

SIGNS AND SYMPTOMS

**Common allergies**

Cereals containing gluten, crustaceans, eggs, fish, milk protein, molluscs, mustard, peanuts, tree nuts, sesame seeds, soya beans

Symptoms include: coughing; swollen tongue; an itchy rash; shortness of breath; swelling of the lips; sore, red and itchy eyes; faintness or anaphylaxis.

Common intolerances

Food preservatives, gluten, lactose, wheat fibre, natural chemicals in caffeine

Symptoms include: weight loss, nausea, feeling bloated, diarrhoea, vomiting, general malaise, fatigue and headaches.



Feeding your fears

Are some food-testing companies playing on our food phobias and risking our health?

Which? can reveal that some companies are not diagnosing food allergies and intolerances properly – and potentially risking people's health.

In our tests, we found that conventional medicine confirmed our four researchers with one allergy and one intolerance between them. But the alternative tests diagnosed 183 intolerances.

Many people confuse allergies and intolerances. A food allergy affects the body's immune system (see 'Signs and symptoms', left). Some allergies are so severe that they can be life-threatening. Food intolerances usually don't involve the immune system. They can be caused by the inability to digest a particular food

or by a chemical or irritant in a food.

Conventionally, a skin-prick test or RAST (radioallergosorbent) blood test at a hospital can diagnose an allergy. Reliable diagnosis of intolerances is more complex, although a hydrogen breath test can detect lactose intolerance. Numerous companies claim to diagnose hidden food intolerances, and sometimes allergies, via more unconventional means. We put them to the test.

Four Which? researchers tried out common alternative tests that advertise online and in magazines. The results, analysed by our experts, make disturbing reading. The tests were expensive and the findings were often contradictory and inconsistent.

Blood test (IgG)

Analysis of blood samples produced differing results

YorkTest Laboratories and Cambridge Nutritional Sciences Ltd (CNS) are the main companies that advertise these tests. They cost between £99 and £275, depending on how many foods your blood is tested against.

They use a sample of blood and test it against a range of foods to detect levels of an IgG (immunoglobulin G) antibody.

They claim that raised levels of IgG antibodies within your blood indicate food intolerance.

What we did

The company sends you a small surgical pin to prick yourself with, and a vial to collect the blood sample. You post back the sample to be tested. Our researcher Clare

said: 'I found the CNS test hard to do and had to prick myself several times to get the right amount.'

Researcher Adam sent one blood sample to YorkTest for the IgG test and one to CNS taken on the same day. A few days later, so as not to arouse suspicion, he sent a duplicate sample to YorkTest under a different name. Clare did the same, but sent her duplicate sample to CNS. Results are provided in a table telling you the level of reaction to each food.

Our findings

Adam has a severe peanut allergy, yet only one of the results showed any possible sensitivity to peanuts. Of 56 foods identified as problematic for Clare, who



A pinprick blood test can be tricky, as our researcher found

has no known allergies or intolerances nor any symptoms, only 21 matched on results from both companies.

There were even differences between the original and duplicate test results from the same companies. Only 34 of 62 foods appeared on both results

from CNS for Clare, with varying levels of reaction.

Experts' verdict

Although IgG testing is a validated scientific test, our three experts believe that, in line with our findings and other published research, its use in diagnosing food intolerance is difficult to prove scientifically. IgG antibodies are commonly found in healthy people and do not prove intolerance, only that the food itself has been eaten.

The experts were also concerned that the diets recommended by these tests exclude up to 39 foods – which could lead to nutritional problems (see 'Checklist', p27).

Vega testing

Can an electric current point to food intolerances?

This method is sometimes called electrodermal testing, and claims to diagnose food intolerances by measuring changes in your 'electromagnetic field' with a galvanometer or computer. Our researchers paid between £60 and £75, depending on where they had the test.

What we did

Our researchers visited an independent practitioner and a practitioner from a company called Nutrimark operating from health-food specialist Holland & Barrett.

