



**Dr Soh Jian Yi**  
Consultant  
Division of Paediatric Allergy,  
Immunology and Rheumatology  
National University Hospital

## SHOWCASING SERVICES: PAEDIATRIC ALLERGY CHALLENGE TESTS

Doctors specialising in allergy often face questions from patients about allergies to foods or drugs. During the consultation, we get information about the problem and, with the help of skin or blood tests, can advise our patient on whether there is likely to be a food or drug allergy. Doing a challenge to the food or drug is another option.

What is a challenge? This is where the food or drug is given carefully in increasing doses, under observation by a trained and experienced healthcare team. If there is a reaction, the challenge is stopped and treatment, where necessary, is given.

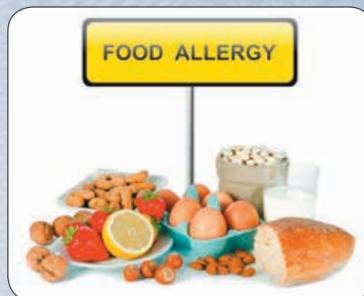
Why spend the time and money to do a challenge? The most common reason is that the doctor has deduced that a food or drug allergy is unlikely. However, "unlikely" is not a 100 percent certainty. This matters most when the food is common or the drug is important; avoiding foods can be difficult and distressing to the patient's family, and using substituted drugs unnecessarily can lead to higher costs, more side effects and less effective treatment when the patient is sick.

This is where the challenge comes in - give the suspected food or drug and prove that there is no allergy. Because these challenges are done in the situation where the allergy is unlikely, the rates of reactions during a challenge are very low (less than five percent of all challenges). In the rare event that reactions do occur, they are promptly treated by the team and the patient still walks out of the centre. No one has died or needed intensive care after a challenge at our Centre.

The other common reason that we do a challenge is in preparation to perform immunotherapy for food allergies. At present, we are doing immunotherapy to peanuts and a few other foods at our centre. Immunotherapy can be thought of as "teaching the body of someone with the food allergy to tolerate higher and higher doses of the food without a problem". Since immunotherapy requires significant time and money to perform, the challenge serves two purposes:

1. Confirm that there is truly a food allergy. It is wasteful time and money to undergo immunotherapy for someone who does not have the allergy at all.
2. Confirm the starting dose of immunotherapy. This can save significant time and money in certain patients.

The challenge typically lasts for two to four hours in the Paediatric Day Therapy Centre within National University Hospital. Often kids would bring their books, school work and sometimes toys and electronic devices to pass the time. Parents would do the same too!



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The Children's Asthma and Allergy Network

## NEWSLETTER

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**Dr Mohana D/O Rajakulendran**  
Senior Resident  
Division of Paediatric Allergy,  
Immunology and Rheumatology  
National University Hospital

## CARING FOR YOUR CHILD WITH ECZEMA

Living with a child with difficult-to-control eczema can be stressful for parents and caregivers. Dealing with itching at night, poor sleep, constant scratching, irritability and discomfort, worries about stigma at school and in public are just a few of the many concerns that parents of children with eczema may have. In this article, we aim to share everyday tips to help control your child's eczema and to prepare yourself to deal with common situations better.



**Skincare**

**1) Bath**

Pick a gentle non-soap based cleanser for your child. These are minimally irritative on the skin. Avoid prolonged baths or soaking in the tub. Some children may benefit from bath oils or oat baths to soothe broken skin.



**2) Moisturising**

The key to good skin control is frequent and ample moisturising. A child with eczema should have his full body moisturised at least two times a day. Moisturising should be done immediately after baths as baths are drying to the skin. Another good time to moisturise is right before bedtime so that the skin is kept moist and reduces itching during sleep.

Apply ample moisturiser; the skin may feel a little greasy after a good application. Another way of gauging if you are using enough moisturiser is how long a tube of moisturiser lasts. Usually a standard sized tube will not last more than two weeks!

Pick a moisturiser without fragrances or additives as these are irritating to the skin. Select one with the texture and feel that your child likes as he will need to get used to the application.

**3) Irritants**

Avoid the use of perfumes, fragrances, powders which may further irritate your child's skin.



**4) Skin infections**

Skin infections due to a skin commensal Staphylococcus aureus are common in children with poorly controlled eczema. This is because scratching breaks the skin barrier and allows the bacteria to enter sometimes even into the bloodstream. In some cases, your child may require a short course of antibiotics.



To prevent such skin infections, it is important to use antiseptic washes during a flare-up. Your doctor may prescribe washes such as chlorhexidine, zinc copper sulphur, Octenisan wash, etc. In some countries, people may use bleach baths too. These washes help to reduce the amount of bacteria on the skin and helps improve the flare as well. It is important to note that these washes may be slightly drying on the skin, so always moisturise right after washing.

Another fun way to have antiseptic treatment is to go swimming! The chorine helps to keep the skin clean. However this may be a little stinging for your child if he has open wounds. You may want to let him swim when his skin condition is better under control. As chlorine is drying as well, it will be good to take a shower and moisturise right after.

**5) Steroids**

The aim of good skincare is to prevent the need or dependence on steroids. However, if your child's skin condition worsens or flares, it may be necessary to start on a short course of steroid creams as prescribed by your doctor to bring the skin under control.

