

Myelodysplastic Syndrome

Disease Report

REPORT CATEGORIES —



IMMUNITY &
INFECTIONS



ENERGY & FATIGUE

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

13 Next Steps

- 13 Your Lab Results

Personal information

NAME

Sample Client

SEX AT BIRTH

Male

HEIGHT

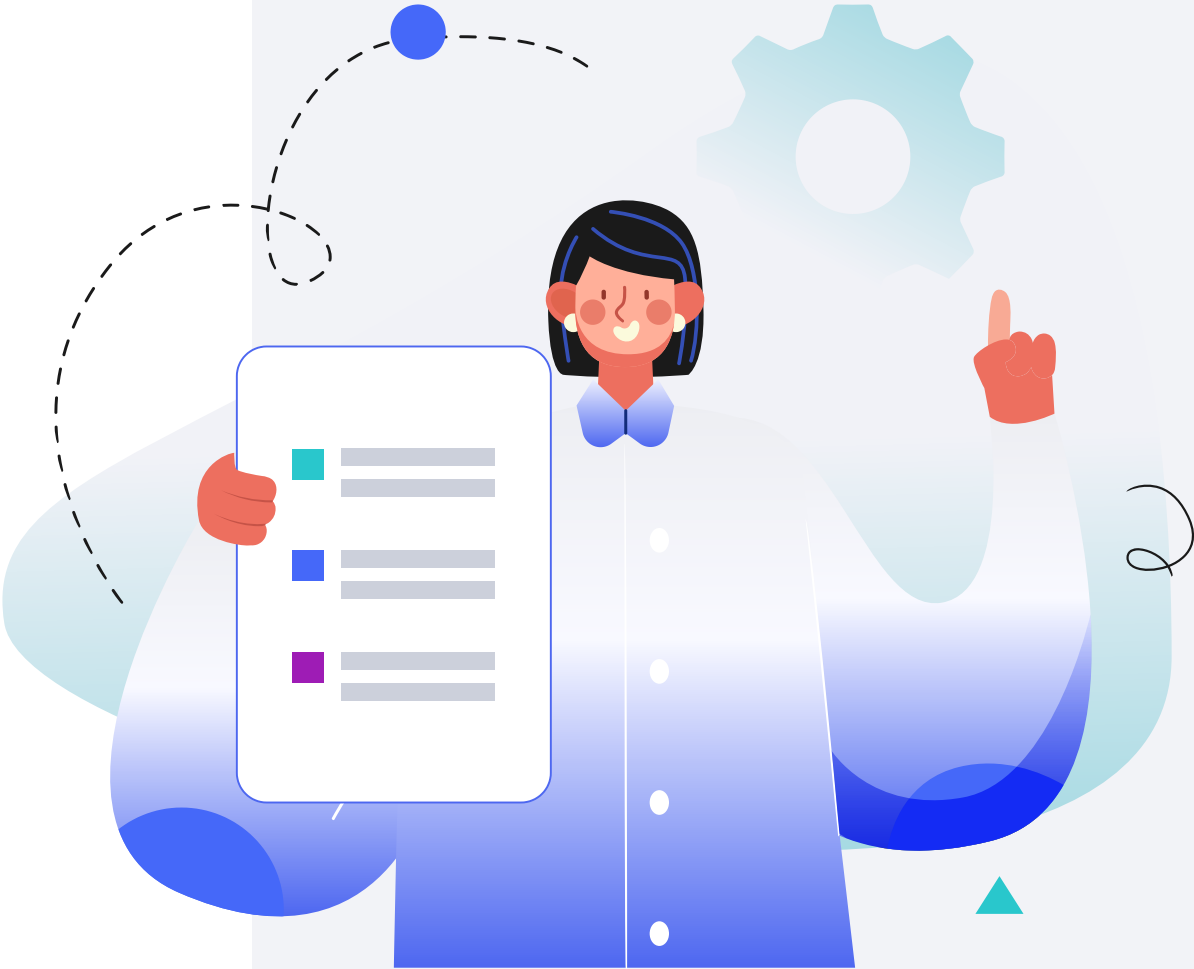
5ft 5" 165cm

WEIGHT

137lb 62kg

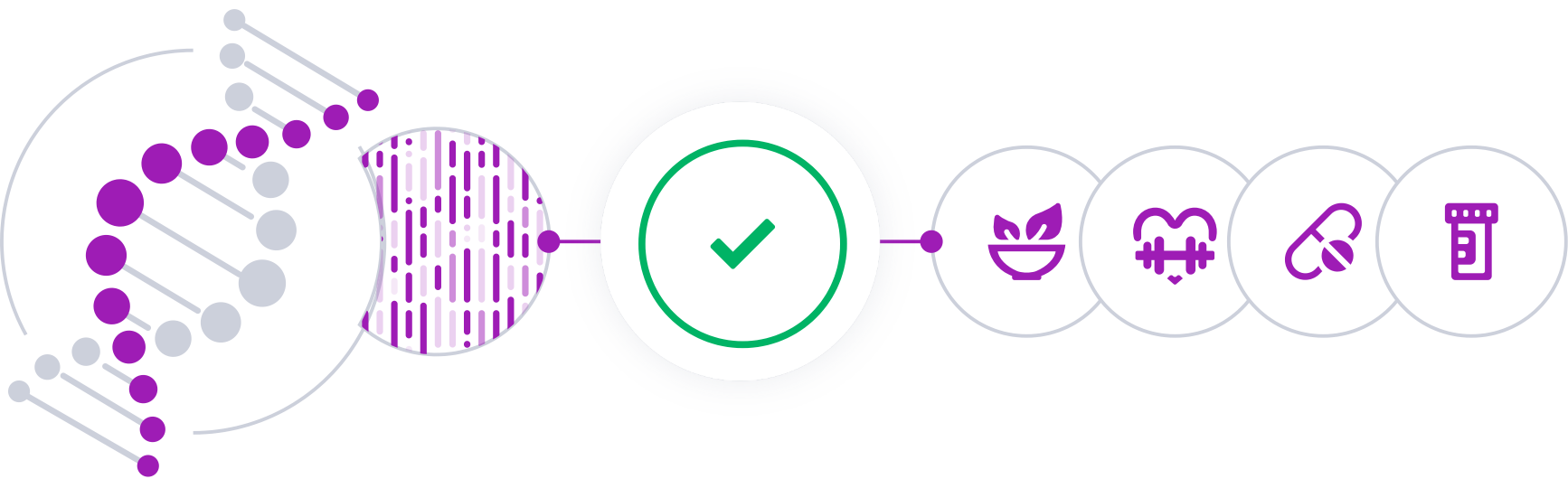
DISCLAIMER

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.

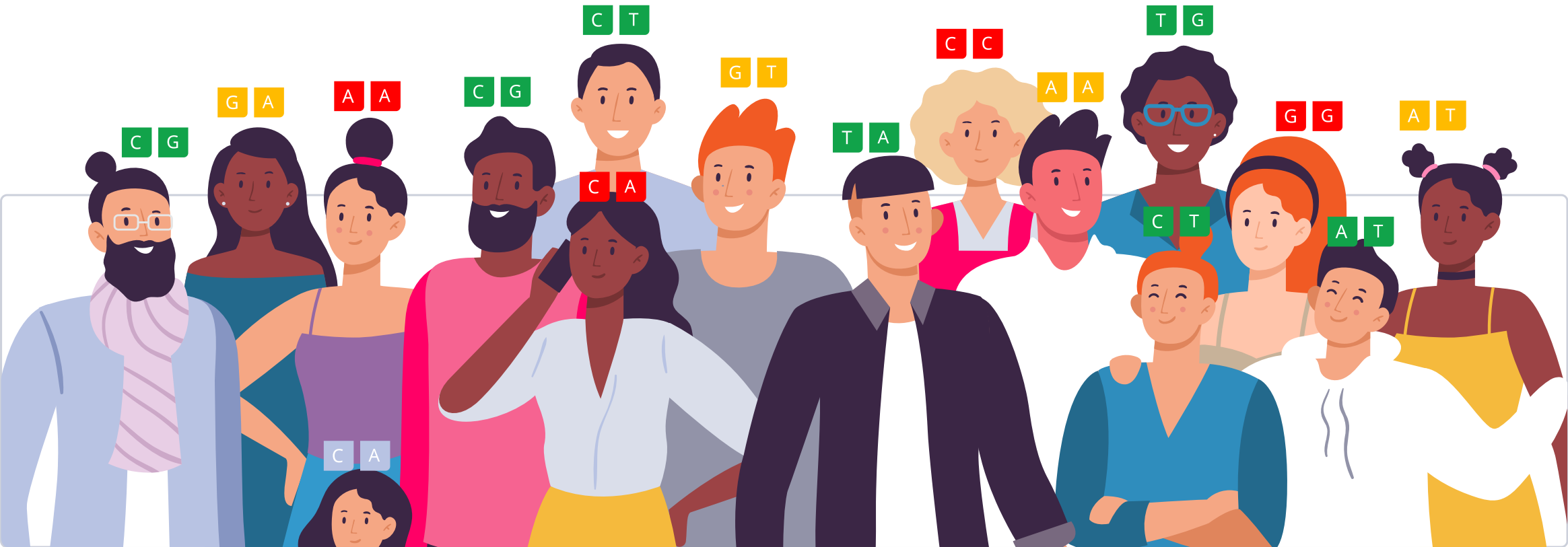


Similarly, our Trait Reports look at how your DNA influences your traits.



