

Gout

DNA Health Report

REPORT CATEGORY —



JOINT & TENDON
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

10 Your recommendations

29 Next Steps

- 29 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

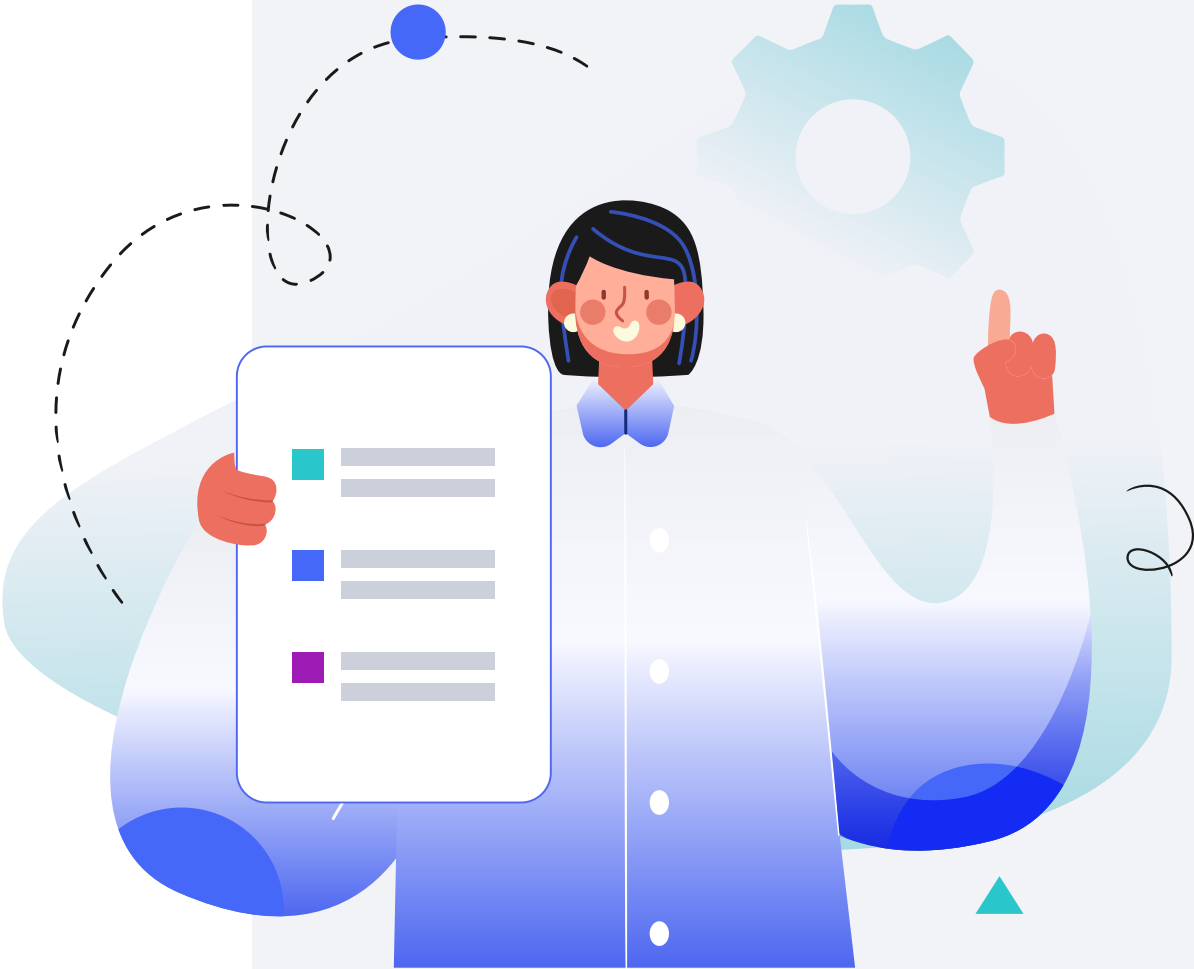
Male

HEIGHT

5ft 5" 165cm

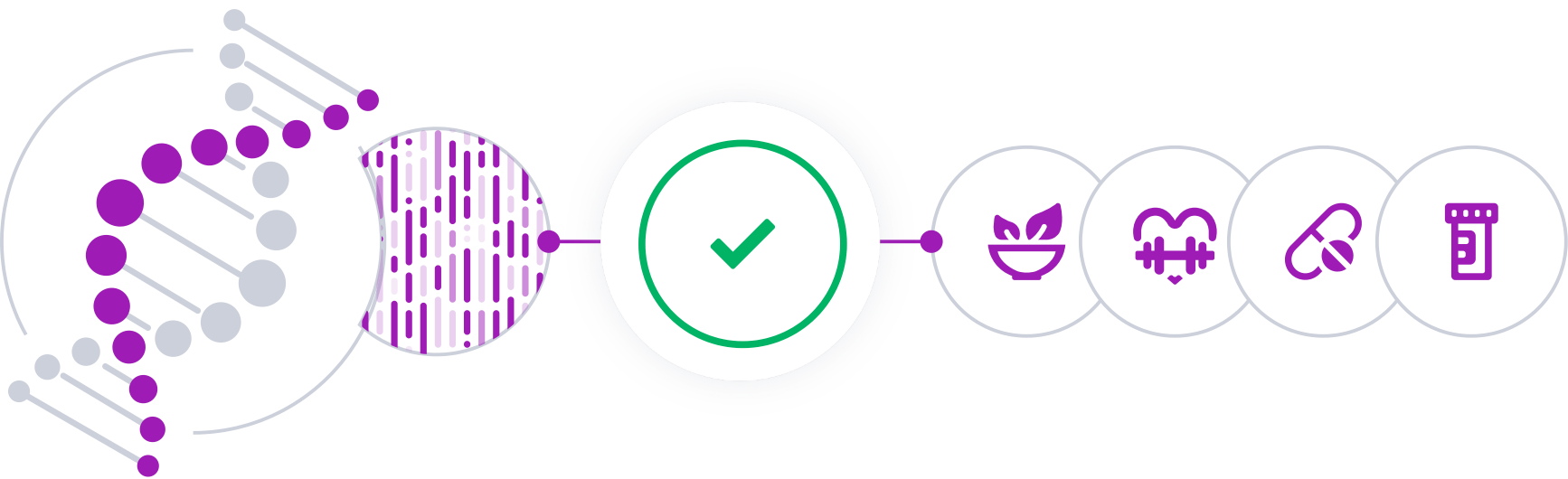
WEIGHT

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.

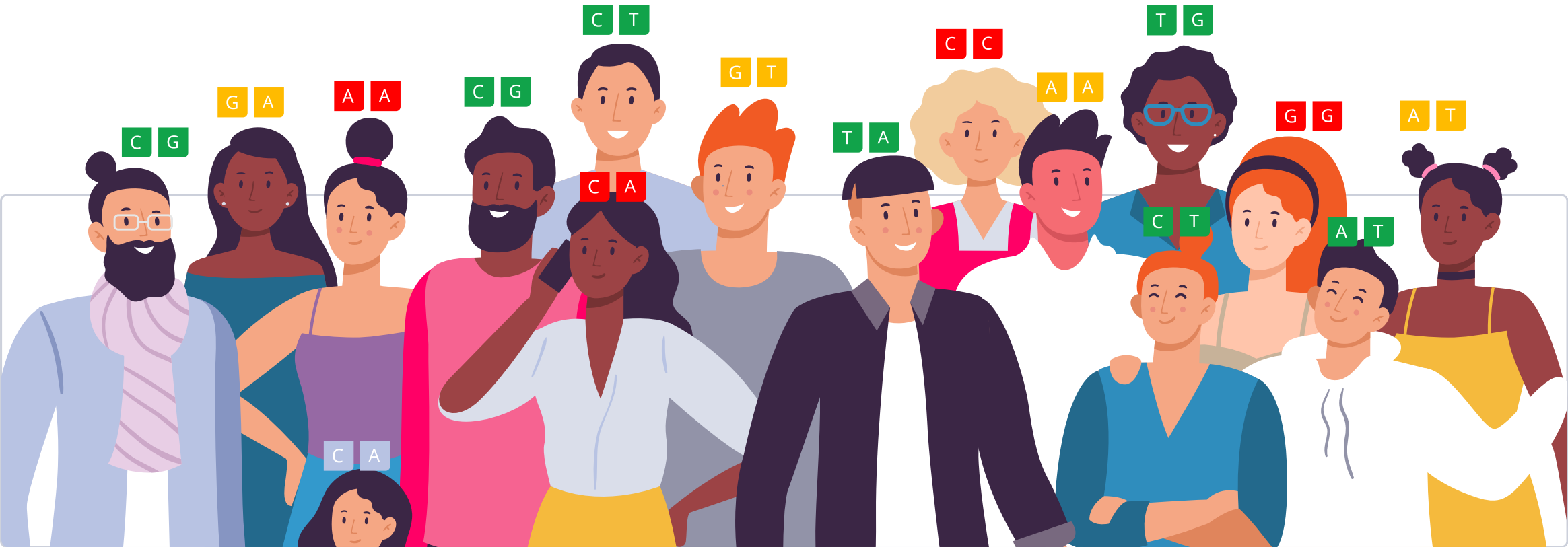


