



# **Food intolerances**

Diagnosis and guidance for IgG food intolerances





Food intolerances linked to the production of IgG antibodies (Immunoglobulin G) are the root of an increasing number of health problems and often go unnoticed.

# How do IgG food intolerances develop?

**IgG food intolerances** are based on a sensitivity to certain foods, but have a different mechanism to IgE-mediated allergies.

Multiple local, inflammatory reactions are produced in response to certain foods that are poorly tolerated by the immune system. This causes a disruption in the balance of the intestinal flora, also known as dysbiosis.

This dysbiosis makes the intestinal mucosa porous and the barrier permeable, and can result in undesirable macromolecules and toxins entering the bloodstream. This leads to the formation of immune complexes (interaction between food antigens and IgG antibodies). The IgG antibodies are then distributed throughout various organs and – via a mechanism which has yet to be elucidated – disrupt certain functions and metabolisms, and can be the cause of a number of chronic pathologies.

#### The most common clinical symptoms

#### **Gastrointestinal disorders**

- Flatulence and bloating
- Constipation
- Crohn's disease
- Diarrhoea
- Irritable bowel syndrome (IBS)
- Nausea
- Abdominal spasms
- Colitis

# Non-coeliac gluten sensitivity Chronic pain

- Headaches
- Migraines
- Fibromyalgia
- Muscle and joint pain

#### Weight issues

- Weight problems / yo-yo effect
- Obesity
- Water retention

#### **Psychological conditions**

- Depression
- Behavioural disorders

#### Skin problems

- Atopic dermatitis
- Urticaria
- Dry skin
- Acne
- Eczema
- Psoriasis
- Angioedema
- Ageing of the skin





**NOTE:** These clinical symptoms do not appear immediately, occurring between four hours and three days after the food is consumed.

# What is the difference between a standard allergy and an IgG food intolerance?

Both conditions involve the immune system. However, their mechanisms differ.

A **standard type I allergy** occurs when the immune system produces specific IgE antibodies. These antibodies result in an immediate allergic reaction. The symptoms appear within a few seconds or minutes: sudden and significant swelling, difficulty in breathing, a skin rash, itchiness of the skin or even anaphylactic shock.

A **IgG food intolerance** occurs when the immune system produces specific IgG antibodies. These antibodies can cause inflammatory processes. The symptoms appear up to three days after consumption of a trigger food.

## Our approach

Our concept combines a blood analysis for testing IgG-dependant food intolerances with unique post-test guidance.

An in-depth laboratory analysis allows the identification of abnormally high levels of specific IgG antibodies when compared to food antigens. Individual testing of foods allows patients to very selectively alter their diet according to their results. This limits the degree of restriction thus increasing the chances of success.

# Our 6 pillars of support

- Reliable, reproducible IgG tests based on cutting-edge research
- 2. Dietary recommendations
- Simple rotation and provocation schedule
- Personal profile listing trigger foods and potential trigger foods that bring on symptoms
- Practical advice for dayto-day life
- 6. Scientific advice



NOTE: The test does not detect standard IgE-mediated food allergies

## The nutritional strategy

Our proposed method is based on three important elements: the elimination phase, the provocation phase and the stabilisation phase.



#### 1. Elimination phase

Based on the results of the assayed antibody titre, foods are assigned to one of three groups: 'normal', 'borderline' and 'elevated'. During the elimination phase, the patient can eat all the foods within the "normal' IgG antibodies food group using a four-day rotation cycle. This prevents the development of new delayed food intolerances while avoiding malnutrition. All foods within the 'borderline' and 'elevated' IgG antibody groups are eliminated during this phase. By avoiding these foods, the inflammatory processes can be reduced or even stopped.







#### 2. Provocation phase

After the elimination phase, the patient begins the provocation phase, by gradually including the avoided foods, one by one. The provocation phase helps to identify the trigger foods that may be causing the symptoms. Only one new food at a time should be reintroduced in order to find out whether or not it may be responsible for the patient's symptoms.





# 3. Stabilisation phase

During the stabilisation phase, the trigger foods identified in the provocation phase are eliminated for at least one year so that the IgG antibodies can degrade and the chronic inflammation can subside. The patient then starts another provocation phase. This may reveal that there are one or two foods that will need to be eliminated permanently.





# The panels offered by Eurofins Biomnis

Panel	Description	Pre-analytics
Panel 44	Analysis of 44 common foods, such as dairy products, grains and hens' eggs.	Group code: PAG44
		3 mL of refrigerated serum
Panel 90	Analysis of the 90 most widely consumed foods, including gluten for screening of NCGS*: different types of meat, vegetables, fruits, grains, dairy products and hens' eggs.	Group code: PAG90
		3 mL of refrigerated serum
Panel 270	Analysis of 270 foods and additives: different types of meat, vegetables, fruits, grains, dairy products, eggs, their substitutes and regional specialities. Also included are a wide range of spices, tea, coffee, wine tannins, thickeners and preservatives.	Group code: PA270 3 mL of refrigerated serum

Turnaround: 10 days from sample reception at the Eurofins Biomnis laboratory

\*NCGS: Non-coeliac gluten sensitivity

**Eurofins Biomnis** analyses the patient's sample and determines whether there are any specific IgG antibodies for a wide range of foods.

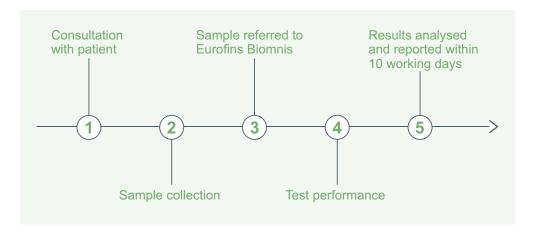
The test is carried out using the ELISA technique.

The foods are then categorised into three groups, based on the results of the antibody titres: 'normal', 'borderline' and 'elevated'. Our laboratory will send you and your patients the results of the test and its dietary recommendations.



# If an IgG food intolerance is suspected

#### **Test process**



#### References

Diet restriction in migraine, based on IgG antibodies against food antigens: a clinical double-blind, randomized, crossover trial Cephalalgia. 2010 Jul;30(7):829-37

IgG-based elimination diet in Migraine plus irritable bowel syndrome. Elifflgaz Aydinlar et al. Department of Neurology, Acibadem University School of Medicine, Istanbul, Turkey Headache 2013 Mar;53(3):514-25

Clinical relevance of IgG antibodies against food antigen in Crohn's Disease – A double blind crossover diet intervention study S. Bentz, M. Hausmann, S. Paul, W. Falk, F. Obermeier, J. Schölmerich, G. Rogler Digestion (2010):81:252–264

IgG antibodies against food antigens are correlated with inflammation and intima media thickness in obese juveniles Martie Wilders-Truschnig, Harald Mangge, Camille Lieners, Hans-Jürgen Gruber, Claudia Meyer, Wilfried März. Experimental and Clinical Endocrinology & Diabetes 2008 Apr;116(4):241-5

#### For more information

# Eurofins Biomnis International Division

E-mail: international@biomnis.com

www.biomnis.com > Test guide



#### **Eurofins Biomnis**

17/19 avenue Tony Garnier BP 7322 – 69357 LYON Cedex 07 – FRANCE www.biomnis.com