

Rosacea

DNA Health Report

REPORT CATEGORY —



Sample Client

Report date: 15 January 2026

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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

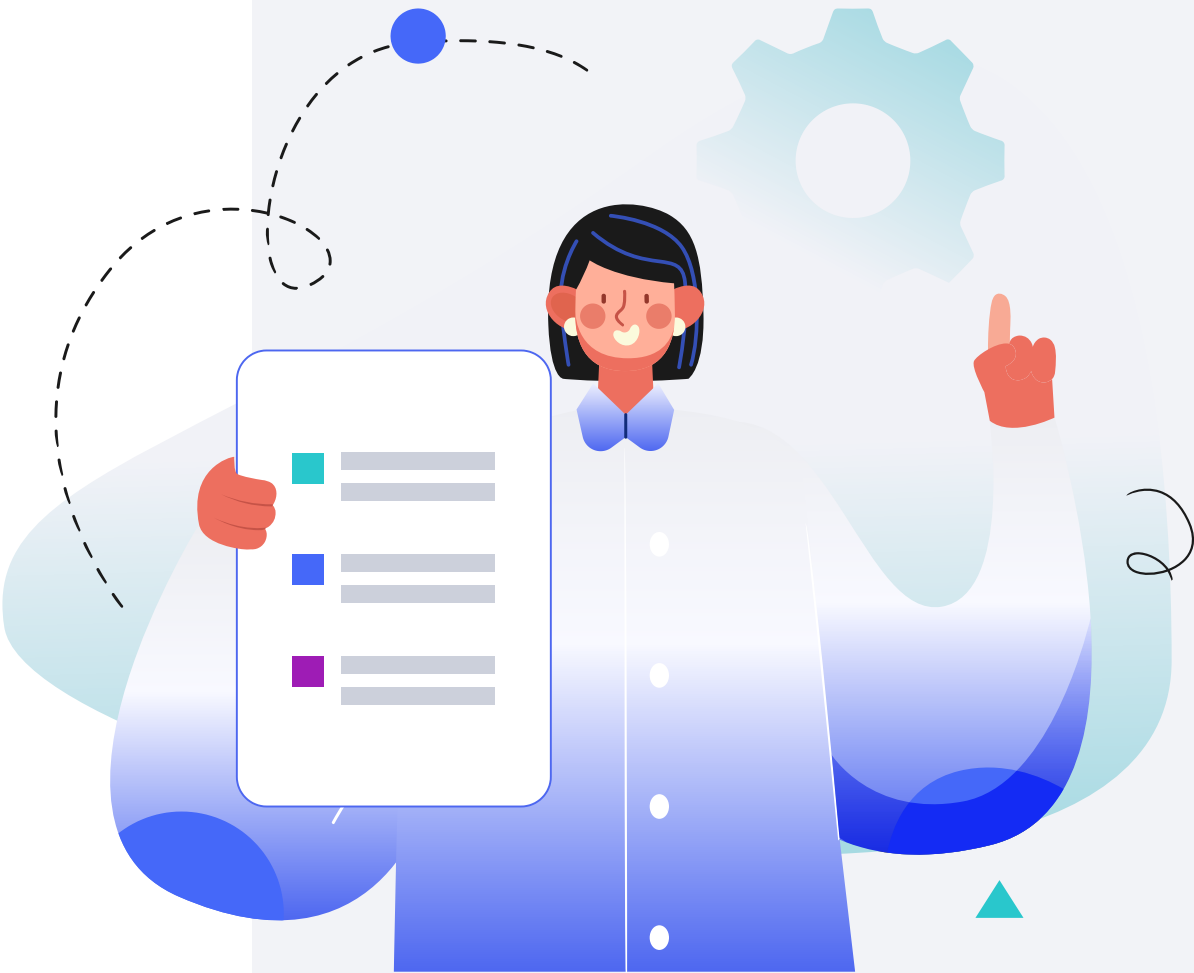
Male