Similarly, our Trait Reports look at how your DNA influences your traits.



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

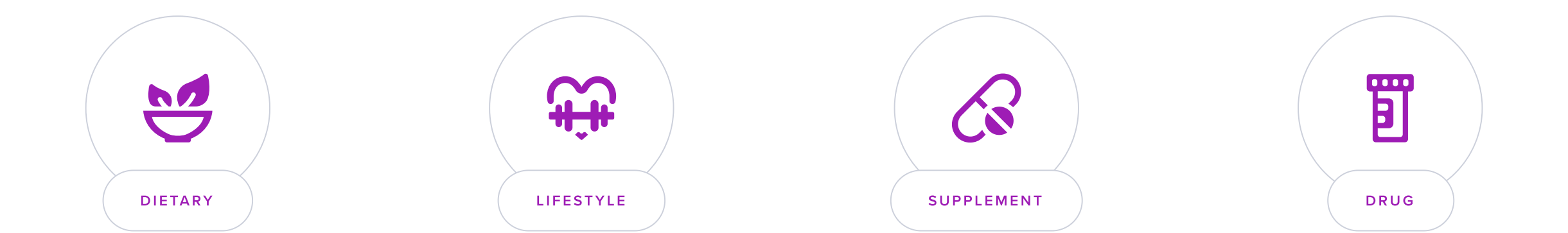
You have 2 risk alleles

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

Gout is one of the oldest diseases known to man. Egyptians first observed it in 2640 BC. Later, in 500 BC, it was named ‘the unwalkable disease’ by legendary Greek physician Hippocrates. The term ‘gout’ was first used in the 1200s [R].

