

Eczema

DNA Health Report

REPORT CATEGORIES —



INFLAMMATION &
AUTOIMMUNITY



ALLERGIES

Sample Client

Report date: 15 January 2026

Table of Contents

03 How this works

- 04 Impact
- 05 Evidence
- 06 Some things to keep in mind

07 Introduction

08 Your genetics

10 Your recommendations

77 Next Steps

- 77 Your Lab Results
- 78 Your lifestyle assessments

DISCLAIMER

This report does not diagnose this or any other health conditions. Please talk to a healthcare professional if this condition runs in your family, you think you might have this condition, or you have any concerns about your results.

Personal information

NAME

Sample Client

SEX AT BIRTH

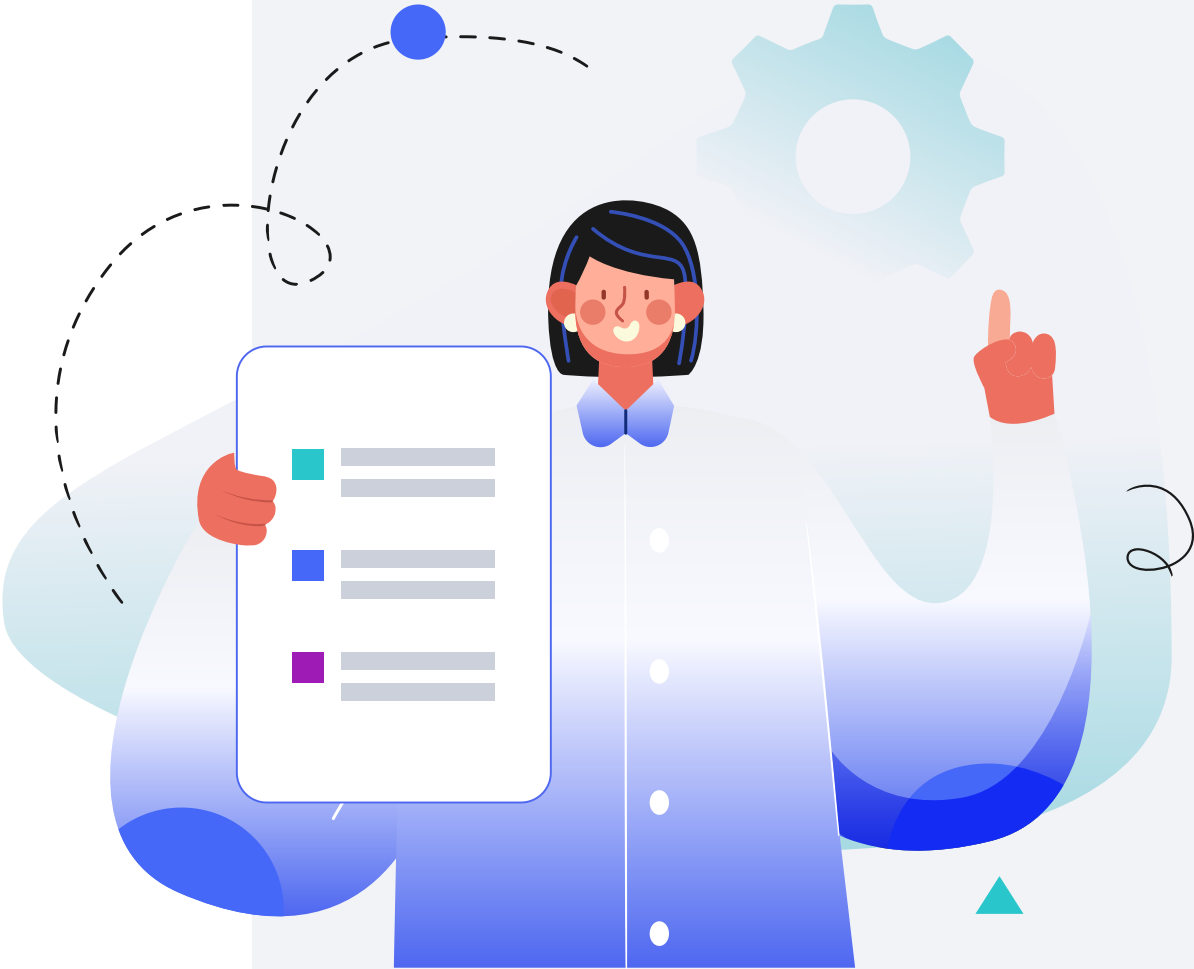
Male

HEIGHT

5ft 5" 165cm

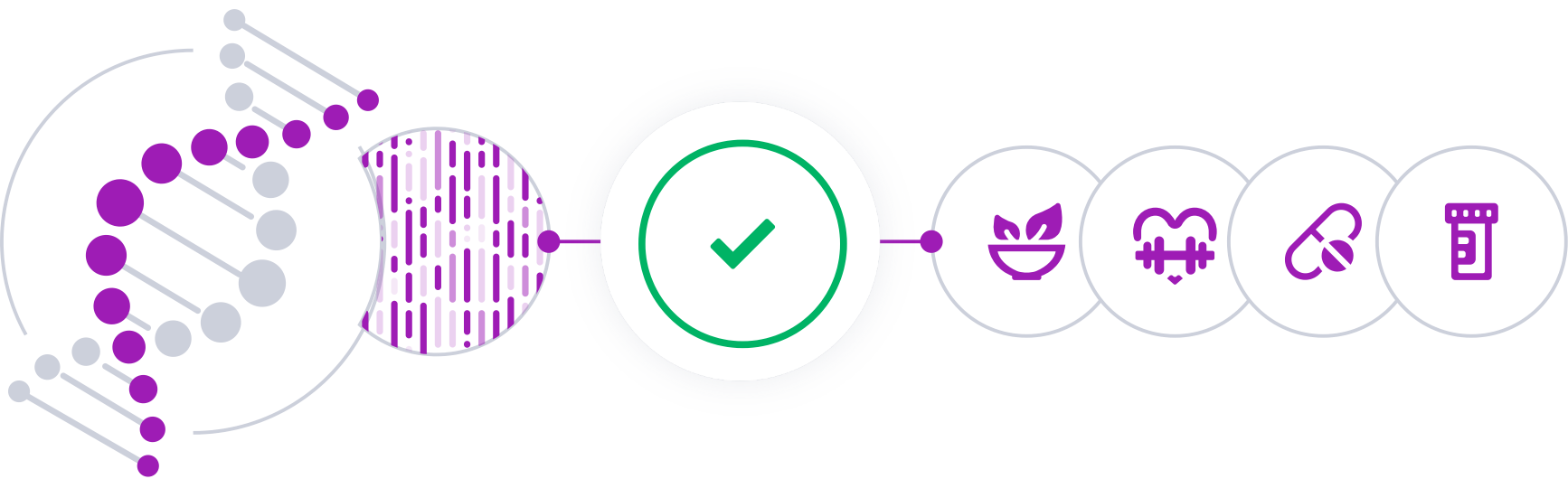
WEIGHT

137lb 62kg



How this works

Our Wellness Reports analyze how your DNA influences your health.
We then use this analysis to give you personalized risk estimates and recommendations.

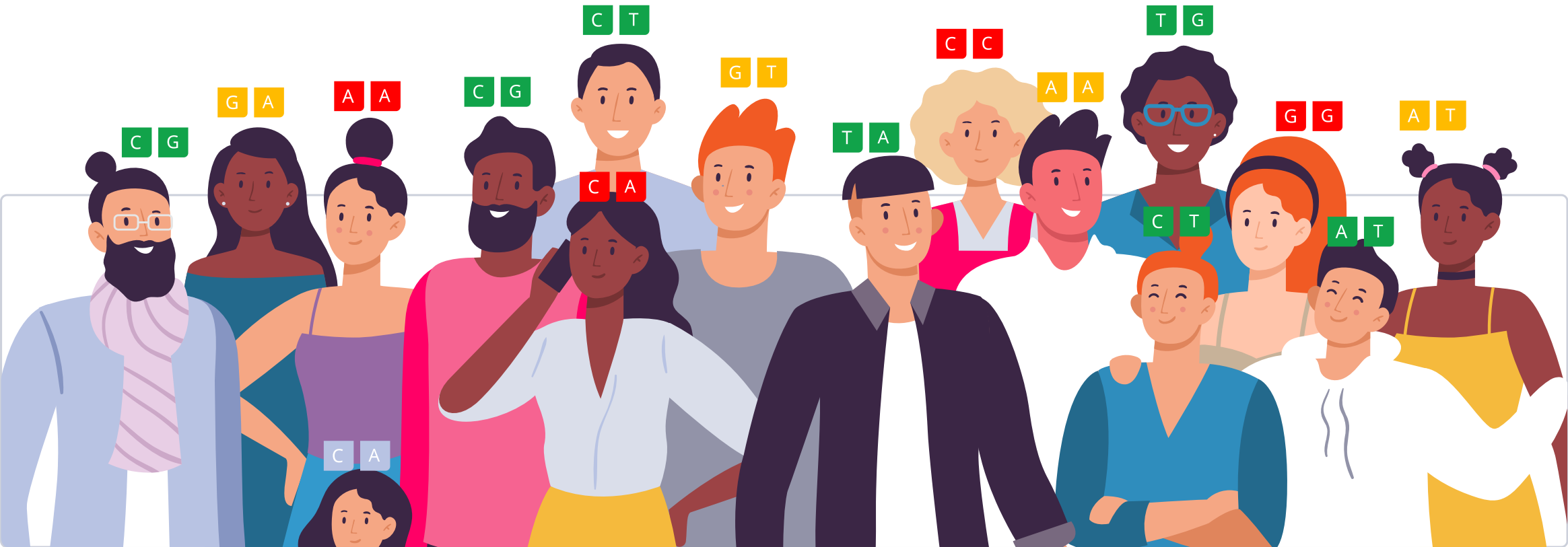


Similarly, our Trait Reports look at how your DNA influences your traits.



Your DNA is like an instruction manual — it contains a lot of information.
You can think of it as a blueprint for your body.

Genetic variants are parts of DNA that differ from person to person. Some can make you more vulnerable to certain health issues, while others may influence traits such as eye color.



We use artificial intelligence and machine learning to analyze all this information.
We then summarize your results as a risk score or display it on a gauge.

In total, we analyze up to 83 million genetic variants.

When we give a risk score, the risk icon tells you if you are at a higher or lower risk compared to other people:



Genotype color info:

AA

You don't have any risk alleles

AA

You have 1 risk allele

AA

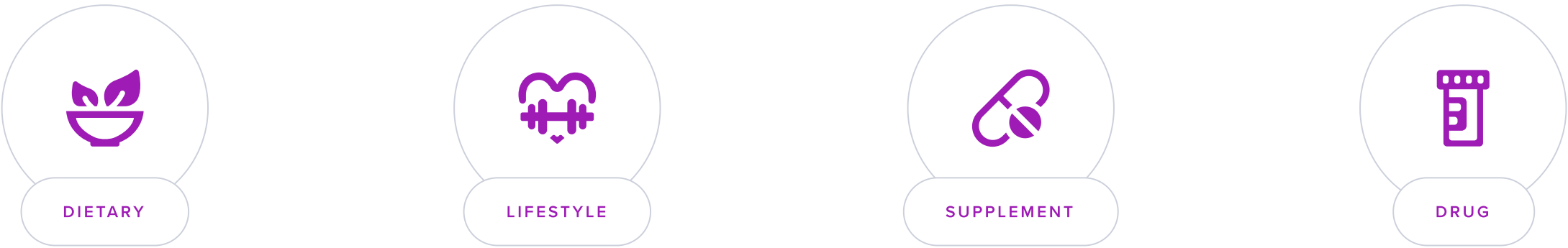
You have 2 risk alleles

Your risk is also displayed as a percentile. This will tell you how your risks compare to our sample population. The lower your percentile number, the lower your risk. The "50th percentile" would be an average risk.

Similarly, the gauge tells you your relative risk score compared to our sample population, or it indicates a specific trait or haplotype you are more likely to have based on your genetic variants.

When applicable, we also list top evidence-based recommendations that may help lower your risk. The focus is on recommendations that may be of benefit to you, based on your genetics.

Our recommendations come in four categories: lifestyle, diet, supplements and drugs.
The following icons tell you which category a recommendation falls into:



Our team of scientists also ranks each recommendation.
We rank based on impact and the strength of evidence in the medical literature.

Impact shows how strongly a recommendation will affect your health in a certain area.
Evidence is how much scientific support there is for the recommendation. Rankings are from 1 to 5 (low to high):



Impact

Impact scores range from 1-5. These scores reflect how much of an effect each recommendation can have. An impact score of 5 predicts the biggest effect.

When a recommendation affects something we can measure, we use those measurements to assign the impact score. For example, a recommendation that decreases cholesterol by 20% will have a higher impact score than one that decreases it by 5%.

Some recommendations affect things that we cannot directly measure, like stress or mood. For these, the impact score is based on how well they work relative to other recommendations and standard treatments. The best ones get the highest scores.

If there is a lot of research that shows a recommendation works especially well for your genotype, the impact score gets increased.

Recommendation Evidence

- 5 / 5
- Recommendations that are considered effective and generally recommended by experts and medical bodies.
-
- 4 / 5
- Recommendations that are considered likely effective and that have multiple independent meta-analyses and a great many studies supporting them.
-
- 3 / 5
- Recommendations that are considered possibly effective and have many studies supporting them
-
- 2 / 5
- Recommendations that have insufficient evidence, with two or several clinical trials supporting them, or many studies but with ambiguous results.
-
- 1 / 5
- Recommendations that have insufficient evidence, with a single clinical trial, or with many studies most of which didn't find support for the recommendation.
-
- 0 / 5
- No evidence in humans.

Genotype-specific Evidence

- High-quality
- Direct evidence that a recommendation helps more in people with your gene variant (many clinical trials, a few large clinical trials, or a meta-analysis).
- Medium-quality
- Direct evidence that a recommendation helps more in people with your gene variant (a few clinical trials or one large clinical trial).
- Low-quality
- Direct evidence that a recommendation helps more in people with your gene variant (a single clinical trial or more trials with inconsistent results).
- Indirect
- A recommendation may help more in people with your gene variant because it targets a specific gene or protein affected by your variant (e.g., MTHFR, dopamine).
- In theory
- A recommendation may help more in people with your gene variant because it targets a specific mechanism affected by your variant (e.g., inflammation, oxidative stress).

Some things to keep in mind:

- Genetics doesn’t play a considerable role in a condition or a trait.
- There is not enough research available to estimate a genetic predisposition.
- There are technical limitations to estimating or presenting a genetic predisposition.
- The topic is sensitive, and a genetic predisposition should only be estimated and presented by a healthcare professional.

Introduction

Eczema is a condition that causes symptoms like itching and red, inflamed skin. One of the most common misconceptions about eczema is that it’s contagious. It’s actually a result of interactions among your immune system, skin, and environment triggers. These triggers differ from person to person and can include certain fragrances, metals or fabrics [R, R].

If you live with eczema, then you know how tough it can be to soothe your symptoms on a daily basis.

One of the difficult parts of managing eczema is identifying the environmental triggers that cause flare-ups. For a lot of people, simple allergy tests with their dermatologist will do the job.

But for some people, these triggers can be tricky to tease out. Even if they identify one trigger, they may end up developing sensitivity to another further down the line. It really is a long-term effort.

