

# Pollen Allergy Guide



**ALLERGY  
SKIN  
ASTHMA**



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A photograph of three young people walking through a field of tall grass and yellow wildflowers. In the center is a young woman with blonde hair in a ponytail, wearing a white t-shirt with a graphic that reads "We must take ADVENTURES in order to KNOW WHERE WE TRULY BELONG". To her left is a young man in a light pink t-shirt with "VENICE BEA" on it. To her right is another young woman in a bright pink t-shirt with a "Scrub" graphic. They are all smiling and looking towards the right. The sky is filled with large, white, fluffy clouds. A semi-transparent white banner is at the bottom of the image, containing the text "POLLEN ALLERGY" in blue capital letters.

# POLLEN ALLERGY

# Pollen allergy

**SNEEZES**, sniffles and itchy eyes. Pollen allergy can cause unpleasant symptoms that impair everyday life and reduce your quality of life. The inconvenience varies for each individual. Some cope well with allergy medication while others are severely impaired, even prevented from enjoying regular everyday life or forced to limit their outdoors activities during the pollen season.

**POLLEN** triggers symptoms in about one in every five Finns, so it is not an uncommon condition. While self-care is enough for some, those with severe symptoms may have to take allergy medication from early spring to late autumn.

**EFFECTIVE** management of pollen allergy improves both quality of life and work ability and helps prevent other atopic conditions. This is important because untreated allergic rhinitis, for instance, can be a risk fac-

tor for the development of asthma. It can also impede asthma control and worsen symptoms for those with atopic dermatitis.

**AS CLIMATE** change leads to longer growing seasons in many regions, including Finland, pollen season can similarly grow longer and help introduce new allergenic plants to Finland. If you have pollen allergy, this might mean extended and increasingly difficult symptoms and becoming exposed and sensitised to new allergens.

**THERE** are various options available for treating pollen allergy. You should not force yourself to cope with the allergy symptoms as there are various therapies available, including treatment of symptoms, allergen immunotherapy, medical remedies and drug-free treatment.

A close-up photograph of several thin, brown willow branches. The branches are covered with numerous small, fuzzy, greyish-brown catkins. The background is a soft, out-of-focus light grey, creating a bokeh effect. The overall composition is vertical and elegant, with the branches and catkins being the primary focus.


# **ALLERGENIC POLLEN PLANTS AND POLLEN SEASON**

# Allergenic pollen plants and pollen season

**ALLERGENIC** pollen grains are lightweight. Once they land on human mucous membrane, the proteins they contain are quickly released, penetrating the membrane within seconds. Of allergenic pollen plants, the most common ones are all wind-pollinated. Even before blooming, many plants release allergenic particles that can cause symptoms in a similar way to pollen grains. For those dealing with pollen allergy, we recommend following the pollen information and pollen forecasts provided by the University of Turku ([www.norkko.fi/en](http://www.norkko.fi/en)).

**AT THE** onset of spring, alder and hazel are the first ones to trigger allergic reactions. In Finland, hazel grows wild only in coastal regions in the south and southwest.

Alder and hazel are the first ones to trigger allergic reactions.



**BIRCH** is the most common cause of pollen allergy in Finland. Statistically, we have a season of high birch pollen levels nearly every other year. The majority of people with birch pollen allergy also react to alder and hazel pollen, as well as birch sap or a fresh birch sauna whisk.

The majority of people with birch pollen allergy also react to alder and hazel pollen.

**OTHER** broad-leaved trees (aspen, poplar, willow, maple, ash, lime, oak and elm) rarely cause any symptoms. The willow catkins that appear late in the winter do not release pollen. Catkins begin to bloom only when yellow stamens emerge. With a wide variety of species, willow blooms from April to early June. While coniferous trees growing in Finland (spruce, pine, juniper) produce high levels of pollen, allergic reactions are highly uncommon.



**AT LEAST** 40 species of grass produce allergenic pollen. They all cause symptoms to those with grass pollen allergy. The majority of them begin to bloom just before midsummer. Grasses have a long period of pollination, often extending to early autumn.

If you are allergic to mugwort, you should weed it out from your immediate environment well before it begins to bloom.

**MUGWORT** is a weed that grows on roadsides and in wastelands. Pollen released by the flowers in the morning does typically not travel far, often triggering allergy symptoms locally near the actual vegetation. If you are allergic to mugwort, you should weed it out from your immediate environment well before it begins to bloom, no later than the first weeks of July.

