

Dilated Cardiomyopathy

Disease Report

REPORT CATEGORY —



HEART & BLOOD
VESSELS

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

10 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

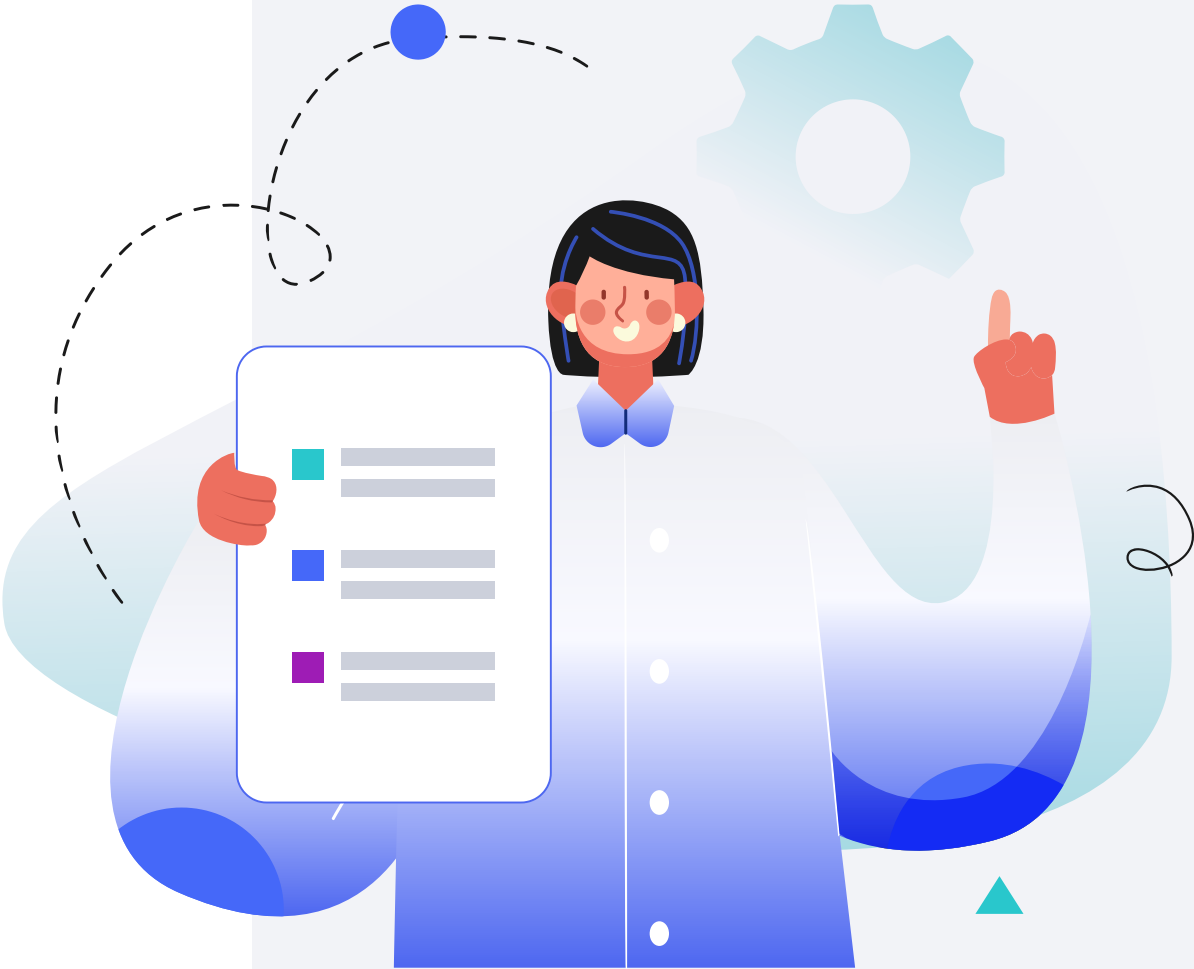
Male

HEIGHT

5ft 5" 165cm

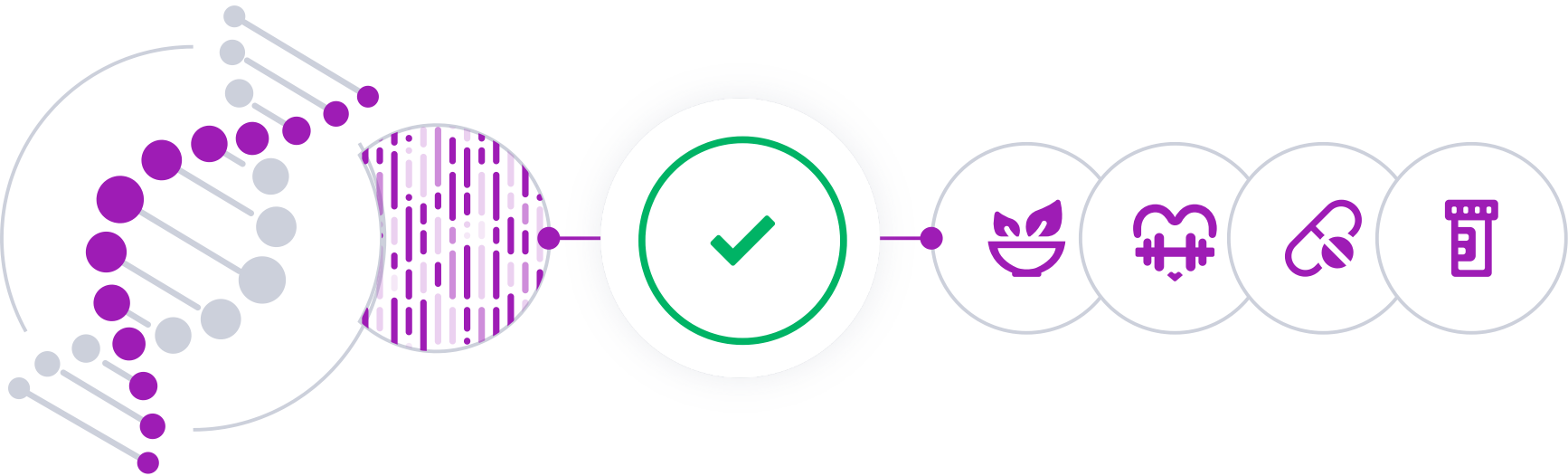
WEIGHT

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

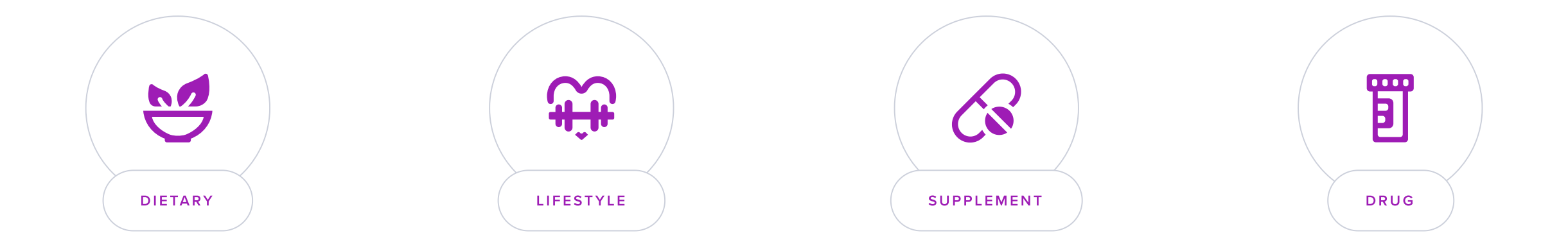
You have 2 risk alleles

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

Dilated cardiomyopathy (DCM) is a disease of the heart muscle, primarily affecting the left ventricle which is the heart's main pumping chamber. In this condition, the ventricle becomes enlarged (dilated) and cannot pump blood effectively, which may lead to heart failure or other complications.

