

The 'simple' elimination diet

How to reduce foods rich in irritant food chemicals (for people with suspected mild food chemical sensitivity)

Food chemical hypersensitivity and the elimination diet

Food is generally one of life's great pleasures. Unfortunately, however, for some people, particular chemicals found in some foods can trigger unpleasant or distressing symptoms.

The simple elimination diet outlined in this booklet is designed to reduce foods that are very high in the food chemicals that commonly cause symptoms. It is suitable for people with very mild or infrequent symptoms. If you have symptoms that are more distressing or bothersome, or that occur on a frequent basis, it may be better to use a more restrictive elimination diet that is much lower in food chemicals. If in doubt, discuss this with your dietitian.

Possible symptoms of food chemical hypersensitivity

The large range of symptoms caused by food chemical sensitivity includes:

- Skin symptoms: skin swelling (angio-oedema), eczema, recurrent hives (urticaria), and other rashes
- Nervous system symptoms: migraine or other headaches, hyperactivity or behaviour disturbances, irritability and mood changes, problems with thinking, restless legs
- Gut symptoms: chronic mouth ulcers, sore throat, reflux, nausea, Irritable Bowel Syndrome
- Respiratory system symptoms: sinus problems, nasal polyps, wheeze, chronic cough
- Miscellaneous symptoms: joint and muscle pain, fatigue

What food chemicals are excluded?

The simple elimination diet reduces foods rich in the following additives and natural chemicals:

Salicylate

This occurs naturally in many fruits & vegetables, herbs & spices, tea, peppermint and honey. They are also frequently found in perfumes, toothpaste and medications (aspirin).

Amines

These occur naturally in a diverse range of foods including chocolate, cheese, wine, beer, liver, yeast extracts, dried and tinned fish, bananas, citrus fruit, pineapple, avocados, broad beans, tomatoes and fermented products.

Glutamates

These occur naturally in tomatoes, mushrooms, grapes, strong cheeses, vegemite, meat extracts, soy sauce and wines. MSG and other flavour enhancers may be added to stock cubes /powders, soups, sauces, Chinese food and snack foods.

Preservatives

This diet reduces benzoates and sorbates (used in many drinks, dips, dairy products, dried fruit & margarines), sulphites (in dried fruits, wine, juice & cordials, pickles and processed meats), propionates (bread & other baked goods) & nitrites (processed meats)

Anti-oxidants

Found in oils, margarine and high fat or fried foods

Artificial colours

These are used in a wide range of processed foods

Annatto (code 160b)

This natural yellow food colour is used in some margarines, dairy products, Asian noodles and oven-bake chips

Most added flavours

These occur in a very wide range of processed foods.

The simple elimination diet guidelines

How long to follow the simple elimination diet

The simple elimination diet should be followed for at least 3 to 6 weeks, to see if your symptoms clear up or reduce significantly. If no improvement occurs in this time, and your symptoms are still bothersome, you may want to consider the stricter elimination diet.

Record keeping

It can be useful to keep a record to refer back to. This should include:

- Foods and drinks consumed each day
- Symptoms, if they occur, and any medications taken to relieve symptoms
- Other factors that affect symptoms e.g. illness, stress, chemical exposure

Withdrawal Symptoms

Some people experience “withdrawal symptoms” during the first week or two on the elimination diet. Symptoms may temporarily flare-up, but generally settle after a while.

Medications

Avoid any non-essential medication (consult your doctor if uncertain).

All aspirin-containing drugs should be avoided (aspirin is a similar chemical to salicylate). Panadol and/or codeine preparations are suitable for treating headaches or for pain relief. If you have been prescribed aspirin as a blood thinning medication, the Royal Prince Alfred Hospital Allergy Unit recommends talking to your doctor about switching to Clopidogrel.

If you take any essential medications which are coloured, ask the pharmacist if there are suitable uncoloured alternatives. If not, check if it is ok to wash off any surface colour from tablets. It may be OK to open capsules and just take the powder (perhaps mixed with golden syrup) - check with your pharmacist. Syrups and liquid medications often contain preservatives, flavours or colours.

Refer to the medication list listed later in this booklet for more information.

