

# Retinal Vein Occlusion

## DNA Health Report

REPORT CATEGORY —



Sample Client

Report date: 15 January 2026

Powered by

 omicse Edge



# 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

## 18 Next Steps

- 18 Your Lab Results

# Personal information

NAME

Sample Client

SEX AT BIRTH

Male

HEIGHT

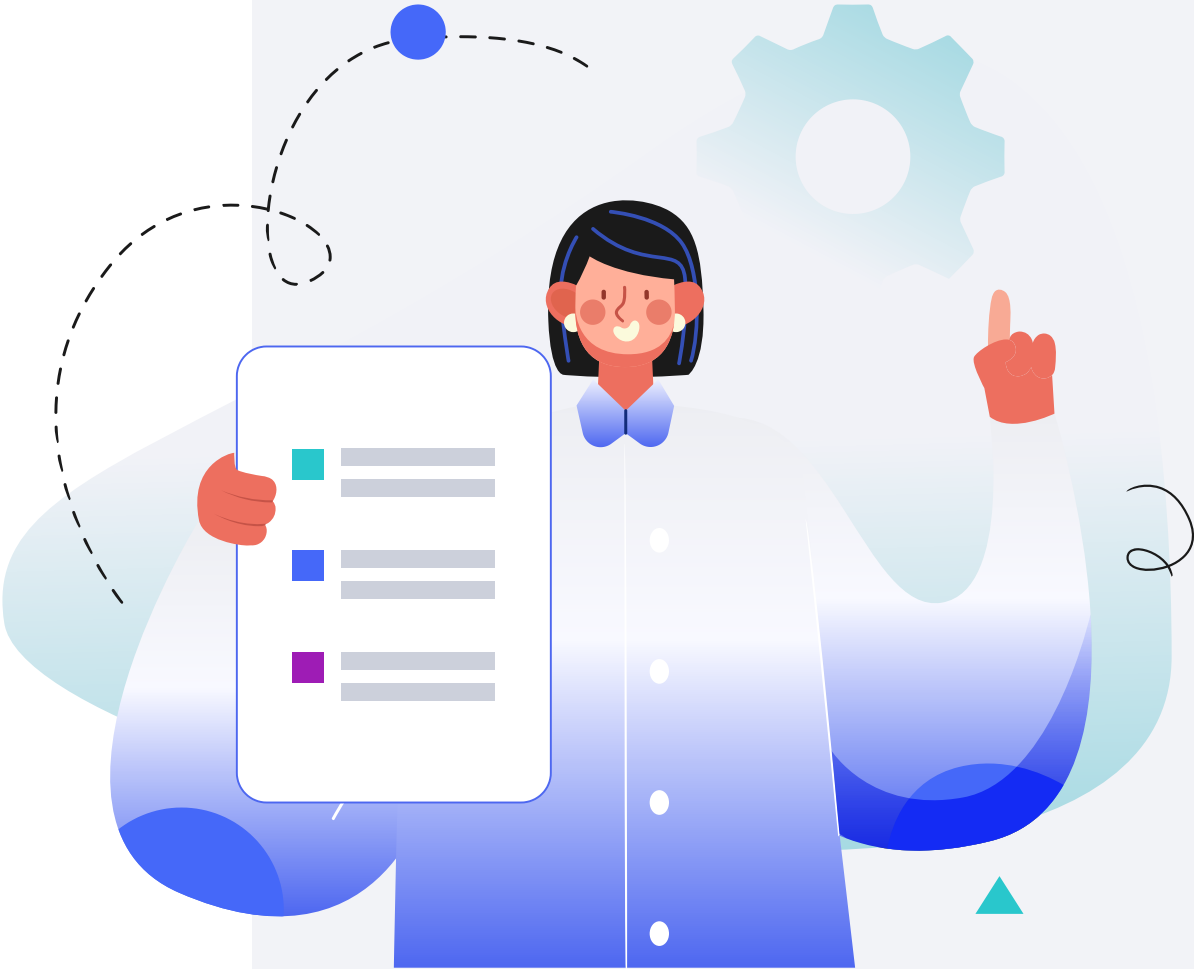
5ft 5" 165cm

WEIGHT

137lb 62kg

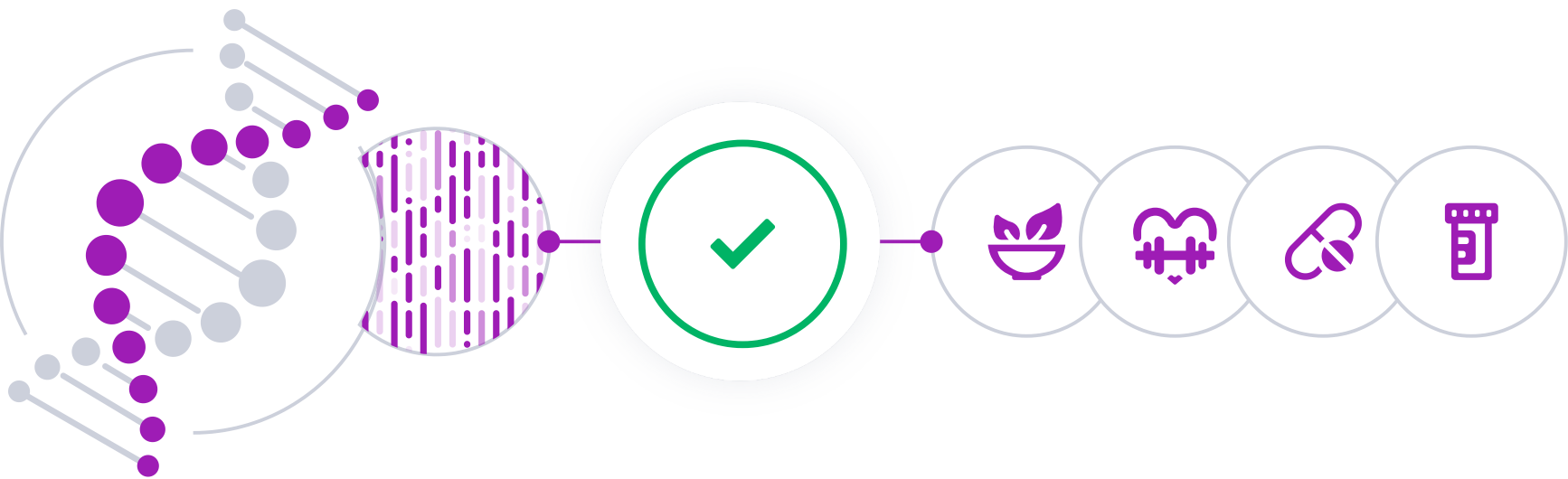
DISCLAIMER

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.