Gout has had many touted remedies. During Hippocrates’ time, the toxic autumn crocus flower was used as a laxative to treat gout, and in some cases it still is today [R].

More recently, in the 1600s, the earliest known advert for coffee boasted, *‘it is excellent to prevent and cure the Dropsy, Gout, and Scurvy’* [R].

Unbeknown to the creators of this advert, **the benefits of coffee for gout may depend on your DNA.** Those who carry a particular variant of the [CYP1A2](#) gene may both have an increased risk of gout and a tendency to drink less coffee than others. However, scientists aren’t certain about the link between the two yet [R, R, R, R].

From cures to causes, **Hippocrates initially described gout as a condition of the rich,** and around 600 years later, Galen (a Greek physician of the Roman Empire) noticed that those who excessively indulge were more prone to the condition [R].

The link between overindulgence and gout was famously demonstrated by King Henry VIII, whose death was linked to the condition [R].

Amazingly, Galen also noticed that gout was sometimes inherited, **spotting the genetic link nearly 2000 years prior to the discovery of DNA** [R]!

Both Hippocrates’ and Galen’s observations were somewhat correct. **Consuming excess meat, sugar, and alcohol can all raise your uric acid levels, contributing to your risk of gout.** The link between these indulgences and gout may in fact be inherited [R, R, R, R]!

Those with particular variants of the [GCKR](#), [SLC17A4](#), or [SLC2A9](#) genes may be at an increased risk of gout if they consume excess meats, alcohol, or sugar, respectively [R, R, R, R, R].

We know a lot more about the link between gout and genetics today than we did 2000 years ago. You can use this information to potentially help lower your risk of developing gout!

Read on to find out more about:

- **How your genetics play a role in gout**
- **Your genetic risk score based on over 200 genetic variants**
- **Personalized recommendations based on your genetics**

About Gout

Key Takeaways:

- About **30%** of differences in people's chances of developing gout may be due to genetics. It is most common in middle age.
- Risk factors include a diet rich in purines, fructose, alcohol, high blood pressure, overweight, diabetes, kidney disease, and genetics.
- If you are at high genetic risk or have symptoms, take action now on your modifiable risk factors to help lower overall risk.
- Click the **next steps** tab for relevant labs and lifestyle factors.

Gout is a common type of arthritis. It is caused by urate crystals building up in the joints [\[R\]](#), [\[R\]](#).

Urate crystals are formed from *uric acid*, a waste product. The body makes the most uric acid when it breaks down *purines*. These are compounds found in our cells and in many foods, such as meat and seafood [\[R\]](#).

The major symptom of gout is pain and swelling in the joints. The most commonly affected joint is the big toe. However, gout can also occur in other joints, such as the elbows, wrists, and fingers [\[R\]](#), [\[R\]](#).

Gout comes and goes in cycles called flares. Flare-ups are often sudden and tend to occur at night. Afterward, the joint may be uncomfortable for days or weeks [\[R\]](#), [\[R\]](#).

Left untreated, gout can cause [\[R\]](#):

- *Tophi* (crystals around the joints and other parts of the body, just under the skin)
- Joint deformities
- Loss of bone
- Osteoarthritis

This condition is most common in middle-aged people. Younger people do not usually get gout, but if they do, it tends to be severe [\[R\]](#), [\[R\]](#).



TYPICAL LIKELIHOOD

Typical likelihood of gout based on 233 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
SLC2A9	rs16890979	CC
SLC2A9	rs6449213	TT
SLC2A9	rs12498742	AA
SLC2A9	rs75341455	CC
SLC2A9	rs13129697	GT
ADH1B	rs1229984	TC
SLC2A9	rs6839820	CC
SPP1	rs2728127	AA
TMEM171	rs520007	CC
TRMT112	rs2078267	TC
GCKR	rs1260326	TC
INHBC	rs2229357	AG
MTX1	rs760077	TA
PRKAG2	rs10224002	AG
MAN2C1	rs1394125	AG
CARMIL1	rs9461183	AG
ABCG2	rs2231142	GG
NUDT9	rs114791459	GG
SPP1	rs114580333	GG
PPM1K	rs4693211	TT
RPS6KA4	rs77085155	TT
HOXD1	rs72929103	CC
ABCG2	rs72552713	GG
NRXN2	rs471618	TT

In addition to age, other risk factors for gout include [\[R\]](#), [\[R\]](#):

