SelfDecode™

Tongue Cancer

Disease Report

REPORT CATEGORY

CANCER

Sample Client

Report date: 15 January 2026

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Personal information

NAME

Sample Client

SEX AT BIRTH

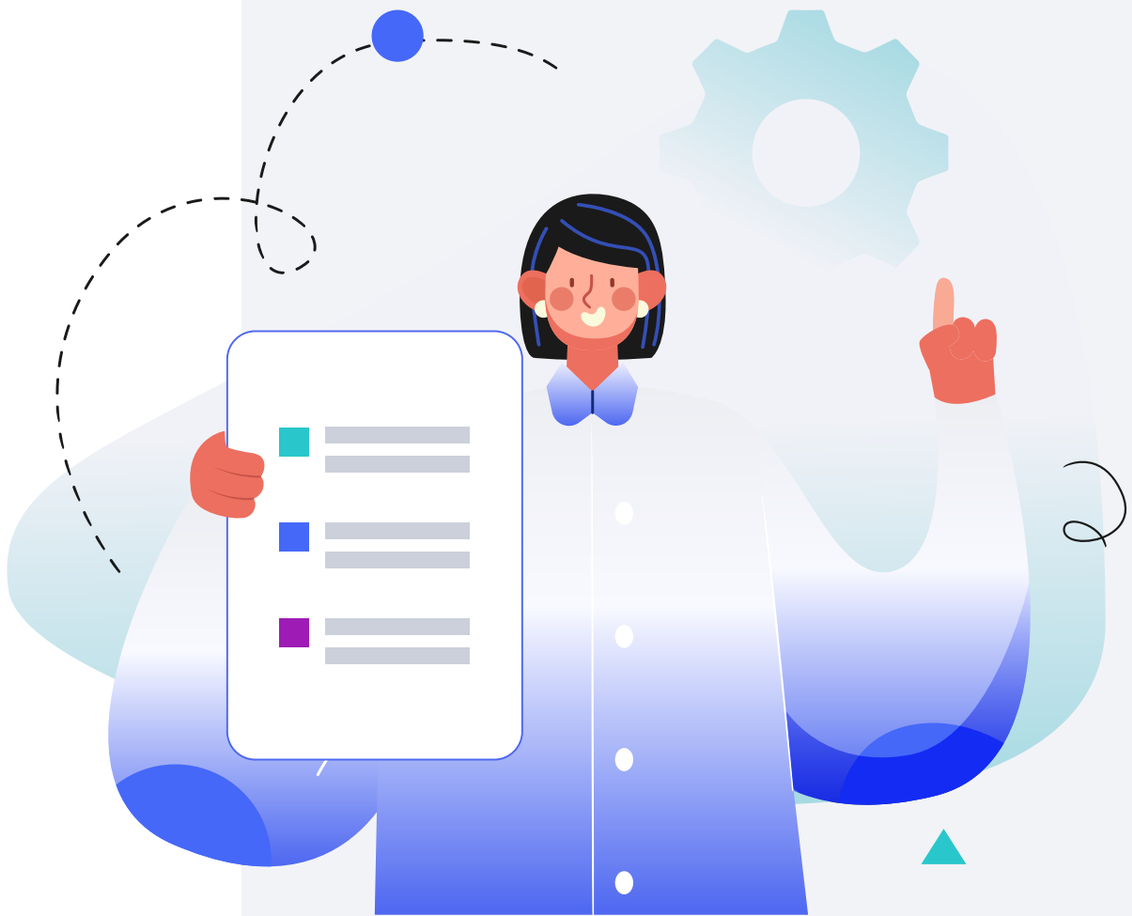
Male

HEIGHT

5ft 5" 165cm

WEIGHT

137lb 62kg

