SelfDecode™

Magnesium

DNA Health Report

REPORT CATEGORIES

BONE HEALTH

NUTRITION

Sample Client

Report date: 15 January 2026

Powered by omicsedge

Table of Contents

Personal information

NAME

Sample Client

SEX AT BIRTH

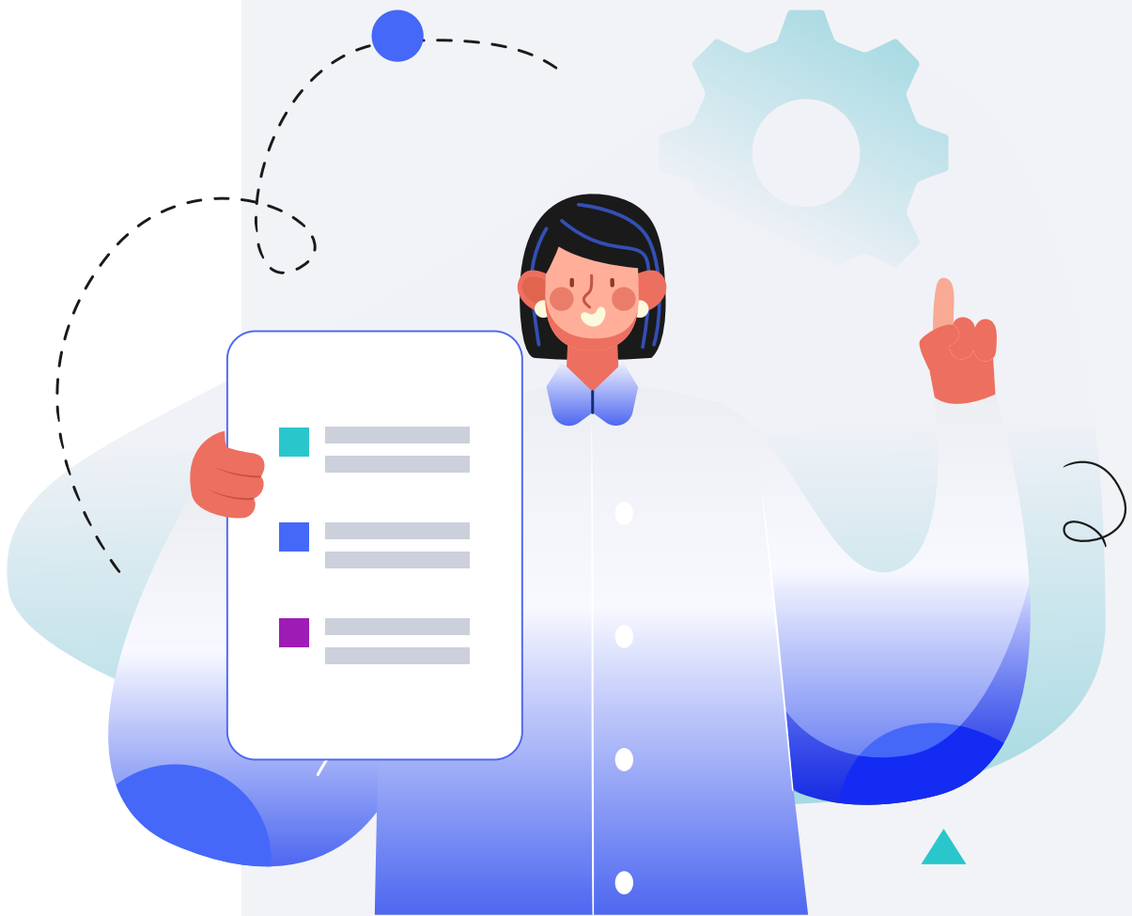
Male

HEIGHT

5ft 5" 165cm

WEIGHT

137lb 62kg

