

Diabetic Retinopathy

Disease Report

REPORT CATEGORIES —



BLOOD SUGAR
CONTROL



EYE HEALTH

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

27 Next Steps

- 27 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

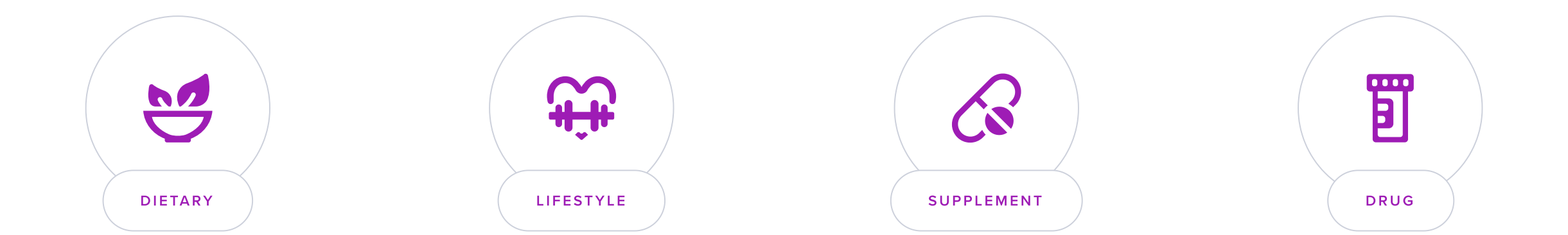
You have 2 risk alleles

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

Diabetic retinopathy is a diabetes complication that affects the eyes, specifically the retinal blood vessels, and it's caused by damage to the small blood vessels within the retina. High blood sugar levels cause these vessels to swell and leak or they can close, preventing blood from passing through.

Eventually, these abnormalities can lead to the development of new, but fragile, blood vessels that can bleed into the eye, potentially causing vision problems or even blindness. This condition develops over time and can affect individuals with both type 1 and type 2 diabetes.

Complications and Treatment

As the condition progresses to more advanced stages, like proliferative diabetic retinopathy, the risk for serious vision impairment increases. Symptoms might not be apparent in the early stages, but as it progresses, patients can experience blurred vision, floaters, dark areas of vision, and difficulty perceiving colors.

Management of diabetic retinopathy includes strict control of blood sugar and blood pressure, laser treatment, injections of anti-VEGF drugs into the eye, or vitrectomy surgery in more advanced cases. Regular eye check-ups are critical for early detection and prevention of vision loss.



TYPICAL LIKELIHOOD

Typical likelihood of diabetic retinopathy based on 142 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
RBFOX1	rs4787008	GG
FLCN	rs11867934	CC
TAB2	rs7772697	TT
TNFSF4	rs1342038	AG
CCDC68	rs1970671	CG
PAX7	rs3007729	CT
TENM2	rs17404956	AA
ZBTB18	rs10927101	AC
INSR	rs2115386	TC
CREB5	rs11765845	AA
LEKR1	rs13064954	GG
C19ORF12	rs10403021	CC
MTHFSD	rs2696835	GG
GRAMD2B	rs1073203	CC
MYT1L	rs10199521	CC
ZBTB18	rs476141	GT
KCNK1	rs10910200	CC
OSCP1	rs6702784	AA
CCNL1	rs9866141	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	Aerobic Exercise (Cardio)	1 hour	
2	Citicoline (CDP Choline)	250 mg	
3	Salvia Miltiorrhiza		
4	Vitamin B12	100 mcg	
5	Garlic Supplement	200 mg	
6	Plasmalogens		
7	Lutein		
8	Alpha-Lipoic Acid	600 mg	
9	Grape Seed Extract	100 mg	
10	Bilberry Extract		
11	Good Oral Hygiene	2 minutes	
12	Saffron	20 mg	
13	Dietary Antioxidants		
14	Pycnogenol	100 mg	
15	Taurine	500 mg	
16	Dietary Omega-3 Fatty Acids		
17	Ginkgo	120 mg	
18	Berries		

1



Aerobic Exercise (Cardio)

IMPACT3 / 5

EVIDENCE2 / 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

Physical activity may reduce the risk of diabetic retinopathy, while sedentarism may increase it [\[R\]](#).

In a non-placebo-controlled trial of 40 patients with type 2 diabetes and retinopathy, moderate-intensity aerobic exercise practiced for 12 weeks lowered fasting glucose and central macular thickness [\[R\]](#).

Aerobic exercise may help by managing blood sugar levels and improving blood vessel function.

2



Citicoline (CDP Choline)

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take 250 to 1000 mg of citicoline (CDP choline) daily, in the morning with or without food. For best results, continue this supplement regimen daily for at least 6 weeks to 3 months.