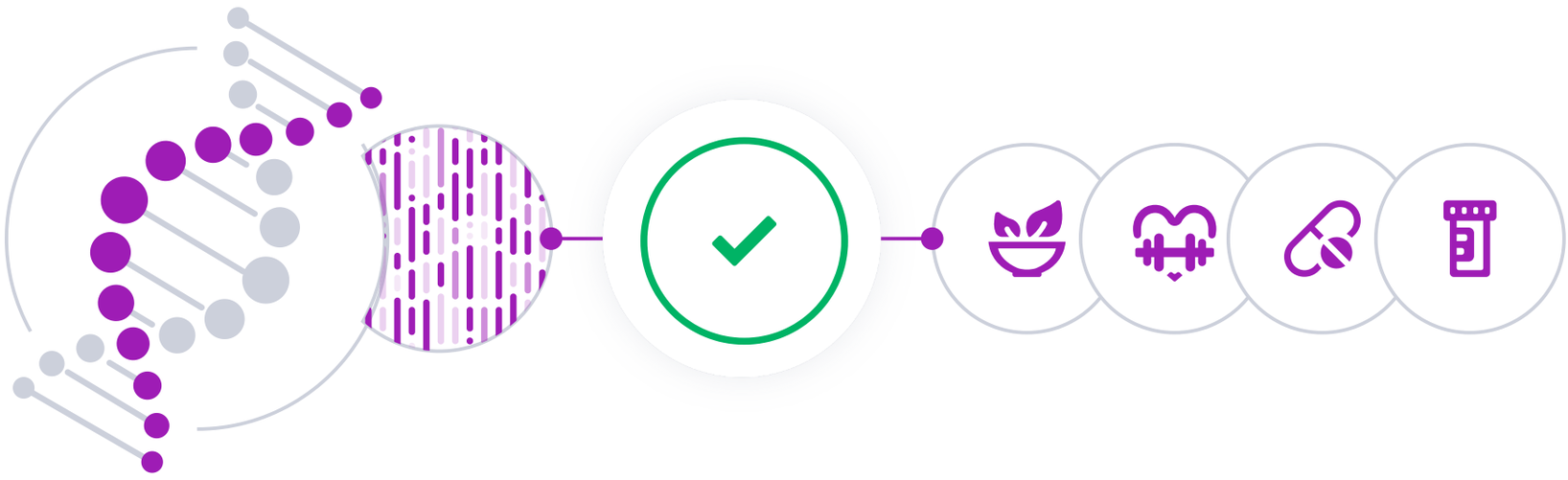


DISCLAIMER

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.

How this works

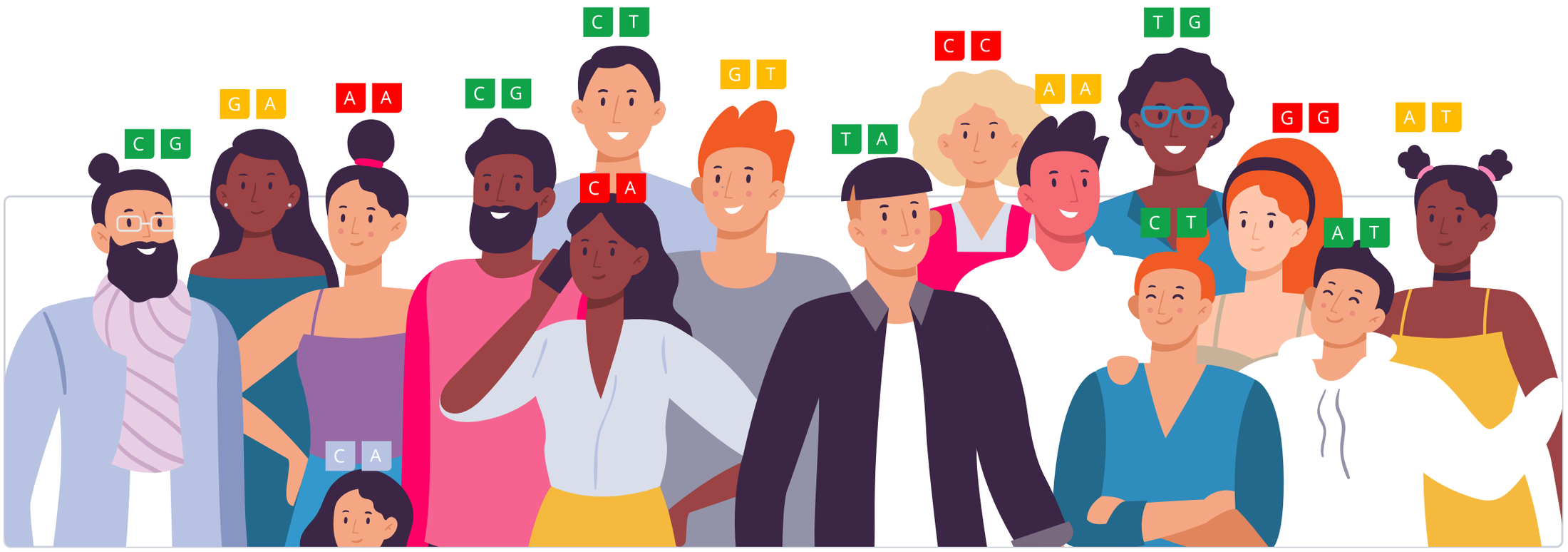
Our Wellness Reports analyze how your DNA influences your health.
We then use this analysis to give you personalized risk estimates and recommendations.