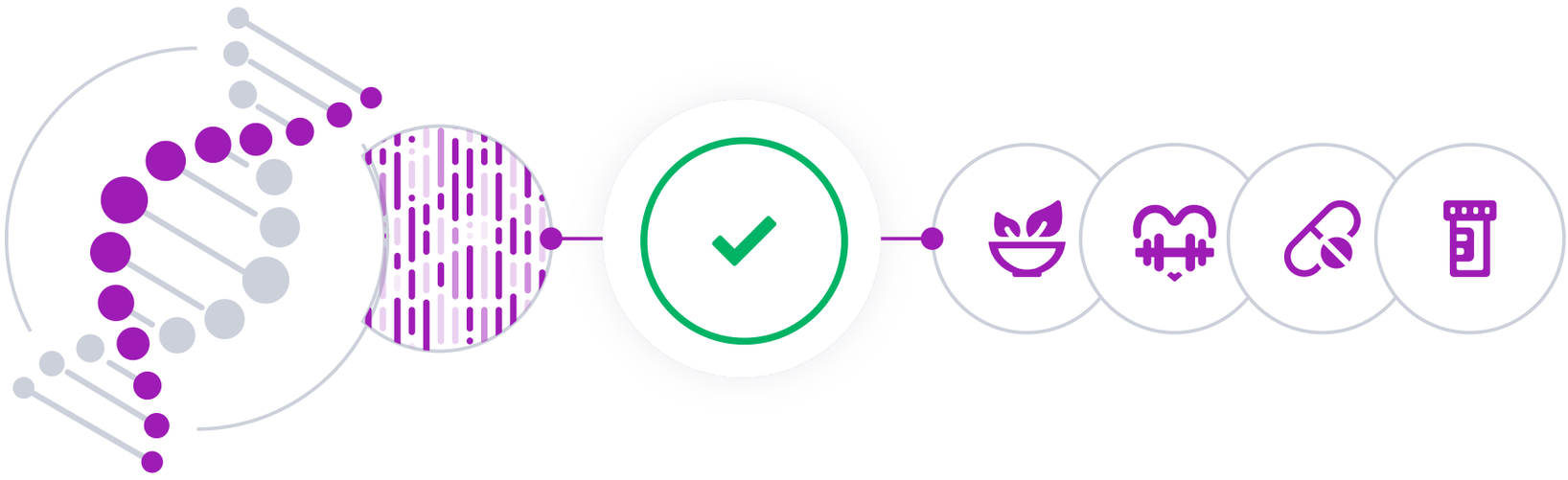


DISCLAIMER

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

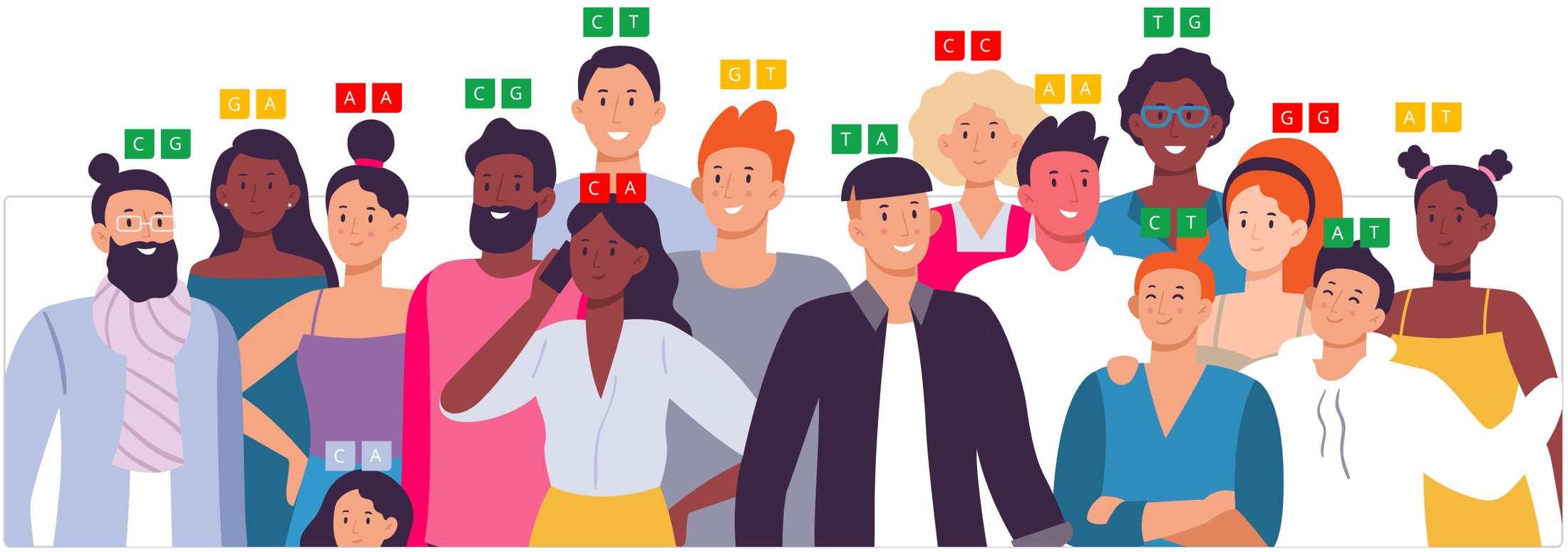
Our Wellness Reports analyze how your DNA influences your health.
We then use this analysis to give you personalized risk estimates and recommendations.



