

Skin Hydration

DNA Health Report

REPORT CATEGORY —



SKIN & BEAUTY

Sample Client

Report date: 15 January 2026

Powered by

 omicsedge

Table of Contents

03 How this works

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

07 Introduction

08 Your genetics

09 Your recommendations

47 Next Steps

- 47 Your Lab Results

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

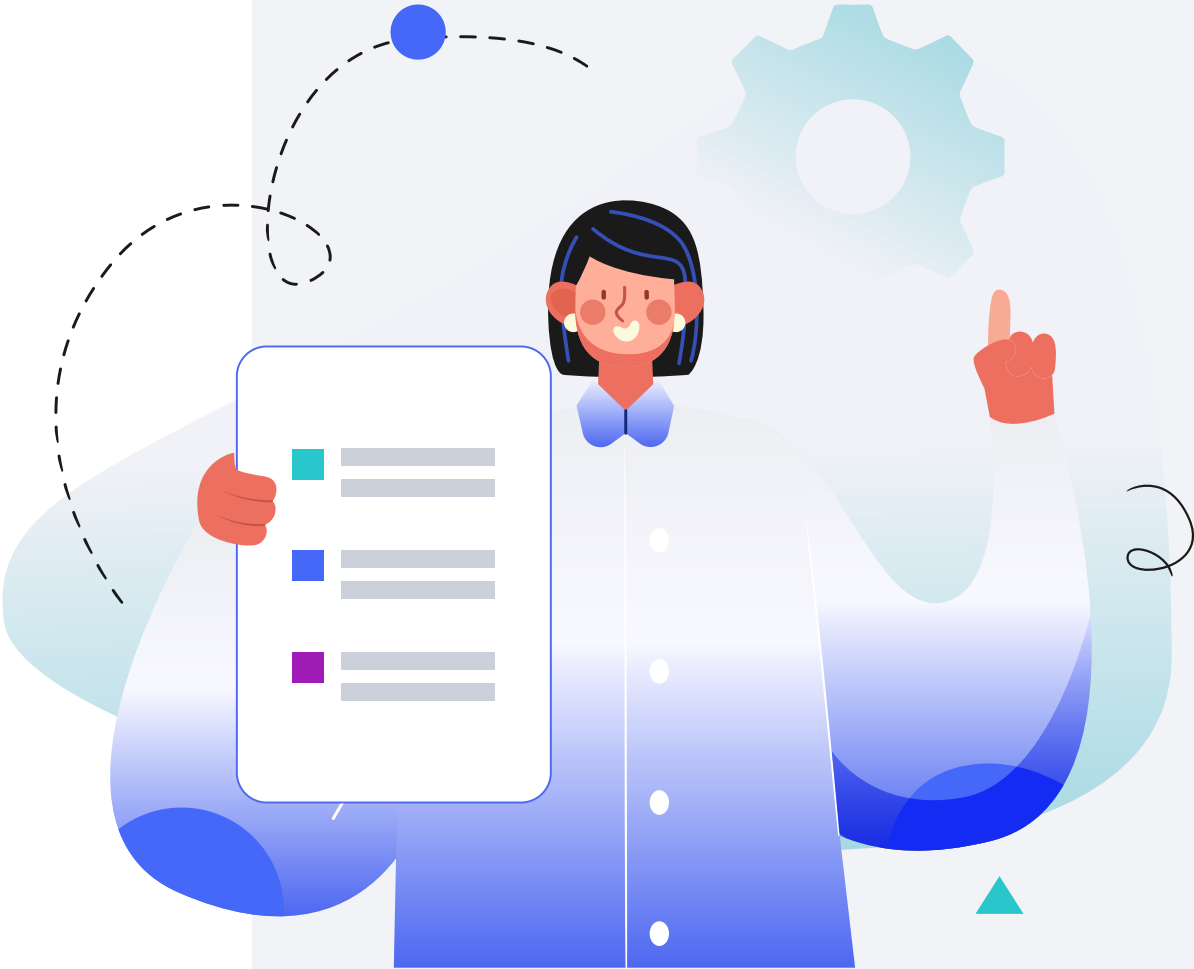
Male

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

The skin acts as a barrier to protect you from your surroundings. It is made up of three layers [\[R\]](#):

- **Hypodermis:** The innermost layer
- **Dermis:** The middle layer
- **Epidermis:** The outermost layer

One of the main functions of the epidermis is to keep your skin hydrated. It does this by retaining water [\[R\]](#), [\[R\]](#).

If the epidermis is not able to retain enough water, the skin will start to feel dry, rough, and saggy. This tends to happen naturally as you age [\[R\]](#), [\[R\]](#).

Genetics of Skin Hydration

 PERSONALIZED TO GENES

Based on the gene variants we looked at, you likely have typical skin hydration. However, other gene variants, your diet, lifestyle, and the environment may also influence your skin hydration.

Key Takeaways:

- Genes involved in skin hydration may influence skin barrier function and the transport of water in the skin.
- Other factors include being over 40, cold and windy or low-humidity climates, certain occupations, swimming frequently in chlorinated pools, and certain diseases or conditions.
- If you have high genetic risk, you may lower your overall risk by taking action on those factors that you can change.
- Click the **Recommendations** tab for potential dietary and lifestyle changes.

The skin acts as a barrier to protect you from your surroundings. One of the main functions of the *epidermis* (the outermost layer of the skin) is to keep your skin hydrated by retaining water. If the epidermis is not able to retain enough water, the skin will start to feel dry, rough, and saggy. This tends to happen naturally as you age [\[R,R,R\]](#).

Genetic factors may play a role in skin hydration. Genes involved may influence skin barrier function and the transport of water in the skin [\[R](#), [R](#), [R\]](#).



