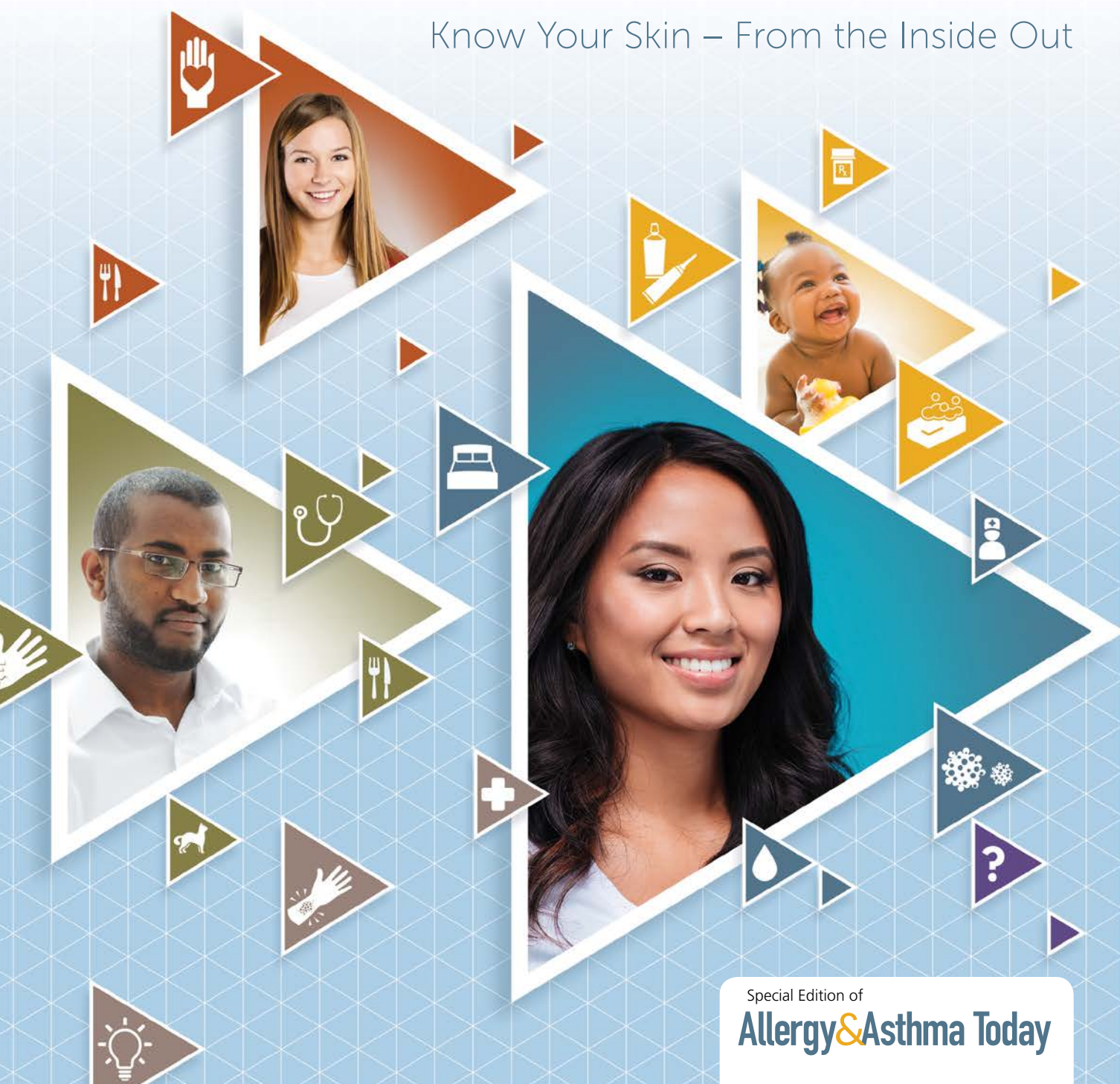




Understanding Atopic Dermatitis

Know Your Skin – From the Inside Out



Special Edition of

Allergy & Asthma Today



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Who We Are

Allergy & Asthma Network is the leading nonprofit patient outreach, education, advocacy and research organization for people with asthma, allergies and related conditions.

Our patient-centered network unites individuals, families, healthcare professionals, industry leaders and government decision-makers to improve health and quality of life for the millions of people affected by asthma and allergies.

An innovator in encouraging family participation in treatment plans, Allergy & Asthma Network specializes in making accurate medical information relevant and understandable to all while promoting standards of care that are proven to work. We believe that integrating prevention with treatment helps reduce emergency healthcare visits, keep children in school and adults at work, and allow participation in sports and other activities of daily life.

Our Mission

To end needless death and suffering due to asthma, allergies and related conditions through outreach, education, advocacy and research.

Allergy & Asthma Network is a
501(c)(3) organization.

Join Allergy & Asthma Network
today, as we work to help
patients and families
breathe better together.
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Beyond Skin Deep

Dry, cracked, inflamed skin. A red, bumpy rash that won't go away. The near-constant itching and sleepless nights. Living with atopic dermatitis (AD) – the most common form of eczema – isn't easy. It's often unpredictable, with skin symptoms arising when you least expect it.

Maybe you're in your mid-20s and eager to go on dates, but also apprehensive because red splotches are visible on your cheek, chin and neck. Perhaps you're the parent of a 10-month-old girl who scratched the rough, scaly skin on her arms so hard it started bleeding. Or maybe you're a 40-something with seasonal allergies, perplexed by the onset of skin inflammation on your hands and feet.



Atopic dermatitis is a lifelong condition – there is no cure. The goal of care is to provide relief. More than 18 million adults and 9.6 million children have it. Doctors believe AD may actually be underdiagnosed – many people are unaware they have it or don't seek out medical care, thinking symptoms will go away on their own.

Further, atopic dermatitis can impact patients' mental health and quality of life. Even those with mild symptoms report it limits their lifestyle and participation in social activities.

Where to start in terms of managing the condition?

First things first: see a doctor – specialists who treat atopic dermatitis include board-certified allergists and dermatologists. You'll undergo tests to confirm the condition and find out what your triggers are. Since AD is believed to be genetic, your family history will be part of the discussion.

Then you'll work together with your doctor to develop a practical management and treatment plan specific to your needs and values.

The key, as you'll learn in this guidebook, is to keep your skin moisturized, regardless of the severity of the condition. If your atopic dermatitis persists, there is hope. New, innovative medications give doctors and patients better tools to keep symptoms in check.

You don't have to struggle – physically or emotionally – with atopic dermatitis. Clear, healthy skin is possible. Help is here.

Tonya A. Winders

Tonya Winders
President/CEO
Allergy & Asthma Network

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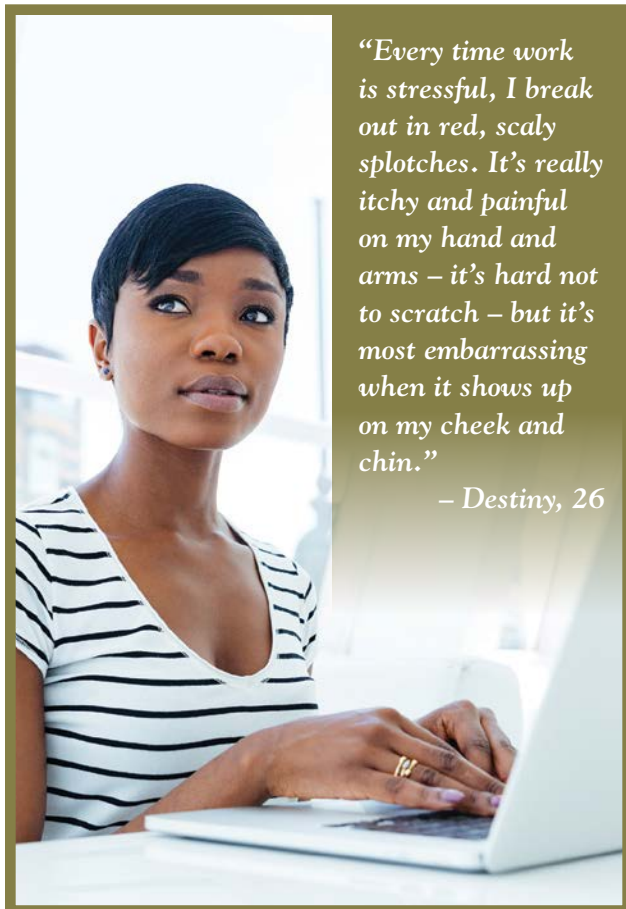
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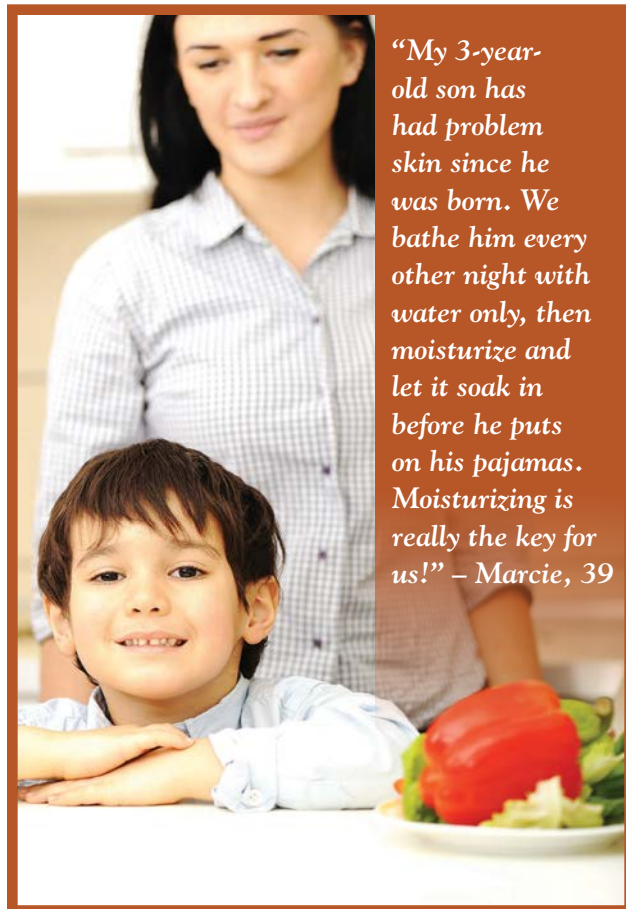
ADDITIONAL RESOURCES

- 34 Dictionary, Websites and Publications



“Every time work is stressful, I break out in red, scaly splotches. It’s really itchy and painful on my hand and arms – it’s hard not to scratch – but it’s most embarrassing when it shows up on my cheek and chin.”

– Destiny, 26



“My 3-year-old son has had problem skin since he was born. We bathe him every other night with water only, then moisturize and let it soak in before he puts on his pajamas. Moisturizing is really the key for us!” – Marcie, 39

What is Atopic Dermatitis?

If you’ve had it, you know it: the dry, red, scaly, unbearably itchy skin condition called atopic dermatitis, or AD – the most common form of eczema.

