

BEFORE  
THE UNITED STATES OF AMERICA  
DEPARTMENT OF HEALTH AND HUMAN SERVICES  
FOOD AND DRUG ADMINISTRATION

COMMENTS OF  
THE UTAH NATURAL PRODUCTS ALLIANCE

ON THE FOOD AND DRUG ADMINISTRATION'S  
REQUEST FOR COMMENT ON

FDA'S PREMARKET NOTIFICATION PROGRAM FOR  
NEW DIETARY INGREDIENTS

February 1, 2005

2004N-0454

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UTAH NATURAL  
PRODUCTS ALLIANCE

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February 1, 2005

Dockets Management Branch (HFA-305)  
Food and Drug Administration  
5630 Fisher's Lane, Room 1061  
Rockville, MD 20852

RE: Docket No. 2004N-0454  
Premarket Notification for New Dietary Ingredients

Dear Sir or Madam:

The Utah Natural Products Alliance (UNPA) is a dietary supplement trade association founded in 1991 to address concerns and issues with respect to the regulation of dietary supplements. Our membership is composed of dietary supplement companies based in the State of Utah as well as other leading companies engaged in the manufacture and sale of dietary supplements, dietary ingredients and related products.

Since passage of the Dietary Supplement Health and Education Act of 1994 (DSHEA), UNPA has actively worked toward full and appropriate implementation of DSHEA.

## **MANDATES CREATED BY DSHEA**

In enacting DSHEA, Congress made clear that dietary supplements are a class of foods that are safely consumed within a broad range of intake, and safety problems with supplements are relatively rare (Section 2 Findings).

Congress also recognized that consumers, not the government, should decide what they include within the scope of their diet for health, nutrition or other reasons. The definition of “dietary supplement” (21 U.S.C. 321(ff)(1)(A)through(F) was written to include products intended to supplement the diet by increasing the total dietary intake of a [dietary supplement] “product.” The only exclusion to this definition is tobacco. Thus, FDA should not consider whether a substance falls within a particular category of the statutory definition of dietary supplement. Rather, FDA’s singular analysis should be whether a substance for any reason would be excluded from this definition. Further, Congress envisioned a broad range of substances (concentrates, metabolites, constituents, extracts or combinations of these ingredients, including vitamins, minerals, herbs and amino acids) in recognition of the extraordinarily broad and diverse usage of substances found in foods, plants and other natural substances as part of people’s diets.

## **CHANGES IN CHEMICAL COMPOSITION**

Against the backdrop of this very broad definition, FDA asked the question, “What changes in chemical composition to a dietary ingredient would cause it to become a substance that is not a dietary ingredient?” Nowhere in DSHEA does the term “chemical composition” appear. UNPA requests clarification of the intent of this question and whether the agency intended to use the term “chemical composition” as a term of art, and, if so, on what basis

would the agency now propose to use this term as a working definition to define a dietary ingredient?

**DEFINITION OF “MARKETED”**

An old dietary ingredient is a substance marketed in the United States on or before October 15, 1994. Such “grandfathered” ingredients represent the large majority of dietary supplements sold in the United States today. The agency asks what it should consider to determine whether a dietary ingredient was marketed in the U.S. before October 15, 1994. UNPA believes the critical term, “marketed,” means offered for sale by any means, including promotion, marketing, advertising, listing for sale in a catalog or price sheet or physically presented for sale at any point of purchase or by any other means.

This includes any marketing conducted in the United States by a foreign entity or individual and does not require that the dietary ingredient be physically in the U.S. before October 15, 1994, but rather that it was marketed for sale before this date.

As there was no statutory definition of dietary ingredient or dietary supplement prior to DSHEA, a substance that meets the definition set out in Section 3 of DSHEA would qualify as a grandfathered substance. We are aware that prior to DSHEA, the agency asserted that a number of dietary ingredients or supplement products were either new drugs, unapproved food additives or otherwise unlawfully sold substances. It is UNPA’s strongly held view that the sole criteria to determine whether a substance was a dietary ingredient/supplement is whether it meets the statutory definition of Section 3.

**CHANGES IN CHEMICAL COMPOSITION / DO ODIs BECOME NDIIs?**

In question 4, the agency asks “what changes in chemical composition to a dietary ingredient that was marketed in the U.S. before October 15, 1994 would lead to the dietary ingredient becoming an NDI subject to notification requirements of DSHEA?” In short, when and under what circumstances would an ODI become an NDI? Again, the term “chemical composition” does not appear in DSHEA and should not now enter the DSHEA lexicon for purposes of deciding when an ODI may become an NDI.

Chemical composition of many dietary ingredients change as a result of standard variability within the manufacturing and growing process of natural products. This is entirely normal and expected. UNPA believes the question is, “At what point has an ODI been changed or modified such that it presents an unreasonable risk of illness or injury under the conditions of use on the label or labeling of the product?” The inherent variability in natural products is a matter accounted for and managed within the good manufacturing process. Since the passage of DSHEA over 10 years ago, many thousands of dietary supplement ingredients have been modified as a result of improved manufacturing or extraction methods, use of different substrate materials in the manufacturing process, refinement and improvement in analytical capabilities and for many other reasons. The drafters of DSHEA were fully aware of and discussed precisely this issue and recognized that within the definition of Old Dietary Ingredient, there would be an “evolutionary factor” of such ingredients. In short, modified, upgraded or improved does not equal “new.”

FDA’s own regulations that identify substances that are GRAS for use (21 CFR Part 182) open-endedly accepts the use of “essential oils, oleoresins

(solvent-free), and natural extractives (including distillates) of a very long list of plants. (See attached copy of 21 CFR 182.20.)

UNPA believes that the same concept embodied in Section 182 be recognized with respect to old dietary ingredients, in that having established that a substance is an ODI, variations in concentration, extraction levels and methods of manufacture are permitted and do not render such substances unlawful. Rather than focus on a series of technical questions such as changes in chemical composition, the agency should focus its resources in identifying when a dietary ingredient (old or new) presents an unreasonable risk of illness or injury or cannot reasonably be expected to be safe, respectively. The resources required for the agency to try and sort out when old dietary ingredients have become new would be enormous and misplaced. Our membership deeply believes that the fundamental responsibility of selling safe dietary ingredients rests with the manufacturer or marketer and that the principles embodied in the ODI/NDI concept were designed to establish a benchmark to help both the agency and the industry identify where and how to affirm or assess the safety of dietary ingredients.

#### **AUTHORITATIVE LISTS OF ODIs**

Shortly after passage of DSHEA, the four dietary supplement trade associations (American Herbal Products Association, Council for Responsible Nutrition, National Nutritional Foods Association and the Utah Natural Products Alliance) agreed that compiling a list of ODIs would be a useful exercise to help provide guidance to industry to determine what was an ODI as of October 15, 1994. It was recognized that over time memories and relevant documents would fade, making the task of compiling an ODI list considerably harder, if not impossible.

Each association compiled an ODI list, which process was completed by October 1995. In September, 1997, UNPA created a compilation of those lists, which we now attach for FDA's reference. (UNPA has previously provided this list to FDA/CFSAN staff but wishes to include this document in the public record as well.)

These lists remain a useful reference tool, although unofficial. FDA asks whether an authoritative list should be compiled. This same question was debated among Congressional members during the negotiations of DSHEA. It was decided to leave the decision to FDA and the industry. UNPA was involved in post-DSHEA discussions with senior FDA officials on this point. In fact, FDA offered to publish an ODI list in the Code of Federal Regulations. It was felt that an official or authoritative list would ultimately become obsolete, inflexible and create an undue burden to add forgotten ODIs to the list.

UNPA believes this was and is the correct decision. If, however, FDA and the industry jointly agree that a refreshed ODI list would be useful, UNPA would be happy to participate in such an effort. Inclusion for criteria should follow the clear language of DSHEA (see comments above on the term "marketed").

### **CHANGES TO CONDITIONS OF USE**

The agency asks, "What changes to the conditions of use (e.g., serving size, duration, frequency of use) recommended or suggested in the labeling for a dietary supplement that contains an NDI would trigger the need for a separate NDI notification?"

Development of an NDI is largely a function of specialized manufacturers who sell single ingredients to other manufacturers, who in turn

make finished dietary supplements, both as single and combination products. Frequently, private label manufacturers will produce formulas to a customer's specification, drawing from a wide range of dietary ingredients, resulting in an extremely broad range of finished product in both combinations and potencies with widely varying labeling. These formulas can and often are revised to suit various needs, including amendments to label text, instructions for use, dosage recommendations, caution language, etc. A requirement to file NDI notification within the historic environment of the dietary supplement industry would be catastrophic to raw material manufacturers, private label manufacturers and marketers of dietary supplements. Unlike new drugs and food additives, the dietary supplements are available to the general consumer, in response to consumer demand for variety in strength, potency, combinations as well as products designed to meet the ever-changing dietary and nutritional needs of the American public. There is little evidence to suggest that these trade practices have resulted in harm or injury to consumers, and it is difficult to justify the burden which would be placed on industry by creating a continuing requirement to file NDI notifications based on changes to conditions of use information.

UNPA believes that the agency would need to establish an underlying rationale that there is a problem that needs to be solved by requiring the filing of NDI notices for ordinary changes in conditions of use. It is the experience of our membership that dietary supplements, including NDIs, have a broad safety range, which is often not the case with new prescription drugs that are required to seek amendments to dosing, labeling, etc. In addition, if this approach were adopted, the labeling of dietary supplement products would essentially become subject to FDA pre-approval – an unacceptable outcome.



## **CHEMICAL IDENTIFICATION OF NDIs**

FDA raises a series of questions with respect to the chemical identification of NDIs, types of chemistry information, growing conditions, bio-engineering methods, processing information, etc., that appear to blend the regulatory concepts embodied in new drug review and approval, food additive approval as well as GRAS affirmation. It is UNPA's view that the agency would be best served to view the NDI process as a parallel to the GRAS affirmation process, insofar as the type and nature of the information required to demonstrate that an NDI is reasonably expected to be safe. Both the agency and the food/ supplement industries have significant experience with the resources and type of information necessary to demonstrate safety through the GRAS affirmation process. In fact, this approach would be desirable in view of a growing trend to develop NDIs for use as both a dietary ingredient and a GRAS affirmed ingredient. By establishing a parallel mechanism, companies could most efficiently marshal their resources to develop products that meet the needs of both the supplement and conventional foods industry.

To that end, UNPA and its members would be pleased to cooperate closely with FDA in development of an NDI/GRAS affirmation Guidance designed to facilitate adequate review of NDIs in a manner consistent with the principles of GRAS affirmation, which would encourage innovation in the process of developing useful and beneficial dietary ingredients/GRAS affirmed food ingredients.

## **WITHDRAWAL OF NDIs WITHOUT PREJUDICE**

UNPA has noted that on several occasions FDA has not permitted the withdrawal of an NDI submission. We respectfully disagree with this and believe that any NDI submitter who, based on new information, determines that

an NDI was improperly filed, be granted the right to withdraw an NDI submission without prejudice, either to re-file an amended NDI or to advise FDA that it has determined that the substance is in fact an old dietary ingredient.

### **NDI EQUIVALENCE**

The members of UNPA have invested significant resources in development of new and useful dietary ingredients, often after years of research and development investment. The NDI process, in addition to its function of assessing the safety of new ingredients, should also recognize that certain NDI submissions are proprietary and unique, particularly with respect to botanical extracts. There have been instances where dietary ingredient/dietary supplement manufacturers and marketers have relied on a competitor's NDI as the basis to assert their ingredient is also an NDI and may be sold without further NDI review. UNPA believes there should be a mechanism or provision for equivalent or generic NDI submissions to assure parity in the marketplace and to protect the proprietary investments made in development of new dietary ingredients by individual NDI sponsors.

### **MORATORIUM**

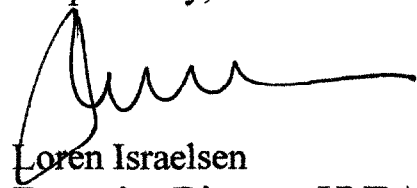
UNPA requests that FDA consider the advisability of creating a "moratorium period" for the submission of NDI filings for products now on the market. It is the understanding of industry that if FDA determines that a dietary ingredient/ supplement currently offered for sale is in fact an NDI, any company or individual selling such ingredient or product would need to stop sale, submit an NDI filing and wait the statutory 75-day period before commencing sale again. FDA should encourage industry to assess its portfolio

of products and ingredients to determine if in fact some ingredients should be submitted as NDIs and to create an opportunity for companies to submit NDIs without jeopardizing their commercial viability. Any company that fails to submit an NDI at the end of the moratorium period would do so at the risk of FDA reaching the conclusion that such ingredients are not being lawfully marketed.

### **CONCLUSION**

UNPA regards the discussion and development of an appropriate NDI policy as central to full implementation of DSHEA and affirms its willingness to work closely with the agency to develop such a policy/guidance. Given the significance of this issue, we believe FDA should, as it has on other issues, hold regional meetings in order to fully understand and appreciate the complexities and difficulties associated with development of a meaningful and effective NDI policy.

Respectfully,



Loren Israelsen  
Executive Director, UNPA

/hhc

Attachments:

UNPA Combined Old Dietary Ingredient List  
Copy of 21 CFR 182.20

Common name	Botanical name of plant source
Galanga (galangal)	<i>Alpinia officinarum</i> Hance.
Geranium	<i>Pelargonium</i> spp.
Ginger	<i>Zingiber officinale</i> Rosc.
Grains of paradise	<i>Amomum melegueta</i> Rosc.
Hoarhound (hoarhound)	<i>Marrubium vulgare</i> L.
Horseradish	<i>Armoracia laphathifolia</i> Glibb.
Hyssop	<i>Hyssopus officinalis</i> L.
Lavender	<i>Lavandula officinalis</i> Chaix.
Linden flowers	<i>Tilia</i> spp.
Mace	<i>Myristica fragrans</i> Houtt.
Marigold, pot	<i>Calendula officinalis</i> L.
Marjoram, pot	<i>Majorana onites</i> (L.) Benth.
Marjoram, sweet	<i>Majorana hortensis</i> Moench.
Mustard, black or brown	<i>Brassica nigra</i> (L.) Koch.
Mustard, brown	<i>Brassica juncea</i> (L.) Coss.
Mustard, white or yellow	<i>Brassica hirta</i> Moench.
Nutmeg	<i>Myristica fragrans</i> Houtt.
Oregano (oreganum, Mexican oregano, Mexican sage, origan)	<i>Lippia</i> spp.
Paprika	<i>Capsicum annuum</i> L.
Parsley	<i>Petroselinum crispum</i> (Mill.) Mansf.
Pepper, black	<i>Piper nigrum</i> L.
Pepper, cayenne	<i>Capsicum frutescens</i> L. or <i>Capsicum annuum</i> L.
Pepper, red	Do.
Pepper, white	<i>Piper nigrum</i> L.
Peppermint	<i>Mentha piperita</i> L.
Poppy seed	<i>Papaver somniferum</i> L.
Pot marigold	<i>Calendula officinalis</i> L.
Pot marjoram	<i>Majorana onites</i> (L.) Benth.
Rosemary	<i>Rosmarinus officinalis</i> L.
Saffron	<i>Crocus sativus</i> L.
Sage	<i>Salvia officinalis</i> L.
Sage, Greek	<i>Salvia triloba</i> L.
Savory, summer	<i>Satureia hortensis</i> L. (Satureja).
Savory, winter	<i>Satureia montana</i> L. (Satureja).
Sesame	<i>Sesamum indicum</i> L.
Spearmint	<i>Mentha spicata</i> L.
Star anise	<i>Illicium verum</i> Hook. f.
Tarragon	<i>Artemisia dracunculus</i> L.
Thyme	<i>Thymus vulgaris</i> L.
Thyme, wild or creeping	<i>Thymus serpyllum</i> L.
Turmeric	<i>Curcuma longa</i> L.
Vanilla	<i>Vanilla planifolia</i> Andr. or <i>Vanilla tahitensis</i> J. W. Moore.
Zedoary	<i>Curcuma zedoaria</i> Rosc.

