

Staph Infection

DNA Health Report

REPORT CATEGORY —



Sample Client

Report date: 15 January 2026

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DISCLAIMER

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

Personal information

NAME

Sample Client

SEX AT BIRTH

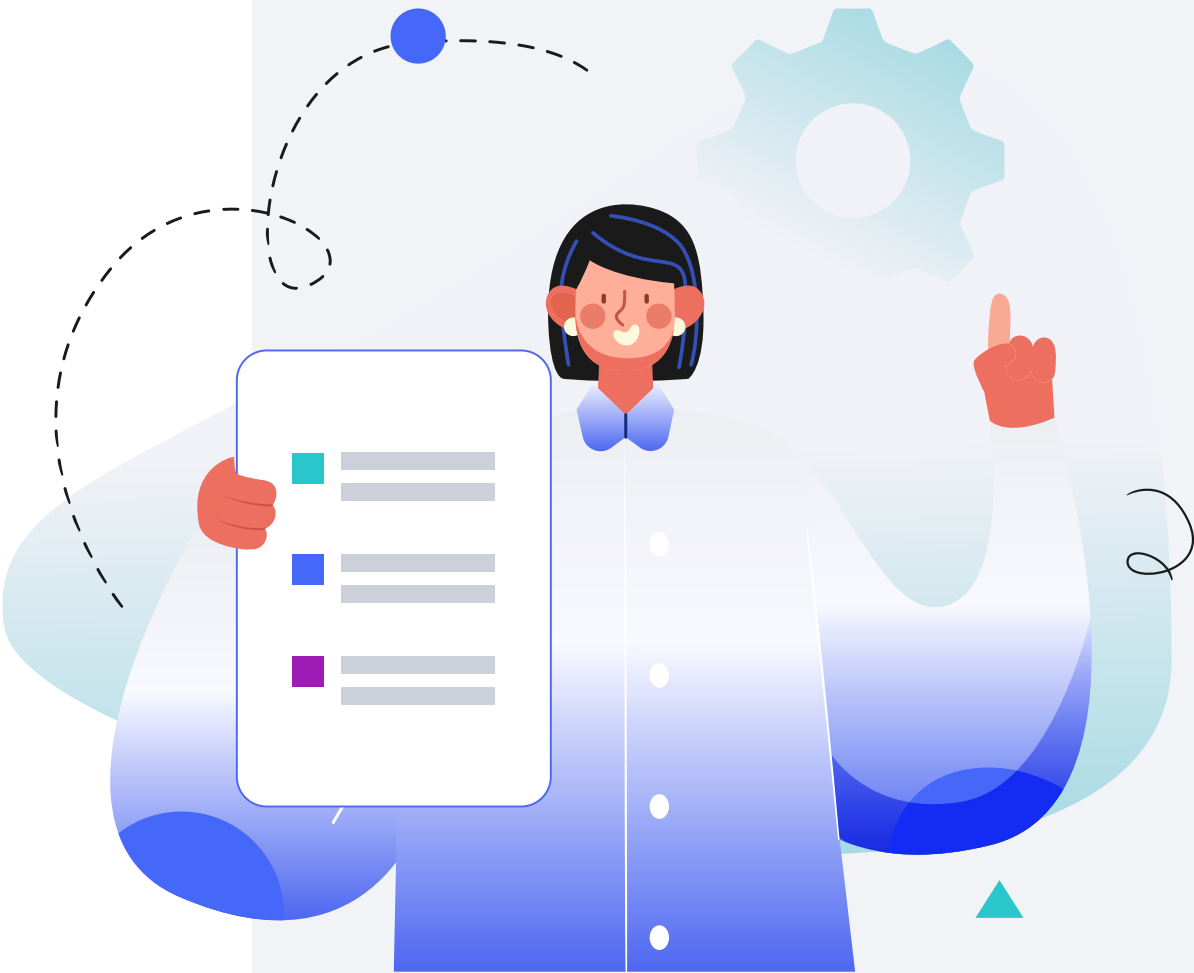
Male

HEIGHT

5ft 5" 165cm

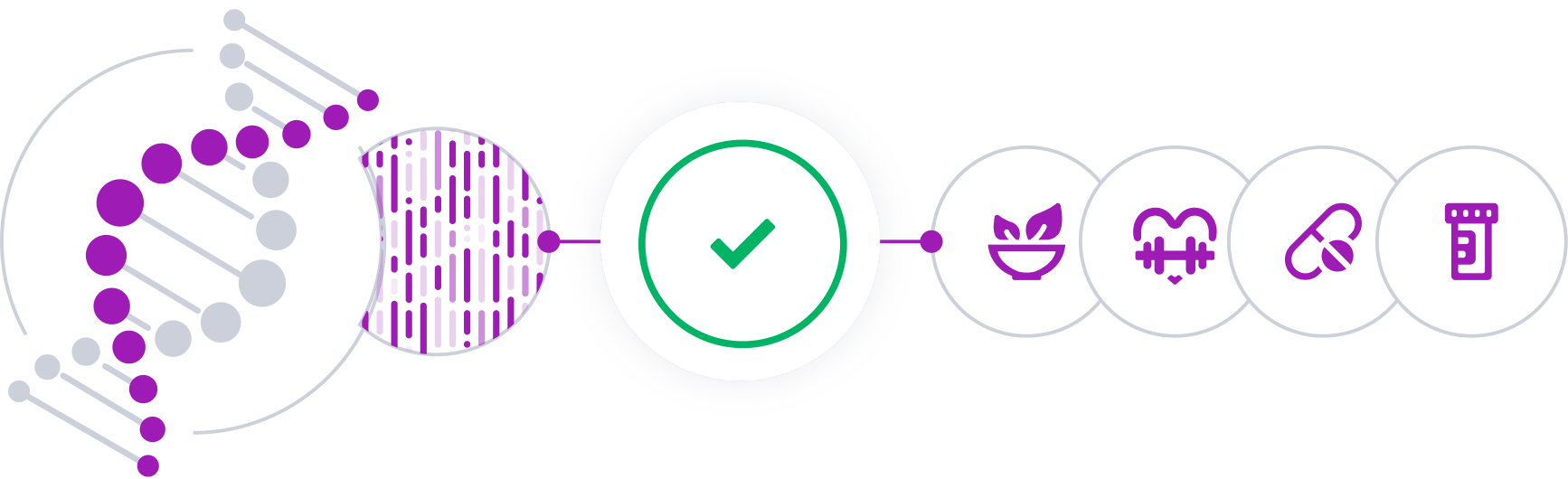
WEIGHT

137lb 62kg



How this works

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

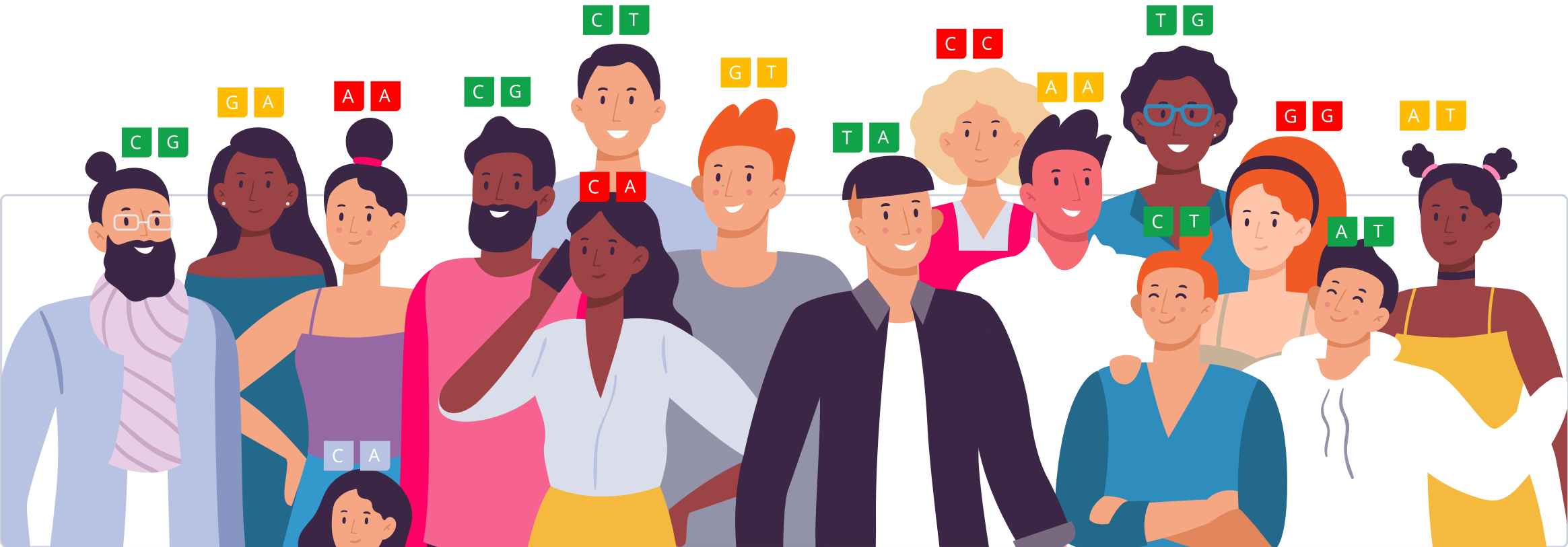


Similarly, our Trait Reports look at how your DNA influences your traits.



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

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



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

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

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



Genotype color info:

AA

You don't have any risk alleles

AA

You have 1 risk allele

AA

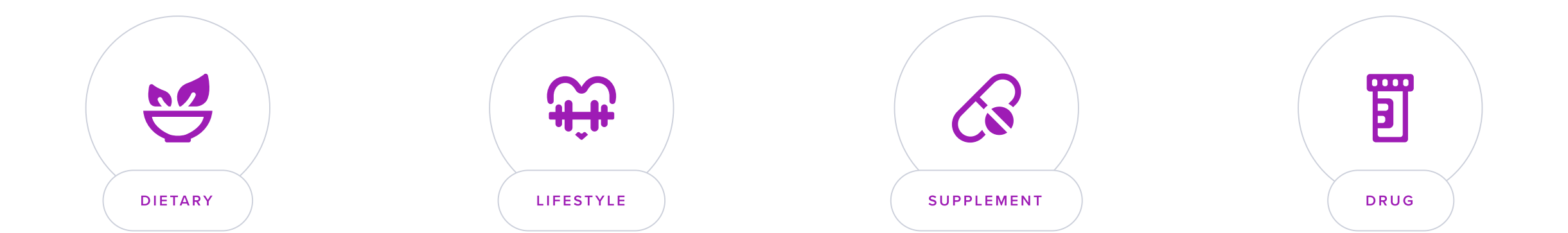
You have 2 risk alleles

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

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

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

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



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

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



Impact

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

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

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

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

Recommendation Evidence

5 / 5

Recommendations that are considered effective and generally recommended by experts and medical bodies.

4 / 5

Recommendations that are considered likely effective and that have multiple independent meta-analyses and a great many studies supporting them.

3 / 5

Recommendations that are considered possibly effective and have many studies supporting them

2 / 5

Recommendations that have insufficient evidence, with two or several clinical trials supporting them, or many studies but with ambiguous results.

1 / 5

Recommendations that have insufficient evidence, with a single clinical trial, or with many studies most of which didn't find support for the recommendation.

0 / 5

No evidence in humans.

Genotype-specific Evidence

High-quality

Direct evidence that a recommendation helps more in people with your gene variant (many clinical trials, a few large clinical trials, or a meta-analysis).

Medium-quality

Direct evidence that a recommendation helps more in people with your gene variant (a few clinical trials or one large clinical trial).

Low-quality

Direct evidence that a recommendation helps more in people with your gene variant (a single clinical trial or more trials with inconsistent results).

Indirect

A recommendation may help more in people with your gene variant because it targets a specific gene or protein affected by your variant (e.g., MTHFR, dopamine).