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.

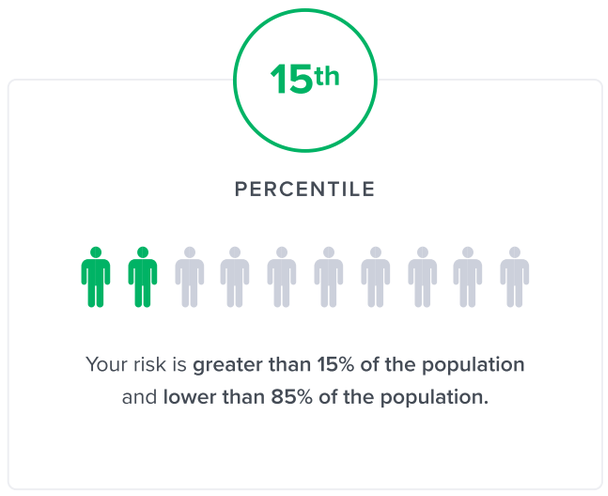
Genetic variants are parts of DNA that differ from person to person. Some can make you more vulnerable to certain health issues, while others may influence traits such as eye color.



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.

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

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



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, afew 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

Tongue cancer is a type of oral cancer that occurs on the tongue. It can affect various parts of the tongue, including the oral part (the part you can see) and the base of the tongue (the part located at the back of the mouth). Tongue cancer is a subset of oral cancer and is most commonly squamous cell carcinoma (SCC), which starts in the squamous cells lining the mouth and tongue. Other types of tongue cancer include [R]:

- Basal cell carcinoma: less common for the tongue, but can occur, typically presenting as a slow-growing lesion.
- Melanoma: a rare type of cancer that originates in pigment-producing cells. It is uncommon in the tongue but can occur.
- Sarcoma: rare, but can develop in the connective tissues of the tongue.

Symptoms of tongue cancer can vary but may include [R]:

- A sore or ulcer on the tongue that does not heal
- Pain in the tongue or mouth that persists
- A noticeable lump or thickening in the tongue or mouth
- Difficulty swallowing food or liquids (dysphagia)
- Difficulty speaking or changes in the way the tongue feels
- Unexplained bleeding in the mouth or tongue
- White (leukoplakia) or red (erythroplakia) patches on the tongue
- Bad breath that does not go away with good oral hygiene.

Risk Factors and Treatment

Several factors can increase the risk of developing tongue cancer [R]:

- Tobacco use
- Heavy alcohol consumption, particularly when combined with tobacco use
- Human papillomavirus (HPV) infection: certain strains of HPV, especially HPV-16, are associated with increased risk.
- Age: risk increases with age, typically affecting adults over 50.
- Gender: men are more likely to develop tongue cancer than women.
- Chronic irritation from poor dental hygiene or ill-fitting dentures
- Excessive exposure to UV radiation can increase the risk of lip cancer, which can sometimes affect the tongue.

Treatment options for tongue cancer depend on the type, stage of the cancer, and the patient's overall health [R]:

- Surgery: partial glossectomy (removal of part of the tongue) or total glossectomy (removal of the entire tongue, often followed by reconstruction to restore function).
- Radiation therapy: using high-energy rays to target and kill cancer cells, often combined with surgery.
- Chemotherapy: systemic treatment using drugs to kill cancer cells, often used in combination with radiation therapy (chemoradiation) for more advanced cases.
- Targeted therapy: drugs that specifically target cancer cells' molecular changes, used in clinical trials or for certain types of tongue cancer.
- Immunotherapy: uses the body's immune system to fight cancer, including checkpoint inhibitors, though it is more commonly used for other cancers and in clinical trials for tongue cancer.

