



ECZEMA

BABIES AND KIDS

Eczema (atopic dermatitis) is a recurring, non-infectious, inflammatory skin condition affecting one in three Australasians at some stage throughout their lives. The condition is most common in people with a family history of an atopic disorder, including asthma or hay fever.

Atopic eczema is the most common form of the disease among Australasians. The skin becomes red, dry, itchy and scaly, and in severe cases, may weep, bleed and crust over, causing the sufferer much discomfort. Sometimes the skin may become infected.

The condition can also flare and subside for no apparent reason.

Although eczema affects all ages, it usually appears in early childhood (in babies between two-to-six months of age) and disappears around six years of age. In fact, more than half of all eczema sufferers show signs within their first 12 months of life and 20 per cent of people develop eczema before the age of five.

Most children grow out of the condition, but a small percentage may experience severe eczema into adulthood. The condition can not only affect the individual sufferer, but also their family and friends. Adult onset eczema is often difficult to treat and may be caused by other factors such as medications.



WET WRAPPING TECHNIQUE

Eczema Care and Relief

If it seems that absolutely nothing will alleviate that red, cracked, and unbearably itchy skin, you may want to try the wet-wrap therapy. This therapy can be a very valuable component of treatment for widespread and localised atopic eczema of moderate severity. However, to be effective it requires a substantial commitment on the part of both the child and the carer.

Studies show that wet-wrap therapy can effectively re-hydrate and calm the skin. In one such study, children with severe eczema (atopic dermatitis) who had not responded to other treatments were treated with wet-wrap therapy. All children experienced significant improvements. In just one week, there was a 74% average reduction in itch and the children had less sleep loss. Improvement to their skin lasted well beyond the 2 weeks of treatment.

Wet Wrapping works in three different ways:

- **Cooling** - as water gradually evaporates from bandages/garments this cools the skin and helps relieve inflammation, itching and soreness.
- **Moisturising** - emollients covered over with wet bandages/garments are deeply absorbed into the skin to provide a longer lasting moisturizing effect.
- **Steroid absorption** - enhanced absorption of topical steroid molecules into both the superficial and deeper layers of skin where inflammation is present.

How to use the Wet Wrap Therapy to Control your Child's Eczema

As the name implies, wet wrap therapy involves wrapping wet bandages or garments around eczema affected skin. The steps recommended by your dermatologist may differ slightly to accommodate a patient's specific needs. Wet wrapping a young child is often a two-person task. Get help if you can!



Benefits of the Wet Wrap Therapy for Eczema Relief

- Skin re-hydration
- Better skin healing process
- Restful sleep
- Reduced redness and inflammation
- Less frequent itching and scratching
- Bandages/garments protect the skin against scratching
- Decrease of the *Staphylococcus Aureus* (staph) bacteria found on the skin which causes infections
- Reduced steroid usage once the condition is controlled



Drawbacks of the Wet Wrap Therapy

Wet Wrap is time consuming. If you are treating a child, it requires a great deal of patience and supervision. Children tend to squirm when bandages are being applied and may try to remove them (for young children use garments instead). As one parent said, "it is not a nice thing for any parent to have to do." However, most parents agree that the results are worth the effort when other therapies are ineffective.

This technique creates a warm humid environment which can encourage infections to spread. If you think the skin is infected or suddenly looks different, stop wet wrapping and seek advice.

In addition, this technique has the effect of increasing the absorption of creams and medications. If topical steroids are applied, it is advisable to use a milder potency steroid than normal.

How to maintain Results and How Long should the Therapy Last?

Wet wrap therapy is generally used for 1-2 weeks depending upon how the child responds to treatment. To maintain the results, you must apply moisturizer frequently throughout the day and straight after bathing (possibly before bed time). In addition, triggers must be avoided, and it may be necessary to continue using medication.



