

Acne

DNA Health Report



REPORT CATEGORY —



Sample Client

Report date: 03 September 2025

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Personal information

NAME

Sample Client

SEX AT BIRTH

Male

HEIGHT

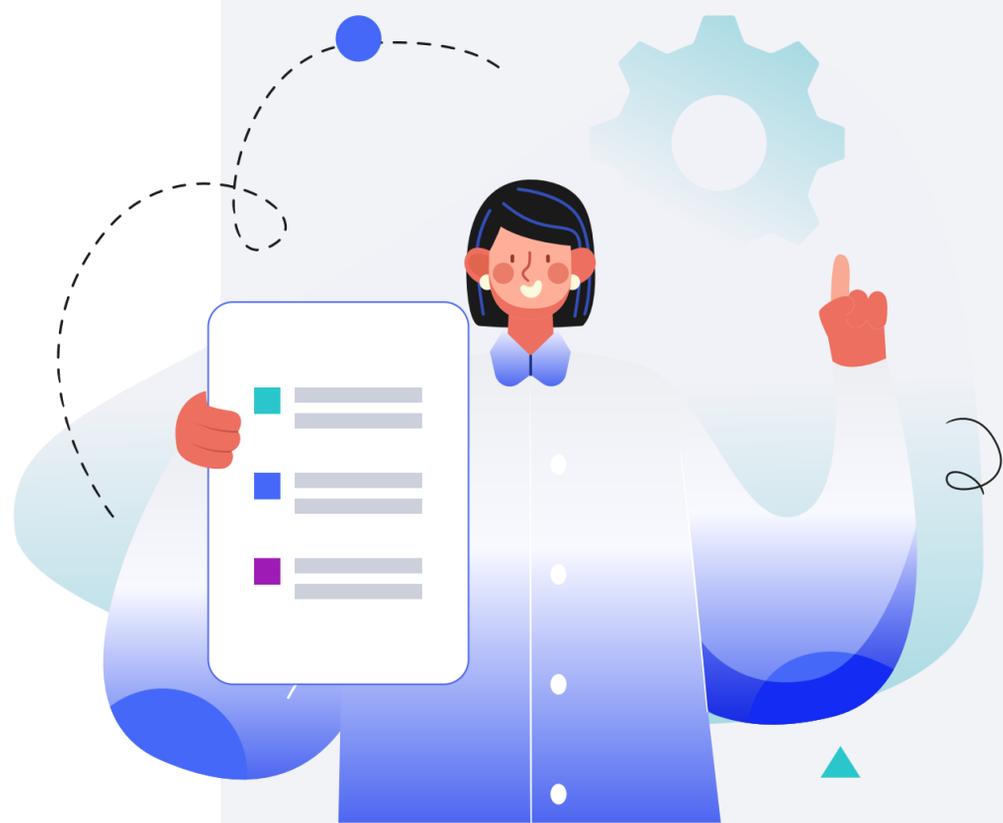
5ft 9" 175.0cm

WEIGHT

165lb 75.0kg

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.



Introduction

We've all been there. Really excited for a night out with our friends or preparing for a big meeting at work and there it is: **the dreaded spot**.

When people think of acne, they typically associate it with youth. That's because **around 85% of people develop acne between the ages of 12-24**. But this isn't just a condition of youth. Adults get acne too. Women are particularly at risk, with **15% of adult women** in the US affected [\[R\]](#).

Despite how common acne is, some people feel self-conscious about these pesky pimples. Many of us spend a great deal of time, energy, and money searching for that one fix to clear up our complexion. **In 2016 alone, acne treatment and lost productivity due to acne cost more than \$1.2 billion in the US** [\[R\]](#).

A big influencing factor when it comes to acne is your environment. This can mean what you eat or how stressed you are. **The other major factor in this equation is genetics** [\[R\]](#).

Most over-the-counter facial cleansers target the external element of acne, like excess oil and debris on your skin's surface. However, there may also be ways to target these factors genetically, adding another facet to your daily skincare routine.

For example, a primary target of facial cleansers is dead skin, which may promote acne by blocking pores. A particular variant in the [OVOL1](#) gene is linked to acne. It may promote skin cell growth, leading to excess dead skin cells. Light therapy may help target the root cause by slowing skin cell growth [\[R, R, R, R\]](#).