HEIGHT

5ft 5" 165cm

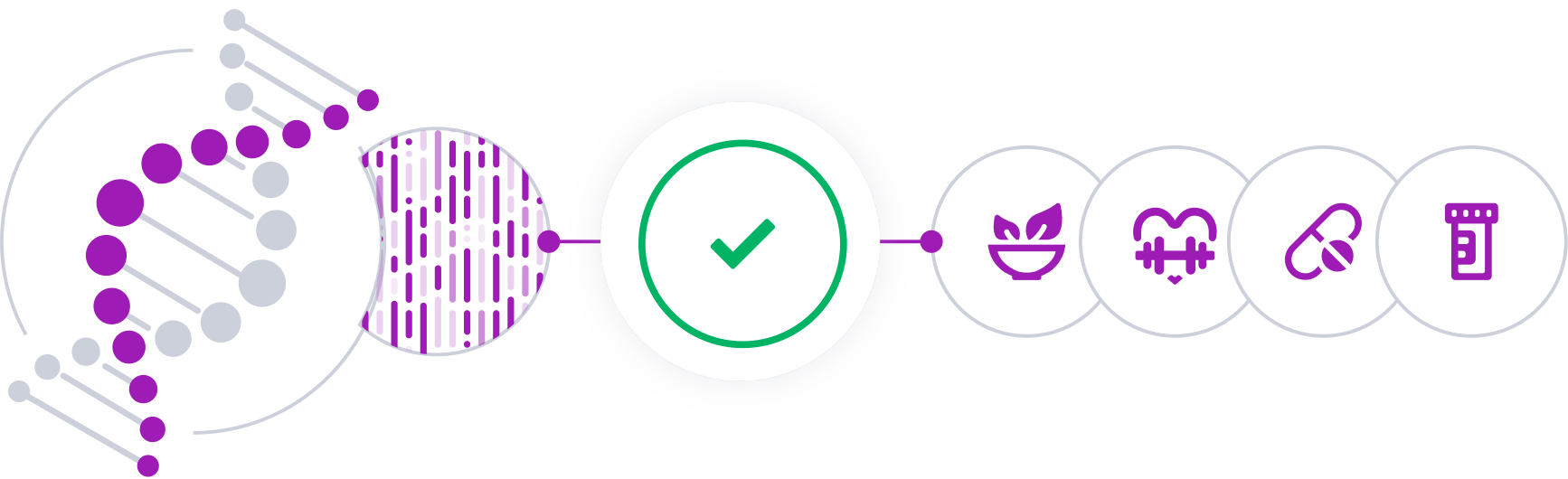
WEIGHT

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.

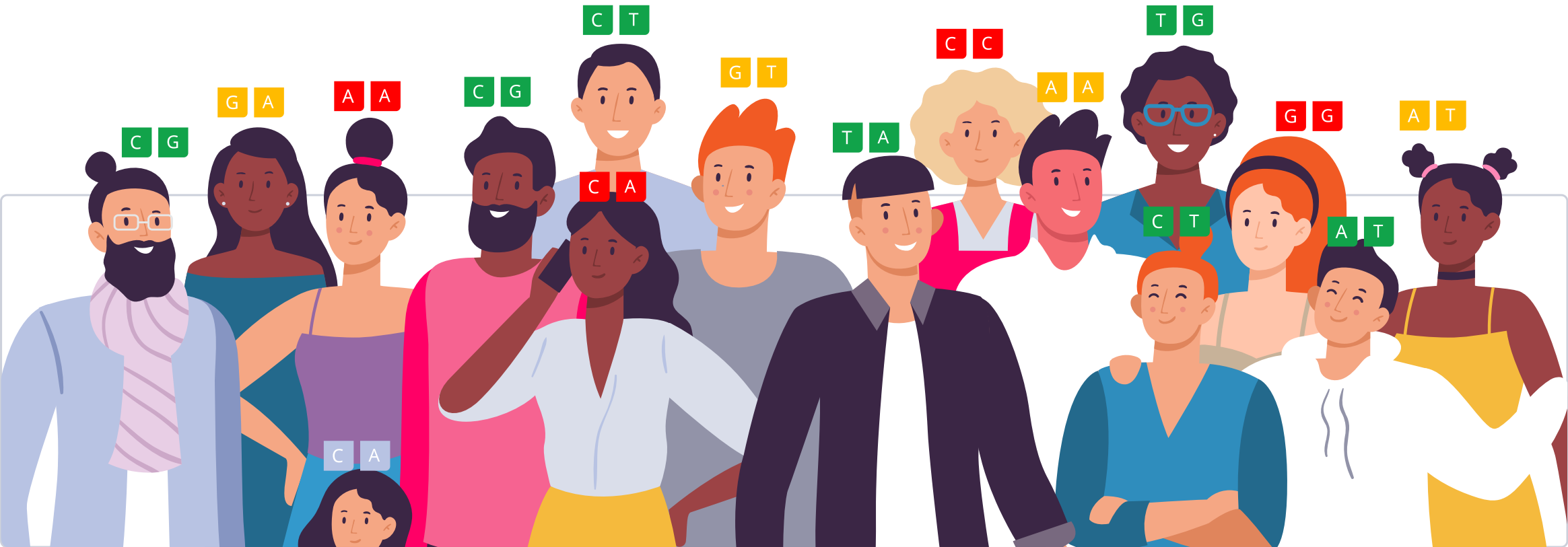


Similarly, our Trait Reports look at how your DNA influences your traits.



