

Omega-3

DNA Health Report

REPORT CATEGORY —



Sample Client

Report date: 15 January 2026



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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

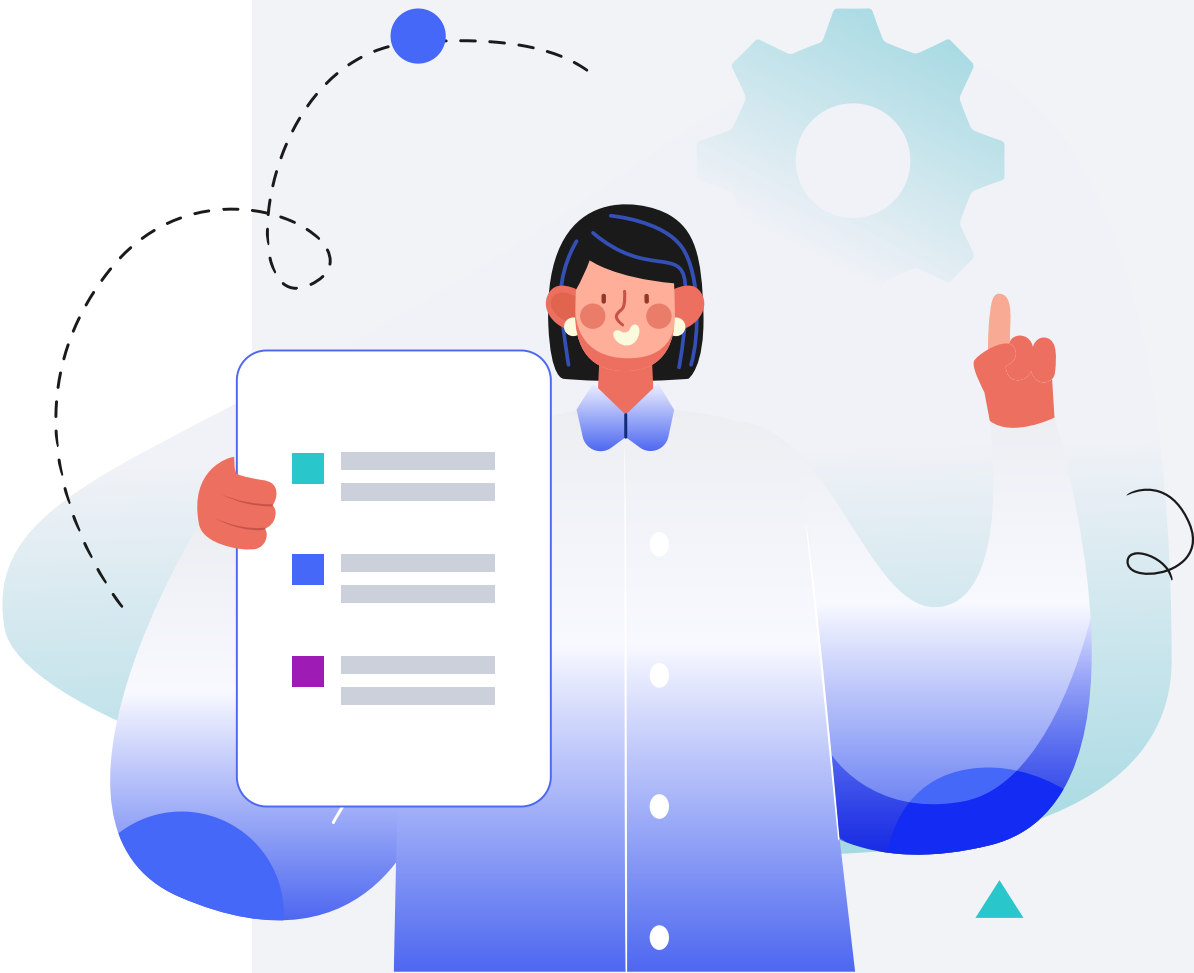
Male

HEIGHT

5ft 5" 165cm

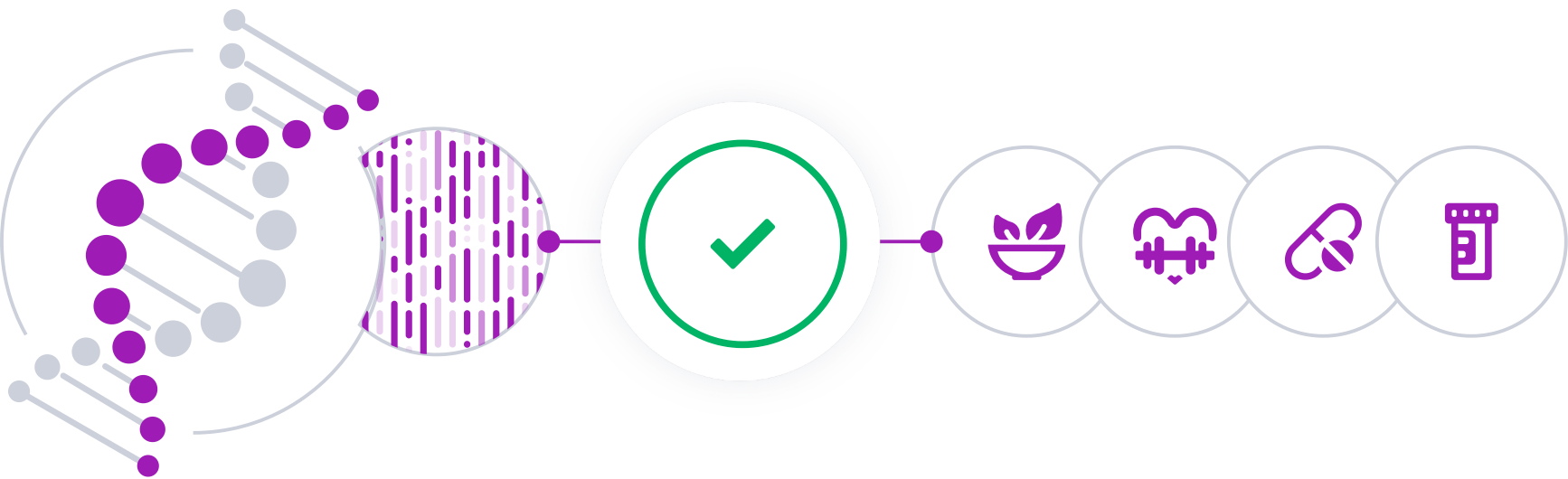
WEIGHT

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.