TYPICAL

Predisposed to typical skin hydration based on 13 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
CRIPT	rs79885808	TT
ARAP2	rs7654356	AA
MKNK2	rs887932	GT
IL34	rs8061854	TC
TNKS	rs138684226	CC
ARHGAP21	rs34485271	TT
ABLIM1	rs77962058	AA
TASP1	rs149092789	AA
UPP1	rs75043305	TT
MCPH1	rs141074203	AA
FZD10	rs7953082	AA
HAPLN1	rs9293356	TT
PLEKHG1	rs9398017	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	Moisturize the Skin	2	Collagen Peptides10 g
3	Carotenoids6 mg	4	Aloe Vera50 mg
5	Drink at Least 8 Glasses of Water a Day	6	Pycnogenol100 mg
7	Topical Vitamin C	8	Topical Niacinamide
9	Hyaluronic Acid120 mg	10	Vitamin E200 iu
11	Topical Coffee Extract	12	Borage Oil2 g
13	Evening Primrose Oil	14	Blood Orange Extract500 mg
15	Shark Cartilage750 mg	16	Amla
17	Astaxanthin12 mg	18	Rice Ceramides30 mg
19	Uva Ursi400 mg	20	Apigenin50 mg
21	Persimmon	22	Almonds
23	Flaxseed Oil15 g	24	Rose Hip500 mg
25	Topical Alpha-Ketoglutarate	26	Turmeric
27	Amla And Lingonberry500 mg	28	Salmon Egg Extract500 mg
29	Passion Fruit Seed Extract30 mg	30	Konjac Extract (Glycosyl-Ceramides)300 mg
31	Green Coffee Extract400 mg	32	Aromatherapy30 minutes

33	Flaxseed	2 tbsp	34	Topical Hydrolyzed Keratin	
35	Royal Jelly	300 mg	36	Wheat Extract (Ceramides)	
37	Lactobacillus Plantarum	10 billion CFU	38	Pantothenic Acid (Vitamin B5)	5 mg
39	Gotu Kola		40	Grape Seed Extract	100 mg
41	Acetic Acid Bacteria (Dihydro-Ceramide)		42	Djulis	
43	Alpha-Ketoglutarate (AKG)	1 g	44	Lingonberry	400 mg

1



Moisturize the Skin

IMPACT

5 / 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

Aging gradually worsens the barrier function of the skin. This results in increased water loss, causing dry, pale skin with fine wrinkles [\[R\]](#), [\[R\]](#).

Applying moisturizer products may help improve skin appearance, barrier function, and renewal. Creams, oils, and lotions may be similarly effective, but oils have more staying power and are especially recommended for very dry skin. **Experts recommend applying moisturizers several times per day, immediately after taking a bath or shower, or washing your hands** [\[R\]](#), [\[R\]](#), [\[R\]](#).

Moisturizers may work better when they include active ingredients that reduce oxidative damage and promote skin cell growth and repair [\[R\]](#).

It is also important to reduce water loss from the skin. Some useful tips include [\[R\]](#), [\[R\]](#):

- Limiting contact with hot water to preserve protective skin oils
- Using skincare products that contain ingredients like ceramides and hyaluronic acid
- Avoiding skincare products that contain ingredients like alcohol, fragrances, and retinoids
- Protecting your skin from the sun, wind, and cold

2



Collagen Peptides

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Take 10-20 grams of collagen peptides daily, mixing the powder into a glass of water, juice, or a smoothie. It is recommended to consume this supplement on an empty stomach to improve absorption, ideally first thing in the morning or right before bedtime for a period of at least 8-12 weeks to observe beneficial effects.

TYPICAL STARTING DOSE

10 g

Description

Collagen peptides are a form of collagen that is broken down into smaller, more easily absorbed molecules. They are commonly used in supplements and skincare products for their potential to promote skin elasticity, hair strength, and nail health.

[Collagen](#) is a protein that helps build skin, bones, and joints [\[R\]](#), [\[R\]](#).

People use collagen supplements for [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Joint pain
- Skin health
- Hair growth

How it helps

Oral hydrolyzed collagen (2.5-5 g/day for 8-12 weeks) may improve skin hydration and elasticity [\[R\]](#), [\[R\]](#).

Collagen supplements may help by increasing the amount of this protein in the skin [\[R\]](#).

3



Carotenoids

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take a carotenoid supplement daily, with a meal that includes fats to improve absorption. Dosage can vary, but a common range is between 6 to 20 milligrams per day. Continue as long as it is recommended by your healthcare provider.

TYPICAL STARTING DOSE

6 mg

Description

Carotenoids are pigments found in colorful fruits and vegetables like carrots, sweet potatoes, and tomatoes. They have antioxidant properties and may support eye health, immune function, and overall antioxidant protection.

Carotenoids are red, orange, and yellow pigments produced by plants, algae, and some microorganisms. Some of the most common carotenoids include [\[R\]](#):

- [Beta-carotene](#)
- [Lycopene](#)
- [Astaxanthin](#)
- Zeaxanthin
- Lutein

The main effects of carotenoids on human health derive from their antioxidant activity. They help with eye health, cognition, heart health, and more. [\[R\]](#), [\[R\]](#).

Carotenoids are especially abundant in yellow- and orange-colored fruits and vegetables, as well as in green leafy vegetables. Some of the main food sources include [\[R\]](#):

- Carrots
- Sweet potatoes
- Tomatoes
- Mangoes
- Oranges
- Watermelon
- Bell peppers
- Kale
- Spinaches

Supplements are also available for people who don’t consume enough fruits and vegetables. Because they are fat-soluble, carotenoids are better absorbed with a fatty meal.

How it helps

Carotenoids may help repair skin aging, including water loss. Tested carotenoids include:

- Zeaxanthin [\[R\]](#), [\[R\]](#)
- Astaxanthin [\[R\]](#)
- Lycopene [\[R\]](#)
- Lutein [\[R\]](#)

Carotenoids may help by reducing oxidative damage to the skin [\[R\]](#).

4



Aloe Vera

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take a 50 mg Aloe vera supplement daily, with a glass of water, preferably at the same time each day to maintain consistency.

TYPICAL STARTING DOSE

50 mg

Description

Aloe vera is a succulent plant native to arid regions and contains a gel-like substance in its leaves that is rich in vitamins, minerals, and antioxidants, making it beneficial for soothing skin irritations, promoting wound healing, and providing relief from conditions such as sunburn and minor burns. The primary active compounds in aloe vera gel include polysaccharides, vitamins like vitamin C and E, and minerals such as zinc, which contribute to its healing and anti-inflammatory effects.

[Aloe vera](#) lives in the desert, and its thick leaves store water in the form of a gel [\[R\]](#).

People use aloe gel to help soften the skin and soothe burns [\[R\]](#).

Oral aloe supplements may help with blood sugar and gut health [\[R\]](#).