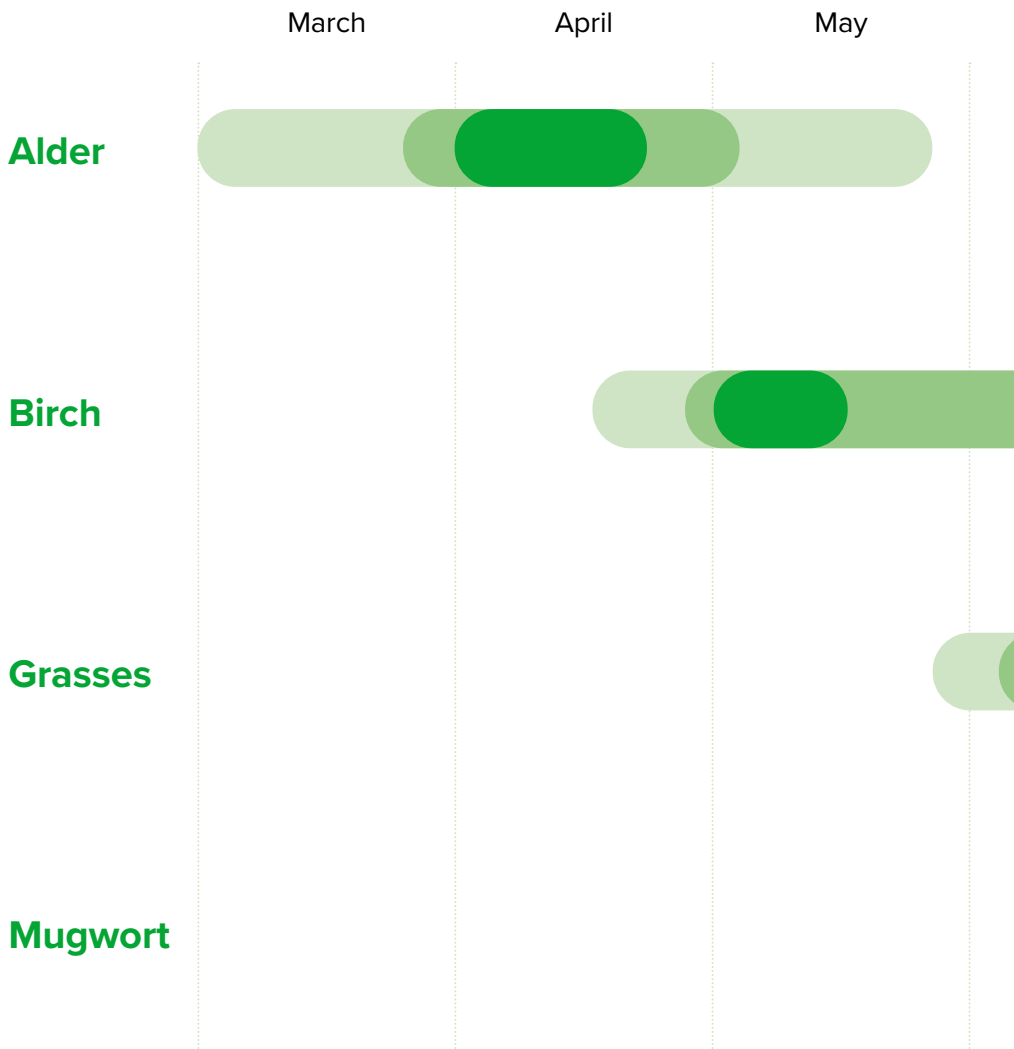
**RELATED** to mugwort, field wormwood (*Artemisia campestris*) and common ragweed (*Ambrosia artemisiifolia*) cause symptoms to most people with mugwort allergy. Running a couple of weeks behind mugwort, field wormwood blooms in the dry sandy soils of South and Central Finland. New to Finland, ragweed is a highly allergenic species. It cannot yet reproduce here due to the short Finnish summer but the climate change may help create conditions that are more favourable to it. Pollen from ragweed travels to Finland from other parts of Europe during August and September.








