

# Newsletter

## Understand Allergies Better

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### Background

Allergy is related to the development of an inappropriate reaction of the body to contact with an allergen. This reaction develops in a context that brings together a set of family and environmental factors. It results in the appearance of a wide variety of symptoms that evolve over the course of a lifetime and can affect several organs.

The medical consultation is essential to discuss the diagnosis, identify allergens and follow the evolution of the disease. In addition to the information collected during the consultation. (Symptoms, history of the disease, exposure to allergens.) The doctor has at his disposal quality biological tests.

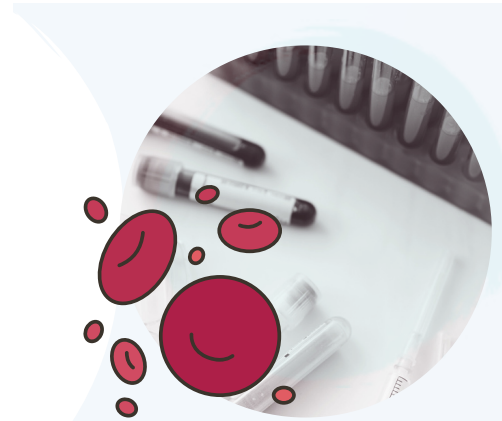
There are indeed blood tests for allergies that can help confirm or exclude the diagnosis if the doctor is suspected. Other examinations, and identification tests, also make it possible to look for allergens responsible for symptoms or to personalize management.

### What is Allergies ?

**Allergy** is an inappropriate, harmful response of our body, which is called a **hypersensitivity reaction**. This reaction is triggered by exposure to a substance in our environment that should normally be tolerated, **the allergen**.

Allergy is related to the synthesis by our body of **specific antibodies, immunoglobulins E or IgE**.

It is these antibodies that will interact with an allergen to trigger the allergic reaction. The mechanism of an allergy takes place in two stages. On the 1<sup>st</sup> contact, the body becomes aware of the allergen and produces IgE. It is from the 2<sup>nd</sup> contact that the symptoms appear, defining the allergy.



Allergy is the consequence of an inappropriate and exaggerated reaction of the body following contact with a substance that should be tolerated. This phenomenon leads to the appearance of very diverse and sometimes severe symptoms.

**Note:** The phenomena of intolerance are not to be confused with allergy. The mechanisms involved are different and the diagnostic tests are also distinct.

## Why do you become allergic?

There is a **family predisposition** to be allergic. Indeed, an individual who has no allergic parents will have a 5 - 15% risk of developing an allergy, while an individual with 2 allergic parents will have a 40 - 60% risk. This is called **atopy** the individual or family tendency to be allergic. **Our environment** and exposure to allergens also play an important role in the occurrence of allergies. As a result of lifestyle, diet, or profession have an influence on the development and evolution of allergic sensitizations.

## What are the symptoms of allergy?

The symptoms observed are very diverse and can be encountered in other pathologies. The diagnosis of an allergy cannot, therefore, be based solely on the presence of these symptoms.

These can be **respiratory symptoms**:

- rhinitis: itching, discharge, "stuffy nose", sneezing;
- conjunctivitis: itching, redness, lacrimation;
- cough;
- asthma: wheezing, coughing, difficulty breathing, chest tightness.

In the case of allergy, these symptoms are persistent and recurrent. **Digestive symptoms** (diarrhoea, vomiting, growth disorder) **or skin symptoms** (eczema, urticaria) may also be observed. **Sometimes the reactions are more severe** and can be life-threatening: angioedema or angioedema (swelling of the mucous membranes of the upper airway that can lead to a risk of asphyxiation) and anaphylactic shock (exacerbated allergic reaction leading to hypotension and severe respiratory failure).

## Evolution of allergy

- Allergy most often begins in infants but can appear at any age. In children under 2 years of age, the allergens involved are usually foodborne and the allergy is manifested by skin (eczema) or digestive symptoms (diarrhoea, growth retardation).
- In most cases, the food allergy disappears when the child grows up. But new awareness-raising may emerge over time. Thus, in adolescents and adults, it is mainly respiratory allergens that are involved, causing rhinitis, conjunctivitis, or allergic asthma. A person allergic to pollen may also experience reactions following the ingestion of foods of plant origin. These are cross-reactions, due to a strong resemblance of certain molecules contained in pollens with those contained in fruits and vegetables.

**Symptoms and sensitizations, therefore, evolve throughout the lives of individuals.**

- You should also know that allergic people are most often **polysensitized (80%)**, with an average of 3 allergens involved. It is the cumulative exposure to all of these allergens that trigger the symptoms.
- It is therefore very important to know all the allergens responsible for the symptoms and to follow their evolution. It is possible to optimize prevention measures & treatments to improve the quality of life.


## What can you be allergic to?

Some allergens are found in the air, these are respiratory allergens:

Some respiratory allergens are present in the environment all year round and cause perennial symptoms. The most important are mites, pets (cats), mold and cockroaches.



**Your Local laboratory can advise you throughout your care journey.**



Other allergens are only present in the air at a specific time of the year: Pollens. The two main pollens at high allergic risk are **birch pollen** and **grass pollen**. Their presence in the air varies depending on the region and climate.

Other allergens are ingested, these are food allergens:  
The foods involved in food allergies vary by country and eating habit.  
Food allergens can sometimes be responsible for respiratory symptoms and vice versa.

Biological diagnosis:

- Allergy biologic tests can be performed at any age, starting with a blood test. They do not require fasting or stopping treatments.
- **Allergy blood tests answer the question: Is it an allergy?**
- They allow, in addition to the medical consultation, to affirm or exclude the allergic origin of the symptoms and therefore the prescription of an adapted treatment. These are, for example, Phadiatop (screening for respiratory allergies) or Trophatop (screening for food allergies).

## Can other blood tests answer the question: what am I allergic to?

In the event of a positive screening, the information collected during the medical consultation suggests 1 or more allergens. The specific IgE dosages of these allergens (for example birch-specific IgE) make it possible to conclude in case of a positive result to sensitization. The general practitioner may also advise a consultation with an allergist. This specialist doctor can perform skin tests that will guide the diagnosis. Advanced tests, prescribed by the allergist, will make it possible to adapt and personalize the management: these are the specific IgE of molecular or recombinant allergens. These tests help, for example, the allergist to predict the severity of symptoms or to adapt the diet

## What should I do if I am allergic ?

In case of food allergy:

The identified allergen should be removed totally or partially from the diet. These food eviction measures can be refined, with the allergist, using very **advanced blood tests: specific IgE assays of molecular or recombinant allergens**. The goal is to reduce evictions as much as possible for the comfort of the allergic person.

In case of respiratory allergy:

Measures can reduce the number of allergens present in the environment (removal of carpets for example for dust mites). These measures can be supplemented by treatments used to alleviate or suppress symptoms (antihistamine treatments). But these treatments do not cure the allergy.

There are treatments that act on the cause of the allergy and can permanently suppress the symptoms. This is desensitization or specific immunotherapy. These are long-term treatments




Resource: Allergy: why do you become allergic? | Cerballiance

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