The prognosis for tongue cancer depends on several factors, including the stage of the cancer at diagnosis, the type of tongue cancer, the extent of the spread, and the patient's overall health. Early-stage tongue cancer generally has a better prognosis, while advanced stages

TYPICAL LIKELIHOOD

Typical likelihood of tongue cancer based on 12,271 genetic variants we looked at

may require more aggressive treatment and have a more variable outlook.

Please note: This report is not diagnostic and can't be used to make any medical decisions. Most cancers are uncommon and have a strong environmental component. Even if your genetic predisposition is high, you will most likely not develop the disease. This report doesn't test for hereditary cancer syndromes or 'cancer genes'. These are usually caused by rare mutations that can't be analyzed by our test. If you're concerned about your risk of hereditary cancer, consider getting a specialized test at a reference laboratory.

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
1	Topical Honey	
2	Cruciferous Vegetables	
3	Avoid Secondhand Smoke	
4	Green Tea	400 mg
5	Curcumin	500 mg
6	Dietary Omega-3 Fatty Acids	
7	Speech Therapy	45 minutes
8	Vegetables	
9	Dietary Antioxidants	
10	Avoid Cannabis	
11	Green Tea Extract	250 mg
12	Anti-Inflammatory Diet	
13	Turmeric	

1

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 antimicrobial and wound healing properties. It can be beneficial for managing symptoms and improving wound healing in cancer care, including for tongue cancer patients. Applying honey topically can help reduce inflammation and promote healing of surgical wounds or ulcers.

2 Cruciferous Vegetables

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Incorporate a serving of cruciferous vegetables, such as broccoli, cauliflower, Brussels sprouts, kale, or cabbage, into at least one meal each day. A serving size is about a half cup cooked or one cup raw. Try to maintain this habit consistently over time for the best health outcomes.

Description

Cruciferous vegetables like broccoli, cauliflower, and kale are rich in vitamins, fiber, and antioxidants. Including them in your diet can promote overall health and may offer cancer-protective properties.

Cruciferous vegetables are a group of vegetables that belong to the Brassicaceae family. They are rich in fiber, vitamins, minerals, and other nutrients.

Some common cruciferous vegetables include broccoli, cauliflower, cabbage, kale, and brussels sprouts.

How it helps

Cruciferous vegetables, such as broccoli, cauliflower, and Brussels sprouts, contain sulforaphane and indoles, which are compounds with potent anticancer effects. They can help protect cells from DNA damage, inactivate carcinogens, induce cell death in cancerous cells, and inhibit tumor blood vessel formation. These vegetables could contribute to a protective effect against the development or progression of tongue cancer.

3 Avoid Secondhand Smoke

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Implementing a smoke-free lifestyle involves communicating your needs to family, friends, and coworkers, requesting they respect your choice by smoking away from you. At home, establish strict no-smoking policies indoors. When out, choose smoke-free venues and accommodations. Advocate for smoke-free environments in your community and support legislation that promotes public health by reducing exposure to secondhand smoke. Utilize air purifiers at home to reduce any residual particles.

Description

Avoiding secondhand smoke is crucial for maintaining good health. Exposure to secondhand smoke can lead to respiratory problems, cardiovascular disease, and an increased risk of lung cancer, even in non-smokers. Protecting oneself from secondhand smoke involves staying away from smoking areas, ensuring smoke-free environments at home and work, and advocating for smoke-free policies in public spaces.

How it helps

Cigarette smoke is a well-known risk factor for tongue cancer due to its carcinogenic components. Avoiding exposure to cigarette smoke, both directly by not smoking and indirectly through second-hand smoke, can significantly reduce the risk of developing tongue cancer.

4

Green Tea

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Consume 400 mg of green tea extract daily. This can be taken in the form of capsules or tablets available that specify the amount of green tea extract. Ensure the supplement is taken according to the product's specific instructions, usually once a day with water.

TYPICAL STARTING DOSE

400 mg

Description

Tea is a beverage made by steeping the leaves of the Camellia sinensis plant in hot water. It comes in various types, including black, green, white, and herbal teas, and is known for its diverse flavors and potential health benefits due to antioxidants and other bioactive compounds.