# Pollen seasons in Finland



Pollen airborne

always 

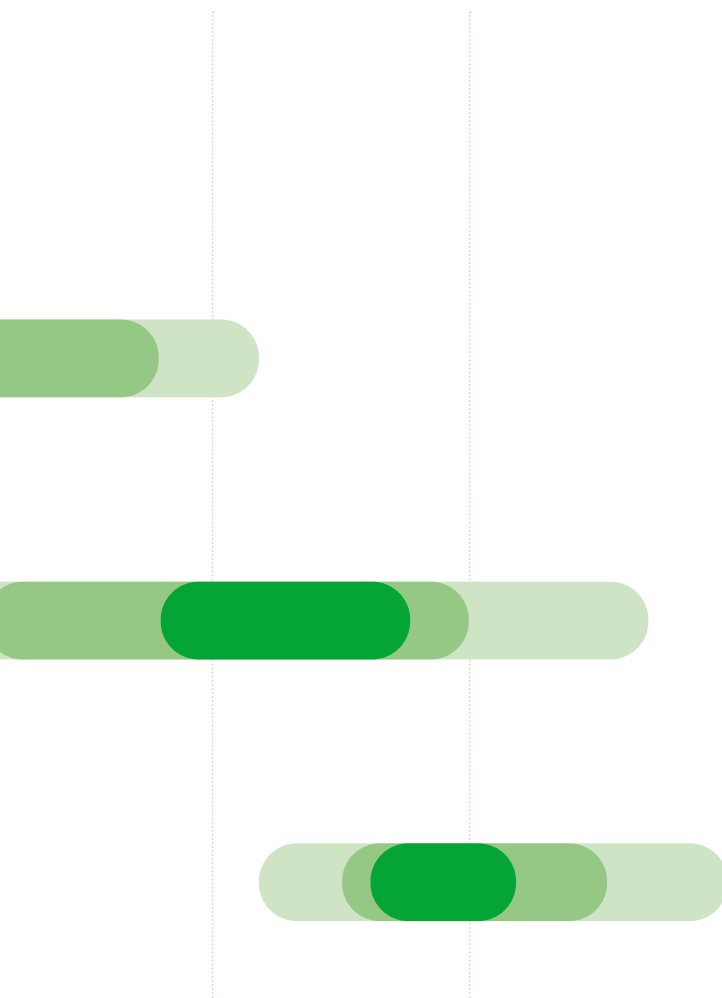
often 

occasionally 

June

July

August



**AIRBORNE** fungi are found outdoors throughout the year, excluding the snow season. They become airborne immediately once snow melts and the soil dries, with concentrations particularly high late in the summer, from late July until snowfall. Fungal spores can cause symptoms similar to allergens in pollen. The most prevalent fungi are *Cladosporium* and *Alternaria*. Airborne fungi cause symptoms to approximately 1–2% of all people outdoors.

Fungal spores  
can cause  
symptoms  
similar to  
allergens in  
pollen.



# POLLEN ALLERGY SYMPTOMS



# Pollen allergy symptoms

**POLLEN ALLERGY** affects both adults and children. While first symptoms often manifest early in life, adult-onset allergies are also not uncommon. It is rare for under two-year-olds to develop a pollen allergy. Pollen allergy symptoms are unique to each individual. They are affected by the degree of allergic sensitisation, the amount of pollen in nature and weather conditions.

**IT MIGHT** sometimes be difficult to tell the difference between allergy symptoms and a common cold. Symptoms are similar but there are some clues that can help you tell them apart. While both involve nasal congestion, sneezing and runny nose, pollen allergy symptoms do not typically involve fever or muscle pain. Pollen allergy symptoms often recur at a particular time of the year and last longer than symptoms of a common cold.

## Nasal symptoms

Runny, itchy and stuffy nose. Occasional sneezing. A clear runny nose is typical to allergies while a common cold tends to cause a thicker green or yellow phlegm.

Pollen allergy symptoms often recur at a particular time of the year.



## Eye symptoms

Watery, red and itchy eyes are common symptoms related to pollen allergy. If persistent, the symptoms may also lead to eye inflammation. Excessive eye discharge, pain in the eyes or sensitivity to light are not allergy symptoms and always require consultation with a doctor.

## Respiratory symptoms

Pollen allergy can also trigger respiratory symptoms. Some people with pollen allergy experience asthma-like symptoms, while some asthmatics with pollen allergy may encounter aggravated symptoms. Respiratory symptoms include cough, shortness of breath and aggravation of other asthma symptoms.

Some people  
with pollen allergy  
experience asthma-  
like symptoms.