You are not alone: 18 million adults (7.2 percent) and 9.6 million children under the age of 18 (13 percent) have AD, according to the National Eczema Association. Among children, 3.2 million have moderate-to-severe symptoms.

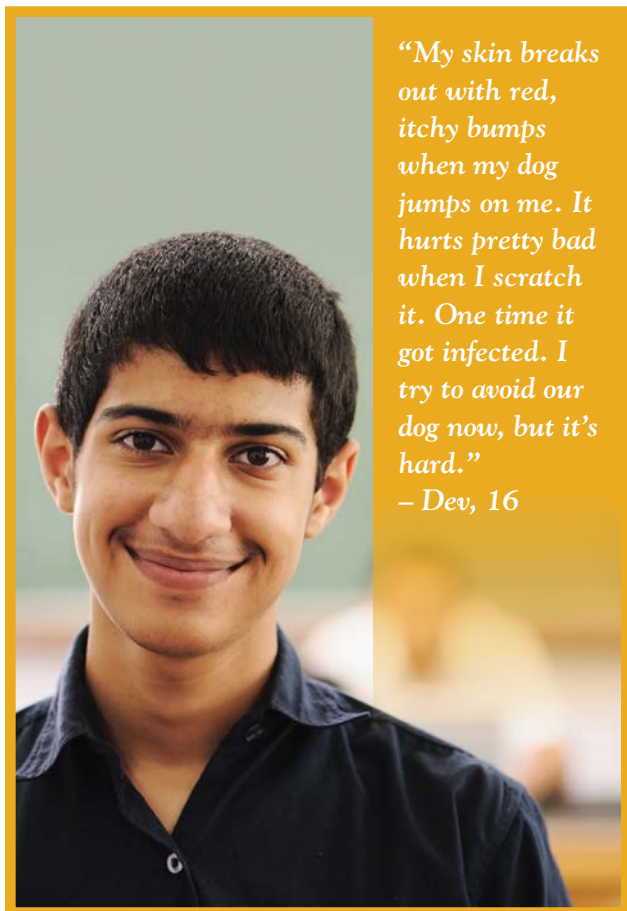
Atopic dermatitis is a chronic inflammatory skin disease. It can cause red patches on the skin that itch; dry and scaly skin; thickened skin; and open, oozing, crusty sores. AD symptoms often appear on the face, neck, hands, wrists, elbows, knees, ankles and feet.

AD symptoms will come and go, but even when your skin appears clear, there may be inflammation underneath the surface, waiting to flare.

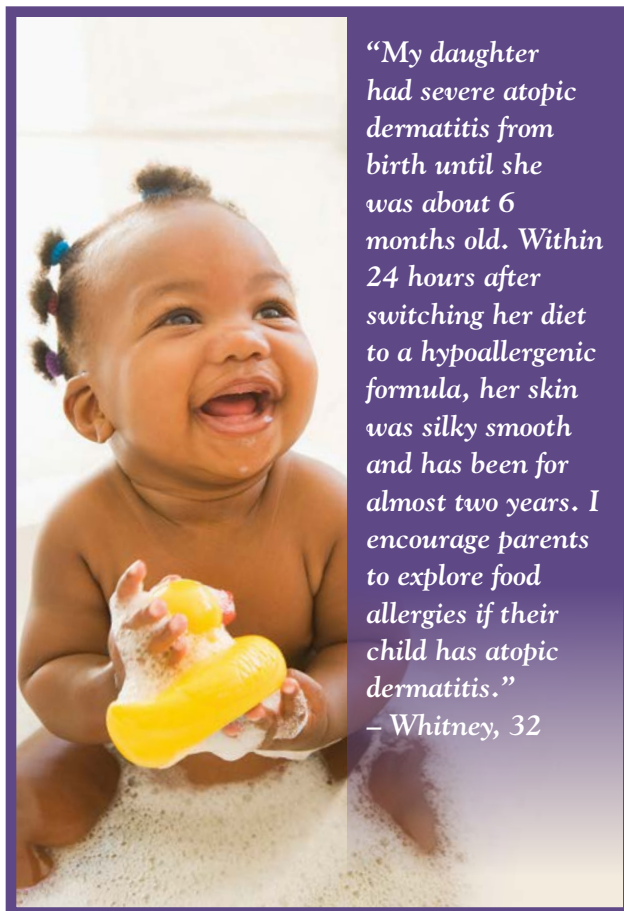
Atopic dermatitis often develops in early childhood – appearing during the first 6 months or within the first 5 years.

Under the Skin

While its cause is unknown, doctors believe AD is related to genetics, an immune system that is sensitive to allergens and irritants, and a defective skin barrier that allows moisture to escape and allergens and bacteria to invade. Seventy percent of people with AD report a



“My skin breaks out with red, itchy bumps when my dog jumps on me. It hurts pretty bad when I scratch it. One time it got infected. I try to avoid our dog now, but it’s hard.”
– Dev, 16



“My daughter had severe atopic dermatitis from birth until she was about 6 months old. Within 24 hours after switching her diet to a hypoallergenic formula, her skin was silky smooth and has been for almost two years. I encourage parents to explore food allergies if their child has atopic dermatitis.”
– Whitney, 32

family history of the condition.

The most common environmental allergens that trigger symptoms include dust mites, pet dander, pollen and mold. Food allergens are also possible triggers, especially in children. Irritants such as wool or man-made fibers, detergents, soaps, cleaning products, some skin care products and tobacco smoke are also common triggers.

Exposure to these allergens and irritants triggers immune cells to release histamines, cytokines and other chemicals to rid the irritants from the body. The resulting inflammation signals the brain to move your hand to the itchy spot and scratch ... and scratch. That only makes it worse, resulting in an endless cycle.

Too much scratching can lead to infection if the surface of the skin is broken. Signs of infection include yellowish, crusty skin (often on top of the eczema), red, swollen bumps and pus-filled blisters.

TRUE OR FALSE?

Atopic dermatitis is contagious.

FALSE!

You cannot “catch it” or spread it to others through physical contact. Atopic dermatitis does tend to run in families, but this is due to genetics.

Some people with atopic dermatitis may lack a specific type of protein, called filaggrin, in their skin. This protein serves as a protective barrier from allergens, irritants and infections. When filaggrin is lacking, it weakens the skin barrier function of the skin. Some people with atopic dermatitis also have high blood levels of Immunoglobulin E (IgE), antibodies produced by the immune system that set off allergy symptoms.

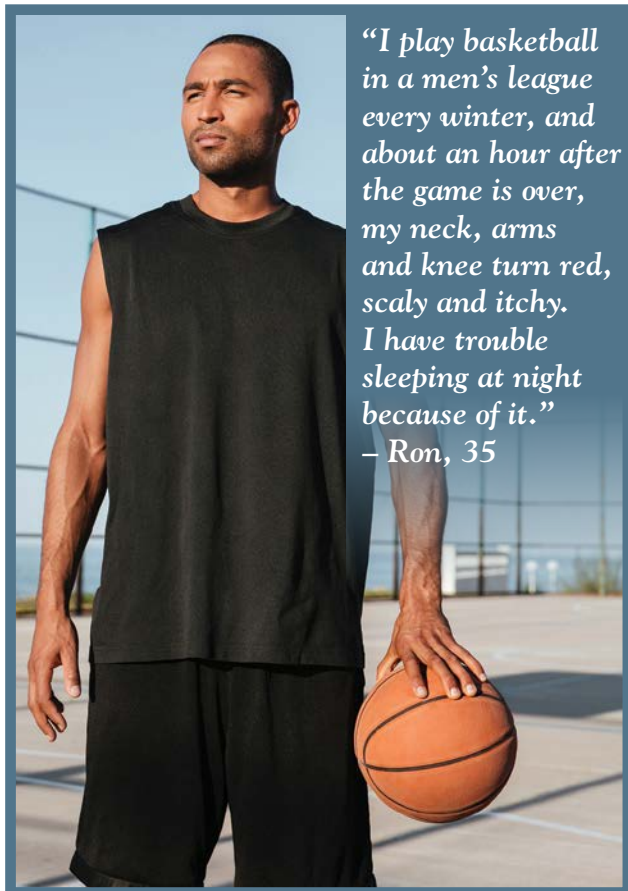
On the Skin

Early diagnosis and treatment are essential to avoid skin complications and improve quality of life.

Treatment begins with avoiding or reducing exposures to known allergens and irritants – immunotherapy to build tolerance to allergens is one option. Then, keep your skin moisturized with creams or ointments, especially during hot summers and dry winters, to lock moisture in your skin and protect against future rashes.



ATOPIC DERMATITIS DEFINED



“I play basketball in a men’s league every winter, and about an hour after the game is over, my neck, arms and knee turn red, scaly and itchy. I have trouble sleeping at night because of it.”
– Ron, 35

Moisturizers are the first-line therapy for treating atopic dermatitis. They work best if used frequently to prevent itching; other treatments include topical corticosteroids that target inflammation. Topical immunomodulators, which regulate the local immune response of the skin, help reduce the redness and itching of inflamed skin. Antibiotics are used to treat skin infections.

Biologics are medications that target cells and pathways that cause inflammation. Dupilumab (Dupixent®) is the first biologic approved by the U.S. Food and Drug Administration (FDA) for atopic dermatitis – it is currently approved for adults with moderate-to-severe atopic dermatitis when topical treatments have not worked. Dupilumab is taken every two weeks by injection.

Doc Talk

Talk with your primary care doctor, an allergist or a dermatologist if you or your child develop symptoms of atopic

The Eczema Umbrella

Eczema is often used interchangeably with atopic dermatitis. The word has Greek origins – it means “to boil over.” It applies broadly to a range of persistent skin conditions:

- **Atopic dermatitis:** a chronic and recurrent inflammatory skin condition that causes red, dry, itchy, painful skin and oozy, scaly rashes.
- **Contact dermatitis:** a reaction to an allergen or irritant (detergent, soap, scratchy clothes, fragrances or nickel jewelry) that touches the skin.
- **Dyshidrotic eczema:** fluid-filled blisters that appear mostly on hands and feet, usually caused by sweat, water or exposure to nickel; more common among women and rarely appears in children under 10.
- **Nummular eczema:** itchy, coin-shaped spots or lesions that appear on the hands, arms, chest or legs.
- **Seborrheic dermatitis:** red, greasy swollen skin and white crusty flakes that occur in areas of the body that tend to be oily. It’s found in infants on the scalp or the folds of the skin; it’s known as dandruff in older children and adults.
- **Stasis dermatitis:** pressure build-up in blood veins, often in the lower legs, forcing fluid to leak out of the veins and into the skin; it can cause redness, discolored skin, oozing, infection, ankle swelling and scaly, dry, itchy skin.

Because atopic dermatitis can be long lasting, it’s important to learn how to take care of your skin. Treatment and good skin care can relieve much of the discomfort.

– American Academy of Dermatology

dermatitis, especially if they are moderate or severe. Communication is as important as treatment in coping with AD; studies show the condition has a significant impact on mental health and quality of life.