How it helps

Consuming aloe sterols (19-40 mcg/day for 8-12 weeks) may improve skin hydration and elasticity [\[R, R, R\]](#).

Topical formulations with Aloe vera (0.1-0.5%) applied for 1-2 weeks may also improve skin hydration [\[R\]](#).

Aloe may help by improving skin barrier function and collagen production [\[R\]](#).

5



Drink at Least 8 Glasses of Water a Day

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Consume a total of at least 64 ounces (or approximately 1.9 liters) of water over the course of the day. This can be divided into 8 glasses, each containing 8 ounces of water. Aim to drink evenly throughout the day to avoid dehydration.

Description

Water is an essential nutrient for nearly every process in your body, helping to mainting brain and gut function, maintain a health weight, as well as energy and performance levels, among others.

Water is essential for life. It supports nearly every process in your body [\[R\]](#).

Water helps maintain [\[R\]](#):

- Energy and performance levels
- Brain function
- Gut function
- Healthy weight

Most experts recommend drinking **around 8 glasses (64 oz. or 2 L) of water daily**. You might need more or less than this, depending on how active you are, where you live, or what your overall health is like [\[R\]](#).

How it helps

Additional water intake may increase skin hydration, especially in people who don't drink sufficient amounts of water. However, the evidence is limited [\[R\]](#).

6



Pycnogenol

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 100 mg of pycnogenol supplement daily. This can be taken in a single dose or divided into two doses of 50 mg each, one in the morning and one in the evening.

TYPICAL STARTING DOSE

100 mg

Description

Pycnogenol (pine bark extract) is derived from the bark of the maritime pine (Pinus pinaster). It has been used in traditional n European folk medicine for centuries, and more recently as a supplement. The extract contains a group of bioactive compounds known as proanthocyanidins, which may be beneficial in supporting cardiovascular health, promoting skin health, and aiding in the management of various conditions related to inflammation and oxidative stress.

Pycnogenol comes from the bark of pine trees that grow in the Mediterranean [\[R\]](#), [\[R\]](#).

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

- Athletic performance
- Seasonal allergies
- Cognitive function
- Joint health
- Varicose veins

How it helps

Oral pycnogenol (40-100 mg/day for 12 weeks) may improve skin hydration and elasticity, and reduce moisture loss [\[R\]](#), [\[R\]](#).

Pycnogenol is rich in polyphenols that may reduce oxidative damage to the skin [\[R\]](#).

7

Topical Vitamin C

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Apply a vitamin C serum to your face and neck once a day, preferably in the morning before applying sunscreen and makeup. It should be left on the skin, not washed off. Consistent daily use is needed for best results.

Description

Topical vitamin C, often in the form of ascorbic acid, is used for its antioxidant properties to protect the skin from environmental damage and promote collagen synthesis, benefiting overall skin health. It can be sourced from various natural plant extracts, such as citrus fruits.

[Vitamin C](#) is an essential nutrient. This means that our bodies can’t produce it on their own, so we have to get it from food or supplements [\[R\]](#).

Vitamin C has antioxidant properties. It supports immunity, heart health, and wound healing [\[R\]](#), [\[R\]](#).

Vitamin C deficiency is called *scurvy*. In the past, many sailors suffered from it [\[R\]](#).

How it helps

Topical vitamin C (5-20%) may increase skin hydration and collagen production [\[R\]](#), [\[R\]](#), [\[R\]](#).

Vitamin C may help by reducing oxidative damage to the skin and promoting collagen production [\[R\]](#).

8



Topical Niacinamide

IMPACT

2 / 5

EVIDENCE

2 / 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 creams with niacinamide (3-5% applied for 4-12 weeks) may improve skin hydration and elasticity, and reduce skin water loss [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Niacinamide may help by improving the barrier function of the skin and protecting it from sunlight damage [\[R\]](#), [\[R\]](#).

9



Hyaluronic Acid

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 120-240 mg of oral hyaluronic acid supplement daily, ideally with or after a meal to enhance absorption. Consistent use for at least one month is recommended to evaluate its effects on skin hydration and joint health.

TYPICAL STARTING DOSE
120 mg

Description

Hyaluronic acid is a natural substance that plays a key role in joint and skin health. As a supplement or topical application, it may help support joint mobility and skin hydration.

How it helps

In a clinical study, the ingestion of an oral hyaluronic acid solution (daily for 40 days) improved skin hydration, wrinkle reduction, and elasticity, showing that hyaluronic acid may effectively contribute to maintaining skin moisture and improving skin texture [\[R\]](#).

Various formulations of hyaluronic acid, including those with different molecular weights, have been shown to improve skin hydration, and elasticity, and even reduce the depth of wrinkles when applied topically. This is attributed to its capacity to bind and retain moisture within the skin [\[R\]](#).

10



Vitamin E

IMPACT

2 / 5

EVIDENCE

2 / 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 acts as a skin penetration enhancer, increasing the skin permeability, which may aid in the delivery of other moisturizing agents. This property helps improve the skin hydration and overall health [\[R\]](#).

Formulations containing vitamin E have shown potential for skin hydration. Studies involving vitamin E-loaded nanoemulsions and hydrogels indicate that these may effectively improve skin moisture and have good occlusive properties, which are beneficial for dry skin conditions [\[R\]](#).

However, vitamin E at low doses may not help increase the skin water content [\[R\]](#).

11

Topical Coffee Extract

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Apply a thin layer of coffee extract cream or gel directly onto the clean, affected area of the skin. Use once or twice daily, depending on the product's instructions or a healthcare provider's advice. Continue this routine for a minimum of six to eight weeks to observe potential benefits.

Description

Coffee extract is derived from coffee beans and is often used in skincare products for its antioxidant properties, which can help protect the skin from free radical damage and reduce the appearance of fine lines and wrinkles.

People drink coffee for an energy and mood boost. [Caffeine](#) is the main ingredient responsible for these effects [\[R, R\]](#).

Caffeine may also help [\[R, R, R\]](#):

- Support heart health
- Improve mood
- Maintain healthy blood sugar
- Improve skin health

How it helps

Applying coffee pulp serum (3 mL/day for 4 weeks) on the skin may improve skin hydration, elasticity, and collagen content. Drinking coffee pulp or coffee polyphenols (270 mg/100 mL/day) may be similarly effective [\[R, R\]](#).