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

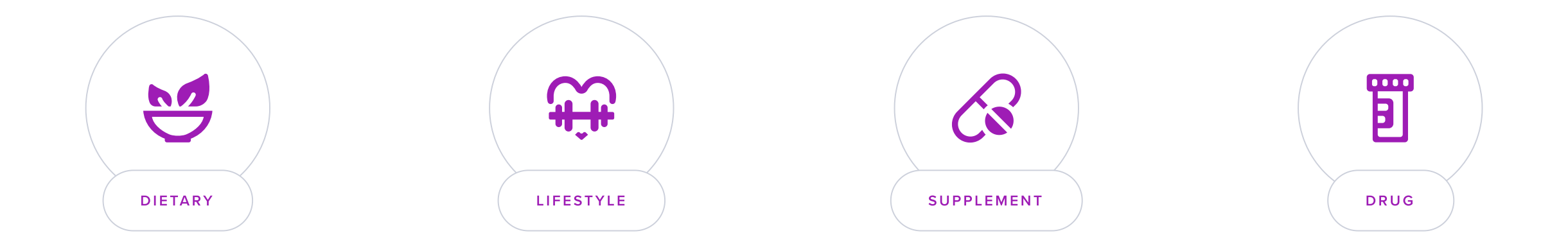
You have 2 risk alleles

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

Most people only blush if they’re embarrassed or feeling cold, but for those with rosacea, skin redness is a permanent feature.

Anything that alters your appearance can impact your self-confidence. Rosacea is no different.

This condition is surprisingly common, **affecting around 16 million Americans** [\[R\]](#).

We’ve also known about this condition for quite a long time. It was first recorded in the 14th century by a French surgeon who named it *couperose*, a term still used today [\[R\]](#).

Despite the longevity of our rosacea awareness, there’s unfortunately still no cure for it [\[R\]](#).

We also don’t know exactly what causes the condition, but it’s likely caused by a mixture of genetic and environmental factors like your diet [\[R\]](#).

The good news is that there are some steps you can take to potentially reduce the symptoms of the condition. These steps involve altering your environment, which can be a potent tool if guided by your genes!

A great example is the [IRF4](#) gene. Rosacea is a chronic inflammatory condition, and a variant of this gene may increase your risk of inflammation. If you carry this variant, you may benefit from applying topical licorice root, which may help reduce skin inflammation [\[R, R, R\]](#).

Likewise, variants of the [ADRB1](#) gene may increase the risk of rosacea. In this instance, the gene plays a role in sleep control, so you may benefit from optimizing your sleep [\[R, R\]](#).

Your genes are what make you unique. They can be a great tool to help you develop a unique approach to fighting rosacea.

Read on to find out more about:

- **How your genetics play a role in rosacea**
- **Your genetic risk score based on over 118,000 genetic variants**
- **Personalized recommendations based on your genetics**

About Rosacea

Key Takeaways:

- Genes involved in rosacea may influence skin pigments and/or inflammation.
- Risk factors include UV-sensitive skin, being female, over age 45, and your genetics.
- A high genetic risk may be affected by limiting sun exposure and being aware of potential triggers.
- Rosacea affects about **1 in 20** people worldwide, and is triggered by things like sun exposure, stress, and makeup.

Rosacea is a common skin condition that causes face redness. It mostly affects the forehead, nose, cheeks, and chin. It can look a lot like acne or other skin conditions [R, R].

Other rosacea symptoms may include [R, R]:

- Small broken veins in the nose and cheeks (spider veins)
- Pimple-like bumps
- Heat and tenderness
- Thickened skin on the nose

About 1 out of 20 people worldwide have rosacea. It most commonly affects people over the age of 45. Although rosacea can affect anyone, it is usually reported in women with lighter skin [R, R].

Other risk factors for rosacea include [R, R]:

- UV-sensitive skin
- **Genetics**

Many things may trigger or worsen rosacea. These include [R]:

- Sun exposure
- Heat
- Wind
- Intense exercise
- Alcohol
- Stress
- Makeup



TYPICAL LIKELIHOOD

Typical likelihood of rosacea based on 113,734 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
SLC45A2	rs16891982	GG
HLA-DMA	rs56934772	TT
HES6	rs55775132	GG
HLA-DMA	rs41317102	CC
HLA-DQA2	rs2894254	TT
HLA-DQA1	rs9272729	GG
MICB	rs519417	GG
KCNJ3	rs75561433	GG
MICB	rs3130614	TT
MICB	rs1144710	TT
KCNJ3	rs10191743	TT
HERC2	rs1129038	TC
HERC2	rs12912427	GA
MMP15	rs191291131	CC
ALG13	rs201820102	A
CAMK1G	rs193183075	CC
KIAA1109	rs77937677	GG
SEMA3C	rs80105877	GG
SGIP1	rs180826669	CC
TCERG1L	rs12243257	GG
CSTF2T	rs118006792	AA
DGKB	rs142431388	CC
RNF217	rs476080	CC
DCLK2	rs190788988	CC