The basic technique is as follows:

- 1 It is better to perform the wet wrapping one hour before bed time; however, it can be used during the day if the eczema is very severe. Wet wrap in the bathroom where it's warm and steamy. The patient soaks in a bath with bath oil/ointment. The water should be lukewarm and the bath should last 5 to 10 minutes.
- 2 After bathing, pat the skin partially dry with towel. Do not rub the skin as rubbing can irritate it.
- 3 Immediately (within 2-3 minutes) apply localised medication (topical steroid/cortisone) or anti-inflammatory cream as directed by your GP or dermatologist.
- 4 Then moisturize the skin with the moisturizer/emollient, making sure to liberally apply it all over the body especially on the areas that need treating. The moisturizer/emollient can be applied over the topical steroid or anti-inflammatory cream. The skin should be very moist when finished.
- 5 Moisten the bandages/garments and wrap. The bandages/garments are generally moistened by soaking them in the bathwater. Wring your bandages/garments out and make sure they are damp but not wet or dripping. Bandages are good for adults or for localised areas (patch wrap) while garments are better for babies and children.
- 6 Wrap the wet bandages/garments on the area to be treated. Wet bandages/garments can be used on any area of the body that the patient will tolerate, including the face. When using garments on babies or children, roll first sleeves/leggings and trunk section up and then roll them down while putting them on.
- 7 Lock in moisture by applying dry bandages/garments over the wet one.
- 8 Put on lightweight sleepwear.
- 9 Leave the wet and dry layer on for a minimum of two hours, better overnight. Check the temperature of the room to ensure comfort. It shouldn't be too hot, too cold, or too breezy (if there is a fan). Wet Dressing will dry after a few hours. Do not leave the dressing on dry (unless your child is sleeping) as dry dressing can irritate the skin by causing it to become hot, dry and itchy.

Make it fun!

Wet wrap therapy is generally used for a few days in a row or for 1-2 weeks depending upon how the child responds to treatment. Like any other treatment it may take a fair bit of time and patience to encourage your child to accept this new treatment.

ENCOURAGE THE CHILD, IF OLD ENOUGH, TO PARTICIPATE IN PREPARING BANDAGES/GARMENTS



MAKE A SET FOR FAVOURITE DOLLY/ACTION MAN

USE TV AS DISTRACTION

SING A SONG/RECITE RHYMES

MAKE A STAR CHART AND REWARD WITH STICKERS

Parents and children who have used the wet dressing generally express great satisfaction with the technique and many have found them to be life changing. It can take a little while to get the hang of the process but once you have your own system worked out it becomes much smoother for wet wrapper and wet wrappee.

IMPORTANT: If you are not familiar with this technique, please maintain close contact with your GP or medical specialist while undergoing the use of the wet wrap and report any suspected adverse effects immediately.

ITCHY FOODS

Common foods that could be contributing to your child's eczema

By nutritionist Karen Fischer

You probably already know that foods with artificial chemicals can be bad for eczema, but did you know some of the healthiest foods, such as oranges and grapes, can also worsen eczema symptoms? While eczema is largely a genetic condition, research shows that dietary habits are one of the most important factors modulating gene expression throughout one's life¹. While dietary changes are not for everyone, there are hundreds of research papers full of interesting facts on how diet can affect the appearance of eczema. Here are just a few:

- Did you know families who predominantly use margarine (as opposed to butter) are more likely to have children with eczema?²
- Did you know consuming soy sauce, chocolate, cheese, coffee and yoghurt causes a worsening of eczema symptoms? According to a Japanese study published in the Journal of Dermatology, after avoiding these foods for three months all the participants had reduced eczema symptoms³.
- Did you know chemicals, including dietary preservatives, MSG and salicylates, worsen eczema symptoms in up to 90 per cent of eczema sufferers?⁴



Food and chemical sensitivities

Common lunchbox items such as oranges, strawberries and grapes are rich in salicylates and other natural chemicals that can trigger flare-ups in sensitive individuals. Swap them for eczema-safe alternatives such as banana, papaya and Pear Muffins (see recipe).

Allergies

Common allergy foods include eggs, peanuts, dairy and wheat but eczema sufferers can also have rare allergies to foods such as rice. Your doctor can advise on allergy testing in your area.

