

DOWN SYNDROME AND Dry Skin

Dry skin, or xerosis (*zee-ROH-sis*), is one of the most common skin conditions in people with Down syndrome. Dry skin can occur from infancy through adulthood. Frequent moisturizing and changes to lifestyle habits, such as bathing and laundry, can often keep it under control.

WHAT DOES DRY SKIN LOOK LIKE?

- » Rough, bumpy, flaky, cracked, and/or peeling skin on the face and body
- » Thick skin on the elbows, knees, and bottoms of the feet called "**hyperkeratosis**"
- » Light, dark, or pink patches of rough skin
- » Itchy skin, which can cause scratching and open sores

WHAT CAUSES DRY SKIN?

Dry skin in people with Down syndrome can be from a mix of environmental and genetic causes. It can be affected by the weather, water, detergents, medications, and family history. People with Down syndrome have an extra copy of chromosome 21. This can lead to differences in skin proteins that cause the skin to become dry and lose moisture easily.

HOW IS DRY SKIN DIAGNOSED?

Dry skin is diagnosed by looking at the skin. Your doctor may also ask about your child's medical history, daily activities, and family history. Some patients with dry skin may also have related skin conditions, like eczema or psoriasis.

WHAT ARE THE TREATMENTS FOR DRY SKIN?

Dry skin can be treated by regularly using moisturizing creams or ointments and changing skin care habits. For itchy spots, a doctor may prescribe a topical steroid. It is unusual to see side effects from a topical steroid if the doctor's instructions are followed.

HOW CAN I CARE FOR MY CHILD'S DRY SKIN?

It is important to keep the skin clean and moisturized. Here are some tips:

>> General Tips

- When choosing a moisturizer, soap, cleanser, and laundry detergent, pick those labeled as fragrance-free, hypoallergenic (allergy-free), and alcohol-free.
- Dress your child in loose-fitted, cotton clothing when possible. Avoid itchy clothing or add a cotton layer under it.
- Avoid fabric softener and dryer sheets.
- Wear gloves outside during cold weather.

WHAT IS HYPERKERATOSIS AND HOW CAN YOU TREAT IT?

- » Hyperkeratosis is a condition that can be seen with dry skin. Not everyone with dry skin will have hyperkeratosis.
- » "Hyperkeratosis" means thickened skin. This can be due to other skin conditions or be seen on its own.
- » People with Down syndrome may have hyperkeratosis on the palms, soles of the feet, elbows, and knees.
- » Washing the body with a plain (fragrance-free) exfoliating cleanser can help prevent thick skin from building up. Talk to your child's doctor about how often to use this type of wash.
- » Some moisturizers have ingredients that can help thicken skin. These lotions or creams have ingredients like urea, lactic acid, or salicylic acid.
- » These special lotions and creams may cause skin irritation for some people. Talk to your child's doctor about if these creams are a good option for your child.
- » Consider differences in sensory processing. If your child feels itching, burning, or stinging, have a comfort item ready like a favorite toy. Let your child know that the feeling will only be for a short time. Try a different cream next time.
- » Wearing comfortable shoes that are not too tight can help prevent thick skin on the soles of the feet.
- » A regular moisturizing routine can help prevent thick skin elsewhere. Encourage your child to not itch or rub their skin, as this can make thick skin worse. Brainstorm different activities, like a dance or song, to do if your child feels itchy. Talk to their doctor about medicines to help itch.

- Rinse off and apply moisturizer after swimming in a hot tub or pool. Pool chemicals can dry out the skin.
- Keep your child's fingernails short to prevent scratches and sores when itching dry skin.
- Use sun protection such as a mineral-based sunscreen or sun-protective clothing.

>> Bath Tips

- Daily baths will help keep the skin clean and bring moisture into the skin.
- Use lukewarm water.
- Limit showers or baths to under 10 minutes.
- Use mild, fragrance-free soap or cleanser only on dirty parts of the body (such as the armpits, groin, and feet). Too much soap can dry out the skin.
- Avoid bubble baths.
- After the bath, gently pat the skin dry. Do not rub the skin.

>> Moisturizers Tips

- Moisturizers help prevent water loss from the skin.
- Immediately apply a moisturizer after taking a bath/shower or washing hands. This helps to lock in the moisture from the water.
- Moisturize the skin as often as needed throughout the day.
- Use a fragrance-free ointment or cream. Ointment (like petroleum jelly) is the thickest and most effective moisturizer. It may feel sticky. Cream (often comes in jars) is also effective and less sticky. Lotion (often comes in pump bottles) is thinner. It does not work as well as ointments and creams.
- If your child is using a prescribed skin medication, apply the medication first. Then, cover it with the moisturizer.
- Continue moisturizing skin daily even after dry or itchy patches have disappeared.

WHAT CAN I EXPECT AFTER TREATMENT?

Your child's skin should start to feel better after a few weeks. Contact a doctor if:

- » Dry and itchy skin does not get better after 2 weeks of treatment.
- » There are symptoms of infection. This can include fever, pus, open sores, or spreading redness.
- » Skin becomes very red or painful.
- » Cracks in the skin cause pain.

TIPS FOR APPLYING MOISTURIZERS ON CHILDREN WITH DOWN SYNDROME:

- » Consider differences in sensory processing. People with Down syndrome can experience sensations, like touch and smell, differently. This can make tasks like bathing, dressing, and applying moisturizer more challenging. Your child may not like the feeling of moisturizer, water during baths, or certain pieces of clothing. Talk about this with their doctor to develop a doable treatment plan.
- » Talk with your child about the treatment plan. Explain how the moisturizer will help their dry skin. Ask them which cream or ointment they like best. Moisturizing creams are less sticky and may be easier to spread than ointments. Each person should choose a moisturizer they are comfortable with.
- » Add activities of interest while applying the moisturizer. Draw cartoon characters, hearts, or favorite animals with the moisturizer on your child's body. Spell out words or make it a game!
- » Include your child when putting moisturizer on. While the level of support varies by child, let the child help where they can. This can help the bond between the support person and child. This can be important in empowering the child to take care of their own health.
- » Place the moisturizer in a place next to other routine items (such as hand soap, toothbrush, towels) to remember to use it regularly. Use a visual checklist or guide and work it into the child's personal care routine early on. Being consistent and predictable can help children with Down syndrome feel more prepared.



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