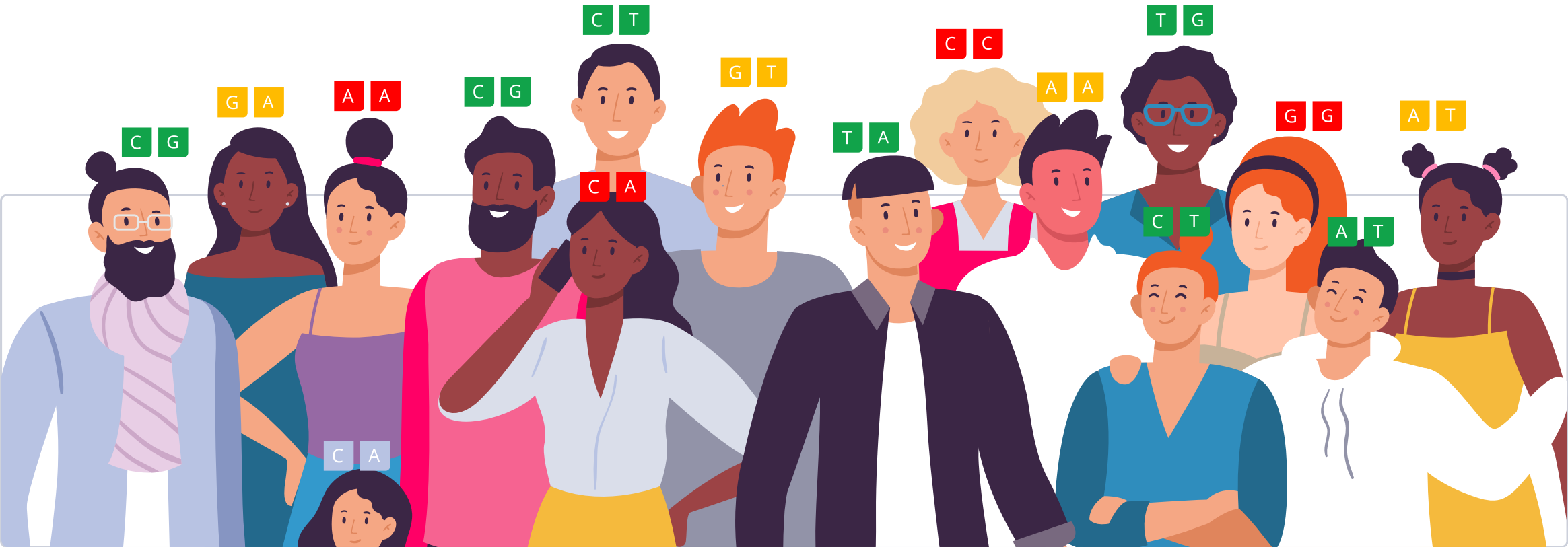


Similarly, our Trait Reports look at how your DNA influences your traits.



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

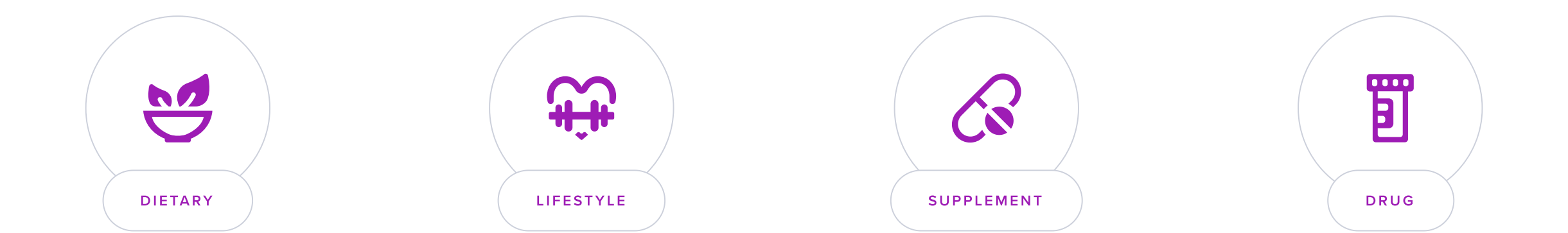
You have 2 risk alleles

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

[Omega-3 fatty acids](#) are some of the healthiest fats we can eat. They help lower inflammation and protect the heart, brain, and eyes [\[R\]](#), [\[R\]](#).

There are three major types of omega-3s [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Alpha-linolenic acid (ALA)
- Eicosapentaenoic acid (EPA)
- Docosahexaenoic acid (DHA)

Our bodies produce less omega-3s than we need for optimal health, so it's important to get enough from food [\[R\]](#).

ALA is found in [\[R\]](#):

- Plant oils (e.g., flaxseed, soybean, and canola oil)
- Chia seeds
- Walnuts

Women should get 1.1 g of ALA per day, while men should get 1.6 g per day. About half a tablespoon of flaxseed or half an ounce of walnuts can provide the adequate daily intake of ALA [\[R\]](#).

EPA and DHA are found in fatty fish like [\[R\]](#):

- Salmon
- Tuna
- Herring
- Sardines

For optimal health, try to get at least **two servings of fatty fish per week** [\[R\]](#).

For those who aren’t able to get enough omega-3s from food, omega-3 supplements are available [\[R\]](#).

Talk to your doctor before taking omega-3 supplements. Omega-3 supplements can interact with blood thinners (like aspirin, Plavix, and Coumadin) [\[R\]](#).

Genetics of Omega-3s Needs

 PERSONALIZED TO GENES

Based on the genetic variants we looked at, you likely have a typical need for omega-3s.

Make sure to get enough omega-3s from fish, flaxseed, walnuts, and other sources.

Some people may have lower blood levels of omega-3s than others. This means that they may have an increased need for omega-3s [\[R, R, R, R, R, R\]](#).

This may be partly due to genetics. Genes involved may influence omega-3 metabolism [\[R, R, R, R, R, R\]](#).