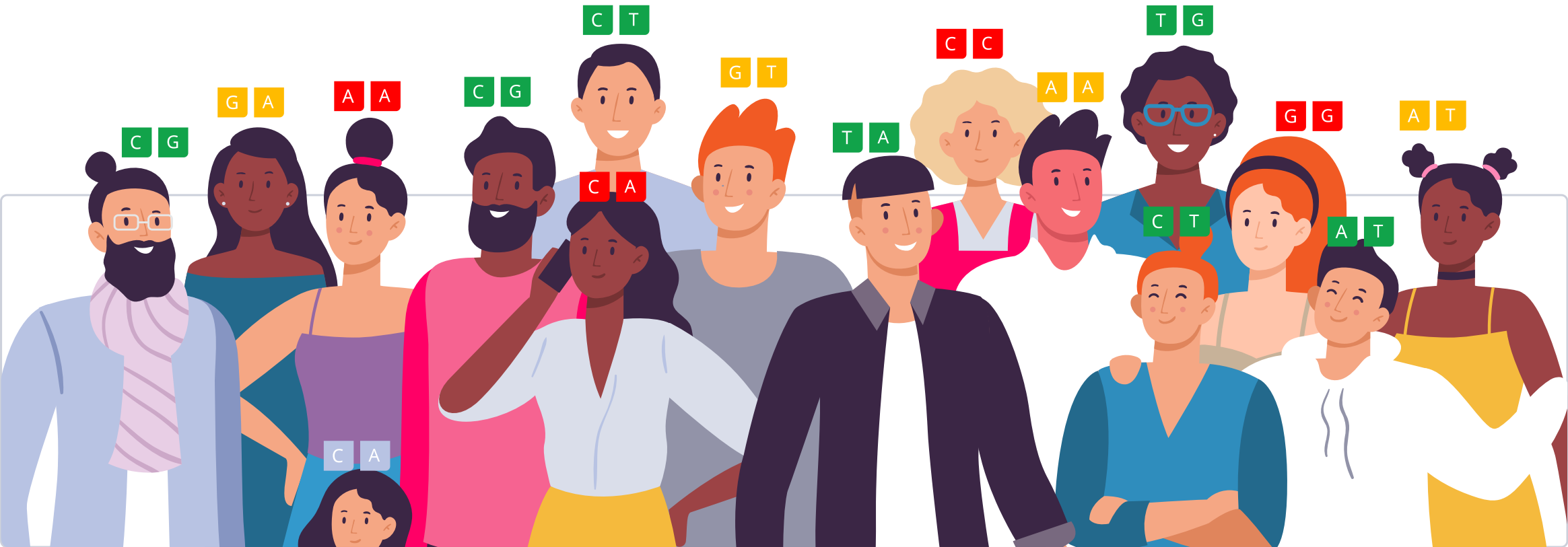


Similarly, our Trait Reports look at how your DNA influences your traits.



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.

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

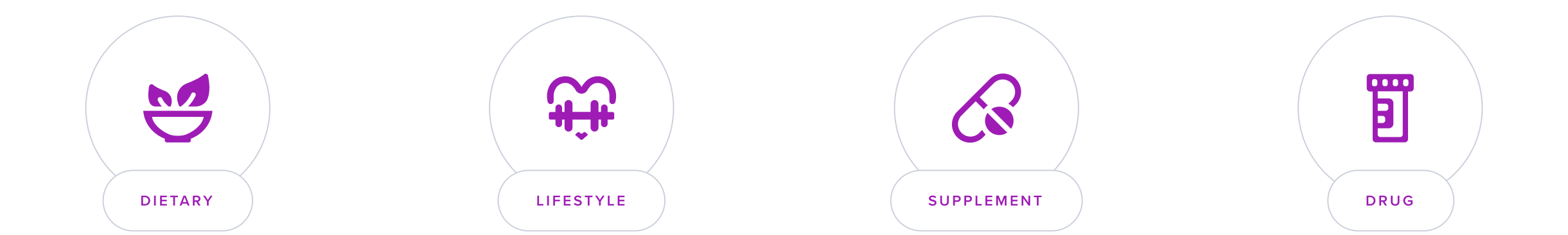
You have 2 risk alleles

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

Retinal vein occlusion (RVO) occurs when a vein in the retina — the light-sensitive layer of tissue at the back of the eye — becomes blocked, typically by a blood clot. This blockage can lead to a build-up of blood and fluid in the retina, which can cause vision to become blurred or distorted.

Central retinal vein occlusion (CRVO) affects the main vein of the retina, while branch retinal vein occlusion (BRVO) affects smaller veins. Symptoms can appear suddenly and may include a noticeable loss of vision or a sudden blur in a part of the field of vision, often with a propensity to worsen over hours or days.

# Management

Treatment for retinal vein occlusion focuses on managing the underlying risk factors and addressing the complications arising from the blockage. Interventions may include intraocular injections of anti-VEGF drugs to reduce swelling and improve vision, laser therapy to seal leaking vessels, or corticosteroids to reduce inflammation.

Long-term management often involves monitoring and controlling conditions that contribute to the risk of RVO, such as hypertension, diabetes, and hyperlipidemia. The prognosis of RVO varies depending on the severity and the individual's response to treatment, but timely medical attention can help preserve vision and prevent more significant loss.



