



A detailed  
guide for people  
with **atopic  
eczema**



## Atopic eczema

# What is atopic eczema?

**Atopic eczema**, also known as **atopic dermatitis**, is a lifelong episodic condition. It alternates between periods of calm (remission) and flare-ups (exacerbations) with severe eczema. In very rare cases, the disease is continuous without periods of remission. Atopic eczema is a protective inflammatory skin reaction and is today the most common chronic inflammatory skin disease, **affecting mainly infants, children, and adolescents**. In some cases, **symptoms persist into adulthood**, or they may first appear in adulthood.

The word eczema is derived from the Greek word ekzeo, meaning something that erupts or bubbles to the surface, describing how the disease appears.



## What are the symptoms of atopic eczema?

The extent of involvement varies for each individual, affecting the face (especially cheeks, forehead, eyelids), neck, torso, and limbs, particularly in the bends of the knees and elbows. Atopic eczema occurs in various forms, which differ in onset and localization of skin manifestations.

### The most common symptoms include:

- Redness
- Itchy skin
- Localized outbreaks
- Dry skin, which loses the ability to retain moisture
- Fine cracks in the skin, with a risk of infection
- Oozing, burning skin
- Swelling

## How do you get atopic eczema?

Atopic eczema is largely caused by genetics and immunity. A person with atopic eczema (an atopic individual) has a genetically increased sensitivity of the skin and mucous membranes to various allergens. These allergens are commonly found around us and enter the body through the skin, respiratory system, or digestive tract.

It's long been known that airborne allergens (pollen from plants, airborne molds, or animal allergens) and certain foods can worsen **atopic eczema** symptoms. The relationship between the number of **dust mites** in household **dust** and the prevalence of **atopic eczema** has also been confirmed.

**In Europe, atopic eczema affects 15-20% of infants and toddlers and 12% of preschool and school-aged children.** The disease is not contagious between people, but it is often caused by a **genetic predisposition** to allergic reactions, such as asthma,

hay fever, or conjunctivitis. Around 50% of children with at least one allergic parent develop atopic dermatitis.

In some children, atopic eczema disappears within a few months, while in others, it persists for years. Fifty percent of children who had atopic eczema as toddlers recover by the age of five. In some cases, atopic eczema persists into adulthood.

## What are the complications of atopic eczema?

The biggest danger comes from scratching, which can damage the skin barrier and allow infection to enter. This infection can be caused by *Staphylococcus aureus* or herpes simplex virus (cold sore). Molluscum contagiosum, which appears as small wart-like growths, or multiple vulgar warts, is also a common infection. These can be treated with cryotherapy, local therapy, or laser removal.

## What helps with atopic eczema in adults and children?

Inflammation on the skin can be treated with antihistamines, which reduce allergic reactions and relieve itching. The basis is local skin care, including topical corticosteroids in ointments during acute flare-ups of atopic eczema. For severe cases, specialized centers use phototherapy, photochemotherapy, or biological treatments. However, these treat the symptoms; prevention is key:

### 1) Cosmetics suitable for atopic eczema

Skin with atopic eczema **dries out excessively**, so regular moisturizing is essential. Creams and ointments specifically designed for atopic skin, containing **coconut and almond oils**, are ideal.

**Soaps** containing the patented **antimicrobial ingredient Dermosoft® decalact** help maintain the skin's microflora.

All cosmetic products should have a composition matching the physiological pH of human skin and its microbial flora, which is extremely important for those with atopic eczema.

## 2) Avoid dust and dust mites

**Dust mites** can be one of the triggering factors, so it is essential to minimize dust in the home.

Atopic skin is characterized by a poor protective function. Atopics have a reduced skin barrier, and their skin constantly allows substances to enter the body. The skin barrier does not sufficiently protect the skin, making it fragile. For this reason, it is extremely important for atopic individuals to equip their bed **with special bedding that prevents contact between the skin and dust mites. There are billions of allergens in the bed that can trigger or worsen eczema.**

We spend about a third of the day in bed, and small children, who suffer from atopic eczema the most, spend even more time there. Itching tends to be worst at night when the levels of cortisol, which has anti-inflammatory and anti-itching effects, are lowest.

**Air purifiers** are also recommended to reduce the number of dust mites in the air.



## How to reduce dust in the home:

- Equip your bed with anti-dust mite bedding.
- Vacuum frequently and use vacuum cleaners with HEPA filters.
- Get an air purifier with a HEPA filter or nanofilter.
- Remove carpets, upholstery, and other textiles where dust can accumulate.
- Remove or frequently wash curtains.
- Remove or frequently wash stuffed toys at higher temperatures.

