SelfDecode™

Sarcosine

Biohacker Report

REPORT CATEGORY

NUTRITION

Sample Client

Report date: 15 January 2026

Powered by omicsedge

Table of Contents

Personal information

NAME

Sample Client

SEX AT BIRTH

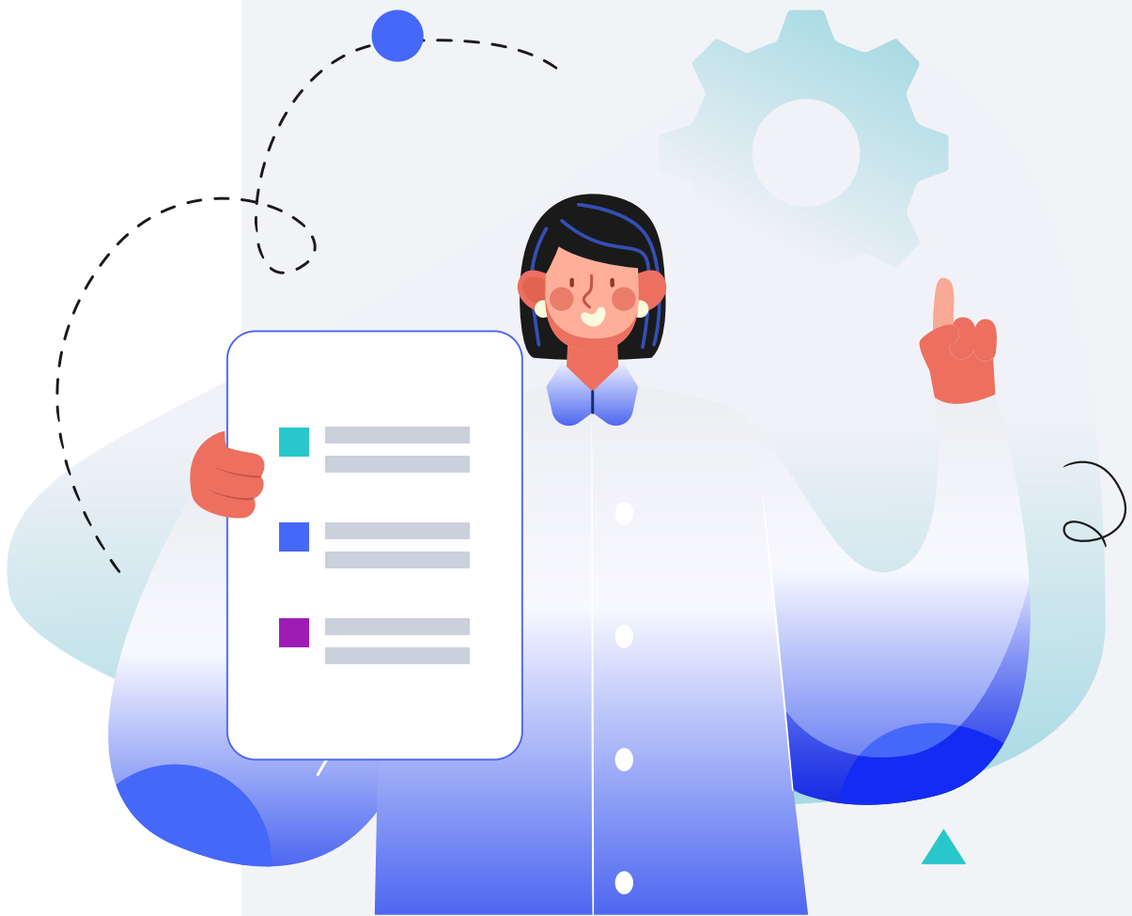
Male

HEIGHT

5ft 5" 165cm

WEIGHT

137lb 62kg