Another variant in the [IL1A](#) gene may promote acne by increasing inflammation. Anti-inflammatory agents, such as zinc and niacinamide, may help by calming skin inflammation [\[R, R, R\]](#).

These are just some examples of how targeting your genes may help freshen up your complexion.

Read on to find out more about:

- **How your genetics play a role in acne**
- **Your genetic risk score based on over 31,000 genetic variants**
- **Personalized recommendations based on your genetics**

About Acne

Key Takeaways:

- About **50-90%** of differences in people's chances of developing acne may be due to genetics.
- Around **85%** of people develop acne between the **ages of 12 and 24**.
- Risk factors include: sugary food, dairy, oily makeup, stress, and hormonal changes.
- If your genetic risk is high, and you are young, take action now.
- Click the **Recommendations** tab for potential dietary and lifestyle changes.

Acne is a common skin condition easily recognized by the pimples that appear on the face and back [\[R, R\]](#).

Pimples are caused by blocked hair follicles. Oil, dead skin cells, and bacteria can all plug hair follicles and contribute to pimples [\[R, R\]](#).

Acne is extremely common in teenagers. In fact, it affects about 90% of boys and 80% of girls at some point in their teen years [\[R, R\]](#).

Researchers aren't sure about the exact cause of acne. One possible explanation is that the body makes more sex hormones during puberty. These hormones can increase the production of *sebum*, a skin oil that can plug a follicle. In response, the bacteria *Cutibacterium acnes* (*C. acnes*) can begin to grow [\[R, R\]](#).

It is normal for *C. acnes* to live on your skin, mainly in and around the hair follicles. In fact, it may even help protect against infection by more dangerous bacteria. However, some types of *C. acnes* have been linked to acne [\[R\]](#).

Besides puberty, factors that may trigger or worsen acne include [\[R, R\]](#):

- Sugary food
- Dairy
- Oily makeup



MORE LIKELY

More likely to have acne based on 30,205 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
TGFB2	rs1159268	AA
MOCS2	rs38055	GA
SEMA4B	rs34560261	CC
WNT10A	rs74333950	TT
TNFRSF1B	rs1061622	GT
TLR4	rs4986791	CC
FGF10	rs16874036	GG
MYEOV	rs10896460	TT
TNF	rs1799724	TC
DEXI	rs7194305	AA
H4C13	rs169262	CC
IL17F	rs763780	TT
LAMC2	rs513398	AA
MAP3K1	rs455660	CC
GPR25	rs296522	CC
ADAMTS18	rs72803831	GA
MOCS2	rs629725	CT
IL6	rs1800796	GC
PPARG	rs1801282	CC
DBX1	rs1838055	GC

- Stress
- Hormonal changes
- **Genetics**

Acne isn't usually dangerous and often goes away on its own. However, zits may leave scars on the skin long after they're gone. Both acne and its scars can affect a person's self-esteem. It is therefore important to manage acne and its potential impact on mental health [\[R, R, R\]](#).

Treatments often combine oral medication, creams, and skin washing. Other treatments include light therapy and chemical peels [\[R, R, R\]](#).

About 50-90% of differences in people's chances of developing acne may be attributed to genetics. Genes involved in acne may influence [\[R, R, R, R\]](#):

- Hormones ([MYC](#), [DDB2](#), [SELL](#))
- Skin cell function ([TP63](#), [CACNA1H](#), [ADAM19](#))

GENE	SNP	GENOTYPE
SUGCT	rs9639838	CT
CYP19A1	rs700518	CC
EDNRA	rs6842241	CA
BORCS7	rs743572	AG
UTP25	rs12086634	TG
BCL11A	rs2901000	AG
SYN3	rs135025	GA
IL1A	rs17561	CC
LPCAT2	rs243865	CC
TNF	rs1800629	GG
SPDYC	rs144908022	AA
PF4V1	rs4073	TT
SLC45A1	rs80293268	GG
LYPLAL1	rs1256580	GG
IL4R	rs1801275	AA
ARNTL	rs3849154	GG
EDAR	rs260643	GG
DLC1	rs17803958	CC
CSTA	rs17265703	AA
MAP3K1	rs158343	CC
PCNX3	rs61744384	AA
TIMP4	rs3773364	AA
TRPM7	rs8042919	GG
CRELD2	rs28470568	GG
UPB1	rs2070475	AA
NUDT6	rs13104688	TT
DUSP16	rs7312010	GG
PAQR8	rs2275913	GG
SLC20A1	rs1800587	GG
PNPLA3	rs738409	GG

