

Brain Ischemia

DNA Health Report

REPORT CATEGORY —



HEART & BLOOD
VESSELS

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

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

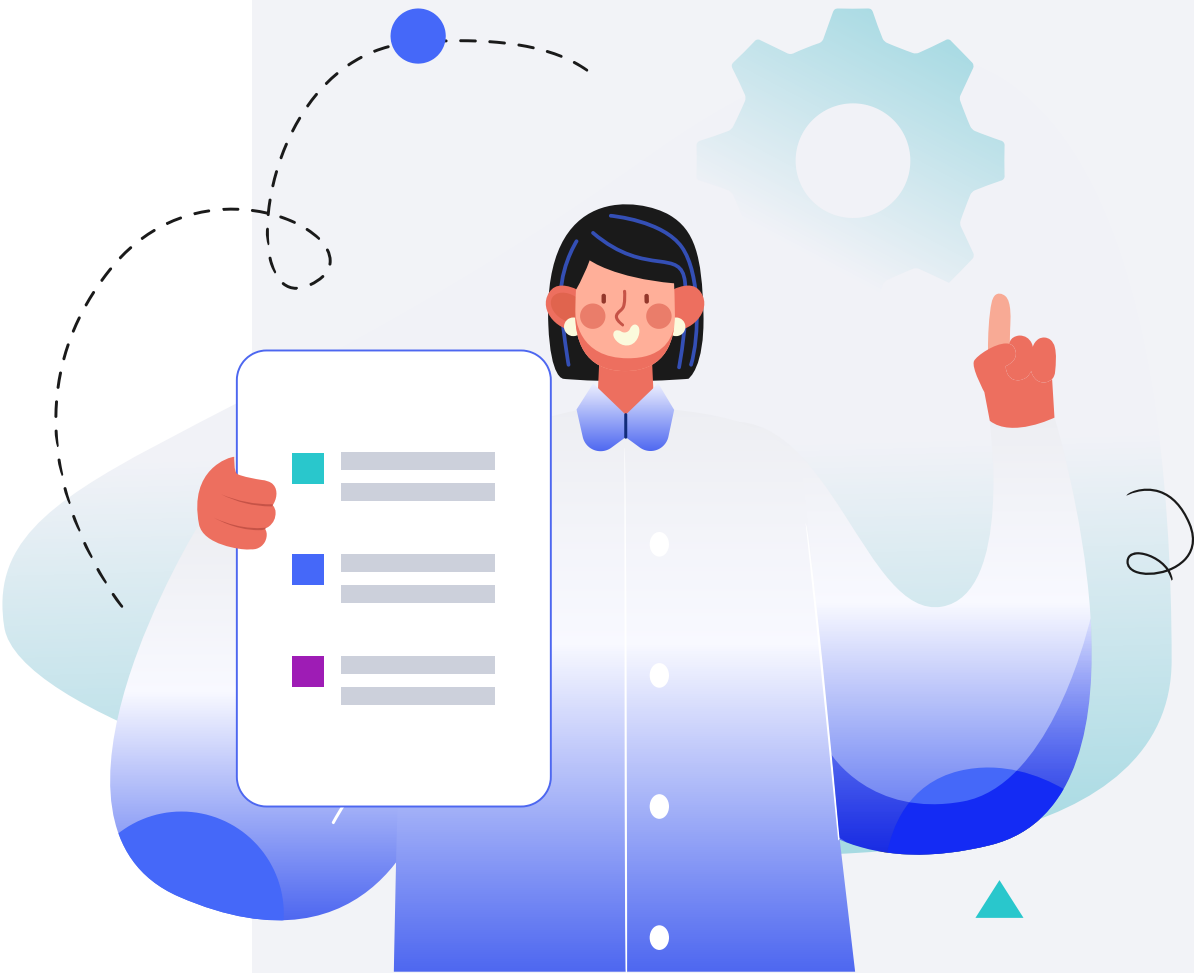
Male

HEIGHT

5ft 5" 165cm

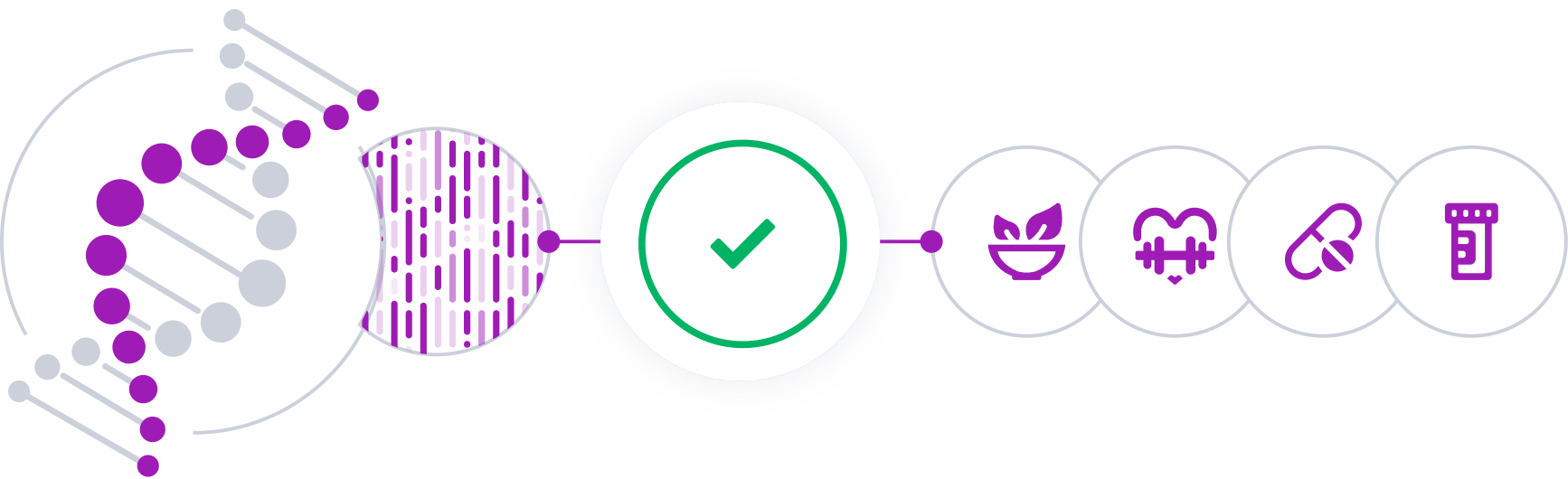
WEIGHT

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.

