

Tonsil Inflammation

DNA Health Report

REPORT CATEGORIES —



INFLAMMATION &
AUTOIMMUNITY



RESPIRATORY HEALTH

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

19 Next Steps

- 19 Your Lab Results

Personal information

NAME

Sample Client

SEX AT BIRTH

Male

HEIGHT

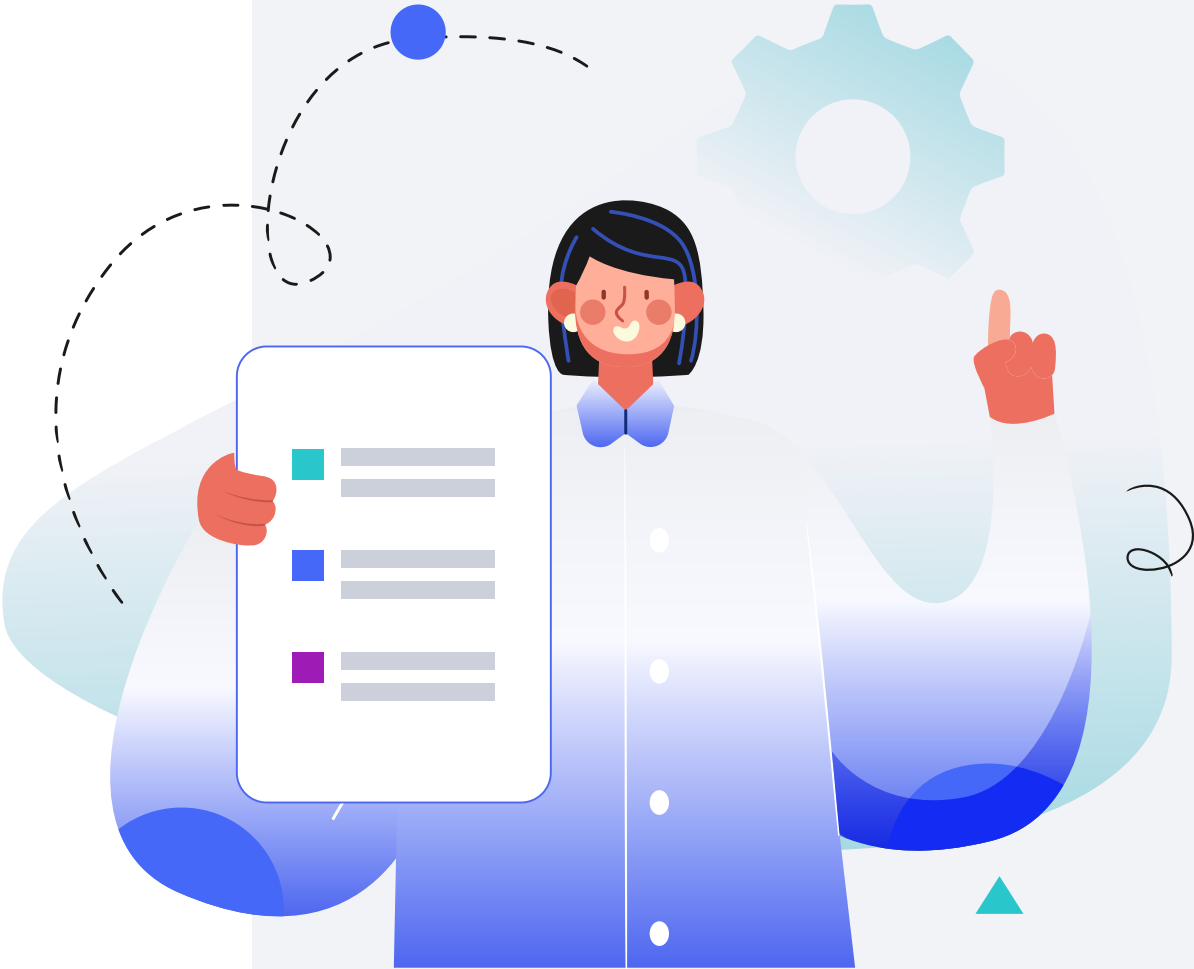
5ft 5" 165cm

WEIGHT

137lb 62kg

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.