PSYCHOLOGICAL EFFECTS OF ECZEMA IN CHILDREN

The challenges for parents

By Katie Sillar – B Psychological Science (Hons), University of Queensland

Parenting a child with eczema involves unique tasks and challenges, and many parents struggle to cope with the difficulties associated with child eczema management. I recently conducted an Australia-wide study of 270 parents of children with eczema which focused on child behaviour and parenting practices. Children's incessant scratching, whinging about eczema symptoms and treatments, and itch-related sleep problems were the most common behaviours parents had difficulty with. Many parents were also concerned about child emotional and social problems related to eczema, such as self-consciousness and frustration. One key finding of the study was that when problematic behaviours were intense, parents were significantly less confident and less able to manage both their child's behaviour and physical condition.

Another important finding was that parents who engaged in dysfunctional parenting styles, such as ineffective discipline, experienced greater difficulties dealing with child eczema and behaviour. In light of these findings, it is important that parents who are struggling with any aspect of managing their child's eczema seek assistance from a psychologist who is able to provide advice and education about parenting skills, strategies for dealing with problematic behaviour, and exercises for coping with the stress associated with caring for a child with eczema. Such a targeted approach will help parents to have greater confidence for managing their child's eczema and related behaviours and, ultimately, lead to improvements in the physical and psychological wellbeing both of children and parents alike. Readers should contact their GP for advice on finding an appropriate psychologist.

Katie Sillar can be reached at this email: katie.sillar@uqconnect.edu.au



Eczema-safe Pear Muffins

This tasty recipe is free of dairy and wheat and can be made egg- and gluten-free (GF) if necessary.

- | | |
|---|-----------------------------------|
| 1 egg (or egg-free substitute) | 1/3 cup golden syrup |
| 1 cup organic soy milk (G), or rice milk (GF) | 1/2 teaspoon real vanilla essence |
| 1/3 cup rice bran oil | 2 cups spelt flour* (G) |
| 3 teaspoons baking powder | 1/2 teaspoon bicarb of soda |
| 2 large ripe pears, peeled and diced | |

Preheat oven to 180°C. Place paper muffin cups into the holes of a 12-cup muffin tray. In a food processor, blend the egg (or egg alternative), golden syrup, milk and vanilla essence until smooth. Then, while the motor is running, open the chute and drizzle in the rice bran oil and blend well. In a separate bowl, mix flour, baking powder and bicarb. Add dry ingredients to the wet and mix using a spoon. Add the pear. Spoon the mixture into the cups. Bake for 15 minutes or until golden on top.

*Spelt is wheat-free but contains gluten (G). Use gluten-free plain flour if necessary.

- 1) Ordovas, 2004, 'Nutritional Genomics', *Annual Review of Genomics and Human Genetics*, 5
- 2) Sausenthaler, 2006, 'Margarine and butter consumption, eczema and allergic sensitization in children', *Pediatric Allergy and Immunology*, 17
- 3) Uenishi, 2003, 'Role of foods in irregular aggravation of atopic dermatitis', *Journal of Dermatology*, 30
- 4) Loblay & Swain, 2006, 'Food Intolerance', *Recent Advances in Clinical Nutrition*.

For more information or to purchase a copy of Karen's book, head to the website www.eczemadiet.com.au or www.exislepublishing.com.au

5 Top tips to manage your child's eczema

- 1 Choose loose-fitting clothing preferably cotton or bamboo blends to prevent overheating and excess sweating which increases itching. Remove labels and wash with fragrance free hypo-allergic laundry products.
- 2 Beat the itch by keeping fingernails short; trim nails regularly in order to reduce damage to the skin from scratching. Pinch rather than scratch itchy skin, wear soft gloves at night, place a cold object onto very itchy areas and most importantly treat irritated skin quickly to avoid flare-ups.
- 3 Moisturize your skin regularly by applying emollients to dry skin, multiple times during the day. Your moisturizer should be free of fragrances and substances that can irritate the skin.
- 4 Be food wise have your child tested for foods that can trigger eczema. The most common foods that trigger eczema include: milk, eggs, nuts, chocolate, citrus fruit and some food colourings.
- 5 Think seasonal & be weather wise extreme temperatures can dry the skin, air conditioning in summer and central heating in winter lead to dry and cracked skin. Moisturize! Keep the temperature around 19-20C in your child's bedroom. Air their room and bed sheets every day. Wash away pollen from skin before bedtime in spring and avoid sun burn in summer; apply sun screen for sensitive skin.

