Food intolerance Dietary Support Guide

2nd edition

CAMBRIDGE NUTRITIONAL SCIENCES LTD

acknowledgements

Cambridge Nutritional Sciences would like to thank Jayne Tooke BSc, DipION MBANT and Jayne Nelson DipION, MBANT, KFAssoc for the dietary advice provided in this guide.

contents

foreword

This booklet is designed to give you advice about how to successfully change your diet based on the results of your CNS Food Intolerance Test. Many people with food intolerance can find it quite daunting when they discover the foods they need to avoid. However, no matter what your results are, it should be possible to maintain a balanced, varied and interesting diet. Our aim is to help by providing the information you may need to help you on the road to better health.

It is important that you read through this booklet thoroughly, and plan your food carefully prior to starting your new diet, to ensure better results.

Wishing you improved health

Cambridge Nutritional Sciences

I've done the test – what do I do now?

However you have obtained your food IgG results – via the Food Detective®, or by using the Cambridge Nutritional Sciences laboratory service – it is important to take time to consider your next steps.

The scheme below summarises these steps and suggests how to ensure that you benefit the most from carrying out the test. Whatever the outcome, we strongly recommend that any significant changes to your diet are carried out under the supervision of a suitably qualified health professional.

For more information about Cambridge Nutritional Sciences' products, why not visit us on: www.food-detective.com www.cambridge-nutritional.com www.food-print.com

food intolerance explained…

“What is food to one man may be fierce poison to another”

Lucretius circa 75BC

For centuries we have known that consumption of certain foods can have profound effects on the physical and mental health of susceptible individuals. This is even more evident in today’s world with the huge variety of processed foods we now consume.

Recent work by Atkinson and co-workers has identified that food-specific antibodies (produced by the body’s immune system) and symptoms of food intolerance are closely linked. Food intolerance is associated with a wide range of unpleasant symptoms and many chronic conditions. Unlike food allergies, food intolerance is unlikely to be life threatening.

Less than 2% of the population suffers from food allergies; however, up to 45% of the population is estimated to suffer from some form of food intolerance. Symptoms often occur some time after the food has been eaten and it can be difficult to identify the food or foods which cause the symptoms. For example, the milk or bread eaten one day could be the cause of joint pains three days later. Some food-related symptoms may be caused by enzyme deficiency or chemical sensitivity, while in others an immune response may be involved.

Many food intolerances are associated with an inappropriate immune response to a particular food or foods. While the causes of food intolerance are not fully understood, inadequate digestion, dysbiosis, candidiasis, parasites, intestinal infections, a poorly balanced diet, alcohol consumption, or the effects of drugs and medications may play a role. Production of antibodies is one of the ways in which the body’s immune system reacts to substances that adversely affect it.

In normal circumstances, these antibodies combine with proteins in the food to form complexes, which are then eliminated by the immune system. However, if the immune system is overwhelmed or over-worked, then complexes can accumulate in places such as joints or the digestive tract to produce symptoms of food intolerance.

For example

- **Respiratory** – rhinitis, sinusitis and asthma.
- **Musculoskeletal** – arthritis, joint pains, aching muscles and weakness.
- **Gastrointestinal** – vomiting, abdominal bloating, cramping, excessive wind, water retention, nausea, constipation, diarrhoea, weight control problems and colic.
- **Central Nervous System** – migraine, headache, impaired, concentration, mood and behavioural changes, depression, anxiety, fatigue and hyperactivity.
- **Dermatological** – urticaria, atopic dermatitis, eczema, itchy skin and other rashes.

Symptoms can appear up to three days after eating the offending or ‘reactive’ food and can last for weeks. Therefore, it can be very difficult to pin-point which foods could be causing the symptoms. In the investigation of food intolerance, it can be helpful to assess the level of food antibodies in a blood specimen.

A diet that eliminates the problem foods will often be enough to prevent the onset of symptoms. Identifying these foods is the difficult part. Your Food Intolerance Test, however, is the first step in this process. A raised level of food antibodies is not a problem in itself, but can help to identify those foods which are the most likely candidates. Where your test shows an elevated level of antibodies to a specific food, you should eliminate it completely from your diet for a period of at least 3 months. When the symptoms subside, the eliminated foods can be reintroduced one by one and the effects monitored.

Avoiding the foods that have been identified as positive in your Food Intolerance Test may reduce your symptoms.

using your test results

With the information you obtained from your Food Intolerance Test, you can make some changes to your eating patterns. If your test showed any positive reactions, it means that you have an elevated antibody reaction to that particular food. Reactions can be mild, moderate or strong.

It is advisable to eliminate any foods that have shown a mild, moderate or strong reaction, for at least 3 months.

If you have a lot of positive results, then you might find it too challenging to eliminate all of the foods at once, and therefore you may find it easier to:

a) avoid the foods with a moderate and strong reaction, and

b) to rotate the foods showing a mild reaction.

NB. To rotate foods, you need to eat them no more than once every 4 days. For example, to rotate wheat, you could have wheat bread on day 1; oat cakes on day 2; corn bread on day 3; rye bread on day 4; pasta on day 5 etc

Some people feel worse for a few days when they eliminate a food and although it can be difficult to give up certain foods, you need to persevere. Substitute your reactive food with other foods which have not shown a reaction (some ideas for food substitutions can be found later in this booklet). Trying out new foods may help to decrease cravings and add pleasure to your eating.