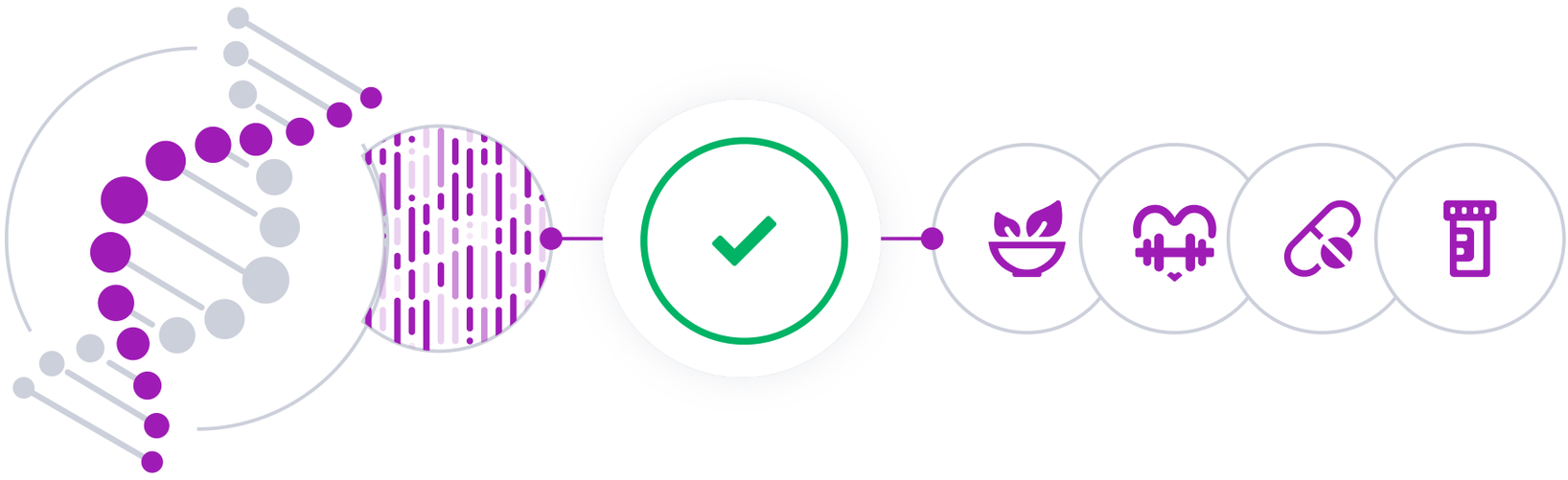


DISCLAIMER

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

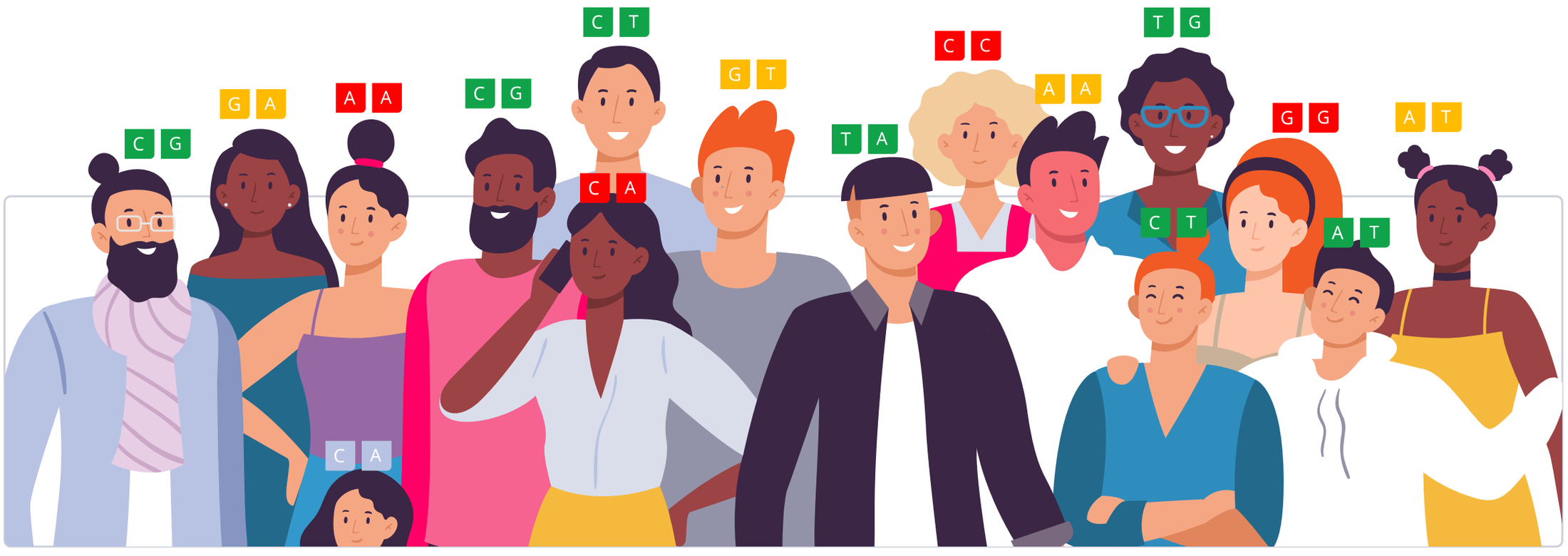
Our Wellness Reports analyze how your DNA influences your health.
We then use this analysis to give you personalized risk estimates and recommendations.