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.

When we give a risk score, the risk icon tells you if you are at a higher or lower risk compared to other people:

In total, we analyze up to 83 million genetic variants.

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, afew 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

Magnesium is a mineral. Your body needs it for [R, R, R]:

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

Men need at least 420 mg and women 320 mg of magnesium per day [R, R].

Foods rich in magnesium include [R]:

- Leafy greens (spinach)
- Nuts (almonds, cashews, peanuts)
- Seeds (pumpkin and chia seeds)

Magnesium is also available as a supplement [R].

Genetics of Magnesium Need

PERSONALIZED TO GENES

Based on the genetic variants we looked at, you may have a typical need for magnesium.

Try to aim for the recommended daily amount of magnesium. For most adults, that's **420 mg** of magnesium per day [R].

Some people may have higher magnesium levels than others. This may be partly due to genetics. Genes involved may influence:

- Magnesium transport in and out of cells [R, R, R, R]
- Magnesium metabolism [R, R]

Genetically higher magnesium levels may be causally associated with:

- Stroke [R]
- Bone health [R]
- Gout [R, R]
- Uric acid [R]
- Cataracts. [R]
- Mood Swings [R]
- Joint Inflammation [R]
- Atrial fibrillation [R]
- Heart Health [R]

TYPICAL NEED

Likely typical need for magnesium based on 31 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
TRPM6	rs11144134	TT
MTMR7	rs3764796	TT
CSTA	rs1801725	GG
FGFR2	rs1219515	GG
RTL1	rs915364	CC
PAPSS2	rs1969821	GG
VIPR1	rs11718502	TC
THBS3	rs4072037	TC
PAPSS2	rs791888	GG
RALGDS	rs7032317	CT
CDKL2	rs6838240	CT
ALPK1	rs2074379	AG
C8ORF48	rs10888073	CT
CANT1	rs11891	GA
THBS3	rs4971100	AG
BORCS7	rs3740393	GC
CDKL2	rs6852678	TC
TRPM6	rs113607577	GG
HDHD2	rs117060920	GG
MPPED2	rs3925584	CC
SHROOM3	rs13146355	GG
SHROOM3	rs9993810	GA
MECOM	rs448378	GA
TRPM6	rs2274924	TT
ASAP1	rs72728275	AA
CAMK1D	rs2648708	CC
FGFR2	rs3135758	CC
CCDC136	rs1472147	TT
METTL21C	rs603894	CC
PHACTR2	rs2073214	CC
DLK1	rs4905994	CC
OR5BS1P	rs193153567	CC

GENE	SNP	GENOTYPE
PRMT7	rs7197653	GG
ATP2B1	rs7965584	AA

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
1	Chicory	
2	Pumpkin Seeds	
3	Collard Greens	
4	Spinach	
5	Magnesium	250 mg
6	Brown rice	
7	Cashews	
8	Avocado	
9	Edamame	
10	Oats	
11	Swiss Chard	
12	Potatoes	
13	Whole Grains	
14	Tofu	
15	Chia Seeds	
16	Quinoa	
17	Black beans	
18	Sunflower Seeds	
19	Almonds	
20	Boron	3 mg
21	Melon	

1 Chicory

IMPACT 2 / 5

EVIDENCE 2 / 5

Description

Chicory is a nutrient-rich vegetable that has been shown to have a number of health benefits. It is a good source of fiber, vitamin K, and antioxidants. Chicory may also help to improve digestion, lower blood sugar levels, and boost the immune system.