[42 FR 14640, Mar. 15, 1977, as amended at 43 FR 3705, Jan. 27, 1978; 44 FR 3963, Jan. 19, 1979; 50 FR 21044, May 22, 1985; 61 FR 14246, Apr. 1, 1996]

**§ 182.20 Essential oils, oleoresins (solvent-free), and natural extractives (including distillates).**

Essential oils, oleoresins (solvent-free), and natural extractives (includ-

ing distillates) that are generally recognized as safe for their intended use, within the meaning of section 409 of the Act, are as follows:

Common name	Botanical name of plant source
Alfalfa	<i>Medicago sativa</i> L.
Allspice	<i>Pimenta officinalis</i> Lindl.
Almond, bitter (free from prussic acid)	<i>Prunus amygdalus</i> Batsch, <i>Prunus armeniaca</i> L., or <i>Prunus persica</i> (L.) Batsch.
Ambrette (seed)	<i>Hibiscus moschatus</i> Moench.
Angelica root	<i>Angelica archangelica</i> L.
Angelica seed	Do.
Angelica stem	Do.
Angostura (cusparia bark)	<i>Galipea officinalis</i> Hancock.
Anise	<i>Pimpinella anisum</i> L.
Asafetida	<i>Ferula assa-foetida</i> L. and related spp. of <i>Ferula</i> .
Balm (lemon balm)	<i>Melissa officinalis</i> L.
Balsam of Peru	<i>Myroxylon pereirae</i> Klotzsch.
Basil	<i>Ocimum basilicum</i> L.

Common name	Botanical name of plant source
Bay leaves	<i>Laurus nobilis</i> L.
Bay (myrcia oil)	<i>Pimenta racemosa</i> (Mill.) J. W. Moore.
Bergamot (bergamot orange)	<i>Citrus aurantium</i> L. subsp. <i>bergamia</i> Wright et Arn.
Bitter almond (free from prussic acid)	<i>Prunus amygdalus</i> Batsch, <i>Prunus armeniaca</i> L., or <i>Prunus persica</i> (L.) Batsch.
Bois de rose	<i>Aniba rosaeodora</i> Ducke.
Cacao	<i>Theobroma cacao</i> L.
Camomile (chamomile) flowers, Hungarian	<i>Matricaria chamomilla</i> L.
Camomile (chamomile) flowers, Roman or English	<i>Anthemis nobilis</i> L.
Cananga	<i>Cananga odorata</i> Hook. f. and Thoms.
Capaicum	<i>Capsicum frutescens</i> L. and <i>Capicum annuum</i> L.
Caraway	<i>Cerum carvi</i> L.
Cardamom seed (cardamon)	<i>Elettaria cardamomum</i> Maton.
Carob bean	<i>Ceratonia siliqua</i> L.
Carrot	<i>Daucus carota</i> L.
Cascarilla bark	<i>Croton eluteria</i> Benn.
Cassia bark, Chinese	<i>Cinnamomum cassia</i> Blume.
Cassia bark, Padang or Batavia	<i>Cinnamomum burmanni</i> Blume.
Cassia bark, Saigon	<i>Cinnamomum loureirii</i> Nees.
Celery seed	<i>Apium graveolens</i> L.
Cherry, wild, bark	<i>Prunus serotina</i> Ehrh.
Chervil	<i>Anthriscus cerefolium</i> (L.) Hoffm.
Chicory	<i>Cichorium intybus</i> L.
Cinnamon bark, Ceylon	<i>Cinnamomum zeylanicum</i> Nees.
Cinnamon bark, Chinese	<i>Cinnamomum cassia</i> Blume.
Cinnamon bark, Saigon	<i>Cinnamomum loureirii</i> Nees.
Cinnamon leaf, Ceylon	<i>Cinnamomum zeylanicum</i> Nees.
Cinnamon leaf, Chinese	<i>Cinnamomum cassia</i> Blume.
Cinnamon leaf, Saigon	<i>Cinnamomum loureirii</i> Nees.
Citronella	<i>Cymbopogon nardus</i> Rendle.
Citrus peels	<i>Citrus</i> spp.
Clary (clary sage)	<i>Salvia sclarea</i> L.
Clover	<i>Trifolium</i> spp.
Coca (decaffeinated)	<i>Erythroxylum coca</i> Lam. and other spp. of <i>Erythroxylum</i> .
Coffee	<i>Coffea</i> spp.
Cola nut	<i>Cola acuminata</i> Schott and Endl., and other spp. of <i>Cola</i> .
Coriander	<i>Coriandrum sativum</i> L.
Cumin (cummin)	<i>Cuminum cyminum</i> L.
Curaçao orange peel (orange, bitter peel)	<i>Citrus aurantium</i> L.
Cusparia bark	<i>Galpea officinalis</i> Hancock.
Dandelion	<i>Taraxacum officinale</i> Weber and T. <i>laevigatum</i> DC.
Dandelion root	Do.
Dog grass (quackgrass, triticum)	<i>Agropyron repens</i> (L.) Beauv.
Elder flowers	<i>Sambucus canadensis</i> L. and <i>S. nigra</i> L.
Estragole (esdragol, esdragon, tarragon)	<i>Artemisia dracunculoides</i> L.
Estragon (tarragon)	Do.
Fennel, sweet	<i>Foeniculum vulgare</i> Mill.
Fenugreek	<i>Trigonella foenum-graecum</i> L.
Galanga (galangal)	<i>Alpinia officinarum</i> Hance.
Geranium	<i>Pelargonium</i> spp.
Geranium, East Indian	<i>Cymbopogon martinii</i> Stapf.
Geranium, rose	<i>Pelargonium graveolens</i> L'Her.
Ginger	<i>Zingiber officinale</i> Rosc.
Grapefruit	<i>Citrus paradisi</i> Macf.
Guava	<i>Psidium</i> spp.
Hickory bark	<i>Carya</i> spp.
Horehound (hoarhound)	<i>Marrubium vulgare</i> L.
Hops	<i>Humulus lupulus</i> L.
Horsemint	<i>Monarda punctata</i> L.
Hyssop	<i>Hyssopus officinalis</i> L.
Immortelle	<i>Helichrysum augustifolium</i> DC.
Jasmine	<i>Jasminum officinale</i> L. and other spp. of <i>Jasminum</i> .
Juniper (berries)	<i>Juniperus communis</i> L.
Kola nut	<i>Cola acuminata</i> Schott and Endl., and other spp. of <i>Cola</i> .
Laurel berries	<i>Laurus nobilis</i> L.
Laurel leaves	<i>Laurus</i> spp.
Lavender	<i>Lavandula officinalis</i> Chaix.
Lavender, spike	<i>Lavandula latifolia</i> Vill.
Lavandin	Hybrids between <i>Lavandula officinalis</i> Chaix and <i>Lavandula latifolia</i> Vill.
Lemon	<i>Citrus limon</i> (L.) Burm. f.
Lemon balm (see balm)	
Lemon grass	<i>Cymbopogon citratus</i> DC. and <i>Cymbopogon leucosus</i> Stapf.
Lemon peel	<i>Citrus limon</i> (L.) Burm. f.
Lime	<i>Citrus aurantifolia</i> Swingle.

Common name	Botanical name of plant source
Linden flowers	Tilia spp.
Locust bean	Ceratonia siliqua L.
Lupulin	Humulus lupulus L.
Mace	Myristica fragrans Houtt.
Mandarin	Citrus reticulata Blanco.
Marjoram, sweet	Majorana hortensis Moench.
Mate	Ilex paraguariensis St. Hil.
Melissa (see balm).	
Menthol	Mentha spp.
Menthyl acetate	Do.
Molasses (extract)	Saccarum officinarum L.
Mustard	Brassica spp.
Naringin	Citrus paradisi Macf.
Neroli, bigarade	Citrus aurantium L.
Nutmeg	Myristica fragrans Houtt.
Onion	Allium cepa L.
Orange, bitter, flowers	Citrus aurantium L.
Orange, bitter, peel	Do.
Orange leaf	Citrus sinensis (L.) Osbeck.
Orange, sweet	Do.
Orange, sweet, flowers	Do.
Orange, sweet, peel	Do.
Origanum	Origanum spp.
Palmarosa	Cymbopogon martini Stapf.
Paprika	Capsicum annuum L.
Parsley	Petroselinum crispum (Mill.) Mansf.
Pepper, black	Piper nigrum L.
Pepper, white	Do.
Peppermint	Mentha piperita L.
Peruvian balsam	Myroxylon pereirae Klotzsch.
Petitgrain	Citrus aurantium L.
Petitgrain lemon	Citrus limon (L.) Burm. f.
Petitgrain mandarin or tangerine	Citrus reticulata Blanco.
Pimenta	Pimenta officinalis Lindl.
Pimenta leaf	Pimenta officinalis Lindl.
Pipsissewa leaves	Chimaphila umbellata Nutt.
Pomegranate	Punica granatum L.
Prickly ash bark	Xanthoxylum (or Zanithoxylum) Americanum Mill. or Xanthoxylum clava-herculis L.
Rose absolute	Rosa alba L., Rosa centifolia L., Rosa damascena Mill., Rosa gallica L., and vars. of these spp.
Rose (otto of roses, attar of roses)	Do.
Rose buds	Do.
Rose flowers	Do.
Rose fruit (hips)	Do.
Rose geranium	Pelargonium graveolens L'Her.
Rose leaves	Rosa spp.
Rosemary	Rosmarinus officinalis L.
Saffron	Crocus sativus L.
Sage	Salvia officinalis L.
Sage, Greek	Salvia triloba L.
Sage, Spanish	Salvia lavandulaefolia Vahl.
St. John's bread	Ceratonia siliqua L.
Savory, summer	Setureia hortensis L.
Savory, winter	Setureia montana L.
Schinus molle	Schinus molle L.
Sloe berries (blackthorn berries)	Prunus spinosa L.
Spearmint	Mentha spicata L.
Spike lavender	Lavandula latifolia Vill.
Tamarind	Tamarindus indica L.
Tangerine	Citrus reticulata Blanco.
Tarragon	Artemisia dracunculus L.
Tea	Thea sinensis L.
Thyme	Thymus vulgaris L. and Thymus zygis var. gracilis Boiss.
Thyme, white	Do.
Thyme, wild or creeping	Thymus serpyllum L.
Triticum (see dog grass).	
Tuberose	Polianthes tuberosa L.
Turmeric	Curcuma longa L.
Vanilla	Vanilla planifolia Andr. or Vanilla tahitensis J. W. Moore.
Violet flowers	Viola odorata L.
Violet leaves	Do.
Violet leaves absolute	Do.
Wild cherry bark	Prunus serotina Ehrh.

Common name	Botanical name of plant source
Ylang-ylang .....	Cananga odorata Hook. f. and Thoms.
Zedoary bark .....	Curcuma zedoaria Rosc.

[42 FR 14640, Mar. 15, 1977, as amended at 44 FR 3963, Jan. 19, 1979; 47 FR 29953, July 9, 1982; 48 FR 51613, Nov. 10, 1983; 50 FR 21043 and 21044, May 22, 1985]

**§ 182.40 Natural extractives (solvent-free) used in conjunction with spices, seasonings, and flavorings.**

seasonings, and flavorings that are generally recognized as safe for their intended use, within the meaning of section 409 of the Act, are as follows:

Natural extractives (solvent-free) used in conjunction with spices,

Common name	Botanical name of plant source
Apricot kernel (persic oil) .....	Prunus armeniaca L.
Peach kernel (persic oil) .....	Prunus persica Sieb. et Zucc.
Peanut stearine .....	Arachis hypogaea L.
Persic oil (see apricot kernel and peach kernel).	
Quince seed .....	Cydonia oblonga Miller.

[42 FR 14640, Mar. 15, 1977, as amended at 47 FR 47375, Oct. 26, 1982]

**§ 182.50 Certain other spices, seasonings, essential oils, oleoresins, and natural extracts.**

tracts that are generally recognized as safe for their intended use, within the meaning of section 409 of the Act, are as follows:

Certain other spices, seasonings, essential oils, oleoresins, and natural ex-

Common name	Derivation
Ambergris .....	Physeter macrocephalus L.
Castoreum .....	Castor fiber L. and C. canadensis Kuhl.
Civet (zibeth, zibet, zibetum) .....	Civet cats, Viverra civetta Schreber and Viverra zibetha Schreber.
Cognac oil, white and green .....	Ethyl ceananthate, so-called.
Musk (Tonquin musk) .....	Musk deer, Moschus moschiferus L.

**§ 182.60 Synthetic flavoring substances and adjuvants.**

3-Methyl-3-phenyl glycidic acid ethyl ester (ethyl-methyl-phenyl-glycidate, so-called strawberry aldehyde, C-16 aldehyde).

Synthetic flavoring substances and adjuvants that are generally recognized as safe for their intended use, within the meaning of section 409 of the Act, are as follows:

Ethyl vanillin.  
Geraniol (3,7-dimethyl-2,6 and 3,8-octadien-1-ol).  
Geranyl acetate (geraniol acetate).  
Limonene (*d*-, *l*-, and *dl*-).  
Linalool (linalol, 3,7-dimethyl-1,6-octadien-3-ol).  
Linalyl acetate (bergamol).  
Methyl anthranilate (methyl-2-aminobenzoate).  
Piperonal (3,4-methylenedioxy-benzaldehyde, heliotropin).  
Vanillin.

Acetaldehyde (ethanal).  
Acetoin (acetyl methylcarbinol).  
Anethole (parapropenyl anisole).  
Benzaldehyde (benzoic aldehyde).  
*N*-Butyric acid (butanoic acid).  
*d*- or *l*-Carvone (carvol).  
Cinnamaldehyde (cinnamic aldehyde).  
Citral (2,6-dimethyloctadien-2,6-*al*-8, geraniol, neral).  
Decanal (*N*-decylaldehyde, capraldehyde, capric aldehyde, caprinaldehyde, aldehyde C-10).  
Ethyl acetate.  
Ethyl butyrate.

[42 FR 14640, Mar. 15, 1977, as amended at 43 FR 47724, Oct. 17, 1978; 44 FR 3963, Jan. 19, 1979; 44 FR 20656, Apr. 6, 1979; 48 FR 51907, Nov. 15, 1983; 54 FR 7402, Feb. 21, 1989]



UTAH NATURAL  
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*This list of dietary ingredients is a compilation of old dietary ingredient lists developed by the American Herbal Products Association (AHPA), Council for Responsible Nutrition (CRN), National Nutritional Foods Association (NNFA) and the Utah Natural Products Alliance (UNPA).*

*This list was compiled shortly after passage of the Dietary Supplement Health and Education Act of 1994 (DSHEA). This list is not recognized by the Food and Drug Administration as either official or binding but only as a reference tool. Any person proposing to offer a dietary ingredient for sale under the provisions of DSHEA is advised to seek competent counsel to confirm whether such an ingredient is an old or new dietary ingredient. This list should not be relied upon as the sole basis to determine ODI/NDA status of any dietary ingredient.*

## **OLD DIETARY INGREDIENT LIST**

Section 8 (413)(c) of the Dietary Supplement Health and Education Act (DSHEA) defines the term “new dietary ingredient” to mean a dietary ingredient that was not marketed in the United States before October 15, 1994. Any dietary ingredient sold prior to this date is regarded as “grandfathered” or, more correctly, an old dietary ingredient.