- A diet rich in purines (e.g., from red meat and shellfish)
- Fructose (fruit sugar)
- Alcohol (especially beer)
- Some medication
- High blood pressure
- Being overweight or obese
- Certain health conditions (e.g., diabetes, heart disease, and kidney disease)
- **Genetics**

Gout is a manageable condition with well-established treatments. For people with gout, a doctor may recommend [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Medication
- A low-purine diet
- Drinking more water
- Avoiding alcohol
- Weight management
- Exercise

About **30%** of differences in people's chances of developing gout may be attributed to genetics. Genes involved in gout may influence [\[R\]](#), [\[R\]](#):

- The immune response ([HLA-B](#))
- Uric acid levels ([ABCG2](#), [SLC2A9](#), [SLC22A11](#), [SLC22A12](#), [SLC17A1](#))

Moreover, genetically higher fasting insulin may be causally associated with a higher risk of gout. In contrast, genetically high testosterone levels may be causally associated with a lower risk of gout in men [\[R\]](#), [\[R\]](#), [\[R\]](#).

GENE	SNP	GENOTYPE
NUDT17	rs1967017	GA
OVOL1	rs11227299	CC
MLXIPL	rs2286276	TT
RREB1	rs11755724	GG
SFMBT1	rs2581778	GG
PRSS16	rs3800307	TT
IDH2	rs28508560	GG
PNPLA3	rs738409	GG
MLXIP	rs28548845	CC
LRP2	rs2075252	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	Dairy Products	2	Avoid Sugary Foods & Drinks
3	Low-Purine Diet	4	Avoid PCBs
5	DASH Diet	6	Vitamin C500 mg
7	Avoid Organochlorine Pesticide Exposure	8	Molybdenum
9	Cherries	10	Maintain Optimal Vitamin D Levels1000 iu
11	Drink at Least 8 Glasses of Water a Day	12	Dietary Vitamin C
13	Avoid Iron Supplements (Unless Deficient)	14	Acupuncture1 hour
15	Fruits And Vegetables	16	Dietary Omega-3 Fatty Acids
17	Methylfolate400 mcg	18	Magnesium250 mg
19	Avoid Sugary Foods At Night	20	Whole Grains

1



Dairy Products

IMPACT

5 / 5

EVIDENCE

3 / 5

How to implement

Incorporate 2-3 servings of low-fat or fat-free dairy products into your daily diet. One serving could be 8 ounces of milk, 1 cup of yogurt, or 1.5 ounces of cheese. Choose options that are low in added sugars and consume as part of balanced meals or snacks throughout the day.

Description

Dairy products, such as milk, yogurt, and cheese, are rich sources of calcium and protein. They are essential for bone health, providing nutrients that support strong bones and teeth, as well as overall nutritional well-being.

Dairy products are made from milk. They include [\[R\]](#):

- Cheese
- Yogurt
- [Kefir](#)
- Butter
- Cream

Dairy products contain high levels of [calcium](#). Calcium helps build strong bones [\[R\]](#).

How it helps

Some experts recommend skim or low-fat dairy products to help with gout [\[R, R, R\]](#).

Dairy may help reduce the risk of gout by decreasing uric acid levels. Skim milk may be especially helpful [\[R, R, R\]](#).

Consuming **enriched skim milk powder for 3 months** may also help. It may reduce gout flares and help clear uric acid with the urine [\[R\]](#).

 PERSONALIZED TO YOUR GENES

Your [SLC2A9](#) gene variant is linked to higher odds of gout. It likely reduces uric acid elimination through the urine. Dairy may help by increasing uric acid elimination [\[R, R, R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
SLC2A9	rs11942223	TT	

2



Avoid Sugary Foods & Drinks

IMPACT

4 / 5

EVIDENCE

4 / 5

How to implement

To avoid sugary foods, eliminate or significantly reduce consumption of foods and beverages high in added sugars such as sodas, candies, baked goods, and sugary cereals from your diet. Instead, opt for natural sugar sources like fruits. Aim to do this daily for ongoing health benefits.

Description

High-sugar foods like baked goods, sweets, and sugary drinks, can spike your blood sugar levels. Consuming a lot of these types of foods can contribute to health issues like diabetes, obesity, insomnia, and heart disease.

High-sugar foods and refined carbs have a high glycemic index (GI). This means they tend to spike your blood sugar levels. They include [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Sugary drinks
- Baked goods
- Sweets
- White bread
- White rice
- Pasta

Eating a lot of sugary foods can contribute to:

- Diabetes [\[R\]](#), [\[R\]](#), [\[R\]](#)
- Weight gain and obesity [\[R\]](#), [\[R\]](#)
- Insomnia [\[R\]](#)
- Heart disease [\[R\]](#)

You may also want to avoid processed sugars and sugary drinks. They may have a role in increasing IL-1B [\[R\]](#), [\[R\]](#).

How it helps

A diet high in sugar, especially *fructose*, may increase the risk of gout. Sweetened beverages, such as soda, are a main source of fructose. They may contribute to gout by raising uric acid levels [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Experts recommend avoiding drinks sweetened with fructose to help with gout [\[R\]](#), [\[R\]](#), [\[R\]](#).