By Clinical Nurse Educator Andrea Matisan



INFECTIONS

Why does Eczema Affected Skin Get Infected?

Eczema is a skin condition that causes dry, itchy, scaly and red skin. The skin can become infected as a result of scratching. Health professionals advise to keep fingernails clean, short and smooth; the use of mitts, to prevent further discomfort caused by scratching.

What are the Signs of Infected Skin?

Signs of infection include:

- Painful red bumps that may contain pus
- Honey-coloured crusts
- Itchy and/or painful lesions

When to Take Action and What to Do?

If you suspect a skin infection, see your doctor and have a sample of the infected skin sent off for testing. Infections such as Staphylococcus aureus and Herpes simplex should be treated immediately. Treatments may include a combination of topical (creams) and oral (pills) therapy. These may be in the form of antibiotics, antiviral or antifungal agents.

Useful Tip: Bleach baths can be used to help decrease the frequency of skin infections. Add one quarter to one half cup of bleach (sodium hypochlorite at 6%) to a full tub. This should create a solution of diluted bleach (about 0.005%), which is just a little stronger than chlorinated swimming pool water. Soak for 5-10 minutes twice a week. Rinse off bath water when finished, pat dry skin and apply emollients or prescribed creams immediately.

By Clinical Nurse Educator **Andrea Matisan**

Atopic Dermatitis
Common Areas of Skin Infection



Infants affected on face, elbows and knees.

Source: www.childrenshospital.org



TOPICAL STEROIDS AND ECZEMA

What are Topical Steroids?

Steroids are a group of natural hormones produced in the body by a variety of different glands. Topical steroids used in the treatment of eczema are mainly synthetic. Topical steroids have revolutionized the practice of dermatology since they were introduced in the late 1950s. They are effective anti-inflammatory preparations used to control eczema/dermatitis and many other skin conditions. They are also called topical corticosteroids or cortisone. The main value of topical steroids is that they reduce inflammation and speed up the healing of the skin. They also help to make the skin less red, hot, itchy and sore. The steroids used for eczema are usually described as topical, meaning that they are applied directly to the skin in the form of creams, ointments or lotions. Creams are usually best to treat moist or weeping areas of skin. Ointments are usually best to treat areas of skin which are dry or thickened. Lotions may be useful to treat hairy areas such as the scalp. Steroid preparations should not be used to prevent eczema occurring, only to treat the symptoms. You will usually be instructed to apply a steroid twice a day.

Applying corticosteroid ointment for eczema



One finger tip unit (FTU) is the amount of ointment from the first bend in finger to the fingertip.

This will cover an area equal to two adult hands.

Guide to applying corticosteroid ointment in children (3mths-10yrs)

(Babies 0-3 months – as advised by Doctor)

Age	Number of FTU's				Body Area
	3-6 mths	1-2 yrs	3-5 yrs	6-10 yrs	
1	1.5	1.5	2	2	Face & Neck
1	1.5	2	2.5	2.5	Arm & Hand
1.5	2	3	4.5	4.5	Leg & Foot
1	2	3	3.5	3.5	Trunk (Front)
1.5	3	3.5	5	5	Trunk (Back)

Source: ABCGA - Action Plan for Eczema - www.allergy.org.au

Topical Steroids Efficacy

The potency of the steroid you are given will be based on several factors:

- **Your age.** Children are usually prescribed mild topical steroids although occasionally a stronger preparation may be required, depending on the severity of the eczema;
- **Severity of the eczema.** A mild or moderately potent steroid may be replaced by a stronger potency if the eczema flares up;
- **Body site.** Thick skin areas such as the feet and the hands can be treated with potent preparations. For the face and genital areas mild and moderately potent preparations are commonly prescribed;
- **Size of the affected area.** A weaker strength may be prescribed when a large area of skin requires treatment.