TYPICAL STARTING DOSE
250 mg

Description

Citicoline is a compound that may have cognitive-enhancing properties and is sometimes used as a dietary supplement to support brain function and memory. It's believed to promote neural health and cognitive performance.

CDP-choline is a molecule naturally produced by the body. It is important for cell structure and function. It also contributes to the production of the chemical messenger [acetylcholine](#) [R, R].

The supplement form of CDP-choline is called [citicoline](#). It may support brain and eye health. It may also help with drug addictions [R, R].

How it helps

A 36-month study on 20 DM1 patients showed citicoline and vitamin B12 eye drops improved macular bioelectrical responses, while placebo led to deterioration in macular function [R].

In an 18-month, double-blind, placebo-controlled study with 30 patients, Cit-B12 improved corneal nerve morphology and function significantly compared to placebo, indicating potential neurodegenerative effects in diabetic patients [R].

In a pilot study with 20 DM1 patients, those treated with citicoline and vitamin B12 eye drops for 3 years showed stabilized or reduced functional impairment, neuroretinal degeneration, and microvascular damage compared to placebo [R].

3



Salvia Miltiorrhiza

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take 200-600mg of Salvia miltiorrhiza extract in capsule or tablet form daily, divided into two or three doses. This should be taken with water, preferably 30 minutes before meals. Continue for a period of 8 to 24 weeks for noticeable effects.

Description

Salvia miltiorrhiza, also known as Danshen, is a traditional Chinese medicinal herb. It is primarily used for its potential cardiovascular benefits, including improving blood circulation and reducing the risk of heart-related conditions. It contains various compounds, including tanshinones and salvianolic acids.

How it helps

A meta-analysis of 8 studies and 524 patients concluded that *Salvia miltiorrhiza* pills used as an add-on to conventional medicines are effective and safe in the treatment of diabetic retinopathy [\[R\]](#).

4



Vitamin B12

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take a 50 mcg vitamin B12 supplement daily, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

100 mcg

Description

Vitamin B12 is a water-soluble vitamin primarily found in animal-based foods like meat, fish, and dairy products. It plays a crucial role in maintaining healthy nerve cells, DNA synthesis, and red blood cell formation. Vitamin B12 deficiency can lead to anemia, neurological issues, and fatigue.

[Vitamin B12](#) is important for [\[R\]](#), [\[R\]](#):

- Building DNA
- Nervous system function
- Energy production

You can get vitamin B12 from [\[R\]](#):

- Animal products (meat, fish, eggs, and dairy)
- Fortified foods
- Supplements

Adults should be getting **2.4 micrograms** of vitamin B12 every day [\[R\]](#).

How it helps

A meta-analysis of 15 studies found significantly reduced serum vitamin B12 levels in type 2 diabetic retinopathy patients. This association was observed in East Asian, South Asian, and mixed populations but not in Caucasians [\[R\]](#).

5



Garlic Supplement

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take a garlic supplement, such as a garlic extract or aged garlic supplement, in a dosage of 600-1,200 mg per day, divided into separate doses. This should be taken with meals to minimize digestive issues. Continue daily for at least 8-12 weeks to evaluate its effects on health markers like blood pressure or cholesterol.

TYPICAL STARTING DOSE

200 mg

Description

Garlic is a pungent herb known for its potential health benefits, including cardiovascular support and immune system enhancement. It contains bioactive compounds that may help reduce the risk of chronic diseases and support overall well-being.

[Garlic](#) is a delicious aromatic herb that adds flavor to your food. But did you know that garlic has been a part of traditional medicine for thousands of years? **From ancient Egypt and Rome to China, people have praised garlic for its many health benefits.** Today, we can trace many of those benefits to sulfur-rich compounds found in garlic. People take garlic to help control their blood pressure and cholesterol [\[R\]](#).

Please note: *Garlic can interact with blood thinners (like aspirin, Plavix, Coumadin). If you are on blood thinners, consult your doctor before supplementing with garlic [\[R\]](#).*

How it helps

In a placebo-controlled trial of 91 diabetic patients with diabetic retinopathy, supplementation with garlic (500 mg, 2x/day) for 4 weeks improved visual acuity, decreased central macular thickness, and lowered intraocular pressure [\[R\]](#).

Please note: *Garlic can interact with blood thinners (such as aspirin, Plavix, and Coumadin). In addition, garlic can irritate the stomach in some people. Talk to your doctor before taking garlic [\[R,R\]](#).*

6



Plasmalogens

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Follow the dosage instructions provided on the product label or as directed by your healthcare provider. Typically, these supplements come in capsule form and are taken once daily with water, ideally with a meal to enhance absorption. Consistency is key, so taking them at the same time each day is recommended. Always consult a healthcare professional before starting plasmalogen supplements, especially if you are pregnant, nursing, or have any medical conditions.