- Medication
- Some foods

Rosacea itself is not usually dangerous. However, one form of the condition can affect the eye. This is called *ocular rosacea*, and it can cause dry, irritated eyes and eyelids. It can also lead to complications like blurred vision and sensitivity to light [R, R, R].

To manage rosacea, doctors may recommend [R, R, R]:

- Avoiding triggers
- Sunscreen (at least SPF 30)
- Moisturizers
- Medication
- Laser therapy

People with ocular rosacea are more prone to eye infections. These are treated with antibiotics. Contact lenses may worsen this condition, so they should be avoided [R].

Genetics seem to play a significant role in rosacea.

Genes involved in rosacea may influence [R, R, R, R]:

- Inflammation ([HLA-DRB1](#), [HLA-DQA1](#), [BTNL2](#), [IL13](#))
- Skin pigments ([SLC45A2](#))
- Both of the above ([IRF4](#), [MC1R](#))

GENE	SNP	GENOTYPE
/	rs185236232	AA
KCNV1	rs144882124	AA
SYBU	rs147863159	CC
NCAM2	rs117322572	CC
KYAT3	rs191805855	CC
/	rs75853901	CC
/	rs146167956	CC
PDCD6IP	rs78529895	AA
SEMA5A	rs16882975	CC
WNT7B	rs59614521	AA
IRF4	rs12203592	CC
DCAF4	rs11628905	AA
CDK10	rs118174802	CC
MC1R	rs1805007	CC

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	Light Therapy for Skin	30 minutes	2	Avoid Triggers	
3	Azelaic Acid		4	Moisturize the Skin	
5	Relaxation Techniques	30 minutes	6	Topical Niacinamide	
7	Sleep for 7+ Hours		8	Topical Licorice Root	
9	Topical Chrysanthellum Indicum		10	Topical Honey	
11	Topical Milk Thistle		12	Silymarin and MSM	
13	Omega-3 (Fish Oil)	2000 mg	14	E. coli Nissle 1917	
15	Konjac Extract (Glycosyl-Ceramides)	300 mg	16	Avoid Excess Sunlight Exposure	
17	Methylsulfonylmethane (MSM)	1 g	18	Zinc	15 mg
19	Niacinamide (Vitamin B3)	1000 mg	20	Milk Thistle (Silymarin)	300 mg
21	Maintain Optimal Vitamin D Levels	1000 iu	22	Avoid Spicy Food	
23	Topical Golden Chamomile		24	Probiotics	30 billion CFU

1



Light Therapy for Skin

IMPACT4 / 5

EVIDENCE4 / 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 say that some types of light therapy can help with rosacea. In particular, a doctor may recommend laser therapy in severe cases [\[R\]](#), [\[R\]](#), [\[R\]](#).

Light therapy may reduce redness, itching, and burning in rosacea. It may also reduce spider veins. Types of light therapy that may help include [\[R\]](#), [\[R\]](#):

- Laser therapy
- Intense pulsed light therapy
- Photodynamic therapy

Laser therapy should only ever be done by a professional. Furthermore, it might take several weeks to show any improvement [\[R\]](#).

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

2



Avoid Triggers

IMPACT

4 / 5

EVIDENCE

4 / 5

How to implement

Identify substances or environmental factors that exacerbate your condition, such as specific foods, stress, or allergens, and actively avoid them. This may involve reading food labels, asking about ingredients when eating out, and making changes to your home or work environment to reduce exposure to identified triggers.

Description

A "trigger" is something that prompts or worsens the symptoms of a health condition. They can be something you eat or come into contact with. Triggers can lead to a wide range of symptoms, such as gut and skin problems and migraines.

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

A **food trigger** can be something you eat.

A **physical trigger** can cause a change to your body through physical contact. It can include swimming in cold water or something you touch or inhale [\[R, R, R\]](#).