With time and treatment, and as children mature, atopic dermatitis may go away – but it sometimes continues into adulthood.

Between 10 and 30 percent of pediatric patients will experience symptoms in adulthood.

Atopic Dermatitis

Fast Facts

Eczema in the United States

31.6
million people

27.6 million people in the U.S. have AD, the most common form of eczema.

- Adults: **18 million**
 - **6.6 million** have moderate-to-severe AD
- Children: **9.6 million**
 - Symptoms by age 1: **60%**
 - Symptoms by age 5: **90%**
 - **3.2 million** have moderate-to-severe AD

As a chronic disease with no cure, AD is one of the most common skin diseases globally.

U.S. Healthcare Burden

Overall cost to treat AD patients (2016):

\$314
million



GENETICS

- 70% of people with AD report a family history of the condition.
- Children born into families that have a history of asthma or allergic rhinitis are at an increased risk for developing AD.



GENDER

AD is slightly more common among women than men.

- Mild symptoms: More women
- Moderate-to-severe symptoms: slightly more men



RACE/ETHNICITY

AD affects people of all races but it is more common among multiracial and African-American populations than Caucasians.



OUTGROW AD?

- Many children outgrow AD, but 10-30% continue to experience relapses as adults.
- Do not disregard treatment expecting your child to outgrow AD. Follow your treatment plan.

Quality of Life Impact On People with AD...

- increased risk of experiencing anxiety and depression
- more sleep disturbances, including trouble falling asleep
- less productivity at school or work
- feelings of embarrassment or anger about their appearance

1 in 5 children diagnosed with AD face bullying.

Sources: American Academy of Dermatology; American College of Allergy, Asthma & Immunology; National Eczema Association; U.S. Centers for Disease Control and Prevention; National Institutes of Health



The Allergic March

Allergies often first express themselves as atopic dermatitis in young children. The skin condition is associated with food allergies, allergic rhinitis and asthma – the so-called allergic march. About 50 percent of children with AD develop asthma and 33 percent develop food allergies. Children with AD are also at higher risk of developing allergic rhinitis.

Is it possible for parents to stop AD before it starts and halt the allergic march?

Breaking the Link

Atopic dermatitis is common among infants and it often runs in families. Infants around 3-6 months of age may start to show dry, itchy skin and formation of red, irritated patches.

The daily application of an unscented moisturizer to the baby's skin shortly after birth may delay and possibly prevent the onset of AD, doctors say. The treatment can prevent moisture loss and damage to the skin, as well as serve as a protective barrier from allergens and irritants.

AD often takes a waxing and waning course and it can be worsened by many different factors including fragranced soaps, detergents and lotions; serious illness; severe weather; or exposure to allergens.

Symptoms can be very severe for some children. In addition to intense itching, their skin can become so dry and irritated that it may bleed from scratching, which can lead to infection.

As researchers continue to study what causes AD, as well as allergies and asthma, they are discovering interventions may be possible.

While no specific diet or food can prevent AD, recent studies suggest expectant moms who eat a healthy diet rich in fruits and

vegetables, fish and vitamin D may reduce the risk of a child developing eczema, according to the American Academy of Dermatology. Taking a probiotic during pregnancy may also slightly lower a child's AD risk.

And regular breastfeeding in the baby's first year of life may decrease the likelihood of the child developing AD.

Talk with your doctor before considering any interventions, especially involving diet during pregnancy.



The Peanut Problem

Infants and young children with moderate-to-severe eczema are at risk for developing peanut allergy, according to multiple studies.

New peanut allergy prevention guidelines from the National Institutes of Health say infants with severe eczema, egg allergy or both are at high risk for peanut allergy and should be given peanut-containing foods as early as 4-6 months of age to reduce the risk. Infants with mild to moderate eczema should be given peanut-containing foods around 6 months of age to reduce the risk of peanut allergy.

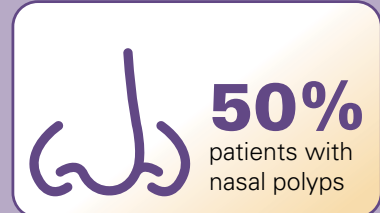
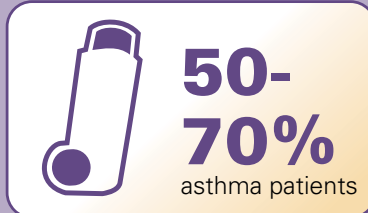
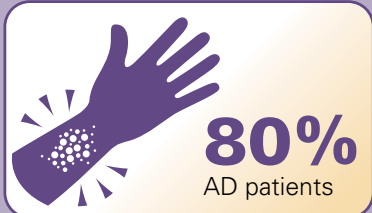
Always talk with a board-certified allergist before introducing peanut to a child at risk for peanut allergy. Studies addressing eczema and early introduction of other food allergens – such as cow's milk and egg – are ongoing.



Type 2 Inflammation

A systemic allergic response known to play a role in classic allergic diseases – including moderate-to-severe atopic dermatitis (AD), asthma and nasal allergies.

Who has Type 2?



Other conditions believed to be impacted by Type 2 inflammation:

AERD, sinusitis, rhinitis, GERD, sleep apnea

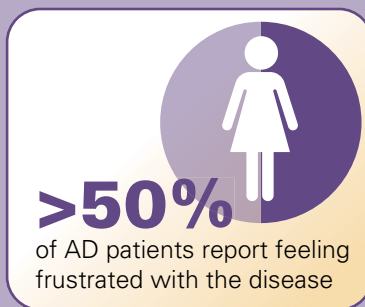
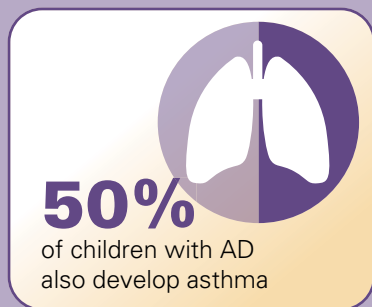
People with AD may have high levels of Immunoglobulin E (IgE), antibodies produced by the immune system that set off allergy symptoms.

Genetics Play a Role

If one or both parents have AD, asthma or nasal allergies related to Type 2 inflammation, their child is **4X more likely** to have one or more of the conditions.



Impact



Pathways to Type 2

The cytokines IL-4, IL-5, IL-13 and ILC2 (secreted proteins that signal cells and begin the immune response) are major contributors to Type 2 inflammation.

Treatment

The biologic dupilumab (for moderate to severe AD) inhibits the pathways of IL-4 and IL-13. The medication:

- reduces inflammation
- calms the immune system
- improves quality of life



What to Watch For...

Atopic dermatitis typically starts in early childhood. It's a chronic condition that is often hereditary and can last into adulthood.

SYMPTOMS

- Itchy skin
- Red patches of sensitive skin
- Dry, cracked skin
- A rash that feels very leathery or scaly
- Open, crusty or weepy sores

OTHER SIGNS

- Infants may rub against bedding to relieve itching
- Itchiness may impact sleep

Common Areas Affected

Infants and Young Children

- Scalp
- Behind the ears
- Cheeks
- Folds of elbows
- Wrists
- Knees



Older Children, Teens and Adults

- Eyelids
- Face
- Neck
- Arms
- Wrists
- Hands
- Back of knees
- Feet



A complication of atopic dermatitis is atopic keratoconjunctivitis, a chronic inflammatory disease of the eye that affects patients with atopic dermatitis. All severe AD patients should get a routine eye exam.

Signs of Infection

Constant scratching due to atopic dermatitis can lead to an infection.

Symptoms

- Oozing skin
- Blistering
- White or yellow pus from open sores
- Severe symptoms may include a fever, achiness and fatigue

If symptoms occur, seek immediate medical help from a healthcare professional.

An infection – especially in infants and young children – can lead to complications such as a prolonged flare, intense itchiness and blisters, scarring, drug resistance and a severe blood infection called sepsis.

Sources: American Academy of Dermatology; American College of Allergy, Asthma & Immunology; National Eczema Association; National Institutes of Health



A Clear Diagnosis

The red, itchy rash on your child's arm – it's atopic dermatitis, for sure. But what's triggering it?

Patients can undergo testing to find out what allergens and irritants are worsening symptoms. Knowing what triggers your AD puts you one step closer to reducing symptoms, whether through avoidance, medication or other treatments.



Skin Prick Test

Droplets of suspected allergens are placed on or just under the skin surface. Raised bumps (about the size of a mosquito bite) strongly indicate an allergy to the substance. Skin prick testing

is commonly used by allergists because of its accuracy, ease of use and immediate results. Results are typically known within 20 minutes.



Blood Test

After a blood sample is drawn, it is analyzed to detect IgE antibodies directed at specific allergens. Tests may measure specific or overall levels of IgE. Some may also break down common allergens

and measure IgE to specific components. Lab results may take several days.

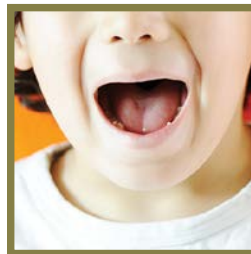
Consult with your doctor to ensure the blood test is interpreted correctly. AD typically results in very high IgE levels and may falsely elevate results.



Patch Test

Chambers containing chemicals of potential triggers on adhesive strips are placed onto the patient's back. After 2-3 days, the patches are removed by the doctor and the skin is evaluated for

reactions. If symptoms appear, then it's confirmation of an allergy. Patch testing is commonly used for contact allergies to fragrances, detergents, metals and other chemical sensitizers.



Oral Food Challenge

If it's believed a food allergy is causing symptoms, the doctor may want to perform an oral food challenge. In this test, the patient is asked to eat a tiny amount of a suspected

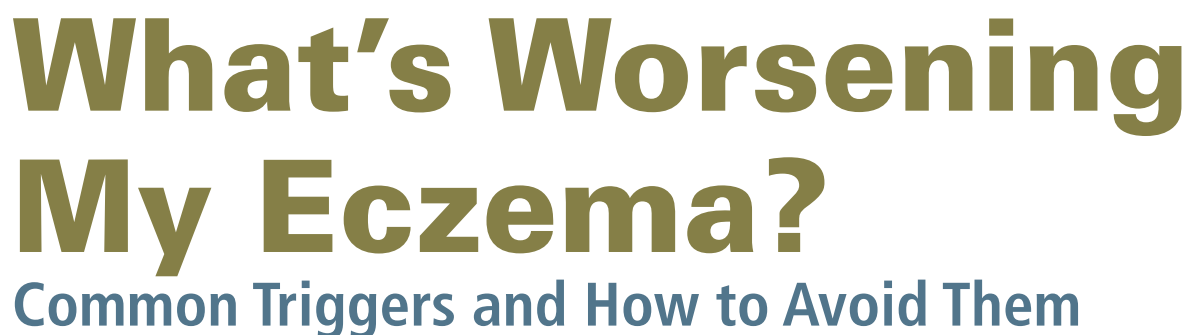
allergen, and then gradually larger amounts, to determine if there's an allergic reaction. The challenge should only be conducted by a doctor and at a medical facility that has access to epinephrine and other emergency treatments.