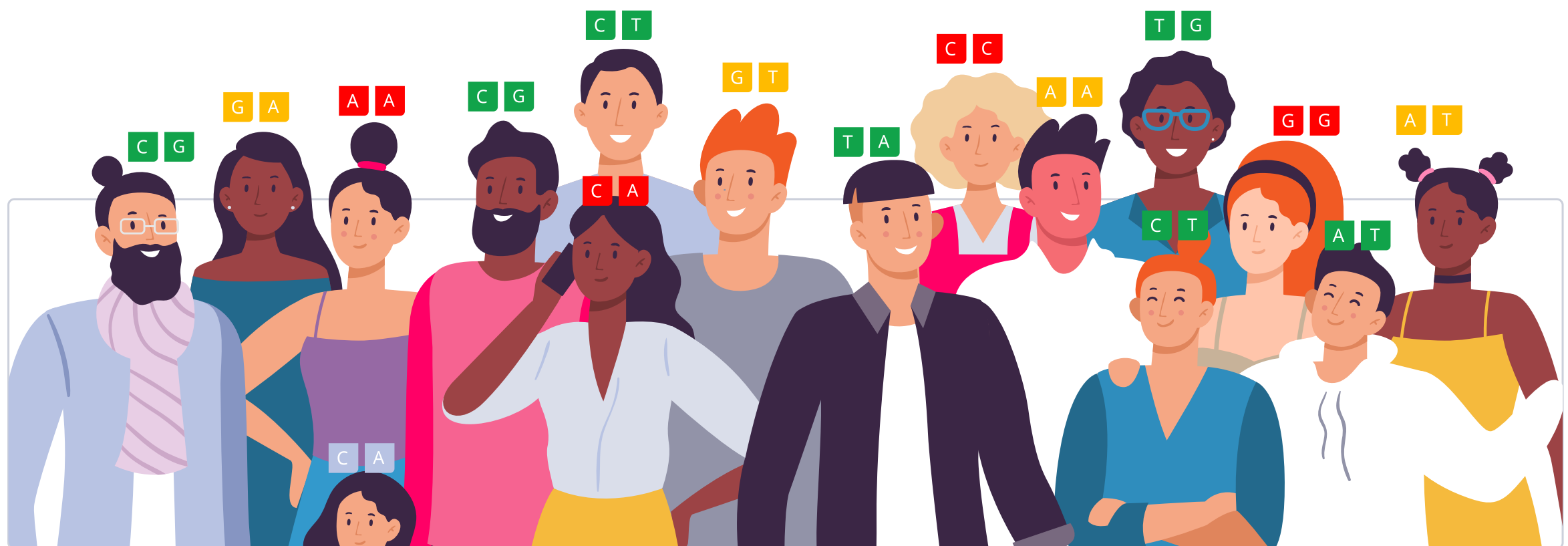
Our Wellness Reports analyze how your DNA influences your health.

We then use this analysis to give you personalized risk estimates and recommendations.



The image shows three overlapping circles. The leftmost circle contains a brown cell nucleus icon. The middle circle contains a purple DNA double helix icon. The rightmost circle contains a green cell nucleus icon. The circles are arranged horizontally and overlap significantly.

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

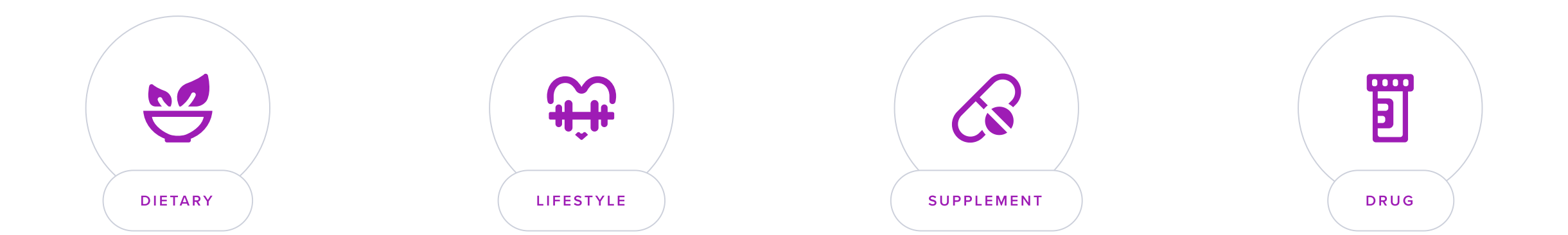
You have 2 risk alleles

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

Tonsillitis is an inflammatory condition that primarily affects the palatine tonsils, which are two masses of tissue located at the back of the throat. The condition is most often caused by viral or bacterial infections, leading to symptoms such as a sore throat, difficulty swallowing, and swollen tonsils.