Always remember to follow the doctor's prescription and avoid 'self-prescription' of steroid creams. If these creams are used frequently and inappropriately, side effects such as reddening or thinning of skin may occur. Short courses of mild creams often do not cause these side effects.

**Clothing**

Choose cotton or cotton blend clothing for your child. Avoid overly occlusive clothing as this will cause sweating and irritation.

Laundry new clothing before use to reduce formaldehyde and chemical contents which may irritate his skin. In addition, use mild detergents as indicated on packaging. Pick liquid detergents over powders and use an extra rinse cycle on the washing machine to remove as much of the detergent from the clothing.

**Food and other allergies**

Food allergies such as cow's milk and egg allergies may be present in up to one third of infants and toddlers. Usually as the child grows older, food allergy is less likely a trigger for the eczema. If you suspect a food allergy, it is important to consult a doctor specialising in allergy who may do a skin prick test or blood test if there is a clinical suspicion of food allergy. Avoid removing multiple foods from your child's diet as most often many of our patients do not have true allergies. By avoiding multiple foods, your child's nutrition may be affected and he may not be getting a balanced diet.

In older children, house dust mite sensitivities may trigger the eczema. Hence, it is important to take precautions to reduce dust mite load at home, by keeping the environment clean, avoiding carpets, rugs and stuffed toys in the child's room and around the house, using anti-dust mite covers or simply washing the bedding in hot water (at least 60 degrees) once a fortnight or more. Since dust mites thrive in indoor environments, allowing your child to have an active outdoor lifestyle also minimises dust mite exposure.

**School and sports**

Your child should be treated in the same way as all his friends. There are not many precautions that need to be taken or for concessions to be made. If there is any bullying or teasing which affects him, do bring it up to the teacher and allow him to educate his classmates.

A common difficulty that children with eczema may face is physical education classes and sporting activities. Although, a child with eczema should be allowed to do all of the same activities as his friends, perspiring a lot irritates the skin. It is best if he is allowed for a quick shower right after these activities, or a quick wipe down with a wet towel and change into dry clothing.



**Outings**

Time outings during cooler and less humid times of the day to minimise sweating.

Use non-sensitising sunscreen such as those formulated for the face which are usually better tolerated in children with eczema. You may want to do a 'patch test' with new products on a small area of skin to check if they irritate your child's skin.

**Overseas trips**

Consider trips to places with more temperate climate. If you are travelling to tropical countries with hot weather, allow frequent breaks to wipe down sweat and get a fresh change of clothing.

Ensure that you pack your child's bath washes and sufficient moisturisers to last the trip, as his specific brand may not be available overseas. Bring travel-sized moisturisers on the plane and apply frequently during long flights to keep the skin moist.

Follow your eczema action plan from your doctor in case of flares overseas. You should seek medical attention if your child's skin continues to worsen despite the steps on the action plan. The action plan may include instructions for a short course of gentle topical steroids in case of a moderate or severe flare.

**Self-esteem and mood**

Boost your child's self-esteem by constantly reinforcing his strengths. Help him realise that he should not be judged by his skin and external appearances. Work with him to build acceptable strategies to deal with teasing or bullying from others and allow him to express his emotions in dealing with such situations. It is important not to further stigmatise eczema by curbing your child's activities or not allowing him to do the same things as his peers citing his eczema as the reason.

It is also important to know your child well and to identify any stressors at home or school early so that you can help him cope with it better. Psychological stress is also known to play a part in flares of eczema. If your child shows any signs of persistent low mood or depression, flag this up to your doctor. Some children may benefit from seeing a specialist such as a psychologist or play therapist to help them deal with these issues better.



**Dr Nisha Suyien Chandran**  
Consultant  
Division of Dermatology  
University Medicine Cluster  
National University Hospital

# LIFESTYLE TIPS: MOISTURISING IN ECZEMA

The use of moisturisers is established as one of the cornerstones of treatment of eczema. It is essential that moisturising is firmly built into the patient's treatment ritual.

Choosing the right moisturiser is important to ensure that one tolerates it well and is compliant to the moisturising regime. An ideal moisturiser is affordable to the patient, hypoallergenic, fragrance- and irritant-free. It should have the following properties: retain water in the skin, attract water into the skin, smoothen and soften the skin. In addition, certain eczema specific moisturisers promote the repair of the dysfunctional skin barrier in this disease, are anti-itch and anti-inflammatory.

Different formulations of moisturisers are suited to different sites and stages of skin lesions. For example, creams are more suited to acute, weepy lesions. Lotions are more easily absorbed and suited for hair-bearing areas. Ointments may be used for subacute or chronic lichenified lesions. However, ointments may not be well tolerated in our warm and humid local weather as they are greasy and occlusive.

The dysfunctional skin barrier in patients with eczema exists not only in the patches of active eczema but also in normal looking skin. It is therefore important that moisturiser is applied liberally to both affected and unaffected skin.

Moisturisers should be applied at least twice a day. When possible, moisturise straight after a shower when the skin is still damp. Some patients find that placing their moisturiser in the fridge and applying the chilled moisturiser to their skin is pleasurable and provides extra relief from itch. If one is sweaty, which can be a frequent occurrence in Singapore, wipe off the sweat with a damp towel and pat dry the skin with a dry towel before applying the moisturiser.