The Results Are In...

After testing, your doctor will compile all of the evidence together – test results, your personal and family health history, physical exam, home and work environments, activities that might expose you to allergens – to reach a diagnosis.

Other Tests

- **Buccal swabs** – used to detect mutations in the filaggrin gene, the protein that helps protect the body from allergens and bacteria; a lack of filaggrin weakens the skin barrier, leading to eczema.
- **Skin biopsy** – a tiny piece of skin is removed and analyzed under a microscope; it can rule out other skin diseases such as skin cancer or psoriasis.



Triggers and symptoms are different for everyone. What makes identifying them so challenging is sometimes a flare-up can occur hours after the initial exposure. Some people may experience symptoms on certain areas of the body or only at certain times of the year.

Be a Detective

- Do certain fabrics cause my skin to itch?
- What time of year is it? Do changes in weather lead to eczema symptoms?
- What foods do I eat that cause my skin to break out in a rash?
- Do I itch after working out?
- Do my eczema symptoms flare up around pets?
- Does my skin flare up after using certain cosmetics, moisturizers, soaps or fragrances?
- How was I feeling when the symptoms appeared?

Trigger Points



- Antibacterial ointments such as neomycin and bacitracin
- Formaldehyde, which is found in household disinfectants, glues and adhesives.





DUST MITES – These tiny insects live in mattresses, pillows, upholstered furniture – anywhere they can find moisture along with their favorite food, tiny bits of shed human skin. Atopic dermatitis patients may be allergic to them. Allergens from their droppings and dead bodies collect in bedding, furnishings and house dust, then irritate skin, airways and eyes on contact.

When atopic dermatitis is already flaring, dust mite allergens can worsen the problem. Encase your bed's pillows and mattress with allergen-proof covers to put a barrier between you and the dust mites. Wash linens weekly and vacuum carpets, floors and furnishings with a HEPA vacuum.

ENVIRONMENTAL ALLERGIES – People with eczema may experience symptoms after exposure to certain grass, tree or ragweed pollen and/or indoor or outdoor mold. It's best to treat symptoms that arise from environmental allergens with aggressive moisturizing, along with antihistamines and topical corticosteroids if necessary.

Skin prick or blood testing for environmental allergies will help identify specific allergens to avoid. Some patients may do well with allergen immunotherapy (allergy shots or tablets), in which a patient is given a gradually increasing amount of an allergen to build tolerance and reduce symptoms.

FOOD ALLERGIES – Food allergens can play a role in the onset of eczema symptoms, particularly for infants and young children. Between 35 and 60 percent of young children with moderate to severe eczema also have food allergies. It's believed the breakdown of the skin barrier contributes to an allergic response when a food allergen is consumed.

Among children under the age of 2, eczema is most often related to milk or egg allergy, but it can occur with any food. Other common food allergens include peanut, tree nuts, fish, shellfish, soy and wheat. Consult with a board-certified allergist for a diagnosis and then develop a plan to avoid the food allergen.

Food-allergic patients are also at risk for anaphylaxis, a severe allergic reaction. Always carry two epinephrine auto-injectors, the treatment for anaphylaxis, if you have a food allergy.

FURRY PETS – Pet dander (dead skin cells), saliva or urine are normally harmless proteins, but for people with eczema they can trigger skin symptoms in addition to respiratory problems.

Early exposure to pet dander may contribute to the development of atopic dermatitis in children who are prone to the condition.

Finding a new home for the furry pet is the most effective way to reduce levels of pet allergens in the home, but if that's not a consideration, bathe your pet at least once a week and set up no-pet zones, including the bedroom.

HORMONES – In women, hormone fluctuations may trigger or worsen eczema symptoms. Hormone changes occur just before and during menstruation, during pregnancy, after pregnancy, or when transitioning to menopause.

OUTDOOR TEMPERATURES – Whether because it dries out skin or causes sweating, heat is a common eczema trigger. Sweat, in particular, can collect in your armpits or inner part of your elbow, leading to skin irritation. Meantime, in winter months, humidity that provides moisture in the air decreases, resulting in dry skin.

In addition, a sudden rise or drop in temperature can trigger an eczema flare.

Strategies to keep comfortable in hot and cold weather include:

HOT WEATHER

- Wear appropriate clothing: light, breathable clothes in the summer.
- Avoid going outside during peak heat times during the day, usually between 10 a.m. and 3 p.m. If you do go outside, keep a small towel with you to wipe away excess sweat.
- Stay hydrated to moisturize from the inside out.

COLD WEATHER

- Wear gloves in the winter (since hands are particularly sensitive and often exposed to cold).
- Consider a humidifier to moisturize the indoor air.



SYMPTOMS

SKIN IRRITANTS – While they are not true allergens, some soaps, shampoos, detergents, fragrances and wool or synthetic clothing can significantly irritate sensitive skin. Heavy or tight clothing that rubs against the skin can also cause symptoms.

Use gentle, nonirritating products and stick with them. Natural fiber clothing such as cotton or silk is usually most comfortable. Once an area gets irritated, it can take a long time for it to calm down.

STRESS – An increase in stress levels may either cause an eczema flare or worsen an existing one. Some patients may scratch more often when they're feeling pressure.

Managing stress effectively can reduce flares. Coping strategies such as meditation or yoga, regular exercise, getting enough sleep, and connecting with family and friends are great ways to take your mind off your worries.

TOBACCO SMOKE – Cigarette smoke, including secondhand smoke, can irritate skin in addition to the lungs and eyes. Set a no-smoking policy both inside and outside your home; smoking is a major health issue for everyone.

VIRAL AND BACTERIAL INFECTIONS – The common cold can cause an eczema flare. In addition, the herpes virus, which can cause cold sores in and around the mouth, can lead to flares – including eczema herpeticum, a potentially serious infection that can spread core sores on other areas of the body. Also, exposure to bacteria can cause harmful toxins to secrete into the skin, prompting an immune reaction and causing skin inflammation. One of the more common bacteria is *Staphylococcus aureus* (staph infection, also known as MRSA), which can not only worsen eczema but also slow skin healing.

When to See a Specialist

Most people with atopic dermatitis, whether a child or adult, get their initial diagnosis from a primary care doctor. If the red, itchy rash stays the same or worsens after initial treatment, it may be time to see a specialist – either a board-certified allergist or dermatologist. Both possess skilled knowledge and experience to treat atopic dermatitis and other eczema-related skin conditions.

If you or your child display moderate-to-severe symptoms, then it's likely you need a treatment plan beyond what standard over-the-counter creams, ointments and other medications can provide. A specialist can best make that determination.

Whether you see an allergist or dermatologist, you'll likely be asked similar questions about environmental exposures that may be making your atopic dermatitis



worsen, as well as about the types of soap, detergent and skin care products you use.

Allergist or Dermatologist?

Allergists are trained to treat skin conditions (such as atopic dermatitis) related to an allergic response, as well as food allergies, environmental allergies and asthma – the allergic march.

Dermatologists are specially trained to treat conditions related to the skin, hair, nails and mucous membranes (the lining inside the nose, mouth and eyelids).

Both specialists can conduct tests to identify allergens and irritants that trigger skin symptoms and put together a comprehensive treatment plan.



Repair the Skin Barrier

How Moisturizing Helps

People with atopic dermatitis have a damaged skin barrier that makes it harder to retain water. As a result, their skin becomes dry and itchy – and more sensitive to harmful allergens, irritants and bacteria.

Moisturizers are the first-line therapy in treating atopic dermatitis. They help protect the outer layer of the skin by sealing in moisture, combatting dryness, keeping out allergens, irritants and bacteria and preventing flare-ups. And they soothe the skin for long-lasting hydration.



Doctors recommend you apply a moisturizer at least twice per day, including once after a bath or shower.

Develop a schedule so that moisturizing becomes part of your skincare routine. If you experience symptoms on your hands, keep moisturizer by all sinks in the home or carry a small tube with you. This way you can easily moisturize every time you wash your hands throughout the day.

Important: If your doctor prescribed a topical medication to treat your atopic dermatitis, make sure to use it as directed before you put on a moisturizer.

Hydrate the Skin

When considering a moisturizer, the first thing to look for is how much oil it contains. The more oil in a moisturizer, the better it is for treating atopic dermatitis. If your skin feels greasy or sticky after applying a moisturizer, that means the product likely contains plenty of oil.

Types of ingredients in moisturizers include: humectants (ceramides, glycerin, sorbitol), which help draw in moisture; petroleum jelly, mineral oil, coconut oil, silicone and/or lanolin, which help seal in moisture; and emollients (linoleic and lauric acids), which help smooth the skin.

Look for products that do not contain added ingredients – such as fragrances, dyes or alcohols – that can irritate the skin.

- **Ointments**

Ointments typically contain the most oil and are effective at sealing in moisture. Mineral oil and petroleum jelly are recommended, as is coconut oil as long as you or your child are not allergic to coconut.

- **Creams**

Creams contain less oil than ointments. If you don't like the greasy or sticky feeling from using ointments, then consider using a cream.

- **Lotions**

Lotions contain more water than oil. As a result, these do not seal in the moisture as well as ointments and creams. Lotions also are more likely to contain fragrances, preservatives and other ingredients that can harm sensitive skin.

Important: Always check the product label before you buy a moisturizer – not only to confirm its beneficial ingredients but also to find out if it has any allergens or irritants.

How to Apply Moisturizer

1. Soften the moisturizer by rubbing it between your hands.
2. Apply it to affected areas using your palm, in a downward stroke.
3. Use a thick layer; the skin will absorb any excess moisturizer within a minute.



To Bathe or Not to Bathe?

Atopic dermatitis is more than just dry skin. Flares erupt unpredictably: dry, scaly, irritated spots on the face or hands, or inside the crease of the elbow or knee. The itch is almost unbearable – and scratching makes it worse, resulting in what feels like an endless cycle.

AD has no cure, so preventing and managing flare-ups becomes a priority.

The trick is figuring out how to get moisture back into the skin and keep it there. Slathering on moisturizer by itself usually won't do it; neither will simply soaking in a bath.

In fact, some people think bathing dries out the skin and makes it worse: We all know how frequent hand-washing dries out the hands. The reason for this is not the water itself, however, but the soaps we use and the fact that we often just wash and dry – forgetting to add a moisturizer to seal in the water.

It may be true that bathing too frequently can dry out skin and exacerbate AD, but rather than skipping baths, doctors recommend shorter ones.

To ease the itch and rehydrate the skin, doctors recommend a “soak and seal” method. Soak the skin to allow water to absorb, then use a moisturizer immediately to seal in the wetness.



Body Washes

Most soaps tend to dry out the skin, so finding a quality soap that keeps the skin moist is important for people with eczema. (Do not use bubble bath – they use chemicals to bring on the bubbles.)

Liquid cleansers are much less harmful to the skin than bar soaps. Emollient-rich liquid cleansers dry out the skin the least and add moisture.

