CATTLE AND SWINE	B1105
CATTLE AND SWINE AND CALF	B1000
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MUSK DEER	B1620
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RACCOON	B1461
SHEEP	B1183
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CATTLE AND SWINE AND CALF	B1000
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ROASTER CHICKEN	B1710
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DOVE	B1203
DUCK	B1316
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GROUSE	B1251
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WAKAME	B1747
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ELDERBERRY	B1403
LOGANBERRY	B1401
YOUNGBERRY	B1388
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LINGONBERRY (COWBERRY)	B1019
GRAPE	B1329
GRAPE, MUSCAT	B1178
GRAPE, SULTANA	B1072
GRAPE, THOMPSON SEEDLESS	B1045
HOLLY BERRY	B1697
MULBERRY	B1501
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        CLEMENTINE                          B1751
      GRAPEFRUIT                            B1507
         GRAPEFRUIT AND ORANGE             B1028
         PINEAPPLE AND GRAPEFRUIT          B1246
      KUMQUAT                               B1530
      LEMON                                 B1275
      LIME (CITRUS)                         B1067
      ORANGE                                B1339
         CALIFORNIA VALENCIA               B1056
         GRAPEFRUIT AND ORANGE             B1028
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            BERGAMOT ORANGE                B1898
      TANGELO                               B1473
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      CRABAPPLE                             B1488
      HAW                                   B1708
      PEAR                                  B1344
      QUINCE                                B1298
   PERSIMMON                                 B1447
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         ORANGE AND APRICOT                B1709
      AVOCADO                               B1470
      CHERRY                                B1306
         SWEET CHERRY                      B1091
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         PEACH, FREESTONE                  B1585
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         CHERRY PLUM                       B1676
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      AKEE                                  B1690
      AVOCADO                               B1470
      BANANA                                B1266
      BREADFRUIT                            B1504
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      CHERIMOYA                             B1687
      CUSTARD APPLE                         B1689
      DATE                                  B1209
      FIG                                   B1302
      GUAVA                                 B1333
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      JACKFRUIT                             B1545
      JAMBOLAN                              B1651
      JUJUBE                                B1311
      KIWIFRUIT                             B1664
      LITCHI                                B1212
      LONGAN                                B1628
      MAMMY APPLE                           B1685
      MANGO                                 B1270
      NATAL PLUM                            B1482
      OHELOBERRY                            B1688
      PAPAYA                                B1249
      PINEAPPLE                             B1484
         PINEAPPLE AND GRAPEFRUIT          B1246
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      PITANGA                               B1657
      PLANTAIN                              B1439
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      SAPODILLA PLUM                        B1693
      SAPOTE                                B1694
      SOURSOP                               B1480
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            SWEETSOP                                        B1477
            TAMARIND                                        B1695
        VINE FRUIT                                          B1499
            MELON                                           B1283
                BITTER MELON                                B1101
                CANTALOUPE                                  B1471
                CASABA MELON                                B1102
                CHINESE PRESERVING MELON                    B1616
                CRENSHAW MELON                              B1661
                HONEYDEW MELON                              B1582
                PERSIAN MELON                               B1133
                SANTA CLAUS MELON                           B1578
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                WINTER MELON                                B1103
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    GRAIN                                                   B1324
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                FIELD CORN AND OAT                          B1706
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                    POPCORN, WHITE                          B1151
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            FIELD CORN AND OAT                              B1706
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            WHEAT AND OAT                                   B1678
        RICE                                                B1322
            FIELD CORN AND RICE                             B1677
        RYE                                                 B1313
            WHEAT AND FIELD CORN AND RYE                    B1705
            WHEAT AND RYE                                   B1088
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        TRITICALE                                           B1358
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            WHEAT AND BARLEY                                B1698
            WHEAT AND CORN                                  B1273
            WHEAT AND FIELD CORN AND RYE                    B1705
            WHEAT AND OAT                                   B1678
            WHEAT AND RYE                                   B1088
            WHEAT AND SOY                                   B1080
        WILD RICE                                           B1375
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            COTTON                                          B1210
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                OAT AND SOY                                 B1679
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        NUT                                                 B1213
            PEANUT                                          B1337
                PEANUT WITH OTHER NUT OR SEED               B1525
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                ACORN                                       B1715
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                BEECHNUT                                    B1543
                BREADNUT                                    B1722
                CHESTNUT                                    B1544
                    EUROPEAN CHESTNUT                       B1584
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                    GINGKO                                      B1260
                    HICKORY                                     B1553
                    PECAN                                       B1320
                    PINE NUT, PINON                             B1596
                    WALNUT                                      B1290
                        BLACK WALNUT                            B1071
                        BUTTERNUT                               B1453
                        ENGLISH WALNUT                          B1130
                TROPICAL OR SUBTROPICAL NUT                     B1022
                    BRAZILNUT                                   B1463
                    CASHEW                                      B1221
                    COCONUT                                     B1536
                    LITCHI                                      B1212
                    MACADAMIA                                   B1451
                    PILI                                        B1289