Maintaining good nutrition

The simple elimination diet just cuts back on foods that are very high in food chemicals, and there are plenty of choices from all the essential food groups. You should still be able to eat a balanced diet, as outlined in the Australian Guide to Healthy Eating (see “further reading” on back page). There is no need to take vitamin or mineral supplements, unless you have a proven deficiency.

If you need, or want, to take supplements, make sure you avoid brands that contain:

- Preservatives or PABA
- Colours or flavours
- Herbs, bioflavonoids, rutin, kelp or hesperidin

Recommended supplements include:

- Children’s multivitamins and minerals: Paediatric Seravit or Orthoplex Children’s Formula
- Adult’s multivitamins and minerals: Amcal One-a-Day, Amcal, Blackmores, Cenovis and Nature’s Own Multivitamin and Minerals, Vitaminorum, Myadec capsules and Blackmore’s Sustained Release Multivitamin
- Pregnancy supplements: Elevit and FABFOL plus
- Calcium: Caltrate (plain), Herron Calcium Plus with Magnesium, Golden Glow Calcium and Magnesium Chelate, OsteoVit D & Calcium or FABCAL 1-2-3.

Elimination diet food list

Use only those foods listed as allowed, unless checked with your dietitian. Unlisted foods may not have been tested for chemical content.

When brand names are mentioned, you still need to check the label for suitability, as product formulations can change. Listed brand names are only correct at the time of writing.

Meat, Poultry, Fish, Eggs, Legumes – At least one to two serves per day	
Allowed	Avoid
<ul style="list-style-type: none"> ▪ Fresh chicken, duck, turkey ▪ Fresh beef, lamb, pork, veal ▪ Game meats eg. kangaroo, emu, venison ▪ Fresh or frozen fish ▪ Canned salmon and sardines ▪ Calamari, crab, lobster, mussels, oysters, scallops ▪ Eggs ▪ Tofu ▪ Dried beans and lentils e.g. kidney beans, chick peas, soybeans, 3 bean mix, red and green lentils, split peas (except broad beans) <p>Note:</p> <ul style="list-style-type: none"> ▪ If you have IBS, and are not used to eating legumes, don't eat too many to begin with, as they tend to increase wind and may upset you. 	<ul style="list-style-type: none"> ▪ Offal eg. liver, kidneys, brain, tripe ▪ Aged or processed meats eg. ham, bacon, corned beef, hot dogs, frankfurts, mettwurst, salami, fritz ▪ Pies, sausages ▪ Dried, salted, smoked or pickled fish ▪ Canned tuna, prawns ▪ Fish products with preservatives, colours etc ▪ Marinated meat, poultry or fish ▪ Tempeh, marinated tofu, TVP ▪ Broad beans, tinned beans with sauces, falafel, hummus <p>Note:</p> <ul style="list-style-type: none"> ▪ Amines increase as meat ages, and with browning or charring.
Milk products and alternatives – At least 2 or 3 serves per day	
Allowed	Avoid
<ul style="list-style-type: none"> ▪ Plain milk (fresh, long-life, canned, powder) ▪ Fresh cheeses (cottage, ricotta, quark, mascapone and cream cheese) ▪ Hard cheeses: Bocconcini, mild cheddar, Swiss, Fetta ▪ Yoghurt - plain or vanilla without colours or preservatives ▪ Icecream - vanilla, with no artificial colours or annatto (160b) eg. Peter's Original, Sarah Lee French Vanilla ▪ Soy drinks - plain, vanilla, carob ▪ Rice drink 	<ul style="list-style-type: none"> ▪ Flavoured milk ▪ Cottage, ricotta cheese or cream cheese in tubs with preservative ▪ Hard cheeses: tasty, Brie, Camembert, Parmesan, flavoured cheeses ▪ Yoghurt with fruit flavouring, artificial colours, preservatives or colour 160b (annatto) ▪ Icecream - coloured or flavoured ▪ Icecream with nuts or fruit ▪ Soy drinks with linseed or cold pressed oil, or other flavours or colours