## Skin symptoms

For some people with atopic dermatitis, pollen allergy symptoms can worsen their atopic dermatitis symptoms. Allergy cross-reactivity can also cause skin symptoms when handling raw fruit or vegetables.

## General symptoms

Fatigue and headaches. Allergy causes symptoms that people do not necessarily associate with pollen allergy. And as they persist at night, they sometimes make it more difficult to sleep. Extended poor-quality sleep leads to increased fatigue and may cause more headaches.



## Allergy cross-reactivity

**CERTAIN** foods may cause symptoms due to cross-reactivity from pollen allergy. Many fruits, vegetables and spices contain pollen-like proteins which the body mistakes for pollen. Symptoms caused by cross-reactivity usually occur in the mucous membranes of the mouth, lips and the pharynx. Touching raw vegetables and fruits may also cause symptoms in the skin. When vegetables and fruits are processed (by cooking or freezing), their protein structure is altered in a way that eliminates the symptoms. Nuts, spices and celery are an exception as their protein structure does not change when they are cooked. In other words, they may cause symptoms due to cross-reactivity even after they are cooked.

**SYMPTOMS** caused by cross-reactivity are usually not serious. The symptoms are unpleasant but not life-threatening. You do not have to completely avoid foods which cause allergy symptoms due to cross-reactivity. You can enjoy them within the limits of your symptom tolerance or you can process them to eliminate the symptoms. Symptoms caused by cross-reactivity may also be seasonal. They might occur only during the pollen season, leaving you to enjoy the foods without any issues in the off-season.

Certain foods may cause symptoms due to cross-reactivity from pollen allergy.



# **POLLEN ALLERGY TESTS**

# Pollen allergy tests

**IF YOUR** allergy symptoms always appear around the same time of the year and disappear after the pollen season, no visit to the doctor or testing may be needed to diagnose your allergy. If the cause for the symptoms is unclear or allergen immunotherapy is an option for treating the symptoms, the allergy can be identified with tests. There are lab tests for cross-reactive and actual food allergies.

Self-medication options for treating allergy symptoms are available from pharmacies as over-the-counter drugs.

## **When should you see a doctor?**

A medical examination should be considered if your pre-school aged child has unresolved allergy symptoms, your symptoms occur year round, self-medication does not alleviate the symptoms, allergic rhinitis is accompanied with a prolonged cough, you make a wheezing sound when you breathe or you suffer from shortness of breath due to pollen allergy.

**SELF-MEDICATION** options for treating allergy symptoms are available from pharmacies as over-the-counter drugs. Respiratory symptoms are treated with asthma medications which always require a prescription. You should also ask for a prescription for your other allergy medications if you need them for a longer period of time or you are using several other medicines as well. As prescription medications, they accrue Kela's annual maximum limit on out-of-pocket costs.

A hand is holding a blister pack of white, round pills. The background shows an open dark blue medical bag with a zipper, containing several other blister packs of pills and a white plastic bottle. A smartphone is visible in the lower left corner. The entire scene is set on a light-colored wooden surface.

# TREATMENT OF POLLEN ALLERGY SYMPTOMS

# Treatment of pollen allergy symptoms

**IN POLLEN** allergy therapy, proper care and timing are important. Allergy medications take effect quickly. You do not have to start taking the medication in advance, only after experiencing the first symptoms. Exceptions include nasal sprays used for treating allergic rhinitis, as they take a while to take effect. You can keep an eye on pollen forecasts to try and predict the right time for starting the use of nasal sprays. You can also ask pharmacists for help and advice on the treatment of allergy symptoms.

In pollen allergy therapy, proper care and timing are important.


## **Self-treatment of allergic rhinitis**

A nasal spray containing corticosteroid (cortisone) is typically recommended for self-treatment of allergic symptoms of the nose. The symptoms can also be treated with nasal sprays containing antihistamines or oral antihistamines. The nasal spray is applied to both nostrils. You should use it regularly for a sufficient period of time because its efficacy is at its best after 1–2 weeks of use. The most efficient nasal sprays contain cortisone and antihistamines. They are safe, and they can be used regularly throughout the pollen season. Decongestant sprays are not recommended for treatment of allergic rhinitis.