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

- Gut problems
- Skin problems
- Migraines

How it helps

Many things can trigger or worsen rosacea. **Physical triggers** for rosacea can include [\[R, R, R, R, R, R, R, R\]](#):

- Exposure to hot or cold temperatures
- Exposure to the sun or wind
- Using irritating or excessive skin, hair, or cosmetic products
- Using certain detergents
- Exposure to nickel (e.g., from jewelry)

Certain foods may also trigger or worsen rosacea in some people. Some examples include [\[R, R, R, R, R\]](#):

- Hot drinks
- Spicy food
- Alcohol
- Tomatoes
- Chocolate
- Citrus fruit
- Fatty food

Experts recommend people with rosacea avoid triggers [\[R, R, R\]](#).

3



Azelaic Acid

IMPACT4 / 5

EVIDENCE4 / 5

How to implement

Apply a thin layer of azelaic acid (typically found in concentrations of 15% to 20%) to the affected area of the skin twice daily, once in the morning and once in the evening. Wash and dry the skin before applying. Use consistently for at least 4 weeks to see improvements.

Description

Azelaic acid is a topical skincare ingredient known for its ability to treat acne and improve the appearance of skin by reducing inflammation and promoting a more even complexion.

Azelaic acid is a compound found in topical products. It fights bacteria and inflammation and helps improve some skin conditions [\[R\]](#) [\[R\]](#).

How it helps

Some experts recommend azelaic acid for rosacea. It may help reduce symptoms like redness, inflammation, and pimple-like bumps [\[R\]](#) [\[R\]](#) [\[R\]](#) [\[R\]](#) [\[R\]](#) [\[R\]](#) [\[R\]](#) [\[R\]](#) [\[R\]](#) [\[R\]](#).

Azelaic acid may help by reducing oxidative stress and inflammation [\[R\]](#).

4



Moisturize the Skin

IMPACT

3 / 5

EVIDENCE

3 / 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

Moisturizers have been linked to a lower risk of rosacea [\[R\]](#).

They may help strengthen the skin barrier and relieve symptoms like dry skin [\[R\]](#), [\[R\]](#), [\[R\]](#).

Moisturizers also help when used together with topical medication [\[R\]](#), [\[R\]](#).

Experts recommend protecting the skin to help with rosacea. Using a gentle, fragrance-free moisturizer and broad-spectrum sunscreen (SPF 30 or higher) are important [\[R\]](#), [\[R\]](#), [\[R\]](#).

5



Relaxation Techniques

IMPACT2 / 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

Stress may trigger or worsen rosacea [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

People with rosacea may also be more likely to have anxiety or depression [\[R\]](#), [\[R\]](#).

Managing stress and mental health may help [\[R\]](#).

6



Topical Niacinamide

IMPACT2 / 5

EVIDENCE2 / 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 may help with symptoms of rosacea [\[R\]](#).

Niacinamide derivatives or niacinamide combined with other ingredients may also help with rosacea [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Topical niacinamide may help by [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Supporting the skin barrier
- Decreasing inflammation

Please note: *Oral niacin, the other form of vitamin B3, can cause skin flushing* [\[R\]](#).

7

Sleep for 7+ Hours

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Ensure you allocate enough time in your schedule to achieve a minimum of 7 hours of sleep each night. This might involve going to bed earlier or adjusting your evening routine to promote relaxation and make it easier to fall asleep.

Description

Optimizing sleep involves adopting healthy sleep habits and creating a sleep-conducive environment to ensure restorative and sufficient sleep duration. It supports cognitive function, mood stability, and overall physical health. Most experts recommend getting **at least 7 hours of good-quality sleep each night**.

[Sleep](#) supports your body and mind [\[R, R\]](#). More precisely, sleep helps:

- Support brain health [\[R, R\]](#)
- Maintain a healthy weight and appetite [\[R, R, R\]](#)
- Regulate blood pressure [\[R, R\]](#)
- Balance blood sugar [\[R, R\]](#)

Ways to sleep better include [\[R\]](#):

- Reducing your bright light exposure (screen time) in the evenings
- Sticking to a regular sleep schedule
- Avoiding hunger or large meals before bed
- Avoiding nicotine, caffeine, and alcohol before bed
- Maintaining a sleep area that’s cool, dark, and quiet

How it helps

Poor sleep is linked to a greater risk of rosacea and more severe symptoms [\[R\]](#).

Poor sleep quality may contribute to rosacea by increasing inflammation [\[R\]](#).

PERSONALIZED TO YOUR GENES

People with your ***ADRB1*** gene variant may be more prone to rosacea. This gene plays a role in sleep control [\[R, R\]](#). Take special care to optimize your sleep.

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
ADRB1	rs12414657	TT	

8

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

Topical *licochalcone A* (a compound in licorice root) may help as part of a skincare routine. It may help improve redness, roughness, and spider veins in people with rosacea [\[R\]](#), [\[R\]](#), [\[R\]](#).

Licochalcone A may help by reducing oxidative stress and inflammation [\[R\]](#), [\[R\]](#).