But there’s some good news. **When it comes to finding soothing techniques to help with troublesome triggers, there may be a genetic element.** If you’re struggling to identify your eczema triggers, your genes might be the Watson to your Sherlock, providing some clues to solve the mystery.

The [FLG](#) gene helps make *filaggrin*, a protein that’s essential for the skin barrier. Variants in this gene might increase your sensitivity to eczema **food triggers**. On a positive side, **skin moisturizers and colloidal oatmeal** may lessen the impact of *FLG* variants by strengthening your skin barrier [R, R, R, R].

Another example is the [CLDN1](#) gene. Variants in this gene may increase your risk of having eczema triggered by **fragrances or jewelry** [R].

This report focuses on the genetics of eczema.

Read on to find out more about:

- **How your genetics play a role in eczema**
- **Your genetic risk score based on over 7,000 genetic variants**
- **Personalized recommendations based on your genetics**

About Eczema

Key Takeaways:

- Up to **75%** of differences in people's chances of developing eczema may be due to genetics.
- Eczema triggers include: allergens, cold, dry air, infections, skin irritants, and stress.
- It can affect your appearance and quality of life.
- If you have a high genetic risk, take special care to avoid potential triggers.
- Click the **Recommendations** tab for potential dietary and lifestyle changes.

Eczema is an inflammatory skin condition. It causes dry skin and itchy red rashes, usually on the elbow creases, neck, and back of the knees [\[R\]](#), [\[R\]](#).

Up to 1 in 3 children experience eczema, usually in the first year of life. The condition is less common (2-10%) in adults [\[R\]](#).

Factors that tend to worsen eczema include [\[R\]](#), [\[R\]](#):

- Contact with allergens (pollen, mold, dust mites, or animals)
- Cold, dry air
- Infections like the flu
- Contact with skin irritants (chemicals or fabrics)
- [Stress](#)

People with eczema may be more prone to skin infections. Normally, the skin has a protective barrier that keeps out germs. Eczema can compromise this barrier, making it easier for infections to arise [\[R\]](#), [\[R\]](#).

The symptoms of eczema can usually be managed at home with the help of [\[R\]](#):

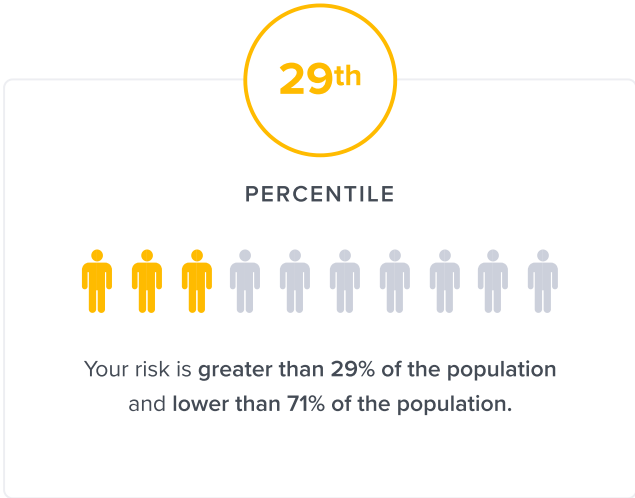
- Moisturizers
- Humidifiers
- Topical medications
- Trimming or covering fingernails (to limit scratching)
- Avoiding skin irritants

While the causes of eczema aren't completely clear, **genetics seems to play a major role**. What's more, the



TYPICAL LIKELIHOOD

Typical likelihood of eczema based on 6,952 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
STMN3	rs3848669	TT
IL6R	rs61812598	AA
ADO	rs4372325	CC
PPP2R3C	rs2415269	GG
SATB1	rs4395418	CC
ID2	rs891058	GG
D2HGDH	rs34290285	GG
ARHGAP27	rs9895436	AA
LRRC32	rs7936434	GC
ACTL9	rs2918299	CT
TREH	rs10790275	CG
TRIB1	rs12334935	AG
PRR5L	rs10836538	GT
MDM1	rs2227491	TC
NCF4	rs4821564	TC
RUNX3	rs6672420	TA
TRAF3	rs12888955	GA
FLG	rs61816761	GG
FLG	rs138726443	GG
LINGO4	rs12123821	CC
ARRDC1	rs117137535	GG
CCR7	rs112401631	TT
LRRC32	rs55646091	GG
SLC22A5	rs60153262	CC

genetics of eczema, asthma, hay fever, and food allergies are very similar. This means that if you have one, you're more likely to have the others [R, R].

Up to 75% of differences in people's chances of developing eczema may be attributed to genetics. Genes involved in eczema may influence [R, R, R, R, R, R]:

- Skin barrier function ([FLG](#), [OVOL1](#), [KIF3A](#))
- Inflammation ([IL13](#), [IL4](#))
- Immune response ([HLA-DQA1](#), [EMSY](#))

GENE	SNP	GENOTYPE
IL2RA	rs62626322	TT
OVOL1	rs10791824	AA
HLA-C	rs2844594	GG
TBKBP1	rs72833417	AA
KIAA1109	rs62323874	GG
SLC25A46	rs3853750	TT
PRR5L	rs6484847	CC
KIAA1109	rs1904522	GG
GNGT2	rs28406364	CC
TNFSF18	rs6691738	TT
ZBTB25	rs11625265	AA

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Your Recommendations

Your recommendations are prioritized according to the likelihood of it having an impact for you based on your genetics, along with the amount of scientific evidence supporting the recommendation.

You’ll likely find common healthy recommendations at the top of the list because they are often the most impactful and most researched.

DOSAGE		DOSAGE	
1	Avoid Contact Triggers	2	Moisturize the Skin
3	Avoid Food Triggers	4	Blue Light Therapy30 minutes
5	Relaxation Techniques30 minutes	6	Bathing15 minutes
7	Light Therapy for Skin30 minutes	8	Avoid Processed Foods
9	Probiotics10 billion	10	Topical Shea Butter
11	Avoid Scratching	12	Limit Contact With Cosmetics
13	Topical Coconut Oil	14	Colloidal Oatmeal
15	Maintain Optimal Vitamin D Levels1000 iu	16	Avoid Formaldehyde Exposure
17	Black Seed (Black Cumin)1000 mg	18	Topical Licorice Root
19	Topical Beta Glucans	20	Topical Palmitoylethanolamide (PEA)
21	Lactobacillus Plantarum10 billion CFU	22	Topical Echinacea
23	Melatonin500 mcg	24	Quercetin250 mg
25	Acupuncture1 hour	26	Pantothenic Acid (Vitamin B5)5 mg
27	Avoid Contact With Dust	28	Lactobacillus Salivarius10 billion CFU
29	Black Seed Oil1000 mg	30	Avoid Excessive Sweating
31	Avoid Secondhand Smoke	32	Lactobacillus Rhamnosus HN00110 billion CFU

33	Dietary Zinc		34	Topical Chamomile	
35	Hemp Seed Oil		36	Dodder Seed Extract	500 mg
37	Topical Fig Extract		38	Evening Primrose Oil	
39	Avoid Air Pollution		40	Avoid Contact With Pollen	
41	Lactobacillus Paracasei	10 billion CFU	42	Avoid Exposure to Molds	
43	Topical Niacinamide		44	Bifidobacterium Breve	10 billion CFU
45	Avoid Alkaline And Detergent Soaps		46	Progressive Muscle Relaxation	10 minutes
47	Histidine	500 mg	48	Mindfulness	30 minutes
49	Topical Black Seed Oil		50	Lactobacillus Fermentum	10 billion CFU
51	Sea Buckthorn		52	Topical Boswellia	
53	Whey Protein	25 g	54	Omega-3 (Fish Oil)	2000 mg
55	Massage	30 minutes	56	Oyster Mushroom	600 mg
57	Topical Vitamin B12		58	Poria	
59	Intermittent Fasting		60	Avoid Exposure to Parabens	
61	Avoid PFAS Exposure		62	Avoid Monosodium Glutamate (MSG)	
63	Lactobacillus Sakei	10 billion CFU	64	Vitamin E	200 iu
65	Topical Dwarf Elder		66	Lactobacillus Acidophilus	10 billion CFU
67	Topical Bentonite Clay		68	DHA (Omega-3)	200 mg

1



Avoid Contact Triggers

IMPACT

5 / 5

EVIDENCE

5 / 5

How to implement

Identify substances or materials that irritate your skin or exacerbate your condition and consistently avoid direct contact with them. This may involve wearing protective clothing or gloves, changing household cleaners or detergents to hypoallergenic options, and carefully reading labels on cosmetics and skin care products to ensure they do not contain irritants specific to your sensitivity.

Description

Identifying and avoiding contact triggers, such as allergens or irritants, can help individuals manage allergies or sensitive skin conditions more effectively, reducing symptoms and improving overall quality of life.

A "trigger" is something that prompts or worsens the symptoms of a health condition.

A contact trigger can be something you touch or inhale. It can include anything from your own sweat to dust in the air [\[R\]](#).

A physical trigger can be anything you come into physical contact with that causes a change to your body. It can include anything from swimming in cold water to wearing tight clothing [\[R\]](#), [\[R\]](#).

In people who are sensitive to them, physical triggers may contribute to vitiligo [\[R\]](#), [\[R\]](#).

In fact, **about 1 in 5 people may have at least one contact trigger**. Common triggers may include [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Nickel and cobalt (e.g., jewelry)
- Latex (e.g., rubber gloves)
- Fragrances

Contact triggers may cause or worsen symptoms in people with eczema [\[R\]](#), [\[R\]](#).

How it helps

Experts agree that a number of triggers can cause eczema flare-ups [\[R\]](#), [\[R\]](#), [\[R\]](#).

Eczema symptoms may be triggered in response to:

- Wool and synthetic fabrics [\[R\]](#), [\[R\]](#)
- Sweat [\[R\]](#), [\[R\]](#)
- Soaps [\[R\]](#), [\[R\]](#)
- Cosmetics [\[R\]](#)
- Dust [\[R\]](#), [\[R\]](#)
- Pollen [\[R\]](#), [\[R\]](#), [\[R\]](#)

It’s important to avoid contact with any substance that may trigger a reaction. Work with your doctor to identify possible contact triggers [\[R\]](#), [\[R\]](#).



PERSONALIZED TO YOUR GENES

People with your **CLDN1** gene variant may be more sensitive to different contact triggers [\[R\]](#). If you have eczema, take special care to avoid contact triggers.

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
CLDN1	rs17501010	GG	

2



Moisturize the Skin

IMPACT

4 / 5

EVIDENCE

4 / 5

How to implement

Apply a moisturizer to your skin within a few minutes after bathing or showering once daily. For dry skin conditions, moisturizing twice daily, once in the morning and once at night before bed, may be beneficial. Choose a moisturizer suited for your skin type; for sensitive skin, opt for fragrance-free options.

Description

Moisturizing the skin involves applying skincare products to maintain skin hydration, prevent dryness, and support a healthy skin barrier, which can help alleviate skin conditions like dryness, itching, and flakiness.

A water imbalance in the skin can make it dry and more susceptible to irritation [\[R\]](#).

Moisturizers help the skin retain water. In doing so, they may strengthen the skin barrier [\[R\]](#).

There are many types of moisturizing products, including [\[R\]](#):

- Gels
- Lotions
- Creams
- Ointments

These products differ in their water and oil content. Ointments contain the most oil. Lotions and gels contain more water. Creams have a bit of both [\[R\]](#).

It might take some trial and error to find products that work best for your skin type [\[R\]](#).

People with skin conditions like eczema may benefit more from using moisturizers with a lot of oil. These include ointments and creams [\[R\]](#), [\[R\]](#).

How it helps

Experts say that moisturizers may improve the severity of eczema symptoms. They may also reduce the need for medication and the number of flare-ups [\[R\]](#), [\[R\]](#), [\[R\]](#).

Oil-based ointments and creams may be best for those with eczema. You should apply moisturizer after a bath, while the skin is still damp. This can help lock water into your skin [\[R\]](#), [\[R\]](#), [\[R\]](#).

Plant oils such as **coconut oil** may also help with dry skin and eczema. However, **people with eczema should avoid moisturizing with olive oil, as it may damage the skin. They should also avoid moisturizers with fragrance** [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Moisturizing helps by hydrating and repairing dry skin. Dry skin may allow allergens to pass through the skin barrier more easily. This can trigger an immune reaction and inflammation [\[R\]](#), [\[R\]](#).

Skin barrier creams may be more helpful than regular moisturizers for eczema. However, the evidence is mixed. These creams contain ingredients naturally found in healthy skin, such as:

- **Ceramides or other lipids** (fats) [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#)
- **Filaggrin** (a protein) [\[R\]](#), [\[R\]](#), [\[R\]](#)

3



Avoid Food Triggers

IMPACT4 / 5

EVIDENCE4 / 5

How to implement

Identify foods that trigger negative reactions in your body, such as digestive issues, allergies, or headaches, and eliminate them from your diet entirely. This may require keeping a food diary for a few weeks to observe patterns and might involve cutting out common triggers like dairy, gluten, soy, or certain additives. Continuously monitor and adjust your diet to avoid these triggers as long as the symptoms persist.

Description

Food triggers are specific substances or ingredients in one's diet that can exacerbate or induce adverse reactions, such as allergies, sensitivities, or digestive issues, often leading to symptoms like inflammation, bloating, or discomfort.

A "trigger" is something that prompts or worsens the symptoms of a health condition.

Food triggers can lead to a wide range of symptoms in people who are sensitive to them. These may include [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Gut problems
- Skin problems
- Migraines

How it helps

Many people have eczema flare-ups after eating certain foods [\[R\]](#), [\[R\]](#), [\[R\]](#).

The most common food triggers in children tend to differ from those in adolescents and adults [\[R\]](#), [\[R\]](#).

In children, food triggers often include **dairy, egg, and peanuts**. In adults, **apple, hazelnut, and celery** may be problematic [\[R\]](#), [\[R\]](#), [\[R\]](#).

Different **additives in processed foods** may also trigger eczema symptoms. These include [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Monosodium glutamate (MSG)
- Balsam of Peru (found in flavorings and spices)
- Propylene glycol

In line with this, **a diet high in processed foods may increase the odds of eczema** [\[R\]](#), [\[R\]](#).

Avoiding food triggers may help prevent eczema flare-ups. However, this may only be the case for people with a proven allergy [\[R\]](#), [\[R\]](#).

Please note: *Food-triggered eczema should be tested and diagnosed by a healthcare professional. Please talk to your doctor if you suspect any food triggers* [\[R\]](#), [\[R\]](#).



PERSONALIZED TO YOUR GENES

Your **FLG** gene variant is linked to higher odds of food allergies and earlier eczema development [R, R]. If you have eczema, take special care to recognize and avoid food triggers.

The **STAT6** gene codes for a protein that stimulates immune responses against parasitic infections. However, when excessive, STAT6 activity may contribute to eczema and other allergic conditions [R, R].

Your genotype for **rs1059513** may increase STAT6 activity. It’s been associated with higher eczema rates [R, R, R, R].

Studies have associated STAT6-increasing gene variants with different food allergies. Avoiding the specific food allergen may relieve eczema in part by suppressing STAT6 [R, R, R, R, R, R].

>>> To learn about other conditions associated with the STAT6 gene, check out the SelfDecode blog posts [here](#).