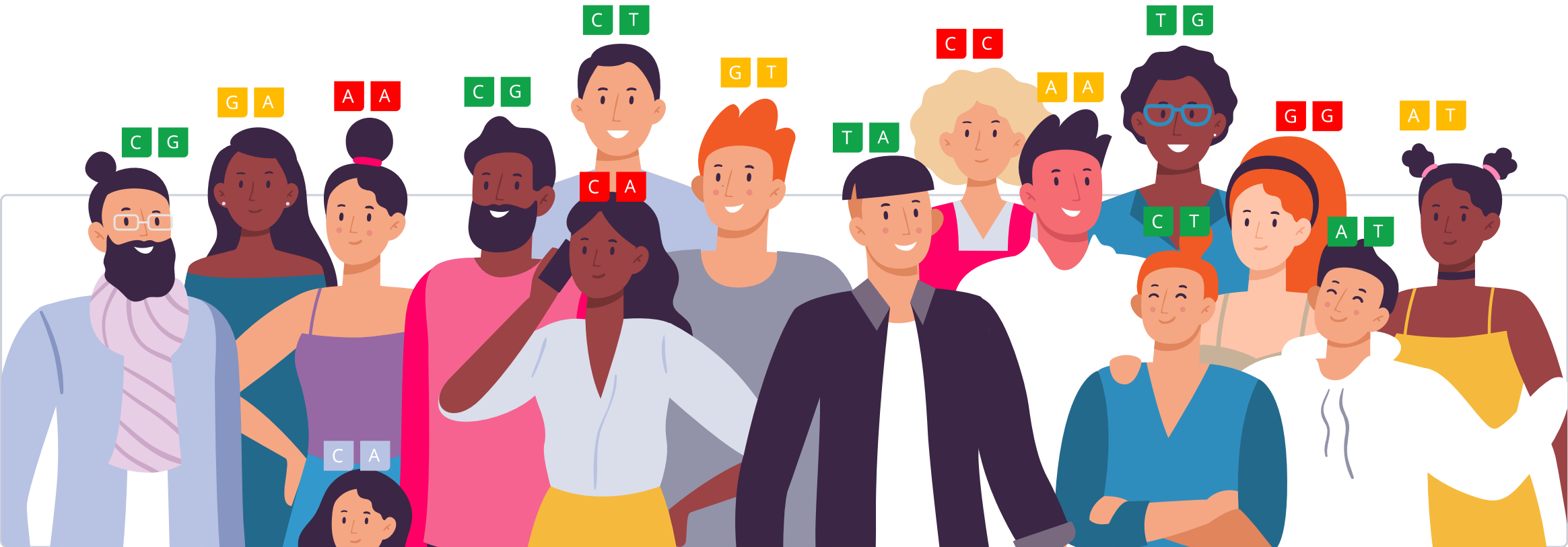


Similarly, our Trait Reports look at how your DNA influences your traits.



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

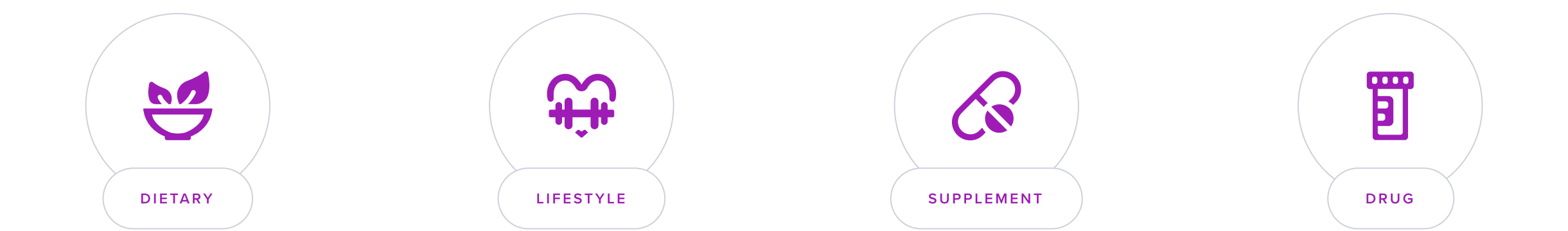
You have 2 risk alleles

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

Chronic cerebral ischemia refers to a condition characterized by reduced blood flow to the brain over an extended period, leading to insufficient delivery of oxygen and vital nutrients. This gradual reduction in cerebral blood flow can cause a range of neurological deficits and symptoms.

Individuals with chronic cerebral ischemia may present with symptoms such as dizziness, transient ischemic attacks (mini-strokes), headaches, and unsteady gait, signaling the brain's struggle to maintain normal function. Over time, if not properly managed or treated, chronic cerebral ischemia can progress and potentially lead to more serious conditions like vascular dementia, due to the ongoing damage to brain tissue.

Causes and Treatment

The underlying causes of this condition are often systemic and can include atherosclerosis, where plaque buildup narrows arteries, chronic hypertension, or other vascular diseases that compromise the integrity of blood vessels. The diminished blood supply can result in cognitive impairment, memory problems, and difficulties in executive functions, reflecting the widespread impact of chronic ischemia on brain health.

Diagnosis usually involves imaging techniques such as MRI or CT scans which can reveal areas of reduced blood flow and potential brain injury. Treatment aims to address the cause of the reduced blood flow, often through medication, lifestyle changes, and, in some cases, surgical interventions to improve cerebral circulation and prevent further damage.