For those using bar soaps, the American Academy of Allergy, Asthma & Immunology (AAAAI) recommends nonsoap cleansers because they are usually free of sodium lauryl sulfate, a chemical that creates the soap's foam and can irritate the skin.

Avoid using washcloths, sponges or loofahs that may scrape the skin.



3-Step Soak and Seal

1. Soak your skin in lukewarm water (not hot water), either a bath or a shower, for 10-15 minutes. Skip the soap or bubble bath: stick to clear water. If necessary, use a gentle cleanser free of fragrances and chemicals. For areas like your face that can't be soaked in a tub, apply a wet washcloth for at least 5 minutes.
2. Gently pat the skin dry with a soft towel – don't rub, as that will irritate the sensitive areas.
3. Apply moisturizer immediately (within 3 minutes is the rule) to seal the water in. If you have a prescription skin medication, use that first on affected areas. Then use a high-oil-content ointment. Petroleum jelly may be messy, but it's often the best solution for AD flares. In general, use fragrance-free, dye-free or clear ointments. Lotions contain too much water or alcohol and easily evaporate, while some creams have preservatives or fragrances to which you may be sensitive.

Extra Help

Some doctors suggest putting a half-cup of household bleach or a cup of vinegar into the bath water. The theory is that bleach and vinegar may help kill bacteria and prevent infection.

Others suggest adding bath oil, salt, baking soda or oatmeal to help ease persistent itching. Baking soda and oatmeal can also be made into a paste that can be applied to the skin.

Talk with your doctor about whether you should try these specific baths.



Under Wraps

People with atopic dermatitis often have two problems: a defective skin barrier that dries out easily and is more open to invasion from allergens and germs than normal; and an overly sensitive immune system.

That means treatment needs to be twofold:

- Repair the damaged skin
- Avoid exposure to allergens and irritants

Sounds simple, but anyone who deals with AD knows that it is anything but easy. Stopping the itch is key, as the itch-scratch cycle feeds upon itself.

For patients with difficult-to-manage AD, one treatment option is **wet wrap therapy**.

After doing a soak-and-seal warm bath and applying medication, the patient's eczema-damaged skin is wrapped in a layer of wet cloths, topped often by dry clothes – such as pajamas, sweatshirt or tube socks. Plenty of videos demonstrating wet wrap therapy for eczema are available online.

Doctors recommend wet wrap therapy as an intervention for moderate-to-severe cases. Wet wrap therapy can reduce the need for medication, but it should be done only after consulting with a physician.

'A Lasting Benefit'

National Jewish Health eczema expert Mark Boguniewicz, MD, says most patients and caregivers have difficulty understanding the chronic nature of eczema, with its frequent relapses, lack of a real cure, and limitations of prescription medications. He also says it can be a challenge to know what to put on the skin and when, where and how much.

In a recent study, Boguniewicz and his colleagues tested wet wrap therapy on a large group of children with moderate-to-severe eczema.

After sealing topical medication under the wraps, they found the treatment:

- Relieved inflammation and itching rapidly
- Kept patients off of systemic corticosteroids
- Protected skin to allow healing

"Wet wrap therapy provided a lasting benefit, even though it was used on average only 4-5 days,"

Dr. Boguniewicz says.





Come Together

How Doctor-Patient Partnerships Are Transforming Healthcare

Healthcare works best with collaboration and coordination to arrive at the best care for you. This practice is called Shared Decision Making – and it benefits doctors and patients alike.

Shared Decision Making encourages patients and families to take a central and active role in their care by working with doctors to select tests and treatment plans. It is evidence-based and balances risks and results with a patient's preferences and values. In short, it personalizes care.

Studies show when patients and families work closely with doctors and make healthcare decisions together, it improves their knowledge of the condition and they are more likely to adhere to treatment plans and go to follow-up appointments.

Allergy & Asthma Network has partnered with the American College of Allergy, Asthma & Immunology (ACAAI) to develop an interactive **Shared Decision Making Tool** for atopic dermatitis patients. The tool is available at EczemaRelief.acaa.org.

Benefits of Shared Decision Making

- Improves patient outcomes and satisfaction
- Increases patient knowledge
- Improves self-management skills
- Creates more certainty, less anxiety
- Ensures follow-through on treatment plan
- Aligns with patient preferences and cultural values
- Builds a trusting relationship with the doctor



New Treatment Guidance

Innovations in atopic dermatitis therapy the last few years have provided doctors and patients with new treatment options.

Leading board-certified allergists and dermatologists combined these treatment options into the **Atopic Dermatitis Yardstick**, published in the January 2018 *Annals of Allergy, Asthma and Immunology*.

The Yardstick uses patient profiles to help doctors determine what steps should be taken to start,

step up or adjust therapy. It offers practical recommendations about which medications are appropriate at which stage of diagnosis.

The Yardstick includes guidelines for prescribing new medications on the market, including the injectable biologic dupilumab (Dupixent®) for patients 18 years or older with moderate-to-severe atopic dermatitis.

The complete Atopic Dermatitis Yardstick can be found at www.annallergy.org.



What's the Best Treatment for My Atopic Dermatitis?

If moisturization (including soak-and-seal after bathing) and management strategies (reducing exposures to allergens and irritants) are not fully effective in treating your atopic dermatitis, your doctor may recommend topical or systemic medications. Discuss the pros and cons of each medication option.

Topical Treatments

Medicated ointments, creams, lotions, gels, oils or sprays that you apply to the skin.

	Corticosteroids	Calcineurin inhibitors	Crisaborole 2%
Use:	Controls redness and itching; apply 1-2X per day; approved for children, including infants as young as 3 months	For use on eyelids, armpits, mouth area, groin; apply 1-2X per day; approved for children ages 2 or older	For use on eyelids, armpits, mouth area, groin; apply 1-2X per day; approved for children ages 2 or older
Side effects:	Redness, stretch marks, skin thinning, spider veins, face rash	Stinging or burning may occur upon first use; very slight risk of infection	Stinging or burning sensation may occur
Cost*:	Low to moderate cost	Moderate cost	High cost

Systemic Treatments

Injectable biologics, oral corticosteroids or phototherapy designed to treat the entire body – typically prescribed for patients with persistent, moderate-to-severe atopic dermatitis who need more than topical treatments.

	Dupilumab (Dupixent®)	Oral or injectable corticosteroids	Phototherapy (light therapy)
Use:	Biologic medication injected under the skin every 2 weeks; not currently available for children	Daily pill or long-acting injection given at doctor's office – should not be used long-term due to side effects; approved for children	Exposure to ultraviolet (UV) light to reduce inflammation and itch and boost the body's ability to fight bacteria; can be applied to specific areas or entire body; approved for children ages 6 and older
Side effects:	Redness or itching at injection site; eye or eyelid inflammation; allergic reaction	Weakened muscles; bone thinning; eye problems; diabetes; sleep problems; mood swings or behavior changes; symptoms may worsen post-treatment	Sunburn; skin aging; risk of skin cancer
Cost*:	High cost	Low cost	Moderate to high cost

* May depend on your health insurance coverage

You Make the Call

Take the complete Shared Decision Making Tool at [EczemaRelief.aaaai.org](https://eczemaRelief.aaaai.org). Share the results with your doctor so that you both come to a decision on the best treatment plan for you.



Find Your Relief

Many over-the-counter and prescription medications are available to treat atopic dermatitis

The first approach to managing atopic dermatitis is vigilant skin care and hygiene, but many patients require more. While there are no medications that “cure” the condition, the good news is that there are many medications both over the counter and by prescription that can relieve symptoms.



Every individual's AD is unique, with different triggers and different symptoms. As a result, treatments will vary from one person to another – and even from one flare to another.

What works for you one time may need to be changed in the future.

It's important to work with your physician on a personalized treatment plan. Then get to know your medications so you understand how to manage your symptoms most effectively. Talk with your doctor or pharmacist about any possible side effects. Read labels carefully and follow dosing and safety instructions.

Corticosteroids (Topical)

Many prescription and over-the-counter corticosteroids are available

WHAT THEY DO

- Relieve itch
- Reduce inflammation
- Reduce dryness
- Prevent flares from recurring

WHAT YOU NEED TO KNOW

- Often the first line of treatment for eczema.
- Available as creams, solutions, foams and ointments.
- Low potency doses available without a prescription.
- Can cause thinning of skin.
- If recommended by physician, may be used 1-2 times per week to prevent outbreaks in areas that commonly flare.



- They come in different strengths; do not substitute one for another without consulting a doctor.
- Children's skin absorbs medicine more quickly and thoroughly than adult skin, so recommended medications and dosages differ according to age.
- For best and long-lasting results, use the medication for the full amount of time recommended by your physician. Discuss any concerns about side effects before discontinuing use.
- Always tell your physician and pharmacist about current or recent use of all forms of corticosteroids, including oral, inhaled, nasal, topical and eyedrops.

Corticosteroids (Oral or Injection)

Prednisone; prednisolone; methylprednisolone; dexamethasone

WHAT THEY DO

- Relieve itching and inflammation

WHAT YOU NEED TO KNOW

- Should be used short-term only; follow recommended dosing schedule closely.
- Approved for severe or difficult-to-treat eczema.
- Side effects may include bone loss, diabetes, weight gain and eye problems.
- Skin may flare when medication is stopped.
- To prevent health risks from overuse of corticosteroids, tell your doctor or pharmacist about all current or recent use of corticosteroids, including oral, inhaled, nasal, topical and eyedrops.

Calcineurin Inhibitors (Topical)

Protopic® (tacrolimus) ointment; Elidel® (pimecrolimus) cream

WHAT THEY DO

- Reduce inflammation
- Reduce itch
- Combat dryness
- Prevent flares from recurring

WHAT YOU NEED TO KNOW

- An alternative to topical corticosteroids, when skin is being damaged or there is concern about overuse of steroids.
- Approved for adults and children age 2 and up.
- May be used 2-4 times weekly as maintenance/preventive treatment.

- Avoid sunlight and sunlamps – calcineurin inhibitors may cause skin to be more sensitive to light.
- May cause skin pain (such as a burning sensation), especially when applied to acutely inflamed skin.
- FDA warning: May increase risk of skin cancer and non-Hodgkin's lymphoma. The American Academy of Dermatology says this risk applies to oral forms of the medication taken at high doses for long periods of time; the risk is lower with limited topical use.

PDE4 Inhibitors (Topical)

Eucrisa® (crisaborole) ointment

WHAT THEY DO

- Reduce inflammation
- Reduce swelling
- Target PDE4 enzymes deep within the skin to reduce inflammation

WHAT YOU NEED TO KNOW

- Approved to treat mild-to-moderate atopic dermatitis in adults and children ages 2 and up.
- Works differently than other topical treatments such as corticosteroid ointments and calcineurin inhibitors.
- PDE4 is produced by cells in our immune system and helps the body regulate inflammation.

Antibiotics (Oral or Topical)

WHAT THEY DO

- Treat bacterial or staph skin infections

WHAT YOU NEED TO KNOW

- Topical antibiotics are used for small, localized bacterial infections; oral antibiotics are used for more extensive or severe skin infections.
- Topical antibiotics are sometimes not recommended, as they can be associated with contact dermatitis and may contribute to antibiotic drug resistance.
- Mupirocin is a prescription topical antibiotic usually applied to the affected area three times per day for 1-2 weeks.
- Bleach baths may also be effective in treating and preventing infection.