Green and black tea are made from the same plant (*Camellia sinensis*). This plant is processed in different ways to make each type of tea [R, R].

Tea contains antioxidants called **flavonoids**, which may help prevent [R, R, R, R]:

- Heart disease
- Cancer
- Diabetes

How it helps

Green tea contains high levels of antioxidants, including epigallocatechin-3-gallate (EGCG), which is thought to have anti-cancer properties. Studies have shown that green tea can inhibit the growth of various types of cancer cells, including those in the tongue, by inducing apoptosis (programmed cell death) and inhibiting angiogenesis (the formation of new blood vessels that feed the tumor).

5

Curcumin

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Take a 500 mg curcumin supplement daily with food. To enhance absorption, take it with a meal that contains fats or oils since curcumin is fat-soluble.

TYPICAL STARTING DOSE

500 mg

Description

Curcumin is a compound found in turmeric known for its anti-inflammatory and antioxidant properties. It has been studied for its potential to reduce inflammation, support joint health, and contribute to overall well-being.

Turmeric is a yellow spice from India. It may reduce inflammation and oxidative stress [R].

The most important active compound in turmeric is **curcumin.** People use curcumin for [R, R, R, R, R, R]:

- Joint pain
- Hay fever
- Mood
- High blood sugar
- Gut health
- Liver health

How it helps

Curcumin, found in turmeric, has been shown in some studies to have anti-cancer properties. It can inhibit the growth of cancer cells and may reduce inflammation and tumor growth.

6

Dietary Omega-3 Fatty Acids

IMPACT 0 / 5

EVIDENCE 0 / 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

Omega-3 fatty acids have been shown to have anti-cancer properties due to their ability to reduce inflammation and prevent the spread of cancer cells. They are found in fish and certain plant oils.

7

Speech Therapy

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Attend speech therapy sessions with a certified speech-language pathologist for 45 to 60 minutes per session, 1-2 times per week, for a period that can range from a few months to over a year, depending on the specific needs and progress.

TYPICAL STARTING DOSE

45 minutes

Description

Speech therapy is a specialized form of therapy that focuses on improving communication skills, speech fluency, and language development in individuals with speech and language disorders, offering support for improved communication and quality of life.

Speech therapy is used to assess and treat speech and communication problems. It helps people develop the skills needed for more effective communication. It is used to treat everything from childhood speech disorders to speech impairments caused by stroke or brain injury.

Speech and language therapy (SLT) aims to improve [R, R]:

- Communication
- Eating
- Drinking
- Swallowing

These programs support children and adults who [R]:

- Recover from a stroke or brain injury
- Have speech disorders (e.g., stuttering)
- Have swallowing or joint disorders

How it helps

Speech therapy helps individuals regain communication skills and improve swallowing functions, which can be affected by tongue cancer treatments.

8

Vegetables

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Incorporate at least 2-3 cups of various vegetables into your daily diet, ensuring a mix of colors like greens, reds, and yellows to maximize nutrient intake. Aim to include vegetables in most meals, either as a side, part of the main dish, or snacks.

Description

Vegetables are edible parts of plants that offer various health benefits due to their rich nutrient content, including vitamins, minerals, fiber, and antioxidants. They are essential components of a balanced diet and contribute to overall health, supporting various bodily functions.

How it helps

A diet rich in vegetables provides essential vitamins, minerals, and antioxidants that have been shown to enhance immune function and potentially reduce cancer cell growth.

9

Dietary Antioxidants

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Incorporate foods rich in antioxidants, such as fruits (berries, oranges, plums), vegetables (spinach, kale, bell peppers), nuts (walnuts, almonds), and seeds (flaxseeds, chia seeds) into your daily meals. Aim for at least 5 servings of fruits and vegetables per day, ensuring a variety of colors to cover different antioxidants.

Description

Dietary antioxidants are compounds found in foods that help neutralize harmful molecules called free radicals, potentially reducing the risk of oxidative stress-related diseases and supporting overall health. Examples include vitamins C and E, beta-carotene, and polyphenols.

Our cells sometimes produce molecules called **reactive oxygen species (ROS)** [R].