The majority of people find symptom relief within one to three months after cutting out the foods to which they show a food antibody reaction.

before you change your diet

Nutrition and health go hand in hand and there are some standard rules you should follow before you change your dietary regime.

- If you have a medical condition, are pregnant or on medication it is advisable to discuss your proposed dietary change with a health professional eg. a doctor, nutritionist or dietician.
- Plan and organise your meals in advance as much as possible. By collecting recipe ideas using your non-reactive foods and shopping ahead you are less likely to struggle with what to eat.
- Know the range of foods you can eat. While you may be intolerant to a few foods, there will be many un-reactive foods that you should be free to eat. Rather than concentrate on what you can't eat, it is often more positive to concentrate on all the good things you can eat.
- When eliminating a food from your diet, try to replace with another food from that food group which does not show a reaction
- Continue to avoid a food if you have evidence that it is having an effect on you, even if it is negative in your Food Intolerance Test.
- Recognise what food products contain your reactive foods. Many ready-made meals and sauces contain a variety of ingredients that you may not have necessarily associated with the product, so it is important to always check the labels.
- It is very important to maintain a healthy, nutritious diet. By eating a variety of foods you will obtain a wide range of nutrients and will reduce the risk of further intolerances.

the importance of a healthy, nutritious diet

Your diet has a direct effect on your health. Eating a balanced diet is recommended as it can help to prevent disease.
A balanced diet will include a regular supply of proteins, fats, carbohydrates, vitamins and minerals.

proteins

Proteins are the building blocks of health, and are essential for tissue growth and repair. They play a vital role in virtually every process in the body such as muscle contraction, enzyme production, immune protection, skin and bone health. Protein can also provide a source of energy. While some protein is present in everything we eat, meat, fish, poultry, eggs, soya, pulses, nuts and dairy products are rich sources of protein.

fats

Fats are involved in many body processes, and are essential for maintaining cell walls and nerve tissue. They are also a good source of energy and help to absorb certain vitamins. Although fats are important in our diet, it is necessary to eat the right types of fat.

The different types are:

- **Poly-unsaturated fats** – found in sunflower oil, corn oil and groundnut oil, nuts, seeds, avocados and oily fish.
- **Mono-unsaturated fats** – found in olive and rapeseed oil.
- **Saturated fats** – found in red meats, sausages, butter, cheese, cream, palm oil and coconut oil
- **Trans-fats** – found in cakes, biscuits, fast foods, and pastry. These are vegetable fats altered during processing.

The healthy choice is to increase your intake of poly- and mono-unsaturated fats and to reduce the saturated and trans fats.

Saturated and trans fats tend to increase the risk of heart disease, whereas the unsaturated fats help to prevent heart disease. The unsaturated fats are also a good source of essential fatty acids which the body cannot make itself.

carbohydrates

Carbohydrate is the collective term for the wide range of starches and sugars in our diet. They are a principal source of energy due to their rapid release and use by the body.

The different types are

a) Complex carbohydrates or natural starches which are found in wholegrains, vegetables, fruits and pulses. These are broken down slowly by the body and provide a controlled, even energy source. They contain high levels of nutrients and fibre and are beneficial for healthy digestion, lower blood cholesterol levels and reduce the risk of cancers.

b) Simple carbohydrates or sugars are found in honey, molasses, fruits and fruit juices. These may cause your blood sugar levels to rise and fall rapidly, but this can be controlled if they are combined with complex carbohydrates or protein.

c) Refined carbohydrates are processed commercially and lose many of their nutrients. They may also cause blood sugar levels to rise and fall rapidly. These can be found in table sugar, sweeteners, sweets, corn syrup, processed cereals, cakes, biscuits, pizzas and soft drinks. These should be kept to an absolute minimum.

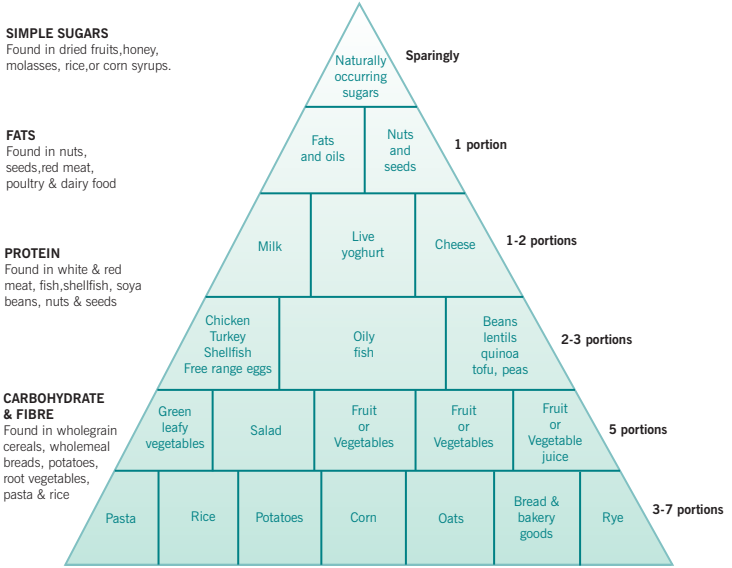
vitamins and minerals

Vitamins and minerals are dietary substances that are essential for normal body function, ranging from energy production, growth and tissue repair, hormone balance, to skin and nerve health. They are required in small amounts but in the correct balance which can usually be achieved by eating a healthy nutritious diet. This means that you should eat a wide variety of fresh foods on a daily basis, including wholefoods, grains, fruits and vegetables for an adequate supply. The vitamin and mineral content of foods can be affected by how fresh the food is, where it was grown and stored, and how it is cooked. The best advice is to eat locally produced fresh organic food as much as possible, and not to over cook it.

eating a balanced diet

It is important to ensure that a diet contains sufficient calories and nutrients to suit the needs of the individual, and is based on a wide variety of food types.