Antihistamines (Oral)

WHAT THEY DO

- Relieve allergy symptoms related to atopic dermatitis
- May help with sleep

WHAT YOU NEED TO KNOW

- “First generation” sedating antihistamines such as diphenhydramine (Benadryl®) and chlorpheniramine (Chlor-Trimeton®) may help with sleep and itch, especially at night when itching is often at its worst. Nonsedating antihistamines may help with itching throughout the day without the drowsiness.
- Topical antihistamine skin creams are not recommended as they may irritate the skin or result in a future allergy to oral or topical forms of Benadryl or doxepin (Zonolon®).

Biologic (Injection)

Dupixent® (dupilumab)

WHAT THEY DO

- Reduce inflammation
- Calm the immune system

WHAT YOU NEED TO KNOW

- Administered by injection every 14 days.
- Approved for adults with uncontrolled moderate-to-severe eczema.
- Can be used with or without topical corticosteroid creams or ointments.
- Expensive; not always covered by insurance.
- Risk of eye-related side effects.

Systemic Immunosuppressants (Oral or Injection)

Azathioprine; cyclosporine; methotrexate; mycophenolate mofetil

WHAT THEY DO

- Suppress the immune system
- Reduce inflammation

WHAT YOU NEED TO KNOW

- Not specifically approved to treat atopic dermatitis; sometimes used off-label for moderate-to-severe eczema.
- Sometimes used as an alternative to phototherapy.



Healing Power

The potency of topical corticosteroids vary according to the active ingredient and the dosage, as well as the formulation and type of application, such as cream or ointment.

LOW POTENCY

- hydrocortisone acetate; 1%; cream/ointment
- desonide; 0.05%; cream/ointment

MID POTENCY

- betamethasone valerate 0.05% or 0.1%; cream/ointment
- mometasone furoate; 0.1%; cream
- hydrocortisone valerate; 0.2%; cream/ointment

HIGH POTENCY

- fluocinonide; 0.05%; cream/ointment/gel
- mometasone furoate; 0.1%; ointment
- desoximetasone; 0.25%; cream/ointment/gel
- diflorasone diacetate; 0.05%; cream

VERY HIGH POTENCY

- betamethasone dipropionate glycol; 0.05%; ointment
- clobetasol propionate; 0.05%; cream/ointment
- halobetasol propionate; 0.05%; cream/ointment

Source: National Institutes for Health Guidelines for Pharmacists.

- Very strong medications, developed for chemotherapy and to prevent organ rejection after transplants
- Require short-term use and regular blood test monitoring by a doctor
- Side effects may include blood pressure and kidney or liver problems.



Let There Be Light



Phototherapy, also called light therapy, can reduce the inflammation that is a part of atopic dermatitis. It can both lessen the itch and help boost the body's bacteria-fighting abilities. It can be used in specific areas that aren't responding to other treatments, or over the entire body if needed.

The Basics



Phototherapy is an in-office procedure conducted by either an allergist or dermatologist. It involves exposing the skin that is affected by atopic dermatitis to ultraviolet (UV) light. Phototherapy is considered a second-line treatment and is used only for patients who haven't had success with other measures.

A special light machine is used to deliver targeted bands of UV light just where it's needed. Nearly 70 percent of patients who are treated with

phototherapy have positive results, but it's important to note that this treatment is not for everybody.

Medical Supervision

It is important for the doctor to determine what type of UV light is right for you in order to time the treatments and avoid risks to your health. The amount of light exposure is timed and increased as treatment progresses.

Phototherapy may start with very short sessions, delivered often, making it difficult for some people to fit this into their busy schedules.

Some areas may not have phototherapy readily available and accessible. Talk with your doctor. A trip to the tanning bed is not a replacement for phototherapy.

Benefits

Phototherapy often provides relief from the itching, swelling and tenderness of atopic dermatitis, with fewer potential side effects than some other treatments. Phototherapy often allows the skin time to heal, although it does not make AD go away permanently.

Patients should always talk with their doctor to see if phototherapy is right for them.

Potential Side Effects

Phototherapy, when done under the direction of a doctor, is considered safe, but there are several side effects that can occur.

As with any exposure to UV light, the skin can get sunburned or appear to age more rapidly. There are some reports this treatment can lead to skin cancer. One important precaution to take is to wear appropriate goggles to prevent injury to the eyes.

Moisturizers must be applied following therapy since this procedure can dry out the skin.

UV Light Treatment

Narrow Band Ultraviolet B (UVB)

- Effective with fewer side effects
- Uses a very small part of the UVB spectrum
- Given 3-5 times per week

Broadband UVB

- Requires treatment 3 times per week initially

PUVA

- Medication (psoralen) must be taken with this treatment to make it effective
- Given 2-3 times per week for 12-15 weeks
- Risk of skin cancer; side effect of nausea



Calming the Itch

The eczema on your skin is itchy. You scratch. It itches again. You scratch again.

The cycle seems unending. What doctors now realize is when you scratch skin impacted by eczema, you perpetuate the itch and worsen the condition.

Here's how it happens: When you scratch, you break down the outer layer of skin, allowing allergens, irritants and bacteria to enter. Your immune system responds by sending signals to the surface of the skin, causing more inflammation, redness ... and more itching. This increases your risk of infection.

Near-constant scratching can also affect quality of life and impact sleep, especially in children.

Common Triggers

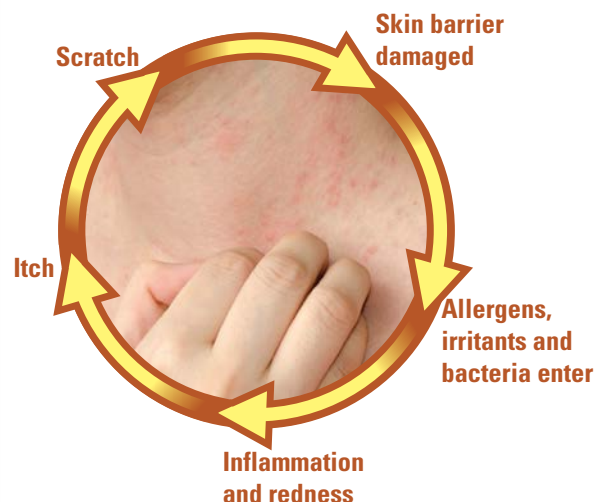
- Sweating
- Heat
- Hot water
- Exposure to allergens and irritant
- Dust
- Dry skin
- Wool fibers
- Soaps and detergents
- Stress

Break the Cycle

'Just stop scratching' is easier said than done. It may even cause unnecessary stress, worsening symptoms. Here are strategies and treatments to help relieve or minimize itch in patients with atopic dermatitis.

- Frequent moisturization can not only soothe the skin but also reduce the itch.
- Medications include topical corticosteroids, topical calcineurin inhibitors and immunomodulators. Talk with your doctor about using these medications for your AD.

The Itch-Scratch Cycle



- Sedative antihistamines can help during sleep; nonsedating ones are available as well and may help relieve itching in some patients. Be sure to confirm the correct antihistamine dosage when administering it to a child.
- Keep fingernails cut very short – especially for infants and young children. Put eczema mittens on a baby's hands; your baby still may try to scratch, but not with fingernails.
- Wear loose-fitting clothes.
- Keep yourself busy and your hands occupied so you don't focus on itching. For children, distract them with games.
- Cooling can relieve itching. Keep cool packs stored in the refrigerator and place one on itchy areas as needed. Apply a cool compress to the skin or take a cool shower or bath. If you prefer a bath, stir in colloidal oatmeal, apple cider vinegar or a half-cup of baking powder and bathe for 10 minutes. Remember to pat yourself dry and use a moisturizer within 3 minutes of bathing.
- It may be helpful to keep moisturizers or topical medications cool in the refrigerator as well.
- For temporary relief, rub the skin with vinegar water (one tablespoon of vinegar to one quart of water).
- If you must scratch, try stroking the itchy area using the top side of the hand instead of your fingernails.



Sleep Tight

Quality sleep is often elusive for people with eczema. It's a sign that symptoms are not well controlled.

Sleep disruption can have a significant impact on well being, especially with kids, because it's critical to overall health. According to the nonprofit National Sleep Foundation, lack of sleep can result in:

- Severe fatigue, depression and memory loss
- Inability to concentrate, listen, learn and problem solve
- Impatience, poor judgment and aggressiveness
- Increased likelihood of contracting colds and the flu

Itching is often at its worst at night, when there are no activities to distract your mind and body. Here are four strategies to develop a bedtime routine and help ease the itch:

1 Moisturize the skin. When bathing, wet the skin with lukewarm water – just enough for the moisture to soak into the skin. Then, pat the skin dry – don't wipe it dry. Apply hypoallergenic moisturizers immediately. This will help the skin trap the moisture.

Hypoallergenic moisturizers are recommended because fragrance-based products can sometimes further irritate the skin.

2 Control the itch. Antihistamines, such as diphenhydramine, may help induce sleep and decrease the itch. It may reduce the amount of time it takes to fall asleep, as well as help you get a longer and better night's sleep – which is also beneficial for the immune system.

Always consult your doctor before taking or administering medication.

3 Treat your symptoms with anti-inflammatories such as topical corticosteroids. The goal with anti-inflammatories is to break the itch-scratch cycle. Eczema is an inflammatory condition, so the more you scratch, the worse the inflammation.

Topical corticosteroids are a very common eczema treatment. There is a range of strengths (or potency) depending on the location and severity of your AD; you can start with a mild-strength topical corticosteroid and then switch to a stronger one if mild is not working well.

Some mild topical corticosteroids are available over-the-counter while higher-strength topical corticosteroids require a prescription from a doctor. Talk with your doctor about these medications.

Anti-inflammatories are typically used in conjunction with moisturizers. They control the inflammation when the skin is moisturized.

An overnight wet wrap using cool or refrigerated clothing may also help relieve itching.

4 Identify what is causing the itching. The triggers can be physical, such as getting hot and sweaty; contact with a fabric such as wool or polyester that irritates the skin; soaps or household cleaners; and even emotional stress.

The triggers could also be related to environmental allergies (seasonal pollen, mold, dust mites or pet dander) or food allergies. Skin testing can help identify which environmental allergens are causing flare-ups; oral food challenges are used to diagnose food allergies.

Work with your doctor to identify triggers and develop avoidance strategies to better manage the condition.



The Heat Is On

Does your atopic dermatitis flare up during the summer? Dry heat and sweat are common factors in setting off symptoms. Summer wardrobes such as sleeveless tops and shorts expose it all.

