



NutriPATH

INTEGRATIVE PATHOLOGY SERVICES

FOODStats

Elimination / Rotation Guide

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FOODStats

ELIMINATION / ROTATION GUIDE

FOODS THAT MAY BE CAUSING A PROBLEM

Any symptom following consumption of a food is termed an 'adverse reaction to food' (ARF). ARFs are broadly divided into three categories: toxic, psychological and nontoxic.

- Toxic reactions are the result of contaminants in the food (e.g. botulism).
- Psychological reactions are largely psychosomatic in nature based on a prior experience with the food.
- Nontoxic ARF's are further classified as either an immune-mediated reaction involving the production of antibodies to a particular food, or food intolerance (e.g. lactose intolerance).

NutriPATH assays for immune-mediated food reactions (food allergies). Our unique sandwich ELISA methodology identifies food-specific antibodies, IgE and IgG present in the individual's blood. Elevations of these food-specific antibodies are depicted on the Food panel report as a bar graph.

An IgE antibody food reaction is classified as an immediate hypersensitivity reaction, with symptoms often occurring minutes to hours after consumption of the offending food.

Delayed food reactions, involve antibodies other than IgE, namely IgG. Symptoms of delayed food reactions may occur hours to days after ingestion of the offending food and persist for days after the food is omitted. These symptoms tend to be chronic or recurrent in nature.

The FOODStats Eliminations Rotation Diet Guide lists the foods tested on the Food Panel report into their respective food families. This booklet serves as an educational aid to help you identify related foods. Please consult your health care practitioner for specific dietary recommendations.

NutriPATH Policy

NutriPATH makes no claims as to the diagnostic or therapeutic use of its test or other informational materials. Results and other information do not constitute medical advice, are provided for educational purposes only, and are not a substitute for professional medical advice. NutriPATH is not responsible or liable for misuse or misinterpretation of the information provided, or any diagnoses or healthcare changes initiated by a patient or a healthcare practitioner based on the content of NutriPATH's informational materials. Please consult your healthcare provider for questions regarding test results, or before beginning any course of supplementation or dietary changes.

YOUR 4-DAY ELIMINATION AND ROTATION GUIDELINE

1. Depending on your practitioner's advice, it is suggested to avoid your reactive foods completely for a duration of at least 3 months to a year, or until your symptoms improve, while incorporating a variety of healthy food alternatives. Your practitioner may recommend that you avoid your moderately reactive foods as well.
2. Read the labels of food products carefully for hidden sources of your reactive foods. Gelatin derived from bovine or porcine source, for example, is a commonly used encapsulation material for some vitamin and mineral supplements.
3. The 4-Day Rotation Diet Guideline contains compatible foods divided into four days by food families. The idea is not to consume the same food more than once every four days and no foods of the same family more than once every two days.
4. You may move any food through days 1 to 4 of the Rotations Guideline, as long as members of the same family are not consumed on consecutive days and particular food is not consumed more than once every four days.
5. The goal of the Rotation Guideline is to reduce repetitive intake of the same foods. This may be an aggravation towards food sensitivities.
6. If you have any symptoms during this time period, write then down (e.g. headaches). There may be a food or foods that are contributing to the problem. Very often the symptoms may be due to consumption of a food that is closely related to one of your reactive foods. If you reacted to several members of a food family, often the entire family of these foods may be eliminated from the diet for several months before they can be re-introduced. Some foods may be 'fixed allergies' in which symptoms may occur on every occasion that the reactive food is consumed.
7. When avoiding reactive foods some may experience withdrawal symptoms. Generally these symptoms are self-limiting and only last for a few days. Immediately consult your healthcare practitioner if you experience weight loss or other health-related concerns.
8. Re-testing is recommended in 3 months to re-assess.

KEY CONCEPTS TO BENEFIT FROM

Eliminate your reactive foods to simmer down the immune response

Rotate all other foods consumed to prevent new food reactions from developing

How to Plan Your Eating

1. Keep a shopping list on the fridge to jot down healthful alternatives that you think of. Reserve a time to shop for groceries that is not going to end up as a hectic last minute rush for convenient and processed foods. When shopping, stock up on live foods; fresh produce (green, red and orange vegetables), lean meats, poultry, wild fish and whole grains.
2. Purchase different items from week to week to incorporate variety into your diet.
3. Invest in a few helpful and easy to follow recipe books that allow you to be creative.
4. Prepare a few lunches and dinners in advance, or make extra to help you through those busy or tiring nights from work. The goal is to always have a healthy dish in the fridge or freezer to help you avoid convenient foods that are not necessarily nourishing.
5. Always have healthful snacks and water on hand in the car and at work. Healthful snacks include foods rich in complex carbohydrates, quality protein and fats, and fibre. Fresh vegetables, whole grain products, nuts, seeds and legumes are excellent choices of complex carbohydrates that provide essential fibre as well. A combination of legumes and grains is a good protein alternative for the vegetarian. For the non-vegetarian, lean meats, poultry and cold-water fish are great protein sources that provide essential building blocks needed for growth and repair processes. Cold-water fish in particular, is a rich source of essential fatty acids, namely omega-3 fatty acids. These fats are anti-inflammatory and promote the integrity and structure of blood vessels and nervous tissue. Colourful fruits and vegetables that are not on your reactive food list are key additions to your daily diet supplying vitamins, minerals and antioxidants which nourish your cells and tissues.
6. Select a variety of fresh vegetables; wash and wrap up before refrigerating; then keep covered. Eat within 2 or 3 days. Frozen food should be kept frozen and stored no longer than 3 months. Steaming and microwaving (5 to 7 minutes per lb) with little or no water is best. Date the foods that you store to avoid consuming spoiled products. When in doubt, throw it out.
7. Avoid packaged foods that are rich in preservatives, artificial flavourings, sweeteners and colorants.
8. Eat in a relaxed setting. Do not eat when rushed or when emotionally upset. Do not overeat.
9. As your mother has always told you, "Chew your food thoroughly". Breaking down the food you eat thoroughly is easier on your digestive system and systemic health.
10. When eating out, choose a restaurant with a large variety of quality dishes so you will have choices. Do not hesitate to ask questions about how some of the foods are prepared.

FOOD FAMILY INFORMATION OF YOUR REACTIVE FOODS

All foods are derived from either a plant or animal source and are grouped into families according to their origin. With some food groups, in certain individuals, an adverse reaction to one member of a family may result in a similar reaction to other members of the same group (known as cross-reactivity). For example, an individual allergic to peanuts may be more likely to be allergic to other legumes including soybeans and peas. Since you were not tested for all of the foods mentioned in the list of food families below, you will need to discuss any additional dietary restrictions with your practitioner.

This is NOT a list of foods to avoid. It is simply for your information.

For easy referral, the foods and inhalants tested are listed in *italics*.

ALGAE FAMILY (*Laminariaceae*)

Arame, brown algae, blue-green algae, dulse, hijiki, kelp, nori, red seaweed, red algae, *spirulina* and wakame.

Sources: 'Green drinks' and Asian cookery. Konbu is a key ingredient used to make dashi (soup stock), sushi, and miso. Other types of seaweeds, hijiki and wakame, are used in salads and mixed vegetables dishes. Toasted nori, yanikori is a packaged snack found in many Asian markets.



The food additive kelp (kombu, konbu), is the dehydrated, ground product prepared from *Macrocystis pyrifera*, *Laminata digitata*, *Laminaria saccharina* and *Laminaria cloustoni*.

As a flavour and nutrient enhancer, kelp may be included in what may simply be labelled as 'noodle sauce'; a mixture of shoyu (soybean, wheat, salt), dried bonito, kelp, sugar and salt. This seasoning mix is included in many instant food preparations.