TYPICAL LIKELIHOOD

Typical likelihood of chronic cerebral ischemia based on 364,751 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
TWIST1	rs2107595	AG
HP	rs879324	AA
PITX2	rs6843082	AG
ALDH2	rs2238151	TT
ABCG5	rs76866386	TT
ABO	rs532436	AA
PTPRF	rs6695915	AA
LIPA	rs1412444	TT
SPSB4	rs16851055	AG
HTRA1	rs60401382	CC
SWAP70	rs10840293	AA
EDNRA	rs1878406	CT
FES	rs8027450	TC
DACH1	rs339800	TC
JCAD	rs2487928	GA
FN1	rs17517928	CT
SH2B3	rs10774625	AG
FGD5	rs748431	GT
MMP8	rs12792912	TG
COL4A1	rs9521634	TC
ASB3	rs13407662	CC
LPA	rs55730499	CC
MPO	rs2632512	CC
NEDD4	rs12442374	CC
FLT1	rs1924981	CC
IL6R	rs11265613	CC

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	L-Carnitine	1 g	2	Meditation	30 minutes
3	Oat Bran		4	Acetyl-L-Carnitine	500 mg
5	Green Tea	400 mg	6	Mindfulness Meditation	30 minutes
7	Oats		8	Ginkgo	120 mg
9	Spend Time in Nature	2 hours	10	Turmeric	
11	Dietary Omega-3 Fatty Acids		12	Vinpocetine	
13	Pomegranate				

1



L-Carnitine

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 500 mg of L-carnitine supplement daily with a glass of water, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

1 g

Description

L-carnitine is an amino acid-like compound that plays a role in energy metabolism and helps prevent toxic substances from building up in cells. It is often used in dietary supplements for its potential to support muscle recovery, reduce fatigue, and enhance athletic performance.

[L-carnitine](#) is a compound that helps you burn fat. It also prevents toxic substances from building up in cells [\[R\]](#).

Your body can usually make enough carnitine to meet its needs. You can also get it from **meat and dairy products** [\[R\]](#).

People use L-carnitine for [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Heart problems
- Overactive thyroid
- Fertility problems
- Blood sugar control
- Weight control

How it helps

A 60-patient clinical study (42-74 years, 22 men, 38 women) administered L-carnitine alongside basic treatment. Groups received 1000mg or 2000mg/day or basic therapy. After 60 days, L-carnitine showed significant improvement in symptoms like weakness, memory loss, and cognitive function, with dose-dependent effects observed [\[R\]](#).

2



Meditation

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Set aside 10-20 minutes each day in a quiet space without distractions to practice meditation. Focus on your breath or perform guided meditation using an app or audio track.

TYPICAL STARTING DOSE

30 minutes

Description

Meditation is a mindfulness practice that can reduce stress, improve mental clarity, and promote relaxation. Regular meditation is associated with numerous mental and emotional health benefits, including reduced anxiety and enhanced emotional well-being.

[Meditation](#) is a relaxation technique that trains your mind to focus and redirect your thoughts. Some of the main types of meditation are [\[R\]](#):

- Mindfulness
- Focused
- Transcendental
- Mantra
- Moving

People use meditation to improve [\[R\]](#), [\[R\]](#):

- Stress and anxiety
- Mood
- Sleep disturbances
- Pain

How it helps

Meditation may help reduce stress, which is known to exacerbate chronic cerebral ischemia. By lowering stress, meditation can indirectly contribute to the reduction of blood pressure, thereby improving blood flow to the brain and alleviating symptoms.

3



Oat Bran

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Incorporate oat bran into your diet by adding 1-2 tablespoons to your breakfast cereal or yogurt daily. You can also use it as an ingredient in homemade bread, muffins, or pancakes. Aim to include oat bran in at least one meal per day for ongoing dietary benefits.