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

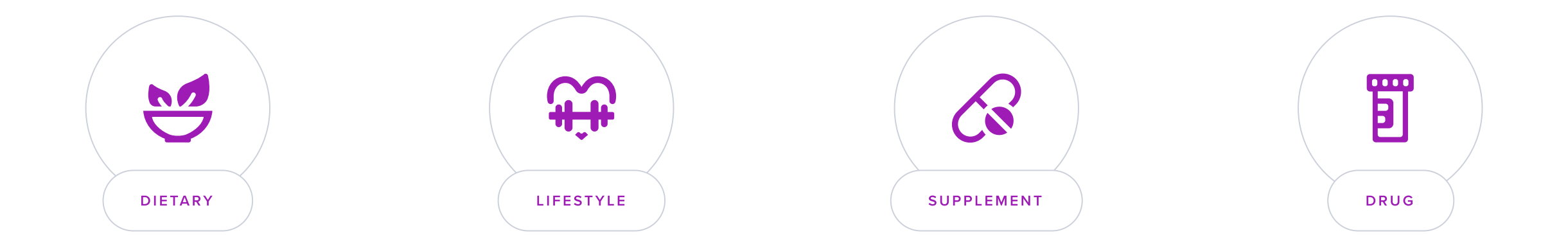
You have 2 risk alleles

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

Myelodysplastic syndrome (MDS) is a group of heterogeneous bone marrow disorders characterized by inefficient hematopoiesis leading to blood cell abnormalities and marrow dysplasia. Individuals with MDS often present with symptoms related to anemia, infection, and bleeding due to the ineffective production of red cells, white cells, and platelets, respectively.

The quality of life can be significantly affected as fatigue, weakness, and susceptibility to infections can become pronounced.

Causes and Treatment

The progression of MDS varies among individuals, ranging from slow to rapid transformation into acute myeloid leukemia (AML). The cause of MDS is not completely understood but is often associated with genetic mutations and may be influenced by previous chemotherapy or radiation therapy.

Treatment strategies for MDS are personalized, depending on the severity and progression of the condition, patient age, and overall health, and may include supportive care, drug therapy, or bone marrow transplantation.



TYPICAL LIKELIHOOD

Typical likelihood of myelodysplastic syndrome based on 3,523 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
EOGT	rs34539210	TT
PLA2G4A	rs6683416	CC
GRID1	rs7099032	AA
SLCO3A1	rs4404050	TT
EYA2	rs1206818	AC
POU5F1	rs1634783	AG
TAF2	rs78898975	TT
/	rs2947170	AA
IRF4	rs12203592	CC
EFNA5	rs341274	GG

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	Maitake Mushroom	2	Good Oral Hygiene2 minutes
3	Selenium Supplements50 mcg	4	Pomegranate

1



Maitake Mushroom

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a maitake mushroom supplement, available in capsule or powder form, daily. The typical dosage ranges from 500mg to 3,000mg per day, divided into two or three doses. Consult with a healthcare provider for the correct dosage suitable for your health condition and needs.

Description

Maitake mushrooms are valued for their potential immune-boosting properties. Compounds found in maitake, such as beta-glucans, may support the immune system and contribute to overall health.

How it helps

Patients with low- and intermediate-1-risk myelodysplastic syndromes received oral Maitake extract for 12 weeks. Maitake increased neutrophil and monocyte function significantly, showing potential immunomodulatory effects in MDS without clinically relevant adverse effects. Further research is recommended [\[R\]](#).

2



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

Maintaining good oral hygiene is important for individuals with MDS, as they are at increased risk of infections due to a compromised immune system. Regular dental care helps prevent infections in the mouth, potentially reducing the overall infection risk.

3



Selenium Supplements

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take 50 mcg of selenium supplements once daily, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

50 mcg

Description

Selenium is a trace mineral found in Brazil nuts and many other foods as well as supplements. It is an essential nutrient that plays a crucial role in maintaining the body's antioxidant defenses and supporting thyroid function.

[Selenium](#) supports [\[R\]](#):

- Reproduction
- Thyroid function
- DNA production
- Immune response

Adults should be getting **55 micrograms** of selenium per day. Selenium supplements are available for people who can't meet their needs with a balanced diet [\[R\]](#).

How it helps

Selenium is an essential trace element that has antioxidant properties and supports immune function. For patients with myelodysplastic syndrome, selenium supplements might reduce the oxidative stress in bone marrow cells, helping to protect them from further damage and potentially delaying disease progression.

4



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 is rich in antioxidants, which can help protect cells from damage. This could be particularly beneficial for individuals with myelodysplastic syndrome by supporting overall cell 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.

	WBC	6.92 x10 ³ /mm ³		9 Nov 2025
	Platelet Count	215 x10 ³ /mm ³		9 Nov 2025
	Hematocrit	51.8 %		9 Nov 2025
	Hemoglobin	17.1 g/dL		9 Nov 2025