Shortly after passage of DSHEA, the four principal trade associations of the dietary supplement industry, i.e., American Herbal Products Association (AHPA), Council for Responsible Nutrition (CRN), National Nutritional Foods Association (NNFA) and the Utah Natural Products Alliance (UNPA), each compiled a list of dietary ingredients sold in or as a dietary supplement prior to October 15, 1994. These lists provide a useful guidance tool for industry to determine whether or not a substance requires an NDI submission. In 1997, UNPA took these four separate lists and created a single master Old Dietary Ingredient list. Each dietary ingredient entry includes an icon noting which trade association included the dietary ingredient in their respective lists.

Loren Israelsen  
Executive Director  
Utah Natural Products Alliance



#0 Red Opaque Conisnap capsule #	Aframomum melegueta (Roscoe) K. Schumann +	Aloe ferox Mill. +
200 Bloom GM1 gelatin #	agar agar ~	Aloe littoralis +
Abelmoschus esculentus +	Agastache rugosa (Fisch. et Mey.) O. Ktze. +	Aloe spicata +
Abelmoschus moschatus (Medik.) +	Agathosma betulina +	Aloe vera (L.) N.L. Burm. +
Abies webbiana +	Agathosma crenulata +	Aloe vera gel # ~
Abrus precatorius +	Agati grandiflora +	Aloysia triphylla (L'Har.) Britton +
Abutilon indicum +	Agave americana +	Alpha ketoglutaramates # ~
acacia (arabic gum) ~	Agkistrodon acutus +	Alpha Linolenic acid (ALA) # ~
Acacia (arabic gum) (arabia gum) #	Aglaia roxburghiana, Miq. +	Alpha-Ketoglutaramic acid # ~
Acacia arabica, Linn. +	Agrimonia eupatoria L. +	Alpinia chinensis +
Acacia catechu Willd. +	Agrimonia gryposepala +	Alpinia galanga (L.) Willd. +
Acacia concinna D.C. +	Agrimonia pilosa +	Alpinia katsumadai +
Acacia farnesiana Willd. +	Agropyron repens +	Alpinia officinarum Hance +
Acacia leucophylla Willd. +	Ailanthus altissima +	Alpinia oxyphylla +
acacia powder, NF ~	Ailanthus excelsa +	Alstonia boonei +
Acacia senegal +	Akebia quinata Decne. +	Alstonia scholaris R. Br. +
Acacia seyal +	Akebia trifoliata +	Alstornia constricta +
Acacia vera +	Akoxyglycerol #	Althaea officinalis L. +
Acalypha indica +	akoxyglycerol ~	althaea officinalis ~
Acanthopanax gracilistylus +	Alanate 330 # ~	Amaranthus spinosus +
Acanthopanax sessiliflorus +	Alangium decapetalum +	Amaryllis belladonna Linn. +
Acanthospermum hispidum +	Alanine # ~	Ambrosia artemisiifolia +
Acanthus virilis +	alaria marginata ~	American Centaury herb # ~
Ac-di-sol # ~	Albizzia julibrissin Durazz. +	American Centaury powder # ~
Acer spicatum +	Albizzia lebbek Benth. +	american ginseng ~
acerola ~	Alcea rosea L. +	American ginseng (Panax quinquefolium) #
acerola concentrate ~	Alchemilla vulgaris auct. non L. +	Amino acid chelates # ~
acerola extract ~	Alchemilla xanthochlora Rothm. +	Amino ethanol phosphates # ~
acerola pulp powder ~	Alchornea rugosa +	aminobenzoic acid ~
Acetaminophen #	Alchornea villosa +	aminobenzoic acid, D.C. ~
Achillea millefolium L. +	Alcohol (ethyl) # ~	Ammi Majus # ~
Achyranthes bidentata Bl. +	Aletris farinosa L. +	Ammi visnaga +
Achyranthus aspera Linn. +	alfalfa concentrate ~	ammonium alginates ~
Aconitum carmichaelii Debx. +	Alfalfa leaf powder # ~	Amomum cardamomum +
Aconitum columbianum +	Alfalfa seed; juice conc. # ~	Amomum krervanh +
Aconitum ferox Wall. +	alginates ~	Amomum melegueta Roscoe +
Aconitum heterophyllum Wall. +	alginic acid ~	Amomum subulatum +
Aconitum nepellus L. +	Alginic acid, alginates #	Amomum tsao-ko Crev. et Lem. +
Aconitum plamatum +	Alhagi camelorum Fisch. +	Amomum villosum +
Acorus calamus L. +	Alisma orientale (Sam.) Juzepczuk +	Amomum xanthioides +
Acorus gramineus Soland. +	Alisma plantago-aquatica L. var. +	Amorphophallus campanulatus +
Adenophora tetraphylla (Thunb.) Fisch. +	Alkanna tinctoria (L.) Tausch +	Amorphophallus konjac +
Adenophorus stricta Miq. +	Allicin # ~	Amyda sinensis +
Adhatoda vasica +	Allium ascalonicum +	Amygdalus communis +
Adiantum capillus - veneris L. +	Allium cepa Linn. +	Amygdalus persica +
Adiantum lunulatum +	Allium sativum L. +	Amylases # ~
Adiantum pedatum L. +	Allium schoenoprasum L. +	Anacardium occidentale +
adipic acid ~	Allium tuberosum +	Anacyclus pyrethrum +
Adonis vernalis +	almond ~	Anagallis arvensis +
Adrenal # ~	almond meal ~	Ananas comosus +
Adzuki sprouts # ~	Aloe # ~	Anaphalis margaritacea (L.) Benth. & J.D. Hook +
Aesculus hippocastanum L. +	Aloe barbadensis Mill. +	Andrographis paniculata +

- Andropogon aciculatus +  
 Andropogon citratus +  
 Andropogon gayanus Kunth. +  
 Andropogon jwarancusa +  
 Andropogon muricatus +  
 Anemarrhena asphodeloides Bge. +  
 Anemone hepatica +  
 Anemone pratensis +  
 Anemone pulsatilla +  
 Anemopsis californica (Nutt.) Hook & Arn. +  
 Anethum graveolens L. +  
 Angelica actiloba Kitagawa \*  
 Angelica archangelica L. +  
 Angelica atropurpurea L. +  
 Angelica dahurica (Fischer ex Hoffm.) Franch. et Sav. +  
 Angelica glauca, Edgw. +  
 Angelica polymorpha Maxim. +  
 Angelica pubescens Maxim. +  
 Angelica root # ~  
 angelica sinensis ~  
 Angelica sinensis (Oliv.) Dies +  
 angustifolia ~  
 anise oil ~  
 anise seed powder ~  
 Annatto # ~  
 Anthemis cotula +  
 Anthemis nobilis +  
 Anthriscus cerefolium (L.) Hoffm. +  
 Apium graveolens L. +  
 apium graveolins ~  
 Apocynum androsaemifolium L. +  
 Apocynum cannabinum L. +  
 Apocynum frutescens +  
 Apondanthera smilacifolia +  
 Apple cider # ~  
 Apple cider vinegar, dry # ~  
 apple fiber ~  
 apple fiber flakes ~  
 Apple pectin # ~  
 apple pectin extract ~  
 apple powder ~  
 apples, evaporated ~  
 Aquilaria agallocha +  
 Aquilaria sinensis +  
 Arachidonic acid # ~  
 Arachis hypogaea +  
 Aralia californica Wats. +  
 Aralia hispida +  
 Aralia nudicaulis L. +  
 Aralia racemosa L. +  
 Aretium lappa L. +  
 Aretium minus +  
 Arctostaphylos uva-ursi (L.) Spreng. +  
 Areca catechu Linn. +  
 Argemone Mexicana Linn. +  
 Arginates # ~  
 Arginine # ~  
 arginine pyroglutamate ~  
 Argyreia speciosa Sweet. +  
 Arisaema consanguineum +  
 Arisaema japonicum Blume +  
 Arisaema triphyllum (L.) Torr. +  
 Ariseama wallichianum +  
 Aristolochia clematitis L. +  
 Aristolochia contorta Bge. +  
 Aristolochia cymbifera Mart. & Zucc. +  
 Aristolochia debilis Sieb. et Zucc. +  
 Aristolochia fangchi +  
 Aristolochia indica +  
 Aristolochia manshurjensis +  
 Aristolochia serpentaria L. +  
 Armoracia lapathifolia Gilib. +  
 Armoracia rusticana P. Gaertn., B. Mey. & J. Scherbius +  
 Arnica latifolia Bong. +  
 Arnica montana L. +  
 Artemisia abrotanum L. +  
 Artemisia absinthium L. +  
 Artemisia annua L. +  
 Artemisia anomala +  
 Artemisia apiacea +  
 Artemisia argyi +  
 Artemisia californica Less. +  
 Artemisia capillaris Thunb. +  
 Artemisia douglasiana Bess. +  
 Artemisia dracunculoides L. 'Sativa' +  
 Artemisia lactiflora Wall. ex DC. +  
 Artemisia maritima Linn. +  
 Artemisia tridentata +  
 Artemisia vulgaris L. +  
 Artichoke leaf (Cynara scolymus) # ~  
 Arundo donax +  
 arvense equisetum ~  
 Asarum canadense L. +  
 Asarum europaeum L. +  
 Asarum heterotropoides Fr. Schmidt +  
 Asarum sieboldii +  
 Asclepias asperula (Dcne.) Woodson +  
 Asclepias curassavica, Linn. +  
 Asclepias incarnata +  
 Asclepias tuberosa +  
 Ascorbates # ~  
 ascorbic acid ~  
 ascorbyl esters ~  
 ascorbyl palmitate ~  
 Ashwagandha # ~  
 Aspalathus linearis +  
 Asparagus adscendens +  
 Asparagus cochinchinensis +  
 Asparagus officinalis L. +  
 Asparagus racemosus, Willd. +  
 Asparagus root # ~  
 Asparagus root powder # ~  
 aspartame ~  
 Aspartates # ~  
 aspartic acid ~  
 Aspergillus oryzae enzyme # ~  
 Asperula odorata L. +  
 Aspidium filix-mas +  
 Aspidosperma quebracho blanco +  
 Aster tataricus +  
 Asteracantha longifolia Nees. +  
 Astragalus # ~  
 Astragalus complanatus +  
 astragalus extract ~  
 Astragalus membranaceus Bunge +  
 Astragalus mongholicus Bunge +  
 Astragalus gummifer +  
 Atractylodes chinensis +  
 Atractylis ovata +  
 Atractylodes lancea (Thunb.) DC +  
 Atractylodes macrocephala Koidz. +  
 Atropa acuminata Royle ex Lindley. +  
 Atropa belladonna L. +  
 autolyzed yeast ~  
 autolyzed yeast extract ~  
 Avena fatua L. +  
 Avena sativa L. +  
 Averrhoa carambola +  
 Avicel PH-102 # ~  
 Azardirachta Indica +  
 Baccharis genistelloides, Triptera +  
 Bacopa Monnieri L. +  
 Balanites aegyptiaca +  
 Balanties roxburghii +  
 Baliospermum axillare +  
 Baliospermum montanum Muell. - Arg. +  
 Ballota nigra L. +  
 Balsamodendron mukul, Hook. +  
 Bambusa arundinacea Willd. +  
 Bambusa vulgaris +  
 banana flakes ~  
 Baphia nitida +  
 Baptisia tinctoria (L.) R. Br. ex Ait. +  
 Barberry root bark (Berberis vulgaris) # ~  
 Barleria prionitis Linn. +

Barley # ~	Bifidus adolescentis #	Boschniadia glabra +
barley bran ~	Bignonia chica +	Boswellia carteri Birdwood +
Barley grass # ~	Bignonia flava +	Boswellia serrata Roxb. +
barley malt extract ~	Bignonia quinquefolia +	Boswellin # ~
Barosma serratifolia (Curtis) Willd. +	Bignonia tocomoides +	Botanical protein # ~
Barringtonia acutangula (Linn.) Gaertn. +	Bignonia unguis +	Bovine cartilage # ~
Basella rubra +	bilberry fruit extract ~ #	Bovine tissue extract # ~
Bassia Latifolia +	Bioflavonoids # ~	Brain # ~
Bauhinia forficata Link +	Biota orientalis +	Brassica alba Rabenh., non L. +
Bauhinia racemosa +	Biota orientalis (L.) Endl. +	Brassica campestris Linn. +
Bauhinia racemosa Lam. +	biotin ~	Brassica juncea (L.) Czerniak var/ +
Bauhinia Variegata, Linn. +	biglycinate ~	Brassica nigra (L.) W. Koch +
beche de mer ~	Bissy nut # ~	Brassica officinalis +
bee pollen ~	Bixa orellana L. +	Brassica oleracea +
bee pollen powder ~	Black cohosh root powder # ~	Brassica rapa +
bee propolis ~	black currant extract ~	Brazil wax # ~
beef peptone ~	Black currant powder # ~	brewer's yeast ~
bees wax ~	Black currant seed oil # ~	brewer's yeast, debittered ~ #
beet fiber ~	Black radish # ~	Bridelia micrantha +
Beet juice powder # ~	Bladderwrack # ~	Broccoli # ~
Beet leaves powder # ~	Blepharis edulis Pers. +	broccoli powder ~
beet powder ~	Blessed Thistle (herb) # ~	Bromelain # ~
Beet root (Beta vulgaris rubra) # ~	Bletilla striata +	Bromelia ananas +
Belamcanda chinensis +	blue cheese powder ~	Bromelia pyramidalis alba +
Bellis perennis +	Blue Cohosh (root) # ~	Broussonetia papyrifera +
Benincasa cerifera +	Blue fim coat conc. C&KT7338L # ~	brown rice syrup ~
Benincasa hispida (Thunb.) Cogn. +	Blue green algae # ~	Brucea javanica +
Bentonite # ~	blue malva flower powder ~	Brunfelsia hopeana +
Berberine # ~	Blue vervain # ~	Brussels sprouts # ~
Berberis aquifolium Pursh +	Blumea balsamifera +	Bryonia alba +
Berberis aristata +	Blumea densiflora +	Bryonia dioica +
Berberis vulgaris L. + ~	Blumea lacera +	Bryonia epigaea +
Bergenia lingulata. +	Boerhaavia diffusa Linn. +	Bryonia umbellata +
Berginia crassifolia +	Boerhaavia hirsuta +	Buchanania lanzan +
Bertholletia excelsa +	Boldo # ~	Buchanania latifolia Roxb. +
beta carotene ~	Bombax malabaricum +	Buchu # ~
Beta glucan # ~	Bone marrow # ~	buckthorn bark powder ~
Beta maritima +	bone meal ~ #	Buckthorn powder (Rhamnus frangula) # ~
Beta vulgaris L. var. rapa +	bone phosphate ~	buckwheat ~
beta vulgaris rubra ~	Borage oil # ~	Buddleja officinalis +
betaine anhydrous ~	Borage oil powder # ~	bulgarcus ~
betaine HCl ~	Borago officinalis L. +	Bungarus multicinctus +
Beta-sitosterol # ~	Borassus flabellifer +	Bupleurum chinense DC. +
Betonica officinalis +	boric acid ~	Bupleurum falcatum L. +
Betula alba L. +	Boron # ~	Bupleurum scorzoneraefolium +
Betula lenta L. +	Boron (sodium borate) #	burdock root ~
Betula pendula Roth. +	Boron aspartate # ~	Butcher's Broom (Ruscus Aculeatus) # ~
Betula pubescens Ehrh. +	Boron chelate # ~	Butea frondosa +
Betula verrucosa Ehrh. +	Boron citrate # ~	Buthus martensi +
Bifidobacterium bifidum # ~	Boron gluconate # ~	Butternut (bark) # ~
Bifidobacterium infantis # ~	Boron glycinate # ~	Buxus sempervirens L. +
Bifidobacterium longum # ~	Boron proteinate # ~	Cabbage # ~