9

Topical Chrysanthellum Indicum

IMPACT

2 / 5

EVIDENCE

1 / 5

How to implement

Apply a cream or gel containing Chrysanthellum indicum extract to the affected skin areas twice daily, morning and evening. Continue this application for at least 8 to 12 weeks to see significant improvements.

Description

Chrysanthellum indicum extract, obtained from the Chrysanthellum indicum plant, is used topically for its potential to improve microcirculation and reduce the appearance of dark under-eye circles and puffiness.

Chrysanthellum indicum is a flowering plant. It contains compounds that may strengthen the blood vessels [\[R\]](#).

Creams containing this plant may help with some skin conditions [\[R\]](#).

How it helps

In people with rosacea, *Chrysanthellum indicum* cream may help reduce redness. It may also help make the condition less severe [\[R\]](#).

C. indicum may help by strengthening the blood vessels [\[R\]](#), [\[R\]](#).

10

Topical Honey

IMPACT2 / 5

EVIDENCE1 / 5

How to implement

Apply a thin layer of raw, unpasteurized honey directly to the affected area of the skin. Cover it with a sterile bandage and leave it on for at least 1 hour, or overnight for best results. Repeat daily until improvement is seen.

Description

Honey is a natural topical application known for its moisturizing, antibacterial, and wound-healing properties. It is used to soothe dry skin, promote skin repair, and address minor burns and cuts.

[Honey](#) is a thick, sweet substance. It’s made by honeybees from the nectar of flowering plants. There are many different types of honey. For example, kanuka honey is made from the flowers of the New Zealand kanuka tree [\[R\]](#), [\[R\]](#).

Besides sugar, honey also contains amino acids (protein building blocks), vitamins, and minerals [\[R\]](#).

People use honey for its anti-inflammatory and antioxidant properties. It may help with [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Heart problems
- Gut problems
- Cough
- Skin problems

How it helps

A cream with kanuka honey (90%) may help make rosacea less severe in some people [\[R\]](#).

Honey may help by reducing inflammation [\[R\]](#), [\[R\]](#), [\[R\]](#).

11



Topical Milk Thistle

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Apply a milk thistle extract cream or gel to the affected area of the skin once or twice daily, depending on the product instructions. Continue this application daily for at least 4-8 weeks to observe potential benefits.

Description

Milk thistle extract, derived from the milk thistle plant, is used topically for its antioxidant properties, which can help protect the skin from environmental damage. It is often included in skincare products to promote a healthy complexion.

Milk thistle (*Silybum marianum*) is a purple flowering plant in the daisy family. Traditionally, it has been used for liver problems. Some people also eat the leaves in salads [\[R\]](#), [\[R\]](#).

The extract of milk thistle is called *silymarin* [\[R\]](#), [\[R\]](#), [\[R\]](#).

People use milk thistle to help with [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Liver problems
- Blood sugar control
- Indigestion
- Skin problems

How it helps

Topical silymarin may help reduce redness in the face in people with rosacea [\[R\]](#).

A cream with silymarin and [MSM](#) may improve many symptoms of rosacea. These include skin redness, itchiness, and dryness [\[R\]](#).

Milk thistle may help with rosacea by [\[R\]](#), [\[R\]](#):

- Decreasing oxidative stress and inflammation
- Improving blood vessel function
- Blocking new blood vessel production

Please note: *Avoid milk thistle if you're allergic to ragweed, daisies, or chrysanthemums. Because it belongs to the same plant family, it may cause similar reactions* [\[R\]](#), [\[R\]](#).

12



Silymarin and MSM

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a silymarin supplement containing 140mg three times daily and an MSM (Methylsulfonylmethane) supplement of 1000mg three times daily. Both supplements should be taken with meals to improve absorption. This regimen should be followed for a minimum of 8 weeks to evaluate its effectiveness.

Description

Silymarin is a flavonoid complex found in milk thistle that has been shown to protect the liver from damage, while MSM is a sulfur-containing compound that has anti-inflammatory and antioxidant properties.

How it helps

MSM is thought to improve skin health by strengthening keratin and reducing inflammation.

Forty-six patients affected by stage I-III rosacea entered this double-blind, placebo-controlled study. Subjects were treated for 1 month. The combination of silymarin and S-MSM can be useful in managing symptoms and condition of rosacea skin, especially in the rosacea subtype 1 erythemato-telangiectatic phase [R](#).

13



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

Supplementation with omega-3 fatty acids for 6 months reduced dry eye symptoms in a placebo-controlled trial of 130 patients with rosacea [\[R\]](#).