The **TSLP** gene helps make a protein that activates Th2 cells. Eczema is considered a **Th2-dominant** condition, since Th2 cells stimulate **histamine** release, **IgE** antibody production, and other components of allergic inflammation [R, R, R].

Your genotype for **rs1837253** may stimulate Th2 cells by increasing TSLP activity. It correlates with more severe allergic inflammation and higher odds of eczema [R, R, R].

Increased TSLP activity may contribute to eczema triggered by food allergens [R, R].

>>> To learn about other conditions associated with the TSLP gene, check out the SelfDecode blog posts [here](#).

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
FLG	rs1933064	AG	
STAT6	rs1059513	TT	
TSLP	rs1837253	CC	

4



Blue Light Therapy

IMPACT

4 / 5

EVIDENCE

3 / 5

How to implement

To utilize blue light therapy, expose your skin or eyes to a blue light therapy device for about 15 to 30 minutes daily. This can be done at home using a personal device or under professional supervision, depending on the condition being treated. Consistency is key, so incorporating it into your daily routine, such as during morning or evening skin care, is recommended.

TYPICAL STARTING DOSE

30 minutes

Description

Blue light therapy is used to treat various conditions, including seasonal affective disorder (SAD) and acne. It involves exposure to specific wavelengths of blue light, which can have mood-regulating and skin-improving effects when administered correctly.

How it helps

With proper safety precautions, **blue light therapy** can be practiced at home. It may help decrease eczema severity by [\[R, R, R\]](#):

- Reducing inflammation
- Slowing skin cell growth and division

Please note: *Light therapy may damage skin and increase signs of aging. Please consult your doctor before trying any light therapy* [\[R, R\]](#).

 PERSONALIZED TO YOUR GENES

Your [ACTL9](#) gene variant is linked to eczema. This gene affects skin cell growth and division. Blue light therapy may help slow this process [\[R, R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
ACTL9	rs2164983	CA	

5



Relaxation Techniques

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Incorporate relaxation techniques such as deep breathing exercises, meditation, or yoga into your daily routine. Spend at least 15-30 minutes each day practicing one of these techniques, preferably in a quiet, comfortable space without interruptions.

TYPICAL STARTING DOSE

30 minutes

Description

Relaxation techniques encompass various methods like deep breathing, yoga, meditation, and progressive muscle relaxation, aimed at reducing stress and promoting mental and physical relaxation. Practicing these techniques regularly can help manage stress, improve mental clarity, and enhance overall emotional well-being.

We all get stressed from time to time.

[Stress](#) can help you deal with a challenge or avoid danger. However, **it’s not healthy to be stressed for a long time** [\[R\]](#), [\[R\]](#).

Relaxation techniques such as [yoga](#) and [meditation](#) can relieve stress in different ways. Most of them focus on breathing and help you get rid of negative thoughts and emotions [\[R\]](#).

People use relaxation techniques to improve conditions like [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Anxiety
- Depression
- Chronic pain

Progressive muscle relaxation is another relaxation technique. In this technique, you focus on tensing and relaxing different parts of your body. It is common to start with the toes and slowly work your way up to the neck and head [\[R\]](#), [\[R\]](#).

Autogenic training is a relaxation technique that a person may carry out on their own. It uses exercises that take the mind’s attention to bodily sensations such as warmth and heaviness [\[R\]](#), [\[R\]](#).

How it helps

Stressful life events may trigger and worsen eczema. In turn, **eczema may influence mental health** [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Stress may increase skin inflammation and impair the skin barrier [\[R\]](#).

Relaxation techniques may improve eczema symptoms [\[R\]](#).



PERSONALIZED TO YOUR GENES

The [BCL6](#) gene controls the activity of different immune cells and proteins involved in allergic reactions. It helps prevent skin inflammation by reducing *interleukin-4* (IL-4) production [\[R, R, R\]](#).

Your genotype for [rs9865818](#) correlates with higher odds of eczema. It may stimulate IL-4 production by reducing BCL6 activity [\[R, R\]](#).

The hormones released during chronic [stress](#) block BCL6 production and increase IL-4 levels, leading to higher eczema incidence and severity [\[R, R\]](#).

>>> To learn about other conditions associated with the BCL6 gene, check out the SelfDecode blog posts [here](#).

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
LPP	rs9865818	GG	



Bathing



How to implement

Incorporate bathing into your daily routine, preferably in the evening, using warm water for about 10 to 15 minutes. This helps in relaxing the muscles, improving sleep quality, and maintaining good hygiene.

TYPICAL STARTING DOSE

15 minutes

Description

Bathing is not only a relaxing activity but also important for personal hygiene. It helps remove dirt, sweat, and dead skin cells, promoting overall cleanliness and skin health.

Bathing is the act of washing the body, and it usually implies the immersion of the body in water.

People practice it for personal hygiene, religious rituals, or therapeutic purposes.

How it helps

Experts recommend taking short baths in warm water to soothe eczema. While in the bath, the skin should be cleansed gently to help remove dead skin and harmful bacteria [\[R, R, R\]](#).

Bathing with or without added ingredients may help reduce the severity of eczema [\[R, R\]](#).

However, experts do not agree on which ingredients, if any, are most helpful for eczema [\[R, R, R\]](#).

People with eczema should be careful when choosing bath soaps or additives. They should be hypoallergenic, fragrance-free, and not acidic. It's also important to prevent the skin from drying out. Try to bathe for a short time and moisturize immediately after taking a bath [\[R, R, R\]](#).

7



Light Therapy for Skin

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Sit in front of a light therapy box that emits a bright light (without UV rays) for about 20 to 30 minutes daily, preferably in the morning. Make sure the light is indirectly entering your eyes, as direct exposure can be harmful. Consistently use light therapy daily over several weeks to notice improvements in skin conditions.

TYPICAL STARTING DOSE

30 minutes

Description

Light therapy, such as phototherapy or laser treatments, can be effective for various skin conditions like psoriasis and acne by reducing inflammation, promoting skin cell turnover, and improving overall skin appearance.

Light therapy involves shining different types of light on the skin. Doctors prescribe light therapy to help with certain skin conditions, including [R](#), [R](#), [R](#), [R](#):

- Psoriasis
- Eczema
- Acne
- Stretch marks

Different types of light can be used for skin, including [R](#), [R](#), [R](#):

- UV light
- [Blue light](#)
- [Red light](#)
- Laser therapy

How it helps

Experts recommend UV light therapy for some people with eczema, but it requires medical supervision [R](#), [R](#), [R](#).

With proper safety precautions, blue light therapy can be practiced at home. It may help decrease eczema severity by [R](#), [R](#), [R](#):

- Reducing inflammation
- Slowing skin cell growth and division

Please note: Light therapy may damage skin and increase signs of aging. Please consult your doctor before trying any light therapy [R](#), [R](#).



PERSONALIZED TO YOUR GENES

Your **ACTL9** gene variant is linked to eczema. It likely increases skin cell growth and division. Blue light therapy may help slow this process [R, R]. The **TSLP** gene helps make a protein that activates Th2 cells. Eczema is considered a **Th2-dominant** condition, since Th2 cells stimulate **histamine** release, **IgE** antibody production, and other components of allergic inflammation [R, R, R].

Your genotype for **rs1837253** may stimulate Th2 cells by increasing TSLP activity. It correlates with more severe allergic inflammation and higher odds of eczema [R, R, R].

In mice with eczema, UVA radiation improved skin lesions, in part by reducing TSLP levels and Th2 immunity. UV light therapy has been extensively used for eczema. While UVA is more effective against flare-ups, UVB may be a safer and more effective option for chronic eczema [R, R, R, R, R].

>>> To learn about other conditions associated with the TSLP gene, check out the SelfDecode blog posts [here](#).

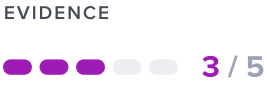
YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
ACTL9	rs2164983	CA	

GENE	SNP	GENOTYPE	EVIDENCE
TSLP	rs1837253	CC	



Avoid Processed Foods



How to implement

Eliminate foods such as packaged snacks, sugary drinks, ready-made meals, and anything with ingredients you can't pronounce from your daily diet. Focus on consuming whole foods like fruits, vegetables, lean meats, and whole grains instead.

Description

Processed foods often contain high amounts of sugar, fat, and salt, which can lead to diseases like obesity and heart problems. They also have fewer nutrients than fresh foods. It's healthier to eat fresh fruits, vegetables, and lean proteins instead. This improves our overall health by giving our body the nutrients it needs.

How it helps

Avoiding processed foods helps manage eczema as these foods often contain additives or chemicals that can trigger inflammation and exacerbate skin irritation. A more natural, unprocessed diet allows for better control of the ingredients, reducing the risk of inflammation.

Two studies with over 27k participants associated a dietary pattern rich in processed foods with a **142-157% increased incidence of eczema** [R, R].

The additives found in these foods are believed to function as pseudo-allergens that may trigger or worsen eczema. In line with this, restricting the intake of the additive monosodium **glutamate improved eczema symptoms and reduced the levels of a protein released during food allergic reactions (ECP)** in 2 controlled trials of 50 adults and 13 children [R, R].

9



Probiotics

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Take a probiotic supplement containing 10 billion or more live cultures once daily, preferably with a meal or as directed by the packaging or a healthcare provider.

TYPICAL STARTING DOSE

10 billion

Description

Probiotics are live beneficial bacteria and yeasts that can support gut health and digestive function when consumed as supplements or found in fermented foods like yogurt and sauerkraut. They may be beneficial to gut health, immune function, blood sugar, and mood.

Probiotic bacteria are “good” bacteria found mainly in the large intestine. They support your body and mind by [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Maintaining gut health
- Supporting a healthy immune system
- Improving your mood
- Helping to maintain healthy blood sugar

Prebiotics are certain types of fiber and other complex carbs that serve as food for gut bacteria. **They support gut health by helping boost the activity and growth of “good” bacteria** [\[R\]](#), [\[R\]](#).

Prebiotics are also added to foods and supplements. Common prebiotic ingredients are [\[R\]](#), [\[R\]](#):

- Oligo-fructose
- Oligo-galactose
- [Inulin](#)

Mixtures of probiotics and prebiotics are known as **synbiotics** [\[R\]](#).

How it helps

Supplementing with certain *Lactobacillus* [probiotics](#) may improve eczema. The most common ones include:

- [L. rhamnosus](#) [\[R\]](#)
- [L. reuteri](#) [\[R\]](#)
- [L. plantarum](#) [\[R\]](#), [\[R\]](#)
- [L. paracasei](#) [\[R\]](#), [\[R\]](#)
- [L. fermentum](#) [\[R\]](#)
- *L. sakei* [\[R\]](#)

A combination of other *Lactobacillus* and *Bifidobacterium* probiotics may also help [\[R\]](#), [\[R\]](#).

Probiotics may help by balancing the immune response [\[R\]](#).

Note that the evidence to support probiotic use for eczema is mixed [\[R\]](#), [\[R\]](#), [\[R\]](#).



PERSONALIZED TO YOUR GENES

The [MYC](#) gene helps make c-Myc, a protein that regulates the immune response. Increased c-Myc levels may overstimulate T cells and innate lymphoid cells — immune cells with a major role in inflammation and allergic reactions [[R](#), [R](#), [R](#), [R](#)].

Your genotype for [rs4410871](#) has been associated with higher eczema rates. It may increase c-Myc levels, leading to a dysregulated immune response and skin inflammation [[R](#), [R](#)].

[Probiotic](#) supplementation may reduce c-Myc levels [[R](#), [R](#), [R](#)].

>>> *To learn about other conditions associated with the MYC gene, check out the SelfDecode blog posts [here](#).*

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
MYC	rs4410871	TC	

10

Topical Shea Butter

IMPACT3 / 5

EVIDENCE2 / 5

How to implement

Apply a small amount of shea butter directly onto the skin area in need of treatment, gently massaging it in until fully absorbed. Repeat this process 2-3 times daily, especially after showering or bathing when your skin is still slightly damp to enhance absorption.

Description

Shea butter is extracted from the nuts of the shea tree native to Africa and is known for its rich moisturizing properties. It is widely used in skincare products for its ability to hydrate and nourish the skin, making it suitable for dry and sensitive skin types.

How it helps

Topical Shea Butter aids in moisturizing and soothing the skin, reducing the dryness and itchiness associated with ecicema. Its anti-inflammatory properties can also help decrease inflammation and promote healing.

Topical creams containing [shea butter](#) improved redness, swelling, dryness, and itching in 3 trials (one of them controlled) of 88 children and adolescents with mild-to-moderate eczema [\[R, R, R\]](#).

Shea butter triterpenes, especially lupeol, reduce skin inflammation by preventing the production of pro-inflammatory molecules such as [prostaglandins](#), [myeloperoxidase](#), and cytokines [\[R, R, R, R\]](#).

PERSONALIZED TO YOUR GENES

The [BCL6](#) gene controls the activity of different immune cells and proteins involved in allergic reactions. It helps prevent skin inflammation by reducing *interleukin-4* (IL-4) production [\[R, R, R\]](#).

Your genotype for [rs9865818](#) correlates with higher odds of eczema. It may stimulate IL-4 production by reducing BCL6 activity [\[R, R\]](#).

Compounds from [shea butter](#) may reduce skin inflammation, in part by preventing the production of IL-4 [\[R, R, R\]](#).

>>> *To learn about other conditions associated with the BCL6 gene, check out the SelfDecode blog posts [here](#).*

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
LPP	rs9865818	GG	

11



Avoid Scratching

IMPACT

3 / 5

EVIDENCE

2 / 5

How to implement

Keep your fingernails short and smooth to minimize damage if you do scratch. Whenever you feel the urge to scratch, try applying a moisturizer, using ice packs, or tapping/slapping the area lightly instead to reduce itching.

Description

Avoiding excessive scratching of the skin, especially in the presence of skin conditions like eczema, helps prevent further skin irritation and potential infection. It supports skin health and encourages healing.

How it helps

Scratching eczema can lead to open sores and increase your risk of infection. It can also make your symptoms worse and extend the time it takes for your skin to heal [\[R, R\]](#).

12



Limit Contact With Cosmetics

IMPACT

3 / 5

EVIDENCE

2 / 5

How to implement

Avoid using cosmetics on a daily basis, and when you do, choose products labeled 'non-comedogenic' or 'for sensitive skin'. Try to designate at least 2-3 days per week as cosmetic-free days to allow your skin to breathe and recover.

Description

Limiting contact with certain cosmetics containing allergens or irritants can help prevent skin sensitivities and allergic reactions, promoting healthier and more comfortable skin.

How it helps

Cosmetics often contain fragrances and preservatives, which can irritate the skin and trigger eczema flare-ups. Limiting their use reduces the skin's exposure to these potential irritants, helping prevent eczema episodes.

Eczema can be triggered and worsened in response to cosmetics (soap, shampoo, makeup, cleansers) [\[R, R\]](#).

A study involving patients with eczema and positive patch tests to formaldehyde found that exposure to products containing formaldehyde or formaldehyde releasers, such as cosmetics can exacerbate eczema. Patients advised to avoid these products experienced improvements in their condition [\[R\]](#).

13

Topical Coconut Oil

IMPACT3 / 5

EVIDENCE2 / 5

How to implement

Apply a small amount of coconut oil directly to the skin area you wish to treat, gently massaging it in until absorbed. Do this process 1-2 times daily, preferably after showering to help retain moisture. The duration of use depends on the condition being treated but generally ranges from a few days to ongoing as needed for skin hydration and protection.