Patients may also experience fever, enlarged lymph nodes in the neck, and a hoarse voice or loss of voice. The inflammation resulting from tonsillitis can produce white or yellow patches of pus on the tonsils, indicating an immune response to the infection.

Treatment

The course of treatment for tonsillitis depends on whether the cause is viral or bacterial. Viral tonsillitis typically does not require specific medical treatment other than symptomatic relief through pain relievers and rest, as it usually resolves on its own. Bacterial tonsillitis, often caused by *Streptococcus pyogenes*, can require antibiotic therapy to eliminate the infection.

Recurrent cases of bacterial tonsillitis may lead to a recommendation for tonsillectomy, which is the surgical removal of the tonsils. Adequate hydration and throat soothing remedies are also common supportive care measures regardless of the cause.



MORE LIKELY

More likely to have tonsillitis based on 351,312 genetic variants we looked at



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	Maintain Optimal Vitamin D Levels	1000 iu	2	Echinacea	240 mg
3	Topical Aloe Vera		4	Gargling	30 seconds
5	Topical Honey		6	Zinc	15 mg
7	Vitamin C	2000 mg	8	Good Oral Hygiene	2 minutes
9	Probiotic Yogurt		10	Honey	

1



Maintain Optimal Vitamin D Levels

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

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

TYPICAL STARTING DOSE

1000 iu

Description

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

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

- Mood
- Immunity
- Heart health
- Blood sugar control

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

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

How it helps

People with recurrent tonsillitis may have a 4 times higher risk of vitamin D insufficiency [\[R\]](#).

Supplementation with vitamin D (50,000 IU weekly for 3-6 months) reduced recurrence and tissue inflammation in a placebo-controlled trial of 80 children with chronic tonsillitis [\[R\]](#).

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

2



Echinacea

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take an echinacea supplement of 240 mg to 480 mg per day, divided into 2 to 3 doses, for up to 8 weeks to support immune function. It is available in various forms such as capsules, tinctures, or teas.

TYPICAL STARTING DOSE
240 mg

Description

Echinacea is an herbal remedy believed to boost the immune system and reduce the severity and duration of colds and respiratory infections. Some studies suggest that it may have immune-stimulating properties, but the evidence is mixed, and its effectiveness varies among individuals.

[Echinacea](#) (*Echinacea angustifolia*), also known as purple coneflower, is a herb traditionally used for [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Common cold and flu
- Anxiety
- Infections

How it helps

In a non-placebo-controlled trial of 200 children with recurrent tonsillitis, supplementation with echinacea (5 mL, 3x/day) 10 days/month for 6 months as an add-on to Azithromycin reduced tonsillitis recurrence better than Azithromycin alone [\[R\]](#).

Echinacea may help through its immune-boosting and anti-inflammatory effects.

3



Topical Aloe Vera

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Apply a thin layer of pure aloe vera gel extracted directly from the aloe plant or an aloe vera-based product directly to the affected area. Gently rub it in until it is absorbed. Repeat this application 2-3 times daily until the symptoms improve.

Description

Aloe vera is a plant-derived gel known for its skin-soothing and healing properties. Topical applications of aloe vera are commonly used to relieve sunburn, minor burns, and skin irritation, promoting faster healing and reducing discomfort.

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

Topical aloe vera may help soothe burns and skin conditions [\[R\]](#).

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

How it helps

Aloe Vera has anti-inflammatory and soothing properties. When applied topically, it can help in reducing the pain and inflammation associated with tonsillitis, providing a cooling effect to the sore areas.

4



Gargling

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Gargle with warm salt water for 30 seconds, two to three times a day, especially after meals and before bed. Dissolve half a teaspoon of salt in a cup of warm water for the solution.

TYPICAL STARTING DOSE
30 seconds

Description

Gargling with salt water or certain antiseptic solutions is a simple practice that can help soothe a sore throat, reduce inflammation, and promote oral hygiene. It is often recommended as a natural remedy for minor throat discomfort and respiratory health.

Gargling is the act of bubbling some liquid in the throat and spitting it afterwards. The most common gargling solution is water with table salt, but you can use other salts or add ingredients such as honey, lemon, or herbs to improve the taste.