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                AGAVE                                           B1535
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                        AGAR                                    B1033
                        CAROB BEAN                              B1366
                        CARRAGEENAN                             B1053
                        GHATTI                                  B1330
                        GUAR                                    B1334
                        STERCULIA                               B1445
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                    PECTIN-PRODUCING PLANT                      B1011
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                            FIELD CORN, WHITE                   B1577
                            FIELD CORN, YELLOW                  B1580
                            POPCORN                             B1454
                                POPCORN, WHITE                  B1151
                                POPCORN, YELLOW                 B1617
                            SUGAR CANE AND FIELD CORN           B1680
                            WHEAT AND CORN                      B1273
                            WHEAT AND FIELD CORN AND RYE        B1705
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                    CLOVER                                      B1254
                    FIELD CORN                                  B1379
                        FIELD CORN AND OAT                      B1706
                        FIELD CORN AND RICE                     B1677
                        FIELD CORN, WHITE                       B1577
                        FIELD CORN, YELLOW                      B1580
                        POPCORN                                 B1454
                            POPCORN, WHITE                      B1151
                            POPCORN, YELLOW                     B1617
                        SUGAR CANE AND FIELD CORN               B1680
                        WHEAT AND CORN                          B1273
                        WHEAT AND FIELD CORN AND RYE            B1705
                    SORGHUM                                     B1448
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                        SUGAR CANE AND FIELD CORN               B1680
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                BITTERSWEET, EUROPEAN                           B1076
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            OIL-PRODUCING PLANT                                 B1017
                CACAO                                           B1318
                CASTOR BEAN                                     B1703
                COCONUT                                         B1536
                COMELLO                                         B1474
                COTTON                                          B1210
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                FIELD CORN                                      B1379
                    FIELD CORN AND OAT                          B1706
                    FIELD CORN AND RICE                         B1677
                    FIELD CORN, WHITE                           B1577
                    FIELD CORN, YELLOW                          B1580
                    POPCORN                                     B1454
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              POPCORN, WHITE                              B1151
              POPCORN, YELLOW                             B1617
          SUGAR CANE AND FIELD CORN                       B1680
          WHEAT AND CORN                                  B1273
          WHEAT AND FIELD CORN AND RYE                    B1705
       FLAX                                               B1700
       HORSERADISH TREE                                   B1748
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          BLACK OLIVE                                     B1170
          GREEN OLIVE                                     B1169
       PALM                                               B1286
          BABASSU PALM                                    B1707
       PEANUT                                             B1337
          PEANUT WITH OTHER NUT OR SEED                   B1525
       RAPE                                               B1248
       SAFFLOWER                                          B1548
       SESAME                                             B1226
       SHEANUT                                            B1667
       SOYBEAN                                            B1452
          OAT AND SOY                                     B1679
          WHEAT AND SOY                                   B1080
       SUNFLOWER                                          B1547
       UCUUBA                                             B1699
   PROTEIN-PRODUCING PLANT                                B1049
       ALFALFA                                            B1359
       SOYBEAN                                            B1452
          OAT AND SOY                                     B1679
          WHEAT AND SOY                                   B1080
   STEEPED BEVERAGE-PRODUCING PLANT                       B1035
       COFFEE                                             B1305
       GINSENG                                            B1673
       TEA                                                B1623
SPICE OR FLAVOR-PRODUCING PLANT                           B1179
   ANGELICA                                               B1377
   ANGOSTURA BARK                                         B1188
   ANISE                                                  B1296
   BASIL, BUSH                                            B1145
   BASIL, SWEET                                           B1158
   BAY                                                    B1197
   CAPER                                                  B1247
   CAPSICUM                                               B1541
       PAPRIKA                                            B1353
   CARAWAY                                                B1549
   CARDAMOM                                               B1665
   CASSIA, BATAVIA                                        B1556
   CELERY                                                 B1282
   CHERVIL                                                B1444
   CHIVE                                                  B1294
   CINNAMON                                               B1472
       CINNAMON, CHINESE                                  B1572
       CINNAMON, SAIGON                                   B1590
   CLOVE                                                  B1255
   CORIANDER                                              B1381
   CUMIN                                                  B1274
   CUMIN, BLACK                                           B1176
   DILL                                                   B1277
   FENNEL                                                 B1262
   FENUGREEK                                              B1696
   GARLIC                                                 B1233
   GAULTHERIA                                             B1386
   GINGER                                                 B1265
   HOPS                                                   B1517
   HORSERADISH                                            B1146
   MACE                                                   B1321
   MARJORAM, POT                                          B1097
   MARJORAM, SWEET                                        B1609
   MINT                                                   B1267
       PEPPERMINT                                         B1449
       SPEARMINT                                          B1434
   MUSTARD, BLACK                                         B1127
   MUSTARD, BROWN                                         B1092
   MUSTARD, WHITE                                         B1148
   NUTMEG                                                 B1214
   ORIGANUM                                               B1542
   PARSLEY                                                B1550
   PEPPER, BLACK                                          B1191
   PEPPER, WHITE                                          B1141
   PIMENTA                                                B1356
