

Food Intolerance.

COMPLEMENTARY MEDICINE



Identify Food Intolerances.

Food intolerance comprises the major part of the adverse reactions which individuals have to food and affects our health in numerous ways.

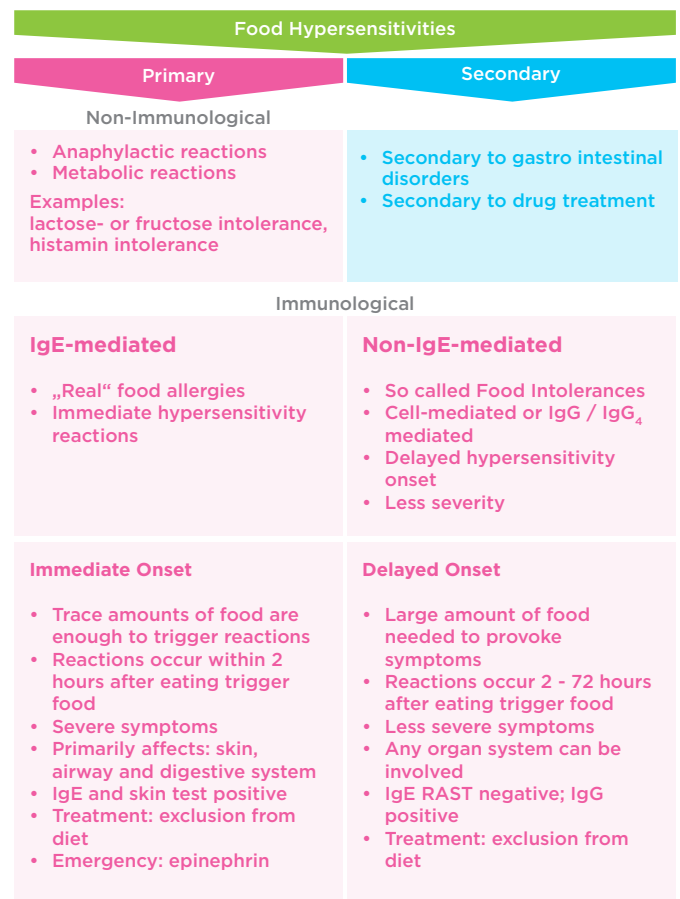
People pay more and more attention to nutrition and health following the “healthy style of life” trend from one side and ongoing trend of selective food avoidance, dictated by allergen labelling regulations.

Multiple clinical manifestations of food intolerance include gastrointestinal (GI) disorders along with various diseases of other organ systems:

- Digestive tract: vomiting, seizures, constipation, diarrhea, Irritable Bowel Syndrome (IBS), Crohn’s disease
- Migraine, headache
- Atopic disease: atopic dermatitis, allergic conjunctivitis, allergic rhinitis and asthma
- Adiposity / Type II diabetes
- Cardiovascular system: hypertension, arteriosclerosis
- Fatigue, depression, etc.

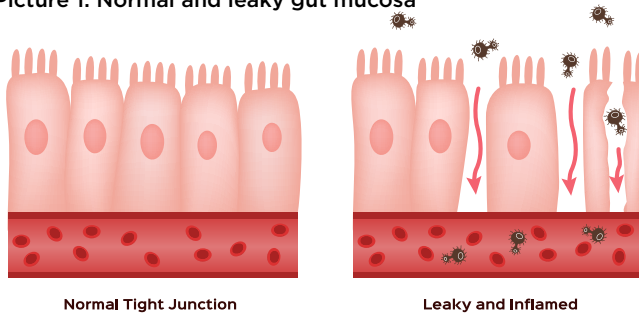
The most important function of the GI tract is to digest the food intake and adsorb nutrients. Chronic stimulation of the GI tract with certain food ingredients (food antigens) can impair basic functions and potentially lead to chronic inflammation and greater permeability of the gut mucosa, phenomenon also recognized as “leaky gut syndrome”.

Two basic categories of food hypersensitivity



If the gut permeability is increased, undigested food ingredients leak through the intestines into the bloodstream (Picture 1). The body then recognizes these particles as foreign “invaders,” and the immune system attempts to fight them off, causing various autoimmune disorders.