Vegetables – At least 2 to 2 ½ cups per day

Allowed	Avoid
<ul style="list-style-type: none"> ▪ Artichoke (globe, Jerusalem*) ▪ Asparagus* ▪ Avocado - just ripe ▪ Bamboo shoots ▪ Beans (butter, French, snake, string) ▪ Beetroot ▪ Bok choy, Pak choy ▪ Broccoli ▪ Brussels sprouts* ▪ Cabbage* (red, green, savoy, Chinese) ▪ Carrot ▪ Cauliflower ▪ Celery ▪ Choko (chayote) ▪ Corn ▪ Cucumber ▪ Garlic* ▪ Leeks*, shallots*, chives*, spring onion* ▪ Lettuce ▪ Marrow, squash, zucchini ▪ Parsnip ▪ Peas (green, snow peas, sugar snap peas) ▪ Potato ▪ Pumpkin ▪ Rocket ▪ Sprouts (alfalfa, mung bean) ▪ Swede ▪ Sweet potato, kumara ▪ Tomato - fresh, peeled (a few slices) ▪ Turnip <p>Note: * Some people with IBS or other bowel symptoms may need to limit foods marked with an asterisk.</p>	<ul style="list-style-type: none"> ▪ Avocado - soft ▪ Broadbeans ▪ Capsicum and chilli ▪ Chicory ▪ Eggplant ▪ Mustard greens ▪ Olives ▪ Onion ▪ Mushroom ▪ Sauerkraut (fermented cabbage) ▪ Seaweed ▪ Spinach, silverbeet, Chinese spinach ▪ Tomato - dried, juice, puree, paste and sauce ▪ Instant mashed potato, commercial potato chips, oven-bake chips or wedges ▪ Dried vegetables with preservative ▪ Pickled vegetables ▪ Herbs and spices, fresh or dried ▪ Vegetable juice and stock <p>Notes: Salicylates have a natural preservative action, and tend to be concentrated near the surface of vegetables.</p> <ul style="list-style-type: none"> ▪ Potato products coated with oils may contain antioxidants not listed on the label.

Fruits – At least 2 serves per day	
Allowed	Avoid
<ul style="list-style-type: none"> ▪ Apple* ▪ Avocado, just ripe ▪ Banana ▪ Berries: blueberry, mulberry (ripe and sweet) ▪ Fig* ▪ Guava* and Feijoa* ▪ Loquat ▪ Mango* ▪ Melons: Honeydew*, Rockmelon, Watermelon* ▪ Pawpaw* ▪ Pear* ▪ Persimmon* ▪ Pomegranate ▪ Rhubarb ▪ Stone fruit: apricot*, nectarine* (peeled), peach* (peeled) ▪ Tamarillo ▪ Tropical fruit: Custard apple, Dragonfruit, Durian, Jackfruit, Longan, Lychee*, Rambutan, Starfruit* <p>Notes: * Some people with IBS or other bowel symptoms may need to limit foods marked with an asterisk.</p> <ul style="list-style-type: none"> ▪ Salicylate tends to be concentrated near the surface of fruits, and is higher in less ripe fruit. ▪ 	<ul style="list-style-type: none"> ▪ Avocado, very ripe ▪ Berries: blackberry, boysenberry, cranberry, strawberry, raspberry ▪ Blackcurrant, red currant ▪ Cherry ▪ Citrus fruit: grapefruit, lemon, lime, mandarin, orange, tangelo ▪ Date ▪ Dried fruit ▪ Fruit juices and drinks, fruit cordials, fruit juice iceblocks, fruit-based confectionary ▪ Grapes ▪ Kiwifruit ▪ Passionfruit ▪ Pineapple ▪ Plums, prunes ▪ Quince ▪ Tomato and tomato products
Nuts and Seeds	
Allowed	Avoid
<ul style="list-style-type: none"> ▪ Almond, Brazil, Chestnut, Hazelnut, Macadamia, Peanut, Pecan, Pine nut, Pistachio, Walnut ▪ Linseed, Poppy seed, Pumpkin seeds and Pepitas, Sesame seed, Sunflower seed ▪ Coconut - fresh, cream, milk ▪ 	<ul style="list-style-type: none"> ▪ Roasted nuts ▪ Peanut paste, other nut pastes ▪ Tahini (sesame seed paste) ▪ Almond meal and hazelnut meal ▪ Coconut, dessicated or shredded

