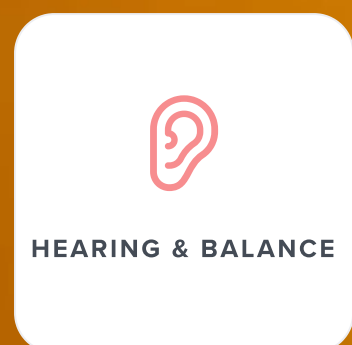


Eustachian Tube Dysfunction

DNA Health Report

REPORT CATEGORY —



Sample Client

Report date: 15 January 2026

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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

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

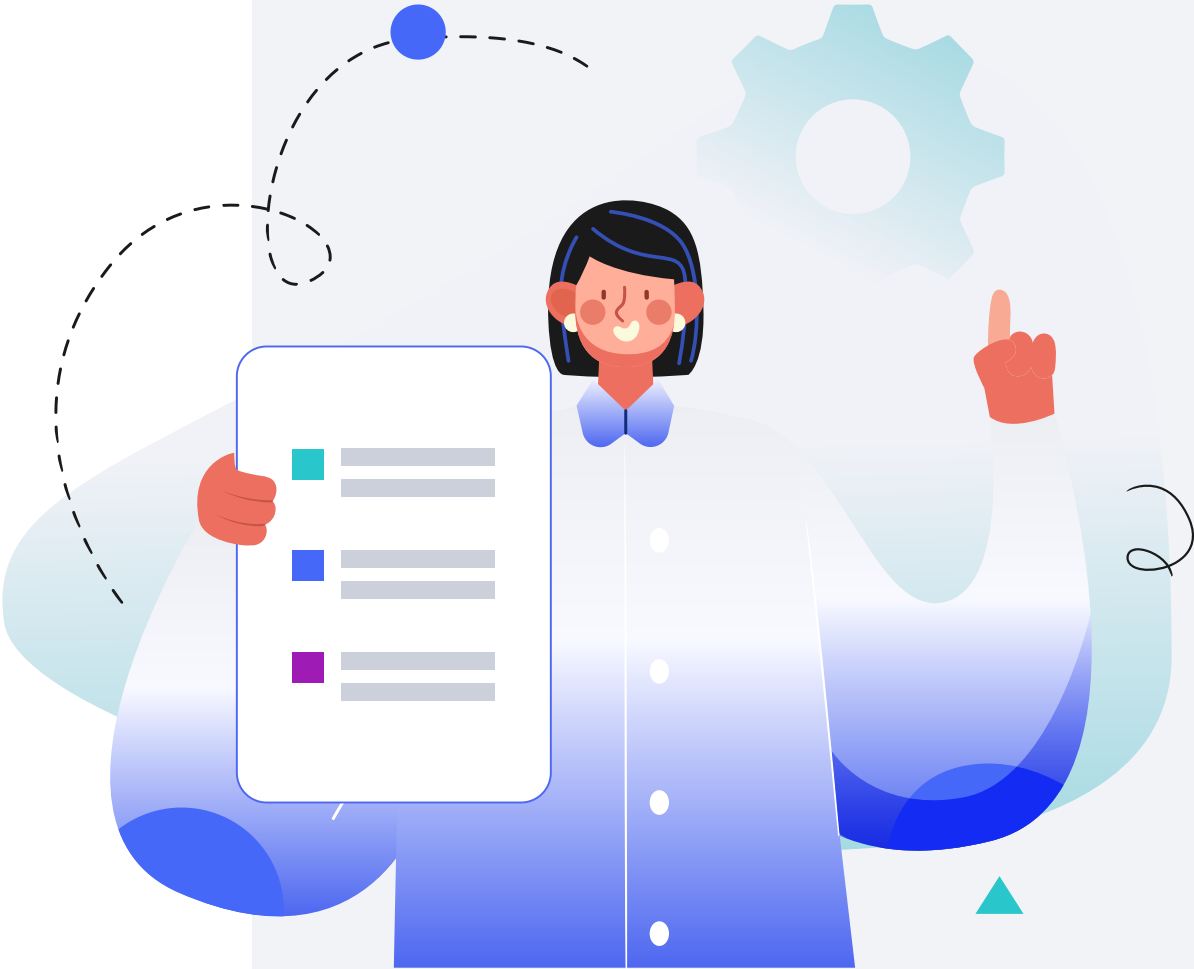
Male

HEIGHT

5ft 5" 165cm

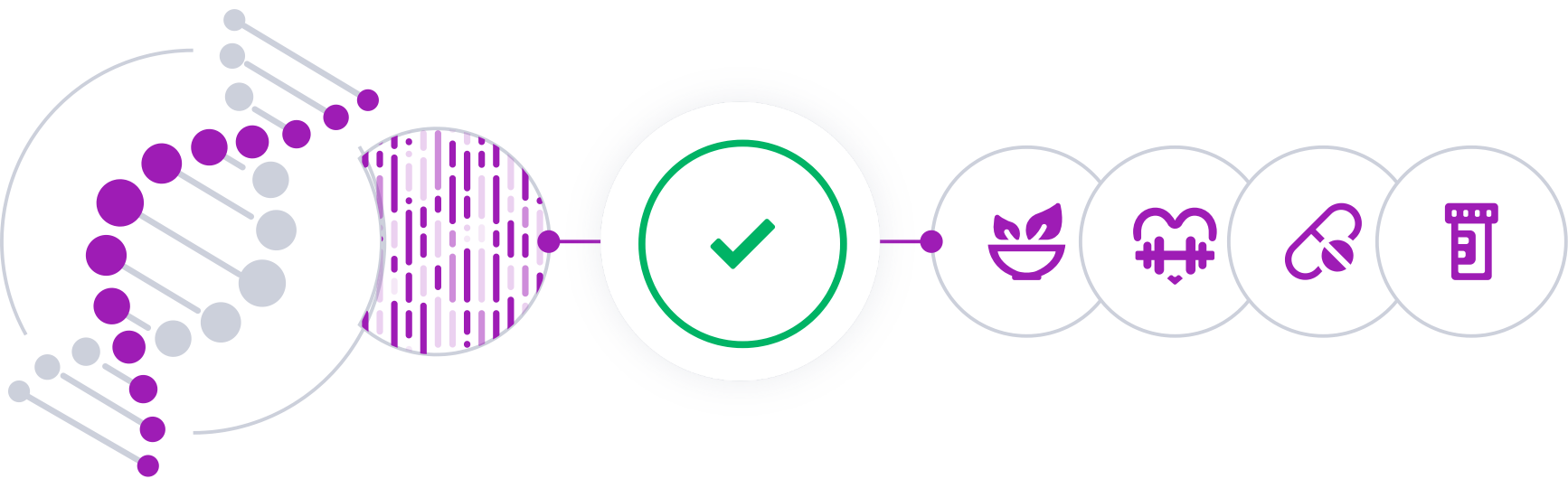
WEIGHT

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

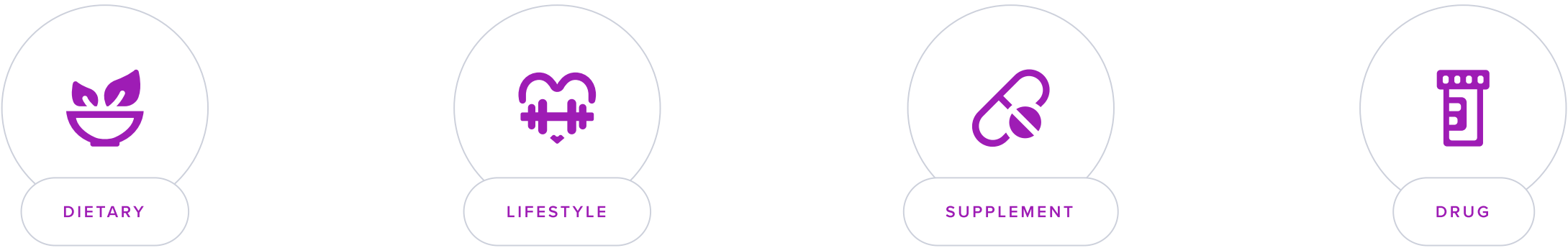
You have 2 risk alleles

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

Eustachian tube dysfunction (ETD) is a condition where pressure abnormalities in the middle ear result in various symptoms. The Eustachian tube is a small passage connecting the middle ear to the throat that plays several crucial roles, including:

- **Balancing Pressure:** It helps maintain pressure equilibrium in the middle ear, often experienced as the sensation of ears “popping.”
- **Fluid Drainage:** The tube facilitates fluid drainage from the middle ear.
- **Protection:** It shields the ear from both internal sounds (such as your own body noises) and nasal drainage.

Common symptoms of Eustachian tube dysfunction include:

- **Aural Fullness:** A feeling of fullness or pressure in the ears.
- **Ears Popping:** Sensation of ears being clogged or popping.
- **Crackling:** Unusual sounds within the affected ear(s).
- **Ear Pain:** Discomfort or tenderness around the ear.
- **Tinnitus:** Ringing or buzzing in the ear.
- **Autophony:** Hearing your own voice, breathing, or bodily functions loudly.
- **Muffled Hearing:** Partial hearing loss or muffled sounds.