   POPPY                                                  B1515
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ROSE                                                          B1225
ROSEMARY                                                      B1495
SAFFRON                                                       B1459
SAGE                                                          B1303
SASSAFRAS                                                     B1493
SAVORY, SUMMER                                                B1123
SAVORY, WINTER                                                B1114
STAR ANISE                                                    B1464
TARRAGON                                                      B1469
THYME                                                         B1199
    THYME, WILD                                               B1173
TONKA                                                         B1039
TURMERIC                                                      B1425
VANILLA                                                       B1355
VEGETABLE-PRODUCING PLANT                                     B1579
  VEGETABLE-PRODUCING PLANT, ABOVE-GROUND PARTS USED          B1057
    FLORET USED AS VEGETABLE                                  B1036
      ARTICHOKE                                               B1466
      CAULIFLOWER                                             B1094
    FRUIT USED AS VEGETABLE                                   B1006
      BALSAM PEAR                                             B1718
      CHAYOTE                                                 B1730
      CUCUMBER                                                B1404
      EGGPLANT                                                B1458
      GOURD                                                   B1719
        CALABASH                                              B1720
        DISHCLOTH GOURD                                       B1721
      HORSERADISH TREE                                        B1748
      OKRA                                                    B1241
      OLIVE                                                   B1299
        BLACK OLIVE                                           B1170
        GREEN OLIVE                                           B1169
      PEPPER                                                  B1250
        HOT PEPPER, CHILI PEPPER                              B1643
          JALAPENO PEPPER                                     B1666
        PAPRIKA                                               B1353
        PIMIENTO                                              B1531
      PUMPKIN                                                 B1456
      SQUASH                                                  B1208
        SUMMER SQUASH                                         B1190
        WINTER SQUASH                                         B1189
        ZUCCHINI                                              B1462
      TOMATO                                                  B1276
        GLOBE TOMATO                                          B1078
        MINIATURE TOMATO                                      B1608
        PEAR TOMATO                                           B1107
        TRIPLE SUCCOTASH                                      B1606
    HEAD VEGETABLE                                            B1194
      BRUSSELS SPROUT                                         B1611
      CABBAGE                                                 B1406
      CELTUCE                                                 B1728
      CHINESE OR CELERY CABBAGE                               B1051
      LETTUCE                                                 B1390
    LEAFY VEGETABLE                                           B1566
      BORAGE                                                  B1735
      CHICORY                                                 B1552
      COLLARD                                                 B1385
      CORN SALAD (PLANT)                                      B1754
      DANDELION                                               B1428
      ENDIVE                                                  B1314
      ESCAROLE                                                B1446
      FIELD CRESS                                             B1082
      GARLAND CHRYSANTHEMUM                                   B1740
      KALE                                                    B1281
        HANOVER GREENS                                        B1171
      LAMB'S QUARTER                                          B1681
      LEAF MUSTARD                                            B1749
      MALABAR NIGHTSHADE                                      B1150
      MUSTARD GREENS                                          B1163
      NALTA JUTE                                              B1731
      NEW ZEALAND SPINACH                                     B1732
      POKE GREENS                                             B1086
      POKEWEED                                                B1400
      SKUNK CABBAGE                                           B1733
      SORREL                                                  B1641
      SPINACH                                                 B1420
      SWISS CHARD                                             B1175
      WATERCRESS                                              B1492
    POD OR SEED VEGETABLE                                     B1156
      BEAN (VEGETABLE)                                        B1567
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ADZUKI BEAN	B1110
BLACK GRAM BEAN	B1588
BROAD BEAN	B1367
FIELD BEAN	B1663
GARBANZO BEAN	B1172
GOA BEAN	B1726
HYACINTH BEAN	B1725
LIMA BEAN	B1397
BABY LIMA BEAN	B1185
FORDHOOK LIMA BEAN	B1562
SUCCOTASH	B1361
TRIPLE SUCCOTASH	B1606
LUPINE BEAN	B1701
MOTH BEAN	B1920
MUNG BEAN	B1395
PHASEOLUS VULGARIS	B1555
PHASEOLUS VULGARIS, EDIBLE POD CULTIVAR	B1060
GREEN BEAN	B1371
GREEN BEAN AND PINTO BEAN	B1753
WAX BEAN	B1351
PHASEOLUS VULGARIS, EDIBLE SEED CULTIVAR	B1061
CRANBERRY BEAN	B1186
GREAT NORTHERN BEAN	B1027
KIDNEY BEAN	B1113
GREEN KIDNEY BEAN	B1658
RED KIDNEY BEAN	B1659
NAVY OR PEA BEAN	B1560
PINTO BEAN	B1368
GREEN BEAN AND PINTO BEAN	B1753
RICE BEAN	B1702
SIEVA BEAN	B1372
SOYBEAN	B1452
OAT AND SOY	B1679
WHEAT AND SOY	B1080
COWPEA	B1200
BLACKEYED PEA	B1100
CATJANG BEAN	B1919
CROWDER PEA	B1196
YARDLONG BEAN	B1724
LENTIL	B1268
PEA	B1338
PEA AND CARROT	B1613
PEA AND ONION	B1605
PEA, EDIBLE POD CULTIVARS	B1031
PEA, EDIBLE SEED CULTIVARS	B1001
ALASKA PEA	B1326
FIELD PEA	B1486
PEA, SMOOTH WRINKLED CROSSES	B1042
PIGEON PEA	B1668
SWEET PEA	B1487
SWEET CORN	B1380
SUCCOTASH	B1361
SWEET CORN, WHITE	B1597
SWEET CORN, YELLOW	B1595
TRIPLE SUCCOTASH	B1606
TUMBLE MUSTARD	B1737
SESBANIA	B1736
STEM OR SPEAR VEGETABLE	B1005
ASPARAGUS	B1415
GREEN ASPARAGUS	B1604
WHITE ASPARAGUS	B1603
BAMBOO	B1271
BROCCOLI	B1443
BUTTER BUR	B1739
CELERY	B1282
KOHLRABI	B1369
URTICA	B1674
VEGETABLE-PRODUCING PLANT, ALL PARTS USED	B1058
CARDOON	B1727
EAR FUNGUS	B1741
LEEK	B1308
MUSHROOM	B1467
ABALONE MUSHROOM	B1645
JAPANESE MUSHROOM	B1635
OYSTER MUSHROOM	B1632
STRAW MUSHROOM	B1637
PURSLANE	B1642
SCALLION	B1478
SHALLOT	B1538
TREE FERN	B1750

TRUFFLE	B1387
VEGETABLE-PRODUCING PLANT, ROOT, TUBER OR BULB USED	B1018
ARROWHEAD	B1716
BEET	B1309
CARROT	B1227
BELGIAN CARROT	B1095
PEA AND CARROT	B1613
CELERIAC	B1729
COLTSFOOT	B1647
EPPAW	B1752
JERUSALEM ARTICHOKE	B1038
LAPPA	B1646
ONION	B1300
PEA AND ONION	B1605
PARSNIP	B1483
POTATO	B1218
RADISH	B1315
SALSIFY	B1551
SWEETPOTATO	B1106
TARO	B1636
TURNIP	B1238
RUTABAGA	B1413
WATERCHESTNUT, CHINESE	B1026
YAM BEAN	B1738
YAM, TROPICAL	B1181

C. Part of plant or animal

```
PART OF PLANT OR ANIMAL                                              C116
    EXTRACT, CONCENTRATE OR ISOLATE OF PLANT OR ANIMAL               C228
        ALCOHOL EXTRACT OF PLANT                                     C263
        CARBOHYDRATE                                                 C152
            OLIGOSACCHARIDE                                          C226
            POLYSACCHARIDE                                           C153
                CELLULOSE                                            C220
                PECTIN                                               C198
                STARCH                                               C203
            SUGAR                                                    C108
                DEXTROSE                                             C222