## 3) Unsuitable foods

Unsuitable foods are, of course, those you are allergic to. However, certain other foods may also trigger eczema, even if you do not have a proven allergy to them. If you are allergic to pollen, you may also react to certain types of fruits and vegetables. **It is also advisable to avoid/limit foods high in histamine** (a substance released during allergic reactions), such as:

- Fermented, pickled, and preserved foods
- Alcohol
- Blue or ripened cheeses
- Smoked meats or sausages
- Certain vegetables, such as tomatoes, peppers, spinach, and avocados
- Fruits like strawberries, citrus fruits, and pineapples
- Nuts, legumes
- Chocolate, cocoa
- Fish, seafood

Since atopic individuals are generally more sensitive, you should also be cautious of additives used in food (preservatives, colourants, flavors).

## What foods to seek out?

Foods that have a positive effect include:

- Foods rich in unsaturated fatty acids
- Foods containing zinc (pumpkin seeds, meat, legumes)
- Probiotics that support a healthy gut microbiome

The composition of the gut microbiome in people with atopic eczema is likely different from that of healthy individuals. Experts also suspect that this difference may contribute to the development of eczema, rather than being its consequence. Probiotics are live bacteria that colonize the digestive tract and positively impact health.

#### **4) Choosing the right clothing**

Atopic people often struggle with clothing choices. In cold weather, most people naturally wear as many layers as possible, but this can exacerbate eczema. Choose **clothing that will help prevent unnecessary sweating**. Sweat left on the skin for too long is likely to irritate your eczema. Breathable fabrics are therefore crucial for those with eczema.





### Suitable materials for eczema-prone skin:

- Ultra-lightweight nanomaterials for allergy sufferers
- Cotton with antibacterial treatment
- Silk
- Bamboo
- Linen

While cotton is often recommended for eczema sufferers, it can be too heavy and may cause discomfort in summer. Opt for cotton with antibacterial properties instead.

Be mindful of where the garment was manufactured, as **dyes** used in clothing can also cause irritation.

**Always wash and thoroughly rinse new clothes, preferably several times, before wearing them.** Silk is another option, though less practical. **Bamboo**, which is as soft as cotton but more absorbent and has some antibacterial properties, offers an interesting alternative.

Tight clothing may irritate eczema, so choose looser garments. Tight jeans, combined with the aggressive dyes used in them, are not ideal. Looser clothing doesn't rub against the skin as much and is far more breathable.

Always make sure to **cut off any itchy or stiff tags from your clothing**. Even if you're wearing something loose and flowy, a scratchy tag could trigger an eczema flare-up if you're not careful.



## 5) Correct Temperature and Humidity Levels

It is especially important to monitor humidity levels in the winter. Dry air can dehydrate mucous membranes and skin, potentially worsening atopic eczema. The ideal humidity level ranges between 40–60%. If humidity is low, using a **humidifier** is recommended, some are even available **combined with air purifiers**.

### **Excessively high temperatures in the bedroom**

can cause an adult or child with eczema to scratch throughout the night. Higher air temperatures lead to moisture loss, resulting in skin dehydration and increased susceptibility to various illnesses. Additionally, dust mites thrive better in heated apartments.

Generally, the bedroom temperature should be about 3 to 4 degrees lower than the usual daytime temperature in other rooms. Therefore, if you typically heat to 22°C (72°F) during the day, you should definitely lower the bedroom temperature to 18 to 19 °C (64 to 66 °F) at night.

## 6) Washing and Hygiene

Especially for children, it is important to ensure proper and gentle bathing. Thoroughly rinse off sweat, ointments, skin medications, and especially bacteria residing on the skin. A short **shower or brief bath** is suitable, but it should not exceed three times a week and should last no longer than 5 minutes. Always dry the skin gently; never rub it harshly with a towel; just place the towel on the skin and let it absorb the moisture. Immediately after washing (within 3 minutes), apply a suitable **moisturizing cream** (emollient) all over the body to prevent the bath from drying out the skin.





**nanoSPACE®**

**Size matters.**



nanoSPACE s.r.o.

IČO: 29161215, DIČ: CZ29161215

Rohova 98, Dolejší Předměstí  
344 01 Domažlice

[www.nanospace.store](http://www.nanospace.store)