The test required researchers to hold a metal probe that was connected to a machine or computer. Another probe was placed on acupressure points on the other hand, creating an electric circuit between them and the machine.

At Holland & Barrett, vials containing 'essences' of different foods were placed in the machine, one at a time, and 'resistance' was tested. The test at the private practitioner was computerised and the practitioner tested for different foods through the computer program.

In both cases, a reduction in current is interpreted as intolerance to that food.

Our findings

Our researcher Adam was told to avoid four foods by one practitioner and three by the other, with only one overlap.

Our researcher Dee was told to eliminate or reduce a total of 13 foods by one practitioner and 10 by the other, with only one overlap.

Both researchers were told to avoid wheat in each test, even



A patient undergoes a course of vega, or electrodermal, testing

though neither has a known wheat or gluten intolerance nor any symptoms that would indicate either. The Nutrimark practitioner told both researchers to avoid bananas, cows' milk and yeast. Dee, who had submitted a food diary before the test, felt that the practitioner 'pushed the probe harder for certain foods, especially ones I eat frequently and was told to avoid'.

Experts' verdict

Dietitian Catherine Collins was particularly concerned that the

private practitioner advised Dee to exclude all grains from her diet. 'This significantly reduces intake of fibres, selenium and B-vitamins, and would make it difficult to get a balanced diet,' she said.

Neither test for either researcher gave matching results for food intolerances.

Our experts agree that this method cannot be recommended and Dr Morris said: 'Clinical studies have repeatedly shown Vega testing to be ineffective in diagnosing allergies and intolerances.'

Hair analysis

Our researchers received conflicting reports with this technique

We contacted two companies, Bionetics and Integral Health, which use hair to diagnose intolerances. Bionetics uses a scanner to diagnose intolerances, claiming it tests 'the vibrational energy pattern of your hair which represents the energy state of your body' to diagnose intolerances.

Integral Health claims to 'genetically examine the DNA at the hair root' to investigate food intolerances. The tests cost between £48 and £75, depending on the company.

What we did

Each researcher sent a few strands of hair to each company. A few days later, Becky sent another sample to Bionetics under a different name and Dee did the same for Integral Health.

Our findings

The companies post a report with intolerances, and vitamin and mineral deficiencies.

Integral Health successfully diagnosed Becky's lactose intolerance and she was told to avoid all dairy products. But Bionetics told her to avoid only sheep's milk and no other dairy products on her first test, and on her second test only cows' milk and no other dairy products. Becky's test results from both companies were very different. Of 37 foods identified, only two

appeared on both lists.

The two tests sent to Bionetics also gave very different results, with only one of 31 foods appearing on both lists.

Dee was told to avoid cows' milk by all tests, even though she has no lactose or cows' milk protein intolerance and has never shown any symptoms.

Experts' verdict

'Despite exhaustive research, using hair analysis to diagnose food allergies has never been proven,' Dr Morris said.

Integral Health claims that no two people are the same and that their test results are 98% accurate. 'But Becky and Dee both received standardised reports advising them to avoid similar foods,' said Andrew Williams.

Analysis form and hair strands

A photograph of a form titled 'HAIR ANALYSIS - APPLICATION'. The form has sections for 'Personal Details (Please Complete)' and 'Practice Details'. The 'Personal Details' section includes fields for Name, Address, Postcode, Tel, Mobile, Email, Age, and Occupation. The 'Practice Details' section includes fields for First Test, Retest, and a question 'How did you find us?'. There are also checkboxes for 'First Test' and 'Retest'.

OUR RESEARCH

Four healthy researchers visited conventional specialists for confirmation of food allergies and intolerances. Researchers were diagnosed as follows (not their real names): **Adam White**, peanut allergy; **Becky Brown**, lactose intolerance; **Clare Black and Dee Grey**, no allergies or intolerances. Becky aside, none of them showed any symptoms of intolerances.

Each researcher trialed two tests. They mentioned symptoms of bloating and headaches but offered no other information.