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.

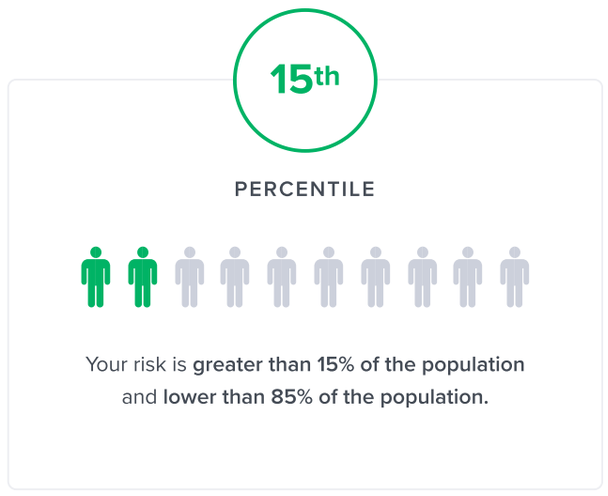
Genetic variants are parts of DNA that differ from person to person. Some can make you more vulnerable to certain health issues, while others may influence traits such as eye color.



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

Sarcosine (also known as N-methylglycine) **is a non-essential amino acid** that is **required to produce the amino acid glycine and is also a byproduct of glycine breakdown.** In the body, it is produced by turning dietary choline into glycine, or by breaking down methionine to glycine [R].

Sarcosine has several important roles in the body [R]:

- It helps build proteins and DNA (as a participant in the one-carbon metabolism)
- It's an intermediate metabolite in the conversion of choline to glycine
- It increases the amount of glycine, an important inhibitory neurotransmitter, in the brain

Some studies that suggest sarcosine may have roles in improving learning and memory. This may be important if we take into account that sarcosine decreases as we age [R].

Sarcosine has also been used to help improve symptoms in people with schizophrenia and depression [R, R, R].

It is also a **promising biomarker for prostate cancer.** Sarcosine may be able to detect it at early stages, unlike the currently used biomarker (prostate-specific antigen or PSA) [R, R].

Sarcosine is readily present in a variety of food products, including [R]:

- Egg yolks
- Legumes
- Nuts
- Certain vegetables
- Turkey, ham, and other meats

As a supplement, sarcosine is available in **bulk powders, capsules, and sometimes liquid form.**

Factors Influencing Sarcosine Levels

Up to 60% of differences in people's sarcosine levels may be due to genetics. Involved genes influence sarcosine synthesis and transport [R, R, R].

Sarcosine levels decrease as we age. Lower levels have been linked to [R]:

- Hardening of the arteries (atherosclerosis)
- Neuropathic pain
- Seizures
- Parkinson's

A healthy lifestyle can help increase sarcosine levels within the normal range. Some helpful strategies include:

- Regular aerobic exercise [R]
- Fasting and calorie restriction [R]
- Foods rich in omega-3 acids [R]

In contrast, elevated sarcosine levels may signal:

- Folate deficiency [R, R, R]
- Sarcosinemia, a benign rare inborn metabolic disorder [R, R, R]

Higher urinary levels of sarcosine have been linked to an increased risk of diabetes [R].

Please note: This report doesn't test for rare inborn disorders mentioned above.

TYPICAL LEVELS

Likely typical sarcosine levels based on 120,378 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
SARDH	rs2519125	AA
SARDH	rs111389997	CC
SARDH	rs3780804	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
1	Sarcosine	2 g
2	Dietary Protein	
3	Aerobic Exercise (Cardio)	1 hour
4	Krill Oil	1 g
5	Omega-3 (Fish Oil)	2000 mg
6	Limit Calorie Intake	

1

Sarcosine

IMPACT 5 / 5

EVIDENCE 5 / 5

How to implement

Take sarcosine as an oral supplement, typically in powder form. The common dosage ranges from 2 grams to 3 grams per day, usually divided into two equal doses taken in the morning and evening. It is recommended to continue this regimen for at least 4 to 6 weeks to observe effects.

TYPICAL STARTING DOSE

2 g

Description

Sarcosine is a naturally occurring amino acid derivative that has been studied for its potential role in cognitive function and mental health.

How it helps

As a supplement, sarcosine is available in **bulk powders, capsules, and sometimes liquid form**. Clinical trials have used doses ranging from 1 g to 4 g, with 2 g being the most common [R, R].