Description

Coconut oil is a natural plant-derived topical application obtained from coconuts. It is used for its moisturizing and antimicrobial properties, making it suitable for skincare, haircare, and as a general moisturizer.

How it helps

Virgin coconut oil, applied daily for eight weeks, was effective for mild to moderate eczema in a placebo-controlled trial of 117 patients [\[R\]](#).

Coconut oil also moisturized the skin in a 2-week placebo-controlled trial of 34 patients and prevented infections in a placebo-controlled trial of 52 patients, which may further help improve eczema [\[R\]](#), [\[R\]](#).

Topical coconut oil reinforces the skin's natural barrier, locking in moisture and suppressing inflammation. It also contains fatty acids with antibacterial properties that may help prevent skin infections.

14



Colloidal Oatmeal

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Apply a thin layer of colloidal oatmeal cream or lotion to the affected skin area once or twice daily. For baths, add 1 to 2 cups of colloidal oatmeal under running water and soak for 10 to 15 minutes.

Description

Colloidal oatmeal is finely ground oatmeal suspended in a liquid. It is used in skincare products and baths to soothe dry, irritated skin and relieve conditions like eczema and itching.

Colloidal oatmeal is made from finely ground and boiled oat grain. People have used it for centuries to help manage skin conditions [\[R\]](#).

Colloidal oatmeal is a common ingredient in many skin care and bath products. These include gels, creams, shampoos, and soaps [\[R\]](#).

How it helps

Creams with 1% colloidal oatmeal may improve eczema symptoms. These include skin itching, irritation, and dryness [\[R, R, R, R\]](#).

Colloidal oatmeal may help protect the skin barrier by [\[R, R, R\]](#):

- Moisturizing the skin
- Protecting against oxidative damage
- Reducing inflammation

15

Maintain Optimal Vitamin D Levels

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

Check your vitamin D levels, they should ideally be in the 30-66 ng/mL range. If your levels are lower than that, take a vitamin D supplement, 1000-4000 IU daily, to reach an optimal range.

TYPICAL STARTING DOSE

1000 iu

Description

Vitamin D, often referred to as the "sunshine vitamin," can be synthesized by the skin when exposed to sunlight, as well as being found in fish, eggs, and fortified milk. It helps regulate calcium absorption, promoting strong bones and a healthy immune system. Vitamin D deficiency can lead to conditions like rickets in children and osteoporosis in adults.

Your body needs [vitamin D](#) for strong bones. Vitamin D also plays a role in [\[R\]](#):

- Mood
- Immunity
- Heart health
- Blood sugar control

[Sunlight](#) is our main source of vitamin D. Experts recommend getting at least **5-15 minutes of midday sun, 2-3 times per week**. People with darker skin and those living at high latitudes may need longer periods of sun exposure [\[R, R\]](#).

Foods like fish, eggs, and fortified milk provide small amounts of vitamin D. **People lacking vitamin D should consider taking a supplement** [\[R\]](#).

How it helps

People with eczema may have low levels of vitamin D. **Supplementation may help improve vitamin D levels and eczema symptoms** [\[R, R\]](#).

However, the evidence is mixed, and experts do not recommend vitamin D supplementation to treat eczema [\[R, R\]](#).

Please note: *Experts recommend getting 600-800 IU of vitamin D per day. Medical bodies recommend against taking more than 4,000 IU per day* [\[R\]](#).

PERSONALIZED TO YOUR GENES

The [MYC](#) gene helps make c-Myc, a protein that regulates the immune response. Increased c-Myc levels may overstimulate T cells and innate lymphoid cells — immune cells with a major role in inflammation and allergic reactions [\[R, R, R, R\]](#).

Your genotype for [rs4410871](#) has been associated with higher eczema rates. It may increase c-Myc levels, leading to a dysregulated immune response and skin inflammation [\[R, R\]](#).

[Vitamin D](#) may reduce c-Myc levels [\[R, R, R\]](#).

>>> To learn about other conditions associated with the MYC gene, check out the SelfDecode blog posts [here](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
MYC	rs4410871	TC	

16



Avoid Formaldehyde Exposure

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

To minimize formaldehyde exposure, choose household products and building materials labeled low-VOC (Volatile Organic Compounds) or formaldehyde-free. Ensure proper ventilation in your living and working spaces, especially when using products known to contain formaldehyde like certain adhesives, cleaning agents, and cosmetics. Aim to reduce use of pressed wood products and seek out alternatives when possible.

Description

Avoiding exposure to formaldehyde, a chemical commonly found in building materials and certain products, is crucial to prevent respiratory problems and potential carcinogenic effects.

How it helps

Formaldehyde can irritate the skin and trigger eczema symptoms, so steering clear of it can help manage the condition.

Exposure to formaldehyde has been associated with the development and exacerbation of eczema, particularly contact dermatitis. Several studies have documented the adverse effects of formaldehyde exposure in individuals with eczema:

- Formaldehyde, a common contact allergen, can provoke eczema reactions in sensitive individuals. A study involving patients with eczema and positive patch tests to formaldehyde found that exposure to products containing formaldehyde or formaldehyde releasers, such as cosmetics, personal care products, and household items, can exacerbate eczema. Patients advised to avoid these products experienced improvements in their condition [\[R\]](#).
- A study highlighted that formaldehyde-sensitive patients generally improved after receiving extensive information about their allergy and performing an exposure assessment. Despite efforts to avoid formaldehyde, many patients remained exposed, and a trend suggested that continued exposure might result in more severe eczema. Patients who actively avoided formaldehyde experienced fewer eczema eruptions [\[R\]](#).
- An article emphasizes that formaldehyde and substances that release formaldehyde can act as sensitizers, potentially aggravating eczema in individuals allergic to formaldehyde. Knowledge about exposure to formaldehyde releasers is beneficial for managing eczema in formaldehyde-sensitive patients [\[R\]](#).

These studies suggest that formaldehyde exposure can contribute to the development and exacerbation of eczema, particularly in individuals sensitive to this chemical. Reducing exposure to formaldehyde and formaldehyde-releasing substances can improve the management of eczema in affected individuals.

17



Black Seed (Black Cumin)

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 1000 mg of black seed (black cumin) supplement daily, preferably split into two doses of 500 mg each, one in the morning and one in the evening.

TYPICAL STARTING DOSE

1000 mg

Description

Black seed, also known as black cumin or *Nigella sativa*, has been used for its potential health benefits in traditional medicine. It is believed to have anti-inflammatory, antioxidant, and immune-boosting properties.

[Black seed](#) (black cumin) and its oil are used in cooking and traditional medicine [\[R\]](#).

People use black seed for [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Asthma
- Allergies
- High blood sugar
- High blood pressure
- Joint pain

How it helps

A meta-analysis of 4 studies and 152 patients with allergic diseases concluded that oral black seed oil (40-80 mg/kg per day) may help with allergic symptoms, including eczema, when used as an add-on to conventional therapy [\[R\]](#).

Black seed oil possesses anti-inflammatory properties that may help soothe the skin and alleviate itchiness. It also has antimicrobial effects that can prevent secondary skin infections.

18



Topical Licorice Root

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Apply a thin layer of licorice root extract cream or gel directly to the affected skin areas twice daily, morning and evening, for at least two to four weeks to see improvements.

Description

Licorice root, derived from the Glycyrrhiza plant, is used topically for its anti-inflammatory and soothing properties. Its main compound, glycyrrhizin, can help alleviate skin conditions such as eczema, psoriasis, and dermatitis.

[Licorice](#) (*Glycyrrhiza glabra*) is a plant used to flavor candy and drinks [\[R\]](#).

Its root has long been used in folk medicine. Today, people use it for sore throats, digestive problems, and itchy skin. Its compound *licochalcone A* may also help with rosacea [\[R\]](#).

How it helps

Licorice root gel (2%) may improve eczema symptoms. These include skin redness, itching, and swelling. When combined with willow bark and gentian root extracts, topical licorice root may also help with eczema [\[R\]](#), [\[R\]](#).

Some creams contain an active compound of licorice called *licochalcone A*. These may help with eczema symptoms [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Topical licorice may help by:

- Reducing inflammation [\[R\]](#)
- Boosting skin hydration [\[R\]](#)

 PERSONALIZED TO YOUR GENES

The [STAT6](#) gene codes for a protein that stimulates immune responses against parasitic infections. However, when excessive, STAT6 activity may contribute to eczema and other allergic conditions [\[R\]](#), [\[R\]](#).

Your genotype for [rs1059513](#) may increase STAT6 activity. It’s been associated with higher eczema rates [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

[Licorice](#) may reduce allergic inflammation, in part by suppressing STAT6 [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

>>> To learn about other conditions associated with the STAT6 gene, check out the SelfDecode blog posts [here](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
STAT6	rs1059513	TT	

19

Topical Beta Glucans

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Apply a topical cream or serum containing beta-glucans to the affected area of the skin once or twice daily, as per the product instructions. Continue this routine consistently for at least 8 weeks to observe potential improvements in skin hydration, elasticity, and healing.

Description

Beta-glucans, often derived from yeast or oats, are used topically in skincare products for their moisturizing and soothing effects. They can help alleviate dryness, reduce redness, and promote overall skin hydration and comfort.

Beta-glucan is a type of soluble fiber with antioxidant properties. It is abundant in [\[R\]](#), [\[R\]](#):

- Baker's yeast
- Cereals (e.g., oats, barley)
- Mushrooms (e.g., maitake)
- Seaweeds

People use beta-glucans to [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Improve immunity (e.g., fight infections)
- Reduce blood sugar
- Reduce cholesterol

How it helps

Topical Beta Glucans stimulate the skin's natural repair process and strengthen its protective barrier, helping to alleviate dryness and itching in patients with eczema. It also has anti-inflammatory properties which reduce skin inflammation, soothing the symptoms of this condition.

A cream with 0.25% beta-glucans **reduced itching, flare intensity, and overall symptoms** in a [controlled trial of 80 patients with eczema](#) [\[R\]](#).

Another formulation with beta-glucans **reduced allergic dermatitis** in a [placebo-controlled trial of 22 patients](#) [\[R\]](#).

20

Topical Palmitoylethanolamide (PEA)

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Apply a cream or gel containing palmitoylethanolamide (PEA) to the affected area of your skin 2-3 times daily. Gently massage it into the skin until fully absorbed. Continue this application daily for a period of at least 4-6 weeks to assess its effects on reducing pain and inflammation.

Description

PEA, a fatty acid compound, is used topically for its anti-inflammatory and analgesic effects. It may help relieve skin conditions associated with inflammation and itching.

How it helps

In 2 studies (one of them placebo-controlled) of over 2.5k patients, creams containing palmitoylethanolamide (PEA) reduced eczema symptoms such as itching, redness, scaling, and dryness, and improved skin barrier function [\[R, R\]](#).

PEA may help by interacting with the cannabinoid receptors of the skin, which reduces inflammation and itching.

21



Lactobacillus Plantarum

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take a probiotic supplement containing *Lactobacillus plantarum* 299V daily. The typical dosage is 10 billion colony-forming units (CFUs). Continue for at least 4 weeks to assess benefits on digestive health.

TYPICAL STARTING DOSE
10 billion CFU

Description

Lactobacillus plantarum is a [probiotic](#) bacterium found in many fermented plant products such as sauerkraut, pickles, brined olives, and Korean kimchi [\[R\]](#).

People take *L. plantarum* supplements to improve [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Diarrhea
- Skin appearance
- IBD
- High cholesterol

How it helps

Lactobacillus Plantarum is a type of probiotic that can help to strengthen your immune response, reducing inflammation affecting your skin in eczema. It also contributes to the health of your gut microbiome, which can play a significant role in managing skin inflammation related to eczema.

In [2 placebo-controlled trials of 30 adults and 22 children with atopic dermatitis](#), supplementation with *L. plantarum* IS-10506 (1-2 × 10¹⁰ CFU/day) for 12 weeks **improved the symptoms and decreased IL-4 and IL-17 levels while increasing IFN-gamma and Foxp3+ levels** [\[R\]](#), [\[R\]](#).

In a [placebo-controlled trial of 109 patients with atopic dermatitis](#), supplementation with *L. plantarum* CCFM8610 **decreased the symptoms while increasing IL-10 levels** [\[R\]](#).

The combination of *L. plantarum* PBS067, *L. reuteri* PBS072, and *L. rhamnosus* LRH020 **increased skin smoothness, skin moisturization, and self-perception while decreasing dermatitis symptoms and inflammatory cytokine levels** in a [placebo-controlled trial of 80 adults with mild-to-moderate atopic dermatitis](#) [\[R\]](#).

 PERSONALIZED TO YOUR GENES

The [MYC](#) gene helps make c-Myc, a protein that regulates the immune response. Increased c-Myc levels may overstimulate T cells and innate lymphoid cells — immune cells with a major role in inflammation and allergic reactions [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Your genotype for [rs4410871](#) has been associated with higher eczema rates. It may increase c-Myc levels, leading to a dysregulated immune response and skin inflammation [\[R\]](#), [\[R\]](#).

[Probiotic](#) supplementation may reduce c-Myc levels [\[R\]](#), [\[R\]](#), [\[R\]](#).

>>> To learn about other conditions associated with the MYC gene, check out the SelfDecode blog posts [here](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
MYC	rs4410871	TC	

22



Topical Echinacea

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Apply a thin layer of echinacea cream or gel to the affected area of the skin. Do this 2-3 times daily until improvement is observed, which may take up to two weeks for minor skin irritations or wounds.

Description

Echinacea is a plant-derived topical application made from the echinacea plant. It is used to support the immune system and may be applied topically to promote wound healing and relieve skin irritations.

How it helps

Topical Echinacea can help soothe Eczema because it has anti-inflammatory and antimicrobial properties. This helps to reduce redness, swelling, and itchiness, and prevent infection that can worsen the condition.

In 3 placebo-controlled trials of 178 people with eczema, applying a cream with [echinacea](#) for 3 months helped **improve skin redness, swelling, and barrier function** [\[R\]](#).

23



Melatonin

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 500 mcg of melatonin orally, about 30 minutes before bedtime, to help with sleep. It can be taken daily as needed.

TYPICAL STARTING DOSE

500 mcg

Description

Melatonin is a natural hormone produced by the pineal gland in the brain that helps regulate the sleep-wake cycle. It plays a crucial role in promoting sleep onset and maintaining a consistent sleep pattern, making it a commonly used supplement for managing sleep disorders and jet lag.

[Melatonin](#) is an important sleep hormone. Bright light at night may prevent your body from making enough melatonin [\[R, R, R\]](#).

Your body makes melatonin on its own. However, some people take melatonin supplements to help them sleep. It may help with jet lag in particular [\[R, R, R\]](#).

How it helps

Melatonin could help treat eczema by reducing inflammation and boosting the body's antioxidant defenses, which can alleviate skin irritation. It's also known to improve sleep, which can indirectly assist in healing and reducing the severity of eczema symptoms.

In [2 placebo-controlled trials of 143 children and adolescents with eczema](#), supplementation with [melatonin](#) (3-6 mg/day) for 4-6 weeks improved both **disease severity** and [sleep disturbances](#) [\[R, R\]](#).

