

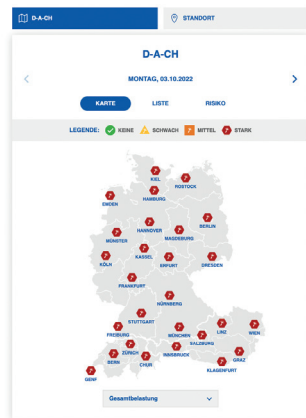
## GET MORE TIPS AND INFORMATION

If you would like additional information, visit us at our Patient Information Portal.

[www.allergie-freizeit.de](http://www.allergie-freizeit.de)

For example, here you will find a practical pollen forecast for the DACH region (see screenshot below) and many more useful tips. (Note: Website in German)

A symptom calendar and many helpful questionnaires are also available for you under downloads: [www.allergie-freizeit.de/downloads/](http://www.allergie-freizeit.de/downloads/) (Note: Documents in German)



In 2022 again, our website allergie-freizeit.de received the „MeinAllergie Portal Digital Health Heroes Award“ as a very well-designed and helpful communication service for allergy sufferers.

**Allergopharma GmbH & Co. KG**  
Hermann-Körner-Str. 52 · 21465 Reinbek, Germany  
Tel. +49 40 72765-0 · Fax +49 40 7227713  
[www.allergopharma.com](http://www.allergopharma.com) · [info@allergopharma.com](mailto:info@allergopharma.com)

## CROSS-REACTIVITY BETWEEN DIFFERENT TYPES OF POLLEN

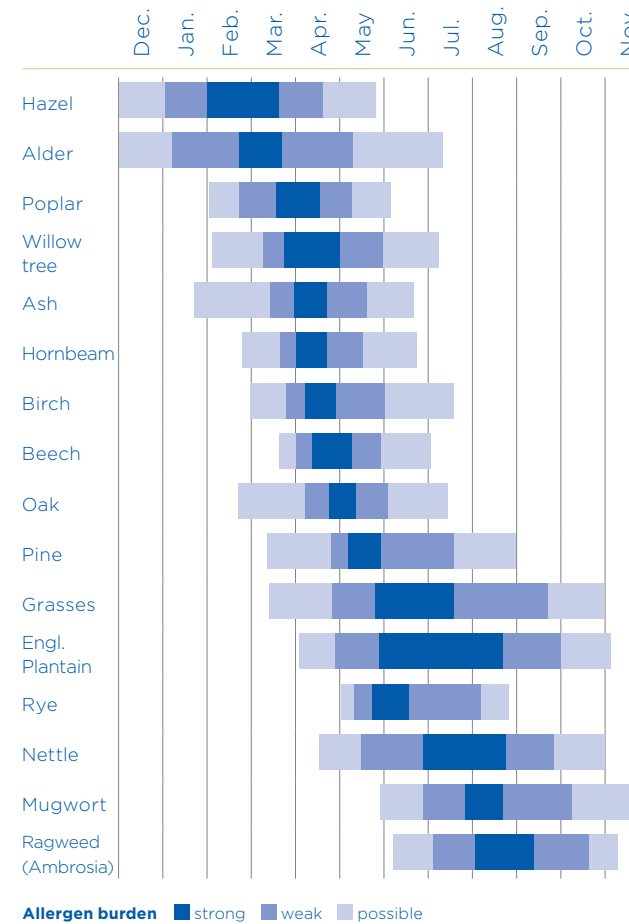
Pollen from wind-pollinated grasses, trees and herbs are among the most common allergen sources in Europe. These almost all belong to 6 plant families, so there is a great biological similarity that can lead to cross-reactivities. Therefore, for example, birch pollen allergy sufferers often also react allergic to the pollen of hazel and alder. Since the pollen period is often not identical, the complaint period may be prolonged.

The following table shows possible cross-reactivities between some relevant plants.

POLLEN	POSSIBLE CROSS-REACTIVE POLLEN
<b>Trees; bushes</b>	
Birch	Beech; oak; alder; ash; hazel; chestnut; olive tree; lamb's quarters; rape; grasses/cereals; mugwort
Beech	Birch; alder; hazel
Oak	Birch
Alder	Birch; beech; hazel
Ash	Birch; olive tree; grasses/cereals; ragweed (ambrosia)
Lilac	Olive tree
Hazel	Birch; beech; alder
Chestnut	Birch
Olive tree	Birch; ash; lilac; grasses/cereals; mugwort
Platanus	Mugwort
Robinia	Lamb's quarters
<b>Grasses/cereals; herbs</b>	
Grasses/cereals	Birch; ash; olive tree; rape; mugwort; corn; lamb's quarters
Rape	Birch; grasses/cereals
Mugwort	Birch; platanus; olive tree; grasses/cereals; ragweed (ambrosia); oxeye daisy; sunflower; chrysanthemum
Lamb's quarters	Grasses/cereals; birch; robinia
Ragweed (Ambrosia)	Ash; mugwort
Oxeye daisy	Mugwort; sunflower
Sunflower	Mugwort; oxeye daisy

## FLOWERING SEASON AND ALLERGEN LOAD

Depending on the pollen season, plants are categorized as early bloomers (January to April), mid-season bloomers (May to Mid of July) and late bloomers (from Mid of July to End of September).