Sodium alginate, Potassium Alginate, and Ammonium Alginate are distillates of alga and may be found listed on processed food packages as a thickener, emulsifier, stabilizer, and binder. In addition, alginic acid is used in ice cream to prevent it from crystallizing.

Sold as a medicine, K-Alginate Tea is distributed in some countries as an antihypertensive.

Kelp powder is also found in a variety of soaps as an exfoliating agent.

AMARANTH FAMILY (Amaranthaceae/chenopodiaceae)

Amaranth, beet, sugar beet, green spinach, quinoa and Swiss chard.

Sources of amaranth: Bakery products, snacks, cereals, batter and breading, dry mixes, pilaf polenta and other goods containing amaranth. Related plants: Rough amaranth, campala, Joseph's coat, lady bleeding, pilewort, prince's feather red cockscomb, spleen amaranth, summer cypress, spearscale, tassel flower, tumbleweed and wild beet.



Sources of beet, spinach, quinoa: Beet soup (Borscht), pickled beets, some relish, beet sugar, spinach dips and some casserole dishes, quinoa flour, and quinoa cereal. Spinach is contained in any dish called Florentine. It is also in Italian Cannelloni, and Greek spanakopita.

Foods containing beet sugar: Beet sugar appears on labels as DEXTROSE, sugar and SUCROSE, and may be found in most canned foods, packaged cereals, processed meats (bacon, hot dogs, luncheon meats, hams, turkey hams, sausages), condiments (catsup, mayonnaise, salad dressings, BBQ and meat sauces), Equal dextrose, dehydrated corn syrup and other additives), syrups, molasses, fruit drinks and beverages, jams, jellies and peanut butter.

ARUM FAMILY (Araceae)

Taro (dasheen, cocoyam, poi)

Taro is known as the "potato of the humid tropics. The starchy corms (stems) of the plant are roasted, boiled, or baked, and may be made into cakes. Heating is necessary to remove an acid, irritating property of the raw corm. Because of its digestibility, taro flour may be used in infant formulae and canned baby foods.

ASTER/DAISY FAMILY (Asteraceae)

Artichoke, burdock root, chamomile, chicory, dandelion, endive, globe artichoke, Jerusalem artichoke, lettuce (iceberg lettuce, romaine lettuce, red leaf lettuce), safflower oil, salsify (oyster plant), stevia, sunflower seeds, tansy, tarragon, vermouth, wormwood, yarrow, Echinacea and milk thistle.



Inhalants: Dog fennel, rough marsh elder, common mugwort, poverty weed, rabbit bush, short ragweed. Western ragweed, common sagebrush.

Related plants and chemicals: Aster, bachelor's button, mum, chrysanthemum, cosmos, dahlia, daisy, goldenrod, heliopsis, lad's love, marigold, pyrethrum, sunflower, saffron, zinnia, blessed thistle, tansy, feverfew, and lavender cotton. Pyrethrum is used in insect sprays and in mothballs. If you are very sensitive to the members of this family and related plants, avoid insect sprays containing pyrethrum.

BANANA FAMILY (Musaceae)

Banana and plantains.

Sources: Baked goods, banana bread, banana chips, cereals, shakes and smoothies.

A cross-reactivity of banana and latex – containing products has been reported in subjects with so called 'latex-fruit syndrome'.



BEE FAMILY (Apidae)

Honey, bee pollen, beeswax, commercial blended honey, honeycomb, raw honey, and Tapulo honey.



BOVINE FAMILY (Bovidae)

Beef, calf, veal, gelatin, rennin, rennet tablets, sausage casings; cow's milk, cow's milk cheeses, whey, casein, yogurt and other dairy products; goat, goat milk, goat dairy products; lamb and mutton.

Beef products: Steak, short ribs, London broil, shoulder roast, ground beef, pot roast, corned beef, beef jerky, beef sausage, processed meat products, luncheon meats, beef heart, tripe, tongue, gelatin, jelly, medications in gelatin capsules, beef broth, beef bouillon, soups, main dish mixes, skillet dinners, hamburgers, hot dogs, and meat dinners.



A note about gelatin: A common ingredient of many processed foods including confectionery, fruit gums, food thickeners, dips, glazes, icing, soups, chilled dairy products, (yogurt, hams, and pate) used to clarify fruit juices and wine.

Non-food sources include collagen implants for plastic surgery, gelatin sponges for surgical haemostasis, colloid solutions (Haemacel), dissolvable contact lenses, stabiliser in some vaccines (MMR), binding and coating agent in tablets and capsules, shampoo, glue, matches and photographic emulsions.

A note about finished wax coatings: Manufacturers may add stearic acid (a fat that may be derived from animal or vegetable sources) to carnauba wax; a wax derived from palm trees, used to coat stone fruits, and a variety of vegetables.

MILK AND DAIRY PRODUCTS

Cow's milk, powdered milk, cream, Half & Half, buttermilk, sour cream, whey, casein, lactalbumin phosphate, lactose and milk solids.

Sources: Sauces and gravies, batter fried foods, breads, cakes, muffins, puddings, cream soups, ice cream, sherbets and milk chocolate.

Lactalbumin is a protein found in cow's milk. When milk is heated, the lactalbumin becomes insoluble and forms a film on the surface. Continued heating of the milk at high temperatures allow this film to be easily removed. This is why some milk-sensitive people can tolerate an evaporated milk formula. During the cheese making process, the proteins are separated into curds and whey. Lactalbumin primarily remains in the whey. As such, many milk sensitive people may be able to tolerate hard cheese since most of the lactalbumin has been removed.



Casein is also a milk-derived protein found in any food product that contains dairy. Caseinates impart a creamy character and stabilize fats in non-dairy products, such as coffee whiteners, cheese-sauce powders, and bind water in processed meat and baked goods.

Hidden sources of milk proteins: Deli meat slicers used for meat and cheese products, canned tuna fish may contain casein. Restaurants may put butter on steaks after grilling to add flavour (ask the waiter about potential hidden dairy additions to your meal of choice), Alpine cereal, batter-fried foods, breads, breakfast cereals, cakes, chocolate, cookies, cream sauces, cream soups, custard, fish in batter, gravies and gravy mixes, ice cream ("non-milk" fat), imitation sour cream, instant mashed potatoes, margarine, muesli, muffins, Packaged soups, pies, puddings, rusks sausages, sherbet, soy cheese, soup mixes, sweets, canned soups, vegetarian cheese, artificial butter flavour, butter, butter fat, buttermilk solids, caramel colour, caramel flavouring, casein, caseinate, cheese, cream curds, de-lactosed whey, demineralised whey, dried milk, dry milk solids, fully cream milk powder, high protein, flavour, lactalbumin, lactalbumin phosphate, lactose, milk derivative, milk protein, milk protein, milk solids, natural flavouring, pasteurized milk, rennet casein, skim milk powder, solids, sour cream solids, sour milk solids, whey, whey powder, whey protein concentrate, yogurt, casein in wax (casein may be used as a thickener in lac-resin waxes – a finished wax coating used for citrus fruits, apples, and pears. Other names for lac-resin include; lac, shellac, confectioners glaze, food grade resin etc; it can therefore be found not only on produce but candies as well), seasoning mixes may contain lactose, seasoned potato chips, milk in 'non-dairy' hot dog and bologna, and milk glaze on bakery products.

Ingredients that not contain milk protein: Calcium lactate; calcium stearoyl lactylate; cocoa butter; butter of tartar; lactic acid; oleoresin; sodium lactate; sodium stearoyl lactylate

Foods containing whey: Whey protein powder, protein energy bars, imitation milk products, imitation sour cream, cream soups, soup mixes, most margarines, store bought cookies, pies, and other baked goods. If a label says Pareve or Pave, it is milk free in order to conform to Jewish food laws.