Salt water gargling has been used as a safe, affordable home remedy for sore throat since before modern medicine. People also use salt water gargles to improve [R](#), [R](#), [R](#), [R](#):

- Respiratory infections
- Mouth ulcers
- Allergies
- Dental problems

How it helps

Gargling, especially with salt water, can help soothe a sore throat, reduce throat swelling, and flush out irritants and infections. Salt water may help to kill bacteria, and keeping the throat moist can provide symptomatic relief.

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 wound-healing properties, making it beneficial for soothing sore throats and reducing tonsillitis symptoms. Its viscous texture can coat the throat, offering a protective layer and relieving irritation.

6



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 plays a significant role in immune function. Supplementation can help enhance the immune response to the bacteria or viruses that cause tonsillitis, potentially reducing symptom severity and duration.

7



Vitamin C

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take 500-2000 mg of vitamin C supplement daily. It can be taken at any time of the day, with or without food, according to personal preference or tolerance.

TYPICAL STARTING DOSE

2000 mg

Description

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

Foods rich in Vitamin C include: [\[R\]](#)

- Citrus Fruits
- Peppers
- Brussel sprouts
- Kiwi
- Broccoli
- Tomato
- Cantaloupe
- Cauliflower
- Spinach

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

Vitamin C is known for its immune system support. It can help enhance the body's resistance against the infections that lead to tonsillitis and may also reduce the severity and duration of symptoms due to its anti-inflammatory properties.

8



Good Oral Hygiene

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Brush your teeth at least twice a day for two minutes each time using fluoride toothpaste. Floss daily to remove plaque from places your toothbrush can't reach and consider using mouthwash. Visit your dentist at least twice a year for professional cleanings and checkups.

TYPICAL STARTING DOSE

2 minutes

Description

Good oral hygiene, which includes regular brushing, flossing, and dental check-ups, is crucial for preventing tooth decay, gum disease, and maintaining overall oral health. A healthy mouth contributes to overall well-being and can prevent dental issues that may impact systemic health.

Oral hygiene refers to practices that keep the mouth healthy. Good habits include [R](#), [R](#):

- Gently brushing the teeth and tongue for two minutes, at least twice a day
- Flossing daily
- Using a toothpaste with fluoride and a soft toothbrush
- Replacing a worn toothbrush at least every 3 months

To help maintain good oral hygiene, it is also important to regularly see dental professionals. They can help prevent and address issues with your teeth and gums.

How it helps

Maintaining good oral hygiene is crucial for preventing infections in the mouth and throat. Regular brushing and flossing can help remove bacteria that could contribute to tonsillitis.

9



Probiotic Yogurt

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Consume one to two servings of probiotic yogurt each day. Each serving is typically 6 to 8 ounces. Continue this practice daily for at least 1 to 2 weeks to begin noticing benefits to digestive health.

Description

Probiotic yogurt is a dairy product containing live probiotic cultures like Lactobacillus and Bifidobacterium, which can aid digestion and improve gut health when consumed regularly. It is a good source of calcium, protein, and probiotics, contributing to bone health and digestive well-being.

How it helps

Probiotic yogurt contains live bacteria that can support the immune system, potentially helping the body to fight off the infection causing tonsillitis. Consuming it may help reduce the severity and duration of tonsillitis symptoms.

10



Honey

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Consume 1-2 tablespoons of raw honey daily, either directly or by mixing it into warm water, tea, or yogurt. Continue this practice regularly to observe benefits.

Description

Honey is a natural sweetener known for its antimicrobial properties and potential benefits for wound healing. It contains antioxidants and may have soothing effects on sore throats and coughs.

[Honey](#) is a thick, sweet substance. It’s made by honeybees from the nectar of flowering plants. There are many different types of honey. 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 can potentially help with [\[R\]](#):

- Heart problems
- Gut problems
- Cough
- Burns

How it helps

Honey has antimicrobial properties and can soothe a sore throat, which is a common symptom of tonsillitis. Consuming honey can help reduce throat pain and discomfort.

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	✓ 0 6 15 100	9 Nov 2025
!	WBC	6.92 x10^3/mm3	! 2 4 6.5 11 40	9 Nov 2025
✓	Neutrophils (%)	69.3 %	✓ 40 80	9 Nov 2025
!	Neutrophils (Absolute)	4.8 x10^9/L	! 0.5 1.5 4.2 8	9 Nov 2025