© Stiftung Deutscher Polleninformationsdienst, according to pollen report data from 2011 - 2016.

What, when and how in case of allergies

## CROSS-REACTIVE ALLERGENS

Explanation, Therapy, Tips for You



A pollen allergy should be taken seriously because the illness can move from the upper to the lower respiratory tract and develop into allergic asthma.

# UNDERSTANDING CROSS-REACTIVITIES

The word allergy essentially means „foreign reaction“. This fairly accurately describes what happens in your body in case of an allergy. An allergy is nothing more than an exaggerated defense reaction of the immune system to certain, normally harmless environmental substances. These substances are called allergens.

The number of people affected by allergic diseases has risen sharply in recent decades. The number of people who complain of intolerance reactions after eating food is also increasing.

Cross-reactivities occur when the allergenic proteins in different allergens are similar in structure. They can be the reason why allergy sufferers suddenly react allergically to a foreign allergen.

## POSSIBLE CROSS-REACTIONS

- 1 Pollen and foods,
- 2 House dust mites and foods,
- 3 Pollen of various plant species.

## CROSS-REACTIVITIES BETWEEN POLLEN AND FOODS

Cross-reactivities between pollen and foods are called pollen-associated food allergies. Usually, a pollen allergy is already present before the allergy to the cross-reactive food develops. Especially in older children, adolescents and adults, food allergy is usually caused by cross-reactivities with pollen.

Below you will find some examples of possible cross-reactivities between pollen and foods.

POLLEN	POSSIBLE CROSS-REACTIVE FOODS
Birch	Pome fruit (apple, pear); stone fruit (peach, cherry); banana; kiwi; lychee; mango; orange; carrot, raw; potato, raw; celery; soy; tomato, raw; spices; nuts; chamomile (tea, medicinal)
Hazel	Nuts
Olive tree	Banana; potato, raw; tomato, raw
English Plantain	Melon
Lamb's quarters	Banana; melon
Grasses/cereals	Pome fruit (apple, pear); stone fruit (peach, cherry); kiwi; melon; celery; tomato, raw; peanut; flours; rice
Mugwort	Pome fruit (apple, pear); stone fruit (peach, cherry); kiwi; mango; pea; celery; tomato, raw; spices; chestnut; peanut; nuts
Ragweed (Ambrosia)	Melon; celery

## CROSS-REACTIVITIES BETWEEN HOUSE DUST MITES AND FOODS

People allergic to house dust mites may develop allergic reactions due to cross-reactivities when eating shellfish (e.g. shrimp).

## POSSIBLE SYMPTOMS

Symptoms usually appear within a few minutes to two hours after eating certain foods.

### MORE OFTEN



#### MOUTH AND THROAT

Itching or tingling in mouth and throat (lips, tongue, palate, ears, throat), swelling of oral mucosa, sometimes accompanied by hoarseness, difficulty swallowing



#### LUNG

Coughing



#### SKIN

wheals, redness, itching (hives), rarely swelling (angioedema)

### RARER



#### STOMACH/INTESTINE

Stomach cramps, vomiting, diarrhea, nausea



#### WELL-BEING

Cardiovascular problems, severe allergic reactions in form of anaphylaxis

# MAKE LIFE EASIER

In case of food intolerances, only a doctor can check if it is an allergy. The following tips can help you to reduce your everyday complaints.

## TIPS FOR EVERYDAY LIFE



The safest approach is to avoid the allergy-triggering foods. A diet and complaint log can help identify them.



Some factors influence the strength of the reaction to the food, e.g.:

- existing diseases (e.g. gastrointestinal tract, asthma)
- physical exertion
- quantity of a single food or consumption of several allergenic foods
- simultaneous intake of alcohol
- taking certain medications (e.g. proton pump inhibitors, beta blockers)



Many foods cause discomfort only raw or uncooked.



If severe reactions have occurred, a doctor can prescribe emergency medication. These can be recorded in an allergy passport.



In the case of a pollen-associated food allergy, increased discomfort may be experienced when consuming cross-reactive foods during the pollen count, while consumption may be possible outside of the pollen count.