Description

Plasmalogens are a special kind of phospholipids found in cell membranes, particularly in the brain (comprising 20% of its content), heart, lungs, eyes, and kidneys. Plasmalogens help the nervous system work and prevent brain cell death by reducing inflammation and oxidative stress. Their levels decrease with age [\[R\]](#).

Plasmalogen supplements are being researched to improve cognitive function in both healthy subjects and those with mild cognitive impairment or Alzheimer’s disease [\[R, R\]](#).

How it helps

In a non-placebo-controlled trial of 522 individuals with impaired glucose tolerance, higher serum levels of plasmalogen dm16:0 after a lifestyle intervention were associated with a reduced occurrence of retinal microaneurysms [\[R\]](#).

7



Lutein

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Increase your intake of lutein by eating more dark, leafy greens such as spinach and kale, as well as other foods like corn, peas, and egg yolks. Aim to include these in your daily diet, consuming at least one serving of lutein-rich foods per meal. It can also be taken as a supplement.

Description

Lutein is an antioxidant pigment found in the eye, and may support eye health. It is commonly found in leafy green vegetables.

Lutein is an antioxidant pigment found in the eye. Many plants contain lutein, including [\[R\]](#), [\[R\]](#):

- Leafy greens (kale, spinach, leeks, lettuce)
- Cantaloupe
- Corn
- Peas
- Peppers
- Herbs (basil, parsley)

Lutein may help support eye health [\[R\]](#), [\[R\]](#).

How it helps

A 36-week study on 31 NPDR patients given 10 mg/d of lutein showed slight VA improvement, and significant contrast sensitivity (CS) improvement at 3 cycles/degree, suggesting lutein may help prevent vision loss in diabetic patients [\[R\]](#).

8



Alpha-Lipoic Acid

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take 600-1800 mg of alpha-lipoic acid daily, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

600 mg

Description

[Alpha-lipoic acid](#) is a natural antioxidant found in almost every cell in your body. People use alpha-lipoic acid to help with issues like skin aging, weight loss, and high blood sugar [\[R, R, R\]](#).

People use alpha-lipoic acid to help with [\[R, R, R, R\]](#):

- Complications of high blood sugar
- Skin aging
- Weight loss
- Carpal tunnel syndrome

How it helps

Alpha-Lipoic Acid is an antioxidant that can help reduce oxidative stress in the body, which is a factor in diabetic retinopathy. It improves insulin sensitivity and may help protect against the damage to the retina that causes vision problems in diabetic retinopathy.

9



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 is known for its antioxidant properties, which can protect the retina by reducing oxidative stress and inflammation. These effects can help slow the progression of diabetic retinopathy by safeguarding the blood vessels in the eye from damage.

10



Bilberry Extract

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take 160mg of bilberry extract twice daily with water, preferably with meals. Continue this regimen for at least 3 months to observe potential benefits.

Description

Bilberry extract is a concentrated form of bilberry, containing higher levels of its beneficial compounds. It's used in supplements and herbal remedies for its potential to promote eye health and circulation.

[Bilberry](#) (*Vaccinium myrtillus*) is a bush native to parts of Europe, Asia, and North America. Its fruit looks like the blueberry, which is likely why it is sometimes called the European blueberry. However, it is higher in antioxidants and has darker flesh than blueberries [\[R\]](#), [\[R\]](#), [\[R\]](#).

People use bilberries to support eye and blood vessel health [\[R\]](#), [\[R\]](#).

How it helps

Bilberry Extract contains anthocyanins which have been shown to strengthen blood vessels and improve circulation. This can be beneficial in diabetic retinopathy by reducing the damage to the small blood vessels in the retina.

11



Good Oral Hygiene

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Brush your teeth at least twice a day for two minutes each time using fluoride toothpaste. Floss daily to remove plaque from places your toothbrush can't reach and consider using mouthwash. Visit your dentist at least twice a year for professional cleanings and checkups.

TYPICAL STARTING DOSE

2 minutes

Description

Good oral hygiene, which includes regular brushing, flossing, and dental check-ups, is crucial for preventing tooth decay, gum disease, and maintaining overall oral health. A healthy mouth contributes to overall well-being and can prevent dental issues that may impact systemic health.

Oral hygiene refers to practices that keep the mouth healthy. Good habits include [R](#), [R](#):

- Gently brushing the teeth and tongue for two minutes, at least twice a day
- Flossing daily
- Using a toothpaste with fluoride and a soft toothbrush
- Replacing a worn toothbrush at least every 3 months

To help maintain good oral hygiene, it is also important to regularly see dental professionals. They can help prevent and address issues with your teeth and gums.