- Cabbage powder # ~  
 Cab-O-Sil M5 #  
 Cactus grandiflorus L. , +  
 Caesalpinia bonducella Flem. +  
 Caesalpinia crista +  
 Caesalpinia digyna +  
 Caesalpinia sappans, Linn. +  
 Caffeine # ~  
 Cajanus cajan (Linn.) Millsp. +  
 Calcium # ~  
 Calcium (hydroxyapatite) #  
 Calcium acetate # ~  
 calcium alginates ~  
 calcium amino acid chelate ~  
 Calcium ascorbate # ~  
 Calcium aspartate # ~  
 calcium caprylate ~  
 Calcium carbonate # ~  
 Calcium caseinate # ~  
 Calcium chloride # ~  
 Calcium citrate # ~  
 Calcium citrate malate # ~  
 Calcium fumarate # ~  
 Calcium gluconate # ~  
 Calcium glycerophosphate # ~  
 Calcium hydroxide # ~  
 Calcium iodate # ~  
 Calcium lactate # ~  
 Calcium lysinate # ~  
 Calcium malate # ~  
 calcium malate glycine ~  
 Calcium malate lactate # ~  
 calcium pantothenate ~  
 Calcium phosphate # ~  
 calcium polyascorbate ~  
 Calcium pyruvate # ~  
 Calcium serine phosphate # ~  
 Calcium sodium caseinate # ~  
 Calcium stearate # ~  
 Calcium succinate # ~  
 Calcium sulfate # ~  
 Calcium undecylenate # ~  
 Calendula officinalis L. +  
 Callicarpa macrophylla Vahl. +  
 Calluna vulgaris (L.) Hull +  
 Calotropis gigantea +  
 Calotropis procera (Ait) R.Br. +  
 Camellia sinensis (L.) Kuntze +  
 camellia thea leaf powder ~  
 Campesterol # ~  
 Camphora officianalis +  
 Canadine # ~  
 Cananga odorata (Lam.) J.D.Hook & T.Thomp. +  
 Canarium album (Lour.) Raeush. +  
 Candex # ~  
 Cannabis sativa Linn. +  
 canola oil ~  
 Canscora Decussata, Roem. etc. Sch. +  
 cantella leaf ~  
 Canthium subcordatum +  
 Canthium glabrifolium +  
 Capparis aphylla +  
 Capparis spinosa +  
 Capparis tomentosa +  
 Capparis trifoliata +  
 Caprylic acid # ~  
 Capsella bursa-pastoris (L.) Medik. +  
 Capsicum annuum L. annuum +  
 capsicum fatigiatum ~  
 Capsicum frutescens L. +  
 Capsicum powder # ~  
 Capsule, Red Opaque Conisnap ~  
 Caratonia siliqua +  
 Caraway seeds # ~  
 Carbomer # ~  
 Carbonates # ~  
 Carbonyl iron (ferronyl) # ~  
 Carbowax 3350 # ~  
 carboxymethyl starch ~  
 Carica papaya L. +  
 Carlina acaulis +  
 carmine dye ~  
 Carmine dye #09350 #  
 Carnauba Wax # ~  
 Carnauba Wax Powder, NF # ~  
 Carnitine # ~  
 Carnitine HCl # ~  
 Carnitine L-Tartrate # ~  
 Carnosine # ~  
 Carob Extract (St. John's bread) # ~  
 carob powder ~  
 Carotenoids # ~  
 Carrageenan # ~  
 Carrageenan agar # ~  
 Carrot # ~  
 carrot flakes ~  
 Carrot oil # ~  
 carrot pulp powder ~  
 Carthamus tinctorius L. +  
 Carum carvi L. +  
 Carum copticum +  
 carum petroselinium ~  
 Carum roxburghianum +  
 Caryophyllus aromaticus +  
 Casanthranol # ~  
 Cascara sagrada (bark) # ~  
 Casein # ~  
 Cassia absus Linn. +  
 Cassia acutifolia +  
 Cassia alata +  
 cassia angustifolia ~  
 Cassia angustifolia Vahl +  
 Cassia auriculata +  
 cassia fistula ~  
 Cassia fistulosa Linn. +  
 Cassia foetida +  
 Cassia lanceolata +  
 Cassia leavigata, Willd. +  
 Cassia obovata +  
 Cassia obtusifolia L. +  
 Cassia Tora, Linn. +  
 Cassia torrea +  
 Castanea dentata (Marsh.) Borkh. +  
 Castanea sativa Mill. +  
 Castor oil # ~  
 Catalase # ~  
 Catechins # ~  
 Catharanthus roseus (L.) G. Don +  
 catnip ~  
 Cat's Claw # ~  
 Cauliflower # ~  
 Caulophyllum thalictroides Michx. +  
 Cayaponia tayuya +  
 cayenne ~  
 Cayenne (Capsicum fatigiatum) #  
 cayenne extract ~  
 Ceanothus americanus L. +  
 Cedrus deodara (Roxb.) Loud. +  
 Celandine root # ~  
 Celastrus paniculatus Willd. +  
 Celery # ~  
 Celery leaf powder (Apium graveolins) # ~  
 Cellulase # ~  
 cellulose acetate ~  
 cellulose acetate phthalate ~  
 Cellulose Gum # ~  
 cellulose gum, modified ~  
 cellulose, bacterial ~  
 cellulose, fermentation derived ~  
 Cellulose, microcrystalline cellulose #  
 Celosia argentea +  
 Centaurea aspera L. +  
 Centaurea benedicta +  
 Centaurea cyanus L. +  
 Centaurium erythraea Raf. +  
 centaury herb ~

- centaury powder ~  
 Centella asiatica (L.) Urban +  
 Centratherum anthelminticum (Willd.) +  
 Cephaelis ipecacuanha (Brot.) Tussac +  
 Cephalotaxus harringtonia +  
 Ceratonia siliqua L. +  
 Cetraria islandica (L.) Achar. +  
 Cetyl Alcohol # ~  
 Chaenomeles speciosa (Sweet) Nakai +  
 Chamaebatiaria millefolium +  
 Chamaelirium luteum (L.) A. Gray +  
 Chamaemelum nobile (L.) All. +  
 Chamomile (flowers) # ~  
 chamomile flower powder, german ~  
 Chamomilla suaveolens (Pursh) Rydb. +  
 Changium smyrnoides Wolff +  
 Chaparral # ~  
 Charcoal carbon # ~  
 cheddar cheese powder ~  
 Chelidonium majus L. +  
 Chelone glabra L. +  
 Chenopodium ambrosioides +  
 Chenopodium anthelminticum +  
 Chickory root # ~  
 Chickweed # ~  
 Chili peppers # ~  
 Chimaphila maculata +  
 Chimaphila umbellata (L.) W. Barton +  
 Chimaphila umbellata Cisarantica (Blake) Hulten +  
 Chinese Dong Quai # ~  
 Chinese Ephedra (Ma Huang) # ~  
 Chionanthus virginicus L. +  
 chitin ~  
 chitin oligosaccharides ~  
 Chitosan # ~  
 chitosan oligosaccharides ~  
 Chlorella # ~  
 Chlorella growth factor # ~  
 chlorella powder ~  
 Chlorophyll # ~  
 Chlorophyll, oil soluble, 8% #  
 Chlorophyllin # ~  
 Chlorophytum arundinaceum Baker. +  
 Chlorpheniramine Maleate USP # ~  
 Choeroneles lagenaria (Loisel.) Koidzumi +  
 cholecalciferol ~  
 Choline bitartrate # ~  
 Choline dihydrogen citrate # ~  
 Chondroitin sulfate # ~  
 Chondrus crispus +  
 chromate ~  
 Chromium # ~  
 Chromium (chromate) #  
 Chromium (picolinate) #  
 Chromium aspartate # ~  
 Chromium chelate # ~  
 Chromium chloride # ~  
 Chromium dinicotinate # ~  
 Chromium GTF # ~  
 Chromium hydrolyzed protein # ~  
 chromium nicotinate ~  
 Chromium nitrate # ~  
 chromium picolinate ~  
 Chromium polynicotinate # ~  
 Chromium protein chelate # ~  
 Chromium proinate # ~  
 chromium yeast ~  
 Chromium yeast GTF # ~  
 Chromium yeast-free GTF # ~  
 Chrysanthemum indicum +  
 Chrysanthemum morifolium Ramat. +  
 Chrysanthemum parthenium (L.) Berhn. +  
 Chrysanthemum sinense +  
 Chrysanthemum vulgare (L.) Berhn. +  
 Chrysanthemum x morifolium +  
 Chymotrypsin # ~  
 Cibotium barometz (L.) J. Sm. +  
 Cicer arietinum +  
 Cichorium intybus L. +  
 Cider vinegar # ~  
 Cider vinegar powder # ~  
 Cimicifuga heracleifolia +  
 Cimicifuga foetida L. +  
 Cimicifuga racemosa (L.) Nutt. +  
 Cinchona calisaya Wedd. +  
 Cinchona ledgerana Moens & Trimen +  
 Cinchona officinalis L. +  
 Cinchona pubescens Vahl +  
 Cinnamomum aromaticum +  
 Cinnamomum camphora (L.) J. Presl +  
 Cinnamomum cassia J. Presl +  
 Cinnamomum Loureirii +  
 Cinnamomum Tamala Nees +  
 Cinnamomum verum J. Presl. +  
 Cinnamomum Zeylanicum Blumos. +  
 cinnamon ~  
 Cissampelos pareira, Linn. +  
 Cissus quadrangularis +  
 Cistanche Deserticola +  
 Cistanche salsa (C. A. Mey.) Beck +  
 citrate ~  
 Citrates #  
 Citric acid # ~  
 citrulline ~  
 Citrullus colocynthis +  
 Citrullus lanatus +  
 Citrullus vulgaris Schrad. +  
 Citrus aurantifolia (Christm.) Swingle +  
 Citrus aurantium L. +  
 Citrus bergamia Risso & Poit. +  
 Citrus bioflavonoids # ~  
 Citrus erythrocarpa +  
 citrus fiber ~  
 Citrus limon (L.) N. L. Burm. +  
 Citrus limonia Osbeck +  
 Citrus medica Linn. +  
 Citrus pectin powder # ~  
 Citrus reticulata Blanco +  
 Citrus rind extract \*  
 Citrus sacodactylis +  
 Citrus sinensis L. +  
 Citrus trifoliata ~  
 Citrus unchiu Markovich \*  
 Citrus wilsonii +  
 Clausena anisum-olens +  
 Clematis armandii +  
 Clematis chinensis Osbeck +  
 Cleome felina +  
 Clerodendrum indicum +  
 Clerodendrum infortunatum +  
 Clerodendrum phlomidis +  
 Clerodendrum serratum Spreng. +  
 Clerodendrum trichotomum +  
 Clitoria ternatea +  
 Cnestis palala +  
 Cnicus benedictus L. +  
 Cnidium monnieri (L.) Cuss. +  
 Cnidium officinale +  
 cobalamin concentrate ~  
 Cobalt # ~  
 cobalt sulfate ~  
 cobalt sulfate crystals ~  
 Coccinia cordifolia +  
 Coccoloba ilhensis +  
 Cocoa # ~  
 cocoa, lecithinated ~  
 Cocoa, natural powder # ~  
 cocoa, unlecithinated ~  
 coconut flakes ~  
 Coconut oil # ~  
 Cocos nucifera +  
 Cod liver oil # ~  
 Codonopsis pilosula (Franch.) Nannfeldt +  
 Codonopsis tangshen Oliver +  
 Coenzyme Q10 (ubiquinone) # ~  
 Coffea arabica +

- Coix lacryma-jobi* L. +  
*Cola acuminata* (P.Beauv.) Schott & Endk. +  
*Cola nitida* Schott. & Endl. +  
*Colchicum autumnale* +  
*Colchicum luteum* Baker. +  
*Coleus amboinicus* Lour. +  
*Coleus forskohlii* Benth. +  
*Collinsonia canadensis* L. +  
 Colloidal alkaline ash mineral conc. # ~  
*Colocasia antiquorum* +  
*Colostrum* # ~  
 Corn bran #  
*Combretodendron macrocarpum* +  
*Combretum apiculatum* +  
*Commelina salicifolia* +  
*Commiphora abyssinica* +  
*Commiphora africana* +  
*Commiphora erythracea* +  
*Commiphora hildebrandtii* +  
*Commiphora madagascariensis* Jacq. +  
*Commiphora molmol* Engl. ex Tschirch +  
*Commiphora mukul* (Hook. ex Stocks) Engl. +  
*Commiphora myrrha* +  
*Commiphora opobalsamum* +  
*Commiphora schimperi* +  
*Consolida orientalis* +  
*Convallaria majalis* L. +  
*Convolvulus arvensis* +  
*Convolvulus batatas* +  
*Convolvulus operculatus* +  
*Conyza canadensis* (L.) Cronq. +  
*Conyza cinera* +  
 Copper # ~  
 Copper (cupric oxide) #  
 Copper (lysinate) #  
 Copper amino acid chelate # ~  
 copper carbonate ~  
 Copper citrate # ~  
 Copper gluconate # ~  
 copper glycinates ~  
 copper lysinate ~  
 Copper protein chelate # ~  
 Copper sulfate # ~  
 copper yeast ~  
*Coptis chinensis* Franch. +  
*Coptis groenlandica* (Oed.) Fern. +  
*Coptis teeta*, Wall. +  
*Corallacarpus epigaeus* +  
*Cordia salicifolia* Cham. +  
*Cordyceps sinensis* +  
 CordyMax Cs-4 ~  
*Coriandrum sativum* L. +  
 corn bran ~  
 corn oil shortening, dehydrated ~  
 corn oil, winterized, USP ~  
 Corn silk # ~  
 Corn solids, hydrolyzed # ~  
 Corn starch # ~  
 corn syrup ~  
 corn syrup solids ~  
 Corn, winterized, USP #  
*Cornus officinalis* Sieb. & Zucc. +  
*Corydalis ambigua* +  
*Corydalis bulbosa* +  
*Corydalis turtschaninovii* Bess. F. Yanhusuo Y.H.  
 Chou et C.C.Hus +  
*Corydalis yanhusuo* W.T. Wang. +  
*Corylus avellana* L. +  
*Corylus cornuta* Marsh. +  
*Corynanthe pachyceras* +  
*Costus spicatus* +  
 Couch grass # ~  
*Coutarea latifolia* +  
 Cranberry fruit powder # ~  
 Cranberry juice concentrate # ~  
*Crataegus cuneata* +  
*Crataegus laevigata* (Poir.) DC. +  
*Crataegus monogyna* Jacq. +  
*Crataegus oxyacantha* +  
*Crataegus pinnatifida* Bge. +  
*Crataeva narvala* +  
*Crataeva religiosa* +  
 cream extract ~  
 Creatine monohydrate # ~  
 Creatine phosphate # ~  
*Crocus sativus* L. +  
 crosearmellose sodium ~  
 Crospovidone, NF (PVPP) # ~  
*Crotalaria juncea* Linn. +  
*Crotalaria verrucosa* +  
*Croton lechleri* +  
*Croton phili* +  
*Cryptolepis b Buchanan* Roem. & Schult. +  
*Cryptolepis sanguinolenta* +  
*Cryptotympana atrata* +  
 Cucumber ext (cucumis sativae) # ~  
*Cucumis melo* Linn. +  
 cucumis sativae ~  
*Cucumis sativus* Linn. +  
*Cucumis utilis*sumus +  
 Cucurbita pepo +  
 Cullen corylifolia (L.) Medicus +  
 Culvers root # ~  
 Culvers root powder # ~  
*Cuminum cyminum* L. +  
*Cuphea balsamona* Cham. & Schlechtend. +  
*Cuphea ingrata* +  
*Cupressus sempervirens* +  
 cupric acetate ~  
 cupric oxide ~  
 cupric oxide powder ~  
 Cupric sulfate # ~  
*Curculigo orchioidea* Gaertn. +  
*Curcuma amada*, Roxb. (C. matico) +  
*Curcuma aromatica* Salisbury +  
*Curcuma domestica* Valet. +  
*Curcuma longa* L. + ~  
*Curcuma zedoaria* (Berg.) Roscoe +  
 Curcumin pod (curcuma longa) # ~  
*Cuscuta chinensis* Lam. +  
*Cuscuta europaea* +  
*Cuscuta japonica* Choisy +  
*Cuscuta reflexa* +  
*Cyamopsis psoralioides* +  
*Cyamopsis tetragonoloba* (L.) Taubert +  
 cyanocobalamin ~  
*Cyathula capitata* +  
*Cyathula officinalis* Kuan. +  
*Cyclanthera pedata* +  
*Cyclina sinensis* +  
*Cydonia Vulgaris* +  
*Cymbopogon citratus* (DC. ex Nees) Stapf +  
*Cymbopogon jwarancusa* Schult. +  
*Cymbopogon schoenanthus* +  
*Cynanchum atratum* Bge. +  
*Cynanchum stauntonii* +  
*Cynara scolymus* L. + ~  
*Cynodon dactylon* (Linn.) Pers. +  
*Cynomorium songaricum* Rupr. +  
*Cyperus rotundus* L. +  
*Cyperus scariosus* +  
*Cypripedium acaule* +  
*Cypripedium calceolus* L. +  
*Cypripedium pubescens* +  
 Cysteine # ~  
 Cystine # ~  
*Cytisus scoparius* (L.) Link +  
 DHEA\*  
 D, L-Methionine #  
 D, L-Phenylalanine #  
 D. salina algae # ~  
*Daemonorops draco* Blume +  
*Dalbergia sissou* Roxb. +  
 d-alpha tocopherol ~  
 d-alpha tocopherol concentrate ~  
 d-alpha tocopheryl acetate ~