The results were reviewed by our expert panel: Dr Adrian Morris, allergy specialist at The London Medical Centre and Guildford Nuffield hospital; Andrew Williams, consultant allergy nurse at Homerton University Hospital NHS Foundation Trust; and Catherine Collins, chief dietitian at St George's Hospital, London.

LIVING WITH INTOLERANCE

Sue Vaughan 58, airport check-in staff

Sue has a pork intolerance. She consulted her doctor and kept a food diary when she was younger to discover the cause of regular vomiting and diarrhoea, eventually identifying the offending food as pork.

Now she's very careful to avoid even the smallest trace of pork. 'Restaurants cause a problem as they have a tendency to cook meats together,' she told us. 'I either go vegetarian or am ultra careful.'

When shopping she reads the ingredients of nearly everything she buys. She's particularly wary of gelatine, often found in sweets, but also unexpectedly in some cheesecakes and chicken curries. 'If in any doubt, we don't buy it,' she said.



Kinesiology

This test claims that muscle weakness indicates that a certain food is causing problems

The tests involve lying down and either touching or being close to vials containing 'food extracts'. The practitioner applies pressure on your legs or arms to test resistance. The lower the resistance, the more the food is believed to interfere with the body. The tests cost between £45 and £70, depending on the practitioner.

What we did

Our researchers visited four practitioners (two each) accredited with the Association of Systematic Kinesiology.

Kinesiology in practice



Our findings

These tests proved to be wildly unpredictable and unreliable and there was no overlap of results for either researcher by the two practitioners.

Becky, who is lactose intolerant, was told to avoid three foods by one practitioner and eight by another, with no overlap. Only one practitioner told her to cut down on cows' milk, but not to avoid it, and didn't mention other dairy products.

Clare, who has no known allergies or intolerances, was told to avoid or cut down on seven foods in total, including wheat and dairy. One practitioner told her to definitely avoid peanuts, as she would react very badly to them. But Clare regularly eats peanuts with no ill effect.

The researchers also felt that some practitioners applied more pressure on their limbs for certain foods – those they were later told to avoid.

Experts' verdict

Our experts believe that the

complete lack of consistency in results for both researchers shows that this technique has no use as a diagnostic tool.

They felt that the recommendations given by practitioners were worrying.

'I feel that Clare being told she would go into shock if she ate peanuts is a scary statement to make to a vulnerable client,' said Catherine Collins.

Checklist

■ **Medical advice** Keep a record of your symptoms and a food diary, then speak to your GP. Allergies can be diagnosed by simple skin-prick or RAST testing at your local hospital. Intolerances, other than lactose, are more complicated to diagnose and you may need to carefully cut foods from your diet. Get advice from a registered dietitian before you do this.

If you have an allergy or intolerance:

- **Be prepared** Always carry any medication you may need.
- **Be aware** Check food packaging for ingredients and warnings for allergy and intolerance sufferers.
- **Diets** Don't eliminate food without proper medical advice or supervision. For example, eliminating dairy and wheat could lead to calcium deficiency and osteoporosis in later life.
- **Restaurants** If you're eating out, ask about suitable dishes.
- **Call ahead** Tell friends about dietary requirements if you're going for dinner.
- **School days** If your child has an allergy or intolerance, make sure you always tell their nursery or school.

WHICH? SAYS

Our experts were concerned that the diagnoses from the various companies could endanger patients' health

We believe these tests could cause serious problems. First, they are confusing. For example, CNS say they diagnose intolerances but talk about 'our food allergy IgG test' on their website.

The tests are also expensive and we are concerned you could spend up to £275 one day and get one list of intolerances, only to receive a different list for the same price on another day.

We believe you'd be better off keeping a food diary and making a note of your symptoms before visiting your doctor for a conventional test.

We are also concerned that the diets recommended could lead to nutritional deficiencies.

Our experts feel that none of these tests has diagnostic value for genuine allergies or intolerances, so we recommend you don't take them.