24



Quercetin

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 250-1000 mg of quercetin supplement daily with a glass of water, preferably with a meal to aid in its absorption.

TYPICAL STARTING DOSE

250 mg

Description

Quercetin is a natural plant flavonoid found in various foods, particularly in fruits and vegetables like apples, onions, and broccoli. It is used as a dietary supplement and is valued for its potential antioxidant and anti-inflammatory properties.

[Quercetin](#) is a **plant-based antioxidant**. It supports the immune system and helps lower inflammation [\[R, R\]](#).

Good sources of quercetin include [\[R\]](#):

- Apples
- Onions
- Tea

People mainly use quercetin supplements to relieve allergies [\[R, R, R\]](#).

How it helps

In one study, a diet rich in quercetin reduced eczema symptoms. Supplementation with quercetin or its rich source, dodder seed extract, improved eczema in two trials. Good quercetin sources include [capers](#), onion, celery, berries, apples, and nuts [\[R, R, R, R, R, R\]](#).

Please note: *quercetin may inhibit the production of the thyroid hormone T4 (thyroxine). Individuals with thyroid disorders, particularly hypothyroidism or low T4 levels, should exercise caution when using quercetin and always consult with a healthcare provider before taking this supplement* [\[R\]](#).

Please note: *quercetin may interfere with iron absorption due to its iron-chelating properties, potentially exacerbating anemia or making it harder to manage. If you have anemia, consult your healthcare provider before using quercetin supplements* [\[R\]](#).



PERSONALIZED TO YOUR GENES

The [IL33](#) gene helps make interleukin-33 (IL-33), a protein that activates different immune cells and promotes inflammation. IL-33 stimulates [Th2 immunity](#), which is usually overactive in people with allergies [\[R, R\]](#).

Your genotype for [rs928413](#) has been associated with relatively higher odds of allergies. It likely increases IL-33 levels [\[R\]](#).

[Quercetin](#) is a plant antioxidant recognized as one of the best natural antihistamines. It may reduce airway inflammation by inhibiting IL-33 [\[R, R, R, R\]](#).

>>> To learn more about the link between the IL33 gene and allergic conditions, check out the full SelfDecode blog post [here](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
ERMP1	rs928413	GG	

25



Acupuncture

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Visit a licensed acupuncturist for a session, typically lasting between 30 to 60 minutes, once or twice a week. Depending on your specific condition, a course of treatment might range from a few weeks to several months.

TYPICAL STARTING DOSE

1 hour

Description

Acupuncture is a part of traditional Chinese medicine. It involves inserting thin needles at specific points on the body. People use it to relieve pain and allergies, as well as reduce nausea and improve sleep.

[Acupuncture](#) is a part of traditional Chinese medicine. It involves **inserting thin needles at specific points on the body**. People use it to [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Relieve pain
- Improve sleep quality
- Relieve allergies
- Reduce nausea

How it helps

Acupuncture is thought to help eczema by reducing inflammation and boosting the immune system. In doing this, it can help manage itchiness, redness, and stress that often triggers eczema flare-ups.

A [meta-analysis of 8 trials and 434 patients](#) found [acupuncture](#) **effective at reducing the symptoms and severity of eczema** [\[R\]](#).

However, the authors warned that all the studies compared acupuncture with no treatment or with conventional medication instead of using a more suitable negative control (“sham” or fake acupuncture).

26



Pantothenic Acid (Vitamin B5)

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

For adults, take a pantothenic acid (Vitamin B5) supplement of 5 to 10 milligrams daily with water and a meal. This can be continued indefinitely as part of a daily vitamin regimen to support overall health.

TYPICAL STARTING DOSE

5 mg

Description

Vitamin B5, or pantothenic acid, is found in a wide range of foods such as meat, eggs, and whole grains. It is vital for energy metabolism and the synthesis of fatty acids, supporting healthy skin, digestion, and nerve function.

[Vitamin B5](#) (pantothenic acid) is a water-soluble vitamin required for making [\[R\]](#):

- Energy from food
- Cholesterol, sex, and stress hormones
- Hemoglobin
- Neurotransmitters (acetylcholine and melatonin)

Adults should get **5 mg of vitamin B5 per day** [\[R\]](#).

Vitamin B5 deficiency is extremely rare because this vitamin is present in nearly all foods, especially in meat, dairy products, eggs, avocado, sweet potato, and sunflower seeds. However, **pregnant and lactating women may benefit from slightly increased amounts of this vitamin (6-7 mg/day)** [\[R\]](#).

How it helps

Pantothenic Acid (Vitamin B5) would aid in treating Eczema by replenishing the skin's barrier and promoting cell growth to heal damaged skin. Additionally, its moisturizing effects help soothe and reduce itching and inflammation associated with Eczema.

In a non-placebo-controlled trial of 108 children with atopic dermatitis, applying an emollient with panthenol 2x/day for 3 months improved the symptoms and reduced the time to flare-ups better than a reference emollient. A water-in-oil formulation with 5% dexpanthenol applied 2x/day for 4 weeks was as effective as 1% hydrocortisone in a non-placebo-controlled trial of 26 children with atopic dermatitis [\[R\]](#), [\[R\]](#).

In a placebo-controlled trial of 25 healthy volunteers, applying a gel with 5% dexpanthenol (an analog of pantothenic acid) 2x/day for 26 days prevented skin irritation caused by 2% lauryl sulfate. After lauryl sulfate irritation, applying a dexpenthanol-containing cream 2x/day significantly enhanced skin barrier repair and stratum corneum hydration, while reducing skin roughness and inflammation, in a placebo-controlled trial [\[R\]](#), [\[R\]](#).

The combination of 5% dexpanthenol and zinc oxide decreased transepidermal water loss better than a conventional ointment and the severity of diaper rash as effectively in a non-placebo-controlled trial of 46 children with acute diarrhea [\[R\]](#).

27



Avoid Contact With Dust

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

To avoid contact with dust, clean surfaces with a damp cloth at least twice a week, use a vacuum cleaner with a HEPA filter regularly on carpets and upholstery, and avoid using feather dusters that disperse dust into the air. Additionally, consider using air purifiers in rooms where you spend the most time and keep windows closed on windy days to prevent outdoor dust from coming in.

Description

Avoiding exposure to dust can help alleviate allergy symptoms such as sneezing, runny nose, and itchy eyes, promoting respiratory comfort and overall well-being, particularly for individuals with allergies or allergic conditions.

How it helps

Avoiding contact with dust helps minimize eczema flare-ups, as dust often contains allergens like dust mites that can irritate your skin and worsen inflammation. Therefore, eliminating dust from your environment reduces these provocative exposures, contributing to better management of your eczema.

Eczema can be triggered and worsened in response to air-borne allergens like **dust mites**, pollen, animal dander [\[R, R, R, R, R, R\]](#).

28

Lactobacillus Salivarius

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take a probiotic supplement containing Lactobacillus salivarius daily, preferably with a meal to enhance absorption. The exact dosage can vary, but a common amount is around 10 billion CFUs (colony forming units). It is generally recommended to continue taking the probiotic for at least four weeks to observe benefits.

TYPICAL STARTING DOSE
10 billion CFU

Description

Lactobacillus saliverius is a beneficial probiotic strain that can support digestive health and contribute to a balanced gut microbiome. It may help improve gut function, enhance nutrient absorption, and bolster the immune system, promoting overall well-being.

How it helps

In multiple trials involving adults and children with atopic dermatitis, supplementation with *L. salivarius* LS01 improved clinical manifestations, quality of life, and reduced Th2 cytokines, *Staphylococci* load, and fecal *S. aureus* count. Combining *L. salivarius* LS01 with *Bifidobacterium breve* BR03 enhanced clinical parameters and immune balance. A synbiotic containing *L. salivarius* and fructo-oligosaccharide improved atopic dermatitis severity and medication use more effectively than the prebiotic alone [R, R, R, R, R, R].

L. salivarius may help reduce inflammation and allergic responses, thus alleviating the skin condition's symptoms.

PERSONALIZED TO YOUR GENES

The [MYC](#) gene helps make c-Myc, a protein that regulates the immune response. Increased c-Myc levels may overstimulate T cells and innate lymphoid cells — immune cells with a major role in inflammation and allergic reactions [R, R, R, R].

Your genotype for [rs4410871](#) has been associated with higher eczema rates. It may increase c-Myc levels, leading to a dysregulated immune response and skin inflammation [R, R].

[Probiotic](#) supplementation may reduce c-Myc levels [R, R, R].

>>> To learn about other conditions associated with the MYC gene, check out the SelfDecode blog posts [here](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
MYC	rs4410871	TC	

29



Black Seed Oil

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take one to two teaspoons (5-10ml) of black seed oil twice daily, preferably before meals. For capsule forms, follow the manufacturer's instructions, commonly 500mg capsules twice daily. Continue this regimen for up to 8 weeks to evaluate its effects.

TYPICAL STARTING DOSE

1000 mg

Description

Both black seed extract and black seed oil have been traditionally used for their potential health benefits, including anti-inflammatory and antioxidant properties. They may support overall wellness and immune function when incorporated into a balanced diet.

[Black seed](#) (black cumin) and its oil are used in cooking and traditional medicine [\[R\]](#).

People mainly use black seed for [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Allergies
- Joint pain

How it helps

A meta-analysis of 4 studies and 152 patients with allergic diseases concluded that oral black seed oil (40-80 mg/kg per day) may help with allergic symptoms, including eczema, when used as an add-on to conventional therapy [\[R\]](#).

Black seed oil possesses anti-inflammatory properties that may help soothe the skin and alleviate itchiness. It also has antimicrobial effects that can prevent secondary skin infections.

 PERSONALIZED TO YOUR GENES

The [MYC](#) gene helps make c-Myc, a protein that regulates the immune response. Increased c-Myc levels may overstimulate T cells and innate lymphoid cells — immune cells with a major role in inflammation and allergic reactions [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Your genotype for [rs4410871](#) has been associated with higher eczema rates. It may increase c-Myc levels, leading to a dysregulated immune response and skin inflammation [\[R\]](#), [\[R\]](#).

An active compound from [black seed oil](#) reduced c-Myc levels in mice [\[R\]](#).

>>> To learn about other conditions associated with the MYC gene, check out the SelfDecode blog posts [here](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
MYC	rs4410871	TC	

30



Avoid Excessive Sweating

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Stay in cool, well-ventilated environments as much as possible, especially on hot days. Dress in lightweight, breathable fabrics and avoid strenuous exercise during the peak heat of the day. Use air conditioning or fans to help regulate temperature indoors.

Description

While sweating is a natural cooling mechanism, avoiding excessive sweating can help prevent discomfort and potential skin issues related to excessive moisture, such as chafing or fungal infections.

How it helps

Avoiding excessive sweating can help control eczema flare-ups, as sweat can irritate the skin and trigger an itchy, inflammatory response. Remember to stay cool and dry to maintain a balanced skin environment.

According to some experts and research findings, things that can worsen eczema include sweat [\[R, R, R\]](#).

31



Avoid Secondhand Smoke

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Implementing a smoke-free lifestyle involves communicating your needs to family, friends, and coworkers, requesting they respect your choice by smoking away from you. At home, establish strict no-smoking policies indoors. When out, choose smoke-free venues and accommodations. Advocate for smoke-free environments in your community and support legislation that promotes public health by reducing exposure to secondhand smoke. Utilize air purifiers at home to reduce any residual particles.

Description

Avoiding secondhand smoke is crucial for maintaining good health. Exposure to secondhand smoke can lead to respiratory problems, cardiovascular disease, and an increased risk of lung cancer, even in non-smokers. Protecting oneself from secondhand smoke involves staying away from smoking areas, ensuring smoke-free environments at home and work, and advocating for smoke-free policies in public spaces.

How it helps

Smoking and exposure to secondhand smoke may be linked to higher odds of eczema. This is likely because cigarette smoke impairs the function of the skin barrier and immune system [\[R, R, R\]](#).

32



Lactobacillus Rhamnosus HN001

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

L. rhamnosus HN001 is available in various forms, including capsules, powders, and sometimes as an ingredient in fermented dairy products like yogurts and kefir. Typically, doses range from 1 billion to 10 billion colony-forming units (CFUs) per day. It is often recommended to start with a lower dose and gradually increase it to gauge how your body responds. Consistency is key. Taking *L. rhamnosus* HN001 regularly can help maintain its effectiveness.

TYPICAL STARTING DOSE

10 billion CFU

Description

Lactobacillus rhamnosus HN001 is a probiotic strain originally isolated from dairy products. Research suggests that *L. rhamnosus* HN001 can have several beneficial impacts, particularly in the areas of digestive health and immune system support.

People mainly take *L. rhamnosus* HN001 to help with:

- IBS
- Diarrhea
- Respiratory infections
- Eczema
- Anxiety
- Depression

How it helps

In a placebo-controlled trial of 474 pregnant women, supplementation with *L. rhamnosus* HN001 daily from 35 weeks gestation until 6 months by the mothers and from birth until 2 years of age by children decreased the odds of eczema. The protective effects persisted for at least 4 years. However, supplementation by the mothers alone was ineffective [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

In a placebo-controlled trial of 331 children at risk of eczema, supplementation with *L. rhamnosus* HN001 helped prevent its development [\[R\]](#).

33



Dietary Zinc

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Incorporate foods high in zinc, such as beef, poultry, seafood (especially oysters), beans, nuts, and whole grains, into your daily diet. Aim for the recommended dietary allowance of zinc, which is 11 mg per day for adult men and 8 mg per day for adult women.

Description

Dietary zinc is essential for the body. It helps our immune system fight off bacteria and viruses, plays a role in healing wounds, and is essential for our sense of taste and smell. Without enough zinc, these systems may not work as effectively as they should.

How it helps

In one meta-analysis, zinc deficiency correlated with increased odds of eczema [\[R\]](#).

34



Topical Chamomile

IMPACT

2 / 5

EVIDENCE

1 / 5

How to implement

Apply a chamomile cream or ointment directly to the affected area of the skin 2-3 times daily. Ensure the skin is clean before application. Continue use for as long as symptoms persist or according to the product's specific instructions.

Description

Chamomile extract, obtained from the flowers of the Matricaria chamomilla plant, is used topically for its anti-inflammatory and calming properties. It is commonly applied to soothe irritated skin and alleviate conditions like dermatitis.

How it helps

Topical Chamomile helps soothe eczema symptoms because it has anti-inflammatory and antibacterial properties. Applying it to the skin can reduce redness, itching, and swelling associated with this condition.

Applying a cream with 2% [chamomile](#) extract **improved skin itching, redness, and scaling more effectively than some conventional anti-inflammatory creams** in 2 controlled trials (one of them with 161 patients) [\[R, R\]](#).

However, the extract **wasn't more effective than the placebo** in a placebo-controlled trial of 114 people with different skin conditions [\[R\]](#).

35



Hemp Seed Oil

IMPACT

2 / 5

EVIDENCE

1 / 5

How to implement

Incorporate hemp seed oil into your diet by adding 1-2 tablespoons to salads, smoothies, or yogurt daily. Ensure the oil is cold-pressed and unrefined for maximum health benefits. This can be a regular part of your diet indefinitely.

Description

Hemp seed oil is derived from hemp seeds and is known for its nutritional value, including a balanced ratio of omega-3 and omega-6 fatty acids. It may support skin health, reduce inflammation, and provide a source of essential nutrients.