In line with this, diets lower in sugar may help reduce uric acid levels [\[R\]](#).

It is important to note that whole fruit and 100% fruit juice also contain naturally occurring fructose. However, it is unclear if these foods increase the risk of gout [\[R\]](#), [\[R\]](#), [\[R\]](#).

3



Low-Purine Diet

IMPACT4 / 5

EVIDENCE4 / 5

How to implement

Consume foods low in purines such as fruits, vegetables (excluding high-purine vegetables like spinach, asparagus, and cauliflower), dairy products with low fat content, and whole grains. Limit intake of red meats, organ meats, and seafood as these are high in purines. Aim to maintain this dietary pattern consistently to manage conditions such as gout.

Description

A low-purine diet can help individuals with gout manage their condition by limiting foods high in purines, which can reduce the risk of painful gout attacks and joint inflammation.

Purines are compounds found in cells of the body and in many foods. They are broken down by your kidneys into *uric acid*. Although uric acid can act as an antioxidant, too much of it can lead to gout [\[R\]](#), [\[R\]](#).

Foods and drinks high in purines include [\[R\]](#), [\[R\]](#):

- Red meat
- Organ meats
- Seafood (such as anchovies, shellfish, and sardines)
- Alcohol

How it helps

A diet high in meat and seafood may increase the risk of gout. These foods are rich in purines and may raise uric acid levels [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Experts recommend limiting the intake of foods rich in purines to help with gout [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

In line with this, **following a vegetarian diet is linked to a reduced risk of gout** [\[R\]](#), [\[R\]](#), [\[R\]](#).

Following a low-purine diet may help by decreasing uric acid production. It may also increase the amount of uric acid removed in the urine [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Vegetarians who include eggs and milk in their diets tend to have the lowest levels of uric acid [\[R\]](#), [\[R\]](#).

 PERSONALIZED TO YOUR GENES

Eating meat may worsen the effects of your [MSRA](#) gene variant on gout. Meat is the main source of purines, so try to reduce its intake [\[R\]](#), [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
MSRA	rs545854	GC	

4



Avoid PCBs

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

To avoid PCBs (Polychlorinated Biphenyls), do not use old electrical equipment manufactured before 1977, avoid consuming fish from contaminated waters, especially larger species such as shark and swordfish which are higher in the food chain, and check for and properly dispose of any old fluorescent lighting fixtures that may contain PCBs. Pay attention to local advisories regarding the safety of locally caught fish and wildlife.

Description

PCBs are toxic chemicals that can cause cancer, reproductive problems, and developmental problems. Avoiding exposure to PCBs is important for protecting your health.

Polychlorinated biphenyls (PCBs) are man-made chemicals. They were used in the industry until their **ban in 1979**. PCBs are considered **persistent organic pollutants** (POPS) due to their slow degradation in the environment. They may also **accumulate** in the food chain and the human body [\[R, R\]](#).

We may be exposed to PCBs through contaminated [\[R, R\]](#):

- **Food** (e.g., fish, meat, rice)
- Soil
- Air

PCBs may have toxic effects on [\[R, R\]](#):

- Immunity
- Nervous system
- Reproductive system
- Hormone levels

They may also increase the risk of cancer and reduce lifespan [\[R, R\]](#).

How it helps

PCBs, or polychlorinated biphenyls, are industrial compounds that can potentially increase uric acid levels in your body. High uric acid levels trigger gout attacks, so avoiding PCB exposure could help prevent gout flare-ups.

5



DASH Diet

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Adopt a dietary pattern that emphasizes fruits, vegetables, whole grains, lean proteins, and low-fat dairy, while reducing sodium, red meat, sweets, and sugary beverages. Aim for 4-5 servings of both fruits and vegetables per day, 6-8 servings of grains (with at least half being whole grains), and 2-3 servings of low-fat dairy. This diet should be followed daily to manage blood pressure effectively.

Description

The DASH (Dietary Approaches to Stop Hypertension) diet is a dietary plan designed to reduce high blood pressure. It emphasizes fruits, vegetables, lean proteins, and whole grains while limiting sodium intake.

Health experts developed the DASH diet to reduce blood pressure. This diet also helps support weight control while reducing inflammation and cholesterol [\[R\]](#).

It **limits salt, sweets, and saturated fat**, while promoting the intake of [\[R\]](#):

- Fruits (4-5 servings/day)
- Vegetables (4-5 servings/day)
- Whole grains (6-8 servings/day)
- Low-fat dairy (2-3 servings/day)
- Nuts, seeds, and legumes (4-5 servings/week)
- Fish and poultry (up to 6 ounces/day)

The DASH diet focuses on fresh, minimally processed food rich in nutrients. Magnesium, calcium, and potassium-rich foods are particularly important due to their beneficial effects on the heart and blood vessels [\[R\]](#).

Although similar to the [Mediterranean diet](#), DASH is lower in sodium (<2,300 mg a day) and omega-3 fatty acids. On the other hand, it’s higher in red meat and dairy [\[R\]](#).

How it helps

Eating a lot of sodium (salt) in the long term is linked to elevated uric acid levels [\[R\]](#).