The pyramid, right, shows the typical recommended daily serving from the key food groups.



The food pyramid: **Figure 1**

root vegetables, wholegrains, rice and pasta group

This group forms the bottom of the pyramid. These foods are all rich sources of carbohydrates. **Nutritionists suggest that you eat 3 to 7 daily servings from this group.** However, many of these foods come in processed form so it is best to ensure that the options you take are in as natural state as possible. Choose from potatoes, wholegrain breads and a variety of wholegrain cereals. These should be unrefined with no added sugars. It is interesting to note that potatoes have a much higher nutritional value than rice or pasta and therefore you can choose these several times per week.

Remember that bread and pasta are made from wheat. If you eat toast for breakfast, a sandwich for lunch and pasta for dinner these only gives one type of grain for that day. Try to eat different types of grains throughout the day to give you a variety, for example oat cakes, rice cakes, buckwheat pancakes, polenta, rye bread. For some people, too many carbohydrates from this group may not suit them or may exacerbate a weight problem. If so, you may need to work with a nutritional therapist or dietary advisor to guide you through the options.

Examples of a single portion:

1 x 40 g slice of bread

40 g (dry wt) of cooked rice or pasta (note not 1/2 a plate!)

40 g (dry wt) of cooked cereal such as porridge oats

40 g of cold cereal such as cornflakes or muesli

1/2 bread roll, bun or muffin

1 jacket potato or 4-5 small new potatoes

fruits and vegetables group

Fruit and vegetables are very good sources of many vitamins, minerals and fibre, yet most of us do not eat enough of them. There is mounting evidence that by increasing the consumption to **at least 5 portions per day**, then the health of many people would dramatically improve, and would lower the risk of chronic diseases such as coronary heart disease. The high fibre content is also very beneficial for a healthy digestive tract.

These foods are all highly nutritious, but different groups provide specific nutrients. For example:

Green leafy vegetables, such as cabbage and spring greens, are rich in chlorophyll, magnesium, folic acid, vitamin C and potassium (vital for nerves, muscles and hormones).

Orange, yellow and red foods, such as carrots and tomatoes often derive their colour from beta-carotene, which is a powerful anti-oxidant that protects from cancer.

Beetroot, red grapes, blackberries and blueberries, derive their colour from flavanoids, which are also anti-oxidants, some more powerful than vitamin C.

Therefore, a simple way to ensure that you have all the essential nutrients, is to aim to include a mixture of fruits and vegetables in a variety of colours each meal-time.

It is worth noting that the nutritional value may be affected if the food is not fresh and has ripened in unnatural conditions. For example, due to distribution requirements many fruits have to be picked before they are ready, and stored in vacuum controlled warehouse to stop the natural ripening process. Therefore, it is a good idea to shop locally at your nearby organic farm whenever possible.

Examples of a single portion:

1 medium sized apple, banana or orange

2 satsumas, plums or kiwis

80 g of strawberries or cherries

100 mls of fresh fruit or vegetable juice

80 g of canned or cooked fruit

3 medium broccoli florets

80 g cooked cabbage or greens

1 large carrot

80 g fresh or frozen peas

1 cereal bowl of salad or green leafy vegetables

NB Several glasses of fruit juice per day only counts as one portion

meat, fish, eggs and pulses group

The main meal of the day should always include a good protein portion from animal or vegetable sources.

Animal sources include red meat, chicken, turkey, oily fish, shellfish and dairy produce).

Vegetable sources include wholegrains, beans, lentils, quinoa, tofu (soya), nuts and eggs.

A poor intake of protein can lead to low levels of nutrients such as iron, zinc and the B-vitamins, which in turn can lead to increased infections, reduced muscle function and fatigue. It is thought that too much protein (especially from red-meat and dairy) may eventually lead to an increased risk of osteoporosis and heart disease, so it is important to get the balance right.

It is recommended that you **eat only 2 to 3 servings from this group each day**, and that ideally you would aim to include more vegetable proteins than animal proteins. It is a good idea to have oily fish several times per week, as they are a rich source of vitamins A and D and the poly-unsaturated fats (omega-3 type). These fats help to lower the risks of heart disease by reducing the stickiness of blood that can lead to a heart attack.

Examples of a single portion:

80 g cooked chicken, lean red meat

80 g salmon, sardines or mackerel

1-2 eggs

80 g beans or lentils

milk, yoghurt and cheese group

Dairy foods are an important component of a healthy diet, especially in growing children, however eating too much can eventually lead to the risk of heart disease in later life. Excessive consumption of high-fat dairy products such as butter, cheese and cream should be kept to a minimum, whilst low-fat milks and yoghurts can be eaten in moderation. In fact, 'live' (or probiotic) yoghurts are particularly useful as they can improve the health of the digestive tract and improve resistance to infection.