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

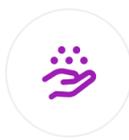
Your Recommendations

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 Topical Benzoyl Peroxide		2 Avoid Sugary Foods & Drinks	
3 Topical Salicylic Acid		4 Moisturize the Skin	
5 Topical Tea Tree Oil		6 Light Therapy for Skin	30 minutes
7 Microneedling		8 Fractional CO2 Laser Therapy	30 minutes
9 Dietary Omega-3 Fatty Acids		10 Blue Light Therapy	30 minutes
11 Topical Niacinamide		12 Chemical Peels	
13 Topical Green Tea		14 Red Light Therapy	20 minutes
15 Limit Dairy Intake			

1



Topical Benzoyl Peroxide

IMPACT

 4 / 5

EVIDENCE

 4 / 5

How to implement

Apply a thin layer of benzoyl peroxide gel or cream over the affected areas of clean, dry skin once or twice daily, according to the product instructions or as directed by your healthcare provider. Start with once daily to see how your skin reacts, then increase to twice daily if tolerated and needed. Avoid contact with hair and dyed fabrics, which can be bleached by the product.

Description

Benzoyl peroxide is a topical acne treatment known for its antibacterial properties and its effectiveness in reducing acne lesions and preventing new breakouts. It's commonly used in skincare products to treat various forms of acne.

How it helps

Topical benzoyl peroxide (2.5-5%) is FDA-approved for the treatment of acne. Experts recommend this compound both alone and as an add-on treatment. Importantly, its combination with antibiotics helps prevent antibiotic resistance [R, R]

Topical benzoyl peroxide works by reducing the amount of acne-causing bacteria and causing the skin to dry and peel. This helps to clean pores, reduce inflammation, and prevent new acne from forming.

2



Avoid Sugary Foods & Drinks

IMPACT

 4 / 5

EVIDENCE

 4 / 5

How to implement

To avoid sugary foods, eliminate or significantly reduce consumption of foods and beverages high in added sugars such as sodas, candies, baked goods, and sugary cereals from your diet. Instead, opt for natural sugar sources like fruits. Aim to do this daily for ongoing health benefits.

Description

High-sugar foods like baked goods, sweets, and sugary drinks, can spike your blood sugar levels. Consuming a lot of these types of foods can contribute to health issues like diabetes, obesity, insomnia, and heart disease.

High-sugar foods and refined carbs have a high glycemic index (GI). This means they tend to spike your blood sugar levels. They include [\[R, R, R\]](#):

- Sugary drinks
- Baked goods
- Sweets
- White bread
- White rice
- Pasta

Eating a lot of sugary foods can contribute to:

- Diabetes [\[R, R, R\]](#)
- Weight gain and obesity [\[R, R\]](#)
- Insomnia [\[R\]](#)
- Heart disease [\[R\]](#)

You may also want to avoid processed sugars and sugary drinks. They may have a role in increasing IL-1B [\[R, R\]](#).

How it helps

Experts agree that refined carbs and sugary foods are associated with acne. Eating them may worsen the symptoms [\[R, R, R, R, R, R\]](#).

Increased chocolate intake may also be linked to acne. Avoiding chocolate may help, but the evidence is mixed [\[R, R, R, R, R, R, R\]](#).

In line with this, **eating foods lower in refined sugar may improve acne**. Healthy options include fruits, vegetables, legumes, nuts, and whole grains [\[R, R, R, R\]](#).

Following a diet low in sugar may help by [\[R, R, R\]](#):

- Reducing inflammation
- Decreasing skin oil production

3  **Topical Salicylic Acid**

IMPACT  4 / 5

EVIDENCE  4 / 5

How to implement

Apply a small amount of salicylic acid gel or cream to the affected area of the skin once or twice a day, after gently cleaning and drying the skin. Use consistently for several weeks to achieve the best results, and always follow the specific product instructions.

Description

Salicylic acid is a beta-hydroxy acid (BHA) used in skincare for its ability to exfoliate the skin, unclog pores, and treat acne. It is derived from the bark of willow trees and is effective in managing various skin conditions.

