

Baby

Child

ECZEMA

**The gut-skin
connection!**

The Gut-Skin connection

Eczema (atopic dermatitis) is a chronic or recurrent inflammatory skin condition. It is thought to affect up to 20% of children. In babies and young children lesions emerge on the face, scalp, cheeks, trunk and the inside and outside of elbows and knees. Scratching is common and hard to avoid which then causes crusted erosions. Persistent itch is a source of stress and sleep deprivation for both parents and child.



A defect in the **skin barrier function** is thought to lead to water loss and allow pathogens (bacteria, fungi or virus) or external irritants such chemicals in the environment or skin products to penetrate the skin. This can lead to an over-reaction of the immune system and create inflammation and symptoms of itchiness and redness. Eczema sufferers are more prone to skin infections, e.g. infection with *Staphylococcus aureus* is known to be present in up to 90% of cases.

Beyond the skin, there is increased evidence of the involvement of the gut in the onset of eczema. Impaired **gut barrier function** and an **imbalance of healthy gut bacteria** are commonly found in children with eczema. This may explain why from early age eczema sufferers are at increased risk of developing allergic diseases later on in life, notably food allergies and asthma.



Natural Integrative approach

The conventional approach focuses on symptom control with the use of steroid creams of different potency and antihistamines to reduce inflammation and itching. The integrative approach focuses at identifying the underlying triggers of inflammation to **heal the skin inside out**.

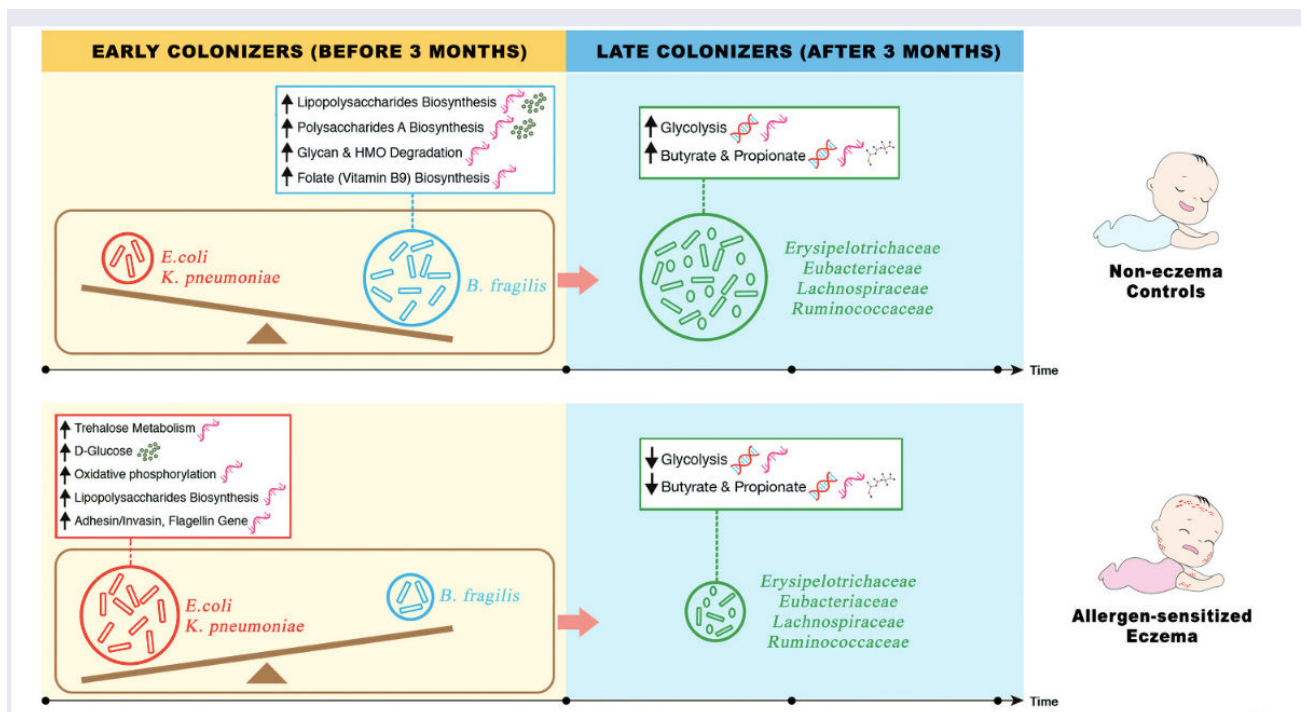
1. Gut Health

Addressing the imbalances in the gut thus becomes a key strategy when trying to get to the root cause of this inflammatory condition.