It is recommended that you **eat 1.5 to 2 portions of dairy per day**.

Examples of a single portion:

200 mls milk (low-fat recommended)

1 small probiotic yoghurt

50 g hard cheese, such as Cheddar

nuts and seeds group

Nuts and seeds are surprisingly healthy and are often overlooked by many people. They are very nutritious and are rich in protein, magnesium, zinc and vitamin B. They are very useful to have as a snack with a piece of fruit, as they give a sustained release of energy, rather than a rapid boost such as that obtained with cakes, biscuits and sweets.

Nuts and seeds are also a very good source of essential fatty acids which the body cannot make itself and therefore it is a good idea to have a small handful as a snack or sprinkled on salads on a daily basis. **1 portion per day is suggested**.

Examples of a single portion:

20 g walnuts, almonds or hazelnuts

20 g sunflower, sesame, linseeds or pumpkin seeds

20 g mixture of above

fats and oils

If you follow the recommendations as described in the previous groups, you will easily reach your daily allowance for fats and oils, as they are present in many foods especially dairy produce, meat, oily fish , nuts and seeds.

It is therefore important that you use oils and fats sparingly if you wish to use spreads on bread, and oils for cooking and salad dressings.

The best dietary advice is to have a variety of fats and oils just as we have a variety of fruits and vegetables.

Walnut and olive oil are good for salad dressings and rapeseed, sunflower and olive oil are recommended for cooking. Sunflower, olive oil spreads and/or a scraping of butter are suggested for bread or toast.

simple sugars

In general, we need to dramatically reduce our consumption of sugars and sugar-rich foods including all processed cakes, biscuits, ice-cream, sweet, chocolates and desserts.

These foods are at the top of the pyramid and therefore should be eaten the least and then only as a treat.

Instead of having sugar in teas or baking, try honey, rice syrup or apple juice. You could have chopped banana, grated apple or other fruits on cereals or in yoghurt. Have a handful of dried fruits as a snack or a sugar-free fruit and grain muesli bar. These may seem odd at first, but once you have weaned yourself off your sugar eating habits, you may be surprised how much your tastebuds and cravings change.

maintaining a balanced diet whilst avoiding certain foods

If your test results have indicated a raised level of antibodies to a certain food, then you should avoid that food for at least three months and await an improvement in your symptoms. Removing the offending foods will allow you to reassess your lifestyle and food choices. You may wish to work with a nutritional therapist or dietician in order to evaluate your diet and identify any food groups which maybe missing or limited. It is important to eat a wide variety of foods.

In the following sections we will consider some of the commonest reactive foods.

IgG reaction to

cow's milk

If your results have shown a reaction to milk it is recommended that you either eliminate, or at the very least cut down your consumption of cow's milk.

Milk is an important source of protein, calcium and vitamins A & B. If you have to give up drinking cow's milk then it is important that these nutrients are obtained from alternative food sources.

Please note that people who are intolerant to cow's milk may, in some cases, develop an intolerance to sheep or goat's milk when these are used as substitutes.

Sources of Milk Proteins

Below is a check list of the main product ingredients that are derived from milk

Butter
Butter oil
Calcium casenate
Casein
Caseinate
Cheese
Chocolate
Cream
Demineralised whey
Fat replacement
Lactalbumin
Light cream
Milk powder
Skimmed milk powder
Milk solids
Non-fat milk
Non-fat milk solids
Sodium caseinate
Sweet whey powder
Whey
Whey protein concentrate
Whey solids

The above ingredients are found in a variety of foods including:

- Baked goods (cakes, doughnuts, waffles, scones, biscuits, pancakes...), bread, pizza, gravy
- Instant mashed potato, creamed soup, ready meals, processed meats and sausages
- Packet snacks, chocolate, confectionery
- Custards, puddings, sauces, yoghurt, fromage frais, ice-cream, spreads

Milk Alternatives

There are now a number of other milks that you can substitute for cow's milk and include rice milk, soya milk, coconut milk, potato milk, goat or sheep's milk, buffalo milk and oat milk. You could also use nut creams instead of cream; soft tofu instead of fromage frais, and tahini or cold pressed olive oil instead of butter.

You can ensure a rich source of protein, calcium and vitamins A & B by consuming a variety of other foods such as:

Soya, cod liver oil, vegetable oil, sardines, whitebait, nuts, red meat, fresh fruit and vegetables especially green leafy vegetables such as spring greens, watercress and spinach, broccoli, rhubarb, figs, mushroom, oranges, apricots, prunes, pumpkin seeds and legumes.

IgG reaction to

wheat

If your results have shown a reaction to wheat, it is important that you either eliminate or cut down your consumption of wheat.