How it helps

A study on 15 postmenopausal women tested the effect of chicory-derived SYN1 on calcium and magnesium absorption, as well as bone turnover markers. SYN1 supplementation for 6 weeks increased mineral absorption and influenced bone turnover, especially in women with lower spine bone mineral density [R].

2 Pumpkin Seeds

IMPACT 2 / 5

EVIDENCE 1 / 5

How to implement

Incorporate a handful of pumpkin seeds (about 28 grams) into your diet daily. You can add them to your breakfast cereal, sprinkle them over a salad, blend them into smoothie bowls, or simply eat them as a snack. This practice can be continued indefinitely as part of a healthy dietary pattern.

Description

Pumpkin seeds, also known as pepitas, are the edible seeds of the pumpkin.They are rich in protein, antioxidants, iron, zinc, magnesium, manganese, and phosphorus. The compounds in pumpkin seeds may benefit heart health and immune function.

Pumpkin seeds are rich in arginine, protein, antioxidants, iron, zinc, magnesium, manganese, and phosphorus. Pumpkin seeds contain 54.18 mg of arginine per gram.

How it helps

Pumpkin seeds are packed with magnesium, which is essential for more than 300 biochemical reactions in the body like maintaining normal heart rhythm and nerve function. Eating pumpkin seeds can therefore significantly improve your magnesium levels and prevent potential deficiencies which may negatively influence these reactions.

3

Collard Greens

IMPACT 2 / 5

EVIDENCE 1 / 5

How to implement

Incorporate at least one cup of cooked or two cups of raw collard greens into your diet 3-4 times a week. Wash the greens thoroughly before use to remove any dirt or pesticides.

Description

Collard greens are a nutritious leafy vegetable rich in vitamins, minerals, and antioxidants. They are known for their potential to support bone health, provide essential nutrients, and contribute to a balanced diet.

Collard greens contain vitamins K, A, and C, as well as decent amounts of calcium and folate. A 1-cup (cooked) serving provides 836 mcg of vitamin K or 697%DV.

How it helps

Collard greens are a great source of magnesium which helps to maintain nerve and muscle function, supports a healthy immune system, and stabilizes heart rhythm. Higher magnesium intake can help prevent conditions like osteoporosis and high blood pressure.

4

Spinach

IMPACT 2 / 5

EVIDENCE 1 / 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 rich in magnesium, a mineral necessary for energy production and maintaining normal heart rhythm. Regular consumption can help prevent magnesium deficiency, reducing risks of fatigue, muscle cramps, and heart disorders.

5

Magnesium

IMPACT 1 / 5

EVIDENCE 1 / 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

Magnesium supplements promote optimal muscle and nerve function, maintain a steady heartbeat, keep your bones strong, and support the immune system. If you're deficient in Magnesium, taking supplements can prevent potential health complications like irregular heartbeat, muscle cramps, and weak immunity.

6

Brown rice

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Replace white rice with brown rice in your meals. Aim to consume brown rice 3-4 times a week, incorporating it into dishes such as stir-fries, salads, or as a side to your main protein source. Start with a serving size of about 1/2 to 1 cup of cooked brown rice per meal.

Description

Brown rice is a whole grain rich in fiber, vitamins, and minerals. It provides sustained energy, supports digestive health, and contributes to overall nutritional well-being.

Brown rice contains a host of B-vitamins including thiamine, and minerals like magnesium, phosphorus, manganese, and selenium. A ½ cup serving provides 0.1 mg of thiamine or 8%DV.

How it helps

Brown rice is rich in magnesium, a mineral crucial for many bodily functions including nerve function and blood sugar regulation. A diet including brown rice can help maintain adequate magnesium levels, reducing the risk of deficiency-related health issues.

7

Cashews

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Incorporate a handful of cashews (about 1 to 2 ounces) into your daily diet. You can eat them as a snack, or add them to meals like salads, stir-fries, or oatmeal for added texture and nutritional benefits.

Description

Cashews are a nutrient-rich nut known for their healthy fats, vitamins, and minerals. They are a versatile snack option that can support heart health, provide energy, and contribute to overall well-being.