Salicylic acid is a medication that removes dead skin cells. It's used to treat a number of skin issues, such as [\[R, R\]](#):

- Dandruff
- Warts
- Acne

For acne, **salicylic acid (0.5-2%)** is available without a prescription in a variety of topical products. These include [\[R, R\]](#):

- Soaps
- Facial wipes
- Lotions
- Gels

How it helps

Some experts recommend using topical salicylic acid to manage acne [\[R, R, R\]](#).

Products with topical salicylic acid may help treat acne by [\[R, R, R, R, R\]](#):

- Removing dead skin cells
- Killing acne-causing bacteria
- Stopping new pimples from forming

Salicylic acid can also be combined with other acne treatments [\[R, R, R, R, R, R\]](#).

Please note: *Skin irritation and dryness are more likely to occur if you use multiple topical acne medications at the same time* [\[R, R\]](#).

4  **Moisturize the Skin**

IMPACT  4 / 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

Acne is associated with an impaired skin barrier function, which in turn contributes to its worsening [\[R, R\]](#).

Experts recommend properly moisturizing the skin as part of acne treatment to reduce irritation and inflammation [\[R, R, R\]](#).

5

Topical Tea Tree Oil

IMPACT

4 / 5

EVIDENCE

3 / 5

How to implement

Apply a few drops of 100% tea tree oil to a cotton swab or ball and gently dab onto the affected area of the skin. Do this 1-2 times daily until improvements are noticeable, usually for a period of 1-4 weeks. Avoid applying tea tree oil to large areas of the skin and test on a small patch of skin first to ensure no allergic reaction occurs.

Description

Tea tree oil is used topically for its antimicrobial and antifungal properties, commonly applied to treat skin conditions like acne, fungal infections, and insect bites. Its main chemical compound of interest is terpinen-4-ol, and it is sourced from the leaves of the tea tree, *Melaleuca alternifolia*.

[Tea tree oil](#) is derived mostly from steaming the leaves of *Melaleuca alternifolia*, a tree native to Australia [\[R\]](#).

It's used to treat a number of conditions, such as [\[R\]](#):

- Acne
- Dandruff
- Nail fungus
- Lice
- Athlete's foot

How it helps

Experts agree that tea tree oil may help with acne [\[R, R, R\]](#).

It may help by killing acne-causing bacteria [\[R, R, R, R\]](#).

Lotion or gel with tea tree oil (5%) may work as well as benzoyl peroxide, an over-the-counter acne treatment. However, it may act slower [\[R, R, R, R\]](#).

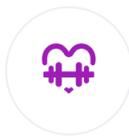
Please note: *Ingesting tea tree oil is toxic. Applying undiluted tea tree oil to the skin can cause irritation. Do not use tea tree oil if you have skin conditions such as eczema or rosacea [\[R, R\]](#).*

PERSONALIZED TO YOUR GENES

Your [DEFB1](#) gene variant may be linked to acne. It is likely less protective against acne-causing bacteria. Tea tree oil may help by killing these bacteria [\[R, R, R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
DEFB1	rs11362	CC	<div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #800080; margin-right: 2px;"></div> <div style="width: 20px; height: 10px; background-color: #ccc; margin-right: 2px;"></div> <div style="width: 20px; height: 10px; background-color: #ccc; margin-right: 2px;"></div> <div style="width: 20px; height: 10px; background-color: #ccc; margin-right: 2px;"></div> </div>

6



Light Therapy for Skin

IMPACT

 3 / 5

EVIDENCE

 4 / 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 light therapy may help some people with acne. However, evidence is limited, and they do not recommend a specific regimen [\[R, R, R\]](#).

Light therapy with **blue light**, **red light**, and their combination may help improve acne. However, the evidence is mixed [\[R, R, R\]](#).

Light therapy may help by [\[R, R\]](#):

- Slowing skin cell growth
- Killing acne-causing bacteria

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



PERSONALIZED TO YOUR GENES

The [TGFB2](#) gene codes for TGF-beta, a protein that supports skin growth and repair. People with [acne](#) tend to have lower TGF-beta levels in their skin, which may contribute to clogged pores and bacterial growth [\[R, R, R\]](#).