Coffee extract may help by reducing oxidative damage to the skin [\[R\]](#).

12



Borage Oil

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 2-3 grams of borage oil daily, in divided doses, with meals to help with inflammation or skin conditions. It is available in capsule form. This supplementation can be ongoing but consider a break or evaluation after 6 months.

TYPICAL STARTING DOSE

2 g

Description

Borage oil, derived from the seeds of the borage plant, is rich in gamma-linolenic acid (GLA), an omega-6 fatty acid. It is believed to have potential anti-inflammatory properties and may be used as a dietary supplement to support skin health and overall well-being.

Borage oil contains between 180-260mg of GLA per gram.

How it helps

Consumption of borage oil (containing 360 or 720 mg GLA for 2 months) may improve the skin barrier function in elderly people, as evidenced by a lower transepidermal water loss . This indicates that borage oil may help to maintain moisture in the skin, though it did not alter skin hydration measurements [R].

In a study involving women, ingestion of borage oil (for 12 weeks) improved skin hydration compared to a placebo. This effect was noted alongside a reduction in skin roughness and scaling [R].

13



Evening Primrose Oil

IMPACT

1 / 5

EVIDENCE

1 / 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

In a placebo-controlled trial of 40 healthy volunteers, supplementation with evening primrose oil (1500 mg, 2x/day) for 12 weeks improved skin moisture and transepidermal water loss [R].

Evening primrose oil is rich in omega-6 fatty acids, which help in increasing skin hydration. This boost of fatty acids strengthens your skin's natural barrier, causing it to retain more water.

14



Blood Orange Extract

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 500 mg of blood orange extract supplement daily with water, ideally in the morning with breakfast. Continue this regimen for at least 8 to 12 weeks to see potential benefits related to cardiovascular health and antioxidant effects.

TYPICAL STARTING DOSE

500 mg

Description

Blood orange extract is rich in antioxidants and vitamin C, potentially supporting immune health and providing protection against oxidative stress.

How it helps

Blood Orange Extract is packed with Vitamin C and antioxidants, which are crucial for good skin health. It aids in collagen production, helping hydrate and maintain the skin's elasticity and overall hydration.

A 56-day study involving 110 Asian and Caucasian subjects showed that a daily intake of 100 mg of red orange extract improved UV protection, increased skin antioxidants, moisture, elasticity, and radiance while reducing melanin intensity, wrinkle depth, and TEWL [\[R\]](#).

15



Shark Cartilage

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take the shark cartilage supplement orally in capsule or powder form, following the dosage instructions on the product label, which is typically around 750 mg to 2000 mg per day, divided into two to three doses. It should be taken with meals to help with absorption. Continue daily for a period as suggested by a healthcare provider.

TYPICAL STARTING DOSE

750 mg

Description

How it helps

In a [placebo-controlled trial of 66 participants](#), applying blue shark cartilage on the wrists for 10-20 min **enhanced skin elasticity and hydration, and reduced wrinkles** [\[R\]](#).

16



Amla

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate 1-2 teaspoons (approximately 4-8 grams) of amla powder into your daily diet. You can mix it into a glass of water, blend it into a smoothie, or sprinkle it over salads or cooked meals. Do this consistently every day for best results.

Description

Amla, also known as Indian gooseberry, is a fruit known for its high vitamin C content and antioxidant properties. It is used in traditional Ayurvedic medicine for various health benefits, including immune support and skin health.

How it helps

Amla branch extract has demonstrated anti-skin aging effects, including enhancing skin elasticity and hydration and reducing skin wrinkles [\[R\]](#).

A study involving healthy women found that oral intake of a drink containing lingonberry (25 mg) and amla fruit extract (30 mg) improved skin conditions. After 12 weeks of daily intake, there were dose-dependent improvements in skin elasticity, thickness, stratum corneum water content, and the degree of wrinkles around the eyes [\[R\]](#).

17



Astaxanthin

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take an astaxanthin supplement daily, with a typical dosage ranging from 4 to 12 mg. It is best taken with a fat-containing meal to enhance absorption.

TYPICAL STARTING DOSE

12 mg

Description

Astaxanthin is a powerful antioxidant found in certain microalgae and seafood. It is known for its potential benefits in reducing oxidative stress, supporting skin health, and promoting eye health.

[Astaxanthin](#) is a naturally-occurring orange-red pigment carotenoid found in algae, shrimp, lobster, crab, and salmon [\[R\]](#). As an antioxidant, astaxanthin is **10 times stronger than zeaxanthin, lutein and [beta-carotene](#)**, and **100 times stronger than [vitamin E](#)** [\[R\]](#). People take astaxanthin to:

- Support skin health [\[R, R\]](#)
- Reduce exercise fatigue [\[R, R\]](#)
- Prevent heart disease [\[R, R, R\]](#)

How it helps

A meta-analysis concluded that oral astaxanthin supplementation restored moisture content in the skin [\[R\]](#).

18



Rice Ceramides

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a rice ceramide supplement daily, preferably with meals to improve absorption. The typical dosage ranges from 30 to 40 mg per day. Continue this regimen for at least 3 months to notice improvements in skin hydration and texture.

TYPICAL STARTING DOSE

30 mg

Description

Rice ceramides are lipid molecules derived from rice bran that are often used in skincare products for their potential to hydrate and improve skin barrier function.

How it helps

Oral supplementation with rice ceramides significantly improved skin hydration, firmness, elasticity, reduced TEWL, melanin index, erythema index, sebum production, pH, and wrinkle severity, particularly in a study of 50 older individuals [R].

Rice ceramides strengthen skin cells and prevent water loss. Over time, this leads to improved skin hydration and overall skin health.

19



Uva Ursi

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a Uva Ursi supplement containing 400 to 800 mg of the extract, standardized to contain 20% arbutin, up to three times a day. It's typically used for short-term relief of urinary tract infections, not exceeding one week of usage at a time.

TYPICAL STARTING DOSE

400 mg

Description

Uva Ursi, often known as bearberry, is a plant whose leaves are used to make medicine. It's primarily used to treat urinary tract infections because it contains a chemical that could kill bacteria. It's important for health because it can provide relief for such infections, but as with any medicine, it should be used responsibly.