Symptoms of dilated cardiomyopathy can range from none to severe and may worsen as the heart becomes weaker. Symptoms typically include:

- Fatigue
- Shortness of breath (especially during activity or while lying down)
- Swelling in the legs, ankles, and feet due to fluid buildup (edema)
- Rapid, irregular heartbeats that feel fluttering or pounding
- Chest pain or discomfort
- Dizziness, lightheadedness, and fainting

Causes and Treatment

The exact cause of dilated cardiomyopathy is often unclear, but several factors can contribute to or trigger its development:

- Genetic factors: A significant number of cases are inherited, though the specific genetics can be complex.
- Viral infections: Viruses that inflame the heart muscle, such as the Coxsackie virus, can lead to DCM.
- Alcohol and toxins: Chronic abuse of alcohol and exposure to certain toxic substances, including chemotherapy drugs and substances like cobalt, can damage the heart muscle.
- Autoimmune diseases: Conditions where the immune system mistakenly attacks the body's tissues, including the heart.
- Endocrine and metabolic disorders: Diseases such as diabetes or thyroid disorders can contribute to DCM.
- Neuromuscular disorders: Diseases like muscular dystrophy that affect the muscles and nerves can also impact heart muscle function.

There is no cure for dilated cardiomyopathy, but treatments can help manage symptoms and prevent complications:

- Medications: Such as ACE inhibitors, beta-blockers, diuretics, and aldosterone antagonists, which are used to manage blood pressure, prevent fluid build-up, and reduce the workload on the heart.
- Lifestyle changes: Including diet modifications, exercise, and quitting smoking.
- Devices and surgical procedures: In some cases, devices like pacemakers and implantable cardioverter-defibrillators (ICDs) are necessary to correct irregular heartbeats. In severe cases, a heart transplant may be considered.
- Monitoring and management: Regular follow-up visits with a cardiologist to monitor heart function and adjust treatment as necessary.

The prognosis for dilated cardiomyopathy varies widely depending on its severity, the effectiveness of treatment, and individual factors such as age and overall health. Some people live long, stable lives, while others may experience



TYPICAL LIKELIHOOD

Typical likelihood of dilated cardiomyopathy based on 498,517 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
BOC	rs1846594	AA
IL19	rs17016480	CC
TASOR	rs7627580	GG
MGAM	rs4341082	TC
CDH10	rs4701446	GG
VEPH1	rs2649734	AG
/	rs6556795	GA
WVOX	rs8047442	CT
ALG10B	rs11182052	TC
JPH3	rs8051448	CC
PODXL	rs11765910	TC
YTHDF1	rs73308970	AA
/	rs10272945	CC
RFTN2	rs75330306	AA
MARS2	rs139236944	GG
VEGFC	rs114108584	TT
/	rs11742119	TT
SPP1	rs72654150	TC
VMP1	rs115624974	AA
CCDC149	rs2244757	CC
DNAH17	rs78212518	CC
TBX5	rs149932627	TT
CCND1	rs145355401	TT
RALY	rs140035275	CC
OR2F2	rs73462438	AA
RAG2	rs77698332	AA
FAM120B	rs149215314	GG
THSD7A	rs74676849	AA
PARD3B	rs4487073	TT
/	rs35548982	INS(T)INS(T)
ADAM7	rs17052317	AA
TPSD1	rs11862795	TT

worsening heart failure or sudden cardiac death. Early detection and consistent treatment are crucial for improving the quality of life and outcomes for those affected by this condition.

GENE	SNP	GENOTYPE
DAOA	rs202209255	TT
B3GALT2	rs61815623	GG
SULF2	rs114241858	GG
TBC1D7	rs192183165	CC
ATXN7L3B	rs7486169	AA
/	rs142971575	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	Exercise At Least One Hour a Day	1 hour	2	Avoid Illicit Drugs	
3	Limit Salt Intake		4	Omega-3 (Fish Oil)	2000 mg
5	L-Carnitine	1 g	6	Sleep for 7+ Hours	
7	Limit Copper Intake				

1



Exercise At Least One Hour a Day

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Dedicate a minimum of 60 minutes to moderate-intensity activities such as brisk walking, swimming, or cycling. Do this most days of the week, aiming for at least 5 days to optimize benefits.

TYPICAL STARTING DOSE

1 hour

Description

[Exercise](#) can do wonders for your health. It can help you lose weight, improve your heart health, boost your mood, and more [\[R\]](#).

There are many ways you can be active. You can walk, run, swim, dance, or play team sports. **Everything counts, and it's never too late to start!**

Try to get at least **60 minutes of moderate physical activity on most days**, including walking. **Getting a mix of cardio (min 150 min/day) and strength training (min 2 times a week) may be optimal.**

How it helps

Experts agree that exercising helps reduce the risk of heart disease, including dilated cardiomyopathy [\[R, R, R, R\]](#).