The DASH diet limits the intake of salt. It may reduce uric acid levels and thus help prevent gout. However, some studies didn’t find a clear benefit [\[R, R, R, R, R, R\]](#).

A DASH-style diet high in plant-based proteins may have the best effects on uric acid [\[R\]](#).

6



Vitamin C

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Take 500-2000 mg of vitamin C supplement daily. It can be taken at any time of the day, with or without food, according to personal preference or tolerance.

TYPICAL STARTING DOSE

500 mg

Description

[Vitamin C](#) is an essential nutrient. This means that our bodies can’t produce it on their own, so we have to get it from food or supplements [\[R\]](#).

Foods rich in Vitamin C include: [\[R\]](#)

- Citrus Fruits
- Peppers
- Brussel sprouts
- Kiwi
- Broccoli
- Tomato
- Cantaloupe
- Cauliflower
- Spinach

Vitamin C has antioxidant properties. It supports immunity, heart health, and wound healing [\[R\]](#), [\[R\]](#).

Vitamin C deficiency is called *scurvy*. In the past, many sailors suffered from it [\[R\]](#).

How it helps

Low vitamin C levels are linked to a higher risk of gout [\[R\]](#).

Supplementing with vitamin C may help decrease the risk by lowering uric acid levels [\[R\]](#), [\[R\]](#), [\[R\]](#).

However, experts note there may not be enough evidence to recommend vitamin C for gout, and some recommend against it [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Please note: *Supplementing with vitamin C is linked to a slightly higher risk of kidney stones in men. Talk to your doctor before taking vitamin C* [\[R\]](#), [\[R\]](#).

7

Avoid Organochlorine Pesticide Exposure

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Minimize exposure by choosing organic fruits and vegetables, thoroughly washing produce before consumption, and avoiding areas where organochlorine pesticides are applied. Consider using air purifiers in homes close to agricultural areas to reduce indoor pesticide levels.

Description

Reducing organochlorine pesticide exposure involves minimizing contact with pesticides like DDT, which can accumulate in the body and potentially lead to adverse health effects, including disruption of hormonal functions and carcinogenicity.

How it helps

Limiting exposure to organochlorine pesticides can reduce gout risk as these chemicals can disrupt your body's ability to process uric acid. Elevated uric acid levels often lead to gout attacks.

A [meta-analysis of 9 studies](#) associated exposure to **DDT with a 2.34-fold higher risk of hyperuricemia, DDE with a 3.25-fold higher risk, and trans-nonanchlor with a 2.57-fold higher risk** [\[R\]](#).

8



Molybdenum

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Adults should get about **45 micrograms** of molybdenum each day [\[R\]](#).

Foods rich in molybdenum include [\[R\]](#):

- Black-eyed peas (288 mcg per serving)
- Beef liver (104 mcg per serving)
- Lima beans (104 mcg per serving)
- Yogurt (26 mcg per serving)
- Baked potato (16 mcg per serving)
- Wheat cereals (15 mcg per serving)

Description

[Molybdenum](#) (Mo) is a mineral that we need in very small amounts (trace mineral) [\[R\]](#).

Molybdenum helps process sulfur-containing amino acids such as [methionine](#) and [cysteine](#). It also helps make [uric acid](#) and is part of the tooth enamel [\[R\]](#), [\[R\]](#).

Adults should get about **45 micrograms** of molybdenum each day [\[R\]](#).

Foods rich in molybdenum include [\[R\]](#):

- Black-eyed peas (288 mcg per serving)
- Beef liver (104 mcg per serving)
- Lima beans (104 mcg per serving)
- Yogurt (26 mcg per serving)
- Baked potato (16 mcg per serving)
- Wheat cereals (15 mcg per serving)

Water also contains some molybdenum, although the exact amount can vary greatly depending on the region [\[R\]](#).

People easily get all the molybdenum they need through food and water, so [molybdenum deficiency is extremely rare](#) [\[R\]](#).

How it helps

A meta-analysis of 20 studies and 63,283 participants associated exposure to molybdenum with a decreased risk of elevated uric acid [\[R\]](#).

9



Cherries

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Incorporate a serving of cherries, which is about 1 cup or 21 cherries, into your daily diet. You can eat them fresh, frozen, dried, or in juice form. If opting for juice, ensure it's 100% cherry juice without added sugars.

Description

Cherries are a stone fruit that comes in numerous varieties. They are a natural source of antioxidants and anti-inflammatory compounds. They may help reduce inflammation, promote better sleep, and support overall health.

A cherry is a stone fruit with numerous varieties. Cherries are native to parts of Europe and Asia [\[R\]](#), [\[R\]](#).

People consume sweet cherries (*Prunus avium*) and tart cherries (*Prunus cerasus*) to help with [\[R\]](#):

- Gout
- Exercise recovery
- Blood sugar control
- Blood pressure

How it helps

Some experts recommend that people with gout eat more cherries. They may be linked to a reduced risk of gout flares [\[R\]](#), [\[R\]](#).

Cherries may help by reducing uric acid levels. However, these effects may be temporary, and the evidence is mixed [\[R\]](#), [\[R\]](#), [\[R\]](#).