How it helps

In a non-placebo-controlled trial, applying a gel formulation loaded with uva ursi extract on the skin improved skin hydration and elasticity while reducing skin erythema, melanin, and sebum levels [R].

20



Apigenin

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 50-100 mg of apigenin supplement daily, preferably with a meal to enhance absorption. This dosage is suggested based on studies for general health benefits and should be continued as long as it contributes positively to your well-being, or as directed by a healthcare professional.

TYPICAL STARTING DOSE

50 mg

Description

Apigenin is a flavonoid compound found in various plants, including parsley, chamomile, and celery. Its potential health benefits include anti-inflammatory and antioxidant properties.

How it helps

In a placebo-controlled trial of 40 women, applying 2 g of cream with apigenin for 4 weeks increased moisture content and reduced TEWL [\[R\]](#).

Apigenin has antioxidant properties that may help protect your skin against environmental damage, thus boosting its hydration.

21



Persimmon

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a dried persimmon supplement of 100-200mg daily, with water, preferably in the morning after breakfast. Continue this routine for at least 4-8 weeks to observe potential health benefits.

Description

Persimmon is a tropical fruit that comes from a variety of Diospyros trees . It has been used traditionally in Asian countries for centuries. Persimmons are a good source of nutrients, including vitamin A, vitamin C, dietary fiber, and various antioxidants like beta-carotene and flavonoids, which may support immune function and healthy skin.

How it helps

Recomendation References: [\[R\]](#)

In a placebo-controlled trial of 13 healthy men, applying emugels loaded with persimmon fruit extract 2x/day for 12 weeks increased skin moisture and elasticity, and reduced skin wrinkles (by 12.40%), roughness (by 11.76%), and scaliness (by 18.59) [\[R\]](#).

22



Almonds

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate a handful of almonds (about 23 kernels) into your daily diet. You can eat them as a snack, add them to your breakfast cereals or yogurt, or include them in salads and other dishes. Do this consistently for ongoing health benefits.

Description

Almonds are a good source of omega-6s, protein and vitamins, making for a great snack food. A 1-ounce serving provides 3700 mg of omega-6.

Almonds are nutritious tree nuts that originate from the *Prunus dulcis* tree. They are packed with essential nutrients, including healthy fats, fiber, vitamin E, and magnesium, which collectively contribute to heart health, support weight management, and may help regulate blood sugar levels.

How it helps

A study on the effects of almond consumption (accounting for 20% of daily energy consumption for 24 weeks) on facial wrinkles and pigmentation also measured skin hydration and found improvements in skin conditions related to hydration. Almonds contain fatty acids and antioxidants such as vitamin E, which are known to support skin health and may contribute to maintaining skin hydration [\[R\]](#).

23



Flaxseed Oil

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 1 to 2 tablespoons (15-30 g) of flaxseed oil daily. It can be taken with or without food. For best results, use consistently for at least 2 months.

TYPICAL STARTING DOSE

15 g

Description

Flaxseed oil is a source of healthy fats, particularly alpha-linolenic acid (ALA), an omega-3 fatty acid. It can help support cardiovascular health and may have anti-inflammatory properties when used as part of a well-rounded diet.

[Flaxseed](#) is a common ingredient in bakery products. Some people also use it as a health food to support digestion [\[R\]](#).

Flaxseed is rich in many compounds, including [\[R\]](#):

- Vitamins and minerals
- Protein
- Fiber
- Omega-3 fatty acids ([ALA](#))

How it helps

In a [placebo-controlled trial of 45 women](#), consuming flaxseed oil (2.2 g/day fatty acids) for 12 weeks **increased skin hydration while decreasing reddening, water loss, roughness, and scaling** [\[R\]](#).

24



Rose Hip

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a 500 mg rose hip supplement daily, preferably with a meal to aid absorption.

TYPICAL STARTING DOSE

500 mg

Description

Rose hip is the fruit of the wild rose plant and is commonly used in various forms, such as oil or extract. It's rich in nutrients like vitamin C, antioxidants, and essential fatty acids, making it valuable for skincare and immune health.

Rose hips are round fruits found on rose plants [\[R\]](#).

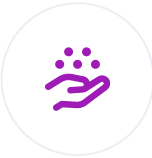
They’re a **good source of vitamin C and other antioxidants**. Some compounds in rose hips are also **anti-inflammatory** [\[R, R, R\]](#).

How it helps

Rose Hip is high in antioxidants and essential fatty acids, which hydrate the skin by promoting skin cell renewal. It also helps protect against inflammation and sun damage that can dry out the skin.

In a non-placebo-controlled trial of 34 healthy volunteers with crow’s feet wrinkles, ingesting powder made from rose hip seeds and shells for 8 weeks improved crow's-feet wrinkles, skin moisture, and skin elasticity as effectively as astaxanthin [\[R\]](#).

25



Topical Alpha-Ketoglutarate

IMPACT

1 / 5

EVIDENCE

1 / 5

Description

Topical alpha-ketoglutarate (AKG) is a form of the amino acid alpha-ketoglutaric acid that is applied to the skin. It is used to treat a variety of skin conditions, including acne, eczema, and psoriasis. AKG may help to reduce inflammation and improve skin barrier function.

How it helps

Alpha-ketoglutarate (AKG) may support skin hydration and elasticity through its role in collagen and elastin synthesis. Collagen and elastin are key structural proteins in the skin, contributing to its firmness and elasticity.

AKG, as a critical molecule in the Krebs cycle, is involved in the production of energy needed for the synthesis of these proteins. It also serves as a precursor for the amino acids like proline and lysine, essential for collagen formation. Additionally, its potential antioxidative properties may protect skin cells from oxidative stress, which can degrade collagen and elastin.

In cultured human dermal fibroblasts, α-KG stimulates procollagen production and activates prolidase, an enzyme involved in collagen metabolism. In UVB-irradiated hairless mice, topically applied α-KG reduces wrinkle formation [\[R\]](#).

Alpha-ketoglutarate (Alpha-KG), an important metabolic intermediate, has shown skin benefits. In vitro tests revealed that Alpha-KG promotes skin hydration, barrier function, and cell proliferation. Clinical testing demonstrated reduced wrinkles, improved firmness, and increased skin gloss with Alpha-KG. Rice fermented liquid containing Alpha-KG is a promising ingredient for skin care products, offering potential benefits for skin health [\[R\]](#).