TYPICAL NEED

Likely typical need for omega-3s based on 54 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
/	rs11235247	GG
TNFSF10	rs11914753	CC
FADS2	rs174579	CC
TMEM258	rs174532	GG
NOS3	rs1799983	TT
MACROD2	rs12481689	AA
KCNK17	rs6921231	AA
/	rs6553050	TT
MAP7	rs13191834	TT
ANKS1A	rs3800433	GG
WSB1	rs17703271	TT
COL11A1	rs11164689	GT
PIK3C2A	rs7949405	AA
/	rs2129588	CC
ADRA1A	rs558455	GG
TMEM258	rs108499	TC
SNX17	rs4665972	CC
TSPAN31	rs2277324	AG
PRR11	rs2291193	GA
SYCP2L	rs953413	AG
MYOM1	rs949306	AG
WDR70	rs7736605	GG
CITED2	rs10499212	GG
FADS2	rs174583	CC
FADS2	rs174577	CC
FADS2	rs174576	CC
FADS2	rs174550	TT
FADS2	rs174547	TT
FADS2	rs174546	CC
TMEM258	rs174538	GG
TMEM258	rs174537	GG
TMEM258	rs174535	TT

GENE	SNP	GENOTYPE
AHI1	rs2092556	TT
FADS1	rs2727270	CC
AHI1	rs4896151	CC
AHI1	rs1547079	TT
G2E3	rs7149414	GG
FADS2	rs1535	AA
TMEM258	rs102275	TT
MAU2	rs10401969	TT
TMEM132D	rs265603	TG
FADS1	rs99780	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	Krill Oil	1 g	2	Omega-3 (Fish Oil)	2000 mg
3	Herring		4	Canola Oil	
5	Mackerel		6	Cod Liver Oil	
7	Hemp Seed Oil		8	Salmon	
9	Chia Seeds		10	Sardines	
11	Flaxseed	2 tbsp	12	Alpha-Linolenic Acid (ALA)	
13	Trout		14	English walnuts	

1



Krill Oil

IMPACT

4 / 5

EVIDENCE

3 / 5

How to implement

Take 1 to 3 grams of krill oil daily as a dietary supplement, preferably with a meal to enhance absorption. It's often available in soft gel form, making it easy to swallow. Continue this regimen consistently for best results, typically reviewing its effectiveness and any need for adjustments with a healthcare provider after a few months.

TYPICAL STARTING DOSE

1 g

Description

Krill oil is a source of omega-3 fatty acids, primarily in the form of phospholipids. It can promote cardiovascular health, joint comfort, and may have anti-inflammatory properties.

How it helps

In 10 placebo-controlled trials of 551 participants, supplementation with krill oil (0.3-4 g/day omega-3) for 2-12 weeks increased serum omega-3 (by 118.5-178.4 ug/mL or 1.15%), omega-3:omega-6 index, and the levels of EPA (by 214%), and DHA (by 36%) at least as effectively as fish oil. Krill oil high in phospholipids was most effective [\[R, R, R, R, R, R, R, R, R, R\]](#).

In 3 non-placebo-controlled trials of 83 healthy volunteers, a single dose of phospholipid krill oil (1680-4000 mg EPA+DHA) was more effective than fish oil, krill meal, or ethyl esters at incorporating EPA and DHA into plasma phospholipids. Similarly, a high-fat breakfast supplemented with krill oil (5 g, containing 907 mg omega-3s) caused the same postprandial increase in plasma EPA as fish oil with higher omega-3 content (1441 mg) in a placebo-controlled trial of 10 women [\[R, R, R, R\]](#).

Krill oil is rich in the omega-3 fatty EPA and DHA.

2



Omega-3 (Fish Oil)

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take 1-2 g of omega-3 (fish oil) supplement daily, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

2000 mg

Description

Omega-3 fatty acids are essential fats found in fatty fish like salmon, flaxseeds, and walnuts. They are known for their potential cardiovascular and brain health benefits, including reducing the risk of heart disease and supporting cognitive function.

[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 [\[R\]](#), [\[R\]](#).

Fatty fish are rich in EPA and DHA. They include [\[R\]](#):

- Salmon
- Tuna
- Herring
- Sardines

For optimal protection, 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](#) 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 [\[R\]](#), [\[R\]](#), [\[R\]](#).

Your need for omega-3s partly depends on genetics. Some people should take special care to get enough omega-3s due to higher genetic needs.