                FRUCTOSE                                             C223
                GALACTOSE, D-                                        C254
                HONEY                                                C188
                INVERT SUGAR                                         C171
                LACTOSE                                              C209
                MALTOSE                                              C206
                SUCROSE                                              C210
                    BROWN SUGAR                                      C156
                    MOLASSES                                         C207
                    WHITE SUGAR                                      C157
        ESSENTIAL OIL                                                C260
        FAT OR OIL                                                   C190
            BUTTER                                                   C179
        PROTEIN EXTRACT, CONCENTRATE OR ISOLATE                      C236
            CASEIN                                                   C180
            GELATIN                                                  C219
            GLUTEN                                                   C177
        WATER EXTRACT OF PLANT OR ANIMAL                             C159
            BROTH, STOCK                                             C170
    PART OF ANIMAL                                                   C164
        ANIMAL BODY OR BODY PART                                     C127
            MEAT PART                                                C103
                CHEEK AND HEAD TRIMMINGS                             C259
                ORGAN MEAT                                           C218
                    ORGAN MEAT, CARDIOVASCULAR SYSTEM                C129
                        BLOOD                                        C185
                        BONE MARROW                                  C149
                        HEART (ANIMAL)                               C201
                        SPLEEN                                       C191
                        THYMUS, SWEETBREADS                          C109
                    ORGAN MEAT, DIGESTIVE SYSTEM                     C106
                        INK, AQUATIC ANIMAL                          C246
                        INTESTINE                                    C212
                        LIVER                                        C176
                        PANCREAS                                     C204
                        STOMACH                                      C211
                            AVIAN STOMACH, GIZZARD                   C124
                            RUMINANT STOMACH                         C224
                                TRIPE                                C192
                    ORGAN MEAT, OTHER SYSTEMS                        C255
                        BRAIN                                        C199
                        EYE                                          C256
                        LUNG                                         C187
                        TONGUE                                       C189
                    ORGAN MEAT, UROGENITAL SYSTEM                    C145
                        KIDNEY                                       C196
                        OVARY, ROE                                   C202
                        TESTIS, MILT, SOFT ROE                       C234
                SKELETAL MEAT PART                                   C175
                    SKELETAL MEAT PART, WITH BONE OR SHELL           C243
                        SKELETAL MEAT PART, WITH BONE, WITH SKIN     C265
                        SKELETAL MEAT PART, WITH BONE, WITHOUT SKIN  C266
                    SKELETAL MEAT PART, WITHOUT BONE OR SHELL        C125
                        BELLY MEAT                                   C252
                        SKELETAL MEAT PART, WITHOUT BONE, WITH SKIN  C267
                        SKELETAL MEAT PART, WITHOUT BONE, WITHOUT SKIN C268
                            SKELETAL MEAT PART, WITHOUT BONE AND SKIN, WITH SEPARABLE FAT    C269
                            SKELETAL MEAT PART, WITHOUT BONE AND SKIN, WITHOUT SEPARABLE FAT C270
            NONMEAT PART OF ANIMAL                                   C122
                BONE OR SHELL                                        C168
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            FAT, TRIM                                                    C253
            SKIN                                                         C193
                FEATHER                                                  C221
        WHOLE ANIMAL OR MOST PARTS USED                                  C173
            WHOLE ANIMAL, SKINNED, DEFEATHERED OR SCALED, EVISCERATED    C120
            WHOLE ANIMAL, SKINNED, DEFEATHERED OR SCALED, NOT EVISCERATED C147
            WHOLE ANIMAL, WITH SKIN, FEATHERS OR SCALES, EVISCERATED     C105
    EGG                                                                  C194
        EGG WHITE, ALBUMEN                                               C241
        EGG YOLK                                                         C215
        WHOLE EGG IN SHELL                                               C128
        WHOLE EGG WITHOUT SHELL                                          C225
    MILK OR MILK COMPONENT                                               C113
        CREAM OR CREAM COMPONENT                                         C123
            BUTTER                                                       C179
            BUTTERMILK                                                   C216
            CREAM                                                        C195
                HEAVY CREAM                                              C161
                LIGHT CREAM                                              C160
                WHIPPING CREAM                                           C154
        CURD                                                             C245
        MILK                                                             C235
        WHEY                                                             C244
PART OF MICROORGANISM                                                    C247
    WHOLE MICROORGANISM                                                  C248
PART OF PLANT                                                            C174
    FRUIT, SEED                                                          C165
        FRUIT OR BERRY                                                   C167
            FRUIT OR BERRY, PEEL PRESENT                                 C137
                FRUIT OR BERRY, PEEL PRESENT, CORE, PIT OR SEED PRESENT  C140
                FRUIT OR BERRY, PEEL PRESENT, CORE, PIT OR SEED REMOVED  C139
            FRUIT OR BERRY, PEEL REMOVED                                 C138
                FRUIT OR BERRY, PEEL REMOVED, CORE, PIT OR SEED PRESENT  C230
                FRUIT OR BERRY, PEEL REMOVED, CORE, PIT OR SEED REMOVED  C229
            FRUIT OR BERRY, PEEL UNDETERMINED, CORE, PIT OR SEED PRESENT C163
            FRUIT OR BERRY, PEEL UNDETERMINED, CORE, PIT OR SEED REMOVED C213
            PEEL, CORE OR SEED                                           C110
        POD OR SEED                                                      C158
            POD AND FULL-SIZE SEED, MIXTURE                              C117
            POD CONTAINING FULL-SIZE SEEDS                               C262
            POD CONTAINING SMALL, IMMATURE SEED                          C169
            POD WITH SEEDS REMOVED                                       C112
            SEED IN SHELL                                                C227
            SEED OR KERNEL                                               C155
                SEED OR KERNEL, SKIN PRESENT                             C135
                    SEED OR KERNEL, SKIN PRESENT, GERM PRESENT           C133
                        GERMINATED OR SPROUTED SEED                      C102
                        SEED ON COB, WITH OR WITHOUT HUSK                C242
                    SEED OR KERNEL, SKIN PRESENT, GERM REMOVED           C119
                SEED OR KERNEL, SKIN REMOVED                             C134
                    SEED OR KERNEL, SKIN REMOVED, GERM PRESENT           C132