Control AD in warm weather by conditioning the skin and soothing the itch. Some tips:

- Keep up with moisturizers. Just because summer humidity feels clammy doesn't mean you can let up on keeping skin hydrated. Follow the 3-minute rule: Apply moisturizers right after a warm (not hot!) bath to seal in water in your skin.
- Skip harsh deodorizing soaps and products that contain alcohol, fragrances, retinoids or alpha-hydroxy acid (AHA).
- Screen wisely. Sunshine eases eczema for some people, but skin cancer prevention remains crucial. Choose and use sunscreen without fragrances, dyes and alcohols. (If you're a new parent, don't put sunscreen on your baby until after 6 months of age.)
- The more you moisturize at the beach, pool or club, the better. Rinse off periodically to wash away allergens, irritants (salt! sand! chlorine!) and sweat on your skin, then reapply moisturizing sunscreen.
- Drink plenty of fluids to avoid becoming too hot.



Here Comes the Sun

Can someone be allergic to the sun? Probably not. Allergic reactions to the sun's rays are very rare. If you develop a skin rash or hives after being in the sun, you are more likely experiencing photosensitivity – a nonallergic reaction to the sun's ultraviolet rays. If you think you've experienced photosensitivity, stay out of the sun as much as possible, use a broad-spectrum sunscreen that blocks both UVA and UVB rays, wear protective clothing to cover your skin, and consult your physician.

Baby It's Cold Outside

During the winter, our skin loses moisture much more quickly than in the summer, spring or fall. This is a problem for people with atopic dermatitis.

What are some preventive measures to keep your skin from over-drying in wintertime?

- Increase your moisturizing routine. If you normally moisturize once a day, such as after a bath or shower, do it two or even three times a day during winter so skin does not become dry and cracked.
- Talk with your doctor about using a stronger medication during wintertime.
- Consider a humidifier. Running heaters during the winter makes indoor air even drier; humidifiers are designed to put moisture back in the air.

As you dress warmly for the outdoors, make sure you put on hats, scarves, sweaters and gloves that are not made from wool, as these can irritate and increase itching.





Don't Keep It a Secret

Peter Moffat, executive producer of HBO's 'The Night Of,' encourages patients and families to talk openly about atopic dermatitis



For years, wherever Peter Moffat went, he covered up the red and itchy rashes, dryness, skin flakes, bumps and peeling that defined his severe atopic dermatitis (AD).

"I did all the classic things – I kept it a secret, I was ashamed and humiliated by it, and I didn't want people to look at me," Moffat says.

Moffat no longer hides his atopic dermatitis. An accomplished English playwright, screenwriter and producer, he even instills it in his TV characters – most notably criminal defense attorney John Stone (played by John Turturro) in the HBO series "The Night Of."

Now Moffat is raising awareness of atopic dermatitis via *UnderstandAD.com*, a website that educates the public about the severe and chronic nature of the disease.

"I want to help people to be able to talk about it – so that it becomes less of a secretive disease, so they don't feel there's a stigma attached to it and they don't feel socially isolated because of it," Moffat says. "The more people talk about it, the better the chance of achieving that goal."

Allergy & Asthma Network talked with Peter in a Q&A interview:

Q: What triggers your flare-ups?

A: Often it's changes in temperatures and heat. When we turn central heating on due to cold weather, it dries my skin. I wear sandals during cold months because it's better for the AD on my feet to be left open to the air. If I wear socks and shoes all day, my feet are in terrible pain by evening.

It's also not good to have wool next to my skin. And here's a weird one – contact with a potato peel can cause a flare.

Q: What misconceptions do you think many people have about AD?

A: The biggest one – and the one that hits me hardest – is that people think it's contagious. It really speaks to the lack of knowledge about the disease, that in 2017 there are people who believe you can catch AD or other forms of eczema by coming into contact with it. Some people will lead their children away from me because they think their kids might catch it. It would be great to undo that misconception.

Q: What did you learn about AD through writing about it for a TV character?

A: I have come into contact with so many more people who have AD and I'm much better informed about their individual relationship with the disease.

I talked to a man who had a job in retail but gave it up because people would come in, look at his face and walk out – and he couldn't take that. A parent told me their son doesn't want to go to school because of how he feels about the way classmates and teachers look at him.

These stories are incredibly profound. And these stories really affected me.

Read the full Q&A on AllergyAsthmaNetwork.org.



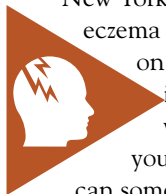


Stress-Busters

Many doctors cite stress as a significant factor in causing eczema flare-ups. Stress does not always come from an outside factor; sometimes it's triggered by how you are feeling about your eczema, thus creating a cycle that is hard to break.

New York City allergist Payel Gupta, MD, an eczema patient herself, explains: "If you focus on your skin and the thought that you are itchy, then your mind automatically stays with those thoughts. But if you can help your mind divert from those thoughts, that can sometimes help."

Developing coping mechanisms for your stress is an essential tool in managing your eczema.



Connect with others

Getting eczema off your mind is a great way to reduce stress. Talk with someone close to you or join an online community to connect with other people going through similar situations. Spending time with family and friends is also a great way to take your mind off any worries.



Keep a journal

Journaling helps you decompress and let out any troubles you may be feeling. It can also help uncover the roots of stress. Additionally, writing down daily success stories or what you are thankful for is a positive way to lift you up.



Take time for self-care

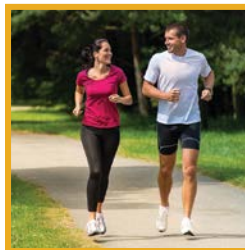
Slow down and do something for yourself. Whether it is a bath, watching your favorite TV show, painting, knitting, cooking, reading or another activity, shifting your focus elsewhere can make a difference.



Practice mindfulness

Meditation and breathing exercises help focus the mind and can keep you from thinking negative thoughts or jumping to the worst outcomes. By calming the mind and body, you can also help decrease the severity of an eczema exacerbation.

Meditation may feel odd if you're a beginner, but there are plenty of apps available to teach you how to get started. Try a couple to find the right one for you.



Exercise

From jogging to yoga to playing sports, exercise can improve your mood and physical and emotional well-being, as well as increase your energy. Make sure to wear loose, light-fitting clothes to avoid overheating and irritating your skin.



Get plenty of sleep

Lack of sleep can negatively impact your state of mind and ability to focus. A good night's sleep will help you go into each day feeling regenerated.

If you suspect stress is triggering your eczema, keep a diary to help identify what stressors may be causing your flares. Track your emotional state, energy levels, diet, people you meet, significant events, and the state of your eczema. Look for any patterns to help you make the right changes at the right time as you manage your eczema.

Written by Kortney Kwong Hing, founder of the Allergy Girl Eats blog (allergygirleats.com) and co-founder of AllergyTravels.com. Kortney lives with multiple food allergies, asthma and eczema.



Recipe For Success

Celebrity chef Elizabeth Falkner explains how she manages atopic dermatitis in and out of the kitchen.



Elizabeth Falkner's career was just starting to take off. It was the mid-1990s and she was owner and chef of a trendy San Francisco restaurant. Suddenly, she began to experience painful, itchy skin rashes on her legs, arms and hands.

"It was a burning sensation and it kept getting worse," she says. "I went to my doctor and was diagnosed with moderate-to-severe atopic dermatitis."

Atopic dermatitis (AD) runs in Elizabeth's family. She worked with her doctor to identify what causes her skin to flare up – dry heat in the kitchen, certain foods and stress were the most common triggers – and then create a prevention and treatment plan.

Now living in New York City, Elizabeth no longer works daily in restaurants, but she continues to cook as a celebrity chef and is a recognizable face on TV cooking shows. She is also a motivational speaker and author.

Elizabeth is raising awareness of atopic dermatitis through *UnderstandAD.com*, a website to educate people about moderate-to-severe atopic dermatitis and encourage them to see a doctor for treatment. "Having atopic dermatitis affects many aspects of a person's life – physically and emotionally – and yet many people don't understand the severity and impact," Elizabeth says.

Allergy & Asthma Network talked with Elizabeth in a Q&A interview:

Q: How did working in restaurants impact your AD?

A: Restaurants are a highly stressful line of work and it's a hostile environment for your skin. When I had itchy rashes on my hands, it was really painful. As a chef, you're constantly working over heat and washing your hands. And you're constantly around foods with different ingredients, from garlic and tomatoes to flour and lemon. It's harsh activity for your skin.

I couldn't scratch it because that made it worse. I couldn't wear gloves because that made my hands sweat. I would hide my hands and hide the pain. My doctor put me on over-the-counter and prescription lotions, creams and ointments, and I've tried some homeopathic remedies.

Q: What lifestyle changes did you make to help ease your symptoms?

A: I stay active and eat healthy. I don't eat fast food or processed food. Stress is a huge trigger for my flare-ups and I've found that physical activity reduces my anxiety and tension. I do yoga, pilates and a swordfighting fitness program. I'm certified in scuba diving. And I've run in the New York City Marathon. I enjoy staying active – it's fun.

Q: Do you think AD is not taken as seriously as it should be?

A: Definitely. It's a disease that affects so many people, but you don't hear about it very often. Everyone thinks it's just a skin rash that you get – but it's way more than a skin rash. It's inflammation and it feels like it's always there.

Atopic dermatitis is a big deal and being able to talk about it openly with family, friends or colleagues is really important.

Q: What advice do you have for people with the disease?

A: There's no cure for atopic dermatitis, but there are different ways to manage it effectively. With new and ongoing medical research on atopic dermatitis, it's important to discuss the disease with a doctor and develop a treatment plan together.

You can't let atopic dermatitis take over your life. And you don't have to go it alone.

Read the full Q&A on AllergyAsthmaNetwork.org.



Coping with Eczema

How to Handle Anxiety and Depression

Anxiety. Fear. Depression. Self-consciousness.

People often underestimate how much eczema can affect mental health. They think it's just a physical symptom that doesn't go beyond affecting the skin. Besides the itch, the oozing rashes and the painful blisters, eczema affects mental health much more than people realize.

A recent survey by the National Eczema Association revealed more than 30 percent of people with eczema suffer from depression and anxiety.

Another survey showed one-third of more than 600 eczema patients felt

dissatisfied with life. Slightly more than half of the patients reported eczema limited their lifestyle, 43 percent said it impacted their activities and 39 percent said they avoid social interaction. Eczema also had a significant negative impact on quality of life compared to other chronic illnesses, including heart disease, diabetes and high blood pressure.

Count me among eczema patients who can relate to dissatisfaction with life. For years I experienced extreme eczema flare-ups and pain, so much so I was unable to even move properly.

Depression, anxiety, suicidal thoughts and post-traumatic stress disorder (PTSD) are a few ways this condition has affected myself and many others. There have been times when I was unable to leave my house or attend social activities due to symptoms.

When I did go out while my eczema was flaring, I often felt extreme anxiety and discomfort – I would look at other people and wonder, 'What are they thinking about my skin?' or 'Does my skin really look that bad today?'

Unfortunately, I am not alone. If you're struggling, here are some tips to help you mentally cope with eczema:

Find a great support group – this includes finding people who can help you through this. Talk to other eczema patients, join Facebook support groups or speak with a psychologist.