3



Herring

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate herring into your diet 2-3 times per week, aiming for a serving size of about 3.5 ounces (100 grams) each time. You can enjoy it grilled, baked, or as part of salads and sandwiches.

Description

Herring is a fatty fish rich in omega-3 fatty acids, protein, and essential vitamins and minerals. Consuming herring as part of a balanced diet can support heart health, brain function, and overall well-being.

Herring is a great source of omega-3 fatty acids, antioxidants, vitamins A, D, and B12, and protein. A 3-ounce serving provides 0.94 g of DHA and 0.77 g of EPA.

How it helps

Eating herring, a fish high in Omega-3 fatty acids, helps enhance heart health by reducing inflammation and lowering blood pressure. It can also boost brain function, reducing the risk of Omega-3 deficiency disorders like depression and ADHD.

4



Canola Oil

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate canola oil into your diet as a cooking oil or a salad dressing base. Use it in place of other fats such as butter or margarine when baking, frying, or preparing meals to help lower bad cholesterol levels. Aim for using canola oil in 1-2 meals per day, everyday, for consistent dietary benefits.

Description

Canola oil is a heart-healthy cooking oil rich in unsaturated fats and low in saturated fats. Incorporating canola oil into your diet can help lower cholesterol levels and reduce the risk of cardiovascular disease.

How it helps

Canola oil contains a fair amount of the omega-3 ALA, which can contribute to a heart-healthy diet.

5



Mackerel

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate mackerel into your diet 2-3 times per week, preferably choosing baked or grilled preparation methods to preserve its nutritional quality.

Description

Mackerel is a fatty fish high in omega-3 fatty acids, which are known for their anti-inflammatory properties and potential cardiovascular benefits. Regular consumption of mackerel can support heart health and provide essential nutrients like vitamin D and selenium.

Mackerel is a good source of omega-3s along with histidine, vitamins D and B12, protein, selenium, phosphorus, and magnesium. Mackerel contains 11.37 mg of histidine per gram.

How it helps

Eating mackerel, rich in Omega-3 fatty acids, enhances brain and heart health, reducing the risk of developing several diseases. Regular consumption balances the lack of Omega-3 in the body and prevents related conditions.

6



Cod Liver Oil

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 1-2 teaspoons of cod liver oil daily with a meal. It's best to incorporate it into your routine with breakfast or dinner to help with absorption and to minimize any potential fishy aftertaste or reflux.

Description

Cod liver oil is a supplement derived from cod liver and is a source of omega-3 fatty acids and vitamin D. It can help maintain healthy bones, support immune function, and promote cardiovascular health when used as a dietary supplement.

Cod liver oil is high in vitamin D and A as well as a lot of omega-3 fatty acids and health fats. A single tablespoon provides 34 mcg of vitamin D or 170%DV.

How it helps

Cod liver oil is a rich source of omega-3 fatty acids, known for supporting cardiovascular health and reducing inflammation.

7



Hemp Seed Oil

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate hemp seed oil into your diet by adding 1-2 tablespoons to salads, smoothies, or yogurt daily. Ensure the oil is cold-pressed and unrefined for maximum health benefits. This can be a regular part of your diet indefinitely.

Description

Hemp seed oil is derived from hemp seeds and is known for its nutritional value, including a balanced ratio of omega-3 and omega-6 fatty acids. It may support skin health, reduce inflammation, and provide a source of essential nutrients.

Hemp seed oil contains vitamin E, magnesium, calcium, sulfur, phosphorus, iron, and zinc. Hemp oil contains about 30 mg of GLA per gram.

How it helps

Hemp seed oil contains omega-3 fatty acids which can contribute to the reduction of inflammation in the body.

8



Salmon

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate at least two servings of salmon into your weekly diet, aiming for each serving to be about 3.5 ounces (100 grams), cooked. Choose wild-caught salmon when possible for higher omega-3 content.

Description

Salmon is a nutrient-rich fish known for its high content of omega-3 fatty acids, which can support heart health and reduce inflammation. It's also an excellent source of protein, vitamin D, and various minerals.

How it helps

Eating salmon regularly can boost your omega-3 fatty acid intake. Adequate omega-3 helps prevent conditions like heart disease.