MORE LIKELY

More likely to have retinal vein occlusion based on 26,525 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      | Methylfolate         | 400 mcg | 2  | Red Grape Juice             |        |
| 3      | Limit Meat Intake    |         | 4  | Grape Seed Extract          | 100 mg |
| 5      | Limit Salt Intake    |         | 6  | Dietary Omega-3 Fatty Acids |        |
| 7      | Turmeric             |         | 8  | Rutin                       |        |
| 9      | Dietary Antioxidants |         | 10 | Spinach                     |        |

1



Methylfolate

IMPACT

4 / 5

EVIDENCE

3 / 5

How to implement

Take an L-methyl folate supplement (400-800 micrograms daily), ideally with a meal, to improve absorption. This dosage is recommended for adults, including pregnant women, to support overall health, especially to reduce the risk of neural tube defects in developing fetuses. Continue daily use as part of your regular supplement routine.

TYPICAL STARTING DOSE

400 mcg

Description

Folate, a B-vitamin, is crucial for DNA synthesis, cell growth, and the formation of red blood cells. Adequate folate intake supports overall health and reduces the risk of neural tube defects during pregnancy.

**Vitamin B9** (*folate*) plays an essential role in [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Making DNA
- Metabolism
- Energy production

SelfDecode recommends L-methylfolate as the preferred folate supplement for those who need one. It is superior to folic acid because it doesn't require activation, but the research is still ongoing [\[R\]](#), [\[R\]](#).

How it helps

A meta-analysis of 9 studies on vitamin B12, and 10 studies on folate showed no significant difference in serum B12 levels. However, there were lower plasma folate levels in RVO subjects, particularly in CRVO, indicating that folate may have a protective effect [\[R\]](#).

2



Red Grape Juice

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Consume 8-12 ounces of red grape juice daily, preferably unsweetened or with no added sugars, with a meal to enhance absorption and reduce the risk of digestive upset. Continue this practice regularly as part of your daily diet.

Description

Red grape juice, made from crushed red grapes, is rich in vitamin C, manganese, and antioxidants like resveratrol, which may contribute to heart health and overall well-being when consumed in moderation.

How it helps

Red grape juice, rich in antioxidants, can aid in strengthening blood vessels and improving blood flow, potentially lowering the risk of retinal vein occlusion.



3



Limit Meat Intake

IMPACT

0 / 5

EVIDENCE

0 / 5

## How to implement

Substitute red and processed meats with plant-based proteins, such as beans, lentils, and tofu, for at least two meals per week. Gradually increase the number of meat-free meals by incorporating more fruits, vegetables, and whole grains into your diet daily.

## Description

Limiting meat intake involves consuming fewer animal-based products, often as part of a plant-based diet. This dietary choice can provide health benefits such as lower cholesterol levels, reduced risk of certain chronic diseases, and a decreased environmental footprint.

**Proteins, fats, and carbs are macronutrients.** You need these nutrients in large (‘macro’) amounts. They provide your body with the energy it needs to function properly [\[R\]](#).

You should choose high-quality foods that give you the “best” version of each macronutrient. For example, too much saturated fat and protein from certain animal sources may increase the risk of heart disease and infertility [\[R, R, R\]](#).

Consider replacing red meat with other high-protein foods, such as [\[R, R\]](#):

- Eggs
- Fish
- Soy
- Beans

## How it helps

Reducing meat intake can lower the risk of atherosclerosis, a condition that narrows and hardens arteries, which is a risk factor for retinal vein occlusion.

4



Grape Seed Extract

IMPACT

0 / 5

EVIDENCE

0 / 5

## How to implement

Take 100-300 mg of grape seed extract daily, preferably with a meal to enhance absorption. This can be done either through a single dose or split into multiple doses throughout the day. Continue this regimen for at least 3 months to observe potential benefits.

TYPICAL STARTING DOSE

100 mg

## Description

Grape seed extract is rich in antioxidants called polyphenols, which may help protect against oxidative stress and support cardiovascular health. It's also believed to have potential benefits for skin health and overall well-being.