Description

Oat bran is the outer layer of oat grains and is rich in soluble fiber, making it a heart-healthy addition to diets. Consuming oat bran may help lower cholesterol levels and support digestive regularity.

How it helps

Oat bran is high in soluble fiber, which can help lower cholesterol levels. High cholesterol is a risk factor for chronic cerebral ischemia, as it can lead to the development of plaques in the arteries, restricting blood flow to the brain.

4



Acetyl-L-Carnitine

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take 500-1,000 mg of Acetyl-L-Carnitine per day, split into 2 or 3 doses, with or without food. Joe prefers taking 500 mg in the morning. It can be taken indefinitely for chronic conditions or for a period of several months for acute concerns.

TYPICAL STARTING DOSE

500 mg

Description

Carnitine is a protein building block (amino acid). It comes in many forms, such as acetyl-L-carnitine. Acetyl-L-carnitine may help with nerve damage and mood problems.

Carnitine is a protein building block (amino acid). It comes in many forms, such as acetyl-L-carnitine [R, R, R].

Acetyl-L-carnitine may help with [R, R, R]:

- Nerve damage
- Mood problems
- Cognitive decline

Doctors are also studying its potential effect on drug addiction [R].

How it helps

Acetyl-L-Carnitine is an amino acid that the body uses to turn fat into energy. It is believed to improve cognitive function and reduce oxidative stress, which are both important factors in managing chronic cerebral ischemia.

5



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 antioxidants that can benefit the brain by improving blood flow and reducing inflammation. Its components may reduce the risk of stroke and improve brain health, which is crucial for those dealing with chronic cerebral ischemia.

6



Mindfulness Meditation

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Practice mindfulness meditation for 10-20 minutes daily. Find a quiet, comfortable place to sit or lie down, then focus on your breath, observing thoughts and sensations without judgment. Consistency is key, so try to incorporate it into your daily routine, perhaps in the morning or before bed.

TYPICAL STARTING DOSE

30 minutes

Description

Mindfulness meditation involves focused attention on the breath or a specific point of focus to cultivate mindfulness and reduce stress. Regular meditation practice is associated with improved mental clarity, emotional regulation, and overall well-being.

How it helps

Like meditation, mindfulness meditation can help in reducing stress levels. Lower stress levels can lead to lower blood pressure and improved blood flow to the brain, which is beneficial for managing chronic cerebral ischemia.

7



Oats

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Incorporate oats into your diet daily by having them for breakfast as oatmeal, or adding them to smoothies, baking recipes, or overnight oats. Aim for at least a half-cup (40 grams) of dry oats to reap the health benefits.

Description

Oats are a whole grain known for their high fiber content and nutritional value, like zinc, iron, and manganese. Including oats in one's diet can promote heart health, stabilize blood sugar levels, and provide sustained energy.

Oats are a good source for manganese, zinc, iron, magnesium, and vitamins B1 and B5. A ½ cup serving provides 0.7 mg of manganese or 30%DV.

How it helps

Consuming oats can contribute to lowering LDL (bad) cholesterol levels, helping to reduce the risk of plaque buildup in the arteries. This is beneficial in preventing or managing chronic cerebral ischemia by promoting better blood flow to the brain.

8



Ginkgo

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take 120 mg of Ginkgo supplement daily, preferably with meals to aid absorption. This dosage is typically split into two 60 mg doses taken in the morning and evening for best results.

TYPICAL STARTING DOSE

120 mg

Description

[Ginkgo](#) (*Ginkgo biloba*) is an ancient tree used in traditional Chinese medicine [\[R\]](#), [\[R\]](#).

According to limited evidence, ginkgo leaf extract may help with [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Anxiety
- Dementia
- Eye problems
- Blood vessel problems
- Vitiligo

How it helps

Ginkgo biloba supplements can improve blood flow to the brain. They have been found to act as vasodilators, increasing blood vessel diameter, which may help in the management of chronic cerebral ischemia. Additionally, Ginkgo has antioxidant properties that may protect nerve cells.