- d-alpha tocopheryl linoleate ~  
 d-alpha tocopheryl succinate ~  
 Damiana (leaves) (*Tumeria aphrodisiaca*) #  
 damiana leaves ~  
 dandelion ~  
 Dandelion (*Taraxicum deins-leonis*) #  
 date powder ~  
 Datura alba Nees. +  
 Datura Stramonium Linn. +  
 Daucus carota Linn. var. sativa D.C. +  
 Davilla rugosa +  
 d-beta tocopherol ~  
 d-delta tocopherols ~  
 Deer antler \*  
 Deer Antler Velvet \*  
 dehydroepiandrosterone (DHEA)\*  
 Delphinium staphisagria +  
 Delphinium consolida +  
 Delphinium zaili +  
 Dendranthea x morifolium (Ramat) Tzelev +  
 Dendranthema x morifolium +  
 Dendrobium nobile Lindl. +  
 Dendrobium officinale +  
 Deodorized garlic powder # ~  
 Desiccated liver # ~  
 Desiccated liver granulation # ~  
 Desmodium adscendens +  
 Desmodium diureticum +  
 Desmodium gangeticum D.C. +  
 Desmodium styracifolium (Osbeck) Merr. +  
 Desmostachya bipinnata +  
 devils claw ~  
 dextran chelate ~  
 Dextromethorphan # ~  
 dextrose ~  
 dextrose mega tab ~  
 dextrose, D.C. ~  
 d-gamma tocopherol ~  
 Dianthus superbus +  
 Diastase # ~  
 Dicalcium phosphate # ~  
 Dictamnus dasycarpus +  
 Didymocarpus pedicellata +  
 Digitalis purpurea L. +  
 Diindolylmethane (DIM) \*  
 Dillweed oil # ~  
 Dimethyl glycine (DMG) # ~  
 Dimethylaminoethanol # ~  
 Dimocarpus longan Lour. +  
 Dionaea muscipula +  
 Dioscorea alata +  
 Dioscorea batatas Dcne. +  
 Dioscorea bulbifera Linn. +  
 Dioscorea oppositifolia Thunb. +  
 Dioscorea villosa # ~  
 Dioscorea villosa L. +  
 Diosgenin # ~  
 Diosmin \*  
 Diospyros virginiana +  
 Dipac DC Tableting Sugar Gran. # ~  
 Dipotassium phosphate # ~  
 Dipsacus asper Wallich +  
 Dipsacus japonicus Miq. +  
 Dipteryx odorata (Aubl.) Willd. +  
 Dipteryx oppositifolia Willd. +  
 disodium phosphate ~  
 Datab Unmill DCP Dihydrate USP # ~  
 dl methionine ~  
 dl phenylalanine ~  
 DNA # ~  
 Docosahexaenoic acid (DHA) # ~  
 Docosate sodium # ~  
 Dolichandrone falcata +  
 Dolichos albus +  
 Dolichos biflorus +  
 Dolichos catiang +  
 Dolichos lablab +  
 Dolomite # ~  
 Dong Quai (*Angelica sinensis*) # ~  
 Dorstenia brasiliensis +  
 d-panthenol ~  
 Dracocephalum moldvica +  
 Dracontium foetidum L. +  
 Dracontium polyphyllum +  
 dried yeast ~  
 Dri-Klear # ~  
 Drosera lanatum +  
 Drosera longifolia +  
 Drosera rotundifolia L. +  
 Drynaria fortunei (Kze.) J. Sm. +  
 Dryobalanops aromatica Gaertn. +  
 Dryobalanops camhora +  
 Dryopteris crassirhizoma +  
 Dryopteris filix-mas (L.) Schott +  
 dulce ~  
 Dulce (sea vegetable) #  
 Duodenal substance (bovine source) # ~  
 dusting powder, Dry Flo ~  
 echinacea ~  
 Echinacea (Angustifolia) #  
 Echinacea (Purpurea) #  
 Echinacea angustifolia DC. +  
 echinacea angustifolia root powder ~  
 echinacea pallida ~  
 Echinacea pallida (Nutt.) Nutt. +  
 Echinacea purpurea (L.) Moench +  
 echinacea purpurea herb powder ~  
 Echinocereus grandiflorus +  
 Echinodorus macrophyllus M. Mich. +  
 Echinops echinatus +  
 Eclipta alba Hassk. +  
 Eclipta prostrata (L.) L. +  
 EFA (unrefined vegetable lipids) essential fatty acids #  
 Egg Albumin # ~  
 Egg protein isolate # ~  
 Egg shell powder # ~  
 Elaeophorbia drupifera +  
 Eleteria cardamomum (L.) Maton +  
 Eleutherococcus senticosus + ~  
 Elk Antler \*  
 Elk Antler Velvet \*  
 Elsholtzia ciliata +  
 Elsholtzia haichowensis +  
 Elsholtzia splendens +  
 Elytrigia repens (L.) Nevski +  
 Embelia Glandulifera +  
 Embelia Indica +  
 Embelia Ribes, Burm. +  
 Embelia tsjeriam-cottam +  
 Emblica officinalis L. +  
 Embryopteris glutinosa +  
 Emcosoy # ~  
 Enicostema littorale +  
 enterococcus faecium ~  
 EPA (Eicosapentaenoic acid) #  
 Ephedra distachya L. +  
 Ephedra equisetina Bunge +  
 ephedra extract ~  
 Ephedra gerardiana Wall. ex Stapf +  
 ephedra herb ~  
 Ephedra herb & extract #  
 Ephedra intermedia Schrenk et C.A. Meyer +  
 Ephedra nevadensis S. Wats. +  
 Ephedra sinica Stapf +  
 Ephedra vulgaris sensu Brandis +  
 Ephedrine HCl #  
 Epigaea repens L. +  
 Epilobium angustifolium L. +  
 Epilobium parviflorum Schreb. +  
 Epimedium alpinum +  
 Epimedium grandiflorum C. Morr. +  
 Epimedium macranthum Morr. & Dcne. +  
 Equisetum arvense L. +  
 Equisetum hyemale L. +  
 Equisetum telmateia Ehrh. +  
 Eragrostis cynosuroides, Beauv. +

- ergocalciferol ~  
 Erigeron canadensis L. +  
 Erigeron heterophyllum +  
 Eriobotrya japonica (Thunb.) Lindley +  
 Eriodictyon californicum (Hook. & Arn.) Torr. +  
 Eriodictyon glutinosum Benth. +  
 Eriodictyon tomentosum Benth. +  
 Eriodictyon trichocalyx +  
 Eryngium maritimum L. +  
 Erythrina indica L. +  
 Erythrina mulungu +  
 Erythrina stricta Roxb. +  
 Erythrina variegata +  
 Erythroxyllum catuaba +  
 Eschscholtzia californica \*  
 esters of propylene glycol ~  
 Ethocel (10 cps) # ~  
 ethyl cellulose ~  
 Eucalyptus globulus Labill. +  
 eucalyptus leaf extract ~  
 eucalyptus oil ~  
 Eucalyptus piperita +  
 Eucommia ulmoides Oliver +  
 Eugenia aromatica +  
 Eugenia aromatica (L.) Baill. +  
 Eugenia caryophyllata Thunb. +  
 Eugenia jambolana +  
 Eugenia jambolana Lam. +  
 Eugenia pimenta +  
 Euodia rutaecarpa J.D. Hook. ex Benth. +  
 Euonymus atropurpureus Jacq. +  
 Eupatorium cannabinum + ~  
 Eupatorium fortunei +  
 Eupatorium perfoliatum L. +  
 Eupatorium purpureum + ~  
 Eupatorium purpureum L. +  
 Euphorbia brasiliensis +  
 Euphorbia entheurodoxa +  
 Euphorbia hirta L. +  
 Euphorbia ipecacuanhae L. +  
 Euphorbia kansui +  
 Euphorbia lingularia +  
 Euphorbia nerifolia, Linn. +  
 Euphorbia pilulifera L. +  
 Euphorbia resinifera Berg. +  
 Euphorbia royleana Boiss. +  
 Euphorbia tirucalli Linn. +  
 Euphorbia longan (Lour.) Steud. +  
 Euphrasia officinalis L. +  
 Euryale ferox Salib. +  
 Evening primrose oil # ~  
 Evernia furfuracea (L.) W. Mann +  
 Evernia prunastri (L.) Achar. +  
 Evodia rutaecarpa (Juss.) Benth. +  
 Evolvulus alsinoides +  
 Evolvulus hirsutus +  
 Eye # ~  
 Eyebright # ~  
 cynara scolymus ~  
 Fagara xanthoxyloides +  
 Fagonia arabica +  
 Fagopyrum esculentum Moench +  
 Fennel # ~  
 fennel seed powder ~  
 Fenugreek (seeds) # ~  
 Feronia limonia (Linn.) Swingle. +  
 Ferric ammonium citrate # ~  
 Ferric glycerophosphate # ~  
 ferric peptonate ~  
 Ferrochel iron bisglycinate # ~  
 ferronyl ~  
 ferrous chelate ~  
 ferrous fumarate ~  
 Ferrous fumarate (coated) # ~  
 ferrous gluconate ~  
 Ferrous lactate # ~  
 ferrous sulfate ~  
 Ferula assa-foetida L. +  
 Ferula foetida (Bunge) Regel +  
 Ferula galbaniflua +  
 Ferula narthex +  
 Ferulic acid # ~  
 Fever few (Tanacetum parthenium) # ~  
 Ficin #  
 Ficus amottiana +  
 Ficus asperrima Roxb. +  
 Ficus benghalensis Linn. +  
 Ficus carica Linn. +  
 Ficus microcarpa +  
 Ficus racemosa Linn. +  
 Ficus religiosa Linn. +  
 fig powder ~  
 Filipendula ulmaria (L.) Maxim. +  
 fioin ~  
 fish body oil (EPA/DHA) ~ #  
 Fish liver oil # ~  
 fish oils ~  
 Flacourtia sapida +  
 Flax oil # ~  
 Flaxseed meal # ~  
 Fluorine # ~  
 Foam Blast 10 Silicone compound # ~  
 Foeniculum vulgare Mill. +  
 folic acid ~  
 Food Glaze # ~  
 Forsythia suspensa (Thunb.) Vahl +  
 Fo-ti (Polygonum multiflorum) # ~  
 Fouquieria splendens Engelm. +  
 Frac # ~  
 Fragaria vesca L. +  
 Fragaria virginiana Duchesne +  
 Frangula alata Mill. +  
 Frangula purshiana (DC.) Cooper +  
 Fraxinus americana L. +  
 Fraxinus excelsior L. +  
 Fraxinus ornus +  
 Diindolylmethane (DIM) \*  
 Fritillaria cirrhosa D. Don. +, ~  
 Fritillaria thunbergii Miq. +  
 Fructooligosaccharides (FOS) # ~  
 fructose ~  
 fructose, food grade ~  
 Fucus vesiculosus L. +  
 Fumarates # ~  
 Fumaria indica +  
 Fumaria officinalis L. +  
 Fumaria parviflora Lam. +  
 GABA ~  
 Galactomannan # ~  
 Galactosidase # ~  
 Galega officinalis +  
 Galeopsis ochroleuca Lam. +  
 Galium aparine L. +  
 Galium verum L. +  
 Galium odoratum (L.) Scop. +  
 gamma aminobutyric acid ~  
 Gamma Aminobutyric acid (GABA) #  
 Gamma Linolenic acid (GLA) # ~  
 Gamma Oryzanol # ~  
 Ganoderma applanatum (Pers.) Pat. +  
 Ganoderma lucidum (Leyss, ex F) P.Karst. +  
 Ganoderma oregonense +  
 Ganoderma sinense +  
 Ganoderma tsugae +  
 Garcinia atroviridis +  
 Garcinia cambogia Desr. +  
 Garcinia cambogia extract # ~  
 Garcinia cowa Roxb. +  
 Garcinia hanburyi +  
 Garcinia indica Chois. +  
 Garcinia mangostana +  
 Garcinia pedunculata +  
 Gardenia jasminoides Ellis +  
 Gardenia lucida +  
 garlic extract powder, aged ~  
 Garlic extract, aged (extract, powder) #