                    SEED OR KERNEL, SKIN REMOVED, GERM REMOVED (ENDOSPERM) C208
                SEED OR KERNEL, SKIN UNDETERMINED, GERM PRESENT          C136
                SEED OR KERNEL, SKIN UNDETERMINED, GERM REMOVED          C114
                SEED PART, OTHER                                         C178
                    GERM                                                 C182
                    GERM AND BRAN                                        C142
                    NUT MILK                                             C214
                    SKIN, BRAN (PERICARP)                                C111
            SHELL (SEED)                                                 C249
    ROOT, STEM, LEAF OR FLOWER                                           C148
        BARK                                                             C264
        PLANT ABOVE SURFACE, EXCLUDING FRUIT AND SEED                    C144
            CAP, BUTTON                                                  C258
            FLOWER, FLORET                                               C237
            HEAD (PLANT)                                                 C151
            HEART (PLANT)                                                C162
            HUSK                                                         C181
            LEAF                                                         C200
            SPEAR, SHOOT                                                 C186
            SPROUT                                                       C183
            STEM, STALK (WITHOUT LEAVES)                                 C101
        ROOT, TUBER OR BULB                                              C238
            ROOT, TUBER OR BULB, PEEL ONLY                               C261
            ROOT, TUBER OR BULB, WITH PEEL                               C239
            ROOT, TUBER OR BULB, WITHOUT PEEL                            C240
        ROOT, TUBER OR BULB, WITH PART OF TOP                            C100
    WHOLE PLANT OR MOST PARTS USED                                       C150
PART OF PLANT OR ANIMAL NOT APPLICABLE                                   C005
PART OF PLANT OR ANIMAL NOT KNOWN                                        C001
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E. Physical state, shape or form

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PHYSICAL STATE, SHAPE OR FORM                                    E113
   LIQUID                                                        E130
      LIQUID, HIGH VISCOSITY                                     E102
         LIQUID, HIGH VISCOSITY, WITH DISCRETE PARTICLES         E138
         LIQUID, HIGH VISCOSITY, WITH NO VISIBLE PARTICLES       E139
         LIQUID, HIGH VISCOSITY, WITH VERY SMALL PARTICLES       E121
      LIQUID, LOW VISCOSITY                                      E109
         LIQUID, LOW VISCOSITY, WITH DISCRETE PARTICLES          E149
         LIQUID, LOW VISCOSITY, WITH NO VISIBLE PARTICLES        E123
         LIQUID, LOW VISCOSITY, WITH VERY SMALL PARTICLES        E114
   PHYSICAL STATE, SHAPE OR FORM NOT KNOWN                       E001
   SEMILIQUID                                                    E103
      SEMILIQUID WITH DISCRETE PARTICLES                         E110
      SEMILIQUID WITH SMOOTH CONSISTENCY                         E135
   SEMISOLID                                                     E144
      SEMISOLID WITH DISCRETE PARTICLES                          E134
      SEMISOLID WITH SMOOTH CONSISTENCY                          E119
   SOLID                                                         E151
      CRYSTAL                                                    E143
      DIVIDED OR DISINTEGRATED                                   E122
         DISINTEGRATED OR GROUND                                 E136
            FINELY GROUND                                        E106
            MEDIUM GROUND                                        E117
               MEDIUM GROUND AND SIFTED (BOLTED)                 E101
         DIVIDED INTO HALVES, QUARTERS OR SEGMENTS               E133
            DIVIDED INTO HALVES                                  E116
            DIVIDED INTO QUARTERS                                E148
            DIVIDED INTO SEGMENTS OR WEDGES                      E107
         DIVIDED INTO PIECES                                     E152
            DIVIDED INTO PIECES, THICKNESS <0.3 CM.              E100
            DIVIDED INTO PIECES, THICKNESS >1.5 CM.              E125
            DIVIDED INTO PIECES, THICKNESS 0.3-1.5 CM.           E115
               CUT INTO LONG PIECES                              E141
               CUT INTO SHORT PIECES                             E111
               SLICED                                            E137
                  SLICED, THICK, BETWEEN 0.5 AND 1.5 CM.         E124
                  SLICED, THIN, BELOW 0.5 CM.                    E145
      WHOLE                                                      E131
         WHOLE, NATURAL SHAPE                                    E150
         WHOLE, SHAPE ACHIEVED BY FORMING                       E147
            WHOLE, SHAPE ACHIEVED BY FORMING, THICKNESS <0.3 CM.     E153
            WHOLE, SHAPE ACHIEVED BY FORMING, THICKNESS >7 CM.       E146
            WHOLE, SHAPE ACHIEVED BY FORMING, THICKNESS 0.3-1.5 CM.  E140
            WHOLE, SHAPE ACHIEVED BY FORMING, THICKNESS 1.5-7 CM.    E105
      WHOLE AND PIECES                                           E104
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F. Degree of preparation

G. Cooking Method

COOKING METHOD	G002
COOKED BY DRY HEAT	G004
BAKED OR ROASTED	G005
BROILED OR GRILLED	G006
CHARCOAL BROILED	G007
GRIDDLED	G008
POPPED	G009
TOASTED	G010
COOKED BY MICROWAVE	G011
COOKED BY MOIST HEAT	G012
COOKED IN WATER OR WATER-BASED LIQUID	G013
BOILED	G014
BOILED AND DRAINED	G015
BOILED IN LARGE AMOUNT OF LIQUID	G016
BOILED IN SMALL AMOUNT OF LIQUID	G017
BOILED AND UNDRAINED	G018
BRAISED	G019
SIMMERED, POACHED OR STEWED	G020
COOKED WITH STEAM	G021
STEAMED WITH PRESSURE	G022
STEAMED WITHOUT PRESSURE	G023
COOKED WITH FAT (ADDED OR INHERENT)	G024
COOKED WITH ADDED FAT	G025
COOKED IN SMALL AMOUNT OF FAT	G026
SAUTEED	G027
STIR-FRIED	G028
DEEP-FRIED	G029
COOKED WITH INHERENT FAT	G030
COOKING METHOD NOT APPLICABLE	G003
COOKING METHOD NOT KNOWN	G001

TREATMENT APPLIED	H111
COMPONENT REMOVED	H238
ALKALOID OR PURINE REMOVED	H135
DECAFFEINATED	H140
CARBOHYDRATE REMOVED	H266
DEBITTERED	H198
DEMINERALIZED	H137
SODIUM REMOVED	H236
FAT REMOVED	H161
FAT FULLY REMOVED	H248
FAT PARTIALLY REMOVED	H247
PROTEIN REMOVED	H134
COMPONENT SUBSTITUTED	H103
FAT SUBSTITUTED	H208
PROTEIN SUBSTITUTED	H250
FOOD MODIFIED	H141
INSTANTIZED	H169
MICROBIALLY/ENZYMATICALLY MODIFIED	H119
ENZYMATICALLY MODIFIED	H252
LACTOSE CONVERTED	H203
FERMENTED/MODIFIED, COMPLEX PROCESS	H128
CURED, AGED OR RIPENED	H253
LACTIC ACID-OTHER ORGANISM FERMENTED	H107
FERMENTED, SIMPLE PROCESS	H230
CARBOHYDRATE FERMENTED	H256
ALCOHOL FERMENTED	H232
ALCOHOL-ACETIC ACID FERMENTED	H123
LACTIC ACID FERMENTED	H101
LIPOLYTIC FERMENTED	H127
PROTEOLYTIC FERMENTED	H102
PICKLED	H190
PHYSICALLY/CHEMICALLY MODIFIED	H130
AERATED, WHIPPED	H178
ALKALIZED	H206
BLEACHED	H197
CANDIED	H182
DISTILLED	H270
FLAKED	H274
HYDROGENATED	H174
IRRADIATED	H121
IRRADIATED BY IONIZING IRRADIATION	H179
IRRADIATED BY ULTRAVIOLET RADIATION	H261
LIQUID INJECTED	H275
PARBOILED (GRAIN)	H220
PREVIOUSLY FROZEN	H241
PUFFED	H268
ROLLED	H239
TEXTURED	H192
INGREDIENT ADDED	H225
CARBOHYDRATE ADDED	H209
OLIGOSACCHARIDE ADDED	H240
HYDROLYZED CEREAL SOLIDS ADDED	H104
POLYSACCHARIDE ADDED	H120
CELLULOSE ADDED	H218
HEMICELLULOSE ADDED	H125
HYDROLYZED CEREAL SOLIDS ADDED	H104
PECTIN ADDED	H145
STARCH ADDED	H146
SWEETENED WITH SUGAR	H136
DEXTROSE ADDED	H154
CORN SYRUP ADDED	H224
FRUCTOSE ADDED	H168
GALACTOSE ADDED	H265
HONEY ADDED	H149
HYDROLYZED CEREAL SOLIDS ADDED	H104
INVERT SUGAR ADDED	H211
LACTOSE ADDED	H157
MALTOSE ADDED	H155
SUCROSE ADDED	H158
MOLASSES ADDED	H156
COLOR ADDED	H150
CERTIFIED COLOR ADDED	H133
NONCERTIFIED COLOR ADDED	H106
FAT OR OIL ADDED	H221
ANIMAL FAT OR OIL ADDED	H262

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            BUTTER ADDED                                              H271
        FAT OR OIL COATED                                            H233
        MARGARINE ADDED                                              H272