In theory

A recommendation may help more in people with your gene variant because it targets a specific mechanism affected by your variant (e.g., inflammation, oxidative stress).

Some things to keep in mind:

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

Introduction

Staphylococcus aureus, commonly referred to as "staph," is a **type of bacteria often found on the skin and in the nose of healthy individuals**. While it can be part of the body's normal flora without causing harm, it can also lead to various infections, such as:

- **Skin infections** (e.g., boils, impetigo, cellulitis, or abscesses)
- Food poisoning
- Respiratory infections (e.g., sinusitis or pneumonia)

In rare cases, it can cause more severe infections, such as:

- Septicemia (blood poisoning)
- Endocarditis (infection of the heart valves)
- Pneumonia
- Toxic Shock Syndrome

Risk Factors and Genetics

Factors that might increase the risk of a staph infection include:

- Current or recent hospitalization
- Having medical devices (e.g., catheters or feeding tubes)
- Skin injuries or disorders
- Weakened immune system (e.g., HIV/AIDS, diabetes, or cancer)
- Practicing contact sports.
- Living in crowded conditions (e.g., military barracks or correctional facilities)

Genetic variations in immunity genes may slightly increase the susceptibility to staph infection or its complications. **However, factors other than genetics seem to play a much bigger role** [\[R\]](#).



LESS LIKELY

Less likely to have a staph infection based on 56,947 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
MAP2	rs72989928	TT
BCL11B	rs7152530	AG
COPB1	rs2007361	AA
SLC12A2	rs3749748	TC
HLA-DQA2	rs4321864	AC
PDE4B	rs2455012	GG
PNPLA5	rs470093	GG
TXNRD2	rs3804047	AA
/	rs115231074	CC
H4C8	rs115740542	TT

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	Sleep for 7+ Hours	2	Topical Tea Tree Oil
3	Black Walnut Hull	4	Stress Management Therapy1 hour
5	Topical Honey	6	Maintain Optimal Vitamin D Levels1000 iu
7	Avoid Crowds	8	Zinc15 mg
9	Avoid Scratching	10	Regular Hand Washing

1



Sleep for 7+ Hours

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

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

Description

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

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

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

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

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

How it helps

Adequate sleep enhances overall immune function, helping the body to better combat infections such as staph.

2

Topical Tea Tree Oil

IMPACT

0 / 5

EVIDENCE

0 / 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

Tea tree oil has strong antibacterial properties. It can kill or inhibit the growth of Staphylococcus bacteria, helping to treat and reduce staph infections.

3



Black Walnut Hull

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Black walnut hull is available in capsules, tinctures, and powders. The appropriate dosage depends on the form and intended use. For tinctures, a common recommendation is 1 to 2 teaspoons diluted in water, while capsules are often taken according to the product's instructions, typically once or twice a day. It's important to follow the dosage guidelines provided by a healthcare professional or the product label, as bioactive compounds like juglone can be toxic in large amounts. Additionally, it's advisable to consult with a healthcare provider before starting any black walnut hull supplements, particularly for individuals with underlying health conditions or those who are pregnant.

Description

Black walnut (*Juglans nigra*) is a tree native to North America, valued for both its edible nuts and its medicinal properties. The hull of its seeds contains active compounds such as juglone, tannins, flavonoids, and phenolic acids.

Studies suggest that black walnut hull may help in managing infections, promoting skin health, and even possessing anticancer potential. Its antimicrobial activity is particularly noted against bacteria like *Staphylococcus aureus*, while its antioxidant compounds help neutralize free radicals, potentially lowering the risk of chronic diseases.

How it helps

Black walnut hull contains antibacterial compounds such as glansreginin A, azelaic acid, quercetin, and eriodictyol-7-O-glucoside. These compounds have shown inhiboty activity against *Staphylococcus aureus* in test tubes [R].

4



Stress Management Therapy

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Engage in stress management therapy sessions, such as cognitive-behavioral therapy (CBT), for at least 1 hour per week over a course of 8 to 12 weeks. Techniques can include mindfulness, deep breathing exercises, and identifying stressors to develop coping strategies.