Cashews are actually seeds and a rich source of omega-6s, and minerals including magnesium, manganese, zinc, iron, and selenium. A 1-ounces serving provides 2300 mg of omega-6.

How it helps

Cashews are a natural source of magnesium, a crucial nutrient your body needs to maintain healthy bones, nerves, and muscle function. Regular consumption can help prevent magnesium deficiency and associated health problems.

8

Avocado

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Incorporate half to one whole avocado into your daily diet. You can add it to salads, sandwiches, or use it as a healthy fat substitute for spreads or dressings.

Description

Avocado is a nutrient-dense fruit known for its creamy texture and healthy monounsaturated fats. It is packed with vitamins, minerals, and dietary fiber, and may support heart health, skin health, and overall nutrition.

Avocado is a fruit first cultivated in Mexico in 500 BCE [R, R].

You can eat it raw in salads, sandwiches, and dips. Avocado oil has recently become popular, but it's much less nutritious than the whole fruit.

Avocado is rich in antioxidants, vitamins, minerals, and fiber. It may support [R]:

- Heart health
- Healthy weight
- Healthy aging

How it helps

Avocado is a nutrient-dense fruit with healthy fats and magnesium, necessary for many biochemical reactions in the body.

9

Edamame

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Incorporate shelled or whole edamame into your diet by boiling, steaming, or pan-frying them for about 5 to 10 minutes until tender. Eat them as a snack, add to salads, or include in main dishes. Aim for a serving size of about 1 cup (155 grams) a few times a week to benefit from their nutritional value.

Description

Edamame, young soybeans, is a nutritious snack rich in protein, fiber, and essential nutrients like folate and vitamin K. Including edamame in your diet can help promote heart health, bone health, and overall nutritional balance.

Edamame is a good source of vitamin K, protein, fiber, and minerals like magnesium, iron, potassium, and folate. A ½ cup serving provides 21 mcg of vitamin K or 18%DV.

How it helps

Edamame is rich in magnesium, a mineral important for bone structure and heart rhythm. By incorporating edamame into your diet, you can help your body maintain adequate magnesium levels and prevent deficiency-related issues.

10

Oats

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Incorporate oats into your diet daily by having them for breakfast as oatmeal, or adding them to smoothies, baking recipes, or overnight oats. Aim for at least a half-cup (40 grams) of dry oats to reap the health benefits.

Description

Oats are a whole grain known for their high fiber content and nutritional value, like zinc, iron, and manganese. Including oats in one's diet can promote heart health, stabilize blood sugar levels, and provide sustained energy.

Oats are a good source for manganese, zinc, iron, magnesium, and vitamins B1 and B5. A ½ cup serving provides 0.7 mg of manganese or 30%DV.

How it helps

Eating oats can help with magnesium deficiency as they are a rich source of magnesium. Regular consumption of oats can help replenish your body's magnesium levels, which is essential for nerve function, bone health, and regulation of muscle contractions and blood sugar levels.

11

Swiss Chard

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Incorporate Swiss chard into your diet by adding it to salads, sautéing it with olive oil and garlic for a side dish, or mixing it into soups and stews. Aim to eat Swiss chard 2-3 times per week to benefit from its nutrients.

Description

Swiss chard is a leafy green vegetable rich in vitamins K, A, and C, as well as minerals like potassium and magnesium. It supports bone health, immunity, and overall nutrition.

How it helps

Swiss Chard is high in magnesium, a nutrient your body needs for energy production, muscle movements, and regulating nerve functions. Regular intake can help alleviate magnesium deficiency symptoms such as fatigue, muscle weakness, and irregular heartbeat.

12

Potatoes

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Incorporate potatoes into your diet 2-3 times per week, either baked, boiled, or steamed, avoiding deep-frying to minimize unhealthy fats. Aim for portion sizes of about a half to a whole medium-sized potato per serving.

Description

Potatoes are a starchy root vegetable rich in carbohydrates, molybdenum, iron, fiber, vitamin C, manganese and potassium. They provide sustained energy, and promote digestive regularity.

Potatoes are a good source for choline, as well as vitamins and minerals (mostly in the skin), including iron, vitamins C and B6, potassium, manganese, and niacin. One medium potato provides 57 mcg of choline or 10%DV.