        VEGETABLE FAT OR OIL ADDED                                   H263
FILLED, STUFFED                                                      H207
FLAVORING OR TASTE INGREDIENT ADDED                                  H117
    ACIDIFIED                                                        H200
    ALCOHOLATED                                                      H160
    CARBONATED                                                       H175
        ARTIFICIALLY CARBONATED                                      H109
        CARBONATED BY FERMENTATION                                   H246
    FLAVORING, SPICE OR HERB ADDED                                   H227
        FLAVORING OR SPICE ADDED, ARTIFICIAL                         H228
        FLAVORING, SPICE OR HERB ADDED, NATURAL                      H229
            CAROB ADDED                                              H267
            CHOCOLATE OR COCOA ADDED                                 H231
            FLAVORING OR SPICE EXTRACT OR CONCENTRATE ADDED          H100
            SPICE ADDED                                              H151
    SALTED                                                           H173
    SMOKED OR SMOKE-FLAVORED                                         H172
        SMOKED BY ADDING SMOKE CONCENTRATE                           H110
        SMOKED BY SMOKE INFILTRATION                                 H118
    SWEETENED                                                        H202
        SWEETENED WITH NONNUTRITIVE SWEETENER                        H108
        SWEETENED WITH NUTRITIVE SWEETENER                           H105
            SWEETENED WITH SUGAR                                     H136
                DEXTROSE ADDED                                       H154
                    CORN SYRUP ADDED                                 H224
                FRUCTOSE ADDED                                       H168
                GALACTOSE ADDED                                      H265
                HONEY ADDED                                          H149
                HYDROLYZED CEREAL SOLIDS ADDED                       H104
                INVERT SUGAR ADDED                                   H211
                LACTOSE ADDED                                        H157
                MALTOSE ADDED                                        H155
                SUCROSE ADDED                                        H158
                    MOLASSES ADDED                                   H156
FOOD ADDED                                                           H180
    CHOCOLATE OR COCOA ADDED                                         H231
    DAIRY PRODUCT ADDED                                              H242
        CHEESE ADDED                                                 H143
        MILK ADDED                                                   H184
            PUDDING OR CUSTARD ADDED                                 H132
        WHEY ADDED                                                   H260
    EGG ADDED                                                        H186
        EGG WHITE ADDED                                              H205
        EGG YOLK ADDED                                               H185
    FRUIT ADDED                                                      H147
        JELLY, JAM OR PRESERVE ADDED                                 H122
            ARTIFICIALLY SWEETENED FRUIT JELLY ADDED                 H131
    GRAIN ADDED                                                      H152
        BREADED, BATTER-COATED                                       H188
        WHEAT GERM ADDED                                             H222
    MEAT ADDED                                                       H191
    NUT OR SEED ADDED                                                H177
        PEANUT OR PEANUT BUTTER ADDED                                H124
    POULTRY ADDED                                                    H171
    SEAFOOD ADDED                                                    H153
    VEGETABLE ADDED                                                  H212
        MUSHROOM ADDED                                               H166
NUTRIENT OR DIETARY SUPPLEMENT ADDED                                 H116
    AMINO ACID ADDED                                                 H210
    ENRICHED                                                         H194
    FORTIFIED                                                        H199
    MINERAL ADDED                                                    H159
        CALCIUM ADDED                                                H162
        CHLORIDE ADDED                                               H196
        IODIZED                                                      H189
        IRON ADDED                                                   H181
        PHOSPHORUS ADDED                                             H223
        POTASSIUM ADDED                                              H195
        SODIUM ADDED                                                 H144
        ZINC ADDED                                                   H273
    VITAMIN ADDED                                                    H163
        VITAMIN A ADDED                                              H213
        VITAMIN A AND D ADDED                                        H126
        VITAMIN B ADDED                                              H216
        VITAMIN C ADDED                                              H215
        VITAMIN D ADDED                                              H214
        VITAMIN E ADDED                                              H217
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      PROTEIN ADDED                                                    H164
          GELATIN ADDED                                               H165
          SOY PROTEIN ADDED                                           H257
NO TREATMENT APPLIED                                                  H003
TREATMENT APPLIED NOT KNOWN                                           H001
TREATMENT NOT APPLIED                                                 H115
    LESS SALT ADDED                                                   H264
    NO CAFFEINE ADDED                                                 H269
    NO COLOR ADDED                                                    H167
    NO FLAVOR ADDED                                                   H219
    NO PRESERVATIVE ADDED                                             H129
        NO NITRITE/NITRATE ADDED                                      H249
    NO SALT ADDED                                                     H193
    NO WATER ADDED                                                    H251
    NONCARBONATED                                                     H139
    NOT PASTEURIZED                                                   H255
    UNBLEACHED                                                        H176
    UNPURIFIED, UNREFINED                                             H258
    UNSWEETENED                                                       H170
WATER ADDED OR REMOVED                                                H254
    REHYDRATED                                                        H259
    WATER ADDED                                                       H148
        DILUTED TO (FRUIT) DRINK                                      H234
        DILUTED TO (FRUIT) FLAVORED DRINK                             H237
        DILUTED TO (FRUIT) JUICE DRINK                                H235
    WATER REMOVED                                                     H138
        WATER REMOVED TO RECONSTITUTION RATIO 1 PLUS 1                H114
        WATER REMOVED TO RECONSTITUTION RATIO 2 PLUS 1                H113
        WATER REMOVED TO RECONSTITUTION RATIO 3 PLUS 1 OR HIGHER      H112
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J. Preservation method

K. Packing medium

```
PACKING MEDIUM                                                        K20
   NO PACKING MEDIUM USED                                            K03
   PACKED IN EDIBLE MEDIUM                                           K11
      PACKED IN BROTH                                                K42
      PACKED IN CREAM OR MILK                                        K43
      PACKED IN FAT OR OIL                                           K26
         PACKED IN VEGETABLE OIL                                     K21