TYPICAL STARTING DOSE

1 hour

Description

Stress management therapy refers to various techniques and approaches aimed at reducing and coping with stress. It can improve mental and physical well-being by helping individuals better manage the effects of stress on their health.

How it helps

Managing stress can help improve immune function, which is important in fighting off infections including those caused by staph bacteria.

5

Topical Honey

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

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

Description

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

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

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

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

- Heart problems
- Gut problems
- Cough
- Skin problems

How it helps

Honey has natural antibacterial and anti-inflammatory properties. It can help reduce bacterial growth and soothe irritated skin, making it effective against staph infections.

6



Maintain Optimal Vitamin D Levels

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

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

TYPICAL STARTING DOSE

1000 iu

Description

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

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

- Mood
- Immunity
- Heart health
- Blood sugar control

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

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

How it helps

Vitamin D supports the immune system and has antimicrobial properties that may help the body fight against staph bacteria.

7



Avoid Crowds

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Minimize your time in crowded places by scheduling your errands during off-peak hours, avoiding public events known to draw large crowds, and choosing less crowded routes or modes of transportation.

Description

Avoiding crowded environments, especially during contagious disease outbreaks, can reduce the risk of viral transmission and help protect public health. It promotes social distancing measures that are crucial for preventing the spread of infectious diseases.

How it helps

Avoiding crowds can help reduce the risk of exposure to staph bacteria, which can easily spread in places with lots of people.

8



Zinc

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take a 15 mg zinc supplement daily, ideally with a meal to enhance absorption.

TYPICAL STARTING DOSE

15 mg

Description

Zinc is an essential mineral found in various foods, including meat, dairy, and nuts. It is crucial for immune function, wound healing, DNA synthesis, and maintaining healthy skin and nails. Zinc supplements are sometimes used to support immune health and manage zinc deficiencies.

[Zinc](#) is an essential mineral. Your body needs it to [\[R\]](#), [\[R\]](#):

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

Some of the best sources of zinc include **shellfish, pork, beef, and beans**. It is also available as a supplement [\[R\]](#).

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

How it helps

Zinc aids in immune function and has been shown to possess antibacterial properties, potentially helping in the management of staph infections.

9

Avoid Scratching

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

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

Description

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

How it helps

Avoiding scratching can prevent skin damage and reduce the risk of introducing and spreading staph bacteria into open wounds or other parts of the body.

10

Regular Hand Washing

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Wash your hands with soap and water for at least 20 seconds, making sure to scrub all surfaces of your hands, including the backs, between your fingers, and under your nails. Do this several times a day, especially before eating, after using the bathroom, after blowing your nose, coughing, or sneezing, and after touching garbage.

Description

Regular hand washing is a simple yet highly effective hygiene practice that helps prevent the spread of infectious diseases and illnesses. It is essential for reducing the transmission of harmful pathogens and maintaining overall health.

How it helps

Regular hand washing helps remove staph bacteria from the skin, reducing the risk of infection and transmission to others.

Next Steps

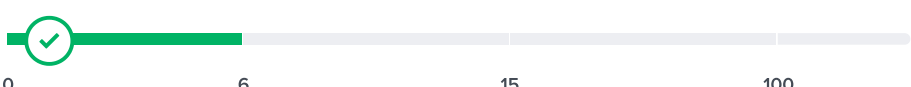
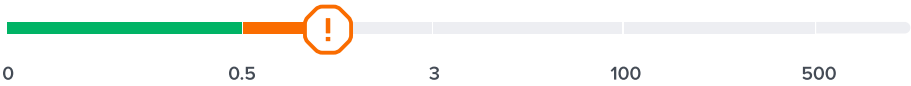
Remember, your genes only tell one important part of your health story!

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.

 ESR	1 mm/hr		9 Nov 2025
 WBC	6.92 x10 ³ /mm ³		9 Nov 2025
 Albumin	4.3 g/dL		9 Nov 2025
 hs-CRP	1.6 mg/L		9 Nov 2025