26



Turmeric

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate 500-1000 mg of turmeric into your daily diet, either by adding ground turmeric spice to your food, such as in curries, soups, and smoothies, or by taking a dietary turmeric supplement. This should be done daily for at least 8 weeks to observe potential health benefits.

Description

Turmeric is a bright yellow spice derived from the root of the *Curcuma longa* plant. It contains curcumin, a potent antioxidant and anti-inflammatory compound. Turmeric is used for various health conditions, including reducing inflammation, alleviating joint pain, and supporting digestive health.

How it helps

Turmeric is packed with anti-inflammatory and antioxidant properties that may benefit skin health by reducing inflammation, healing wounds, and increasing natural glow. However, there's no direct evidence to suggest that it can improve skin hydration.

In a [placebo-controlled trial of 47 healthy participants](#), supplementation with hot water extract of turmeric for 8 weeks **increased skin water content but had no effects on water loss or erythema** [\[R\]](#).

27



Amla And Lingonberry

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take an amla supplement of 500 mg twice daily and a lingonberry supplement of 400-500 mg daily. Continue this regimen for at least 3-6 months to evaluate its benefits.

TYPICAL STARTING DOSE

500 mg

Description

Amla, also known as Indian gooseberry, is a fruit known for its high vitamin C content and antioxidant properties. It is used in traditional Ayurvedic medicine for various health benefits, including immune support and skin health. Lingonberry is a small, red, tart berry, rich in vitamin C content and potential health benefits, including its role in supporting urinary tract health.

How it helps

A study involving healthy women found that oral intake of a drink containing lingonberry (25 mg) and amla fruit extract (30 mg) improved skin conditions. After 12 weeks of daily intake, there were dose-dependent improvements in skin elasticity, thickness, stratum corneum water content, and the degree of wrinkles around the eyes [\[R\]](#).

28



Salmon Egg Extract

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a salmon egg extract supplement daily, following the dosage instructions on the product label, which typically range from 500 to 2000 mg. Continue this regimen for at least 3 to 6 months to observe potential health benefits.

TYPICAL STARTING DOSE

500 mg

Description

Salmon egg extract is derived from the eggs of salmon and is often used in dietary supplements for its potential health benefits like heart health, due to being a source of essential omega-3 fatty acids and phospholipids, vitamins, and minerals that support overall well-being.

How it helps

A double-blinded, randomized clinical trial of 66 healthy female volunteers found that salmon egg extract (1% and 5% in vehicle formulation for 56 days) improved wrinkles, pigmentation, redness, brightness, and hydration and led to global improvement of facial skin in a dose-dependent and time-dependent manner [\[R\]](#).

Salmon egg extract is rich in essential fatty acids and proteins that boost the skin's moisture levels and promote cell regeneration.

29



Passion Fruit Seed Extract

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 30 milligrams of passion fruit seed extract daily, preferably with a meal to enhance absorption. This supplement should be taken continuously for a period of at least four to eight weeks to evaluate its effects on your health.

TYPICAL STARTING DOSE

30 mg

Description

Passion fruit seed extract is derived from the seeds of the passion fruit (*Passiflora edulis*), a fruit native to South America. It contains carotenoids, flavonoids, and polyphenols, that are utilized for skin health.

How it helps

In a placebo-controlled trial of 32 healthy Japanese women, passion fruit seed extract (containing 5 mg piceatannol) taken for 8 weeks increased the moisture content of the skin after 4 and 8 weeks. It also decreased the amount of transepidermal water loss over time, although the differences were not significant. In subjects with moisture values of $\leq 200 \mu\text{S}$, it increased moisture content and reduced perspiration and fatigue [\[R\]](#).

Passion fruit peel extract is rich in vitamins A and C and antioxidants. They may help by boosting skin regeneration and protecting it from damage.

30



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].

31



Green Coffee Extract

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a 400 mg dose of green coffee extract supplement daily. This can be consumed in the morning or as directed on the supplement’s packaging.

TYPICAL STARTING DOSE

400 mg

Description

Green coffee extract is believed to support weight management due to its high content of chlorogenic acids, which may help regulate blood sugar levels and promote fat metabolism.

Green coffee is made from unroasted coffee beans. It’s rich in an anti-inflammatory and antioxidant compound called [chlorogenic acid](#) [R, R].

Green coffee may help lower [R]:

- Blood pressure
- Weight
- Blood sugar levels

How it helps

In a placebo-controlled trial of 49 women with mildly xerotic skin, supplementation with coffee polyphenols (270 mg/100 mL/day) for 8 weeks reduced skin dryness and water loss while increasing skin hydration [R].

Green coffee contains high levels of antioxidants that can reduce inflammation and free radicals that dry the skin. It also contains chlorogenic acid, which may improve the skin's texture and reduce signs of aging by increasing hydration.

Please note: *Green coffee bean extract contains caffeine. Keep this in mind if you're trying to limit your caffeine intake. If you're pregnant, limit caffeine to 200 mg per day* [R].

Please note: *chlorogenic acid from green coffee beans 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 coffee bean extract and always consult with a healthcare provider before taking this supplement* [R].

Please note: *polyphenols and tannins from coffee may bind to iron and form insoluble complexes, which reduces iron absorption in the gut. If you have anemia, consult your healthcare provider before using coffee or coffee supplements.*

32

Aromatherapy

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Select essential oils like lavender, peppermint, or eucalyptus. Use a diffuser to disperse the scent into your room for 30-60 minutes at a time, up to 3 times a day. Alternatively, apply a few drops diluted in a carrier oil directly to your skin, such as on your temples or wrists, twice a day.

TYPICAL STARTING DOSE

30 minutes

Description

Aromatherapy is a holistic practice that uses the scents and aromas of essential oils to promote physical, mental, and emotional well-being. It is often used for relaxation, stress reduction, and to address various health concerns through inhalation or topical application of essential oils.

Aromatherapy uses concentrated plant extracts known as **essential oils**. They can be inhaled using a diffuser (a device that releases small amounts of oil into the air) or applied to the skin using a roller [\[R\]](#).