            PACKED IN OLIVE OIL                                      K38
         PACKED IN VINEGAR AND OIL                                   K40
      PACKED IN FRUIT JUICE                                          K39
      PACKED IN GELATIN                                              K35
      PACKED IN GRAVY OR SAUCE                                       K34
         PACKED IN GRAVY OR SAUCE, DAIRY OR EGG COMPONENT            K33
         PACKED IN GRAVY OR SAUCE, FRUIT                             K45
         PACKED IN GRAVY OR SAUCE, MEAT                              K36
         PACKED IN GRAVY OR SAUCE, VEGETABLE                         K37
      PACKED IN INK                                                  K44
      PACKED IN SALT BRINE                                           K18
         PACKED IN ACIDIFIED SALT BRINE                              K22
         PACKED IN SWEETENED BRINE                                   K19
      PACKED IN SWEETENED LIQUID                                     K23
         PACKED IN EXTRA HEAVILY SWEETENED LIQUID                    K24
         PACKED IN HEAVILY SWEETENED LIQUID                          K12
         PACKED IN LIGHTLY SWEETENED WATER OR JUICE                  K13
         PACKED IN SLIGHTLY SWEETENED WATER OR JUICE                 K30
      PACKED IN VEGETABLE JUICE                                      K16
      PACKED IN VINEGAR                                              K29
         PACKED IN VINEGAR AND OIL                                   K40
         PACKED IN VINEGAR WITH SUGAR                                K10
      PACKED IN WATER                                                K17
   PACKED IN GAS OTHER THAN AIR                                      K14
      PACKED IN CARBON DIOXIDE                                       K28
      PACKED IN GAS MIXTURE                                          K32
      PACKED IN NITROGEN                                             K31
   PACKED WITH AEROSOL PROPELLANT                                    K15
   PACKING MEDIUM NOT KNOWN                                          K01
   PACKING MEDIUM, OTHER                                             K04
   VACUUM-PACKED                                                     K27
```

M. Container or wrapping

```
CONTAINER OR WRAPPING                                                M100
   CERAMIC OR EARTHENWARE CONTAINER                                  M116
      CERAMIC, EARTHENWARE BOTTLE                                    M114
      CERAMIC, EARTHENWARE CROCK, JAR                                M115
   CONTAINER OR WRAPPING NOT KNOWN                                   M001
   CONTAINER OR WRAPPING, OTHER                                      M004
   GLASS CONTAINER                                                   M130
      GLASS CONTAINER, ALUMINUM LID                                  M132
         GLASS CONTAINER, ALUMINUM LID, PLASTIC LINING               M135
      GLASS CONTAINER, CORK STOPPER                                  M121
      GLASS CONTAINER, PLASTIC LID OR STOPPER                        M134
         GLASS CONTAINER, PLASTIC LID, ALUMINUM FOIL LINING          M140
         GLASS CONTAINER, PLASTIC LID, LAMINATE LINING               M133
         GLASS CONTAINER, PLASTIC LID, PAPER LINING                  M108
         GLASS CONTAINER, PLASTIC LID, PLASTIC LINING                M136
      GLASS CONTAINER, TIN-PLATED STEEL LID                          M143
      GLASS CONTAINER, TINLESS STEEL LID                             M106
   LAMINATE CONTAINER                                                M181
      LAMINATE BAG OR POUCH                                          M144
      LAMINATE TUBE                                                  M167
         LAMINATE TUBE, ENDS LINED WITH CORK                         M111
         LAMINATE TUBE, ENDS LINED WITH FOIL                         M110
         LAMINATE TUBE, ENDS LINED WITH LAMINATE                     M109
         LAMINATE TUBE, UNLINED ALUMINUM ENDS                        M127
         LAMINATE TUBE, UNLINED PLASTIC ENDS                         M138
   METAL CONTAINER                                                   M151
      ALUMINUM CONTAINER                                             M182
         ALUMINUM CAN, DRUM OR BARREL                                M175
         ALUMINUM FOIL WRAPPER                                       M190
         ALUMINUM TRAY OR PAN                                        M165
            ALUMINUM TRAY OR PAN, ALUMINUM FOIL COVER OR WRAPPING    M163
            ALUMINUM TRAY OR PAN, CARDBOARD COVER                    M161
            ALUMINUM TRAY OR PAN, LAMINATE COVER OR WRAPPING         M162
            ALUMINUM TRAY OR PAN, PAPER WRAPPING                     M164
            ALUMINUM TRAY OR PAN, PLASTIC COVER OR WRAPPING          M160
         ALUMINUM TUBE                                               M168
            ALUMINUM TUBE, TOP LINED WITH CORK                       M171
            ALUMINUM TUBE, TOP LINED WITH FOIL                       M170
            ALUMINUM TUBE, TOP LINED WITH LAMINATE                   M169
            ALUMINUM TUBE, UNLINED PLASTIC TOP                       M139
      BIMETAL CONTAINER                                              M107
      STEEL PLATE CONTAINER                                          M189
         TIN PLATE CONTAINER                                         M176
         TINLESS STEEL PLATE CONTAINER                               M149
   NO CONTAINER OR WRAPPING USED                                     M003
   PAPERBOARD OR PAPER CONTAINER                                     M159
      PAPER BAG, SACK OR POUCH                                       M120
         PAPER BAG, SACK OR POUCH, FOIL LINER                        M118
         PAPER BAG, SACK OR POUCH, LAMINATE LINER                    M119
         PAPER BAG, SACK OR POUCH, PAPER LINER                       M141
         PAPER BAG, SACK OR POUCH, PLASTIC LINER                     M117
      PAPER WRAPPER                                                  M173
      PAPERBOARD CONTAINER                                           M156
         PAPERBOARD CONTAINER WITH FOIL OR LINER OVERWRAP            M192
         PAPERBOARD CONTAINER WITH LINER                             M155
            PAPERBOARD CONTAINER WITH ALUMINUM FOIL LINER            M147
            PAPERBOARD CONTAINER WITH LAMINATE LINER                 M142
            PAPERBOARD CONTAINER WITH PAPER LINER                    M148
            PAPERBOARD CONTAINER WITH PLASTIC LINER                  M146
         PAPERBOARD CONTAINER WITH WINDOW                            M154
         PAPERBOARD CONTAINER, PLASTIC COATED                       M153
         PAPERBOARD CONTAINER, WAXED                                 M152
         PAPERBOARD TUBE WITH LID OR ENDS                            M112
      PAPERBOARD MOLDED PACK                                         M150
      PAPERBOARD TRAY WITH WRAPPER                                   M129
   PLASTIC CONTAINER                                                 M172
      PLASTIC CONTAINER, FLEXIBLE OR FILM                           M186
         PLASTIC BAG OR POUCH                                        M166
            PLASTIC BOIL-IN-BAG                                      M145
         PLASTIC SHRINK-PACK                                         M137
         PLASTIC SQUEEZE BOTTLE OR TUBE                              M102
            PLASTIC SQUEEZE BOTTLE OR TUBE, TOP LINED WITH CORK      M105
            PLASTIC SQUEEZE BOTTLE OR TUBE, TOP LINED WITH FOIL      M101
            PLASTIC SQUEEZE BOTTLE OR TUBE, TOP LINED WITH LAMINATE  M103
            PLASTIC SQUEEZE BOTTLE OR TUBE, UNLINED TOP              M104
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    PLASTIC WRAPPER                                                 M128
  PLASTIC CONTAINER, RIGID OR SEMIRIGID                            M184
    PLASTIC CONTAINER, MOLDED OR BUBBLE PACK                       M180
      PLASTIC CONTAINER, BLOW-MOLDED                               M193
    PLASTIC CONTAINER, RIGID OR SEMIRIGID, ALUMINUM LID            M188
    PLASTIC CONTAINER, RIGID OR SEMIRIGID, PLASTIC LID             M187
    PLASTIC CONTAINER, RIGID OR SEMIRIGID, TIN-PLATED STEEL LID    M183
    PLASTIC CONTAINER, RIGID OR SEMIRIGID, TINLESS STEEL LID       M185
