

IgG Food Sensitivity Profile - FAQs

Technical/Clinical Information

What is an IgG?

IgG is an Immunoglobulin (type G). There are several different types of immunoglobulins made in the body, with IgA, IgE, IgG and IgM being the most well known. Immunoglobulins are a class of proteins which function as antibodies produced by the immune system in response to foreign bodies such as food antigens.

What is the usual half life of an IgG protein?

The half life of IgG antibodies is approximately 21 days.

What is the difference between IgG and IgE?

IgE-mediated food reactions are immediate in onset and usually involve symptoms such as abdominal cramping, diarrhoea, skin rashes, hives, swelling, wheezing and in some cases, anaphylaxis. IgG-mediated food reactions are more subtle in their presentation, often occurring hours to days after exposure to food antigens. Symptoms tend to be cumulative and may include abdominal bloating, fluid retention, irritable bowel syndrome, migraine, depression, mood swings, skin conditions and behavioural problems in children.

How should my patient prepare before an IgG Food Sensitivity Test?

When testing for food antibodies, it is recommended that the patient eats a variety of foods for 2-3 weeks prior to testing, with the exception of foods that are known to cause severe reactions. By maintaining a varied diet, this will help to ensure the presence of antibodies to allergenic foods.

Frequently Asked Questions

What types of proteins are tested for in wheat?

There are a number of proteins in wheat, the main ones being albumin, globulin, gliadin and glutenin. This test does not specifically test for gluten although if a number of glutenous grains (wheat, barley, oats and rye) test positive, gluten sensitivity may be inferred.

What types of proteins are tested for in cow's milk?

This test is for casein and the whey proteins alpha-lactalbumin and beta-lactoglobulin. All caseins present in whole milk are included on the test plate.

What is Plaice?

Plaice is a common name for a group of flat fish including flounder and halibut.

Is Cola nut referred to by any other name (e.g. when used as a flavouring is there a number associated with it?). What are its sources and derivatives? Does it contain caffeine?

Cola nut, from the Malvaceae family, comes from an evergreen tree native to the rainforests in Africa. It is related to cocoa and naturally contains caffeine. Cola nut was widely used as a flavouring in soft drinks such as colas and many 'ready meals', fast foods, ice cream and frozen desserts. It is not associated with an E number and is usually listed as "flavouring" rather than by its natural name, making it difficult to identify in foods. Food manufacturers now tend to use artificial ingredients instead of Cola nut in many products. The only way to avoid Cola nut completely is to consume a whole foods diet without any flavouring, additives or preservatives.

Can there be a cross reaction of food in the same family?

Yes, for example crab is in the crustacean family which also includes prawn, crayfish, lobster and shrimp. If a patient tests positive to any of these, it is advisable to avoid the other foods in the family for the first 3 months.

Similarly, the legume family includes beans, nuts, lentils and sprouts. Therefore if a patient tests positive to any of these it is advisable to avoid the whole family for 1- 3 months.

Why would some members of a food family come up positive (e.g. lentils, peas, peanuts) although the patient hasn't consumed them for years, whilst there is no reaction to other members (e.g. almonds, walnut, kidney bean?)

This will depend on the antigenic similarity of certain members of the same family. Some will also cause stronger antibody reactions in an individual than others. Therefore, it is possible that foods which have caused a strong antibody response which remain detectable even though they haven't been consumed for years may not cross react with other members of the same food family. Further, some antigens in food are less likely to initiate an immune response than others and thus the likelihood of producing antibodies to them is reduced.

If a patient has been avoiding a certain food but would like to have it tested, should this food be included in the diet before the test, and how long before taking the test?

Antibody levels decrease at different rates for individuals therefore if wanting to test for a particular food, it is important to include that food in the diet before taking the test. We suggest including a portion of the food every few days for 3 – 4 weeks before taking the test, to ensure an immune response.

What are the implications if a patient has a lot of positive results?

Multiple positive reactions are strongly indicative of high intestinal permeability, also referred to as "leaky gut". Healthscope Functional Pathology provides an Intestinal Permeability test which may confirm this.

My patient knows they have a reaction to wheat and has been avoiding it, but it did not show up in the test. Why?

If a patient has been avoiding a particular food for an extended period of time, it is possible that antibody levels to that food have decreased to a level that is not detectable by the test. This is commonly the case when the gut mucosa has been treated.

What is the difference between durum wheat and wheat? Why would one come up as positive and not the other?

Durum wheat is very hard and is used to make flour and semolina for pasta. Other types of wheat are used for other purposes. The key difference is the protein content therefore one can show up positive and not the other. If a patient is positive for wheat but negative for durum wheat they may tolerate durum wheat but need to eliminate other types of wheat.

If a patient has a high IgG result, how long will it take for the level to return to normal?

After extended avoidance of particular food/foods the concentration of IgG antibodies will eventually decrease. The half life of IgG antibodies in the bloodstream is approximately 21 days. However, antigens may be stored in the liver and released slowly over time which may mean they are still present. The levels will however decrease over time as long as the food is avoided.

Is it necessary to eliminate a particular food from the diet in order to reduce symptoms or can I advise the patient they can still have small amounts occasionally?

This depends on the level of the result for each food. For example, if it is a 1+ result, implying a mild reaction, it is recommended that intake of this food/foods is limited. Such foods should be rotated so they are only eaten once every three or four days. If the result is 2+, a positive reaction, these foods should be eliminated or rotated for 3-6 months, allowing the body to clear immune complexes from circulation. For strong positive reactions that yield a 3+-4+ result it is recommended that the food/foods be eliminated completely for at least 3-6 months, including foods of the same family. As long as the patient continues to be exposed antibodies will continue to be produced as the immune system continues to be reactive.

My patient has not eaten a particular food for several years but they have a positive result. Why?

This is either because that food is hidden in other foods consumed (check all food labels thoroughly for ingredients) or the patient has eaten foods within the same food family and that is eliciting an antibody response. Yeast is a good example here, as is cornstarch which is commonly added to many food products.

If there is a positive result for yeast, does that mean the patient has candidiasis?

No, the test result indicates there is an elevated level of antibodies to yeast. If you need to confirm candidiasis a Complete Digestive Stool Analysis (CDSA) is recommended.

When should I retest?

We usually advise the patient is retested within 6-12 months after the initial test. However, if symptoms have improved and foods have been reintroduced without adverse reactions then a retest is not necessary.