## **Self-treatment of eye allergy symptoms**

Antihistamine eye drops are typically recommended for the treatment of allergic symptoms of the eyes. And while sodium cromoglicate eye drops





may also be used, they have a lower efficacy. The drops are applied to both eyes. Allergy eye drops are safe to use. If they do not alleviate your symptoms sufficiently, you should also take an oral antihistamine.

### **Self-treatment of other allergy symptoms**

Oral antihistamine products have a good efficacy against general pollen allergy symptoms, such as sneezing, allergy-induced fatigue and any symptoms in the skin caused by pollen allergy. Some with allergic reactions find simple relief for all their symptoms via an oral antihistamine. You may also treat your skin symptoms with a mild hydrocortisone cream. Remember to follow the directions in the medicine package.

### **Treatment of children's pollen allergy**

Pollen allergy symptoms are known to have a negative impact on children and young people, affecting their sleep, alertness level, spirits and even performance in school. Due to the adverse effects of pollen allergy on the quality of life, extra care should be taken when treating children. If untreated, pollen allergy increases the risk of developing asthma by 2.5- to 3.5-fold. Symptoms of pollen allergy in both children and adults are treated with the same medication. Children over the age of 5 may also start pollen allergen immunotherapy. Consult your physician to determine the correct medication and dosage for smaller children. Older children may use non-prescription allergy medications. Always account for age-appropriate dosage and observe relevant directions when using allergy medications.

## Drug-free treatment

**POLLEN ALLERGY** symptoms may also be alleviated without medication. There are a number of drug-free options which should be used if they are helpful.

**SOME** that are allergic to pollen find sinus rinses useful. Using the rinses, such as a neti pot, is easy but may involve a slight learning curve. They may help reduce the amount of pollen on mucous membranes and therefore alleviate allergy symptoms. Sinus rinses should be used before applying nasal spray.

**THERE** are many simple ways to prevent pollen from coming indoors. Because pollen grains attach to skin, hair and clothing during outdoor activities, you can choose to go out on rainy days or in the early morning or late evening, as there is less pollen in the air.

**LAUNDRY** should not be taken outside to dry during high pollen season as pollen may attach to it. When you come home, it is a good idea to change into clean clothes. You can equip ventilation windows and air vents with anti-pollen mesh or filters. You should also avoid opening your windows in the high pollen season.

**IT IS** also a smart idea to change your bedlinen and especially your pillow case more often than usual. Showering just before bedtime reduces the amount of pollen that may have attached to hair and skin and may alleviate your nighttime symptoms. A high-quality air purifier removes pollen grains from indoor air.

A high-quality  
air purifier  
removes pollen  
grains from  
indoor air.





# **POLLEN ALLERGEN IMMUNOTHERAPY**

# Pollen allergen immunotherapy

**ALLERGEN** immunotherapy is a cause-specific treatment. It is designed to desensitise the body to the substance causing the allergy. Allergen immunotherapy should especially be considered if the allergic symptoms are long-lasting (the entire pollen season), particularly adverse or recur constantly. The treatment requires a major commitment as it takes approximately 3 years. Allergen immunotherapy can be given to adults and children over the age of 5.

Allergen immunotherapy can be administered by injections or orally as sublingual tablets.

**THE NEED** for allergen immunotherapy can be assessed with a referral from primary health care or occupational health care. The therapy is also provided by several private clinics. A physician assesses if there is anything that might prevent the therapy. For instance, a poorly treated asthma may impede the start of allergen immunotherapy.

**ALLERGEN** immunotherapy can be administered by injections or orally as sublingual tablets. Both are effective. Injections are given for birch tree allergy, hay fever, pet allergies (dogs, cats) and hymenoptera venom allergy. Tablets are given for hay fever, birch tree allergy and dust mite allergy.



## **POLLEN** allergy immunotherapy

injections are generally started in the autumn. Ask your physician for an assessment well in advance in the late summer. Tablet treatment usually starts in January.

**ANYONE** undergoing allergen immunotherapy receives specific directions in the beginning of the therapy period. The directions vary based on the form of treatment. In an initial guidance session, specific situations related to the treatment are discussed and you are instructed on when to contact your care unit. Good direction is important to ensure the therapy succeeds.

## **Injection therapy**

Injection therapy is provided at a health care unit. The injections can be given for 1–2 allergens at a time. At first, subcutaneous injections are given on the upper arm every 1–2 weeks, in most cases for a period of 7 weeks. Thereafter, the injections are continued every 4–8 weeks for three years. The patient remains under supervision at the health care unit for approximately 30 minutes.