Use stress-coping techniques by doing something you love – for example, watch a movie, pray, take a nature

walk, exercise or start writing in a journal – each of these activities can help reduce anxiety and depression.

Practice gratitude – it will help you focus on the positive things in your life, so that you can stop focusing on negativity.

Use visualization, affirmations and meditation – these can all help you relax and reduce stress. Regular meditation can also help you control anxiety by redirecting your thoughts.

Don't be afraid to cry – let out your emotions, cry and scream if you need to. Do whatever it takes so you don't suppress what you're going through.

Many people may not understand how mentally painful and draining eczema can be. If you or a loved one are suffering with eczema, remember

that the more you support yourself mentally, the more you can cope with the challenges that eczema brings in your life.





Dating and Intimacy

Being in a relationship with any type of skin problem is difficult – but especially when you have eczema. The most traumatizing thing about eczema is how unattractive it can make you feel. How do you go about being in a relationship when you are suffering with eczema?

For me – I remember all my fears and insecurities came out, and it was terrifying.

I remember struggling with the idea that someone would even want to date me. I remember feeling so scared that my significant other, Bryan, would leave me. I even recall feeling that Bryan would be repulsed by my skin.

I was wrong. And here we are today – married!

Many people with eczema, no matter how severe, struggle with dating and intimacy. These feelings are completely normal.

However, you may be surprised at how much your partner is willing to support you. My whole body was covered in eczema when I was dating Bryan, but he supported me, cooked for me, and even vacuumed the flakes of skin that I was shedding. I was touched.

Don't let eczema keep you from being in a relationship. You deserve to be loved – regardless of how your skin looks!

Tips for Eczema Patients

Embrace their love: I've heard so many people tell me they are scared their partner will leave them. If they're willing to stay with you, then they want this to work out with you. Embrace it.

Have fun and enjoy life. Don't let eczema overwhelm you and turn you into a negative person. Remember to enjoy life, relax and learn to laugh.

Be confident. You may not feel attractive or self-confident – but you need to try. Eczema ruined many of my relationships growing up because I lacked confidence in myself. Act confident, even if you don't feel it inside.

Talk it out. If you're dating someone and you're wondering if they are bothered by your eczema, be brave and talk to them about it. Communication is key.

Tips for the Supportive Partner

Always be encouraging. Your partner may feel very insecure about eczema. Be your partner's greatest cheerleader. Your encouragement will lead to perseverance.

Find support. Talk to someone so that you have support. It's not always easy, but you need a support system as much as your partner does.

Do something you love. If you feel you are consumed by your partner's eczema, remember to do things that you enjoy. Life is about your dreams, too.

Be adaptive. Your partner may have to make some lifestyle changes to improve their eczema – and this may affect you as well. Learn to be adaptive and flexible in order to help ease the transition.

Written by Abby Lai, a registered holistic nutritionist, eczema blogger and creator and host of The Eczema Podcast. Her website is PrimePhysiqueNutrition.com.



When Eczema Goes to School...



Millions of school-age children in the United States have eczema. Although the skin condition is not contagious, it can embarrass children and make it difficult for them to concentrate at school. What can parents and teachers do? Here are some suggestions:

For Parents:

Talk to your child's teacher. Give the teacher a written list of things that trigger your child's eczema, such as foods, allergens, fragrances, glue or other art/science supplies, heat or activities that

cause sweating and suggest ways to avoid them. For instance, your child may need to sit away from windows, radiators and heating ducts if heat makes eczema worse. Some children may

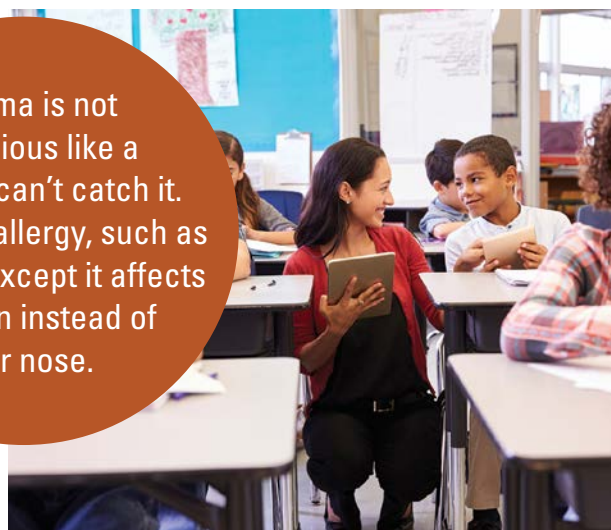
need a sheet to cover the carpet when sitting on the floor, or something to cover the desk chair.

Make sure your child's teachers know how your child behaves during a flare-up and suggest ways to handle it. If your child fidgets, becomes anxious, or is easily distracted during a flare, these behaviors may be misinterpreted as attention deficit disorder (ADD).

Send a first aid kit to school containing adhesive bandages, antibiotic ointment, moisturizer, sunscreen, petroleum jelly, gauze pads, and other items your child might need. Explain to the teacher the importance of using only approved skin products, as some lotions and creams may contain chemicals or fragrances that are eczema triggers.

Talk to your child. Teach your child about what triggers symptoms, how to prevent them, and why certain treatments help. Have a conversation every day – talk about challenges faced at school or play and how the child handled them. Encourage your child to share his or her feelings with you, so that you can help. If your child is angry, upset or discouraged, accept and validate these feelings without dwelling on them, then move on.

Eczema is not contagious like a cold. You can't catch it. It is like an allergy, such as hay fever, except it affects your skin instead of your nose.



For Teachers:

Avoid telling the child not to scratch. Instead, work with the parents to brainstorm ways to distract the child or to ease the itch. Some suggestions:

- Apply a moisturizer from the child's first aid kit.
- Apply a cool washcloth to the itchy area.
- Give a glass of cold water.
- Encourage the student to walk around or leave the classroom until itching calms down.
- Bring the student to the school nurse's office to place a covered ice pack on the itchy spot.

Set up a signal and action plan. For many students it is helpful to have a signal the teacher can give to them (or they to the teacher) during a particularly itchy period. The teacher can give the agreed-upon hand signal that reminds the student to take a previously agreed-upon action to help bring relief.



Come Clean

Our bodies are in constant contact with clothing, so it only makes sense to take special care when washing clothes – especially if you have eczema.

Laundry detergent often contains chemicals, toxins, allergens and irritants that are left on the fabric after washing and drying. These can irritate sensitive skin.

If you have eczema, here are some laundry tips:

Choose detergents carefully

Use hypoallergenic detergent products free of bleach, fragrances, preservatives and dyes. Liquid detergents leave less residue than powdered detergents. Remember: Laundry detergent that works for one eczema patient may not work for another.



It's often a trial-and-error process. For example, one mother found that using a pure, mild soap instead of detergent was more beneficial for her baby's sensitive skin.

Keep 'em separate

You may want to wash clothing of family members who have eczema separately from those who do not. This helps avoid cross contamination.

Rinse and repeat

Consider giving clothes a second or extra rinse to fully wash away traces of detergent.

Don't over-soap

When measuring laundry detergent, use the amount recommended on the label. If you use too much, excess soap can stick to clothing. If you think you used too much detergent, consider doing a second or third rinse in the washer.

Forget fabric softeners

Fabric softeners contain surfactants that can irritate sensitive skin. Some also contain fragrances, preservatives and dyes.

Dry 'em indoors

If pollen is your eczema trigger, don't air-dry your clothes outside. Pollen can attach to clothes.

Wash new clothing before wearing it

Most new clothing contains fabric with finishes and dyes that can irritate skin. The same goes for blankets, bedding, towels, cloth napkins and stuffed animals. Give used or hand-me-down clothes a thorough washing as well before wearing them.

Contact manufacturers

Not sure if there are skin irritants in a detergent product? Check and doublecheck the ingredient list by calling or sending emails to companies. Shampoos, conditioners and dishwasher detergents may also contain allergens and irritants that can worsen eczema when exposed to the skin.





Dictionary

Allergic rhinitis (hay fever): Inflammation of the nasal passages, usually caused by the body's reactions to airborne allergens. It's characterized by runny nose, swollen and congested nasal passages, postnasal drip and sneezing fits. Atopic dermatitis is sometimes an initial indication that a child may develop allergic rhinitis.

Asthma: A chronic disease that causes inflammation in the lungs and airways, leading to episodes of coughing, wheezing and shortness of breath. Atopic dermatitis is sometimes an initial indication that a child may later develop asthma.

Atopic dermatitis: A chronic inflammatory skin disease caused by a skin barrier defect and an immune system reaction. It's the most common and severe form of eczema. Common triggers include foods, pet dander, dust mites, pollen, mold and stress.

Contact dermatitis: A type of eczema that occurs when your skin touches an allergen or irritant. Common triggers include detergents and bleach, soaps, shampoos, solvents, nickel, rubbing alcohol, fertilizers and pesticides.

Eczema: A term that refers to a series of different skin conditions (including atopic dermatitis) in which the skin develops a sensitive, red, itchy and irritated rash usually on the cheeks, arms and legs.

Websites

Allergy & Asthma Network – AllergyAsthmaNetwork.org

AltogetherEczema – AltogetherEczema.org

American Academy of Allergy, Asthma & Immunology
aaaai.org

American Academy of Dermatology – aad.org

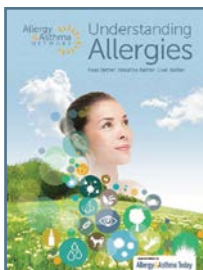
American College of Allergy, Asthma & Immunology
acaai.org

Eczema Exposed – eczemaexposed.com

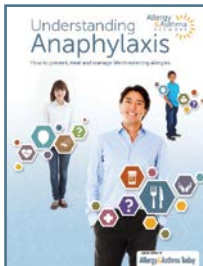
National Eczema Association – nationaleczema.org

Understand AD – UnderstandAD.com

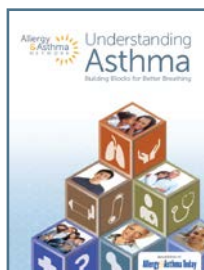
Publications



Understanding Allergies: Prevent and reduce seasonal and environmental allergies – and improve your quality of life.



Understanding Anaphylaxis: Learn to recognize and prevent life-threatening allergic reactions to food, stinging insects, latex and medications.

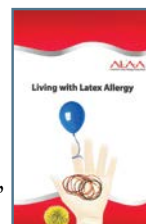


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**“I DOUBT I SLEPT
MORE THAN
20 MINUTES
LAST NIGHT.”**

Tonya B.
Actual eczema sufferer

Photo represents her
moderate-to-severe eczema.

**THE REAL EFFECTS
OF ECZEMA
ARE OBVIOUS.
AND NOW ITS CAUSES
MAY BE TOO.**

You know that moderate-to-severe eczema, or atopic dermatitis, is more than just a skin condition. But did you know that a root cause may be inflammation that lies beneath your skin? An overactive immune system could be causing the itching, flare-ups and other symptoms you're experiencing. Find out more at **[EczemaExposed.com](https://www.EczemaExposed.com)**.

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