Grain products, breads and cereals – At least 5 serves per day

Allowed	Avoid
<p><u>From gluten-containing grains</u></p> <ul style="list-style-type: none"> ▪ Barley (flour, flakes, pearl) ▪ Oats (oatbran, oatmeal, rolled oats) ▪ Rye (flour, flakes, crispbread) ▪ Wheat, kamut, spelt, triticale ▪ Couscous, semolina, cracked wheat ▪ Wheat bran, wheat germ ▪ Wheat flour (plain, SR), wheaten “cornflour” ▪ Plain pasta eg. spaghetti, macaroni ▪ Home baked bread from allowed ingredients, or Laucke’s bread mixes ▪ Plain unpreserved commercial breads and rolls e.g. Brumby’s and Baker’s Delight Mountain bread. Local bakeries may have suitable breads ▪ Breakfast cereals: All Bran, Bran Flakes, Cornflakes, Guardian, Oats, Puffed Wheat, Rice Bubbles, Special K, Vitabrits, Weetbix, Weeties ▪ Plain homemade cakes and biscuits, using allowed ingredients ▪ Some commercial vanilla or sponge cake mixes with allowed ingredients ▪ Some plain commercial biscuits e.g. ▪ Sweet: milk coffee and arrowroot, Lattice, Marie, Nice, Scotch finger, Shredded wheatmeal ▪ Savoury: Cruskits, Jatz, Ryvita, Sao, Salada, Saltines, Vitawheat and Carr’s water crackers ▪ Some pancake mixes eg. Greens - original, low fat and maple ▪ Pampas Butter Puff pastry, Lion pastry mix 	<ul style="list-style-type: none"> ▪ Coloured pasta, canned spaghetti ▪ Commercial pasta meals ▪ Bread containing preservative, vinegar, flour treatment agents (may contain sulphites), honey, whey powder, dried fruit, herbs or spices, processed meats or cheese ▪ Crumpets, muffins (preservatives) ▪ Breadcrumbs with preservative ▪ Cereals containing cocoa, honey, dried fruit, artificial colours or flavours e.g. muesli, many mixed grain cereals, many children’s cereals ▪ Most commercial cakes, cake mixes and biscuits which contain chocolate, dried fruit, nuts, jam, spices, flavours, MSG, colours, preservatives and/or antioxidants

Grain products, breads and cereals – At least 5 serves per day	
Allowed	Avoid
<p><u>From non-gluten grains</u></p> <ul style="list-style-type: none"> ▪ Amaranth (flour, flakes, puffed, grain) ▪ Arrowroot flour ▪ Bean thread noodles ▪ Buckwheat (flour, cereal, puffed, noodles) ▪ Corn, polenta, cornflour ▪ Millet (flour, meal, flakes, puffed, pasta) ▪ Psyllium husks ▪ Quinoa (flour, flakes, puffed, grain, pasta) ▪ Rice ▪ Rice flakes, rice bran, puffed rice ▪ Rice noodles and pasta ▪ Rice flour, ground rice, rice paper ▪ Rice crackers and cakes - plain ▪ Sago, Tapioca ▪ Sorghum (flour, grain) ▪ Gluten-free breads - unpreserved <p>Note:</p> <ul style="list-style-type: none"> ▪ Some gluten-free fours are preserved with sulphite. Most disappears with cooking. 	<ul style="list-style-type: none"> ▪ Gluten-free cereals that contain dried fruit, honey, nuts or seeds, cocoa or colours and flavours ▪ Baby rice cereals with antioxidants or rosemary ▪ Rice crackers - flavoured ▪ Rice cakes with sesame or sunflower ▪ Gluten-free breads that contain preservative, dried fruit, nuts, cheese, meat or vinegar
Butter, margarine, fats and oils	
Allowed	Avoid
<ul style="list-style-type: none"> ▪ Margarine, butter - check there is no colour 160b (annatto), antioxidants or preservatives ▪ Note: colour 160a is OK ▪ Cream ▪ Canola, corn, peanut, rice bran, sunflower, safflower or soy oils without antioxidants ▪ Canola spray oil 	<ul style="list-style-type: none"> ▪ Margarines or butter blends that contain antioxidants, preservatives (200 -203), annatto colour 160(b) or flavour enhancers ▪ Extra virgin olive, sesame, peanut, almond, and walnut oils ▪ Oils containing antioxidants, cold-pressed oils ▪ Oils infused with herbs etc
Sugars, syrups, spreads	
Allowed	Avoid
<ul style="list-style-type: none"> ▪ Sugar ▪ Golden syrup, pure maple syrup, rice syrup 	<ul style="list-style-type: none"> ▪ Artificial sweeteners ▪ Honey, imitation maple syrup ▪ Jams, marmalade, fruit spreads , jellies ▪ Peanut paste, other nut butters, Tahini ▪ Chocolate or hazelnut spreads eg. Nutella ▪ Vegemite, Promite, Marmite, Mighty Mite