There are three main types of Eustachian tube dysfunction:

- **Patulous Eustachian Tube Dysfunction:** The valve of the Eustachian tube remains open, allowing sound to travel from the nasal-sinus cavity to the ears. Symptoms include hearing your own voice or breathing too loudly.
- **Obstructive Eustachian Tube Dysfunction:** The tube fails to open adequately, leading to fluid buildup, pain, and pressure in the ear. It can occur during altitude changes (like flying) or due to allergies.
- **Baro-Challenge-Induced Eustachian Tube Dysfunction:** Similar to obstructive Eustachian tube dysfunction, triggered by changes in pressure (e.g., flying or SCUBA diving).

Risk Factors and Treatment

Possible risk factors for Eustachian tube dysfunction include:

- Weight loss
- Chronic neuromuscular or immunological diseases
- Chronic nasal allergies
- Acid reflux disease
- Stress and anxiety

Possible treatments include:

- Limiting decongestants, caffeine, and staying hydrated.
- Implants, fillers, grafts, or fat transfers to restore normal tube function.

Remember to seek medical attention if you experience symptoms of Eustachian tube dysfunction. An otolaryngologist specializes in diagnosing and treating ear, nose, and throat conditions.



TYPICAL LIKELIHOOD

Typical likelihood of Eustachian tube dysfunction based on 698,869 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	Avoid Loud Noises	2	Buteyko Technique20 minutes
3	Hearing Aids	4	Sound Therapy30 minutes
5	Nasal Cleansing	6	Eucalyptus
7	Cineole600 mg	8	Avoid Noise Pollution

1



Avoid Loud Noises

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Limit exposure to loud noises by keeping the volume down on personal audio devices, wearing earplugs at concerts or noisy work environments, and taking breaks in quiet areas when possible. Attempt to maintain noise levels below 85 decibels, especially for prolonged periods, to protect your hearing.

Description

Most sounds you’re exposed to daily are quiet. However, there are times when sounds can be uncomfortably loud. **Exposure to loud noise for long periods of time can damage the cells of the inner ear.** This may lead to hearing impairment and conditions like tinnitus.

Exposure to loud noises may damage the inner ear or the auditory nerve. This may lead to hearing impairment or conditions like tinnitus [\[R, R\]](#).

Potentially damaging noises can be anything at a volume **above 70 decibels** (dB). The louder the noise, the less time it takes to cause damage to your ear. For reference, some volume levels of common sounds include [\[R, R\]](#):

- Whispering (30 dB)
- Normal conversation (60-70 dB)
- Motorcycle (95 dB)
- Ambulance siren (110-129 dB)
- Fireworks, gunshots (140-165 dB)

How it helps

Avoiding loud noises helps manage Eustachian Tube Dysfunction by minimizing stress on the auditory system, thereby reducing the likelihood of exacerbating symptoms like tinnitus and preventing further auditory damage.

2



Buteyko Technique

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Practice the Buteyko breathing exercises for 15-20 minutes daily, ideally in a quiet, comfortable place without distractions. The method emphasizes nasal breathing, reduced breathing rate, and breath-holding to increase carbon dioxide levels in the blood, thereby promoting better oxygenation. Consistency is key, and it is recommended to continue practicing daily for several months to notice significant improvements in breathing-related conditions.

TYPICAL STARTING DOSE

20 minutes

Description

The Buteyko Technique is a breathing method that aims to improve respiratory health and reduce symptoms of conditions like asthma and anxiety. It involves exercises to control and optimize breathing patterns, potentially enhancing lung function and overall well-being.

How it helps

In a non-placebo-controlled trial of 51 patients with Eustachian tube dysfunction, practicing the Buteyko technique as an add-on to conventional management for 12 weeks further improved the symptoms [\[R\]](#).

3



Hearing Aids

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Wear your hearing aids daily, starting from the morning and remove them before bedtime to rest your ears and allow the device to dry. It's recommended to gradually increase wearing time over the first few weeks to adjust comfortably. Ensure proper maintenance by cleaning them as per the manufacturer's instructions.

Description

Hearing aids are devices designed to assist individuals with hearing loss. They can significantly improve communication, quality of life, and mental well-being for those with hearing impairments.

How it helps

Hearing aids enhance auditory input, assisting individuals with Eustachian Tube Dysfunction by compensating for associated hearing loss. This improvement fosters better communication, thereby reducing social isolation and contributing to overall mental well-being.

4



Sound Therapy

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Engage in sound therapy sessions by listening to calming and therapeutic sounds for at least 30 minutes a day. You can do this by using apps that offer sound therapy tracks, attending sound therapy workshops, or using sound therapy machines at home. Try to incorporate this practice into your daily routine for a continuous period to observe benefits.