Cherries may also help by reducing oxidative stress and inflammation [\[R\]](#), [\[R\]](#).

10

Maintain Optimal Vitamin D Levels

IMPACT

1 / 5

EVIDENCE

2 / 5

How to implement

Check your vitamin D levels, they should ideally be in the 30-66 ng/mL range. If your levels are lower than that, take a vitamin D supplement, 1000-4000 IU daily, to reach an optimal range.

TYPICAL STARTING DOSE

1000 iu

Description

Vitamin D, often referred to as the "sunshine vitamin," can be synthesized by the skin when exposed to sunlight, as well as being found in fish, eggs, and fortified milk. It helps regulate calcium absorption, promoting strong bones and a healthy immune system. Vitamin D deficiency can lead to conditions like rickets in children and osteoporosis in adults.

Your body needs [vitamin D](#) for strong bones. Vitamin D also plays a role in [\[R\]](#):

- Mood
- Immunity
- Heart health
- Blood sugar control

[Sunlight](#) is our main source of vitamin D. Experts recommend getting at least **5-15 minutes of midday sun, 2-3 times per week**. People with darker skin and those living at high latitudes may need longer periods of sun exposure [\[R\]](#), [\[R\]](#).

Foods like fish, eggs, and fortified milk provide small amounts of vitamin D. **People lacking vitamin D should consider taking a supplement** [\[R\]](#).

How it helps

Low levels of vitamin D are linked to higher uric acid levels [\[R\]](#), [\[R\]](#), [\[R\]](#).

Supplementing with vitamin D may help reduce uric acid in people with high levels [\[R\]](#).

Please note: *Experts recommend getting 600-800 IU of vitamin D per day. Medical bodies recommend against taking more than 4,000 IU per day* [\[R\]](#).

11



Drink at Least 8 Glasses of Water a Day

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Consume a total of at least 64 ounces (or approximately 1.9 liters) of water over the course of the day. This can be divided into 8 glasses, each containing 8 ounces of water. Aim to drink evenly throughout the day to avoid dehydration.

Description

Water is an essential nutrient for nearly every process in your body, helping to mainting brain and gut function, maintain a health weight, as well as energy and performance levels, among others.

Water is essential for life. It supports nearly every process in your body [\[R\]](#).

Water helps maintain [\[R\]](#):

- Energy and performance levels
- Brain function
- Gut function
- Healthy weight

Most experts recommend drinking **around 8 glasses (64 oz. or 2 L) of water daily**. You might need more or less than this, depending on how active you are, where you live, or what your overall health is like [\[R\]](#).

How it helps

Proper hydration can help to flush uric acid out of the body and reduce the risk of gout attacks.

12



Dietary Vitamin C

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Incorporate foods rich in Vitamin C into your daily diet, such as oranges, strawberries, red peppers, kale, and broccoli. Aim to consume 5 servings of fruits and vegetables per day to meet the recommended dietary allowance of Vitamin C, which is 90 mg for adult men and 75 mg for adult women.

Description

Vitamin C is an antioxidant that supports the immune system, collagen production, and wound healing. It also enhances iron absorption from plant-based foods and contributes to overall health.

[Vitamin C](#) is an essential nutrient. This means that our bodies can’t produce it on their own, so we have to get it from food or supplements [\[R\]](#).

Vitamin C has antioxidant properties. It supports immunity, heart health, and wound healing [\[R, R\]](#).

Vitamin C deficiency is called *scurvy*. In the past, many sailors suffered from it [\[R\]](#).

How it helps

Vitamin C can help lower uric acid levels, making it beneficial for managing gout.

13



Avoid Iron Supplements (Unless Deficient)

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Only take iron supplements if a blood test shows you are iron deficient. If not deficient, do not use iron supplements. For those diagnosed with iron deficiency, follow your healthcare provider's instructions on the type and dosage of iron supplement to take.

Description

[Iron](#) (Fe) is an essential mineral. It helps make [hemoglobin](#), a protein that carries oxygen to cells. In this way, iron **increases energy** and supports **brain and immune system function** [\[R\]](#), [\[R\]](#), [\[R\]](#).

Avoiding unnecessary iron supplements, particularly without a confirmed deficiency, can prevent the risk of iron overload, which can lead to health issues like hemochromatosis and oxidative stress.

However, too much iron can be bad for the body. It can deposit into organs, such as the liver, heart and the pancreas. This can cause issues such as liver disease, heart problems and diabetes [\[R\]](#), [\[R\]](#).

How it helps

Genetically higher iron levels may be associated with a 35% increased risk of gout [\[R\]](#).

Iron supplements might contribute to gout by increasing uric acid levels in the body.

Please note: *Some people deficient in iron may need to take iron supplements. Your doctor should help you make that decision based on your actual iron levels.*

14



Acupuncture

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Visit a licensed acupuncturist for a session, typically lasting between 30 to 60 minutes, once or twice a week. Depending on your specific condition, a course of treatment might range from a few weeks to several months.