Hemp seed oil contains vitamin E, magnesium, calcium, sulfur, phosphorus, iron, and zinc. Hemp oil contains about 30 mg of GLA per gram.

How it helps

Hemp Seed Oil is rich in essential fatty acids and antioxidants that can help reduce inflammation and dryness associated with Eczema. Applying it topically can aid in hydrating and soothing the skin, reducing itchiness and flares.

In a controlled trial of 20 people with eczema, consuming 30 mL/day of [hemp seed oil](#) for 20 weeks **reduced skin dryness, itching, and medication use while increasing blood levels of essential fatty acids** [\[R\]](#).

Hemp seeds are very rich in polyunsaturated fatty acids with potential benefits to skin health such as [omega-3](#) alpha-linolenic acid ([ALA](#)) and the omega-6 linoleic and gamma-linolenic acid ([GLA](#)) [\[R\]](#).

36



Dodder Seed Extract

IMPACT2 / 5

EVIDENCE1 / 5

How to implement

Take 500-1000 mg of dodder seed extract daily, preferably with meals to aid absorption. This dosage can be taken as a single dose in the morning or split into two doses taken in the morning and evening. Continue this supplementation for at least a few months to observe potential benefits.

TYPICAL STARTING DOSE

500 mg

Description

Dodder seed extract is an herbal remedy used in traditional medicine for its potential to support kidney and reproductive health. It is sometimes used as a natural remedy for these purposes.

How it helps

Dodder Seed Extract contains anti-inflammatory properties that can help to soothe the skin and reduce redness and itching associated with Eczema. Over time, it could potentially help to heal and strengthen the skin's barrier, minimizing eczema flare-ups.

A rich source of quercetin, dodder seed extract (2 g/day) **improved moderate-to-severe eczema** in a 30-day [placebo-controlled trial of 42 people with eczema](#) [R].

37



Topical Fig Extract

IMPACT2 / 5

EVIDENCE1 / 5

How to implement

Apply a small amount of fig extract cream or gel directly to the affected area of the skin. Use a gentle, circular motion to massage it into the skin until fully absorbed. Repeat this application twice daily, in the morning and evening, for at least 4 weeks to see improvements.

Description

Fig extract is derived from figs and is used in skincare products for its potential moisturizing and skin-soothing properties, which can help improve skin hydration and reduce dryness.

How it helps

Topical Fig Extract supports skin hydration and reduces skin inflammation, key issues in eczema. Its antioxidative properties can also help to relieve the redness and itching characteristic of this condition.

In a [placebo-controlled trial of 45 children with eczema](#), applying fig extract on the skin 2x/day for 2 weeks was **as effective as hydrocortisone at improving itching and other symptoms** [R].

38

Evening Primrose Oil

IMPACT

1 / 5

EVIDENCE

3 / 5

How to implement

Take 500mg to 1000mg of evening primrose oil, in capsule form, once daily with a meal to ensure optimal absorption. This regimen is typically recommended for several months to evaluate its effectiveness for the specific condition being addressed.

Description

Evening primrose is a plant known for its seeds, which are a source of gamma-linolenic acid (GLA), an essential fatty acid. Some studies suggest that evening primrose oil, derived from these seeds, may help alleviate symptoms of conditions like premenstrual syndrome (PMS) and eczema, as well as support overall skin health.

Evening primrose (*Oenothera biennis*) is a flowering plant. Its name comes from the fact that its flowers close during the day and open when the sun sets [R].

[Evening primrose oil](#) comes from the plant’s seeds. It is rich in omega-6 fatty acids like [GLA](#). People use this oil to help with high triglycerides [R, R].

How it helps

Supplementation with evening primrose oil has shown mixed results in treating atopic eczema. Some trials demonstrated improvements in symptoms and fatty acid composition, while others found it ineffective compared to a placebo. Early meta-analyses suggested benefits, but criticism arose regarding bias and study inclusion. More recent reviews, including Cochrane, concluded that evening primrose oil may not be effective against eczema symptoms [R, R, R, R, R, R, R, R, R, R, R, R, R, R, R].

Evening primrose oil contains GLA, a fatty acid that our body uses to produce anti-inflammatory compounds that can help alleviate the inflammation and skin dryness associated with eczema.

39



Avoid Air Pollution

IMPACT

1 / 5

EVIDENCE

2 / 5

How to implement

Stay indoors on days when air quality indexes (AQI) indicate high pollution levels, which are often reported by weather services or government environmental agencies. **Install air purifiers** in your home, especially in bedrooms, to reduce indoor pollutants. Limit outdoor exercise when air pollution warnings are issued, opting for indoor activities instead.

Description

Avoiding air pollution by reducing exposure to pollutants in the environment is essential for respiratory and overall health. It can help lower the risk of respiratory diseases, cardiovascular conditions, and other health issues associated with poor air quality.

While city life is convenient in a lot of ways, it comes with some health hazards. Cars, factories, and other sources increase air [pollution](#) [R].

Air pollution plays a role in [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Lung disease
- Heart disease
- Diabetes
- Asthma
- Skin conditions

How it helps

Prenatal exposure to NO2 may increase the risk of eczema in children. However, exposure to air pollutants during childhood may not increase the risk [\[R\]](#), [\[R\]](#).

In adults, long-term exposure to PM2.5 and NO2 may increase the risk of eczema while SO2 and PM10 may increase the risk of exacerbations [\[R\]](#).

 PERSONALIZED TO YOUR GENES

Traffic-related air pollution may increase susceptibility to eczema more in people with your [AHR](#) gene variant [R].

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
AHR	rs2066853	GG	

40



Avoid Contact With Pollen

IMPACT

1 / 5

EVIDENCE

2 / 5

How to implement

Stay indoors during high pollen count days, usually during early morning or late afternoon. Close windows and use air purifiers to keep indoor air clean. Shower and change clothes after being outside to remove pollen.

Description

Avoiding exposure to pollen can help alleviate allergy symptoms such as sneezing, runny nose, and itchy eyes, promoting respiratory comfort and overall well-being, particularly for individuals with allergies and allergic conditions.

How it helps

Avoiding contact with pollen can benefit those with Eczema by reducing potential allergens that may trigger flare-ups, leading to itchy, inflamed skin. Less exposure means fewer irritations, thus helping manage Eczema symptoms.

Eczema can be triggered and worsened in response to airborne allergens like dust mites, **pollen**, and animal dander [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

41



Lactobacillus Paracasei

IMPACT1 / 5

EVIDENCE2 / 5

How to implement

Take a supplement containing Lactobacillus paracasei daily, with a dose of around 10 billion colony-forming units (CFUs). Consume the supplement with or without food, but consistently at the same time each day for at least 4 weeks to observe beneficial effects.

TYPICAL STARTING DOSE
10 billion CFU

Description

Lactobacillus paracasei is a beneficial probiotic strain that can support digestive health and contribute to a balanced gut microbiome. It may help improve gut function, enhance nutrient absorption, and bolster the immune system, promoting overall well-being.

[Lactobacillus paracasei](#) is a type of bacteria naturally found in the intestine. It is considered a [probiotic bacteria](#), which means “good” bacteria that has health benefits when taken in adequate amounts [\[R\]](#).

L. paracasei is used in the production of the following fermented foods [\[R\]](#):

- Yogurt
- Cheese
- Sauerkraut

It may help [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Improve gut and skin health
- Boost immunity
- Fight allergies

How it helps

In 7 placebo-controlled trials of 149 adults and 381 children with eczema, supplementation with different probiotic strains slightly improved skin inflammation [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

A study found that adding a diet with *L. paracasei* K71 to conventional treatments for adult atopic dermatitis reduced skin severity scores and topical therapeutic use, without evident effects on itchiness or quality of life [\[R\]](#).

Supplementing with a probiotic mixture of *L. paracasei* and *L. fermentum* improves atopic dermatitis severity and quality of life in children, showing persistent effects even after discontinuation [\[R\]](#).



PERSONALIZED TO YOUR GENES

The [MYC](#) gene helps make c-Myc, a protein that regulates the immune response. Increased c-Myc levels may overstimulate T cells and innate lymphoid cells — immune cells with a major role in inflammation and allergic reactions [[R](#), [R](#), [R](#), [R](#)].

Your genotype for [rs4410871](#) has been associated with higher eczema rates. It may increase c-Myc levels, leading to a dysregulated immune response and skin inflammation [[R](#), [R](#)].

[Probiotic](#) supplementation may reduce c-Myc levels [[R](#), [R](#), [R](#)].

>>> *To learn about other conditions associated with the MYC gene, check out the SelfDecode blog posts [here](#).*

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
MYC	rs4410871	TC	

42



Avoid Exposure to Molds

IMPACT1 / 5

EVIDENCE2 / 5

How to implement

Keep indoor humidity levels below 50% by using dehumidifiers or air conditioners, ensure proper ventilation in areas like bathrooms and kitchens, fix leaks promptly, and clean up any water damage within 24-48 hours to prevent mold growth. Regularly check and clean places where mold tends to accumulate, such as shower curtains, window sills, and refrigerator drip pans.

Description

[Molds](#) are tiny fungi that live all around us: in the soil and air, on food crops, and even on our skin. Some of them are beneficial while others can wreak havoc on our health. Inhaled mold may cause a range of respiratory symptoms, like infections, asthma, and coughing.

[Molds](#) are tiny fungi that live all around us: in the soil and air, on food crops, and even on our skin. Some of them are beneficial while others can wreak havoc on our health [\[R\]](#).

Inhaled mold may cause a range of respiratory symptoms, including [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Respiratory infections
- Reduced lung function
- Caugh
- Asthma worsening

Mycotoxins are the most dangerous aspect of **foodborne mold**. Exposure to higher amounts of these toxins can damage the organs and promote cancer growth [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

Exposure to molds can trigger allergic reactions and exacerbate eczema symptoms. Avoiding molds can lower the risk of such flare-ups.

Exposure to mold has been associated with the development and exacerbation of eczema, **especially in children**. Key findings from the research include:

- A study conducted in Shanghai, China, involving 13,335 preschool children, found robust associations and dose-response relationships between home dampness-related indicators (such as visible mold spots, visible damp stains, damp bed clothing, water damage, window pane condensation, and moldy odor) and increased risk of eczema both during a lifetime and in the last 12 months before the questionnaire. This suggests that dampness-related exposures in residences could be risk factors for childhood eczema [\[R\]](#).
- Fungal allergens, including molds, are widely present in the environment and have been identified as causes of asthma, rhinitis, conjunctivitis, and extrinsic allergic alveolitis through immunological mechanisms. The possibility that molds can induce eczema, although speculative, has been suggested, indicating a potential link between mold exposure and eczema [\[R\]](#).

These studies highlight the potential role of mold exposure in the development and exacerbation of eczema, particularly in damp environments and among infants. Reducing exposure to mold and managing dampness in living environments could be beneficial in preventing and managing eczema.

43



Topical Niacinamide

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Apply a topical niacinamide product, containing 2-5% niacinamide, to clean, dry skin once or twice daily. For best results, use consistently as part of your morning and/or evening skincare routine.

Description

Niacinamide, a form of vitamin B3, is used topically for its ability to improve skin texture, reduce redness, and minimize the appearance of pores. It is a versatile skincare ingredient suitable for various skin types and conditions.

[Niacinamide](#) is a form of [vitamin B3](#) (niacin). Vitamin B3 supports your nerves, skin, gut, and more [\[R\]](#).

Niacinamide can be applied to the skin to potentially help with [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Acne
- Wrinkles
- Dark patches

How it helps

Topical niacinamide increases the production of ceramides, which are lipids that maintain and strengthen the skin's protective barrier. By doing this, niacinamide helps to keep the skin moisturized and reduces symptoms in conditions like eczema where the skin's barrier is compromised.

[Niacinamide](#) 2% cream applied 2x/day for 2 months **reduced skin water loss and improved skin hydration** in a [controlled trial of 28 patients with eczema](#) [\[R\]](#).

44

Bifidobacterium Breve

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a Bifidobacterium breve supplement according to the product's specific instructions, usually 1-2 capsules daily with water, ideally before meals for better absorption. This regimen should be followed for at least 2-4 weeks to start observing benefits.

TYPICAL STARTING DOSE

10 billion CFU

Description

Bifidobacterium breve is another probiotic strain that can contribute to digestive health and support a balanced gut microbiome. People use *B. breve* as a supplement to improve skin health and combat allergies and infection.

[Bifidobacterium breve](#) is a probiotic species found in human breast milk and the gastrointestinal tracts of infant and adult humans. As an individual ages, the total population of B. breve within their gut decreases [\[R\]](#).

People use *B. breve* as a supplement to improve skin health and combat allergies and infections [\[R, R, R\]](#).

How it helps

Taking Bifidobacterium Breve can significantly improve eczema conditions as it aids in balancing gut flora and reducing inflammation, both of which are essential for healthy skin functioning. These probiotic bacteria can thus help control eczema symptoms like redness and itching.

A synbiotic with *B. breve* M-16V and fructo-oligosaccharides taken for 12 weeks modulated the intestinal microbiota but had no effect on atopic dermatitis symptoms in a placebo-controlled trial of 90 infants with this condition. In a placebo-controlled trial of 75 children with atopic dermatitis, supplementation with this synbiotic for 12 weeks prevented asthma-like symptoms. A probiotic with *B. breve* BR03 and *Lactobacillus salivarius* LS01 taken for 12 weeks improved clinical parameters and immune alterations in a placebo-controlled trial of 48 patients with atopic dermatitis [\[R, R, R\]](#).

PERSONALIZED TO YOUR GENES

The [MYC](#) gene helps make c-Myc, a protein that regulates the immune response. Increased c-Myc levels may overstimulate T cells and innate lymphoid cells — immune cells with a major role in inflammation and allergic reactions [\[R, R, R, R\]](#).

Your genotype for [rs4410871](#) has been associated with higher eczema rates. It may increase c-Myc levels, leading to a dysregulated immune response and skin inflammation [\[R, R\]](#).

[Probiotic](#) supplementation may reduce c-Myc levels [\[R, R, R\]](#).

>>> To learn about other conditions associated with the MYC gene, check out the SelfDecode blog posts [here](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
MYC	rs4410871	TC	

45



Avoid Alkaline And Detergent Soaps

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Use only gentle, pH-balanced soaps for washing your skin. This means avoiding soaps labeled as 'alkaline' or containing strong detergents. Check the product labels before purchasing. This change should be applied to your daily hygiene routine indefinitely.

Description

Avoiding alkaline and detergent soaps can help maintain the natural acidity of the skin, which is crucial for its protective barrier function. This can reduce the risk of dryness, irritation, and disrupted skin health.

How it helps

Alkaline and detergent soaps can strip the skin of its natural oils, causing it to become dry and potentially exacerbating eczema symptoms. By avoiding these soaps, you can help to maintain your skin’s natural moisture barrier and reduce irritation caused by eczema.

According to Mayo Clinic, things that can worsen eczema include soaps and detergents [\[R\]](#).

46



Progressive Muscle Relaxation

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Set aside at least 10-15 minutes daily in a quiet, comfortable spot where you won't be disturbed. Start by tensing the muscles in your feet for 5 seconds, then relax for 30 seconds, and progressively work your way up through the major muscle groups of your body, tensing then relaxing each for 5 and 30 seconds respectively.