TYPICAL STARTING DOSE

30 minutes

Description

Sound therapy involves the use of sound frequencies, music, or specific sounds to promote relaxation, reduce stress, and alter how a person experiences sound.

Sound therapy changes the way a person experiences tinnitus by exposing them to different sounds [\[R, R, R\]](#).

Sound therapy uses **hearing aids** and different **sound-masking devices** [\[R, R, R\]](#).

How it helps

Sound therapy aids in the management of Eustachian Tube Dysfunction by providing auditory masking that can reduce the perception of tinnitus, facilitating improved auditory contrast and relaxation in affected individuals.

5



Nasal Cleansing

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Perform nasal cleansing using a saline solution twice a day, in the morning and evening. Tilt your head sideways over a sink and gently pour the saline solution into the upper nostril, allowing it to flow out of the lower nostril, then switch sides.

Description

Nasal cleansing, often done using saline solutions or neti pots, helps clear nasal passages, alleviate congestion, and reduce allergy symptoms, promoting better respiratory comfort and improved breathing.

Nasal cleansing involves rinsing your nasal passages with a sterile salt solution. This is done with a squeeze bottle or a teapot-like container called a neti pot [\[R, R\]](#).

People mainly use nasal cleanses to relieve a stuffy nose, which may be caused by [\[R, R\]](#):

- Allergies
- Colds
- Sinus problems

How it helps

Nasal cleansing helps alleviate congestion in the nasal passages, enhancing Eustachian Tube function by promoting clearer drainage of fluid. This can reduce pressure and discomfort in the ears, effectively mitigating symptoms associated with Eustachian Tube Dysfunction.

6



Eucalyptus

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a eucalyptus supplement in the form of capsules or tablets, typically ranging from 300mg to 600mg, daily with water. It is important to follow the dosage instructions on the product label or as advised by a healthcare professional.

Description

Eucalyptus is often used in traditional medicine and aromatherapy for its potential to alleviate respiratory issues and promote relaxation. Inhaling eucalyptus vapor or using eucalyptus essential oil may help ease congestion and provide a calming effect.

How it helps

Eucalyptus possesses anti-inflammatory properties that may reduce swelling in the Eustachian tube, facilitating drainage and relieving pressure. Additionally, its ability to clear respiratory pathways can help enhance overall respiratory function, contributing to improved symptoms.

7



Cineole

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a supplement containing 200 mg of cineole, three times a day with meals for a duration of at least 10 days to help relieve symptoms of acute bronchitis and sinusitis.

TYPICAL STARTING DOSE

600 mg

Description

Cineole is a natural compound found in certain essential oils, like eucalyptus and rosemary. It's often used in aromatherapy and may have respiratory benefits, helping to ease congestion and promote clearer breathing.

Cineole, also known as eucalyptol, is an extract from the eucalyptus plant. The eucalyptus tree is native to Australia [\[R\]](#), [\[R\]](#), [\[R\]](#).

Cineole can be found in [\[R\]](#), [\[R\]](#):

- Cough and cold products, to help with congestion
- Creams and ointments, to help with pain
- Mouthwashes, to support mouth health

How it helps

Cineole may alleviate symptoms of Eustachian Tube Dysfunction by reducing nasal congestion and promoting clearer airflow, which can facilitate the opening of the Eustachian tubes. This action helps to restore normal middle ear pressure, improving overall ear function.

8



Avoid Noise Pollution

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Minimize exposure to loud environments by using noise-cancelling headphones or earplugs, especially in areas known for high noise levels such as construction sites, concerts, and busy urban streets. Aim to keep the volume of personal audio devices below 60% of their maximum. At home, use carpets, curtains, and wall fabrics to reduce indoor noise, and prefer quieter appliances. Try to dedicate at least one hour of quiet time before bed to aid in relaxation and improve sleep quality.

Description

Noise pollution refers to the presence of excessive, disruptive, or unwanted sound in the environment. It often includes sounds from traffic, industrial machinery, construction, loud music, and other sources that exceed acceptable or comfortable noise levels. Noise pollution disrupts normal activities and can have detrimental effects on human health, well-being, and the natural world.

Prolonged exposure to high noise levels can lead to a range of health issues, including:

- Stress
- Anxiety,
- Sleep disturbances
- High blood pressure
- Heart disease
- Impaired cognitive function

How it helps

Avoiding noise pollution can reduce stress and prevent further irritation of the Eustachian tubes, which may already be compromised. This protective measure helps to minimize discomfort and can promote more stable ear pressure regulation in individuals with Eustachian Tube Dysfunction.