- Garlic macerate # ~  
 garlic powder, granulated ~  
 Garlic sprouts # ~  
 Garlic, oil # ~  
 Gastrin mucin powder # ~  
 Gastrodia elata Bl. +  
 Gaultheria procumbens L. +  
 gelatin B, U.S. edible ~  
 Gelatin bone 150 bloom # ~  
 Gelatin, 200 Bloom GMI ~  
 gelatin, hydrolyzed gelatin, bone ~ #  
 gelatin, SPG ~  
 Gelidiella acerosa (Forssk.) Feldm. +  
 Gelidium amansii J. V. Lamour. +  
 Gelidium crinale (Turn.) J. V. Lamour +  
 Gelidium pacificum Okam. +  
 Gelidium vagum Okam. +  
 Gelidium cartilagineum (L.) Gaill. +  
 Gelidium divaricatum G. Martens +  
 gellan gum ~  
 Gelsemium sempervirens +  
 Genista tinctoria L. +  
 Gentian root # ~  
 Gentiana kurroo Royle. +  
 Gentiana longdancao +  
 Gentiana lutea L. +  
 Gentiana macrophylla Bge. +  
 Gentiana manschurica Kitag +  
 Gentiana olivieri Griseb. +  
 Gentiana scabra Bge. +  
 Gentiana triflora +  
 Geranium maculatum L. +  
 Germanium # ~  
 Germanium (sesquioxide) #  
 Geum urbanum +  
 Ghatti gum # ~  
 Gigartina Mamillosa +  
 Ginger (root) # ~  
 ginkgo biloba extract ~  
 Ginkgo biloba L. + #  
 ginseng, american ~  
 ginseng, siberia ~  
 Glechoma hederacea +  
 Gleditsia sinensis +  
 Glehnia littoralis Fr. Schmidt ex Miq. +  
 Gloriosa superba Linn. +  
 glucomannan ~  
 Glucomannan (Konjac root) #  
 Gluconates # ~  
 Glucosamine HCl # ~  
 Glucosamine sulfate # ~  
 glucose syrup, hydrogenated ~  
 Glucosidase # ~  
 glutamic acid ~  
 glutamic acid HCl ~ #  
 Glutamine # ~  
 Glutathione # ~  
 Glutathione peroxidase #  
 Glutathione peroxidase E # ~  
 Glycerin # ~  
 glycerin, USP ~  
 Glycerol Guaiacolate (Guaifenesin) # ~  
 Glycerophosphates # ~  
 Glycinates # ~  
 Glycine # ~  
 Glycine max Merr. +  
 Glycyrrhetic acid # ~  
 Glycyrrhiza echinata +  
 Glycyrrhiza glabra L. + # ~  
 glycyrrhiza uralensis ~  
 Glycyrrhiza uralensis Fisch. ex DC. +  
 Gmelina arborea Linn. +  
 Gnaphalium obtusifolium L. +  
 Gold #  
 Goldenseal (Hydrastis canadensis) # ~  
 Gonolobus cundurango +  
 Gossypium arboreum +  
 Gossypium herbaceum L. +  
 Gossypium hirsutum L. +  
 Gotu Kola (Hydrocotyle asiatica) # ~  
 gotu kola extract ~  
 grape powder, artificial ~  
 Grape seed extract # ~  
 Grape skin extract # ~  
 grapefruit oil ~  
 grapefruit powder ~  
 Grapefruit seed extract # ~  
 Grapefruit, whole, powder #  
 Gravel root (Eupatorium purpureum) # ~  
 Greater Celandine extract # ~  
 Green bell peppers # ~  
 Green liped sea musel ext.(perma canaliculus) # ~  
 Green onions # ~  
 Green pepper # ~  
 Green pepper concentrate # ~  
 Green tea, extract, powder # ~  
 Grewia asiatica Linn. +  
 Grifola frondosa, (Dicks. ex Fr.) +  
 Grifola umbellata +  
 Grindelia robusta Nutt. +  
 Grindelia squarrosa (Pursh) Dunal +  
 Grindelia stricta DC. +  
 ground limestone ~  
 Guaiacum officinale +  
 guaifenesin ~  
 Guar gum # ~  
 Guarana # ~  
 guava powder, spray dried ~  
 gugulipid ~  
 gum arabic ~  
 gum ghatti ~  
 Gum guggul, gugulipid # ~  
 gum karaya ~  
 gum preblend w/ Vitamin C ~  
 Gymnema sylvestre +  
 Halloysitum rubrum +  
 Hamamelis virginiana L. +  
 Harpagophytum procumbens DC. ex Meisn. +  
 Hawthorn berries # ~  
 Heart # ~  
 Hedeoma pulegioides (L.) Pers. +  
 Hedera helix +  
 Hedychium spicatum Ham. +  
 Heimia salicifolia +  
 Heisteria pariflora +  
 Helianthus annuus L. +  
 Helicteres isora +  
 Helonias dioica +  
 Hemerocallis fulva +  
 Hemidesmus indicus (L.) Schult. +  
 Hemp Agrimony (Eupatorium cannabinum) # ~  
 Herniaria glabra +  
 Herpestis monniera +  
 hesperidin complex ~  
 Hesperidin complex; hesperidin methyl chalcone #  
 hesperidin methyl chalcone ~  
 Hexacosanol # ~  
 Hibiscus rosa-sinensis Linn. +  
 Hibiscus sabdariffa L. +  
 Hieracium pilosella +  
 high fructose corn syrup ~  
 Hijiki seaweed # ~  
 Hillieria latifolia +  
 Hippophae rhamnoides Linn. +  
 Hippophae rhamnoides +  
 Histidines # ~  
 Histidine # ~  
 Holarrhena antidysenterica Wall. +  
 honey ~  
 honey, clover ~  
 honey, D.C ~  
 Hops # ~  
 Hordeum vulgare L. +  
 horehound extract ~  
 Horseradish # ~  
 Horsetail rush #

- Nelumbo nucifera* Gaertn. +  
*Nepeta cataria* L. +  
*Nepeta glechoma* +  
*Nepeta hederacea* +  
*Nepeta hindostana* +  
*Nereocystis luetkeana* (Mert.) Postels & Rupr. +  
*Nerium indicum* Mill. +  
*Nerium odorum*, Soland. +  
*Nerium oleander* +  
 Nettle powder # ~  
 niacin ~  
 niacin complex ~  
 niacin, NF ~  
 niacinamide ~  
 Nickel # ~  
 Nickel sulfate # ~  
*Nicotiana rustica* +  
*Nicotiana tobacum* Linn. +  
 nicotinamide-ascorbic acid complex ~  
*Nigella damascena* +  
*Nigella sativa* Linn. +  
 Noncitrus bioflavonoids # ~  
 nonfat dry milk ~  
*Nothapodytes foetida* Miers. +  
*Notopterygium incisum* Ting ex H.T. Chang +  
*Nymphaea alba* Linn. +  
*Nymphaea edulis* +  
*Nymphaea lotus*, Linn. +  
*Nymphaea nelumbo* +  
*Nymphaea nouchali* +  
*Nymphaea odorata* +  
*Nymphaea rubra* +  
*Nymphaea stellata* +  
 oat bran ~  
 Oat bran fiber # ~  
 Oat bran flour # ~  
 oat bran, high protein ~  
 oat flakes ~  
 Oat flour # ~  
 Oat grass powder # ~  
 Oat straw powder # ~  
 oats, rolled, toasted ~  
*Ocimum album* +  
*Ocimum ballatum* +  
*Ocimum basilicum* L. +  
*Ocimum canum* +  
*Ocimum sanctum* +  
*Ocimum viride* +  
 Octacosanol # ~  
*Oenothera biennis* L. +  
*Oldenlandia (hedyotidis) diffusa* +  
*Olea europaea* L. +  
 oleic acid ~  
 Oleic acid (Omega-9) #  
 Olive oil # ~  
 Omega 3 (Spray dried fish oil) #  
 omega-3 ~  
 omega-6 ~  
 omega-9 ~  
 onion ~  
 onion powder ~  
*Onosma bracteatum* +  
*Onosma echioides* Linn. +  
*Operculina turpethum* (Linn.) +  
*Ophiopogon japonicus* (L. fil.) der - Gawl. +  
*Oplopanax horridus* (Sm.) Miq. +  
*Oplopanax japonicus* +  
*Opuntia ficus-indica*, Mill. +  
 Orange (peel, pulp, oil) #  
 orange oil ~  
 Orange oil 2 1/2 fold #  
 orange peel ~  
 Orange powder # ~  
 orange pulp ~  
 Orchic # ~  
*Orchis latifolia* +  
*Orchis masculata*, Linn. +  
*Origanum majorana* L. +  
*Origanum vulgare* L. subsp. *Hirtum* (Link) ietswaart +  
 Ornithine # ~  
 Ornithine Alpha-Ketoglutarate (OKG) # ~  
 Ornithine monohydrochloride # ~  
 Orotates # ~  
*Oroxylum indicum*, Vent. +  
*Orthosiphon stamineus* +  
*Oryza sativa* Linn. +  
*Osmunda regalis* +  
*Ottonia anisum* +  
 Ox bile extract # ~  
*Oxalis corniculata*, Linn. +  
 Oyster extract powder # ~  
 Oyster shell powder # ~  
 P.E.G. E-3350 ~  
 PABA ~  
*Pachypodanthium staudtii* +  
 Pacific Nori # ~  
*Pacific alaria (Alaria marginata)* # ~  
*Paecilomyces hepiali* Chen mycelia ~  
*Paederia foetida* Linn. +  
*Paeonia albiflora* Pall. +  
*Paeonia lactiflora* Pall. +  
*Paeonia obovata* +  
*Paeonia officinalis* L. +  
*Paeonia suffruticosa* Andr. +  
*Paeonia veitchii* +  
 pagodabuds(Japan) ~  
 Pagodabuds, Japan, PW Rutin #  
 PAK ~  
 palm kernel oil ~  
 Palm Oil ~ #  
 palmitic acid ~  
 Palmitic acid #  
*Panax ginseng* C. A. Meyer + ~  
*Panax notoginseng* (Burk.) F.H. Chen +  
*Panax pseudoginseng* var. *notoginseng* +  
*Panax quinquefolium* + ~  
*Panax quinquefolius* L. +  
*Panax schinseng* Nees +  
 Pancreas # ~  
 pancreatin 4NF ~  
 Pancreatin 4X, pancreatin 4NF #  
 Pancrelipase # ~  
*Pandanus odoratissimus* +  
*Pandanus tectorius* Soland. ex Parkinson. +  
 pantothenic acid ~  
 Papain # ~  
*Papaver rhoeas* L. +  
*Papaver somniferum* L. +  
 Papaya enzymes # ~  
 Papaya fruit powder # ~  
 papaya oil ~  
 papaya powder ~  
 Para-amino benzoic acid (PABA) # ~  
*Parietaria diffusa* Mert. & W. Koch +  
*Parietaria officinalis* L. +  
*Paris polyphylla* +  
*Parmelia perlata* Ach. +  
*Parnassia palustris* +  
 Parotid # ~  
 parsley ~  
 Parsley (*Carum petroselinum*) seed oil # ~  
 parsley concentrate ~  
 Parsley leaf powder # ~  
 parsley, dehydrated ~  
*Parthenium integrifolium* L. +  
 partially defatted peanut flour ~  
 passiflora ~  
*Passiflora caerulea* +  
*Passiflora edulis* +  
*Passiflora incarnata* L. +  
*Passiflora laurifolia* L. +  
*Passiflora quadrangularis* +  
 passion flower ~ #  
 passion flower extract ~  
 pastelsia palmaeformis ~

- Pau D'Arco ~  
 pau d'arco extract ~  
 Paullinia cupana Humb., Bonpl. & Kunth. +  
 Paullinia pinnata +  
 Paullinia sorbilis +  
 Pausinystalia yohimbe Pierre ex Beille +  
 Pavonia odorata +  
 Pea fiber # ~  
 pea powder ~  
 Pea Protein # ~  
 peanut butter ~  
 peanuts, diced roasted ~  
 peanuts, part defatted ~  
 Pedalium murex Linn. +  
 Pedicularis bracteosa +  
 Peganum harmala +  
 Pelargonium graveolens L'Har. ex Aiton +  
 pema canaliculus ~  
 Pennyroyal # ~  
 Peppermint # ~  
 peppermint extract ~  
 peppermint leaf extract ~  
 Peppermint oil # ~  
 Pepsin enzymes # ~  
 peptonate ~  
 Pericampylus incanus (Colebr.) Miers. +  
 Perilla frutescens +  
 perna canaliculus ~  
 Peroxidase # ~  
 Petasites officinalis, P. Hybrids +  
 Petesites frigidus +  
 Petesites hybrids +  
 Petligera canina +  
 Petroselinum crispum (Mill.) Nym. ex A.W. Hill +  
 Petroselinum sativum Hoffm. +  
 Peucedanum graveolens +  
 Peucedanum praeruptorum Koch. +  
 Peumus boldus Molina +  
 Pfaffia paniculata (Mart.) Kuntze +  
 Phaeophyceae +  
 Phalaris canariensis L. +  
 pharmaceutical glaze ~  
 Pharmaceutical glaze #  
 Phaseolus radiatus Linn. +  
 Phaseolus trilobus +  
 Phaseolus vulgaris L. +  
 Phellodendron amurense Rupr. +  
 Phellodendron chinense Schneid. +  
 Phenylalanine # ~  
 Phenyltoloxamine citrate # ~  
 Phoenix dactylifera L. +  
 Phoradendron flavescens Nutt. ex Engeim. +  
 Phoradendron leucarpum (Raf.) Reveal & M.C. Johnston +  
 Phoradendron villosum +  
 Phosphatase # ~  
 Phosphates # ~  
 Phosphatidic acid # ~  
 Phosphatidylcholine # ~  
 Phosphatidylethanolamine # ~  
 Phosphorus (hydroxyapatite) #  
 Phosphorus protein chelate # ~  
 phosphorus protein chelate ~  
 Phragmites communis +  
 Phycocyanin # ~  
 Phycoerythrin # ~  
 Phyllanthus amarus Schum. Thonn +  
 Phyllanthus emblica L. +  
 Phyllanthus hiruri +  
 Phyllanthus niruri, Linn. +  
 Phyllanthus urinaria +  
 Phyllantinis emolica +  
 phyloquinone ~  
 Phyllostachys nigra var henionis +  
 Phytolacca Americana L. +  
 Phytolacca decandra L. +  
 phytonadione ~  
 Phytosterols # ~  
 Picolinates # ~  
 Picrasma excelsa (Swartz) Planch. +  
 Picrohiza kurrooa Benth. +  
 Pilocarpus jaborandi Holmes +  
 Pilocarpus microphyllus Stapf +  
 Pilocarpus pennatifolius Lem. +  
 Pimenta dioica (L.) Merr. +  
 Pimenta officinalis Lindl. +  
 Pimpinella anisum L. +  
 Pimpinella magna +  
 Pimpinella saxifraga +  
 Pine Bark extract # ~  
 pineapple powder ~  
 Pinellia ternata (Thunb.) Briet. +  
 Pinelliae ternatae +  
 Pinguicula vulgaris +  
 Pinus deodara +  
 Pinus longifolia +  
 Pinus roxburghii Sargent. +  
 Pinus strobus L. +  
 Pinus succinifera +  
 Pinus sylvestris L. +  
 Piper aduncum +  
 Piper aurantiacum Wall. +  
 Piper betle +  
 Piper chaba, Hunter, Scindapsus +  
 Piper cubeba L. fil. +  
 Piper Longum L. +  
 Piper methysticum G. Forster +  
 Piper nigrum L. +  
 Piper officinarum +  
 Piper subela +  
 Piscidia erythrina +  
 Piscidia piscipula +  
 Pistacia integerrima Stew. ex Brandis. +  
 Pisum sativum +  
 Pituitary # ~  
 Plantago arenaria Waldst. & Kit. +  
 Plantago asiatica L. +  
 Plantago ispagula +  
 Plantago lanceolata L. +  
 Plantago major L. +  
 Plantago media L. +  
 Plantago ovata Forssk. +  
 Plantago psyllium +  
 Plantain leaf # ~  
 Platinum #  
 Platycladus orientalis (L.) Franco +  
 Platycodon grandiflorum (Jacq.) A. DC +  
 Pleurisy root # ~  
 Pluchea lanceolata Oliver & Hiern. +  
 Plumbago zeylanica Linn +  
 Plumeria lancifoliata ~  
 Podophyllum emodi Wallich ex Hook. f. & Thomson +  
 Podophyllum hexandrum Royle. +  
 Podophyllum peltatum L. +  
 Pogostemon cablin (Blanco) Benth. +  
 polydextrose ~  
 Polyethylene glycol # ~  
 polyethylene glycol, 400 ~  
 Polygala senega L. +  
 Polygala sibirica L. +  
 Polygala tenuifolia Willd. +  
 Polygonatum biflorum (Walter) Elliott +  
 Polygonatum cirrhifolium +  
 Polygonatum commutatum +  
 Polygonatum odoratum (Mill.) Druce +  
 Polygonatum officinale All. +  
 Polygonatum sibiricum Red. +  
 Polygonum aviculare +  
 Polygonum bistorta L. +  
 Polygonum chinense +  
 polygonum multiflorum ~  
 Polygonum multiflorum Thunb. +  
 Polygonum viviparum +  
 Polyphenols # ~  
 Polypodium calaguala +  
 Polypodium californica +