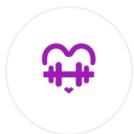
Your genotype for [rs1159268](#) has been associated with lower TGF-beta activity and increased odds of acne [\[R\]](#).

In acne-affected skin, light therapy may reduce inflammation by boosting TGF-beta [\[R, R, R, R, R\]](#).

>>> To learn more about the link between the [TGFB2](#) gene and acne, check out the full [SelfDecode](#) blog post [here](#).

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
TGFB2	rs1159268	AA	



Microneedling



How to implement

To implement microneedling as a lifestyle recommendation for skin rejuvenation or scar treatment, use a dermaroller or microneedling device with needles of 0.2 to 1.0 mm in length, depending on the treatment area and sensitivity of your skin. Gently roll the device over the target area in a criss-cross pattern, ensuring to cover all desired areas, typically once every 2 to 4 weeks. Cleanse the skin and device before and after each use to prevent infection.

Description

Microneedling is a minimally invasive procedure that uses tiny needles to create tiny punctures in the skin. This can help to stimulate collagen production, improve skin texture, and reduce the appearance of scars.

How it helps

A meta-analysis concluded that microneedling without radiofrequency was more effective in improving scars compared to fractional radiofrequency microneedling, with a mean difference of 0.42 for objective scar improvement. However, subjective satisfaction did not significantly differ between microneedling and other treatments [\[R\]](#).

In a different systematic review, the combination of microneedling and PRP (platelet-rich plasma) showed significantly better clinical improvement for atrophic acne scars than microneedling alone. Patients in the combination therapy group reported higher satisfaction rates and side effects like erythema were of shorter duration after combination therapy [\[R\]](#).

Similarly, another meta-analysis reinforced the efficacy of combined treatment with microneedling and PRP. It was associated with increased odds of clinical improvement in acne scars and a significantly improved mean qualitative scale score. Patient satisfaction rates were higher with combined treatment, and severe adverse events were not significantly different [\[R\]](#).

8  **Fractional CO2 Laser Therapy**

IMPACT
● ● ● ● ● 3 / 5

EVIDENCE
● ● ● ● ● 3 / 5

How to implement

Book a series of treatments with a licensed dermatologist or medical spa professional, typically 3-5 sessions spaced 4-6 weeks apart. Each session may last about 30 minutes to an hour, depending on the skin area being treated. Follow post-treatment care instructions carefully, including avoiding direct sun exposure and using prescribed skin care products.

TYPICAL STARTING DOSE

30 minutes

Description

Fractional CO2 laser therapy is a dermatological procedure used to treat skin concerns like wrinkles, scars, and sun damage. It works by stimulating collagen production and skin regeneration, resulting in improved skin texture and appearance.

How it helps

Fractional CO₂ laser delivers infrared light at 10,600 nm. Two meta-analyses (the most recent one with 8 trials) found it a promising technique, although more trials are needed to evaluate its effectiveness. This technique is more effective and safer when combined with platelet-rich plasma, which improves tissue regeneration, according to 2 meta-analyses (the most recent one with 9 studies) [\[R, R, R, R\]](#).

Fractional CO2 laser therapy may help by removing the upper layers of the skin. This helps get rid of dead skin cells, unclog pores, and rejuvenate the skin. This procedure also stimulates the growth of new skin cells, which leads to a smoother and healthier complexion.

9



Dietary Omega-3 Fatty Acids

IMPACT

 3 / 5

EVIDENCE

 3 / 5

How to implement

Incorporate foods high in omega-3 fatty acids into your diet daily. This includes eating fish such as salmon, mackerel, and sardines at least twice a week. Alternatively, include a tablespoon of flaxseed oil or chia seeds in your daily diet.

Description

[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. **EPA and DHA are vital for mental and heart health** [\[R, R, R\]](#).

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

- Salmon
- Tuna
- Herring
- Sardines

For optimal health, 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

People who eat more fish may be at a lower risk of acne [\[R, R\]](#).

Omega-3s from fish may help by reducing inflammation [\[R\]](#).

10

Blue Light Therapy

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

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

TYPICAL STARTING DOSE

30 minutes

Description

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

How it helps

Experts say light therapy may help some people with acne. However, evidence is limited, and they do not recommend a specific regimen [R, R, R].