Picture 1: Normal and leaky gut mucosa



Normal Tight Junction

Leaky and Inflamed

Numerous studies describe the role of IgG involvement in food intolerance nature. Specific serum IgG / IgG₄ antibodies have been reported in cases of celiac disease, dermatitis or atopic eczema, as well as in disease with increased intestinal permeability and IBS.

The role of food in IBS requires specific mention. Majority of patients with IBS connect their symptoms to certain foods:

- Up to 60% of patients with IBS report a worsening of symptoms after food intake.
- The most of IBS patients (84%) report meal-related symptoms to at least one food item.
- Patients try to identify and remove the food items they do not tolerate. A cross-sectional study showed that 62% of IBS patients limited or excluded food items from the diet (A. Cozma-Petruț, F. Loghin, D. Miere, Dan L. Dumitrașcu, 2017).

With a delayed food hypersensitivity, the symptom does not occur until hours or even days after the triggering food has been consumed. Due to this delayed reaction, it is often impossible to establish an obvious relationship between the symptom and a certain food. For this reason, dietary recommendations are limited and largely based more on experimental approach or pathophysiology knowledge.

IBL International provides a ready solution to help to overcome mentioned difficulties and offers an excellent tool for assessing food intolerance by quantifying the body's immune response. Food Screen is a state-of-the-art blood test offering a rapid, sensitive and reliable method for detecting specific food-related IgG and IgG₄ antibodies.

Advantages of IBL International Food Screen ELISAs

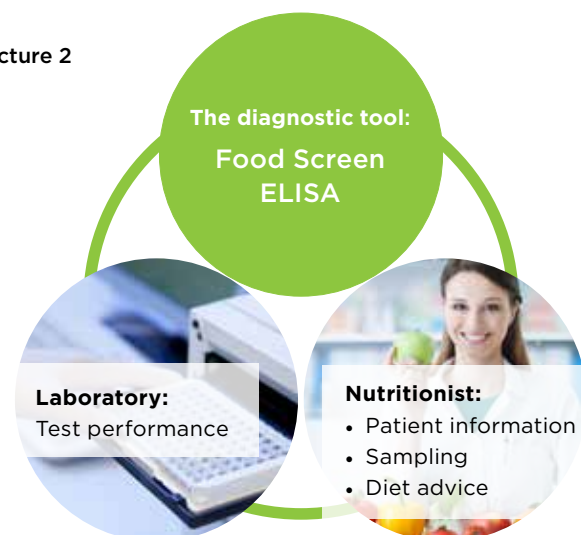
1. Determination of food specific IgG / IgG₄ antibodies is an excellent tool to identify food intolerances
2. State-of-the-art ELISA technology, including ready-to-use reagents
3. Large base of high-quality food antigens available (derived from `native` foods)
4. Flexible number of food antigens on microtiter plate (7 / 24 / 42 / 88)
5. Use of regional food antigens upon request
6. Short incubation periods
7. Common used substrate TMB
8. Low patient sample volume required
9. Venous and / or capillary blood can be used in the IgG and IgG₄ assays
10. Automatable on open ELISA platform (EVOlyzer®, etc.)

Evaluation of results

- Antibody titer is associated with complexity of symptoms
- Quantitative (arbitrary units) or "Classes"
- "Classes" provide relative ranking of the IgG or IgG₄ response (based on the IgE RAST classes)

The best approach to assess food intolerances is to measure specific IgG or IgG₄ antibodies (Picture 2).

Picture 2



Please see the product list on the next page!

PRODUCTS

All assays are available for the quantitative determination of food specific IgG- or IgG₄- antibodies in human serum and plasma. Food Screen tests are available in different plate designs, allowing the screening of most common foods.

Product	Catalog number	Quantity of the plates in the kit	Quantity of patients to be tested from one kit	CE IVD
IgG Food Screen 7 ELISA	30131629	15	180	Yes
IgG ₄ Food Screen 7 ELISA	30131628	15	180	Yes
IgG Food Screen 24 ELISA	30113481	15	45	Yes
IgG ₄ Food Screen 24 ELISA	30113482	15	45	Yes
IgG Food Screen 42 ELISA	30124494	5	10	Yes
IgG ₄ Food Screen 280 ELISA	30115845	15	5	Yes

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The Freedom EVOlyzer meets the demands of laboratories which process between 4 and 12 plates per run. Combine up to 15 assays per run for better result comparability of entire diagnostic panels.

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- Safe



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