How it helps

Potatoes are a rich source of magnesium, which contributes to nerve function, muscle control, and blood pressure regulation. Regular intake can help ensure adequate magnesium levels, reducing the risk of deficiency-related problems.

13

Whole Grains

IMPACT 1 / 5

EVIDENCE 1 / 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 like brown rice and whole wheat bread are enriched with magnesium, benefiting heart and bone health.

14

Tofu

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Incorporate tofu into your meals 2-3 times per week, replacing meat in dishes such as stir-fries, salads, and sandwiches. Aim for servings of about 3.5 to 4 ounces (100 to 113 grams) each time.

Description

Tofu, also known as bean curd, is a popular plant-based protein source made from soybeans. It is rich in protein, iron, calcium, and various vitamins, making it a versatile and nutritious addition to vegetarian and vegan diets.

Tofu is a high-protein soybean product with plenty of iron, copper, calcium, vitamin A, and a host of other nutrients. A ½ cup serving provides 476 mcg of copper or 53%DV.

How it helps

Tofu is a plant-based protein that provides a good amount of magnesium, which is critical for many bodily functions.

15

Chia Seeds

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Incorporate 1 to 2 tablespoons of chia seeds into your daily diet. You can add them to yogurt, smoothies, oatmeal, or salads. Do this regularly as part of your daily meals.

Description

Chia seeds are high in fiber, omega-3 fatty acids, and various vitamins and minerals. Adding chia seeds to your diet can support digestive health, provide essential nutrients, and contribute to overall nutritional wellness.

Chia seeds are a healthy source of omega-3s, calcium, as well as fiber, iron, magnesium phosphorus, and vitamins B1 and B3. A 1-ounce serving provides 5.06 g of ALA.

How it helps

Chia seeds are packed with magnesium, a nutrient that aids in nerve and muscle function, bone strength, and maintaining a healthy immune system. Consistently incorporating chia seeds into your diet can help prevent magnesium deficiency.

16

Quinoa

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Incorporate quinoa into your diet by replacing rice or pasta with it in meals. Aim for 1-2 servings, which is about 1/2 to 1 cup cooked, 2-3 times a week to benefit from its high protein, fiber, and mineral content.

Description

Quinoa is a nutrient-rich, gluten-free grain-like seed originating from South America. It is packed with protein, fiber, B-vitamins, vitamins A, C, and E, as well as minerals like calcium phosphorus, iron, and zinc, making it a valuable addition to diets for promoting muscle health, aiding digestion, and providing essential nutrients.

Quinoa (*Chenopodium quinoa Willd*) is a flowering plant native to The Andes in South America. There, it is a **food staple for indigenous cultures** [R, R, R].

Quinoa is famous for its seeds, which are **gluten-free and high in protein**. In comparison with many grains, quinoa seeds have a greater amount of many nutrients, including [R, R]:

- Fiber
- Fatty acids (e.g., linoleic and α-linolenic acid)
- Vitamins (e.g., B1, B2, B6, C, and E)
- Minerals (e.g., calcium, phosphorus, iron, and zinc)

Quinoa seeds can be used whole or ground to a fine powder and shaped into flakes before use [R].

How it helps

Quinoa is a nutrient-rich grain that provides magnesium, contributing to cardiovascular and bone health.

17

Black beans

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Incorporate one cup of cooked black beans into your daily diet. You can add them to salads, soups, or wraps to easily increase your fiber and protein intake.

Description

Black beans are a nutritious legume rich in fiber, protein, and essential vitamins and minerals. Incorporating black beans into your diet can support digestive health, provide sustained energy, and contribute to overall nutritional wellness.

Black beans are high in fiber, protein, B-vitamins like thiamine, and minerals like magnesium, manganese, copper, and iron. A ½ cup serving provides 0.4 mg of thiamine or 33%DV.

How it helps

Black beans are rich in magnesium, a mineral that is crucial for nerve function, blood sugar control, and blood pressure regulation. Regular consumption of black beans can help meet your body's magnesium needs, reducing the risk of related deficiencies.