Herb, spices, condiments and flavourings	
Allowed	Avoid
<ul style="list-style-type: none"> ▪ Garlic, fresh parsley (sprinkle only), chives, shallots, spring onion ▪ Salt (table, iodized, sea , rock) ▪ Baking powder, bicarb soda, cream of tartar ▪ Gelatine, agar agar ▪ Citric acid (for a lemon flavour) ▪ Carob powder ▪ Vanilla pods and essence (pure) ▪ Malt vinegar ▪ Baker's yeast (small amount baked in bread) <p>Notes: Salad dressing can be made from canola oil, citric acid, garlic and salt Some people do not tolerate a lot of vanilla flavour or citric acid in foods</p>	<ul style="list-style-type: none"> ▪ Other herbs, spices, mint ▪ Chicken salt ▪ Mustard, pickles ▪ Vinegar (except malt) ▪ Salad dressings ▪ Tomato paste, tomato sauce, etc ▪ Other sauces e.g. soy, Worcestershire ▪ Meat pastes, fish pastes, Bonox, Bovril ▪ Gravies, marinades ▪ Stock liquids, cubes or powders ▪ Flavouring syrups and essences
Soups	
Allowed	Avoid
<ul style="list-style-type: none"> ▪ Home made soups from allowed ingredients 	<ul style="list-style-type: none"> ▪ Commercial soups and sauces ▪ Stock liquids, cubes and powders
Desserts	
<ul style="list-style-type: none"> ▪ Home made desserts from allowed ingredients, eg. steamed pudding, vanilla junket, baked egg custard, Blanc mange (milk, cornflour & sugar) ▪ Vanilla custard (Pauls) ▪ Vanilla rice cream, Le Rice Vanilla ▪ Plain or vanilla yoghurt with no preservatives ▪ Peter's Original vanilla ice cream ▪ Peter's Dixie cup icecream ▪ Sara Lee honeycomb & butterscotch or classic French vanilla icecream 	<ul style="list-style-type: none"> ▪ Commercial desserts other than those listed ▪ Custard powder, custard snack packs with colours or flavour other than vanilla ▪ Yoghurt with fruit or preservatives ▪ Other ice creams or ice blocks

Snack Foods	
Allowed	Avoid
<ul style="list-style-type: none"> ▪ Pappadums (dried) - plain or garlic ▪ Potato crisps (Kettle, Red Rock) - plain salted ▪ Grissini sticks - plain ▪ Pretzels - plain ▪ Roasted chick peas - plain or garlic <p>Note: Other plain potato crisps without preservatives may be OK, but there have been some reports of reactions</p>	<ul style="list-style-type: none"> ▪ Ready-to-eat pappadums ▪ Potato crisps with flavours, colours, MSG or antioxidants ▪ Corn chips ▪ Savoury shape biscuits ▪ Any snack foods with cheese, herbs, spices, flavours, flavour enhancers or colours ▪ Commercial hot potato chips ▪ Dried fruit, nuts ▪ Muesli bars
Sweets and treats	
Allowed	Avoid
<ul style="list-style-type: none"> ▪ Plain meringues ▪ Plain homemade toffees ▪ Homebrand Jersey caramels ▪ Pascall's columbines ▪ Allen's Milkshake lollies ▪ Werther's original Butterscotch lollies ▪ Marshmallows - white only ▪ Honeycomb (made with glucose, not honey) ▪ Carob buttons - plain ▪ Jelly beans - white only (avoid coconut or bubblegum flavours) ▪ Kellogg's plain LCM bars (up to one per day) 	<ul style="list-style-type: none"> ▪ Chewing gum ▪ Chocolate, flavoured carob ▪ Coloured, mint or fruit-flavoured lollies ▪ "Naturally-coloured" confectionary (may use natural colours, but also contain natural fruit flavours, high in salicylate, so not suitable) ▪ Cough or throat lozenges ▪ Honeycomb made from honey ▪ Liquorice ▪ Peppermints
Drinks	
Allowed	Avoid
<ul style="list-style-type: none"> ▪ Water - plain, spring, mineral or soda ▪ Coffee, coffee substitutes, camomile tea ▪ Milk - plain ▪ Malted milk powder ▪ Soy drinks - plain ▪ Some flavoured soy drinks eg. vanilla, carob ▪ Rice drinks (plain, vanilla, carob) ▪ Alcohol - gin, vodka, whisky (plain) ▪ Pear juice - unpreserved ▪ Lemon drink - homemade (dissolve ½ -1 teaspoon of citric acid and 1 cup sugar in 1 cup hot water). This concentrate can be added to water or soda. ▪ Lemonade or tonic water - no preservatives eg. Schweppes in bottles 	<ul style="list-style-type: none"> ▪ Flavoured waters ▪ Tea (black and green, chai), herbal teas ▪ Flavoured milk ▪ Cocoa, drinking chocolate ▪ Milo, Ovaltine, Aktavite, Quik ▪ Soy milk with linseed or cold pressed oils ▪ Other flavoured soy or rice drinks ▪ Flavoured gin, vodka or whiskey ▪ Beer, cider, rum, port, brandy, sherry, wine, liqueurs ▪ Other fruit juices, vegetable juices ▪ Cordials ▪ Other soft drinks, ginger beer, flavoured mineral waters