- Polypodium lepidopteris +  
 Polypodium vulgare +  
 Polyporus umbellatus +  
 Polysaccharides # ~  
 Polysorbate 80 # ~  
 Poncirus trifoliata +  
 Pongamia glabra Vent. +  
 Pongamia pinnata +  
 Poplar bud extract # ~  
 Populus balsamifera L. var. +  
 Populus tremuloides Michx. +  
 Populus trichocarpa +  
 Populus x jackii Sarg. +  
 Poria cocos (Schw.) Wolf +  
 Porophyllum ruderale +  
 Portulaca grandiflora +  
 Portulaca oleracea L. +  
 Postogemon patchouli +  
 Potassium # ~  
 potassium alginates ~  
 Potassium amino acid chelate # ~  
 potassium ascorbate ~  
 Potassium aspartate # ~  
 Potassium benzoate # ~  
 Potassium bicarbonate # ~  
 potassium borate ~  
 potassium caprylate ~  
 Potassium caseinate # ~  
 Potassium chloride # ~  
 Potassium citrate # ~  
 Potassium gluconate # ~  
 Potassium glycerophosphate # ~  
 Potassium iodide # ~  
 Potassium phosphate # ~  
 Potassium protein chelate # ~  
 Potassium sorbate # ~  
 Potassium succinate # ~  
 Potassium sulfate # ~  
 Potassium tartrate # ~  
 Potato starch # ~  
 Potentilla erecta (L.) Raesch. +  
 Potentilla reptans +  
 Potentilla tormentilla Stokes +  
 Pothos officinalis +  
 Povidone # ~  
 Pregel, starch NF starch 1500 # ~  
 Premna herbacea +  
 Premna integrifolia Linn. +  
 Premna mucronata +  
 Prickly Ash (bark) # ~  
 Primex ~  
 Primrose # ~  
 Primula veris L. +  
 Prinsepia uniflora Batalin +  
 Pristimera indica +  
 proanthocyanidin ~  
 Procyanadins # ~  
 Proline # ~  
 Prooticarb-MG1 # ~  
 propolis ~  
 propylene glycol ~  
 propylene glycol alginate ~  
 Propylene glycol; esters of propylene glycol #  
 Prostate # ~  
 prosweet powder, natural ~  
 Protease # ~  
 Proteinates # ~  
 prune ~  
 Prune powder-dried (*Prunus aractus*) # ~  
 Prunella vulgaris L. +  
 Prunus africana +  
 prunus aractus ~  
 Prunus armeniaca L. +  
 Prunus avium +  
 Prunus cerasus +  
 Prunus communis +  
 Prunus domestica + ~  
 Prunus dulcis (Mill.) D.A. Webb. var. amara (DC.)  
     H.E. Moore +  
 Prunus ilicifolia +  
 Prunus insititia +  
 Prunus japonica +  
 Prunus mume (Sieb.) Sieb. et Zucc. +  
 Prunus padus +  
 Prunus paranaensis +  
 Prunus persica (L.) Batsch +  
 Prunus puddum +  
 Prunus serotina Ehrh. +  
 Prunus spinosa L. +  
 Prunus virginiana +  
 Pseudoephedrine HCl #  
 Pseudotellaria heterophylla Miq. +  
 Psidium pomiferum +  
 Psidium pyriferum +  
 Psoraleae corylifoliae +  
 Psyllium (husks, seed) # ~  
 Ptelea trifoliata +  
 Pterocarpus bengalensis +  
 Pterocarpus marsupium +  
 Pterocarpus santalinus L. fil. +  
 Ptychopetalum olacoides Benth. +  
 Ptychopetalum uncinatum Anselmino +  
 Pueraria lobata (Willd.) Ohwi +  
 Pueraria thomsonii Benth. +  
 Pueraria tuberosa +  
 puffed brown rice ~  
 puffed oat groats ~  
 Pulmonaria officinalis L. +  
 Pulsatilla chinensis +  
 Pulsatilla patens +  
 Pulsatilla vulgaris +  
 Pumpkin seed meal # ~  
 Pumpkin seed oil # ~  
 Punica granatum L. +  
 purified cellulose, granular ~  
 Purvinella rapa+~  
 PW Rutlin ~  
 Pycnogenol (proanthocyanidin, pine bark extract) # ~  
 Pygeum africanum # ~ +  
 pyridoxal ~  
 pyridoxal-5-phosphate ~  
 pyridoxamine ~  
 pyridoxine HCL ~  
 Pyridoxine ketogluturate # ~  
 Pyridoxine-alpha ketogluturate (PAK) # ~  
 Pyrola rotundifolia +  
 pyrophosphate, sodium acid ~  
 Pyrostegia ignea +  
 Pyrus malus +  
 Pyruvate # ~  
 Quassia amara L. +  
 Quercetin # ~  
 Quercus alba L. +  
 Quercus infectoria, Oliv. +  
 Quercus robur L. +  
 Quillaja saponaria Molina +  
 Quinoa # ~  
 Quisqualis indica L. +  
 raisin paste ~  
 raisins ~  
 Raphanus sativus Linn. +  
 Rauwolfia serpentina Benth. ex Kurz. +  
 reclaimed netting ~  
 Reclaimed netting-0989 & 1109 #  
 Red Clover tops (*Tilfolium pratense*) # ~  
 red jujube date extract ~  
 Red Raspberry (leaves) # ~  
 red root ~  
 Red root/Jersey tea #  
 red wheat flakes bran ~  
 red yeast rice ~  
 Rehmannia # ~  
 Rehmannia glutinosa Liboschitz \*  
 Rehmannia glutinosa Steud. +  
 Reishi mushrooms # ~  
 Rennet # ~

- retinol ~  
 retinyl esters ~  
 Rhamnose # ~  
 rhamnus ~  
 Rhamnus californicus +  
 Rhamnus cathartica +  
 Rhamnus frangula L. +  
 Rhamnus purshiana D.C. +  
 Rheum acuminatum +  
 Rheum emodi, Wall. +  
 Rheum officinale Baill. +  
 Rheum palmatum L. +  
 Rheum tanguticum Maxim. ex. Balf. +  
 Rhizopus enzyme # ~  
 Rhodiola rosea +  
 Rhodomirtus tomentosus +  
 Rhodymenia palmata (J.F. Lamour.) Grev. +  
 Rhubarb juice powder # ~  
 Rhubarb root powder # ~  
 Rhus acuminata +  
 Rhus aromatica +  
 Rhus coriaria L. +  
 Rhus glabra L. +  
 Rhus succedanea, Linn +  
 Ribes grossularia +  
 Ribes nigrum L. +  
 riboflavin ~  
 riboflavin-phosphate sodium ~  
 Rice bran powder # ~  
 rice crisp, extruded ~  
 rice flour ~  
 Rice protein # ~  
 Rice protein concentrate # ~  
 rice syrup ~  
 Rice syrup solids # ~  
 rice wafer ~  
 Ricinus communis, Linn. +  
 Ricinus dicoccus +  
 Ricorrhiza kurroa +  
 Ritchiea reflexa +  
 RNA # ~  
 rolled oats ~  
 Rorippa nasturtium-aquaticum (L.) Hayek +  
 Rosa alba L. +  
 Rosa canina L. +  
 Rosa centifolia L. +  
 Rosa dahurica +  
 Rosa damascena L. +  
 Rosa gallica L. +  
 Rosa indica +  
 Rosa laevigata +  
 Rosa rugosa L. +  
 Roscoea procera +  
 Rose hips (powder) # ~  
 Rosemary (leaves, extract) # ~  
 Rosemary oil # ~  
 Rosmarinus officinalis +  
 Rottlera tinctoria +  
 royal jelly ~  
 Rubia cordifolia, Linn. +  
 Rubia tinctoria +  
 Rubus fruticosus L. +  
 Rubus idaeus L. +  
 Rubus laciniatus +  
 Rubus strigosus Michx. +  
 Rubus suavissimus S. Lee +  
 Rubus villosus +  
 Rubus wallichii +  
 Rudbeckia purpurea +  
 Rumex acetosella L. +  
 Rumex alpinus L. +  
 Rumex crispus Linn. + ~  
 Rumex hymenosepalus Torr. +  
 Rumex obtusifolius L. +  
 Rumex vesicarius, Linn +  
 Ruscus aculeatus L. + ~  
 Ruta graveolens L. +  
 Rutin # ~  
 rye flour ~  
 Rye grass powder # ~  
 Sacamone afzelii +  
 Saccharomyces boulardii # ~  
 Saccharum arundinaceum +  
 Saccharum crudum +  
 Saccharum lactis +  
 Saccharum munja +  
 Saccharum officinarum Linn. +  
 Saccharum granorum +  
 safflower ~  
 Safflower oil # ~  
 Safflower/Mexican Saffron #  
 Sage (Salvia officinalis) # ~  
 Salisb. ex Nutt. +  
 Salisburia adiantifolia +  
 Salix alba L. +  
 Salix nigra +  
 Salmalia malabarica +  
 Salmon oil # ~  
 Salt, sea #  
 Salvadora persica, Linn. +  
 Salvia apiana +  
 Salvia columbariae Benth. +  
 Salvia hispanica L. +  
 Salvia mellifera Greene +  
 Salvia miltiorrhiza Bunge +  
 Salvia officinalis L. + ~  
 Salvia piebeia R.Br. +  
 Salvia sclarea L. +  
 Samalum album +  
 Sambucus australis +  
 Sambucus canadensis L. +  
 Sambucus nigra L. +  
 Sanguinaria canadensis L. +  
 Sanguisorba officinalis +  
 Sanicula europaea L. +  
 Sansevieria roxburghiana +  
 Santalum album L. +  
 Saraca asica Rohb. +  
 Saraca indica L. +  
 Sardine oil # ~  
 Sargassum fusiforme +  
 Sarsaparilla (root) (Smilax officinalis) # ~  
 Sassafras albidum (Nutt.) Nees +  
 Sassafras officinale T. Nees & C. H. Ebermaier +  
 Satureja douglasiana +  
 Satureja hortensis L. +  
 Satureja montana L. +  
 Saussurea lappa (Dcne.) C. B. Clarke +  
 Saussurea obvallata, Wall. +  
 Saw palmetto (serenoa serrulata) # ~  
 Saxifagaraga ligulata +  
 Saxifraga ligulata, Wall. +  
 Schinus molle +  
 Schinus terebinthifolia Raddi +  
 Schisandra chinensis (Turcz.) Baill. +  
 Schizandra (berries) # ~  
 schizandra berry extract ~  
 Schizonepeta tenuifolia +  
 Scilla maritima +  
 Scindapsus officinalis Schott. +  
 Scolopendra subspinipes +  
 Scopolia camioica Jacq. +  
 Scrophularia californica +  
 Scrophularia marilandica L. +  
 Scrophularia ningpoensis +  
 Scrophularia nodosa L. +  
 Scullcap herb powder # ~  
 Scutellaria baicalensis Georgi +  
 Scutellaria californica +  
 Scutellaria lateriflora L. +  
 sea cucumber ~  
 Sea cucumber (Beche-de-mer) #  
 sea kelp powder ~  
 sea palm ~  
 Sea palm (Pastelsia palmaeformis) #  
 sea salt ~

- sea vegetable ~  
 Secale cereale +  
 Sedum sarmentosum +  
 Seguiera alliacea +  
 Seguiera americana +  
 Selenicereus grandiflorus(L.)Britton&Rose +  
 Selenium # ~  
 Selenium (L-Selenomethionine, selenocysteine, selenocystine) #  
 Selenium (sodium selenate) #  
 Selenium amino acid chelate # ~  
 Selenium ascorbate # ~  
 Selenium chelate # ~  
 Selenium Cysteine # ~  
 Selenium Cystine # ~  
 Selenium hydrolyzed protein # ~  
 Selenium protein chelate # ~  
 Selenium selenite # ~  
 Selenium yeast concentrate # ~  
 selenocysteine ~  
 selenocystine ~  
 Seline # ~  
 Semecarpus anacardium Linn. +  
 Senega extract # ~  
 Senna alexandrina Mill. +  
 Senna obtusifolia (L) Irwin & Barneby +  
 Senna tora (L) Roxb. +  
 Senna-leaves (cassia angustifolia) # ~  
 Serenoa repens (W. Bartram) Small +  
 serenoa serrulata ~  
 Serenoa serrulata (Michx.) G. Nichols. +  
 Serine # ~  
 sesame oil ~  
 Sesamum indicum +  
 Sesamum orientale L. +  
 sesquioxide ~  
 Shark cartilage # ~  
 shave grass ~  
 Shiitake mushroom extract # ~  
 Shorea robusta, Gaertn. +  
 Siberian ginseng (Eleutherococcus senticosus) # ~  
 siberian ginseng extract ~  
 Sida cordifolia L. +  
 Sida rhombifolia +  
 Sida rhombifolia Linn +  
 Sida veronicaefolia Lann +  
 Siler divaricatum Benth. & J. D. Hook +  
 silica ~  
 Silicon (silica) (sodium metasilicate) #  
 Silicon dioxide # ~  
 Silicon protein complex # ~  
 silicone ~
- Silver #  
 Silybum marianum (L.) Gaertn. + ~  
 Simarouba excelsa +  
 Simplicus racemosa +  
 Sinapis alba L. +  
 Siraitia grosvenorii (Swingle) C. Jeff. +  
 Sisymbrium nasturtium-aquaticum +  
 Skimmia laureola, Hook +  
 Skip Jack liver oil # ~  
 Slippery Elm (bark) # ~  
 Smilax china +  
 Smilax febrifuga Kunth +  
 Smilax glabra +  
 Smilax glauca Walter +  
 Smilax Japicanga +  
 Smilax medica Schlechtend. & Cham. +  
 smilax officinalis ~  
 Smilax ornata Lem. +  
 Smilax regelii Killip & Morton +  
 Snake root # ~  
 SOD ~  
 sodium alginates ~  
 sodium ascorbate ~  
 sodium borate ~  
 Sodium Caprylate # ~  
 sodium caprylates ~  
 Sodium carbonate # ~  
 Sodium carboxmethylcellulose # ~  
 sodium chloride ~  
 Sodium chlorite # ~  
 sodium citrate ~  
 sodium citrate, hydrous ~  
 Sodium copper chlorophyllin # ~  
 Sodium lauryl sulfate # ~  
 sodium meta vanadate ~  
 sodium metasilicate ~  
 sodium molybdate ~  
 Sodium molybdate powder # ~  
 sodium phosphate, dihydrate ~  
 sodium selenate ~  
 Sodium starch glycolate NF # ~  
 Sodium sulfate # ~  
 Solanum dulcamara +  
 Solanum incertum +  
 Solanum indicum Linn. +  
 Solanum jackquinii +  
 Solanum jilo +  
 Solanum lycopersicum +  
 Solanum nigrum Linn. +  
 Solanum paniculatum +  
 Solanum rubrum +  
 Solanum tuberosum +
- Solanum xanthocarpum, Schrad & Wendil +  
 Solidago canadensis +  
 Solidago virgaurea L. +  
 Sonchus oleraceus +  
 Sophora flavescens Ait. +  
 Sophora japonica +  
 Sorbitan # ~  
 Sorbitan A # ~  
 Sorbitol # ~  
 Sorbus amurensis +  
 Sorbus aucuparia +  
 soy ~  
 soy bran ~  
 soy concentrate ~  
 Soy fiber # ~  
 soy flour ~  
 Soy Lecithin # ~  
 soy lecithin, hydroxylated ~  
 Soy polysaccharide # ~  
 soy protein ~  
 soy protein hydrosylate ~ #  
 soy protein isolate ~ #  
 Soybean oil # ~  
 Soymida febrifuga +  
 Sparganium simplex +  
 Sparganium stoloniferum +  
 Spartium scoparium L. +  
 Spatholobus suberectus +  
 Spearmint # ~  
 Spearmint oil, natural # ~  
 Spelt grass powder # ~  
 Sphaeranthus indicus Linn. +  
 Spheranthus hirtus +  
 Spigelia anthelmia +  
 Spigelia marilandica L. +  
 Spilanthes acmella L. ex J. A. Murray +  
 Spinacea oleracea +  
 Spinach #  
 Spinach powder # ~  
 Spiraea ulmaria +  
 Spiropetalum heterophyllum +  
 Spirulina # ~  
 Spleen # ~  
 Spongia officinalis +  
 Squalene # ~  
 Squaw vine # ~  
 St. John's bread ~  
 St. Johnswort herb extract # ~  
 Stachys officinalis (L.) Tervis. +  
 stannous chloride ~  
 Starch # ~  
 Stearic acid # ~