WHEY is added to numerous processed foods to improve nutritional content. It is a by-product of the cheese making process and should be avoided by all people allergic to milk.

A note on casein and whey: During the cheese-making process, curds, the solid portion of milk, are separated from the milky liquid, called whey. Although casein is the main protein in cheese, different types of cheese have varying moisture contents, as determined by the amounts of whey allowed to remain in the curds. Cheese high in moisture, such as cottage cheese; for example, may contain more whey protein than cheese with lower moisture content such as cheddar.

Cultured milk products: Butter, acidophilus milk, buttermilk, kefir cheese, sour cream, sour half and half, and yogurt.

Additional information about milk products: When milk is heated, treated with acid or rennet, or when bacteria or yeast are added, it becomes a new protein. For these reasons, those sensitive to milk MAY be able to tolerate other milk products. The methods of making cheese, the culture used to age the cheese, and the aging time creates various cheese proteins. Also, the softness of the cheese reflects the extent of solubilisation of the proteins. With cheddar cheese, there is less protein breakdown (hydrolysis) making for a firmer cheese than compared to Camembert, for instance.

CHEESE TYPES:

- SOFT - American, Baker's cheese, cottage cheese, Cream cheese, Feta cheese, Gervais, Neufchatel
- HARD AGED – Cheddars, Cheshire
- COLBY – Edam
- GRANULAR – Grana, Parmesan Reggiana, Romano, and Sardo
- MOZZARELLA – Casiocavallo, String cheese and Provolone
- SWISS – Emmental, Gruyere, Swiss and Asiago

If you are sensitive to yeast and moulds, the following cheeses may be an added source of irritation.

- MOULD RIPENED – Bleu, Brie, Camembert, Crema Dania, Liederkranz, Danish Blue, Gorgonzola, Roquefort, and Stilton
- BACTERIA RIPENED – Brick, Bell Pease, Frontina, Gammelost, Gouda, Jack, Muenster and Port de Salute
- BACTERIA AND YEAST RIPENED – Limburger
- WHEY CHEESES – Gyetost, Mysost, Primost, Ricotta, and Sapsago

Goat products, lamb and mutton: Goat milk is used to make butter, ice-cream, yogurt, cottage cheese and other cheeses. Goat milk cheeses are available in soft forms such as Feta and Chavrie, and in hard forms such as Cheddar and Swiss. Goat milk is also added to select bath products and beauty aids.

Lamb is a sheep less than a year old. Meat from an older sheep is called mutton and has much stronger flavour and tougher texture.

BUCKWHEAT FAMILY (*Polygonaceae*)

Buckwheat, buckwheat honey, rhubarb, dock, sea grape and sorrel.

Sources: Cerela, kasha. Buckwheat hulls are often mixed with black pepper; it is often used as filler in processed meats; bakers use buckwheat flour to keep their loaves from burning.

Inhalants: *Sheep sorrel*



BUTTERCUP FAMILY (*Ranunculaceae*)

Black cohosh, creeping buttercup, baneberry, Columbia wind flower, Oregon anemone, larkspur and goldenseal.

CARROT FAMILY (*Apiaceae / Umbelliferae*)

Angelica, anise (ingredient in five spice powder, woo-hsiang powder), asafoetida gum, caraway, carrot, celeriac, celery, celery seed, water celery, chervil, coriander, cumin, dill, fennel (ingredient in five spice powder, woo-hsiang powder), ferula gum, gum galbanum, kummel, parsley, parsnip, samphire, sumbul, sweet cicely and dong quai.



CARAWAY: Caraway seeds are often found in rye breads, caraway cheeses, sauerkraut, knockwurst, some cereals, cakes and cookies.

CARROT: Stews and soups containing carrots, carrot and raisin salad, tossed salads with carrots, and pot roast with carrots.

CELERY: Celeriac, celery seed, turnip rooted celery and foods containing them. Celery is used in meat sauces, soups, soup mixes, meat loaf, casseroles, green salads, poultry salads, ham salad, macaroni salads, and an ingredient in curry, V-8 juice, vegetable broths, chicken broths, beef broths and bouillon cubes.

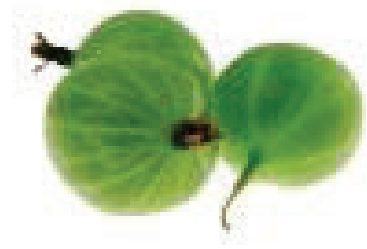
DILL: Dill seed, dill weed, dill weed oil and foods containing them. Dill may be found in: dill pickles, ranch style salad dressings, other salad dressings, Scandinavian potato and soup dishes, curry seasoning, dill vinegar, salad vinegars, dill seed breads and it may be sprinkled on fresh salads, seafood dishes and devilled eggs.

FENNEL: Often in Italian sausage and fennel cookies.

PARSLEY: Cilantro (Mexican parsley), garlic salt with parsley; Italian foods seasoned with garlic often contain parsley, soups, stews, and garnishes.

CHINESE GOOSEBERRY FAMILY (Actinidiaceae)

Kiwifruit, Chinese gooseberry, and yang tao.



CITRUS FAMILY (Rutaceae)

Grapefruit, kumquat, limequats, lemon, lime, mandarin, murcot, oranges, pommelo, Satsuma, shaddock, tangerine, tangelo, ugly fruit, prickly ash, szechuan pepper, (ingredient in five spice powder, woo-hsiang powder)

Sources: Lemons are often added to salad dressings and mayonnaise. In restaurants they are used on fresh fruit, fish, seafood, iced tea, glazes for carrots and fruit pies. Lemon/lime drinks, 7-Up and other fruit colas and fruit drinks may contain lemon or lime juice. Vitamin C preparations and multiple vitamins are often prepared from citrus fruits. Other sources include Angostura (bitters), citric acid, citron citrange, and ascorbic acid.



CRUSTACEA FAMILY

Crab, lobster, crayfish, shrimp, prawn and langoustine.

Sources: Seafood soups, casseroles, Chinese foods, egg rolls, and salads.



DOGBANE FAMILY (Apocynaceae)

Milkweed, showy milkweed, spider milkweed, periwinkle and gymnema sylvestre.

FISH FAMILIES

Bass family (Serranidae)

White bass, European bass, Stripped bass, Sea bass, Grouper.

Codfish Family (Gadidae)

Codfish (Pacific cod, Pacific tomcod, *Atlantic cod*, Atlantic tomcod), Blue ling, Haddock, Whiting, Cusk, Hake and Pollock.

Pollock is found in Pollack-based surimi and may be used as the basis for imitation crab, lobster, shrimp, and for pork or beef substitutes which in turn may be used in the manufacture of hot dogs, ham, pizza toppings and anchovies in Worcestershire sauce.

Surimi: a seafood item that looks like crab or scallops but is mostly white fish fillets that have been minced, washed, and heated causing a natural gelling of the flesh. Also called 'sea legs' imitation crab, imitation shrimp or kamaboko (fish cake).

Halibut and Flounder Family (Pleuronectidae)

Halibut (Atlantic halibut, Pacific halibut) Dab, *Sole* (Little sole, Common sole), Hogchoker, Flathead sole, North Atlantic flounder, Smoothback flounder, American white flounder and Pacific plaice.

Perch family (Percidae)

Sea perch, darter

Salmon and Trout Family (Salmonidae)

Salmon (Coho salmon, Sockeye salmon, Atlantic salmon, *Pacific salmon*, Pink salmon, Chinook salmon, king salmon, Silver salmon), Rainbow trout, Steelhead trout, Brook trout, Lake trout, Whitefish, Red fish and Grayling.

Snapper Family (Lutjanidae)

Red snapper, Gray snapper, and Schoolmaster snapper, fusiliers.

Tuna and Mackerel Family (Scombridae)

Tuna (Albacore, Yellowfin tuna, Bluefin tuna, Blackfin tuna, Chub), mackerel, bonitos and Atlantic mackerel.