Topical Steroids side effects

Topical steroids, used appropriately and under supervision, are a safe and effective treatment for eczema. The likelihood of side effects occurring is directly related to the potency of the preparation, where it is being used, the condition of the skin on which it is used and the age of the person concerned. If used over long periods of time topical steroid can thin the skin making it appear transparent, fragile and over-susceptible to bruising. Blood vessels may also become more prominent. With time the skin can become so badly damaged that it loses its elasticity so that 'stretch marks' develop. Other possible side effects include increased hair growth of very fine hair and perioral dermatitis i.e. a spotty rash around the mouth. It is important to bear in mind that these effects take several weeks to develop and will be avoided if potent preparations are limited in use and replaced by less potent preparations once they have brought a 'flare up' of eczema under control. There is also a risk from topical steroids being absorbed into the blood through the skin. Again the likelihood of this occurring is directly linked to the amount of steroid used and the age of the person involved. The main problem relating to absorption of steroids is a slowing down of growth in children by suppression of internal glands.

Common mistakes when using topical steroids

Fear of side effects can make people under-treat their eczema by stopping a treatment too soon or not using the steroid they have been given in the correct amount. Some people continue to use topical steroids each day in the long term after the eczema has cleared to "keep the eczema away". This is not normally needed. Some people, with severe eczema, may require continuous steroid treatment but this should be under the close supervision of a doctor. Incorrect use can be detrimental to the overall management of the condition and may mean that a stronger preparation has to be used to bring the eczema under control again.

Topical steroids have now been in widespread use although side effects can occur this is usually because treatment has been used incorrectly. Under supervision of a doctor, and used properly and sensibly in combination with good skincare, as part of an overall management routine, topical steroids are a valuable treatment for eczema.

Source: National Eczema Society – www.eczema.org

Yoga & Eczema

Yoga can help your child to reach a good level of relaxation reducing the risks of flare ups. Children of all ages can do yoga. "Babies & Kids Yoga" enhances bonding and helps develop body awareness.



Useful Links



Eczema Association of Australasia
www.eczema.org.au



Eczema Doctors Australia
www.eczemadoctors.com.au

Help Lines



Pregnancy, Birth & Baby Helpline
 - Need to Talk? Call 1800 882 436
 - Medical Problems? Call 1800 022 222



Parentline
 Call 1300 30 1300



Kids Helpline
 Call 1800 55 1800



Children's Hospitals in Australia



Sydney Children's Hospital (Public)
 1 High Street, Randwick, NSW 2031
 Hospital Switch on (02) 9382 1111



Women's and Children's Hospital (Public)
 72 King William Road, North Adelaide, SA 5006
 Hospital Switch on (08) 8161 7000



Allowah Presbyterian Children's Hospital (Private)
 8 Perry Street, Dundas, NSW 2117
 Hospital Switch on (02) 9858 4994



Mater Children's Private Hospital (Private)
 Raymond Terrace, South Brisbane, QLD 4101
 Hospital Switch on (07) 3163 8111



The Children's Hospital at Westmead (Public)
 178 Hawkesbury Road, Westmead, NSW 2145
 Hospital Switch on (02) 9845 0000



Royal Children's Hospital (Public)
 Herston Road, Herston, QLD 4006
 Hospital Switch on (07) 3636 3777



Princess Margaret Hospital for Children (Public)
 Roberts Road, Subiaco, WA 6008
 Hospital Switch on (08) 9340 8222



Royal Children's Hospital (Public)
 50 Flemington Road, Parkville, VIC 3052
 Hospital Switch on (03) 9345 5522

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