## **Tablet therapy**

The first oral dose, i.e. a sublingual tablet, is taken at a health care unit under the supervision of a physician. Thereafter, the tablet is taken at home every day for three years.

## Efficacy of allergen immunotherapy

The efficacy of allergen immunotherapy cannot be predicted with confidence. However, at least 80–90 percent of treated patients ultimately see their allergic symptoms alleviated. Many already experience improvements during the first year of therapy. The effect of the therapy endures for several years following the end of treatment. For children with grass pollen allergy the average effect after treatment is 12 years. The treatment can be later repeated if necessary.

## Costs of allergen immunotherapy

Allergen immunotherapy costs can vary. In 2025, a three-year allergy immunotherapy by injection, administered in public health care, cost about EUR 100–400 depending on the well-being services county. The costs for a three-year tablet immunotherapy were approximately EUR 1,900.

At least 80–90 percent of treated patients ultimately see their allergic symptoms alleviated.

**TABLET IMMUNOTHERAPY** costs comprise of the price of the medicinal product as well as follow-up visits and backup medication. Allergen immunotherapy products accrue Kela's annual maximum limit on out-of-pocket costs. In practice, the limit is exceeded during a full calendar year of tablet therapy.

**INJECTION IMMUNOTHERAPY** costs comprise of injections, follow-up visits and backup medication expenses. Allergen extracts are included in the visit expenses. And when calculating the costs, you should also account for travel expenses to the unit administering the immunotherapy and the time required.

For more information on pollen allergy (in Finnish)  
[allergia.fi/allergia/siitepolyallergia/](https://allergia.fi/allergia/siitepolyallergia/)









Case story:

## Newfound freedom through pollen allergen immunotherapy

*Anna, 41*

”

I spent six months of the year indoors, feeling congested. That was my life before I received allergen immunotherapy for birch pollen. Now, I have plenty of energy and lots of time.

For years, my life consisted of testing various medications, changing my clothes every time I came home and many other inconveniences. I suffered from traditional pollen allergy symptoms as well as year-round cross-reactivity with foods. Other allergies, atopic eczema and asthma were also part of the package. I eventually decided to see a doctor, hoping that I would get allergen immunotherapy. After initial examinations, I started allergen immunotherapy injections for birch pollen.

For me, the three-year immunotherapy worked like a dream: I only got mild symptoms. I had thought, even worried, about the possible anaphylaxis immunotherapy may cause, but I figured that I am in good hands and in a safe environment.

At first, the injections were fairly frequent but soon I only had to take them once every three months. I got to know the people who gave the injections really well. After three years, it was time for my last injection. It was a difficult visit for me. I was sad to say goodbye to the nurse I had been regularly seeing for three years. After all, they had been involved in various phases of my life.

And the positive impact? I already felt a difference during the



first spring of my immunotherapy. The medication helped and I had more energy. Previously a major time-consuming inconvenience, having to avoid and remove pollen was now almost out of the picture.

During the second year of my immunotherapy, most of the cross-reactivity was also gone, and I had the courage to try various foods more freely. I remember the day I was able to eat tomatoes again. I even had to set some limits on my consumption of those delicious cherry tomatoes as it only took me a minute to devour a full pack of them. They're not the cheapest.

After the immunotherapy, I have been able to lead a much more active life. I still need to take allergy medication but they do help for the most part and I don't have to take them as much as before. I feel free and I have more time to do things when I'm not constantly sleepy. It also helps that something that occupied my thoughts for a long time is now gone. However, now that the immunotherapy is more than 10 years in the past, some of the symptoms have started to return. In fact, I just recently received a referral to assess my need for allergen immunotherapy. Let's see if I should have another round.

If you feel that pollen allergy really bothers you, I recommend that you discuss the possibility of allergen immunotherapy with your physician.



# Rajoittaako siitepölyallergia?



**siitepoly**tieto

Kaikki tarvitsemasi  
tieto siitepölyallergiasta  
[www.siitepolytieto.fi](http://www.siitepolytieto.fi)

"The association's advisor gave me  
really good guidance on the treatment  
pollen allergy. What's more, the  
association and its activities became  
a nice hobby for me"

You can become a member, too.  
**[allergia.fi/en/membership/](https://allergia.fi/en/membership/)**



The Finnish Allergy, Skin  
and Asthma Federation