It likely helps control [\[R, R, R, R, R, R\]](#):

- Weight
- [Blood sugar](#)
- [Cholesterol](#)
- Blood pressure
- Inflammation

Guidelines recommend a combination of [\[R, R, R\]](#):

- **Cardio:** at least 150 min/week of moderate activity or 75 min/week of intense activity
- **Strength training:** 2 times/week

Strength and endurance training may help by improving heart function. Other forms of exercise that tend to help include cycling and tai chi [\[R, R, R, R\]](#).

In people who already have heart disease, exercise may prevent complications and hospital visits. It may even boost the quality of life [\[R, R, R, R, R\]](#).

Importantly, **experts recommend asking a health professional about the most suitable exercise that dilated cardiomyopathy can practice safely.** In general, competitive sport isn't recommended because it increases the risk of heart arrest and sudden cardiac death [\[R\]](#).

 TABLE OF CONTENTS

PAGE 11 / 17

2



Avoid Illicit Drugs

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Refrain from using any illegal substances, including but not limited to, narcotics, stimulants, hallucinogens, and cannabis where it's not legalized. This means not purchasing, possessing, or consuming these substances in any form or amount. Commit to this practice indefinitely for long-term health benefits.

Description

Avoiding the use of illicit drugs is essential for preserving physical and mental health, as these substances can lead to addiction, mental health disorders, and other physical health issues. Abstaining from their use supports a safer and healthier lifestyle.

Illicit drugs are highly addictive, illegal drugs. Examples include **marijuana, cocaine, meth, and MDMA (ecstasy)**. The term can also refer to a non-medical use of drugs that are legally available (e.g., medical marijuana in some countries and states) [\[R\]](#).

Illicit drug use can have a **devastating impact on all aspects of your health and wellbeing**. It can lead to [\[R\]](#):

- Dependence and addiction
- Injury and accidents
- Health and sleep problems
- Problems in family and social life

How it helps

Long-term use of illicit drugs such as cocaine may strain the heart and change its anatomy and physiology, thus contributing to dilated cardiomyopathy [\[R, R\]](#).

In people with dilated cardiomyopathy, illicit drugs may increase the risk of complications. Experts recommend that people with this condition avoid cocaine and other stimulant drugs. Talk to your doctor if you need help ending drug use [\[R\]](#).

3



Limit Salt Intake

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

Reduce your daily salt intake to less than 2,300 milligrams (mg), equivalent to about one teaspoon of table salt. This includes all salt consumed, whether added during cooking, at the table, or present in processed and ready-to-eat foods.

Description

Limiting salt intake involves lowering the amount of sodium in the diet, which can help lower blood pressure and reduce the risk of heart disease. It often involves avoiding processed and other high-sodium foods such as cured meats, soups and sauces, and various pickled foods.

Your body needs a certain amount of sodium to function. For example, it helps support your blood pressure. This sodium usually comes from [salt](#). However, eating too much salt is linked to an increased risk of stroke and heart disease [\[R\]](#) [\[R\]](#).

Foods higher in salt include [\[R\]](#) [\[R\]](#) [\[R\]](#):

- Prepared soups, broths, gravies, and sauces
- Fermented or pickled foods (such as pickles, soy sauce, olives, and [capers](#))
- Cured meats and sausages (such as bacon, salt pork, and salami)
- Cheese (such as Roquefort and Parmesan)

Try to limit your daily intake to 1 teaspoon of salt (2,400 mg of sodium) [\[R\]](#).

How it helps

Reducing salt intake may help protect against heart disease [\[R\]](#) [\[R\]](#).

For instance, the DASH diet limits the amount of salt and saturated fat in your diet. **Experts recommend limiting these to help prevent heart disease, including dilated cardiomyopathy** [\[R\]](#) [\[R\]](#) [\[R\]](#) [\[R\]](#) [\[R\]](#).

Note that just limiting the salt in your diet might not be enough to help [\[R\]](#) [\[R\]](#).