FUNGI KINGDOM

Yeasts & Moulds

Saccharomycetaceae Family - Bakers yeast, brewers yeast, mouldy cheeses, Bleu, Gorgonzola, Roquefort, Stilton, Bel Paese, Brick, Limburger, Muenster, Port de Salut and vinegars.

Agaricaceae Family - Mushrooms, truffles



Inhalants: **Pleosporaceae Family** - *Alternaria alternata*
Trichocomaceae Family - *Aspergillus fumigatus*, *Penicillium notatum* **Mycosphaerellaceae** - *Cladosporium herbarum*

Moulds and yeasts are the chief of food spoilage. They feed on the same food that we do. They are in the air we breathe. Refrigeration and freezing slow down their growth and high temperatures will destroy them, but their growth rate under favourable conditions (room temperature – sitting out on the counter) is incredible.

Although baker's yeast and brewer's yeast have different metabolic characteristics, people sensitive to any form of yeast should avoid all forms of yeast mould, mouldy cheeses, and other forms of fungi in their foods and environment. Foods high in carbohydrates (fruits, fruit juices, root vegetables, and grains) tend to be "yeasty" in nature since yeasts have accelerated growth on these foods. Cooked foods also tend to attract yeast, especially when left out at room temperature. For these reasons, you must handle all food wisely, and freeze any leftovers that you do not plan to eat within 24 hours. Avoid eating any leftovers that have been in the refrigerator for more than 24 hours.

Wash all raw fruits and vegetables well. Grapes and the rind of cantaloupes and other melons are covered with yeast. Eating food without washing off the yeast may be problematic for some.

Processed foods (hot dogs, processed meats, frozen concentrated fruit juices, canned fruit juices, sausages, and other man-made food combinations) tend to be yeasty in nature due the long exposure of the food to the air during processing.

Sources: Fermented foods and drinks (ALCOHOLIC BEVERAGES, cider, sauerkraut, beer, malts, ales, soy sauce, vinegar etc.), MOULDY and AGED CHEESES (Bleu, Gorgonzola, Roquefort, Stilton, Brie, Camembert, Bel Paese, brick, Limburger, Muenster, Port de salut, and processed cheese food), cheeses with mould growing on them, BREADS (except those made without yeast), buns buttermilk, coffee cakes and breakfast rolls made with yeast, cakes, cake mixes, crackers, cookies, flour that has been enriched with malted barley, FORTIFIED FOODS (they either contain yeast or malt,) FROZEN FRUIT JUICE CONCENTRATE or juices made from concentrate, MILK FORTIFIED with vitamins from yeast, malted products, mushrooms (especially raw), pickled foods, root beer, salad dressings, smoked foods, Virginia hams, bacon, vinegar-containing foods (condiments, ketchup, BBQ sauce, mayonnaise, pickles, olives, horseradish), and VITAMINS (natural vitamins grown on yeast or containing brewers yeast).

What to look for on labels: Yeast, Citric acid and Yeast proteases.

GINGER FAMILY (Zingiberaceae)

Ginger, cardamom, East Indian arrowroot, and turmeric.

Sources: Chinese foods, spiced nuts, cookies, pumpkin pie spice, Oleoresin of ginger is used to flavour soft drinks, ginger ale, gingerbread, pickling spices, used in making pancake syrups and pickling vinegar. Turmeric oleoresin is used as a colouring in foods and may be listed as 'natural colouring' or 'beta-carotene colouring'. It also is used in Crispix cereal, mustards, relishes, curry, and salad dressings.



CARDAMON: Also known as cardamom. Traditionally oil of cardamom has been used as a carminative and a flavouring to disguise the smell of foul-smelling drugs; used by some cigarette manufacturers to disguise odour, and by some meat packers to flavour sausages and processed meats. In Sweden, cardamom is used more frequently than cinnamon. Other sources of cardamom are cardamom coffee, curry, baked fruit recipes, pumpkin pie spice, and many sweet baked goods.

GINSENG FAMILY (Araliaceae)

Wild sarsaparilla, spikenard, Siberian ginseng (*Eleutherooccus senticosus*), English ivy devil's club, fatshedera (aralia ivy), Panax spp. – ginseng (*P. ginseng*), American ginseng (*P. quinquefolium*), Rice-paper plant, prickly ash, (prickly elder), Japanese aralia.



GOURD/CUCUMBER FAMILY (Cucurbitaceae)

This family can be sub-divided into the following groups of closely related relatives:

CUCUMBERS: Cucumber, bitter gourd (bitter cucumber, bitter melon, ku gua foo, ampalaya, Chinese bitter melon), pickles and decorative gourds.

MELONS: Canary melon, cantaloupe, casaba melon, Crenshaw melon, honeydew melon, muskmelon, Persian melon and watermelon.

SUMMER SQUASH: Acorn, Connecticut field, small sugar squash, table queen squash, melopepo, bush pumpkin, cocozelle squash, summer cookneck, summer straightneck, white bush scallop, pattypan, and zucchini squash.

WINTER SQUASH: Banana squash, Boston marrow, buttercup, delicious squash, blue habbard squash, cushaw, hubbard squash, mammoth squash, queensland blue squash, spaghetti squash, and turban squash.

MISC. SQUASH: Butternut, quaker pie, pumpkin, Virginia mammoth, luffa (Loofah sponges from the dried fibrous part of the loofa fruit (vegetable sponge, see gua), and chayote (mirliton).



GRAPE FAMILY (Vitaceae)

Grape, grape seed, concord grape, wine grape, buckthorn, muscadines, raisin, currants, cream of tarter, brandy, champagne, wine and wine vinegar.



GRASS FAMILY (Poaceae)

Whole wheat, wheat bran, wheat gluten, wheat gliadin, rye, barley and oat

A note on gluten: Gluten is a protein mass present in cereal grains. It's what gives dough elasticity and creates for light and puffy baked goods. The gluten molecule is large and is a mixture of individual proteins; prolamines and glutelins. The prolamine, gliadin is found in wheat and is a problem in celiac disease. Secalin, hordein and avenin, the prolamins of rye, barley and oats respectively, may pose additional problems to celiac patients. Allergy to gluten containing grains closely parallels their taxonomic relationship with decreasing closeness in the following order: wheat, triticale (a wheat/rye blend), rye, barley, oat, rice and corn.

Gluten-containing grains: Kamut, oat, pumpernickel, rye, spelt, triticale, wheat, berries and barley. There are small amounts of gluten in millet, but virtually no gliadin.

Note: Although wheat grass is a member of the grass family, wheatgrass is suitable for those on gluten-free diets. Wheatgrass is cut before the plant forms a grain or wheatberry and therefore has no gluten.

Barley malt and malted barley: Malt is made from sprouted barley and from the hydrolysed starch of other grains. This thick syrup is sweet in taste and is added to foods to improve taste. It can be dried into malt extract, a powder, and be added to an array of foods and beverages. Caramel colour and flavouring is made from malted barley and is used in most baked goods and deli meats. It appears on food labels as 'artificially coloured or flavoured'. Other sources include all purpose flour, barley flakes, barley flour and enriched flour.

Foods containing malt: Ales, all-purpose flour, baby cereals, baby crackers BBQ sauces, barley corn, barley malt (often used to sweeten carob candies), beer, breakfast cereals and granolas, canned and dried soup mixes, caramel flavouring, caramel colouring, cola, sodas of all kinds (contains caramel colouring), condiments, enriched breads, salad dressings, most canned prepared foods (TV dinners, Stouffers, Green Giant etc), lagers, malt, liquor, malted milk, malt syrup, maltodextrins, meat sauces, milk shakes, Ovaltine, Postum, processed meats, pre-cooked meats, rye bread (often coloured with caramel colour), soups, unbleached flour, and all products, made from these flours (cakes, bread, noodles, pasta, pies etc), bourbon, and whiskey.