Light therapy with **blue light**, **red light**, and their combination may help improve acne. However, the evidence is mixed [R, R, R].

Light therapy may help by [R, R]:

- Slowing skin cell growth
- Killing acne-causing bacteria

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

PERSONALIZED TO YOUR GENES

The [TGFB2](#) gene codes for TGF-beta, a protein that supports skin growth and repair. People with [acne](#) tend to have lower TGF-beta levels in their skin, which may contribute to clogged pores and bacterial growth [R, R, R].

Your genotype for [rs1159268](#) has been associated with higher TGF-beta activity and increased odds of acne [R].

In acne-affected skin, light therapy may reduce inflammation by boosting TGF-beta [R, R, R, R, R].

>>> *To learn more about the link between the TGFB2 gene and acne, check out the full SelfDecode blog post [here](#).*

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
TGFB2	rs1159268	AA	<div style="display: flex; align-items: center;"> <div style="width: 15px; height: 10px; background-color: #4a4a8a; margin-right: 2px;"></div> <div style="width: 15px; height: 10px; background-color: #4a4a8a; margin-right: 2px;"></div> <div style="width: 15px; height: 10px; background-color: #ccc; margin-right: 2px;"></div> <div style="width: 15px; height: 10px; background-color: #ccc; margin-right: 2px;"></div> <div style="width: 15px; height: 10px; background-color: #ccc; margin-right: 2px;"></div> </div>

11



Topical Niacinamide

IMPACT

 3 / 5

EVIDENCE

 3 / 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

Applying niacinamide (2-5%) to the skin may help with acne, especially in people with oily skin [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Niacinamide likely helps by [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Limiting the production of skin oil
- Reducing skin inflammation
- Strengthening the skin barrier

12



Chemical Peels

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Apply a chemical peel to clean, dry skin, following the specific product instructions. Generally, the peel is left on the skin for a set amount of time, ranging from a few minutes to overnight, depending on the peel's strength and type. This process can be repeated every 4-6 weeks, but always follow the guidance of a skincare professional to avoid overuse and skin damage.

Description

Chemical peels can improve skin texture and tone by exfoliating the outer layer, revealing fresher and more youthful-looking skin. They are often used in dermatology to address various skin concerns and promote skin rejuvenation.

Chemical exfoliation uses a chemical solution to remove dead cells from the skin's surface [\[R\]](#).

A **chemical peel** is a chemical exfoliation procedure used to smooth the skin. It is often used to minimize the appearance of lines, wrinkles, discoloration, and scars [\[R\]](#).

Alpha hydroxy acids (AHAs) are often used in chemical peels. Some AHAs that are popular in acne treatments include [\[R\]](#), [\[R\]](#):

- Glycolic acid
- Mandelic acid
- Lactic acid

How it helps

Experts recommend using chemical exfoliation to help manage acne. Chemical peels may help, but the effects are short-lasting [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Peels with AHAs (glycolic acid and mandelic acid) may improve the appearance of acne scars [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Peels with salicylic acid, alone or with other ingredients, may work better than other solutions. However, evidence is mixed [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Chemical peels likely help by [\[R\]](#):

- Helping skin retain moisture
- Improving texture and tone of the skin
- Removing dead skin cells

Please note: *Products that contain AHAs may increase the skin's sensitivity to sunlight. This may increase the risk of sunburn. Use sunscreen, wear protective clothing, and limit sun exposure while using products that contain AHAs. Please talk to your doctor before trying chemical peels* [\[R\]](#).

13



Topical Green Tea

IMPACT

 3 / 5

EVIDENCE

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How to implement

Apply a green tea extract cream or lotion to the affected area of the skin once or twice daily, depending on the specific product instructions. Ensure the skin is clean and dry before application.

Description

Green tea extracts, rich in catechins and antioxidants, are used topically for their potential to protect the skin from UV damage, reduce inflammation, and address conditions like acne. Green tea is sourced from the leaves of the *Camellia sinensis* plant.

[Green tea](#) is made from the same plant as black tea (*Camellia sinensis*). However, the leaves and buds are processed differently [\[R\]](#).

Green tea contains **catechins**. These are antioxidants that help reduce [oxidative stress](#) and inflammation [\[R\]](#).

EGCG is the main catechin found in green tea. It may help reduce inflammation and support healthy skin [\[R\]](#).