TYPICAL STARTING DOSE

10 minutes

Description

Progressive Muscle Relaxation is a relaxation technique involving the systematic tensing and releasing of muscle groups to reduce muscle tension, stress, and anxiety. Regular practice can lead to improved physical and mental relaxation.

Progressive muscle relaxation is a relaxation technique focused on releasing muscle tension. In this technique, you focus on tensing and relaxing different parts of your body, one after the other, to relieve stress [R](#), [R](#)].

It is common to start with the toes and slowly work your way up to the neck and head. Try to focus on a single muscle group at a time (for example, the calf muscles). Tense these muscles for 5-10 seconds, then relax for 20-30 seconds before moving on to the next muscle group [R](#), [R](#)].

How it helps

Progressive Muscle Relaxation (PMR) can help manage eczema by reducing the stress that often exacerbates this skin condition. By actively relaxing your muscles, you can lower your body's stress response, potentially resulting in less flare-ups of eczema.

In a non-placebo-controlled trial of 25 patients with atopic dermatitis, one month of progressive muscle relaxation therapy reduced state anxiety, sleep loss, and itch [R](#)].

47



Histidine

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take 500-1000 mg of histidine supplement per day, ideally with a meal. It is best to start with a lower dose, such as 500 mg, to assess tolerance and then adjust as needed up to 1000 mg. Consistent daily intake for at least 4 to 8 weeks may be necessary to notice benefits.

TYPICAL STARTING DOSE

500 mg

Description

Histidine is an essential amino acid that plays a role in protein synthesis and the formation of histamine. It is important for overall health and is found in various protein-rich foods.

A histidine supplement of up to 14 mg/kg/d can be taken to meet the needs not achieved through diet.

You can also increase your dietary histidine intake. Histidine is found in protein-rich foods such as meat, chicken, fish, beans, oats, and wheat. It's especially high in the Japanese food ingredient dashi or dried bonito, often used for soup stock [R].

How it helps

Atopic dermatitis (AD) is a common chronic skin condition linked to filaggrin deficiency. In vitro studies showed that l-histidine improved filaggrin formation and skin barrier function. A clinical study with adult AD patients found that daily oral l-histidine significantly reduced disease severity by 34% (physician assessment) and 39% (patient self-assessment) after 4 weeks, comparable to mid-potency topical corticosteroids but without their side effects. [R]

48

Mindfulness

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Set aside 5-10 minutes each day to practice mindfulness meditation. Find a quiet place, assume a comfortable seated position, close your eyes, focus on your breathing, and observe your thoughts and sensations without judgment.

TYPICAL STARTING DOSE

30 minutes

Description

Mindfulness involves paying focused and non-judgmental attention to the present moment. It can reduce stress, improve emotional regulation, and enhance overall mental clarity and well-being.

Mindfulness is the practice of being aware of the present moment. When practicing mindfulness, a person acknowledges their thoughts, feelings, and sensations without any judgment [R].

Mindfulness and other types of [meditation](#) may improve [R]:

- Weight and anxiety
- Low mood
- Sleep disturbances
- Pain
- High blood pressure

How it helps

Practicing mindfulness can help manage eczema by reducing stress and anxiety levels, which are known triggers for eczema flare-ups. Since eczema is often exacerbated by emotional stress, mindfulness exercises may reduce the frequency and severity of your symptoms.

In a trial with 107 adults having atopic dermatitis, online mindfulness and self-compassion training significantly improved their Dermatology Life Quality Index (DLQI) scores and eczema severity at 13 weeks, demonstrating its effectiveness as a treatment option [R].

49

Topical Black Seed Oil

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Apply a thin layer of black seed oil to the affected area of the skin. Gently massage it in until fully absorbed. Repeat this application twice daily, in the morning and at night before bed, for a period of 1 to 2 months to observe beneficial effects.

Description

Black seed oil is a topical application derived from the seeds of the *Nigella sativa* plant. It contains the compound thymoquinone and is used for its potential anti-inflammatory and antioxidant properties, making it beneficial for skin health and wound healing.

[Black seed](#) (black cumin) and its oil are used in cooking and traditional medicine [\[R\]](#).

People use black seed for [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Asthma
- High blood sugar
- High blood pressure
- Allergies
- Joint pain

How it helps

In a placebo-controlled trial of 60 people with hand eczema, topical application of black seed oil for 4 weeks improved the symptoms as effectively as the corticosteroid betamethasone. A gel with 5% black seed oil reduced the severity and delayed the onset of radiation dermatitis in a placebo-controlled trial of 62 breast cancer patients [\[R\]](#), [\[R\]](#).

Topical black seed oil may help by reducing skin inflammation and irritation. Plus, its moisturizing properties can help protect the skin, ease dryness, and reduce the severity of flares.

PERSONALIZED TO YOUR GENES

The [MYC](#) gene helps make c-Myc, a protein that regulates the immune response. Increased c-Myc levels may overstimulate T cells and innate lymphoid cells — immune cells with a major role in inflammation and allergic reactions [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Your genotype for [rs4410871](#) has been associated with higher eczema rates. It may increase c-Myc levels, leading to a dysregulated immune response and skin inflammation [\[R\]](#), [\[R\]](#).

An active compound from [black seed oil](#) reduced c-Myc levels in mice [\[R\]](#).

>>> *To learn about other conditions associated with the MYC gene, check out the SelfDecode blog posts [here](#).*

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
MYC	rs4410871	TC	

50

Lactobacillus Fermentum

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a supplement containing Lactobacillus fermentum, aiming for dosages around 10 billion CFU (colony forming units). Consume it daily, preferably with a meal, to ensure proper absorption. Continue this routine for at least 4 weeks to observe benefits.

TYPICAL STARTING DOSE

10 billion CFU

Description

Lactobacillus fermentum is a beneficial probiotic strain that can support digestive health and contribute to a balanced gut microbiome. It may help improve gut function, enhance nutrient absorption, and bolster the immune system, promoting overall well-being.

How it helps

Lactobacillus fermentum, a probiotic, can help soothe Eczema by reinforcing the skin's natural barrier and reducing inflammation. As eczema is often linked with an imbalanced gut microbiome, supplementing with probiotics can help restore this balance, potentially reducing eczema symptoms.

In 7 placebo-controlled trials of 149 adults and 381 children with eczema, supplementation with different probiotic strains **slightly improved skin inflammation** [R, R, R, R, R, R, R].

Supplementing with a probiotic mixture of Lactobacillus paracasei and Lactobacillus fermentum improves atopic dermatitis severity and quality of life in children, showing persistent effects even after discontinuation [R].

PERSONALIZED TO YOUR GENES

The MYC gene helps make c-Myc, a protein that regulates the immune response. Increased c-Myc levels may overstimulate T cells and innate lymphoid cells — immune cells with a major role in inflammation and allergic reactions [R, R, R, R].

Your genotype for rs4410871 has been associated with higher eczema rates. It may increase c-Myc levels, leading to a dysregulated immune response and skin inflammation [R, R].

Probiotic supplementation may reduce c-Myc levels [R, R, R].

>>> To learn about other conditions associated with the MYC gene, check out the SelfDecode blog posts [here](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
MYC	rs4410871	TC	

51



Sea Buckthorn

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 500mg of sea buckthorn oil capsules twice daily with meals for at least 3 months to see beneficial effects on skin hydration and elasticity.

Description

Sea buckthorn is a deciduous shrub native to Europe and Asia, and its fruits are rich in vitamins, particularly vitamin C, and antioxidants. It is used for its potential health benefits, including immune support and skin health.

How it helps

In a placebo-controlled trial of 49 patients with atopic dermatitis, supplementation with sea buckthorn pulp and seed oil (5 g/day) for 4 months improved the symptoms [R].

Sea buckthorn is high in omega-7 and other nutrients, which can help repair and rejuvenate skin cells. Topical use can reduce inflammation and skin dryness.

52



Topical Boswellia

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Apply a topical boswellia cream or gel with a concentration of 1-3% boswellic acids to the affected area. Use this topical treatment 2-3 times daily, gently massaging it into the skin until fully absorbed. Continue this regimen for at least 8 weeks to observe potential benefits.

Description

Boswellia extract, derived from the resin of the Boswellia serrata tree, contains boswellic acids and is applied topically for its anti-inflammatory properties. It is often used to relieve joint pain associated with conditions like osteoarthritis.

How it helps

A topical Boswellia supplement helps the condition of eczema by reducing inflammation and redness on the skin. This results from the active ingredients in Boswellia known for their anti-inflammatory and anti-bacterial properties.

A cream with 2% [Boswellia](#) extract **improved the symptoms of itching and redness in 60% of patients** with eczema in a placebo-controlled trial of 59 participants [R].

53



Whey Protein

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Mix one scoop (approximately 25-30 grams) of whey protein powder with 8-12 ounces of water, milk, or your preferred beverage. Consume this drink 1-2 times per day, ideally post-workout or as a meal replacement.

TYPICAL STARTING DOSE

25 g

Description

Whey protein is a complete protein derived from milk during cheese production. It is rich in essential amino acids and is used to support muscle recovery, promote muscle growth, and provide a convenient protein source for athletes and fitness enthusiasts.

Whey is the liquid that separates from milk when cheese is made. [Whey protein](#) is full of amino acids (protein building blocks) that the body needs [\[R\]](#), [\[R\]](#).

Whey protein usually comes in the form of a powder that can be added to soft foods and drinks. People often use it to help with [\[R\]](#), [\[R\]](#):

- Athletic performance
- Nutritional deficiencies

How it helps

In a [placebo-controlled trial of 50 patients with contact dermatitis](#), supplementation with whey protein (30 g/day) for 4 weeks **improved the symptoms (measured as EASI, DLQI, and subjective total improvement)** [\[R\]](#).

The combination of whey powder and dodder extract **decreased pruritus and sleep disturbances while increasing skin moisture, elasticity, and barrier function** in a 30-day [placebo-controlled trial of 52 patients with atopic dermatitis](#) [\[R\]](#).

54

Omega-3 (Fish Oil)

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 1-2 g of omega-3 (fish oil) supplement daily, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

2000 mg

Description

Omega-3 fatty acids are essential fats found in fatty fish like salmon, flaxseeds, and walnuts. They are known for their potential cardiovascular and brain health benefits, including reducing the risk of heart disease and supporting cognitive function.

[Omega-3 fatty acids](#) are some of the healthiest fats we can eat. They help lower inflammation and protect the heart, brain, and eyes. Our bodies produce less omega-3s than we need for optimal health, so it's important to get enough through food or supplements [\[R, R, R\]](#).

There are three major types of omega-3s: ALA, EPA, and DHA [\[R, R\]](#).

Fatty fish are rich in EPA and DHA. They include [\[R\]](#):

- Salmon
- Tuna
- Herring
- Sardines

For optimal protection, try to get at least **two servings of fatty fish per week**. Fish oil supplements are available for those who don't eat fish regularly [\[R\]](#).

How it helps

In a trial with 53 atopic eczema patients, those who received 5.4g of DHA daily for 8 weeks showed significant clinical improvement compared to the control group. DHA reduced SCORAD scores, while the control treatment did not. Additionally, DHA reduced IgE synthesis in PBMC mediated by anti-CD40/interleukin 4, which was not observed in the control group [\[R\]](#).

PERSONALIZED TO YOUR GENES

The [STAT6](#) gene codes for a protein that stimulates immune responses against parasitic infections. However, when excessive, STAT6 activity may contribute to eczema and other allergic conditions [\[R, R\]](#).

Your genotype for [rs1059513](#) may increase STAT6 activity. It's been associated with higher eczema rates [\[R, R, R, R\]](#).

Omega-3 fatty acids from [fish oil](#) reduced STAT6 activity in test tubes [\[R, R\]](#).

>>> To learn about other conditions associated with the STAT6 gene, check out the SelfDecode blog posts [here](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
STAT6	rs1059513	TT	

55



Message

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Schedule a massage session, ideally with a licensed therapist, for 30-60 minutes, once a week. Choose a type of massage that suits your specific needs, such as Swedish for relaxation or deep tissue for muscle tension.

TYPICAL STARTING DOSE

30 minutes

Description

Massage therapy involves the manipulation of soft tissues to relax muscles, reduce stress, and alleviate pain. It can improve circulation, promote relaxation, and provide relief from various physical and mental health concerns.

If you’ve ever had a professional [massage](#), then you probably know how much good it can do. Massages may help with [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Anxiety
- Pain
- Fatigue

Reflexology is a type of massage. It involves applying pressure to specific parts of your feet or hands. In theory, by pressing on these areas, you can relieve tension from other parts of the body [\[R\]](#).

Acupressure is a similar technique, in which pressure points are used to help with stress and pain [\[R\]](#), [\[R\]](#).

How it helps

Massage can help with eczema by reducing stress, a known trigger for eczema flare-ups. Additionally, certain oils used during a massage can provide moisture and reduce skin irritation.

In [2 controlled trials of children with eczema](#), [massage](#) improved symptoms such as redness, itching, and scaling. Because the use of **essential oils provided no additional effects**, physical contact is believed to account for the benefits of massage [\[R\]](#), [\[R\]](#).

56



Oyster Mushroom

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Consume 600 mg to 1.2 grams of oyster mushroom extract in supplement form daily, ideally divided into two or three doses. Continue this routine for 1 to 2 months to evaluate its effects on your health.

TYPICAL STARTING DOSE

600 mg

Description

Oyster mushrooms (*pleurotus ostreatus*) are a popular and edible species of mushroom grown all over the world, rich in protein, fiber, B-vitamins, vitamin D, potassium, iron, and selenium. They have been used in Chinese medicine for their potential benefits toward immune function. They are eaten today for being nutritious and a source of antioxidants.

How it helps

In an uncontrolled trial of 80 patients with atopic dermatitis, applying a cream with oyster mushroom beta-glucans reduced the number of days with eczema exacerbation, its severity, and symptoms such as itch [R].

Oyster mushrooms contain anti-inflammatory and antioxidant polysaccharides, which can lessen the intensity of eczema symptoms. Also, these mushrooms can boost your immune system.

57



Topical Vitamin B12

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Apply a cream containing vitamin B12 to the affected area of skin once daily, ideally at bedtime, to allow for overnight absorption. Continuous application for at least 4 weeks is recommended to see improvements, especially for conditions like eczema.

Description

Topical vitamin B12 formulations are used for their potential to alleviate symptoms of skin conditions like eczema and psoriasis. Vitamin B12 is a water-soluble vitamin, and in topical applications, it is usually synthesized or derived from natural sources.

How it helps

Topical Vitamin B12 can help with eczema as it reduces inflammation, a key issue in this skin condition. Applying it on your skin can soothe irritation and aid healing, thereby reducing discomfort and visible signs of eczema.

In 2 placebo-controlled trials of 70 patients with atopic dermatitis, applying topical vitamin B12 for 4-8 weeks **improved symptoms such as skin rash, redness, and itching** [\[R\]](#), [\[R\]](#).

A cream with vitamin B12 **improved the symptoms more effectively than a glycerol-petrolatum-based emollient cream** in a 4-month non-placebo-controlled trial of 22 patients with mild atopic dermatitis [\[R\]](#).

58



Poria

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 500mg of Poria supplement orally once daily, with or without food. It is typically consumed in capsule form for ease of dosage and can be continued long-term on a daily basis.