- stearic acid, vegetable powder ~  
 Stellaria media (L.) Vill. +  
 Stemona sessilifolia +  
 Stephania tetrandra S. Moore +  
 Sterculia acuminata +  
 Sterculia acuminata powder # ~  
 Stereospermum suaveolens D.C. +  
 Sterol complete premix # ~  
 Sterotex K vegetable stearin # ~  
 Stevia ivaefolia +  
 stevia rebaudiana ~ #  
 Stevia rebaudiana (Bertoni) Hemsl. +  
 Sticta pulmonaria +  
 Stillingia sylvatica Garden ex L. +  
 Stomach # ~  
 Strawberry concentrate # ~  
 strawberry powder ~  
 Streptococcus faecium (Enterococcus faecium) #  
 Streptococcus salivarius #  
 Streptococcus thermophilus #  
 Strychnos nux-vomica, L. +  
 Strychnos potatorum +  
 Styra benzoin Dryander +  
 Styra paralleloneurum Perkins +  
 Styra tonkinensis (Pierre) Craib. Et Hartw. +  
 Succinates # ~  
 Sucrase # ~  
 sucrose ester ~  
 sugar, brown ~  
 sugar, powdered, food grade ~  
 Sulfated Castor oil # ~  
 Sulfates # ~  
 Sulphur # ~  
 Suma # ~  
 Suma root powder # ~  
 Sunflower oil # ~  
 sunflower oil with tocopherol ~  
 sunflower oil, hydrogenated ~  
 Sunflower seed meal # ~  
 Superex S-3027, 2nd # ~  
 Superoxide Dismutase (SOD) #  
 Sweet dairy whey powder # ~  
 Swertia chirayita +  
 Swertia radiata +  
 Symphytum officinale L. +  
 Symphytum x uplandicum Nyman +  
 Symplocarpus foetidus (L.) +  
 Symplocos racemosa, Roxb. +  
 Symplocos theaeifolia +  
 Syringia vulgaris +  
 Syzygium aromaticum (L.M.) err. & L.M. Perry +  
 Syzygium cumini Skeels +  
 Syzygium jambolana DC., +  
 Syzygium jambolana Lam. +  
 Syzygium jambos +  
 T dioxide/glycerin disper # ~  
 Tabebuia avellanedae auct. +  
 Tabebuia heptaphylla (Vell.) +  
 Tabebuia impetiginosa (Mart. ex DC.) Standl. +  
 Tacca aspera Roxb. +  
 Tagates erecta + ~  
 Tagates lucida +  
 Tamarindus indica +  
 Tamarix gallica +  
 tanacetum parthenium ~  
 Tanacetum parthenium (L.) Schultz-Bip. +  
 Tanacetum vulgare L. +  
 Tangerine extract # ~  
 Taraxacum densiconis +  
 Taraxacum mongolicum +  
 Taraxacum officinale G.H. Weber ex Wigg. +  
 taraxicum deins-leonis ~  
 tartaric acid ~  
 Taurine # ~  
 Taxus baccata, Linn. +  
 Tea polyphenols # ~  
 Tecoma undulata +  
 Tectona grandis +  
 Teinshi ginseng # ~  
 Tephrosia purpurea (Linn.) Pers. +  
 Tephrosia villosa +  
 Terminalia arjuna Bedd. +  
 Terminalia bellerica (Gaertn.) Roxb. +  
 Terminalia chebula (Gaertn.) Retz. +  
 Ternstroemia pringlei (Rose) +  
 Tetracosanol # ~  
 Tetrose # ~  
 Teucrium chamaedrys L. +  
 Teucrium scorodonia L. +  
 Thea sinensis +  
 Thelesperman trifidum +  
 Theobroma cacao L. +  
 thiamine HCl ~  
 thiamine HCl, USP ~  
 thiamine mononitrate ~  
 Thonningia sanguinea +  
 threonic acid ~ #  
 threonic salts ~ #  
 Threonine # ~  
 Thuja occidentalis L. +  
 Thuja orientalis L., +  
 Thuja plicata +  
 thyme extract ~  
 thyme powder ~  
 Thymus # ~  
 Thymus serpyllum +  
 Thymus vulgaris L. +  
 Thymus xcitriodorus (Pers.) Schreb. +  
 Thyroid #  
 Tilia platyphyllos Scop +  
 Tilia x europaea L. +  
 Tillandsia usneoides +  
 Timida Tsen et Lee +  
 tin ~  
 Tin (stannous chloride) #  
 Tinospora cordifolia +  
 Tinospora sinensis +  
 titanium dioxide ~  
 Toledo +  
 Torula yeast # ~  
 TR ultra mega II 1/0 iron mix # ~  
 Trachyspermum ammi +  
 Tradescantia diuretica +  
 Trametes versicolor +  
 Transfer-98 TM # ~  
 Tremella fuciformis +  
 Tri Boron complex # ~  
 Triaccontanol # ~  
 Trianosperma tayuya Mart. +  
 Tribulus aey +  
 Tribulus lenuginosus +  
 Tribulus terrestris, Linn. +  
 Tricalcium phosphate # ~  
 Trichillia barraensis +  
 Trichosanthis Kirilowii +  
 Trifolium pratense L. + ~  
 Trifolium repens +  
 Trigonella foenum-graecum L. +  
 Trillium erectum L. +  
 Trillium ovatum +  
 Tripterygium wilfordii +  
 Triticum aestivum L. +  
 Tropaeolum minus +  
 Trypsin # ~  
 Tryptophan # ~  
 turnera aphrodisiaca ~  
 Turmeric # ~  
 Turnera aphrodisiaca (Ward) Urban +  
 Turnera diffusa Willd. ex Schult. +  
 Turnera orpifera +  
 Tussilago farfara L. +  
 Tylophora asthmatica +  
 Tynnanthus elegans +  
 Tyrosine # ~  
 ubiquinone ~  
 Ulmus fulva Michx. +

- Ulmus rubra Muhl. +  
 Uncaria gambir (Hunter) Roxb. +  
 Uncaria rhyncholphylla +  
 Undecylenic acid # ~  
 Uncaria tomentosa (Willd.) DC. +  
 Unidex 2034 # ~  
 unrefined vegetable lipids (EFA) ~  
 Urea # ~  
 Urtica californica +  
 Urtica dioica L. +  
 Urtiga urens +  
 Usnea barbata (L.) Wigg. +  
 Usnea californica +  
 Usnea longissima ach. +  
 Usnea subfloridiana +  
 Uterus # ~  
 Uva Ursi # ~  
 Uva Ursi extract # ~  
 Vaccaria segetalis +  
 Vaccinium angustifolium Aiton +  
 Vaccinium corymbosum L. +  
 Vaccinium myrtillus L. +  
 Vaccinium pallidum Aiton +  
 Vaccinium oxycoccos +  
 Valerian (root) # ~  
 Valeriana edulis Nutt. ex Torr. & A. Gray +  
 Valeriana edulis procera (Kunth)F.G.Meyer +  
 Valeriana officinalis L. +  
 Valeriana sitchensis Bong. +  
 Valeriana wallichii DC. +  
 Valine # ~  
 Vanadium # ~  
 Vanadium amino acid chelate #  
 Vanadium protein complex # ~  
 Vanadium sulfate # ~  
 vandadium amino acid chelate ~  
 Vanilla planifolia Andr. +  
 Vanilla tahilensis J. W. Moore +  
 Vascularis luffae +  
 Vegetable extracts # ~  
 Vegetable magnesium stearate # ~  
 vegetable oil, hydrogenated ~  
 Vegetable rennet # ~  
 Vegetable shortening # ~  
 Vegetable squalene # ~  
 Vegetable stearic acid # ~  
 Velvet Antler \*  
 Veratrum viride Aiton +  
 Verbascum thapsus L. +  
 Verbena hastata L. +  
 Verbena leucostachys +  
 Verbena officinalis L. +  
 Veronia cinerea +  
 Veronica officinalis L. +  
 Veronicastrum virginicum (L.) Farwell +  
 Vetiveria zizaniodes (L.) Nash +  
 Viburnum opulus L. +  
 Viburnum prunifolium L. +  
 Vinca major +  
 Vinca minor L. +  
 Vinca rosea +  
 Viola cucullata +  
 Viola odorata L. +  
 Viola papilionacea Pursh pro parte +  
 Viola sororia Willd. +  
 Viola tricolor L. +  
 Virgin orange bioflavonoid complex # ~  
 Viscum album L. +  
 Viscum flavescens +  
 Vit A (retinol, retinyl esters, fish oils, beta carotene) #  
 Vit B1 (Thiamine Monontrate, Thiamine HCl, yeast) #  
 Vit B2 (Riboflavin) #  
 Vit B3(Niacin, niacinamide, niacin complex) #  
 Vit B6 (Pyridoxine HCl, Pyridoxal-5-phosphate, Pyridoxal, Pyridoxamine) #  
 Vit C (ascorbic acid, mineral ascorbates, ascorbyl esters) #  
 Vit C (calcium polyascorbate) #  
 Vit D (ergocalciferol, cholecalciferol, fish oils) #  
 Vit E (D-alpha tocopheryl acetate, linoleate, succinate, and d, l-forms) #  
 Vit E (d-beta, d-gamma, d-delta tocopherols) #  
 Vit K1 (Phylloquinone, Phytonadione) #  
 vitacel ~  
 vitamin A ~  
 vitamin A acetate ~  
 vitamin A acetate & D2 ~  
 vitamin A acetate & D3 ~  
 vitamin A palmitate, dry ~  
 vitamin B12 ~  
 vitamin B12 on resin ~  
 vitamin D2, beadlets ~  
 vitamin D3, beadlets ~  
 Vitamin E acetate ~  
 vitamin E, dl-a-tocopherol acetate ~  
 vitamin E, mixed tocopherols ~  
 vitamin K ~  
 vitamin K1 ~  
 Vitex agnus-castus L. + ~ #  
 Vitex negundo Linn. +  
 Vitis rotundifolia +  
 Vitis trifolia +  
 Vitis vinifera +  
 walnuts, diced ~  
 Watercress # ~  
 watercress concentrate ~  
 watercress, dehydrated ~  
 Wheat bran powder # ~  
 Wheat germ extract # ~  
 wheat germ flour ~  
 Wheat germ oil # ~  
 Wheat germ oil 50% powder # ~  
 Wheat germ toasted fine powder # ~  
 wheat grass ~  
 Wheat grass juice powder #  
 wheat juice powder ~  
 Wheat sprout conc. (enzyme active) #  
 wheat sprout concentrate ~  
 Whey #  
 Whey protein concentrate # ~  
 whey protein isolate ~  
 White film coating concentrate # ~  
 White oak (bark) # ~  
 White pond lily (Lilium tigrinum) # ~  
 White willow bark # ~  
 Whole brown rice powder # ~  
 Wild yam (root) # ~  
 Withania somnifera Dunal. +  
 Wolfiporia cocos (Schwein.) Ryv. & Gilbn. +  
 Wood betony # ~  
 xanthan gum ~  
 Xanthium sibiricum +  
 Xanthophyll # ~  
 Xanthorhiza simplicissima Marshal +  
 Xylaria nigripes +  
 xylitol, D.C. ~  
 xylonic acid ~ #  
 xylonic salts ~ #  
 Xylopla sethiopica +  
 Yarrow # ~  
 Yeast powder, primary grown # ~  
 yeast, bakon ~  
 yeast, basic, 60MKF ~  
 yeast, chromium ~  
 yeast, debittered brewers, NF ~  
 yeast, molybdenum ~  
 yeast, selenium ~  
 yeast, standardized ~  
 Yellow dock (root ext) (Rumex crispus) # ~  
 Yerba mate # ~  
 Yucca # ~  
 Yucca aloifolia L. +  
 Yucca baccata +  
 Yucca brevifolia Engelm. in Wats. +  
 Yucca glauca Nutt. +  
 Yucca whipplei Torr. in Emory +



Zanthoxylum alatum, Roxb. +  
Zanthoxylum americanum Mill. +  
Zanthoxylum clava-herculis L. +  
Zanthoxylum rhetsa, Linn. +  
Zanthoxylum simulans Hance +  
Zea mays L. +  
Zeaxanthin/Zeaxanthin #  
zeaxanthin ~  
Zeyheria montana +  
zinc ~  
Zinc (amino acid chelate) # ~  
Zinc (glycinate chelate) #  
Zinc ascorbate # ~  
Zinc aspartate # ~  
Zinc citrate # ~  
Zinc gluconate # ~  
zinc glycinate chelate ~  
Zinc lysinate # ~  
Zinc monomethionine # ~  
Zinc oxide # ~  
Zinc picolinate # ~  
zinc protein chelate ~  
Zinc succinate # ~  
Zinc sulfate # ~  
zinc yeast ~  
Zingiber officinale Roscoe +  
Ziziphus joazeiro +  
Ziziphus jujuba Mill. +  
Ziziphus jujuba var. spinosa Hu +  
Ziziphus spinosa Hu +  
Ziziphus vulgaris, Linn. +