Medications	
Allowed	Avoid
<ul style="list-style-type: none"> ▪ Discuss alternatives with your doctor or pharmacist if necessary. ▪ White tablets where possible (or you may be able to gently wash off any surface colouring) ▪ Check with your doctor if you can open coloured capsules and take the powdered contents in a spoonful of golden syrup ▪ Most creams, ointments and sprays ▪ Oral decongestants, Anti-histamines ▪ Asthma medications, saline nasal sprays ▪ For pain relief - paracetamol, codeine, migraine medications, steroid medications ▪ Fibre supplements/ laxatives: Metamucil (plain), Benefiber, Normacol Plus, Duphalac, Actilax, Parachoc 	<ul style="list-style-type: none"> ▪ All non-essential medications not prescribed by your doctor ▪ Syrups or liquids ▪ Medications that contain flavours, colours or preservatives ▪ Herbal preparations ▪ Preparations containing oil of wintergreen, menthol, camphor, essential oils or aromas e.g. muscle balms and liniments, cough lozenges, inhalations ▪ Aspirin, non-steroidal anti-inflammatory drugs ▪ Flavoured Metamucil, prune juice or preparations containing colours or flavours Movicol sachets have citrus flavour - ask a compounding chemists for a plain version
Toiletries, cosmetics etc	
Allowed	Avoid
<ul style="list-style-type: none"> ▪ Unscented soaps or soap-free washes, shampoos and conditioners, moisturisers, fragrance-free deodorants (roll-on or stick) ▪ Sorbolene cream, low irritant sunscreens ▪ Low allergy or hypoallergenic make-up ▪ Plain toothpaste (Soul Pattison's, or from a compounding chemist), or brush teeth with salt and bicarb soda ▪ Low perfume washing powder or liquid eg. Amway, Lux, Omo Sensitive, Planet Ark 	<ul style="list-style-type: none"> ▪ Soaps, hair-care products, deodorants, moisturisers etc with added fragrance or "botanicals" eg. lavender or tea tree oils Spray deodorants, body sprays, perfumes ▪ Sunscreen with fragrance, PABA or menthol ▪ Mint or other flavoured or coloured toothpaste, herbal toothpaste, mouth washes ▪ All scented washing powders or liquids, fabric softeners, spray starches

Further reading

The Australian Guide to Healthy Eating: <http://www.health.gov.au> (type "Australian Guide to Healthy Eating" in the search box)

RPAH Elimination Diet Handbook with food shopping guide. Order from:
<http://www.sswahs.nsw.gov.au/rpa/allergy>.

Friendly Food (recipe book for the elimination diet). Order from <http://www.sswahs.nsw.gov.au/rpa/allergy>.

Are you food sensitive? How to investigate your own diet, with dietitian Joan Breakey. Order from:
<http://members.ozemail.com.au/~breakey/> or <http://www.dietinvestigation.com>

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