Description

Poria, also known as Poria cocos, is a fungus that grows on the roots of certain trees, primarily in East Asia. It has been used traditionally in Chinese medicine for its potential to promote diuresis (increased urine production), support the spleen, digestive health, and improve sleep.

How it helps

In a placebo-controlled trial of 20 healthy volunteers, applying 50 mcL of Poria at 3 different concentrations (0.1%, 1%, and 10%) reduced inflammation when applied before, but not after irritation with sodium lauryl sulfate [\[R\]](#).

Poria has anti-inflammatory properties that may help reduce skin inflammation. It also has immune-boosting effects that could potentially strengthen your body's ability to combat the underlying immune dysregulation associated with this condition.

59



Intermittent Fasting

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Limit your daily eating to a specific window of time, typically within an 8-hour period such as from 12 pm to 8 pm, and fast for the remaining 16 hours of the day. Repeat this daily or for at least 3-4 days per week.

Description

Intermittent fasting is an eating pattern that involves cycling between periods of fasting and eating. It may help with weight management, improve metabolic health, and offer potential benefits for certain health conditions when done under proper guidance.

[Intermittent fasting](#) (IF) is a pattern of eating that alternates between periods of eating and fasting. The most popular IF method is called the 16/8 method, where you fast for 16 hours and eat during an 8-hour window.

People mainly practice IF to lose weight. Besides benefits related to weight reduction, IF may help lower the risk of [\[R\]](#):

- Alzheimer's disease
- Joint pain
- Asthma
- Multiple sclerosis
- Stroke

Some types of intermittent fasting, such as Ramadan fasting, are also practiced for religious reasons.

How it helps

In a non-placebo-controlled trial of 20 patients with eczema, intermittent fasting (5 sessions) improved itching intensity, disease severity, and quality of life [\[R\]](#).

Intermittent fasting can aid in reducing inflammation, which is a primary cause of eczema flare-ups.

60



Avoid Exposure to Parabens

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Check the labels of personal care products such as lotions, shampoos, and cosmetics. If they list methylparaben, propylparaben, butylparaben, or ethylparaben among the ingredients, choose alternative products that are paraben-free. Aim to do this consistently for all personal care purchases.

Description

Avoiding exposure to parabens involves avoiding personal care and cosmetic products that contain these synthetic preservatives. This is done to minimize the potential risk of skin irritation and to reduce the likelihood of exposure to compounds that may disrupt hormone regulation.

How it helps

A study of 1458 Korean children linked certain urinary chemicals (phthalates, BPA, parabens) to atopic dermatitis and allergic rhinitis, especially in preschoolers [\[R\]](#).

People with eczema can have skin irritation or allergic reactions to parabens, which can cause or worsen eczema symptoms.

61



Avoid PFAS Exposure

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

To avoid PFAS exposure, choose products that are labeled PFAS-free, especially when selecting cookware, cosmetics, and clothing. Reduce the consumption of packaged and fast foods since the packaging often contains PFAS. Use a water filter that is certified to remove PFAS compounds for your drinking and cooking water.

Description

Avoiding per- and polyfluoroalkyl substances (PFAS) exposure means avoiding products and environments contaminated with these chemicals, which can help prevent potential health issues like hormonal disruption and adverse effects on liver and immune function.

How it helps

A study of 687 children associated prenatal exposure to PFOA, PFDA, PFDoA, and PFHxS with a 2.1-fold increase in atopic dermatitis risk [\[R\]](#).

PFAS can disrupt the immune system and exacerbate eczema symptoms.

62



Avoid Monosodium Glutamate (MSG)

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Carefully check food labels and ingredient lists of packaged foods to avoid products containing monosodium glutamate (MSG). When dining out, request meals without added MSG. This practice should be consistent for all meals and snacks.

Description

Avoiding excessive consumption of MSG, a common food additive, can help prevent potential side effects like headaches and allergic reactions in some individuals. Moderation in MSG intake promotes better tolerance and overall food enjoyment.

How it helps

Avoiding monosodium glutamate (MSG) can help manage eczema as some individuals report experiencing skin rashes and flare-ups after consuming food or drinks containing MSG. This possible reaction is due to MSG's potential to trigger inflammation in sensitive individuals.

Restricting the intake of the additive monosodium [glutamate](#) **improved eczema symptoms and reduced the levels of a protein released during food allergic reactions (ECP)** in 2 controlled trials of 50 adults and 13 children [\[R, R\]](#).

63

Lactobacillus Sakei

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a supplement containing Lactobacillus sakei daily, according to the manufacturer's instructions on dosage. Most supplements suggest one capsule per day, either with a meal or on an empty stomach. Make sure to check the product label for specific recommendations. Continue for at least one to two months to observe benefits.

TYPICAL STARTING DOSE

10 billion CFU

Description

Lactobacillus sakei is a beneficial probiotic strain that can support digestive health and contribute to a balanced gut microbiome. It may help improve gut function, enhance nutrient absorption, and bolster the immune system, promoting overall well-being.

How it helps

Lactobacillus Sakei is a probiotic that helps restore the balance of good bacteria in your gut. This rebalancing can aid in reducing inflammation in your body, which could in turn help alleviate eczema symptoms.

In 7 placebo-controlled trials of 149 adults and 381 children with eczema, supplementation with different probiotic strains **slightly improved skin inflammation** [R, R, R, R, R, R, R].

A trial involving children aged 2 to 10 years with AEDS found that daily supplementation with Lactobacillus sakei KCTC 10755BP for 12 weeks resulted in a significant improvement in symptoms and serum chemokine levels compared to placebo treatment. There was a 31% improvement in mean disease activity with probiotic use compared to a 13% improvement with placebo use [R].

PERSONALIZED TO YOUR GENES

The [MYC](#) gene helps make c-Myc, a protein that regulates the immune response. Increased c-Myc levels may overstimulate T cells and innate lymphoid cells — immune cells with a major role in inflammation and allergic reactions [R, R, R, R].

Your genotype for [rs4410871](#) has been associated with higher eczema rates. It may increase c-Myc levels, leading to a dysregulated immune response and skin inflammation [R, R].

[Probiotic](#) supplementation may reduce c-Myc levels [R, R, R].

>>> To learn about other conditions associated with the MYC gene, check out the SelfDecode blog posts [here](#).

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
MYC	rs4410871	TC	

64



Vitamin E

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 200 IU of Vitamin E daily as a supplement, preferably with a meal that contains fat to enhance absorption.

TYPICAL STARTING DOSE

200 iu

Description

Vitamin E is a fat-soluble antioxidant found in various foods, such as nuts and seeds. It is known for its ability to protect cells from oxidative damage, support immune function, and may play a role in skin health. Vitamin E supplements are used to bolster antioxidant defenses and may be beneficial for conditions related to oxidative stress.

[Vitamin E](#) is an antioxidant important for the immune system and for heart health [\[R\]](#).

Plant-based foods have the most vitamin E. These include [\[R\]](#):

- Wheat germ
- Sunflower seeds
- Almonds
- Plant oils

Adults need about **15 mg** of vitamin E per day [\[R\]](#).

How it helps

Vitamin E is an antioxidant that reduces inflammatory responses in the body, which may help alleviate some of the redness, itching, and swelling associated with eczema.

According to the American Academy of Dermatology, “there is inconsistent to no evidence to recommend the use of vitamin E for the treatment of AD” [\[R\]](#).

In [3 placebo-controlled trials of 183 people with eczema](#), supplementation with high doses of [vitamin E](#) (400-600 IU/day) for 2-8 months **improved the symptoms and quality of life** [\[R, R, R\]](#).

Please note: *While dietary vitamin E is generally considered safe, vitamin E supplements have been linked to prostate cancer. They may also not be the best option for pregnant people. Those who have heart disease, bleeding disorders, or other conditions may also need to avoid them. Consult your doctor before taking vitamin E supplements* [\[R\]](#).



PERSONALIZED TO YOUR GENES

The [TSLP](#) gene helps make a protein that activates Th2 cells. Eczema is considered a [Th2-dominant](#) condition, since Th2 cells stimulate [histamine](#) release, [IgE](#) antibody production, and other components of allergic inflammation [[R](#), [R](#), [R](#)].

Your genotype for [rs1837253](#) may stimulate Th2 cells by increasing TSLP activity. It correlates with more severe allergic inflammation and higher odds of eczema [[R](#), [R](#), [R](#)].

[Vitamin E](#) reduced TSLP activity in animal studies [[R](#), [R](#), [R](#), [R](#)].

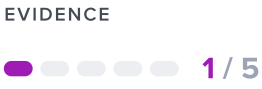
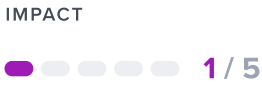
>>> To learn about other conditions associated with the TSLP gene, check out the SelfDecode blog posts [here](#).

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
TSLP	rs1837253	CC	



Topical Dwarf Elder



How to implement

Apply a cream or gel containing dwarf elder extract directly to the affected area of the skin. Use a thin layer and gently massage it in until absorbed. Repeat this process 2-3 times daily for up to 4 weeks or as directed by the product's instructions.

Description

Dwarf elder is a plant-derived topical application used for its anti-inflammatory and skin-soothing properties. It is applied to the skin to alleviate conditions like rashes and minor irritations.

How it helps

Topical Dwarf Elder can assist in treating Eczema by reducing inflammation and encouraging skin healing due to its anti-inflammatory properties. It also contains flavonoids and tannins that have antioxidant effects which can protect the skin.

In a [placebo-controlled trial on 62 people with eczema caused by contact with beetles](#), applying dwarf elder extract **in combination with hydrocortisone reduced burning and inflammation better than hydrocortisone alone** [[R](#)].

66

Lactobacillus Acidophilus

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a probiotic supplement containing Lactobacillus acidophilus. Look for products that offer around 10 billion CFUs (colony-forming units) and take it once daily, preferably on an empty stomach, either first thing in the morning or right before bed.

TYPICAL STARTING DOSE
10 billion CFU

Description

Lactobacillus acidophilus is a [probiotic](#) bacterium that has been traditionally and widely used in the dairy industry to make yogurt [\[R\]](#).

More recently, *L. acidophilus* has been used as a probiotic. People take it to help with [\[R, R, R, R\]](#):

- High cholesterol
- Gut diseases
- Allergies
- Vaginal infections

How it helps

A probiotic with *L. acidophilus* may enhance the effectiveness of conventional treatment for eczema more in people with certain gene variants [\[R\]](#).

PERSONALIZED TO YOUR GENES

A probiotic with *L. acidophilus* may enhance the effectiveness of conventional treatment for eczema more in people with your [CD14](#) gene variant [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
NDUFA2	rs2569190	GG	

How to implement

Description

How it helps

[SKIP TO NEXT SECTION](#) 

68



DHA (Omega-3)

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take an omega-3 supplement containing DHA at a dosage of 200-500 mg daily, preferable with a meal to improve absorption. It's recommended to continue this supplementation as part of your daily regimen to support heart, brain, and joint health.

TYPICAL STARTING DOSE

200 mg

Description

DHA is an omega-3 fatty acid found in fatty fish and algae-based supplements. It is essential for brain health and has been associated with cognitive function, cardiovascular health, and reducing inflammation in the body.

An **EPA/DHA supplement** can be taken to help meet omega-3 fatty acid needs not achieved through diet. Supplement amounts are generally 250-500mg/d though there are no current official recommendations other than for ALA.

How it helps

Omega-3 (DHA) supplements help treat eczema by reducing inflammation and skin dryness, key characteristics of this condition. They aid in maintaining a healthy skin barrier, thus limiting environmental triggers that can lead to eczema flares.

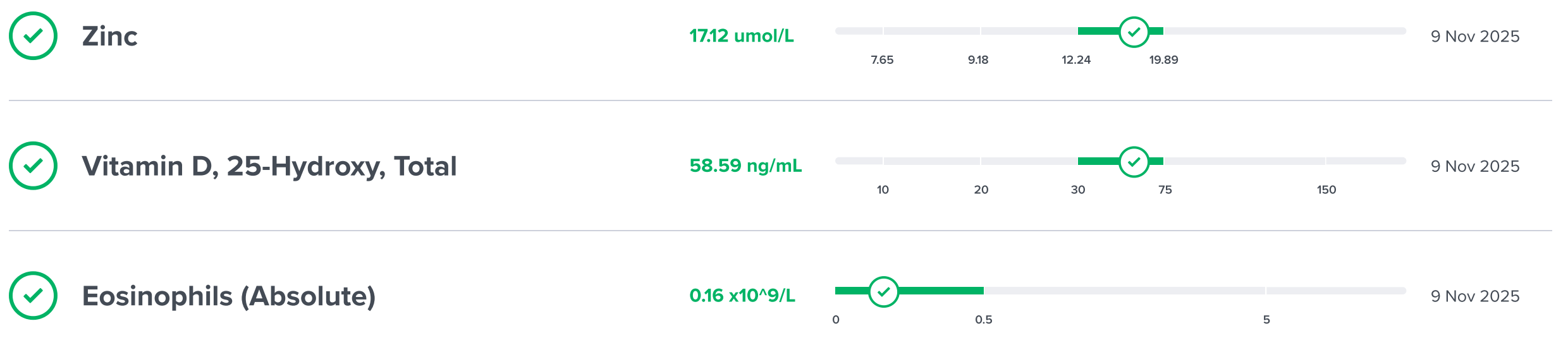
Genetically determined higher omega-3 levels were associated with decreased risk of allergic diseases like atopic dermatitis (AD), allergic conjunctivitis (AC), and allergic urticaria (AU). Omega-6 and DHA levels are also correlated with reduced risk of AC. Conversely, the omega-6:3 ratio was linked to an increased risk of AD and AC. Adjusted multivariable analysis confirmed these associations [\[R\]](#).

Remember, your genes only tell one important part of your health story!

Now that you've seen your DNA-based results for this health topic, let's take a look at other contributing factors.

Your lab results are impacted by the combined effect of your genes, environment and lifestyle.

Lab tests will give you the best picture of your current health status, while your genes provide insight into your health predispositions and which recommendations are best for you.



Your Lifestyle Assessments

Ever heard of the term Nature vs. Nurture?

The thing is, both DNA and environment play a role in determining your health risks. The following assessments shows how much of an impact your lifestyle, environment and medical history are having on your health risks.

LIFESTYLE

You have a **reduced risk** of eczema based on the answers you provided.

Your Lifestyle Risk

LowDecreasedAverageIncreasedHigh

Factors impacting your risk:

What is your age?	Increasing Risk	!
41		
Do you have a parent or sibling who has ever suffered from eczema?	Increasing Risk	!
Yes		
Have you ever been diagnosed with asthma?	Decreasing Risk	✓
No		
Do you smoke tobacco?	Decreasing Risk	✓
No, never		
Did your mother smoke while pregnant with you?	Decreasing Risk	✓
No		
Have you ever been diagnosed with allergic rhinitis (hay fever)?	Decreasing Risk	✓
No		
Did your mother have an infection while pregnant with you?	Decreasing Risk	✓
No		
Do you have a parent or sibling who has ever been diagnosed with allergic rhinitis (hay fever)?	Decreasing Risk	✓
No		
Do you have a parent or sibling who has ever been diagnosed with asthma?	Decreasing Risk	✓
No		
Your BMI:	Decreasing Risk	✓
22.77		
What is your sex?	Decreasing Risk	✓
Male		
What is your height?	No impact	—
165 cm		

What is your current weight?

62.0 kg

No impact 