



# The truth about...food allergy and food intolerance testing

**T**he use of complementary and alternative medicine (CAM) for the diagnosis of food allergy and intolerance is growing fast. There are many types of "tests" available on the high street and on the internet.

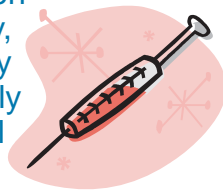
There is so much information available, it is difficult to know what is reliable and scientifically sound. This fact sheet looks at various tests available for diagnosing food allergy and intolerance and also discusses the scientific background behind them.

The medical terminology for food allergy and intolerance is as follows:

- Food Hypersensitivity - covers all adverse reactions to food
- IgE mediated food allergy - the reaction is immediate and can be severe. This reaction involves IgE antibodies which are produced by the immune system
- Non-IgE mediated food allergy - the reaction is delayed or "slow onset". The immune system is involved but not IgE antibodies
- Non-allergic food hypersensitivity - the immune system is not involved e.g. lactose intolerance.

## Conventional Allergy Testing

**Skin prick test** - A minute amount of the diluted allergen is placed on the skin. The skin is then pricked. A small swollen weal (lump) may appear and, in conjunction with a detailed clinical history, an IgE mediated food allergy may be diagnosed. This is only performed under medical supervision.



**Blood tests - RAST (Radio Allergen Sorbent Test) or Specific IgE** - This test measures the amount of IgE antibodies to a suspect food in the blood. The results are interpreted with a detailed clinical history to give a diagnosis of IgE mediated food allergy. This blood test can be organised by your GP or hospital clinician.

There are commercial companies who offer a similar blood test called MAST (Multi-Allergen Screening Test). There is no detailed clinical history available so it is difficult to give an accurate diagnosis. Frequently, little, if any, nutritional information or help in excluding the

offending food is given.

**Food challenges** - Very small amounts of the suspect food are given orally (in the mouth) and symptoms are observed. The food may be given openly or blinded (people are unaware they are being given the food). This test should only be performed under medical supervision where medical facilities and resuscitation equipment are available.

**Food exclusion and reintroduction** - The suspected food is excluded for a period of time and symptoms observed and recorded. If symptoms improve then the suspect food is reintroduced. If symptoms return then this would indicate that there is a problem with that particular food. This can be very time consuming. It is best carried out under the supervision of a registered dietitian, especially if children are involved. It is important to ensure a well balanced nutritional intake during the test period and in the design of a diet where major food groups are excluded (e.g. dairy or wheat).



## All Other Tests

There are many commercially available tests that claim they can diagnose food hypersensitivity.

**IgG blood test** - This blood test looks at IgG antibodies present in the blood. It is claimed that an increase in IgG to a certain food indicates an intolerance to that specific food. At present there is no convincing evidence to support this test. A recent research study suggested that this test may be worthy of further biomedical and clinical research.

**Kinesiology** - This is based on the idea that certain foods could cause an energy imbalance in the body. This is detected by testing the response of the muscle. The client holds the suspect food and the therapist will test the muscle response. The result can lead to many foods being eliminated from the diet. Research studies show that this test is no better than chance and it is not recommended.

**Hair analysis** - A small lock of hair is sent off to a laboratory and analysed for heavy metals such as lead and mercury. It is based on the

idea that these heavy metals cause food intolerances. There is no known scientific basis for this test and it is not recommended.

**Leucocytotoxic or Cytotoxic test** - This is a blood test where the white blood cells are mixed with the suspect food and if they swell this would indicate a problem with that food. There is no rational scientific basis for this test and it is not recommended.

**Pulse test** - The pulse is taken before eating the suspect food and then 15 minutes afterwards. An increase of 10 beats per minute would indicate a food intolerance. Research shows there is no connection between the increased pulse and food intolerance and therefore it is not recommended.



**Electrodermal (Vega) test** - This test measures the electromagnetic conductivity in the body. An offending food will show a dip in the electromagnetic conductivity. Research studies show that this test is no better than chance and it is not recommended.

Some of the above mentioned tests may suggest long lists of foods to be excluded from the diet for long periods unnecessarily. Excluding a major food group e.g. wheat or milk, or a combination of different foods, creates many practical difficulties. Without good nutritional advice, a restricted diet can lead to severe nutritional deficiencies leading to malnutrition in some cases.

Registered dietitians are able to give you the correct nutritional advice and ensure a well-balanced nutritional intake which will be tasty, varied and culturally acceptable. Children, particularly, should not follow a restricted diet unless supervised by a dietitian as they require a well-balanced diet to ensure adequate growth and development. CAM therapists may not have the depth of knowledge to give appropriate advice.

For a consultation with a dietitian, please ask your GP for a referral or for a private practice dietitian go to [www.dietitiansunlimited.co.uk](http://www.dietitiansunlimited.co.uk)

More general information on food allergy and food intolerance can be found on other BDA Food Fact sheets at [www.bda.uk.com](http://www.bda.uk.com)

**Food and Mood**

We all have good days and bad days: we all have foods we like more, or like less. But is there a connection between feeling fine and the foods we have eaten?

Do some foods make us feel good or moor?