Foods containing oat: Oatmeal, granolas, multi-grain breads, meatloaf, and cookies etc.

Foods containing rye: Rye bread, rye crackers, multi-grain breads, some granolas, gin vodka, scotch and whiskey.

Wheat products: Wheat flour, whole wheat, wheat gluten, gluten, wheat germ, wheat bran, whole wheat flour, bleached flour, white flour, unbleached flour, all-purpose flour, bulgur (cracked wheat), miller's bran, farina, triticale, kamut, spelt, couscous, tabouli, and modified, food starch.

Foods containing wheat or derived from wheat: MSG (monosodium glutamate), hydrolysed vegetable protein, semolina (all pasta and noodles), hard durum flour, malt (may be derived from wheat), biscuits, breads, cakes cookies, crackers, Graham crackers, crepes, croutons, dumplings, pancakes, pie crusts, popovers, pretzels, waffles, chocolate candy, pills and tablets that are pressed together, breakfast cereals of all kinds, flours and flour blends (read labels), falafel, candy, bouillon cubes, soy sauce, processed meat/poultry/fish products (serves as binders and fillers), luncheon meats, hot dogs, sausage, canned processed meats (Spam, Vienna sausages), imitation crabmeat, soups, soup mixes, mixed for baking anything, iced cream cones, some ice cream, icing sugar, licorice, baking powder, paprika, seasonings, wheat germ in black pepper, ale, beer, breaded meats, breaded vegetables, white vinegar, and fried foods dipped in batter, flour or crumbs etc. Wheat flour is sometimes flavoured and shaped to look like beef, pork or shrimp, especially in Asian dishes.

Corn, Sugar Cane, Rice, (White rice, brown rice), Lemon Grass.

Corn sources: Corn oil, corn meal, corn cereals, food breaded with corn meal, corn bread, corn flour, corn oil, corn starch, corn sugar, corn syrup, popcorn, hominy, grits, corn chips and tortillas.

Foods containing corn: Baking powder, coffee creamers, candy, chewing gum, pancake syrups, jams, jellies, preserves, cakes, cake mixes, baked goods, some peanut butter, processed meats, hot dogs, cereals, ice cream, baking mixes, fish sticks, TV dinners, potato chips (cooked in corn oil), salad dressings, some margarines, vegetable oils, Chinese food (the gravy is made with corn starch), gravies made with cornstarch, soups, cream pies, carbonated drinks, soda water, fruit drinks, bleached white flour, some cheeses, canned prepared food of all kinds, chilli mix, instant coffee, cough syrups, canned peas, instant (converted) rice, sandwich spreads, condiments, meat sauces, sherbets, dates, (sweetened), deep frying mixtures, gelatin desserts, gelatin capsules, glucose products, graham crackers, Similac (most canned formulas) canned or frozen green beans, soybean milks, instant tea, vinegar, vitamins with candy outer coatings, white powdered sugar has corn starch, baker's yeast often has cornstarch, iodised salt has dextrose from corn, fructose, corn protein dextrose, corn gluten, dextrin, dextrimaltose, corn alcohol (beer, bourbon, blended whiskeys, fortified wines, liquors); most caramel colour is corn-derived. Ingredients in products may change without notice, so always read labels.

Relatives: *Bamboo shoots, Job's tears*

Other sources of irritation: Paper cups, paper cartons and foods in them may have corn since they are stacked with corn starch to prevent sticking. An example is milk packaged in paper cartons. Pharmaceutical syrups (Benadryl), some prescription drugs and over-the-counter preparations contain corn. Liquid children's medicines usually contain corn syrup. Ask the pharmacist for corn-free medicine. Adhesives, lick part of envelopes, glue, stamps, stickers, tapes, aspirin, pain tablets, body powders, clothes starch, and talcum powder.

What to avoid: Corn syrups, corn sugar, dextrose, dextrimaltose, EQUAL (dehydrated corn syrup solids) glucose, fructose, and foods containing them. Fructose that is available commercially also comes from CORN.

Any products containing sugar may also contain corn sugar. The federal standard of identity for sugar states that it may be cane, corn or beet sugar depending on price and availability.

Other names for sugars are: Monosaccharides, polysaccharides, disaccharides, invert sugar invertase, levulose, dextrans, sweetose, and sucrose. Sorbitol is made from corn sugar and is often used in sugar free candies. Too much sorbitol can act as a laxative and should be avoided.

A note on sugar cane: Sugar cane is a bamboo-like grass that creates sucrose from sunlight air, and water. Another name for common table sugar is sucrose. Molasses is the uncrystallisable portion of sugar and a byproduct of the refining process. It is used as a table syrup, food flavouring and in the manufacture of some processed tobacco. Better known on the market is rum, which is a distillate of fermented molasses.

Foods containing rice: Cream of rice cereal, rice noodles, rice crackers, and rice milk.

Sources: Oriental dishes, fried rice, casseroles, Cajun dishes, Indian cookery, pilaf, rice milk based desserts and candies.

Other sources of irritation: Rice hulls may be added to powdered detergents as fillers.

Lemon grass: Common names include Citronella, Sereh, Serai, and Tanglad, Ta krai, Cha krai, Xa and Sa chanh.

Sources: An important culinary herb and spice present in many Asian and Indian dishes- Vietnamese

"vinegar beef" bon bung dam, curry pastes, Indonesian bumbu – a mixture of ground fresh spices, sate, pan-Indonesian fruit salad *rujak*.

Also used as a medical herb, as a substitute for lemon balm, and in the perfume industry.

Inhalants: *Bahia, Bermuda, Smooth brome, Meadow fescue, Johnson, Perennial rye, Sweet vernal, Timothy*

HEALTH FAMILY (Ericaceae)

Blueberry, bearberry (Uva-ursi), bilberry, cranberry, huckleberry, wintergreen flavouring and aspria gum (often in toothpastes).

Sources: Jellies, hams, preserves, pies, muffins, ice cream, and cheesecake, etc.



LAUREL FAMILY (Lauraceae)

Bay leaf, camphor, cinnamon (ingredient in five spices powder, woo-hsiang powder), laurel, sassafras (used to make root beer, herb teas and ground to make Gumbo file) and avocado (alligator pear).

Foods containing avocado: Guacamole, salad dressings.

Foods containing bay leaves: Bay leaves are contained in various seasonings, seasoning salt, seafood seasonings, soups, soup mixes, bouillabaisse, bouillons, prickling spices, pickles, etc. Read labels.... Bay leaves may simply be listed as "spices" and you will have to write to manufacturers to see if those spices include bay leaves. Oil of bay leaves is used in pickling spices and the flavouring of salad vinegar.

Foods containing cinnamon: Apple butter, breakfast rolls, chilli, chilli powder, cinnamon tea cookies, spiced cakes, spiced teas, seasoned meats, processed meats, hot dogs, chewing gum, curry, candy, catsup etc. Cinnamon leaf oil, which contains eugenol, is used in making perfume as well as a starting material in the production of vanillin. Cinnamon flavouring is often added to hot chocolate.



LEGUME/PEA FAMILY (Fabaceae)

This large group can be subdivided into the following groups:

BEANS: Adzuki beans, black turtle beans, fava beans, great northern beans, green beans, jack beans, kidney beans, lima beans, mung beans, navy beans, pinto beans, snap beans, string beans, red beans, and mung bean sprouts.

The fava bean, *vicia faba*, while in the same family, it is not particularly close to common garden beans. The black bean, *phaselous vulgaris*, is a member of the kidney bean family (haricot bean) and includes other common garden varieties including pinto beans.