Sources of Wheat Proteins

It is not just the obvious bread, biscuits and breakfast cereals that contain wheat, it is also found in a host of products – wheat can be found in many foods with these ingredients on the labels:

Amp-Isostearoyl Hydrolysed Wheat protein
Binder
Bleached flour
Brown flour
Breadcrumbs
Bulgar wheat
Cereal binders
Couscous
Edible starch
Hydrolysed wheat protein
Hydrolysed wheat starch
Modified starch
Plain flour
Puffed wheat
Semolina
Wheat bran
Wheat germ extract
Wholegrain
Food starch
Gum base
Wholemeal flour
Cracked wheat
Kibbled wheat
Wheat germ
Wheat flakes

Wheat is even used in some herbs and spice products to separate the ingredients.
Some examples of foods that contain wheat are:

- Burgers, oven chips, salami, sausages, scotch eggs, meat or fish coated in bread crumbs, corned beef, pates and spreads, pizzas, commercial sauces, salad dressings, ham, gravy, stock cubes, baking powder, tinned foods including beans, spaghetti and soup
- Ice-cream, powdered drinks, chocolate bars, liquorices and most puddings
- Beer, stout, lager and most spirits
- Processed, convenience foods, crisps and fast foods generally contain wheat, so it is necessary to read the ingredient labels on all products before purchase

Wheat Alternatives

Although wheat is a significant source of nutrients, there are alternative food products that provide equivalent vitamins and minerals. Whilst it may be challenging, you can use these alternatives to ensure an enjoyable, varied and healthy diet.

Bread: Wheat free bread is now widely available and generally made from rice flour, rye flour or blended from potatoes and corn. These types of bread contain the essential B vitamins, iron and folic acid that are found in wheat bread. Choose from 100% rye bread, pumpernickel or soda bread, or have rice or oat cakes instead.

Pasta: Choose pasta made from rice, quinoa, corn or buckwheat, which all also contain B vitamins. Noodles are also available in buckwheat or rice too.

Biscuits: A wide range of biscuits are available that are made from maize or oats and can be either sweet or savoury.

Breakfast cereals: There are a wide selection of cereals available that do not contain wheat, such as wheat-free muesli, porridge oats, millet puffs, brown rice puffs, puffed buckwheat, shredded oaty bites and quinoa flakes. These all provide a good source of B vitamins and iron.

For baking: Choose from lentil flour, bicarbonate of soda, cream of tartar, tapioca, gelatine or vegegel based desserts, pure spices, cornflour, rice and arrowroot.

A wide range of wheat-free products can now be found in health food stores, supermarkets and from the internet.

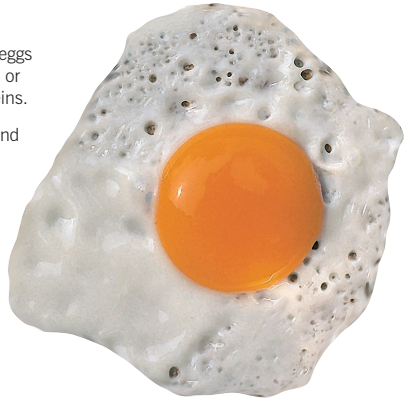
Please note that 'Gluten-free' does not necessarily mean wheat-free – please check the label.

IgG reaction to

egg

If your results have shown a reaction to eggs it is imperative that you either eliminate, or cut down your consumption of egg proteins.

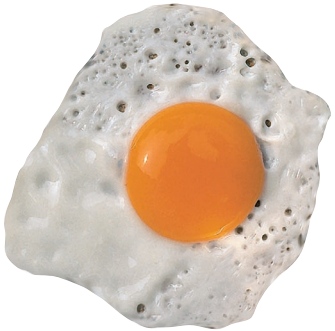
Eggs are an excellent source of protein and provide significant amounts of several vitamins and minerals. However, they are not an essential part of your diet as there are many other commonly consumed foods that provide equivalent nutritional value.



Sources of Egg Proteins

Egg derivatives can generally be identified on food labels as follows:

Albumin	Egg powder	Egg protein
Egg white	Egg yolk	Dried egg
Frozen egg	Globulin	Livetin
Ovalbumin	Ovaglobulin	Ovomucin
Ovovitellin	Pasturised egg	Vitellin



These egg derivatives can be found in many products including:

- cakes, pancakes, desserts,
- Yorkshire puddings and ready-meals,
- mayonnaise
- fresh bakery goods may not be labelled so check the ingredients with the baker.

Egg Substitutes

Eggs are generally used in baking for glazing, binding or raising but the following alternatives can be used as recommended by the Vegan Society:

Instead of one egg, you can use:

- 1 tbs gram (chickpea) or soya flour and 1 tbs water
- 1 tbs arrowroot, 1 tbs soya flour and 2 tbs water
- 2 tbs flour, 1/2 tbs shortening, 1/2 tsp baking powder and 2 tsp water
- 50 g tofu blended with the liquid portion of the recipe
- 1/2 large banana, mashed
- 50 ml white sauce
- Whole egg substitutes made from soy protein and potato starch available.

Tips on raising agents...

- use self raising flour
- add extra oil and raising agent
- use about 2 heaped tsp baking powder per cake
- instead of baking powder, use 3/4 tsp bicarbonate of soda and 1 dsp cider vinegar
- try sieving the flour and dry ingredients, then gently folding in the liquid to trap air

Alternative binding agents

Soya milk, soya dessert, mashed banana, plain silken tofu, soya cream, sweet white sauce (soya milk, vegan margarine, sugar and cornflour), agar agar.

IgG reaction to

yeast

If your results have shown a reaction to Baker's or Brewer's Yeast then you should either eliminate or cut down your consumption of yeast.

NB Bakers and Brewer's Yeast are 2 strains of the same organism and therefore people who react to one, will usually react to the other.

Of all the foods to avoid, yeast is probably the most difficult as it is hidden in so many processed foods, therefore it is vital that you plan ahead before you start your yeast-free diet.