18

Sunflower Seeds

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Incorporate a small handful of sunflower seeds (about 1 ounce or 28 grams) into your daily diet. You can eat them alone as a snack, sprinkle them on salads, or add them to homemade bread or muffins. Ensure they are unsalted to keep your sodium intake in check.

Description

Sunflower seeds are nutrient-dense plant-based snacks high in protein, healthy fats, fiber, and essential minerals like magnesium and selenium. They are associated with promoting heart health, supporting digestion, and providing energy.

Sunflower seeds are a great source of biotin, protein and antioxidants, minerals like zinc and selenium, and vitamins E and B6. A ¼ cup serving provides 2.6 mcg of biotin or 9%DV.

How it helps

Sunflower seeds are a magnesium-rich snack that can contribute to maintaining normal magnesium concentrations in the body.

19

Almonds

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Incorporate a handful of almonds (about 23 kernels) into your daily diet. You can eat them as a snack, add them to your breakfast cereals or yogurt, or include them in salads and other dishes. Do this consistently for ongoing health benefits.

Description

Almonds are a good source of omega-6s, protein and vitamins, making for a great snack food. A 1-ounce serving provides 3700 mg of omega-6.

Almonds are nutritious tree nuts that originate from the Prunus dulcis tree. They are packed with essential nutrients, including healthy fats, fiber, vitamin E, and magnesium, which collectively contribute to heart health, support weight management, and may help regulate blood sugar levels.

How it helps

Almonds are rich in magnesium, a nutrient necessary for various bodily functions, including muscle and nerve function, regulating blood sugar levels, and making protein, bone, and DNA. Regularly consuming almonds can increase your magnesium intake, potentially preventing deficiencies and associated health issues.

20

Boron

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Take a boron supplement of 3 to 6 mg daily, with food to enhance absorption. This dosage range is commonly recommended for general health benefits, based on nutritional studies. It's advisable to continue this regimen daily for an extended period, as long-term benefits depend on consistent supplementation.

TYPICAL STARTING DOSE

3 mg

Description

Boron is a trace mineral that plays a role in bone health, cognitive function, and hormone regulation.

Boron is a mineral in many foods, including:

- Fruits and fruit juices
- Avocados
- Potatoes
- Legumes
- Drinks (coffee, milk, cider, wine, and beer)

Scientists aren’t sure if boron has any roles in the body, so they don’t consider it an essential nutrient.

Some people take boron supplements to balance hormone levels, increase athletic performance, and more. However, the evidence to support these uses is weak.

How it helps

Boron aids in the metabolism of minerals like magnesium, enhancing its absorption and utilization in the body. Therefore, a supplement of Boron might indirectly benefit those with conditions related to magnesium deficiency by promoting better use of magnesium.

In a placebo-controlled trial of 28 college-aged women, supplementation with boron (3 mg/day) **increased serum magnesium but lowered serum phosphorus. Exercise training decreased the effects of boron on phosphorus and magnesium** [R, R].

21

Melon

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Incorporate 1-2 cups of fresh melon, such as cantaloupe or watermelon, into your daily diet. This can be consumed as part of a meal, snack, or a refreshing smoothie.

Description

Melon is a hydrating and nutrient-rich fruit that provides essential vitamins, minerals, and antioxidants. Its consumption can promote skin health, aid in digestion, and support overall hydration and well-being.

How it helps

Melon, especially cantaloupe, is high in magnesium, a mineral that plays a critical role in over 600 bodily functions, including maintaining nerve and muscle function, and regulating blood sugar levels. Therefore, consuming melon can potentially improve symptoms of magnesium deficiency, such as muscle weakness and cramps, by boosting your dietary intake of this mineral.

In a randomized, double-blind, placebo-controlled trial with 38 healthy subjects, melon concentrate and regular standardized physical training **decreased oxidative stress and CRP** plasma levels. It also **increased magnesium plasma levels**. The melon concentrate may allow a better adaptation to effort linked to PGC-1α activation: a regulator of energy metabolism. Its antioxidant properties and ability to mobilize magnesium may induce a better resistance to fatigue and recovery during regular physical activity [R].

Please note: Melon allergy is rare. However, *some people may have an allergic reaction after eating melon, especially if they suffer from allergic rhinitis and/or asthma* [R].

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.