TYPICAL STARTING DOSE

1 hour

Description

Acupuncture is a part of traditional Chinese medicine. It involves inserting thin needles at specific points on the body. People use it to relieve pain and allergies, as well as reduce nausea and improve sleep.

[Acupuncture](#) is a part of traditional Chinese medicine. It involves **inserting thin needles at specific points on the body**. People use it to [\[R, R, R, R, R\]](#):

- Relieve pain
- Improve sleep quality
- Relieve allergies
- Reduce nausea

How it helps

Acupuncture is believed to relieve gout symptoms by reducing inflammation and pain through stimulating specific points on the body. This process encourages the body to release natural painkillers, thus enhancing its own healing ability.

15



Fruits And Vegetables

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Increase your intake of fruits and vegetables to at least five servings per day, aiming for a variety of types and colors to ensure a broad range of nutrients. Each serving size should roughly be the amount you can fit in one hand. Try to incorporate at least one serving of fruits or vegetables into every meal and snack throughout the day.

Description

A diet rich in fruits and vegetables provides essential nutrients, antioxidants, and dietary fiber. This combination supports overall health, helps maintain a healthy weight, and reduces the risk of chronic diseases such as heart disease and certain cancers.

How it helps

Most fruits and vegetables are low in purines and promote a healthy weight and nutrient intake, which can manage gout symptoms.

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 can help to lower the levels of uric acid in your body, the substance that causes gout. Also, they have anti-inflammatory properties which may reduce the painful inflammation associated with gout attacks.

Genetically higher levels of DHA may be linked to a reduced risk of:

- Gout [\[R\]](#)
- High uric acid levels [\[R\]](#)

17



Methylfolate

IMPACT

0 / 5

EVIDENCE

0 / 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

Folate, also known as vitamin B9, can assist with gout by helping to lower levels of uric acid in the body, which are often elevated in cases of gout. This reduction can help decrease the frequency and severity of gout attacks.

18



Magnesium

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take up to 350 mg of magnesium daily as a supplement, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

250 mg

Description

Magnesium is an essential mineral involved in various bodily functions, including muscle contractions, nerve signaling, and bone health. Maintaining adequate magnesium levels through diet or supplements can support overall well-being and reduce the risk of magnesium deficiency-related health issues.

[Magnesium](#) is an essential mineral. Your body needs it for [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Muscle, nerve, and bone function
- Blood sugar and blood pressure control
- DNA and protein production
- Strong immunity

Women need **310-320 mg** of magnesium per day, while men need **400-420 mg** [\[R\]](#).

Foods rich in magnesium include **nuts, seeds, and leafy greens**. Magnesium is also available as a supplement [\[R\]](#).

How it helps

Genetically higher levels of magnesium may be associated with lower:

- Risk of gout [\[R\]](#), [\[R\]](#)
- Uric acid levels [\[R\]](#)

Magnesium aids in the dissolution of uric acid crystals. It also exhibits anti-inflammatory properties that can help alleviate gout symptoms.

Please note: *There is no evidence from controlled clinical trials to support this recommendation. It is included based on uncontrolled clinical trials, animal or cell studies, or non-scientific criteria. Please take this recommendation with a grain of salt until more research is available.*

19



Avoid Sugary Foods At Night

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Stop consuming foods and drinks high in sugar at least 3 hours before your bedtime. This includes desserts, soda, and sweetened beverages. Stick to this habit nightly for an ongoing basis to notice improvements in sleep quality and overall health.

Description

Avoiding sugary foods at night can promote better sleep quality and prevent potential sleep disturbances caused by blood sugar fluctuations.

How it helps

Sugary foods, especially those containing high fructose corn syrup, can increase uric acid levels. Limiting these can help manage gout.

20



Whole Grains

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Incorporate at least three servings of whole grains into your daily diet. This can include consuming foods such as whole grain bread, brown rice, whole grain pasta, and oats. Aim to replace refined grains with whole grains at each meal for optimal benefits.

Description

Whole grains encompass a variety of grains like wheat, oats, and quinoa, where the entire grain kernel is intact. They are rich in fiber, vitamins, minerals, and antioxidants, supporting heart health and reducing the risk of chronic diseases.

Unlike refined grains, whole grains contain nutritious parts of the grain like bran and germ.

Whole grains provide many crucial nutrients, including:

- Fiber
- B-vitamins
- Iron
- Magnesium
- Phosphorus

Due to their high fiber content, whole grains don't tend to spike blood sugar like refined grains do.

How it helps

Whole grains may lower the risk of gout attacks due to their lower glycemic index and purine content compared to refined grains.

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.

	ALT	26 IU/L		9 Nov 2025
	WBC	6.92 x10 ³ /mm ³		9 Nov 2025
	SHBG	39.3 nmol/L		9 Nov 2025
	Uric Acid	4.4 mg/dL		9 Nov 2025
	Magnesium	2.17 mg/dL		9 Nov 2025
	Triglycerides	54 mg/dL		9 Nov 2025
	Creatinine	1.08 mg/dL		9 Nov 2025
	Insulin, Fasting	9.08 uU/mL		9 Nov 2025
	Testosterone, Total	1500 ng/dL		9 Nov 2025



Iron

228 mcg/dL



9 Nov 2025