9



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 an excellent source of omega-3 fatty acids, which are essential for brain health. Incorporating chia seeds into your diet can therefore help ensure you get enough omega-3, potentially preventing deficiencies that can lead to a variety of health issues.

10



Sardines

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate two to three servings of sardines into your diet each week. You can eat them grilled, steamed, or straight from the can as part of salads, sandwiches, or as a snack. Each serving should be about 3.5 ounces (100 grams), which is roughly one can of sardines.

Description

Sardines are small, oily fish known for their rich content of omega-3 fatty acids, calcium, B12, and vitamin D. Consuming sardines can support heart health, bone strength, and provide essential nutrients, and they are typically found in coastal waters.

Sardines are a good source of iron, omega-3 fatty acids, and a host of vitamins and minerals including calcium, iron, and vitamin D. A 2-sardine serving provides 2 mg of iron or 11%DV.

How it helps

Eating sardines can increase your omega-3 intake which is essential for brain function and reducing inflammation in your body. Omega-3 also helps prevent heart disease and can decrease symptoms in conditions like rheumatoid arthritis.

11



Flaxseed

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Consume 2 tablespoons of ground flaxseed daily. You can add it to your breakfast cereal, smoothies, or salads.

TYPICAL STARTING DOSE

2 tbsp

Description

Flaxseed is a nutrient-dense food that's high in fiber and omega-3 fatty acids. It may contribute to heart health, promote digestive regularity, and help manage cholesterol levels when included in a balanced diet.

[Flaxseed](#) is a common ingredient in bakery products. Some people also use it as a health food to support digestion [\[R\]](#).

Flaxseed is rich in many compounds, including [\[R\]](#):

- Vitamins and minerals
- Protein
- Fiber
- Omega-3 fatty acids ([ALA](#))

How it helps

Flaxseed is a rich source of Omega-3 fatty acids, which are essential fats the body can't produce itself. Consuming flaxseed can help keep your body's level of Omega-3 balanced, reducing the risk of deficiency.

12



Alpha-Linolenic Acid (ALA)

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate foods high in alpha-linolenic acid (ALA) into your daily diet. This means eating about a tablespoon (14 grams) of flaxseeds or chia seeds, a quarter cup (30 grams) of walnuts, or using one tablespoon of flaxseed oil every day.

Description

Alpha-linolenic acid (ALA) is a type of omega-3 fatty acid found in plant-based sources like flaxseeds, chia seeds, and walnuts. It is essential for maintaining heart and brain health and is considered a healthy dietary fat.

How it helps

ALA is a type of omega-3 fatty acid found in plant foods that can be converted to EPA and DHA in the body.

13



Trout

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Integrate trout into your diet 2-3 times per week, either grilled, baked, or steamed, aiming for a serving size of about 3-4 ounces (85-113 grams) per meal.

Description

Trout is a type of freshwater fish known for its rich content of omega-3 fatty acids and vitamins A, D, and B12, which are beneficial for heart health and cognitive function. Including trout in one's diet can support overall cardiovascular wellness and brain health.

Trout is not only rich in vitamin D, but also vitamins A and B12, as well as full of protein and good amounts of calcium potassium, magnesium, and niacin. A 3 ounce serving has 16.2 mcg of vitamin D or 81%DV.

How it helps

Trout, being rich in Omega-3 fatty acids, helps improve cardiovascular health and brain function, which are areas often compromised by an Omega-3 deficiency. Regularly consuming trout could therefore help to prevent this deficiency and associated health problems.

14



English walnuts

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate a handful of English walnuts, approximately 1 ounce or 28 grams, into your daily diet. You can eat them as a snack, add them to salads, or use them as a topping for yogurt or cereal.

Description

English walnuts are a nutritious nut variety rich in omega-3 fatty acids, antioxidants, and vitamins. Consuming them as part of a balanced diet may support heart health, cognitive function, and overall nutritional well-being.

English Walnuts are the only nut high in ALA, and also contain vitamin B6 and E, copper, manganese, and phosphorus. A 1-ounce serving contains 2.57g of ALA. Black walnuts are also good, but only have 0.76g of ALA.

How it helps

English walnuts are rich in Omega-3 fatty acids, which are beneficial for heart health. Regular consumption can lower bad cholesterol levels, reduce inflammation, and hence, help prevent conditions related to Omega-3 deficiency.

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.