# Infantile eczema: Food allergies are not to blame

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Atopic dermatitis (AD) in infants is commonly referred to as eczema. Several misconceptions have grown up around its causes, risks and management.

## Is atopic dermatitis an allergy-based disease?

#### YES, but

It is an inflammatory skin disease (dermatitis) with allergic predisposition (atopy). In some 80% of cases, children with AD are predisposed to atopy. This means that they easily produce sensitizing antibodies called IgEs that target various harmless molecules in a natural environment. Non-allergic children would normally tolerate this type of molecule (pollen, animal dander, food, etc.). This causes children with eczema to develop other allergies, because their skin is "permeable" and the genetic predisposition exists. This atopy is fragile, but is not directly related to an allergen.

# Are there diseases directly related to allergens?

#### YES

There is cat-induced asthma, grass-pollen rhinoconjunctivitis (hay fever), peanut allergy, wasp sting allergy. Elimination is key in treating these diseases (goodbye kitty, no more peanuts, etc) and also desensitization (to grass pollen, wasp venom). Eczema is not like any of these diseases. However, a specific allergen (dust mites or food for example) can encourage skin inflammation to peak temporarily, leading to an eczema flare-up, in some sensitized children.

# My child has AD. Should I change his milk?

#### NO, in most cases.

Allergy to cow's milk proteins (CMPA) is associated with atopic dermatitis in only a few cases, and in these patients, eczema is always accompanied by other symptoms.

- Major, visible signs: acute urticaria, faintness, bloody diarrhea in small infants, shock.
- More "insidious" isolated or associated signs: lack of drive and energy, insufficient weight gain, acid reflux (repeated vomiting) treatment resistance, chronic diarrhea, abdominal pain, etc.

If a CMPA is determined, the doctor must prove it (skin and biological tests, elimination/reintroduction test) and the child's milk must always be changed. Hydrolysed milk (EHF milk) will be prescribed in which the allergenic casein molecules have been cut to render them harmless. The eczema will diminish if the child was truly allergic, but will not actually heal if skin care is neglected.

# Does atopic dermatitis have genetic origins?

#### YES, but there's a lot we still don't know

Atopic dermatitis is a genetic and immunological disease.

We just explained the immunological aspect: number of children with AD whose immune system fights against harmless molecules in their environment. This is a useless battle that causes skin inflammation. In the same way, an asthmatic person would react to inhaled substances (e.g. pollens) resulting in inflamed bronchial tubes. This immune-system anomaly is mostly genetic, and entire families can have allergies.

Let us attempt to analyze current data regarding the dermatological aspect: skin in AD is dry, from age 2 months, doctors describe it as xerosis. This dryness is linked to a deficit in a protein (filaggrin), produced by epidermal cells. Filaggrin's purpose is to hydrate the epidermis and make it smooth and impermeable. Most children with atopic eczema have a quantitative filaggrin deficit and the inflammatory response triggered by the immune system is the root of the problem. In other children, the deficit is qualitative, genetic and described as a mutation. This knowledge, however, in no way changes the therapy, but at least we know that these children need to moisturize their skin! Applying emollients helps restore the skin barrier to prevent allergen penetration.

# Are corticosteroid ointments dangerous for infants?

#### NO

These anti-inflammatory ointments have been prescribed for over 50 years. Corticophobia is what we should be wary of. Fear of these medicines prolongs the disease, since all phobias lead to avoidance: 28% of mothers with children in need of AD treatment refuse to use topical corticosteroids, or use them quite sparingly. Emollients are useful for xerosis, but are insufficient in treating eczema. Inflammatory plaques must of course be treated with local anti-inflammatory drugs that are highly effective on red areas and pruritus. They help improve quality of life (especially sleep).

Fear or indifference leads to poor skin treatment, and we are then faced with therapeutic or intellectual drifts, where some point fingers at teething, milk or pollution in the onset of AD.

### Key points to remember

- AD is a skin disease, so skin care is a must. The therapeutic trio: hygiene, emollients, topical corticosteroids. Proper treatment will restore the natural protection of the skin barrier
- Aggravated AD is often a case of neglected disease, due to false beliefs or fear. Do not be afraid of skin care ointments, your baby will thank you for it.
- AD is not linked to food allergy; such allergies must be proven, and food-allergy eczema is always accompanied by other symptoms.
- Why do some internet sources refer to AD as a food allergy?
   Because people with eczema are more prone to food allergies than healthy individuals. We cannot, however, say that reverse is true: food allergy is not the reason for AD.



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