CAROB: Carob (chocolate substitute; also called St. John's bread), carob bean gum, and locust bean gum (guar gum).

LENTILS: *Lentils*, masur beans, and pink lentils.

PEANUTS: Peanuts, peanut butter, and peanut oil.

PEAS: Black-eyed peas, *chickpeas*, cream peas, crowder peas, field peas, *green peas*, purple-hull peas, split peas, *astragalus*.

SOYBEAN: *Soybeans*.

Foods containing soybean: Edamame, tofu, soy protein in soy lecithin may be listed as lecithin. Soy panthenol and soy protein are added to many cosmetics; body lotions and creams. Other sources of soy include: adhesives, dog food, enamel paints, fabric finishes, fertilizers, flooring materials, lubricants, nitroglycerine, paper, printing inks, and soaps.

Other members of Legume family: Acacia (gum), suakin, talca gum, tamarind, tragacanth gum (a thickener), cassia (found in laxatives – often called senna: used in curry and cinnamon; also found in some Mexican vanilla, fenugreek (spice used in curry, cinnamon and chutneys, primary flavouring in imitation maple syrup), and licorice.

Related plants: Clover, mimosa, milk vetch, and all plants that make a bean pod. A tree from this family is used throughout the coffee tree groves to shade the coffee trees.

Inhalants: Acacia and Mesquite

LILY FAMILY

(Asparagaceae, Alliaceae, Asphodelaceae)

White onion, red onion, wild onion, *garlic*, chives, leeks, shallots, scallions, *green onions*, asparagus (Asparagaceae), and Aloe vera (Asphodelaceae)

Sources: Onion and garlic can be used as “natural flavours” added to many processed foods, canned tuna, soup mixes, meat loaf, gravy mixes, tuna salad, chicken salad, potato salad, V-8 juice, tartar sauces, catsup, chilli con carne, picante sauce, Mexican foods, Chinese foods, salad dressings, some mayonnaise, meat dishes, Cajun cooking, Greek cooking, Italian cooking, mixed vegetable dishes, casseroles, Spanish rice and processed meats etc.



LINEN FAMILY (Linaceae)

Linseed oil, *flaxseed*, and flaxseed oil.

Sources: Roman meal products, Uncle Sam's breakfast cereal, mixed grain cereals. Flaxseed is often added to cough remedies; ask the druggist if it is any of your medication/prescriptions. It may be called linolein on the label.

Other sources of irritation: Flaxseed is used to make many products that may be irritating to you: Linoleum, Linseed oil, Bird lime, paint and varnishes, printers ink, lithographic ink, hair setting tonics, (Kremel), Soft soap, some depilatories, fabrics made of linen, insulating materials, Flaxinum (used in refrigerators,) Bi-flax (a based used for insulating plasters), flax rugs, high grade waxed paper, fibreboard, and stuffing for furniture.

MADDER FAMILY (Rubiaceae)

Coffee bean

Sources: Coffee (regular, instant or freeze dried), mocha flavoured foods, chocolate, cocoa and cola drinks of all kinds.

Caffeine is an alkaloid substance (like morphine and codeine) that occurs naturally in the seeds of some plants. These drugs, when refined into pure substances have stimulatory effects and are often habit forming and addictive in nature. Caffeine is added to cola drinks for flavour and as stimulant.



MALLOW FAMILY (Malvaceae)

Cocoa bean

Sources: Cocoa butter, cocoa powder, chocolate, cola bean, theobromine. Relatives: balsa, jute, hollyhock, mallows, cotton and lindens.



MANGOSTEEN FAMILY (Clusiaceae)

St. John's wort, Klamath weed, goat, weed, bacury, dragon's-blood tree, mangosteen, and Scotch attorney.



MINT FAMILY (Lamiaceae)

Apple mint, *basil*, bergamot (tea), betony, catnip, chia, clary, hyssop, marjoram, menthol, *oregano*, pennyroyal tea, *peppermint*, *rosemary*, *sage*, spearmint, savory, summer savory, *thyme*, lemon balm and horehound.



Related plants: Balm mint, blue balm, cure-all, dropsy plant, Melissa, sweet, balm, St. Joseph wort and sweet basil.

Foods containing basil: Oil of basil is used as a base for many perfumes and in scenting soaps. It is the primary ingredient in the liqueur chartreuse.

It is used in Italian foods, spaghetti sauces, pizza, Mexican food, chilli powder, mock turtle soup, and other foods with tomato sauces. Chicken Cacciatore is flavoured with basil.

Foods containing marjoram: Oil of marjoram is used in the preparation of sauces in Greek, Italian and Spanish cooking. It is also added to meats, some cheeses, stuffings and soups.

Foods containing mint: Menthol, mint jelly, gums, toothpastes, and mint teas.

Foods containing oregano Oregano oil is used in scenting soaps, and as an ingredient in liqueurs. It is used in Italian food, spaghetti sauces, pizza, Mexican food, chill powder, and other foods with tomato sauces.

Other sources of irritation: Perfumes, Tulsi (used in the Hindu religion), herb mixtures, and herb-scented room fresheners.

MOLLUSK FAMILY (*Mollusca*)

Abalone, clam, cockle, mussel, oyster, scallops, octopus, snail, squid, cuttlefish.

Sources: Clam chowder, clam dip, seafood soups and chowders.



MORNING-GLORY/BIDWEED FAMILY (*Convolvulaceae*)

Sweet potato (yellow), jicama, and Chinese water spinach.

Note: Yams are not related to sweet potatoes but are commonly interchanged in our vocabulary.

MUSTARD FAMILY (*Brassicaceae/Cruciferae*)

Bok choy, broccoli, Brussels sprouts, cabbage, cauliflower, celery cabbage, Chinese cabbage, collard greens, horseradish, kale, kohlrabi, krait, mustard green, mustard seed, radish, rape rutabaga, savoy cabbage, turnip, turnip greens, watercress, canola and cress.

Foods containing mustard: Prepared mustard, dry mustard, Dijon mustard, mustard seed, potato salad, sandwiches, Chinese hot mustard devilled eggs, mustard seeds are in pickling spices and may be used in sauerkraut, curry, salad dressings, cheese sauces, baked jeans, hamburger relishes. Mustard seed oil can be used in massage oils, lubricant, hair, oil illuminant, and oils for burning in lamps. Also present in tear gas.

Foods containing broccoli: Casseroles with broccoli, vegetable mixtures with broccoli, stir fry foods with broccoli and bok choy. Bok choy is a main ingredient in most Chinese dishes, especially stir-fry dishes with vegetables.

Foods containing cabbage: Sauerkraut, soups and stews, egg rolls, coleslaw, stuffed cabbage and tossed green cabbage salad.



MYRTLE (Myrtaceae)

Allspice, bayberry, clove (ingredient in *five spice powder*, *woo-hsiang powder*), eucalyptus, guava, Jamaica pepper, *lian woo* (wax apple, java apple, bell apple), and pimento.

Sources of allspice: Spiced tea, herbal teas, pickling spices, some sausages, relishes, fruit cakes, room fresheners, and spiced hams. Allspice is an important ingredient in Benedictine and Chartreuse liqueurs. You may also react to sachets and pumpkin pie spice.

Sources of clove: Pumpkin spice, spiced teas, some perfumes, some soap, some digestive aids, and some mouthwashes. Clove is used in the production of synthetic vanilla flavouring. Cloves are often used in pickled fruits, sweet syrups, some fruit punches, fruit cakes and mixed spices.

Related sources of irritation: Scented candles.

Inhalants: *Eucalyptus*

NIGHTSHADE/POTATO FAMILY (Solanaceae)

Green bell pepper, red orange, yellow and purple bell pepper, banana pepper, brinjal, cayenne, capsicum pepper, chili pepper, eggplant, jalapeno pepper, salsa, sweet pepper, paprika, pimento, red potato (new potato), russet potato, white potato, tobacco plant, Tabasco, tomato, tomatillo, ground cherry, thorn apple and ashwaganda (*Withania*).