2

Dietary Protein

IMPACT 5 / 5

EVIDENCE 5 / 5

How to implement

Include a variety of protein sources such as meat, fish, eggs, dairy, beans, and nuts in your diet every day, aiming for at least 0.8 grams of protein per kilogram of body weight. For more active individuals or those looking to build muscle, increase intake to 1.2 to 2.0 grams per kilogram of body weight daily, spread out over all meals to maximize absorption.

Description

Protein is essential for building and repairing tissues, supporting muscle growth, and maintaining overall bodily functions. Adequate protein intake is crucial for overall health and well-being.

Foods that are high in protein include:

- Eggs
- Nuts
- Beef
- Chicken
- Fish
- Yogurt
- Tofu
- Pork
- Cottage cheese

How it helps

As an amino acid, sarcosine can be obtained from dietary protein. Food sources include [R]:

- Egg yolks
- Legumes
- Turkey
- Ham
- Other meats
- Certain vegetables

3

Aerobic Exercise (Cardio)

IMPACT 2 / 5

EVIDENCE 1 / 5

How to implement

Engage in at least 150 minutes of moderate-intensity aerobic exercise or 75 minutes of vigorous-intensity activity each week. Distribute this time over at least 3 days per week, avoiding consecutive days of vigorous exercise to allow for recovery.

TYPICAL STARTING DOSE

1 hour

Description

Engaging in regular aerobic exercise, such as running, swimming, or cycling, offers numerous health benefits, including improved cardiovascular fitness, weight management, and mood enhancement. It supports overall physical and mental well-being while reducing the risk of chronic diseases.

Cardio, short for cardiovascular exercise, is any type of physical activity that temporarily increases your heart rate. Examples include **running, cycling, swimming, and brisk walking**.

Regular cardio exercise has many benefits for your overall health. It can help lower your risk of heart disease and diabetes, support weight loss, and improve your mood and energy levels. To get the most out of cardio, try to do it for at **least 30 minutes, 3-5 times a week**.

Interval training is a type of cardio that combines periods of high-intensity training with brief rest periods.

How it helps

Early studies in animals and humans suggest that sarcosine levels may increase with regular aerobic exercise [R].

4

Krill Oil

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Take 1 to 3 grams of krill oil daily as a dietary supplement, preferably with a meal to enhance absorption. It's often available in soft gel form, making it easy to swallow. Continue this regimen consistently for best results, typically reviewing its effectiveness and any need for adjustments with a healthcare provider after a few months.

TYPICAL STARTING DOSE

1 g

Description

Krill oil is a source of omega-3 fatty acids, primarily in the form of phospholipids. It can promote cardiovascular health, joint comfort, and may have anti-inflammatory properties.

How it helps

In a small trial of 17 healthy volunteers, supplementation with krill oil (4.5 g/day, supplying 833 mg omega-3s) increased sarcosine levels [R].

5

Omega-3 (Fish Oil)

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Take 1-2 g of omega-3 (fish oil) supplement daily, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

2000 mg

Description

Omega-3 fatty acids are essential fats found in fatty fish like salmon, flaxseeds, and walnuts. They are known for their potential cardiovascular and brain health benefits, including reducing the risk of heart disease and supporting cognitive function.

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 [R, R].

Fatty fish are rich in EPA and DHA. They include [R]:

- Salmon
- Tuna
- Herring
- Sardines

For optimal protection, 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

In a small trial of 17 healthy volunteers, supplementation with krill oil (4.5 g/day, supplying 833 mg omega-3s) increased sarcosine levels [R].

6

Limit Calorie Intake

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Consume fewer calories than your body needs for maintenance. Calculate your daily caloric needs using an online calculator based on your sex, age, weight, height, and activity level, then reduce that number by 500-1000 calories per day to safely lose 1-2 pounds per week. Adjust the caloric intake as needed based on your progress.

Description

People often limit their calorie intake to help them lose weight [R, R].
However, moderate calorie restriction may also help you stay healthier and age better [R, R, R, R, R].

There are different ways to take in fewer calories. You can:

- **Eat low-calorie foods**, such as those rich in proteins, fiber, and water. Avoid fatty and sugary foods, which tend to be high in calories [R].
- **Try intermittent fasting**, which involves changing how often you eat [R].

If you are restricting your calories, make sure your diet remains healthy and balanced. Experts also recommend being physically active, to prevent the loss of muscle and bone mass.

How it helps

Fasting and calorie restriction may increase sarcosine levels according to animal studies [R].

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.