Live yeast is used in food preparation and processing where it converts sugar into carbon dioxide and alcohol. It is a good source of vitamin B but this can be obtained in other foods such as meat, fish, whole grains, nuts and dark vegetables.

Yeast free diets need to avoid natural sources of yeast as well as those added to food. A low sugar diet may also provide benefits by preventing the growth of yeast cells within the digestive system.

Sources of Yeast Proteins

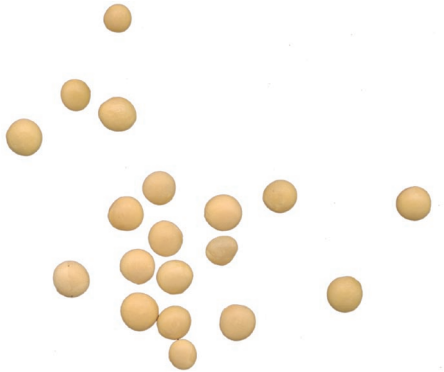
- Breads, pizza bases, pastries such as croissants, and other bread-type cakes
- Yeast extract such as Marmite, Vegemite, Bovril, stock cubes and gravies
- Fermented food & drink such as beer, wine, cider, vinegar, soy sauce and dressings
- Vinegar containing foods such as pickles, relishes, salad dressings, tomato ketchup and chilli sauce
- Ripe foods especially very ripe cheeses such as Brie and Camembert
- Malted milk, malted drinks and home-made ginger beer
- Textured vegetable protein, such as Quorn and hydrolysed vegetable protein
- Mushrooms and other fungi contain organisms closely related to yeast and should be avoided too
- Dried fruits
- Fruit juices – only freshly squeezed are yeast-free
- Some nutritional supplements

Yeast Substitutes

- Soy sauce can be replaced with toasted sesame oil
- Champagne, Tequila, gin and vodka are virtually yeast-free.
- Yeast-free soda breads and other alternatives such as Ryvita, rice cakes, oat cakes and rye pumpernickel.
- Lemon juice instead of vinegar.

IgG reaction to

soya



If your results have shown a reaction to Soya it is necessary that you either eliminate or cut down your consumption of Soya.

Soya is favoured by vegetarians as it is an excellent source of protein, is low in saturated fats and is cholesterol free. When avoiding soya it is important that protein is supplemented through alternative food sources.

Sources of Wheat Proteins

Soya protein is derived from soya beans and is processed into:

Soya mince	Soya chunks	Soya sauces
Soya Flour	Soya lecithin	Tamari
Soya cream	Soya protein isolate	Tempeh
Miso	Soya yoghurt	Tofu
Soya oil	Soya milk	Textured Vegetable Protein
Soya cheese	Soya sprouts	Natto
Soya nuts	Soya margarine	Yuba
Soya meal	Soya flakes	

The above ingredients can typically be found in a variety of foods including:

- Vegetarian and meat ready-meals
- Vegetarian 'meat' products such as veggie burgers and veggie sausages
- Some breads now contain soya
- Canned and packaged foods
- Biscuits, frozen foods, pizzas and noodles.
- Chocolate, breakfast cereals, ice-cream, margarine, sweets.

Therefore, it is very important to check the labels.

Together with the obvious cow's milk, there are now a number of other milks that can be substituted for soya milk, for either drinking or cooking, and include rice milk, coconut milk, potato milk and oat milk.

Protein intake can be supplemented by consuming other foods such as: nuts – especially almonds, meat, fish, eggs, cereals and legumes (any food that grows in a pod such as peas, beans, kidney, haricot, butter, green, lentils).

monitoring your diet and symptoms

Some people find it useful to keep a food and symptom diary to monitor their progress. You could record all foods and drink that you consume before you change your diet and continue whilst making changes to your diet. If you record how you feel and note any changes in symptoms (ie better or worse), then you may find a pattern emerging with respect to certain foods.

re-introducing foods

After at least 3 months, when your symptoms have subsided, you may want to reintroduce some of your reactive foods.

This should be a gradual process. Add one food at a time and monitor your symptoms over a five-day period. If you notice the return of symptoms then you can assume that this food is still a problem and should be avoided for another month or two. If you find that you do not experience a return of your symptoms, you can continue with that food in your diet. You can then add another food to your diet and monitor any reactions over the next 5 days, and so on.

avoiding new food intolerances

As you alter your diet and introduce many new foods, it is possible you may develop intolerances to those new foods. To minimize this, eat a wide variety of foods and limit them to once every three or four days.

9 tips for better health

1

Eat fresh food whenever possible from as many varieties of colour and flavour as possible. Try to have at least 10 different food choices a day. eg. oats, nuts and seeds with banana and milk for breakfast; tuna or cheese or chicken with a salad of lettuce, green beans, tomatoes with a little vinaigrette dressing for lunch; then fish, potatoes, carrots, broccoli and peas for dinner. Already you will have had 12 different food sources and will have really given yourself a good variety of nutrients.

2

Chew your food really well. This is the first stage in digestion. Food which has not been properly chewed will take longer to digest. Many symptoms can be alleviated by increasing the amount of chewing before swallowing the food.