It is possible to plan a diet for a good mood?

**Vitamins and minerals**

When diets are very limited and inadequate, and result in deficient states, effects on mood and brain function are well documented. Aromatic (low levels of haemoglobin, tired and which results in feeling weak, tired and lethargic) all the time. This risk of anemia is not reduced with the regular intake of iron supplements. The risk of anemia is not reduced with the regular intake of iron supplements. The risk of anemia is not reduced with the regular intake of iron supplements.

**Carbohydrate**

The glucose in our blood comes from the carbohydrates we eat (both from fruit and starch) and is needed to fuel the brain. Not having enough blood (hypoglycaemia) makes us feel tired and 'hungry' (shaky). 'Low blood' and 'low energy' are not the same as when not enough food is eaten and when not enough glucose is available to the brain, for the adenosine triphosphate (ATP) needed to fuel the brain. Having too little glucose in the blood can lead to a state called hypoglycaemia, which results in feeling weak, tired and lethargic. This risk of anemia is not reduced with the regular intake of iron supplements. The risk of anemia is not reduced with the regular intake of iron supplements.

**Food Allergies - Fact or Fiction?**

**Introduction**

As many as one in five people believe themselves to be intolerant (or allergic) to a food. In fact, less than 1% of the adult population have a true food allergy. With more people self-diagnosing a food allergy, there is a risk of unnecessarily cutting out important foods from the diet and risking nutrient deficiencies.

**Altery or intolerance - what's the difference?**

Food intolerance is a term used to describe a whole range of adverse reactions to food, including allergies, enzyme deficiencies and pharmacological effects. It is thought that just 1-2% of adults and no more than 0.8% of children are affected by adverse reactions to food. A true food allergy is an immediate and sometimes severe reaction by the body to a protein found in a particular food, for example milk. The allergic response produces lots of IgE antibodies and this can make you feel ill immediately after eating the food. True food allergy is thought to affect 1-2% of children and less than 1% of adults.

**How do I get myself tested?**

The only reliable way to test for a true allergy is an IgE blood test, a skin prick test or a food challenge. These tests should only ever be performed by trained medical staff in a specialist allergy clinic, because of the risk of severe reactions.

**Blood tests:** measure the amount of IgE antibody you produce when you come into contact with an allergen (the food you are allergic to).

**Skin prick tests:** work by pricking the skin with a minute quantity of suspected allergen. A reaction shows as a small, red, swollen spot or welt on the skin.

**Patch tests:** similar to skin prick tests, except the suspected allergen is applied to the skin, usually the back, using patches. The patches are worn for 48 hours and problem foods will show a red mark on the skin.

**Other allergy tests**

There are dozens of other tests available, often at a hefty price. Many of these tests are not regarded by conventional medicine as being effective, and have no place in the diagnosis of true allergies, for extremely sceptical about:

- Applied kinesiology (measures muscle strength, and your response to foods)
- The Autoculic Cardiac Reflex method (tells you about your allergies by monitoring your pulse when suspect foods are offered to you)
- Hair samples (some centres offer a diagnosis by looking at your hair samples, others will place drops of suspect foods under your tongue and monitor how you respond)
- Vega testing (measures your magnetic field) 'gives away the secret' of your allergies)

**So what if I think I've got a problem?**

Be cautious of dubious practitioners around who can give inappropriate advice and may charge you a fortune in the process. If you do want an allergy test, you can find out where recognised tests can be carried out in your area through your GP. If you do have a food allergy you may be referred to a registered dietitian who will advise you on any dietary changes that are necessary. It is particularly important to obtain proper medical advice if, once symptoms are cleared by a medical condition rather than an allergy or intolerance.

If you suspect that your children may have a problem, then it's imperative that you don't dive in without help. Kids need a very well-balanced diet to grow and develop properly and excluding particular foods may cause problems and could put them at serious nutritional risk.

The bottom line is that food allergy and intolerance are both complicated to diagnose and are not as common as some would have you believe. They need a proper medical diagnosis and advice from a registered dietitian for safe and effective management. They also need to be regularly reviewed as allergies and intolerances to foods may change over time.

**Functional Foods**

**What are functional foods?**

Functional foods are foods that have health-promoting benefits over and above their basic nutritional value.

If you take a look in any supermarket, you will find they are packed with functional foods. You may not know what they are, but you will know what they do. They are the foods that give you the health benefits you need.

**Probiotics**

Probiotics are live bacteria that help to maintain a healthy digestive system and may also help to strengthen your immune system.

**Plant sterols and stanols**

Plant sterols and stanols are clinically proven to reduce the absorption of cholesterol from the diet, resulting in a lowering of total (LDL) cholesterol.

**Lowering total (LDL) cholesterol can help to keep your heart healthy.**

**Plant sterols are found naturally in many of the foods we eat.**

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This Food Fact sheet is a public service of The British Dietetic Association intended for information only. It is not a substitute for proper medical diagnosis or dietary advice given by a Registered Dietitian (RD). To check that your dietitian is Registered visit [www.hpc-uk.org](http://www.hpc-uk.org). Other Food Fact sheets are available from [www.bda.uk.com](http://www.bda.uk.com).

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