[Grape seed extract](#) is made from the seeds of wine grapes. It contains antioxidant compounds that may help support [\[R, R\]](#):

- Blood circulation
- Heart health
- Blood sugar control
- Healthy weight

## How it helps

Grape Seed Extract contains antioxidants that can protect the blood vessels from damage and reduce inflammation. It may help in retinal vein occlusion by supporting the health of retinal blood vessels and improving circulation, potentially reducing the risk of further vascular issues in the eye.

5



Limit Salt Intake

IMPACT

0 / 5

EVIDENCE

0 / 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

Eating too much salt can increase blood pressure, which can further strain the vessels in the eyes and exacerbate conditions like retinal vein occlusion. Limiting salt intake can help manage blood pressure and reduce the risk of further eye damage.



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, found in foods like fish, have anti-inflammatory properties that can improve blood flow. This may potentially reduce the risk of blood vessel blockages, such as those seen in retinal vein occlusion.

7



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 curcumin, a compound known for its anti-inflammatory properties that might help in reducing the risk factors associated with retinal vein occlusion.

8



Rutin

IMPACT

0 / 5

EVIDENCE

0 / 5

## How to implement

Take 500mg of rutin supplement daily, preferably with a meal to enhance absorption. Continue this supplementation regularly for at least 4 weeks to evaluate its benefits on your health, as effects may take some time to become noticeable.

## Description

Rutin is a flavonoid found primarily in citrus fruits, buckwheat, and tea, and is known for its antioxidant and anti-inflammatory properties. It may support cardiovascular health and promote strong blood vessels.

## How it helps

Rutin, a bioflavonoid found in certain fruits and vegetables, has been studied for its potential to improve blood circulation and strengthen blood vessels. It may have a positive effect on retinal vein occlusion by promoting better blood flow in the retinal veins and reducing the risk of blood clots.

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 help protect the body's tissues from damage. Consuming foods rich in antioxidants can protect the retina and possibly reduce the risk of complications associated with retinal vein occlusion.



10



Spinach

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Incorporate one cup of fresh spinach or half a cup of cooked spinach into your daily diet. You can add spinach to salads, smoothies, omelets, or pastas to easily increase your intake.

Description

Spinach is a leafy green vegetable packed with essential nutrients, including vitamins A and K, iron, and folate. Incorporating spinach into the diet supports eye health, bone health, and overall nutrition.

**Spinach** is a good source of molybdenum, folate, calcium, and iron, as well as vitamins A, C, and K1. A ½ cup serving provides 8 mcg of molybdenum or 18%DV.

How it helps

Spinach is packed with lutein and zeaxanthin, nutrients that can bolster eye health and possibly reduce the risk of retinal vein occlusion by enhancing vascular health.

# Next Steps

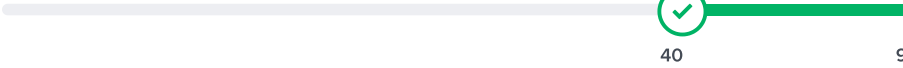
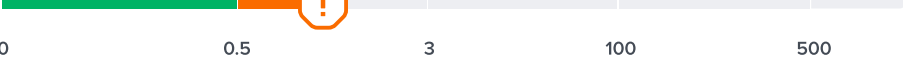
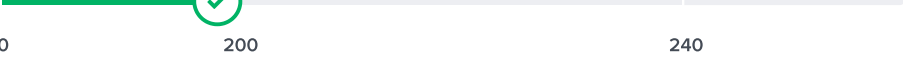
Remember, your genes only tell one important part of your health story!

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.

|                                                                                     |                    |                  |                                                                                       |            |
|-------------------------------------------------------------------------------------|--------------------|------------------|---------------------------------------------------------------------------------------|------------|
|  | Platelet Count     | 215<br>x10^3/mm3 |  | 9 Nov 2025 |
|  | HDL Cholesterol    | 42 mg/dL         |  | 9 Nov 2025 |
|  | 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 |