3

Drink at least 1-1½ litres of water a day. This can be in the form of well diluted fruit or vegetable juices if you like. Fruit and herb teas make a good alternative too, or try a hot drink of boiled water with a slice of lemon or mint. Avoid coffee and tea, which are diuretics. These increase the amount of water eliminated from the body and include vital minerals.

4

Take the time to **write a five day diary** of everything you eat and drink. Count up how many varieties of food you are eating and see if there are any 'habit' foods. These are often the ones that can cause problems. If you have the same foods regularly in your diet, try to avoid them by using alternatives. The information in this brochure should provide you with alternatives to those habitual foods.

5

Avoid burned, browned and fried foods, hydrogenated vegetable fats and excessive animal fats. Burnt foods contain free radicals that can damage cells of the body. To minimize this damage we need plenty of antioxidants found in red wine, vegetables and fruits.

Avoid hydrogenated vegetable fats.

6

Limit intake of sugar, processed food with chemical additives, and minimize your intake of alcohol, coffee, tea.
It may be necessary occasionally to have a quick convenience meal but these should not be a regular feature of your diet.

7

Enjoy some **nuts or seeds** daily to ensure intake of essential fatty acids. Eat **oily fish** three times a week and try different cold pressed oils as a treat on salads. You can get pumpkin, walnut and flax seed oils easily in most health shops or supermarkets.

8

Make sure that you are getting sufficient **fibre and water** in order to keep the bowels moving well.
A daily bowel motion is healthy.

9

Take **regular exercise**. If you are not used to exercising you may wish to have a quick check-up with your GP. Many GP surgeries now have arrangements with local gyms to provide subsidized access to regain your health. Investigate what is available in your area. 50% of health benefits come from taking exercise and 50% from changes in diet. Don't underestimate this important fact. Exercise keeps the joints supple, improves cardiovascular power and increases the rate at which fat is burned.

best sources of some key vitamins and minerals

Mineral	Good sources	Notes
Calcium Calcium is involved in muscle activity, blood coagulation, nerve regulation and cell division.	Milk, yoghurt, fortified rice milk, cheese, ricotta, fortified soy cheese, kidney beans, almonds, green leafy vegetables, molasses, seeds, salmon, fish bones.	Milk and cheese are traditionally quoted as being vital sources of calcium to avoid osteoporosis. If you are avoiding these sources you must ensure that adequate amounts of other calcium rich sources are included in your diet.
Magnesium Involved in muscle function, nervous control, energy production and as a cofactor in enzyme reactions.	Spinach, beet, greens, broccoli, nuts, beans (kidney, broad, soy), peas.	Meat and animal produce also contain magnesium but it is not as easily absorbed due to the simultaneous intake of calcium, phosphate and protein which inhibit its bioavailability according to the British Government's panel on nutrition* *Dietary Reference Values for Food Energy and Nutrients for the United Kingdom. Department of Health 1991
Iron Iron forms part of red blood cells carrying oxygen around the body. There are 2 types of iron in foods: a) Heme iron is more readily absorbable and is usually from animal source. b) Non-heme iron is from vegetable sources and requires vitamin C for absorption eg. orange juice.	Heme bound iron is found in beef liver, chicken liver, beef, pork, oysters, shrimps and sardines. Non-heme is available from baked beans, kidney beans, spinach, molasses, prune juice, enriched pasta, bread and rice, lima beans, chick peas, watercress, soya beans, pumpkin seeds, quinoa, lentils and potatoes.	The following factors will decrease non-heme iron absorption: • Large amounts of tea or coffee consumed with a meal (the polyphenols bind the iron) • Excess consumption of high fibre foods or bran supplements which contain phytates can inhibit absorption • High intake of dairy foods or calcium.
Zinc Zinc is important in growth, sexual development, healthy skin, insulin production and as a co-factor in hundreds of enzyme reactions.	Beef, pork, lamb, dark chicken meat, peanuts, legumes (beans, seeds, pulses), dairy products, yeast, nuts, seeds and whole grain cereals. Pumpkin seeds provide one of the most concentrated vegetarian food sources of zinc.	Dietary fibre and phytic acid found in bran, wholegrain cereals, pulses and nuts, inhibit zinc absorption. Cooking processes can reduce this adverse effect. Various chemicals added to many processed foods can also reduce zinc absorption eg. phosphates, EDTA.
Selenium Part of a protective force guarding the body against free-radical damage leading to degenerative disease and premature ageing.	Fish, shellfish, red meat, grains, eggs, chicken, liver, garlic, brewer's yeast and wheat germ.	All foods lose selenium in processing and vegetable sources are limited in their content and dependent upon the selenium content of soils in which they are grown.

Vitamin	Good sources	Notes
Vitamin A and beta carotene Helps growth and repair of body tissues including the outer skin and inner mucous membranes protecting the body both inside and out from invasive micro-organisms and other harmful particles. Important in vision and immunity.	Vitamin A is found as retinol in fish liver oil, milk, cheese, butter, eggs and meats. The provitamin beta carotene can be found in dark leafy vegetables and yellow/orange fruits and vegetables.	This is a fat soluble vitamin. This is a water soluble vitamin.
B Vitamins B1, B2, B3, B5, B6, B12, biotin and folic acid. The B vitamins are required for all cellular functions. Deficiency leads to non-specific symptoms and general weakness.	Generally found in brewer's yeast, liver, whole-grain cereals, and green vegetables. In addition, specific food sources of individual B vitamins are noted here for information. B1: pork, offal and whole grains. B2: tongue, offal, milk, yoghurt, eggs B3: lean meat, poultry, fish, peanuts. Biotin: royal jelly, unpolished rice and whole grains, sardines, soybeans, lentils. Folic acid green leafy vegetable, oranges, beans, rice.	The B vitamins provide the body with energy by helping the body convert carbohydrates to energy. The "friendly" intestinal bacteria provide another important source of these vitamins so a healthy gastrointestinal tract is imperative for overall good health.