4



Omega-3 (Fish Oil)

IMPACT2 / 5

EVIDENCE2 / 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

Fish oil supplementation (1-2 g/day for 3-12 months) appears to have positive effects on heart function in people with chronic heart failure. These benefits may be greater in people with non-ischemic heart failure [\[R\]](#), [\[R\]](#).

A meta-analysis of 8 studies and 900 patients with heart failure found that supplementation with omega-3 fatty acids increased [\[R\]](#).

Omega-3s may help by [\[R\]](#):

- Reducing triglycerides
- Lowering blood pressure
- Preventing blood clots

The FDA has even approved an omega-3-based drug for people at high risk of heart disease [\[R\]](#).

Please note: *Fish oil can interact with blood thinners (like aspirin, Plavix, Coumadin). Consult your doctor before taking fish oil* [\[R\]](#).

5



L-Carnitine

IMPACT

2 / 5

EVIDENCE

2 / 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

In people with dilated cardiomyopathy, supplementation with L-carnitine as an add-on to conventional therapy may help improve heart function parameters (LVEF, LVEDD, and cardiac output) and the overall efficacy of the therapy [\[R\]](#).

L-carnitine may help by supplying energy to the heart [\[R\]](#), [\[R\]](#).

However, **L-carnitine may not help prevent heart failure**. Genetically higher carnitine levels may even be causally associated with an increased risk of heart failure [\[R\]](#), [\[R\]](#), [\[R\]](#).

Please note: *Supplementing with carnitine at approximately 3 g/day may cause nausea, vomiting, abdominal cramps, diarrhea, and a "fishy" body smell* [\[R\]](#).

6



Sleep for 7+ Hours

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Ensure you allocate enough time in your schedule to achieve a minimum of 7 hours of sleep each night. This might involve going to bed earlier or adjusting your evening routine to promote relaxation and make it easier to fall asleep.

Description

Optimizing sleep involves adopting healthy sleep habits and creating a sleep-conducive environment to ensure restorative and sufficient sleep duration. It supports cognitive function, mood stability, and overall physical health. Most experts recommend getting **at least 7 hours of good-quality sleep each night**.

[Sleep supports your body and mind](#) [R, R]. More precisely, sleep helps:

- Support brain health [R, R]
- Maintain a healthy weight and appetite [R, R, R]
- Regulate blood pressure [R, R]
- Balance blood sugar [R, R]

Ways to sleep better include [R]:

- Reducing your bright light exposure (screen time) in the evenings
- Sticking to a regular sleep schedule
- Avoiding hunger or large meals before bed
- Avoiding nicotine, caffeine, and alcohol before bed
- Maintaining a sleep area that’s cool, dark, and quiet

How it helps

Short sleep (less than 6-7 hours/night) and **long sleep (more than 8-9 hours/night)** are both linked to higher odds of heart disease [R, R, R, R].

In fact, your risk of the condition may increase by **7-11% for every hour of sleep you lose**. It may also increase by **5-7% for every hour of excess sleep**. Short sleep duration may also be causally associated with heart disease [R, R, R].

Poor sleep contributes to many risk factors for heart disease, including [R, R, R]:

- High blood pressure
- High blood sugar
- Obesity

Experts recommend getting enough sleep and rest to prevent dilated cardiomyopathy [R].

7



Limit Copper Intake

IMPACT

2 / 5

EVIDENCE

1 / 5

How to implement

Do not include copper supplements in your daily vitamin or supplement routine. Check the labels of any multivitamins or dietary supplements you are currently taking to ensure they do not contain copper. Ideally, you should also check copper levels in your tap water. If they are excessive, consider using a reliable water filter or drinking spring water.

Description

Taking too many copper supplements can cause a copper overdose in your body. This can be harmful, leading to issues like stomach pain, nausea, and even heart problems. For healthy individuals, the amount of copper obtained through a balanced diet is usually enough without needing supplementation. It's vital to maintain the natural balance of minerals in the body for good health.

Contaminated tap water can also be a source of excess copper.

How it helps

Research involving 47,931 people found that excessive copper intake (above 2.45 mg/day) may be associated with increased risks of death, heart disease, and stroke [\[R\]](#).

High copper levels may also be associated with dilated cardiomyopathy and heart failure [\[R\]](#).