14



E. coli Nissle 1917

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

EcN is typically taken as capsules, tablets, or suspensions, with the dosage depending on the condition being treated (commonly, 1–2 doses daily). It is usually taken before or with meals, and if combined with antibiotics, should be spaced 2–3 hours apart. Follow the product’s storage instructions, as some require refrigeration. Consult a healthcare provider for proper use, especially for children, during pregnancy, or for long-term treatment of conditions like ulcerative colitis.

Description

E. coli Nissle 1917 (EcN) is a non-pathogenic strain of *Escherichia coli* that is widely studied and used as a probiotic. Originally isolated by Dr. Alfred Nissle in 1917 during World War I, this strain was identified for its ability to combat infectious diarrhea in soldiers. Unlike pathogenic *E. coli* strains, EcN lacks virulence factors and is considered safe for therapeutic use.

EcN is commonly available in probiotic formulations and has a well-established safety profile. Owing to its ability to modulate the gut microbiota and reduce inflammation, people use it to improve:

- IBD
- IBS
- Diarrhea
- Intestinal infections

How it helps

In a non-blinded trial of 57 patients with intestinal-borne facial dermatoses such as rosacea, acne, and seborrheic dermatitis, supplementation with *E. coli* Nissle 1917 (2 capsules/day) caused their clinical improvement [\[R\]](#).

15



Konjac Extract (Glycosyl-Ceramides)

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take konjac extract containing glycosyl-ceramides as a daily supplement, usually available in capsule form. The typical dosage ranges from 300 to 500 mg, once or twice daily, with water and before meals. Continue this regimen for at least 3 to 4 months to observe potential benefits for skin hydration and elasticity.

TYPICAL STARTING DOSE

300 mg

Description

Konjac extract, derived from the konjac root, is rich in glucomannan, a dietary fiber known for its potential to promote weight management and digestive regularity. It can contribute to a feeling of fullness and may support healthy cholesterol levels when included in a balanced diet.

How it helps

A 6-week study with 51 healthy participants taking 100 mg/day of *Amorphophallus* konjac extract showed significant improvements in skin dryness, hyperpigmentation, redness, itching, and oiliness, compared to a placebo [R].

Konjac extracts may help to support the outer skin barrier, which can in turn reduce the redness and inflammation associated with rosacea.

16



Avoid Excess Sunlight Exposure

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Limit direct sun exposure to early morning or late afternoon hours, ideally before 10 a.m. or after 4 p.m., when UV rays are less intense. Wear protective clothing, such as long-sleeved shirts, pants, and wide-brimmed hats, along with sunglasses that block UVA and UVB rays. Apply a broad-spectrum sunscreen with at least SPF 30 to all exposed skin, reapplying every two hours or immediately after swimming or sweating.

Description

Avoiding excessive sunlight exposure and practicing sun safety measures, such as wearing sunscreen and protective clothing, helps reduce the risk of skin damage, including sunburn and skin cancer. It supports long-term skin health and minimizes the harmful effects of UV radiation.

[Sunlight](#) or bright light during the day can benefit your body and mind. It may [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Boost your mood
- Boost your performance and energy
- Improve sleep quality

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 [\[R\]](#), [\[R\]](#).

However, **excessive sun exposure may lead to sunburn, skin aging, and skin cancer**, so make sure to find the right balance [\[R\]](#), [\[R\]](#).

How it helps

Sun exposure can cause rosacea to flare up, so limiting time in the sun and using sunscreen can prevent symptoms.

17



Methylsulfonylmethane (MSM)

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take 1 to 3 grams of Methylsulfonylmethane (MSM) per day, divided into three doses. This can be in the form of capsules or powder that is mixed with water. It is recommended to start with a lower dose to assess tolerance, then gradually increase to the desired dose over a period of 1 to 2 weeks.

TYPICAL STARTING DOSE

1 g

Description

MSM is a naturally occurring sulfur compound found in foods and used in dietary supplements. It has anti-inflammatory properties and may be used to support joint health and reduce exercise-related muscle soreness.

A molecule of MSM is broken down in the body into a sulfate (sulfur) group and two methyl groups.

The following may increase people’s needs for sulfur and methyl groups: physical activity, recovery from injuries, inflammation, infections/sickness, toxins, etc.

People also need more sulfur when taking hormones (DHEA, pregnenolone, etc.), drugs (Aspirin, Tylenol, NSAIDs, birth control, etc.) or supplements (flavonoids & polyphenols - resveratrol, quercetin, curcumin, etc.) that undergo sulfation.

How it helps

MSM is thought to improve skin health by strengthening keratin and reducing inflammation.