Foods containing potato: Some inexpensive yogurts, baby foods, egg replacers, consommé, dried soup mixes, soups fish cakes, breaded foods, frozen entrees, meat balls, frozen pies and desserts, canned mixed vegetables, some protein powders.

Foods containing tomato: Chilli sauces, catsup, BBQ sauces, meat sauces, Italian foods, tortillas chips (some), herrings in tomato sauce, TV dinners, frozen entrees, soups, meat loaf, Spanish rice, baked beans, many deli foods.

Foods containing peppers: Relishes, stuffed olives, smoked herrings, frozen chicken dinners, pinkish coloured cheeses, may be labelled 'natural flavour', salad dressings, dips bean dips, refried beans, salsa vitamin C tablets (some), soy sauces, pickles, cough lozenges, bologna, processed meats, hot dogs, and pickled cauliflower.

Foods containing paprika: Paprika is made from peppers. Salad dressings, seasoning salts, some cheeses, may be called 'natural flavouring', natural colouring or 'beta carotene colouring', garnishes on potato salad, sprinkled on broiled fish and chicken, BBQ sauces, Italian sausage, processed meats, bottled roasted peanuts, frozen dinners and entrees, mayonnaise, chill sauce, and other, and other bottled sauces. Paprika contains capsaicin, which is used as an intestinal stimulant. It is also used in ginger ale and ginger beer.

Curry: Curry is a blend of seasonings and herbs from many families. All curries are not the same. A blend may be as simple as 3 or 4 ingredients or as many as 30 spices. Common ingredients in curry are: chilli pepper, fenugreek, cassia, common cinnamon, cardamom, coriander, celery seed, cumin, caraway seed, dill seed, nutmeg, black pepper, mace, mint leaves, mustard seed, poppy seed, turmeric, saffron, cloves, ginger, fennel, and curry leaves.

NUTMEG FAMILY (Myristicaceae)

Nutmeg, mace

Sources: Seasoning in meats, soups, sauces, baked goods, spice mixes (curry powder). The essential oil is as a natural food flavouring in baked goods and syrups (Coca cola), beverages and sweets.

Other sources of irritation: perfumes, pharmaceuticals, tooth paste, Vicks cough syrup. Nutmeg butter may be mixed with cottonseed or palm oil and used as an industrial lubricant.



ALL NUTS

ROSE FAMILY (Rosaceae)

Almond



Sources: Fish almandine, green beans almandine, almond butter, almond cookies, chocolate covered almond candies, Almond Roca, Almond Joy, Amaretto, almond extract, mixed nuts with almonds, ice cream with almonds, almond milk, granola with almonds, and marzipan. Other name is anacardium nut.

Hidden Sources: Pesto sauce and coffee grinders used to grind nut-flavoured coffees.

BEECH FAMILY (Fagaceae)

Beechnuts, chestnuts, and chinquapins



BRAZIL NUT FAMILY (Lecythidaceae)

Brazil nut, sapucaia nut



SUMAC FAMILY (Anacardiaceae)

Cashew, mango and pistachio

Inhalants: *California pepper*

Related plants: Poison ivy, sumac, poison oak. Brown sandals from India are dyed with a relative from this family and may cause a poison ivy-like rash on the feet.



CORYLACEAE FAMILY, Subfamily of BIRCH (Betulaceae)

Filberts and hazelnuts

Sources: Nougat, an ingredient in many confections, ice cream and candies, is a hazelnut product. Inhalants: *American hazelnut, white alder, white birch*



PEA/LEGUME FAMILY (Fabaceae)

Peanut



Sources: Peanuts, peanut butter, peanut oil (arachis oil), and products containing them; mixed nuts, granola bars, peanut butter and jelly sandwiches, nut toppings on ice cream, chocolate covered peanuts, peanut brittle, and peanut butter fudge, etc.

NOTE: Peanut is not a true nut, but a legume and grows in the ground. Due to the fat content and tendency to become mouldy like other nuts, it has been included into this group. People with peanut allergy are not necessarily allergic to tree nuts, although it is usually advised to avoid them due to the possibility of cross-contamination in processing and packaging. Common names include goober nuts/peas and mandelonas (peanuts soaked in almond flavouring).

Hidden sources: Almond icing, de-flavoured/re-flavoured sold as walnuts or almonds, chilli, baby formula, vegetable burgers, flavouring in dry soup mix, chocolate from Europe, gravy, egg rolls, hazelnut paste, ground nut mix, baked mixes, battered foods, biscuits, Chinese dishes, margarine, marzipan, milk formula, satay sauce and dishes, Thai dishes, vegetable fat, and vegetable oil.

PROTEA FAMILY (Proteaceae)

Macadamia



WALNUT FAMILY (Juglandaceae)

Pecans, walnuts

Relatives: Butternut, hickory nut.



Sources: Pecans, walnuts, and foods containing them; cookies, candies, mixed nuts, cakes, ice cream, pralines, chopped nut toppings, brownies and fudge with nuts etc.

Inhalants: *White hickory, pecan, black walnut, English walnut*

SESAME FAMILY (Paedaliaceae)

Sources: Sesame seed, sesame oil and tahini.



ASTER/DAISY FAMILY (Asteraceae)

Sunflower seeds, curry

Relatives: Jerusalem artichoke, and girasole.

Sources: Sunflower seeds, sunflower oil, Jerusalem artichokes, girasole and foods containing them.



OLIVE FAMILY (Oleaceae)

Black olive, green olive, pitted olives, Kalamata, oil.

Sources: Mortadella and other sausage mixes, breads, and puttanesca sauce.

Inhalants: *White ash*

Relatives: Lilac, jasmine, osmanthus, and forsythia.



ORCHID FAMILY (Orchidaceae)

Vanilla bean

Sources: cookies, baked goods, ice creams, candy, soft drinks, toppings, frostings, butter, margarine, chocolate products and custards. Rum guaiacum (other extracts use vanilla as a base and contains alcohol so they need to be avoided as well).

What to look for on labels: Vanillin, ethyl vanillin, imitation vanilla extract, artificial vanilla. Relatives: Lady's slipper.



PALM FAMILY (Arecaceae)

Date, coconut, coconut oil, sago, palm cabbage, saw palmetto

Sources: Most processed foods, especially baked goods, may contain coconut and/or palm oil. Maybe labelled as MCT oils (medium chain triglycerides). Carnauba wax is derived from the palm tree and is used in waxes for a finished coating on stone fruits and some vegetable.

Additional information: Sodium laurel sulphate is derived from coconut and is used in the food industry in the following ways: improves the whipping of foods for easier and smooth mixtures; often included in mixes with egg or gelatin; used to gloss hard and soft candies; can be used in drink mixes as fumaric acid to help dissolve the ingredients in water.

Inhalants: *Queen palm*



PAPAYA FAMILY (*Caricaceae*)

Papaya, papain (meat tenderizer)

Papain is used as a meat tenderizer and may be contained in the following: beer, soy sauce, condiments, seasoned salts, meat tenderiser, meat seasonings, digestive aids, digestive agents, canned and dried gravies, and other meat mixes. Some people have reported that papain may interfere with the clotting time of blood.



PEPPER FAMILY (*Piperaceae*)

Green pepper, red pepper and *black pepper*

Sources: Used to season various soups, stews, casseroles, etc. Relatives: baby rubber plant, coin leaf plant, and kava.



PHEASANT FAMILY (*Phasianidae*)

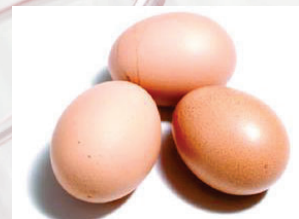
Chicken, egg white, egg yolk, whole egg, pheasant, peafowl, partridge, quail, Cornish hen, turkey and turkey eggs.