How it helps

Topical products containing green tea or its extracts may improve acne. They include [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Green tea lotion (2%)
- EGCG solution (1-5%)

Green tea may help by [\[R\]](#), [\[R\]](#):

- Reducing inflammation
- Decreasing skin oil production

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Red Light Therapy

IMPACT

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EVIDENCE

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How to implement

Position yourself or the specific area of your body that needs treatment about 6 inches away from a red light therapy device. Use the device for 10 to 20 minutes daily. It is recommended to continue this daily regimen for at least several weeks to notice benefits.

TYPICAL STARTING DOSE

20 minutes

Description

Red light therapy involves exposure to low-level red or near-infrared light, which may promote skin rejuvenation, reduce inflammation, and improve circulation when used for therapeutic purposes in skin care and wellness treatments.

How it helps

Experts say light therapy may help some people with acne. However, evidence is limited, and they do not recommend a specific regimen [R, R, R].

Light therapy with **blue light**, **red light**, and their combination may help improve acne. However, the evidence is mixed [R, R, R].

Light therapy may help by [R, R]:

- Slowing skin cell growth
- Killing acne-causing bacteria

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

PERSONALIZED TO YOUR GENES

The [TGFB2](#) gene codes for TGF-beta, a protein that supports skin growth and repair. People with [acne](#) tend to have lower TGF-beta levels in their skin, which may contribute to clogged pores and bacterial growth [R, R, R].

Your genotype for [rs1159268](#) has been associated with higher TGF-beta activity and increased odds of acne [R].

In acne-affected skin, light therapy may reduce inflammation by boosting TGF-beta [R, R, R, R, R].

>>> To learn more about the link between the [TGFB2](#) gene and acne, check out the full SelfDecode blog post [here](#).

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
TGFB2	rs1159268	AA	<div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: #800080; margin-right: 5px;"></div> <div style="width: 20px; height: 10px; background-color: #ccc; margin-right: 5px;"></div> <div style="width: 20px; height: 10px; background-color: #ccc; margin-right: 5px;"></div> <div style="width: 20px; height: 10px; background-color: #ccc;"></div> </div>

15  **Limit Dairy Intake**

IMPACT  **EVIDENCE** 

How to implement

Reduce your consumption of dairy products, such as milk, cheese, yogurt, and butter, to no more than one serving per day. A serving is equivalent to 1 cup (240 ml) of milk, 1 cup of yogurt, 1.5 ounces (42 grams) of natural cheese, or 2 ounces (56 grams) of processed cheese.

Description

Limiting dairy intake may benefit individuals who are lactose intolerant or have dairy allergies, as it helps prevent digestive discomfort and symptoms like bloating and diarrhea. Exploring dairy-free alternatives supports overall gastrointestinal comfort.

Dairy products are made from milk. They include [\[R\]](#):

- Cheese
- Yogurt
- Kefir
- Butter
- Cream

Dairy products contain high levels of [calcium](#). Calcium helps build strong bones. However, eating a lot of dairy products is linked to acne and certain health conditions like Parkinson's disease [\[R, R, R, R\]](#).

How it helps

People who consume dairy may be more likely to develop acne. **Drinking one glass of milk per day, for example, may increase the odds by around 40%.** However, the evidence is mixed [\[R, R, R\]](#).

Experts note that dairy may also worsen acne in people who already have it. This may be especially true for **skim milk** [\[R, R\]](#).

Limiting dairy intake may help by decreasing skin oil production [\[R\]](#).



PERSONALIZED TO YOUR GENES

Your **TGFB2** gene variant is linked to acne. It likely reduces TGF-beta, a protein that helps protect the skin. Components found in dairy may further reduce TGF-beta and trigger acne [R, R].

The *FST* gene helps produce *follistatin*, which inhibits TGF-beta and other similar proteins. People with acne tend to have lower TGF-beta levels in their skin, which may contribute to clogged pores and bacterial growth [R, R, R, R].

Your genotype for **rs38055** correlates with higher odds of developing acne. It may increase follistatin activity and thus lower TGF-beta levels [R].

Hormones and bioactive molecules found in milk may inhibit TGF-beta and contribute to skin inflammation [R, R].

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

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
TGFB2	rs1159268	AA	
MOCS2	rs38055	GA	