How it helps

There is some evidence suggesting that infections, including those that can occur in the mouth, may have a negative impact on blood glucose control. Good oral hygiene may help in managing diabetes better, indirectly affecting the progression of diabetic retinopathy.

12



Saffron

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take 20 mg of saffron supplement daily. This can be taken at any time of the day, with or without food.

TYPICAL STARTING DOSE

20 mg

Description

Saffron is a spice derived from the stigma of the saffron crocus flower, and is native to the Mediterranean and Asia. Its main compounds include crocin, picrocrocin, and safranal, which may contribute to its antioxidant properties and potential mood-enhancing effects.

[Saffron](#) is a yellow spice praised for its color, taste, and potential health benefits [\[R\]](#).

Saffron is rich in antioxidants such as *crocin*. Researchers are looking into its potential benefits for [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Gut conditions
- Heart health
- Mental health

How it helps

Saffron has been observed to improve visual functions and might be beneficial due to its antioxidant and neuroprotective properties in diabetic retinopathy. It potentially helps in reducing retinal damage.

13



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 like vitamins C and E, found in many fruits and vegetables, protect the body's cells from damage. This protection can extend to the eyes by possibly reducing the progression of diabetic retinopathy, which is caused by damage to the blood vessels of the retina.

14



Pycnogenol

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take 100 mg of pycnogenol supplement daily. This can be taken in a single dose or divided into two doses of 50 mg each, one in the morning and one in the evening.

TYPICAL STARTING DOSE
100 mg

Description

Pycnogenol (pine bark extract) is derived from the bark of the maritime pine (Pinus pinaster). It has been used in traditional n European folk medicine for centuries, and more recently as a supplement. The extract contains a group of bioactive compounds known as proanthocyanidins, which may be beneficial in supporting cardiovascular health, promoting skin health, and aiding in the management of various conditions related to inflammation and oxidative stress.

Pycnogenol comes from the bark of pine trees that grow in the Mediterranean [R, R].

It may improve [R, R, R, R, R, R]:

- Athletic performance
- Seasonal allergies
- Cognitive function
- Joint health
- Varicose veins

How it helps

Pycnogenol, an extract from the French maritime pine bark, may improve retinal blood flow and reduce leakage into the retina, which are significant issues in diabetic retinopathy. It has anti-inflammatory and antioxidant properties that help in protecting the retina.

15



Taurine

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take 1-4 g of taurine supplement daily, divided into two or three doses with meals for optimal absorption. It can be taken continuously, with periodic evaluations of its effects and benefits.

TYPICAL STARTING DOSE

500 mg

Description

Taurine is an amino acid found in various foods and often used in energy drinks and supplements. It plays a role in neurological and cardiovascular health and can help support energy metabolism.

[Taurine](#) is the most abundant free amino acid in humans. It's not essential, which means we can produce it. We can also get it from protein-rich foods, such as [\[R\]](#):

- Seafood
- Meat
- Dairy

Taurine is a popular additive in energy drinks and can also be taken as a supplement [\[R\]](#).

Taurine plays an important role in [\[R\]](#), [\[R\]](#):

- Bile production
- Calcium metabolism

It is also well-known for its antioxidant and anti-inflammatory properties [\[R\]](#).

How it helps

Taurine supplementation has shown potential benefits in protecting retinal cells from damage in diabetic retinopathy. It helps to regulate electrolyte balance in the cells and protects against cellular stress.

16



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 fish and flaxseeds, can help improve blood flow and reduce inflammation in the body. This can potentially reduce the risk of blood vessel damage in the eye, which is critical in managing diabetic retinopathy.

 TABLE OF CONTENTS

PAGE 25 / 27

SKIP TO NEXT SECTION 

17



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 extract can improve blood flow to various parts of the body, including the eyes. This improved circulation may help reduce the risk of vision problems associated with diabetic retinopathy by supporting the health of the blood vessels in the retina.

18



Berries

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Incorporate a variety of berries such as strawberries, blueberries, raspberries, and blackberries into your daily diet. Aim for at least one cup of fresh or frozen berries every day, either as a snack, part of your breakfast (such as in oatmeal or yogurt), or as a dessert.

Description

Berries, such as strawberries, blueberries, and raspberries, are packed with antioxidants, vitamins, and fiber. Regular consumption of berries may support heart health, improve cognitive function, and contribute to overall well-being.

How it helps

Berries are packed with antioxidants, including vitamin C and anthocyanins, that can help reduce inflammation and oxidative stress in the body. For individuals with diabetic retinopathy, eating berries may help protect the retina and slow the progression of the disease.

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.

	HbA1c	30 mmol/mol		29 Dec 2025
	Glucose, Fasting	97 mg/dL		9 Nov 2025
	Albumin/Creatinine Ratio, Random Urine	37 mg/g crt		9 Nov 2025