Sources: Sausage, ground meats.

Hidden sources of egg: Baked goods (except some breads), baking mixes, batters used for frying foods, Béarnaise sauce, breakfast cereals, candy, cookies, creamy fillings, puddings, custards, bouillons (cleared with egg white), cake flours, prepared frostings, cookies, divinity, fondant creams, truffles, Turkish delight, French toast, Hollandaise sauce, ice cream, sherbets, malted cocoa drinks (Ovaltine, Ovamalt), egg noodles and macaroni, eggnog, lemon curd, marshmallows, mayonnaise, meringues, muffins, omelettes, pancakes, pretzels, creamy salad dressings, processed meat products (bologna, meat loaf, meatballs, sausages), sherbets, soufflés, soups, tarter sauce, waffles, wines, (cleared with egg white), some fat substitutes, glazes on baked goods, and lysozyme in cheese.

What to look for on labels: Egg; whole egg, dried egg, powdered egg, egg solids, egg yolk, egg white, egg protein, albumin, globulin, livetin, ovalbumin, ovomucoid, ovomucin, ovovitellin, (and any other ingredient beginning with the prefix 'ovo' including ovotransferrin), vitellin, lecithin, lysozyme, binder, coagulant, emulsifier, and globulin.

Related sources of irritation: Poultry feathers, down pillows and down comforters.



PINEAPPLE FAMILY (Bromeliaceae)

Pineapple, bromelain, (enzyme derived from the pineapple plant).

Sources: Fruit salads, fruit desserts, pineapple up-side-down cake, spice cake with pineapple, fruit cocktail, pina colada preparations and pineapple juice etc.



ROSE FAMILY (Rosaceae)

APPLE: *apple*, apple cider, crab apple, loquat, and pear.

Sources: Apple cider vinegar, mayonnaise containing apple cider vinegar, apple sauce, apple juice and pectin from apples.

BERRY: Blackberry, boysenberry, dewberry, loganberry, *red raspberry*, and youngberry.

Sources: Berry jams and jellies, mixed fruit preserves, berry wines and baked goods with berries. Blackthorn, sloe, *strawberry*, *rose hips* and quince.

Sources: Blackthorn tea, sloe gin, strawberries - jams and jellies, preserves, juices with strawberries flavour, and desserts with strawberries (ice cream, strawberry sauces, puddings, cakes, pie).

STONE FRUITS Almond, apricot, cherry, nectarine, peach, and plum/prune

ALMONDS: Fish almandine, green beans almandine, almond butter, almond cookies, chocolate covered almond candies, Almond Roca, Almond Joy, Amaretto, almond extract, mixed nuts with almonds, ice cream with almonds, almond milk, almond rice, granola with almonds and marzipan.

APRICOT: Apricots, dried fruit mixtures, apricot nectar and food containing them.

CHERRY: *Cherries*, cherry preserves, maraschino cherries, Bing cherries and desserts containing cherries.

PEACH and NECTARINE: Jams, jellies, baked desserts, and fruit salads etc.

PLUM and PRUNE: Plums, prunes, prune juice and foods containing them.



SEA CUCUMBER FAMILY

Beche-de-mer aka iriko (Japan), hai-som (China), trepang (Indonesia) sea cucumber, sea stars, brittle stars, basket stars and sea urchins.

Sources: Konowata, (fermented, pickled), and kuchiko (prepared and dried).



SOAPBERRY FAMILY

Soapberries, longan, (lungan, longyen), lychee (Chinese plum), rambutan and guarana.



SPEEDWELL FAMILY (Plantaginaceae)

Psyllium



SWINE FAMILY (Suidae)

Pork

Sources: Pork sausage, processed meats and sausages containing pork lard, refried beans with lard, bacon, bacon grease, fresh ham, cured ham, and foods containing pork products: Liverwurst, bologna, Vienna sausage, Italian sausage, luncheon meats, salami, and hot dogs etc. Knox gelatin is prepared from either swine (porcine) or bovine, depending on cost or availability. Some gelatin-encapsulated supplements may be porcine derived.

Food additive derived from pork: Stearic acid or calcium stearate may be refined from pork fat which may be added to foods as a binder, foam inhibitor, lubricant and coating on foods (manufacturers may add stearic acid to carnauba wax; used as a finishing coating on fresh fruits and vegetables). It is used in beverages, baked goods, candy and chewing gum. Stearic acid is a completely saturated fat and may promote elevated blood cholesterol levels.

A cross-reactivity of pork and cat epithelia has been reported in subjects with so called "pork-cat syndrome".

TEA FAMILY (Theaceae)

Black tea, green tea, Woolong tea (Oolong tea)

Tea is derived from the plant camellia and is classified into three basic types: black, green and oolong. The process used in preparing the leaves establish the classification, while the extent of oxidation determines the colour, body and flavour.



VALERIAN FAMILY (Valerianaceae)

Valerian, valerian root, tobacco root, and St. George's herb.

WATERFOWL FAMILY (Anatidae)

Duck, goose, swan, teal, and hooded merganser.

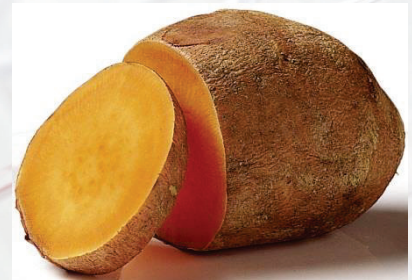


YAM FAMILY (Dioscoreaceae)

Yams, cush-cush, yampee, water yams, yellow yams, black yams, Chinese yams, elephant's foot, wild yam, and white yam.

True yams are not related to sweet potatoes. They are grown in the tropics and are known as yampees and cush-cush.

Note: Five spice powder (woo-hsiang powder) is a blend of spices, commonly cinnamon, fennel, star anise, clove and szechuan pepper. Please refer to their respective families.



A NOTE ON CROSS-REACTIVITY

Cross-reactions occur when the immune system recognizes a similar structure within multiple foods causing a reaction.

With crustaceans, for example, allergic individuals may often be allergic to this family inclusive (shrimp, prawn, crab, lobster). An individual with a peanut allergy, on the other hand, may not necessarily be allergic to other members of the legume family and tolerate them quite well in their diet. Cross-reactivity may also occur due to common allergenic structures from different food families. For instance, there is a strong degree of homology between the allergenic component, Bet v1, the major allergen of birch pollen, and Mal d1, the major allergen of apple. This association is well known in the literature linking birch allergy to that of Oral Allergy Syndrome to apple.

Below is a simple table of food cross-reactions.

Cross-reactivity Between Inhalants and Vegetables/Fruits/Other

Ragweed Pollen	Honeydew, banana, apple, watermelon, gourds, chamomile tea, honey, nuts, sunflower seeds
Birch Pollen	Apple, hazelnut, almond, peach, apricot, nectarine, carrot, potato, parsnips, pear, plum, prune, cherry, fennel, parsley, coriander, buckwheat, celery, kiwi, honey
Alder Pollen	Almond, apple, celery, cherry, hazelnut, parsley, peach, pear
Grass Pollen	Melon, oranges, Swiss, chard, tomato, watermelon, wheat, fennel, celery kiwi, peanut
Mugwort Pollen	Celery, carrot, coriander, fennel, melon, parsley, peppers, spices, sunflower seeds, watermelon
Hazel Tree	Hazelnut
Latex	Banana, avocado, chestnut, almond, potato, tomato, kiwi, pear, hazelnut, papaya, melon, apple, celery, carrot, cherry, peach
Cow's milk	Sheep, lamb, goat, buffalo
Pork Meat	Cat epithelia