Vitamin	Good sources	Notes
Vitamin B12	Liver, kidney, muscle meats, fish and dairy products	Vegetarian or macrobiotic diets are frequently low in B12 but high in folic acid, which can mask a vitamin B12 deficiency. Vegetarians not eating eggs, and vegans, may need to supplement their diet with B12. This is a water-soluble vitamin used throughout the day and needs to be continually replaced.
Vitamin C Maintains connective tissues in skin, ligaments and bones, and walls of blood vessels, providing strength and elasticity. It also acts as an anti oxidant and supports the immune system.	Peppers, watercress, broccoli, fruit, berries, rosehips ,cabbage, tomatoes.	Large amounts of vitamin C are used up in stress.
Vitamin D Vitamin D is required for healthy bones, the nervous system, heart and blood circulation systems.	Egg yolks, oily fish, liver and milk.	This is a fat-soluble vitamin. Exposure of the bare skin to gentle sunlight allows the body to make vitamin D. Care needs to be taken to avoid harmful rays.
Vitamin E Protects cells and organs from free radical damage, supports the function of heart and skeletal muscle, and plays a role in blood clotting.	Cold pressed vegetable oils, all whole raw seeds and nuts, soybeans, wheatgerm oil, whole grains, leafy greens and other vegetables.	This is a fat soluble vitamin and is an important anti-oxidant.

useful contacts

Support Groups:

Allergy UK
3 White Oak Square London Road
Swanley, Kent
BR8 7AG

Helpline: 01322 619864
www.allergyuk.org

National Candida Society
PO Box 151
Orpington, Kent
BR5 1UJ

Telephone: 01689 813039
www.candida-society.org

The Vegetarian Society
Parkdale
Dunham Road, Altrincham
Cheshire
WA14 4QG

Tel:01619 252000
www.vegsoc.org

Coeliac UK
PO Box 220
High Wycombe
Bucks
HP11 2HY

Helpline: 08704 448804
www.coeliac.co.uk

CORE – fighting Gut and Liver disease
3 St Andrews Place
London
NW1 4LB

www.digestivedisorders.org.uk

BANT
British Association for Nutritional Therapy
27 Old Gloucester Street|
London
WC1N 3XX

Telephone: 08706 061284
www.bant.org.uk

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glossary and abbreviations

Word or phrase	Meaning
Antibody	A protein produced by the body's immune system that recognizes and helps fight infections and other foreign substances in the body
Avoid food	A food that is positive in your Food Intolerance Test, and you should avoid eating for at least 3 months
Candidiasis	This is an overgrowth of a yeast-like organism called Candida in the digestive tract, producing a variety of symptoms
Coeliac disease	Coeliac disease is not an allergy. It is an auto-immune disease, which means that the body produces antibodies that attack its own tissues. For people with coeliac disease this attack is triggered by gluten, a protein found in wheat, rye and barley. Some people with coeliac disease also react to oats. The diagnosis is confirmed by a biopsy of the gut wall whose characteristics abnormalities return to normal, along with the improvements in symptoms, when the sufferer adopts a gluten-free diet
dsp	Dessert spoon
Dysbiosis	An altered microbial balance in which normally harmless bacteria, yeasts, and protozoa trigger disease by altering the nutrition or immune responses of their host
Food allergy	A usually rapid and severe immunological reaction to a food, involving an increase in IgE antibody levels
Food intolerance	A usually chronic, long-term immunological reaction to a food, involving an increase in IgG antibody levels, or other cause

Word or phrase	Meaning
g	Gram
Gluten intolerance	Intolerance to gluten, a protein group found in wheat and other flours that helps form the structure of bread dough. Glutenin and gliadin are the two proteins that form gluten
IBS	Irritable bowel syndrome, or IBS, is generally classified as a "functional" disorder where the body's normal activities in terms of the movement of the intestines, the sensitivity of the nerves of the intestines, or the way in which the brain controls some of these functions is impaired. However, there are no structural abnormalities that can be seen by endoscopy, X-ray, or blood tests. The detection of IgG antibodies to food proteins has been advocated as a useful guide to dietary management in IBS
IgG	Immunoglobulin G – a particular class of antibodies
Immunoglobulin	The protein that forms the structure of antibodies produced by the immune system
ml	Milliliter
Reactive food	See "Avoid food"
Rotate food	When a food is eaten no more than once very 4 days
tbs	Tablespoon
tsp	Teaspoon

CAMBRIDGE NUTRITIONAL SCIENCES LTD

Cambridge Nutritional Sciences Ltd
Eden Research Park
Henry Crabb Road
Littleport
Cambridgeshire CB6 1SE

T **44 (0) 1353 863279**
F **44 (0) 1353 863330**
E **labtests@cambridge-nutritional.com**

www.food-detective.com
www.cambridge-nutritional.com
www.food-print.com

Company registration no. 4201429