9



Spend Time in Nature

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Aim to spend at least 120 minutes per week in natural environments, such as parks, forests, or beaches. This can be divided into short durations throughout the week, for example, 17 minutes per day or longer sessions on weekends.

TYPICAL STARTING DOSE

2 hours

Description

Spending time in nature, also known as ecotherapy or forest bathing, is a wellness practice that involves immersing oneself in natural environments. It offers mental and physical health benefits, including reduced stress, improved mood and eye health, healthier weight, and blood sugar control.

Spending over 2 hours in nature every week is linked to better health and well-being [\[R\]](#).

Spending more time in nature or in urban green areas may help support [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Healthy weight
- Blood sugar control
- Heart health
- Mental health
- Eye health

To get in touch with nature, you can [\[R\]](#), [\[R\]](#):

- Go on a walk
- Go biking or camping
- Garden
- Visit a park

How it helps

Spending time in natural environments can reduce stress and support mental health, which might have indirect benefits for individuals with chronic cerebral ischemia by improving overall cardiovascular health and reducing risk factors such as hypertension.

10



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, particularly its active compound curcumin, has anti-inflammatory and antioxidant properties. It may improve endothelial function and decrease the risk of blood vessel blockage, potentially helping in the management of chronic cerebral ischemia.

11



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 anti-inflammatory and neuroprotective properties. Intake of omega-3s can improve blood flow to the brain, reduce inflammation, and potentially lower the risk of chronic cerebral ischemia by protecting against blood vessel damage.

12



Vinpocetine

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take vinpocetine as a supplement with a dose of 10mg three times daily. It's best consumed with meals to enhance its absorption.

Description

Vinpocetine is a synthetic compound derived from the periwinkle plant, used as a dietary supplement. It may support cognitive function and enhance blood flow to the brain, potentially benefiting memory and mental clarity.

How it helps

Vinpocetine is a synthetic derivative of the periwinkle plant. It's believed to increase blood flow to the brain, reduce inflammation, and have neuroprotective effects. This can be beneficial for individuals with chronic cerebral ischemia, as it helps improve brain function and reduce symptoms.

13



Pomegranate

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Incorporate pomegranate into your diet by consuming fresh pomegranate seeds, drinking pure pomegranate juice, or adding pomegranate extract to smoothies or yogurts. Aim for at least one serving per day, which could be about half a cup of seeds or a glass (8 ounces) of juice, to gain its health benefits.

Description

Pomegranate is a fruit native to regions of the Middle East and Mediterranean. It is rich in antioxidants and nutrients such as vitamin C, vitamin K, and dietary fiber. It contains punicalagins, anthocyanins, and ellagic acid, which give it anti-inflammatory effects and potential heart health benefits.

[Pomegranates](#) are red fruits that contain seeds covered by edible sweet coats. They are rich in antioxidants [\[R, R\]](#).

Pomegranate may reduce inflammation and support heart health. People use pomegranate seed oil and peel in cosmetics and traditional medicine [\[R, R\]](#).

How it helps

Pomegranate contains potent antioxidants that can help reduce blood vessel damage and improve blood flow. This may be beneficial in the management or prevention of chronic cerebral ischemia by maintaining healthy cerebral circulation.

Next Steps

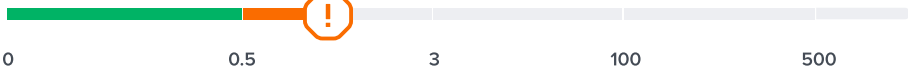
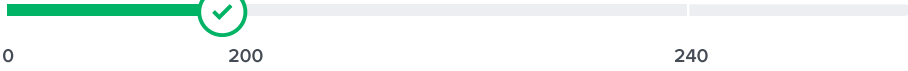
Remember, your genes only tell one important part of your health story!

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.

	Homocysteine	12.84 umol/L		9 Nov 2025
	hs-CRP	1.6 mg/L		9 Nov 2025
	Cholesterol, Total	182 mg/dL		9 Nov 2025