    PLASTIC TRAY OR PAN                                            M126
      PLASTIC TRAY OR PAN, ALUMINUM FOIL COVER OR WRAPPING         M123
      PLASTIC TRAY OR PAN, CARDBOARD COVER                        M131
      PLASTIC TRAY OR PAN, LAMINATE COVER OR WRAPPING             M122
      PLASTIC TRAY OR PAN, PAPER WRAPPING                          M125
      PLASTIC TRAY OR PAN, PLASTIC COVER OR WRAPPING              M124
TEXTILE OR FABRIC CONTAINER                                        M157
  TEXTILE OR FABRIC BAG                                            M158
  TEXTILE OR FABRIC STOCKING OR CASING                            M113
WOOD CONTAINER                                                     M174
  WOOD BARREL, CASK OR WHEEL                                       M179
  WOOD BOX                                                         M177
  WOOD DRUM                                                        M178
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N. Food contact surface

```
FOOD CONTACT SURFACE                                        N10
  CERAMIC                                                   N38
  COATING ENAMEL                                            N24
    BEVERAGE CAN ENAMEL                                     N11
      BEVERAGE CAN ENAMEL, BEER                             N14
      BEVERAGE CAN ENAMEL, CARBONATED SOFT DRINK            N13
      BEVERAGE CAN ENAMEL, NONCARBONATED BEVERAGE           N12
    CITRUS ENAMEL                                           N18
    CORN ENAMEL (C-ENAMEL)                                  N30
    FRUIT ENAMEL (F-ENAMEL)                                 N16
    MEAT ENAMEL                                             N20
    MILK ENAMEL                                             N19
    SEAFOOD ENAMEL                                          N23
  CORK                                                      N46
  FOOD CONTACT SURFACE NOT KNOWN                            N01
  FOOD CONTACT SURFACE, OTHER                               N04
  GLASS                                                     N40
  METAL                                                     N41
    ALUMINUM                                                N42
    STEEL                                                   N44
    TIN                                                     N43
  NO FOOD CONTACT SURFACE PRESENT                           N03
  PAPERBOARD OR PAPER                                       N39
  PLASTIC                                                   N36
    CELLOPHANE                                              N31
    CELLULOSE ACETATE                                       N34
    MYLAR                                                   N26
    NYLON                                                   N27
    PLIOFILM                                                N32
    POLYESTER                                               N33
    POLYETHYLENE                                            N17
    POLYPROPYLENE                                           N21
    POLYSTYRENE                                             N22
    POLYVINYL CHLORIDE                                      N37
    VINYLIDENE                                              N29
      CRYOVAC                                               N28
      SARAN                                                 N25
  TEXTILE OR FABRIC                                         N45
  WAX                                                       N15
  WOOD                                                      N35
```

P. User group

```
USER GROUP                                                  P32
   ANIMAL FOOD                                              P21
      FEED FOR FOOD ANIMALS                                 P15
         CATTLE FEED                                        P19
         FISH FEED (FOOD FISH)                              P11
         POULTRY FEED                                       P18
         SHEEP AND GOAT FEED                                P14
         SWINE FEED                                         P27
      FOOD FOR NON-FOOD ANIMALS                             P16
         FEED FOR NON-FOOD FARM ANIMALS                     P13
            HORSE FEED                                      P25
         FOOD FOR LABORATORY ANIMALS                        P10
         PET FOOD                                           P29
            BIRD FOOD                                       P30
            CAT FOOD                                        P28
            DOG FOOD                                        P31
            FISH FOOD (PET FISH)                            P12
   HUMAN FOOD                                               P26
      HUMAN FOOD, NO AGE SPECIFICATION, REGULAR DIET        P24
      HUMAN FOOD, NO AGE SPECIFICATION, SPECIAL DIET        P23
         HUMAN FOOD, CALORIE SPECIAL DIET                   P45
            HUMAN FOOD, LOW CALORIE                         P33
            HUMAN FOOD, REDUCED CALORIE                     P34
         HUMAN FOOD, CHOLESTEROL SPECIAL DIET               P41
            HUMAN FOOD, CHOLESTEROL FREE                    P42
            HUMAN FOOD, LOW CHOLESTEROL                     P43
            HUMAN FOOD, REDUCED CHOLESTEROL                 P44
         HUMAN FOOD, FAT SPECIAL DIET                       P17
            HUMAN FOOD, LOW FAT                             P39
            HUMAN FOOD, REDUCED FAT                         P40
         HUMAN FOOD, SODIUM SPECIAL DIET                    P47
            HUMAN FOOD, LOW SODIUM                          P38
            HUMAN FOOD, REDUCED SODIUM                      P37
            HUMAN FOOD, SODIUM FREE                         P35
            HUMAN FOOD, VERY LOW SODIUM                     P36
      INFANT OR TODDLER FOOD, REGULAR DIET                  P20
      INFANT OR TODDLER FOOD, SPECIAL DIET                  P22
   USER GROUP NOT APPLICABLE                                P03
   USER GROUP NOT KNOWN                                     P01
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Z. Checklist

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CHECKLIST                                                  Z05
   CUT OF MEAT                                             Z08
      BREAST (MEAT CUT)                                    Z45
      BRISKET                                              Z20
      CHUCK                                                Z21
      CUT OF MEAT NOT APPLICABLE                           Z48
      CUT OF MEAT NOT KNOWN                                Z18
      CUT OF MEAT, COMPOSITE                               Z47
      FLANK                                                Z22
      FORE SHANK                                           Z25
      JOWL, TRIMMED                                        Z40
      LOIN                                                 Z31
      PIG'S FEET                                           Z41
      RIB (MEAT CUT)                                       Z23
      ROUND OR LEG (MEAT CUT)                              Z24
      SHORT LOIN                                           Z26
      SHORT PLATE                                          Z28
      SHOULDER (MEAT CUT)                                  Z43
         FAT BACK                                          Z37
      SIDE (MEAT CUT)                                      Z46
      SIRLOIN                                              Z27
   GRADE OF MEAT                                           Z07
      CANNER GRADE                                         Z16
      CHOICE GRADE                                         Z10
      COMMERCIAL GRADE                                     Z13
      CULL GRADE                                           Z17
      CUTTER GRADE                                         Z15
      GOOD GRADE                                           Z11
      GRADE OF MEAT NOT KNOWN                              Z19
      PRIME GRADE                                          Z09
      STANDARD GRADE                                       Z12
      UTILITY GRADE                                        Z14
   SHADE OF POULTRY MEAT                                   Z06
      DARK MEAT                                            Z02
      LIGHT MEAT                                           Z04
      MEAT SHADE, UNDESIGNATED                             Z03
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