High levels of ROS can cause oxidative stress and damage our cells. Oxidative stress plays a role in many health conditions, including [R]:

- High blood sugar
- Type 2 diabetes
- Heart disease

Antioxidants are substances that help combat ROS [R].

Antioxidants are found in many plants. Good sources include [R, R, R]:

- Fruits like tomatoes, berries, and pomegranates
- Vegetables like onions, spinach, and celery
- Chocolate
- Olive oil
- Wine

How it helps

Antioxidants are substances that can prevent or slow damage to cells caused by free radicals, which are unstable molecules that the body produces as a reaction to environmental and other pressures. Diets rich in antioxidants, such as vitamins C and E, selenium, and carotenoids, can help protect cells from damage. For patients with tongue cancer, antioxidants may help protect healthy cells during cancer treatment, potentially reducing side effects and supporting overall health.

10

Avoid Cannabis

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Stop any form of cannabis use, including smoking, vaping, edibles, and topical applications. If you currently use cannabis, it's recommended to cease usage immediately and seek support or counseling if necessary for cessation.

Description

Avoiding cannabis is advised in situations where its use is prohibited by law or poses health risks, particularly for individuals with a history of substance abuse or mental health conditions. Responsible use and adherence to local regulations are essential to minimize potential negative consequences.

Cannabis (marijuana) is a plant used for its medicinal and recreational properties. It contains substances called *cannabinoids*, such as CBD and THC [R].

Cannabis misuse can have long-term consequences, such as [R, R, R, R]:

- Lung damage
- Mental health problems
- Cognitive impairment

How it helps

Cannabis smoke can contain carcinogenic compounds, similar to tobacco smoke, which may contribute to the risk of developing oral cancers, including tongue cancer. Avoiding cannabis smoke might reduce the exposure to these harmful compounds, potentially lowering the risk of tongue cancer.

11

Green Tea Extract

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Take a green tea extract supplement containing 250-500 mg of EGCG (the active compound in green tea) daily, preferably with a meal to enhance absorption. This dosage is typically split into two separate doses, taken in the morning and later in the day. Continue this regimen for at least three months to observe potential health benefits.

TYPICAL STARTING DOSE

250 mg

Description

Green tea extract is a concentrated form of the beneficial compounds found in green tea, such as catechins. It is used in dietary supplements for its potential to enhance metabolism, aid in weight management, and provide antioxidant protection.

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 prevent oxidative stress [R].

EGCG is the main catechin found in green tea. It may help reduce inflammation and support weight loss [R].

How it helps

Similar to green tea catechins, green tea extract contains polyphenols that act as antioxidants. These compounds can reduce oxidative stress and have been linked to inhibiting the growth of cancer cells, potentially slowing the progression of tongue cancer.

12

Anti-Inflammatory Diet

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Incorporate foods rich in omega-3 fatty acids, such as salmon and flaxseeds, fruits, vegetables, nuts, and whole grains into your daily meals. Avoid processed foods, red meats, and refined sugars. Aim for a balanced diet consisting mostly of plant-based foods and lean protein sources, adjusting portions sizes to meet your individual nutritional needs and health goals.

Description

An anti-inflammatory diet focuses on reducing inflammation in the body by emphasizing foods rich in anti-inflammatory compounds, such as fruits, vegetables, fatty fish, nuts, and seeds, while minimizing processed foods and those high in added sugars and trans fats.

Anti-inflammatory diets use healthy foods to reduce inflammation. These diets are generally high in [R, R, R]:

- Colorful fruits and vegetables
- Nuts and seeds
- Fish
- Olive oil
- Tea

They also tend to restrict [R, R]:

- Processed food
- Sugar and refined carbs
- Red meat

The Mediterranean diet and the DASH diet are good examples of anti-inflammatory diets [R, R].

How it helps

An anti-inflammatory diet can help reduce chronic inflammation, which is known to contribute to cancer progression. It includes foods like fruits, vegetables, whole grains, and healthy fats.

13

Turmeric

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

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

Description

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

How it helps

Turmeric contains a compound called curcumin, which has been studied for its anti-inflammatory and antioxidant properties. Research suggests that curcumin may help in reducing the growth of cancer cells and in preventing the spread of cancer. Its antioxidative action may protect cells from damage, potentially reducing the risk of cancer development.

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.