[Lavender](#) is a decorative flower and a calming herb and its essential oil is commonly used in aromatherapy. People use it to [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Reduce anxiety [\[R\]](#)
- Improve sleep quality [\[R\]](#), [\[R\]](#)
- Relieve pain [\[R\]](#), [\[R\]](#)

Essential oils can be harmful if not used properly. Tips for using them safely include [\[R\]](#), [\[R\]](#):

- Diluting them properly using a plant-based carrier oil (such as olive oil or almond oil)
- Using diffusers in a well-ventilated area for a maximum of 1 hour
- If using on the skin, testing a small area first and waiting a day before using more
- Keeping essential oils away from candles or other heat sources

How it helps

In a non-placebo-controlled trial of 20 elderly participants with dry skin, receiving aromatherapy for 4 weeks improved skin moisture in the arm, leg, back, and chest [\[R\]](#).

33



Flaxseed

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Consume 2 tablespoons of ground flaxseed daily. You can add it to your breakfast cereal, smoothies, or salads.

TYPICAL STARTING DOSE

2 tbsp

Description

Flaxseed is a nutrient-dense food that's high in fiber and omega-3 fatty acids. It may contribute to heart health, promote digestive regularity, and help manage cholesterol levels when included in a balanced diet.

[Flaxseed](#) is a common ingredient in bakery products. Some people also use it as a health food to support digestion [\[R\]](#).

Flaxseed is rich in many compounds, including [\[R\]](#):

- Vitamins and minerals
- Protein
- Fiber
- Omega-3 fatty acids ([ALA](#))

How it helps

Flaxseed oil contains high levels of omega-3 fatty acids which contribute to maintaining healthy skin. Regular consumption of flaxseed oil can help improve skin hydration, reducing dryness and flakiness.

In a [placebo-controlled trial of 45 women](#), consuming flaxseed oil (2.2 g/day fatty acids) for 12 weeks **increased skin hydration while decreasing reddening, water loss, roughness, and scaling** [\[R\]](#).

34

Topical Hydrolyzed Keratin

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Apply a pea-sized amount of topical hydrolyzed keratin to the affected area of the skin or hair. Use it once daily, preferably at night, to allow the keratin to work overnight. Continue this routine for at least one month to observe beneficial effects.

Description

Hydrolyzed keratin is a protein derived from animal sources like wool or feathers, often used topically to strengthen and repair hair and nails. It can help improve hair and nail health and is commonly found in haircare products.

How it helps

A hydrolyzed keratin peptide, derived from wool, was tested on skin in two formulations: aqueous solution and internal wool lipids liposome suspension. Treated areas showed increased hydration, elasticity, and improved skin barrier integrity with enhanced water-holding capacity compared to control sites [R].

Topical hydrolyzed keratin creates a protective barrier on the skin to lock in moisture.

35

Royal Jelly

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a royal jelly supplement daily, starting with a dose of approximately 300 mg to 500 mg. It can be consumed either in capsule form or directly, depending on your preference, for a period ranging from 3 to 6 months to observe the potential health benefits.

TYPICAL STARTING DOSE

300 mg

Description

Royal jelly is a nutrient-rich substance secreted by worker bees to feed bee larvae and the queen bee. Royal jelly contains protein B-vitamins, calcium and iron. It is taken as a supplement for it's potential energy-boosting and immune-supporting properties.

How it helps

Royal jelly is packed with nutrients, particularly amino acids and water, which can help improve your skin's hydration. Its amino acids can promote collagen production for skin strength and elasticity, and its water content may assist in moisturizing and nourishing your skin.

In a placebo-controlled trial of 35 healthy participants, applying an essence with royal jelly for 4 weeks **increased the water content of the stratum corneum** [R].

36



Wheat Extract (Ceramides)

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take an oral supplement containing wheat extract ceramides once daily, preferably with a meal to enhance absorption. The typical dose ranges from 350 to 400mg. It is recommended to continue for at least 3 months to observe improvements in skin hydration and texture.

Description

Wheat extract may refer to various compounds derived from wheat, such as wheat germ extract, known for its vitamin E content. Wheat extracts are used in skincare and dietary supplements for their potential antioxidant properties and to support skin health.

How it helps

A study on 51 women aged 20-63 with dry skin showed that 350 mg of wheat extract oil significantly increased skin hydration on the arms and legs compared to the placebo. Participants perceived improvement in overall skin hydration with wheat extract oil, and it was perceived as more effective in reducing skin dryness signs [R].

Wheat extract, particularly ceramides, may help by creating a barrier that locks in moisture.

37



Lactobacillus Plantarum

IMPACT1 / 5

EVIDENCE1 / 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, a form of probiotic, helps skin hydration by strengthening the skin's barrier function. This enables the skin to retain moisture better, leading to improved hydration.

In a placebo-controlled trial of 21 participants, applying topical L. plantarum LB244R for 56 days **improved skin density, hydration, firmness, and elasticity, while decreasing trans-epidermal water loss and sub-epidermal low echogenic band thickness** [\[R\]](#).

Oral supplementation with L. plantarum HY7714 for 12 weeks **reduced wrinkle depth and increased skin elasticity (by 21.73%) and gloss** in a [placebo-controlled trial for 110 volunteers](#) [\[R\]](#).

38



Pantothenic Acid (Vitamin B5)

IMPACT1 / 5

EVIDENCE1 / 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

Vitamin B5, when applied topically, attracts moisture to the skin and holds onto it, promoting skin hydration. Moreover, it helps the skin barrier function, which aids in reducing water loss, thus contributing to softer, smoother skin.

Applying formulations with 1-5% panthenol on the forearms for 30 days reduced transepidermal water loss in a non-placebo-controlled trial. In a non-placebo-controlled trial of 43 volunteers challenged with skin irritation by SDS, applying an emollient with panthenol for 3 weeks reduced transepidermal water loss and improved skin hydration and barrier function [\[R\]](#), [\[R\]](#).

39



Gotu Kola

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a Gotu Kola supplement, available in capsule or powder form, daily. Dosages typically range from 500mg to 2000mg daily, divided into two or three doses. It's recommended to start with the lower dose to assess tolerance and then increase if necessary. Continue for 4 to 6 weeks to evaluate the benefits.

Description

Gotu kola is an herb used in traditional medicine for its potential to improve cognitive function, reduce inflammation, and support skin health.