Forty-six patients affected by stage I-III rosacea entered this double-blind, placebo-controlled study. Subjects were treated for 1 month. The combination of silymarin and S-MSM can be useful in managing symptoms and condition of rosacea skin, especially in the rosacea subtype 1 erythemato-telangiectatic phase [R](#).

How to implement

TYPICAL STARTING DOSE

15 mg

Description

- Defend against disease
- Protect DNA from damage
- Heal wounds
- Control blood sugar

Adults should get **8-11 mg of zinc** per day [R].

How it helps

Zinc has anti-inflammatory properties that can soothe the skin and may help manage rosacea symptoms.

19



Niacinamide (Vitamin B3)

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take 500 mg of niacinamide (vitamin B3) orally, twice daily with a glass of water, preferably with meals to avoid stomach upset. This supplementation can be continued long-term for maintaining overall skin health and supporting metabolic functions.

TYPICAL STARTING DOSE
1000 mg

Description

Niacinamide, also known as vitamin B3, is a water-soluble vitamin that plays a crucial role in skin health and may help reduce inflammation, improve skin texture, and alleviate symptoms of certain skin conditions when applied topically.

[Niacinamide](#) is one of two forms of [vitamin B3](#). Vitamin B3 supports your nervous system, skin, gut, and more [\[R\]](#).

Vitamin B3 deficiency is called pellagra. It may cause diarrhea, dermatitis, and dementia. Niacinamide may help with pellagra because the body converts it into vitamin B3. Niacinamide may also help with [\[R\]](#):

- Acne [\[R\]](#)
- Diabetes [\[R\]](#)
- Osteoarthritis [\[R\]](#)

How it helps

Niacinamide can boost the skin's barrier function, reduce redness and inflammation, and improve the overall appearance of the skin affected by rosacea.

20



Milk Thistle (Silymarin)

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take a 300 mg milk thistle (silymarin) supplement daily with water, preferably with a meal for better absorption. Continue this regimen as advised by your healthcare provider.

TYPICAL STARTING DOSE

300 mg

Description

Silymarin is a natural plant extract derived from the milk thistle plant (*Silybum marianum*). It has been traditionally used for its potential anti-inflammatory and liver-protective properties. Silymarin consists of several flavonolignans, including silybin, silydianin, and silychristin.

Milk thistle (*Silybum marianum*) is a purple flowering plant in the daisy family. Traditionally, it has been used for liver problems. Some people also eat the leaves in salads [\[R, R\]](#).

The extract of milk thistle is called *silymarin* [\[R, R, R\]](#).

People use milk thistle to help with [\[R, R, R\]](#):

- Liver problems
- Blood sugar control
- Indigestion
- Skin problems

How it helps

MSM is thought to improve skin health by strengthening keratin and reducing inflammation.

Forty-six patients affected by stage I-III rosacea entered this double-blind, placebo-controlled study. Subjects were treated for 1 month. The combination of silymarin and S-MSM can be useful in managing symptoms and condition of rosacea skin, especially in the rosacea subtype 1 erythemato-telangiectatic phase [\[R\]](#).

21



Maintain Optimal Vitamin D Levels

IMPACT

0 / 5

EVIDENCE

0 / 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

Genetically higher vitamin D levels may be associated with a reduced risk of rosacea [\[R\]](#).

Please note: *There is no evidence from controlled clinical trials to support this recommendation. It is included based on uncontrolled clinical trials, animal or cell studies, or non-scientific criteria. Please take this recommendation with a grain of salt until more research is available.*

22



Avoid Spicy Food

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Eliminate or significantly reduce consumption of foods high in spices, such as hot peppers, curry, and salsa, from your daily diet.

Description

For individuals sensitive to spicy foods, avoiding excessively hot or spicy dishes can prevent digestive discomfort and heartburn, promoting better gastrointestinal comfort and overall well-being.

How it helps

Spicy foods are known to trigger rosacea flare-ups in many individuals, so avoiding them can help manage symptoms.

23



Topical Golden Chamomile

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Apply a thin layer of golden chamomile extract cream or gel directly to the affected area of the skin 2 to 3 times daily. Continue application for as long as symptoms persist, or as recommended by a healthcare provider.

Description

Golden chamomile, derived from the chamomile plant, is used topically for its anti-inflammatory and soothing properties. It can help relieve skin irritation, redness, and promote relaxation.

How it helps

Topical Golden Chamomile can reduce the inflammation and redness that rosacea causes because it has anti-inflammatory properties. It can also soothe your skin, reducing the itchiness that often accompanies this skin condition.

How to implement

TYPICAL STARTING DOSE

30 billion CFU

Description

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 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

Probiotics may improve gut health which could influence skin conditions by reducing systemic inflammation and oxidative stress.

Next Steps

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

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.