Eczema and the microbiome

An imbalance of healthy bacteria and their corresponding beneficial by-products can predispose a child to developing eczema (see graphic). Removing unwanted organisms and supporting the growth of key beneficial bacteria is thus essential. This can be done empirically (by looking at the child's health history, signs and symptoms) or through testing, using functional non-invasive testing (such as a stool test).

[A compromised developmental trajectory of the infant gut microbiome and metabolome in atopic eczema](#)



Eczema and food reactions

Research shows that up to 1/3 of eczema cases can be partly triggered by a food allergen, namely dairy and eggs. Removal of those foods for a period of time may help the gut and the skin. **Food elimination and reintroduction** needs to be

personalised to match the child's developmental stage and **supervised by a nutrition expert**.

Even if food is not part of the equation, eczema sufferers have a higher risk of immune reactivity to dietary proteins (food reactions, IgE and IgG). In babies, a **personalised nutritional approach** is needed during the pre-weaning and weaning stages to induce tolerance in the gut and avoid future adverse food reactions.

Plan of action

- Support digestion and introduce foods in a step manner to prevent the development of food allergies and sensitivities
- Selective food elimination when needed, to reduce the allergen load
- Targeted foods to protect the gut/skin barrier and 'feed' the healthy bacteria
- Specialised supplements including probiotics, prebiotics, digestive enzymes and healthy fats like omega 3s
- In recalcitrant cases, assessment of environmental allergens and genetic factors may need to be considered



2. Skin Health

Skin care aims to prevent water loss. Daily use of moisturisers (most commonly known as emollients) is recommended. Moisturisers that contain **natural ingredients** are preferred. Paraffin and other mineral oils (petroleum-derived) are designed to retain moisture in the upper layer of the skin. However, since they do not allow the skin to release moisture, they can aggravate the skin and clog the pores.

Step 1 Wash

Alternate hand wash and bath your baby/child at a warm temperature (not hot). Do not use any products preferably, just water. Do not scrub the skin, simply gently hand wash. If needed, you may use a sensitive skin (natural) soap, better diluted onto the water than applied directly onto the baby's skin. Pat the skin dry. Do not scrub.

Step 2 Daily



Apple cider vinegar + hydrate with a natural moisturiser (you may use a different one for face and body)

Natural moisturisers:

- Organic coconut oil
- Organic aloe vera
- [Wellela nappy change cream](#) (calendula based)
- [Wellela calendula face cream](#) (calendula based)
- [Moogoo irritable skin balm](#) (sweet almond, chamomile, aloe vera, hoops)
- [Aproderm Oat cream](#) (colloidal oat)



During acute infections or flare-ups, the child may be prescribed steroids. Once the infection is cleared, the apple cider vinegar routine can be resumed as above.

Step 3 Wet dressing or garment

Wet dressing

Wet dressing can be an effective and affordable way in cases of moderate to severe eczema. Application of a moisturiser is placed on the skin followed by application of wet dressing on the affected areas. A dry dressing is placed over the wet dressing and is left in place for 12- 24 hours. Most parents choose to leave it overnight. Dressings should be made of non-irritating, breathable fabric such as gauze or cotton. The child's clothes can also be used, i.e. 2 pairs of cotton leggings and two tops.

How to apply the wet clothes/dressings on a child

A word of caution, wet dressing is not recommended if infection is present on the skin.

Garments

Garments for body and head. They can be easier to apply than wet dressings.

If using a garment, allow the skin to dry first. It can be used during an infection alongside a steroid cream. [Happy skin](#)

Note: I do not hold any commercial interest in the products showcased in this handout. They are included based on positive parents' feedback and my own clinical experience. You are encouraged to use products that work for your child. Your feedback is always welcomed!

References

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