[Gotu kola](#) or Pennywort (*Centella asiatica*) is an herb used in Tai-Chi tradition and Ayurvedic and Chinese Traditional Medicine.

Gotu kola is used as an antioxidant and anti-inflammatory. Traditional uses include:

- Wound healing [\[R\]](#).
- Improving leg circulation [\[R\]](#)

How it helps

Gotu Kola, as a supplement, promotes skin hydration by boosting the production of collagen, a protein that maintains the skin's elasticity and moisture. It also improves the skin barrier function, helping to retain more water and resulting in more hydrated skin.

In a non-placebo-controlled trial of 30 textile workers, applying a cream with gotu kola to the hands and arms 2x/day for 4 weeks improved skin hydration [\[R\]](#).

40



Grape Seed Extract

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 100-300 mg of grape seed extract daily, preferably with a meal to enhance absorption. This can be done either through a single dose or split into multiple doses throughout the day. Continue this regimen for at least 3 months to observe potential benefits.

TYPICAL STARTING DOSE
100 mg

Description

Grape seed extract is rich in antioxidants called polyphenols, which may help protect against oxidative stress and support cardiovascular health. It's also believed to have potential benefits for skin health and overall well-being.

[Grape seed extract](#) is made from the seeds of wine grapes. It contains antioxidant compounds that may help support [\[R\]](#), [\[R\]](#):

- Blood circulation
- Heart health
- Blood sugar control
- Healthy weight

How it helps

In a placebo-controlled trial of 15 healthy volunteers, applying a novel grapeseed oil-loaded dermo-cosmetic gel for 12 weeks increased skin moisture [\[R\]](#).

Grape seed extract has high amounts of antioxidants and vitamin E, which can protect the skin cells, improve skin texture, and enhance skin hydration.

41



Acetic Acid Bacteria (Dihydro-Ceramide)

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take an acetic acid bacteria (dihydro-ceramide) supplement as directed on the product label, usually once daily. It's common for supplements to vary in dosage, so adhere strictly to the manufacturer's guidance or a healthcare professional's advice for the best results.

Description

Dihydro-ceramides are lipid molecules involved in cell membrane structure and signaling. They play a role in various cellular processes by maintaining skin barrier function and overall skin health, and helping to prevent moisture loss and dryness.

How it helps

Acetic Acid Bacteria (Dihydro-Ceramide) boosts the body's production of ceramides, which are lipids that help form the skin's barrier and help skin retain moisture. By increasing ceramide levels, the supplement improves skin hydration, helping to keep it soft and supple.

A 12-week study on oral ceramide intake in adults concerned about dry skin found that it significantly improved skin moisture without causing harm to participants [\[R\]](#).

42



Djulis

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate djulis (*Chenopodium formosanum*), also known as Taiwanese quinoa, into your diet by adding it to soups, salads, or as a rice substitute. Cook djulis similar to how you would prepare quinoa: rinse thoroughly, then combine one part djulis with two parts water in a pot, bring to a boil, reduce heat to low, cover, and simmer for about 15-20 minutes until the water is absorbed. Include djulis in your meals 2-3 times per week for dietary variety and potential health benefits.

Description

Djulis, also known as red quinoa, is a grain-like crop native to Taiwan. It is rich in nutrients and antioxidants, offering potential health benefits such as improved heart health and overall nutritional wellness.

Djulis (*Chenopodium formosanum*) is a cereal native to Taiwan, where it's a key component of the indigenous diet. Djulis is rich in fiber, protein, and antioxidants [\[R\]](#).

How it helps

Consuming a djulis drink for 8 weeks may increase the hydration, elasticity, and collagen content of the skin [\[R\]](#).

Djulis is a rich source of antioxidants that may prevent skin aging [\[R\]](#).

43



Alpha-Ketoglutarate (AKG)

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take alpha-ketoglutarate (AKG) as a dietary supplement in a dose of approximately 1-2g per day, preferably with meals to aid in its absorption. The exact dosage may vary based on the specific product and individual health needs, so it's important to follow the label instructions or consult a healthcare provider for personalized advice. This supplementation can be ongoing, with periodic evaluations to assess its effects on your health.

TYPICAL STARTING DOSE

1 g

Description

Alpha-ketoglutarate (AKG) is a key molecule in the Krebs cycle, crucial for energy production in cells. It plays a role in amino acid synthesis and nitrogen transport. In supplement form, it's claimed to improve athletic performance and support recovery, but the scientific evidence for these benefits is limited.

How it helps

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.*

Alpha-Ketoglutarate (AKG) may support skin hydration and elasticity through its role in collagen and elastin synthesis. Collagen and elastin are key structural proteins in the skin, contributing to its firmness and elasticity.

AKG, as a critical molecule in the Krebs cycle, is involved in the production of energy needed for the synthesis of these proteins. It also serves as a precursor for the amino acids like proline and lysine, essential for collagen formation. Additionally, its potential antioxidative properties may protect skin cells from oxidative stress, which can degrade collagen and elastin.

In cultured human dermal fibroblasts, α-KG stimulates procollagen production and activates prolidase, an enzyme involved in collagen metabolism. In UVB-irradiated hairless mice, topically applied α-KG reduces wrinkle formation [R].

Alpha-ketoglutarate (Alpha-KG), an important metabolic intermediate, has shown skin benefits. In vitro tests revealed that Alpha-KG promotes skin hydration, barrier function, and cell proliferation. Clinical testing demonstrated reduced wrinkles, improved firmness, and increased skin gloss with Alpha-KG. Rice fermented liquid containing Alpha-KG is a promising ingredient for skin care products, offering potential benefits for skin health [R].

44



Lingonberry

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take 400 mg of lingonberry supplement daily with a glass of water, preferably in the morning with your breakfast for at least 8 to 12 weeks to observe beneficial effects.

TYPICAL STARTING DOSE
400 mg

Description

Lingonberries are rich in antioxidants and vitamins, supporting immune health and potentially reducing the risk of chronic diseases. Their consumption may also promote urinary tract health and help manage blood sugar levels.

How it helps

A study involving healthy women found that oral intake of a drink containing lingonberry (25 mg) and amla fruit extract (30 mg) improved skin conditions. After 12 weeks of daily intake, there were dose-dependent improvements in skin elasticity, thickness, stratum corneum water content, and the degree of wrinkles around the eyes [R].

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.

