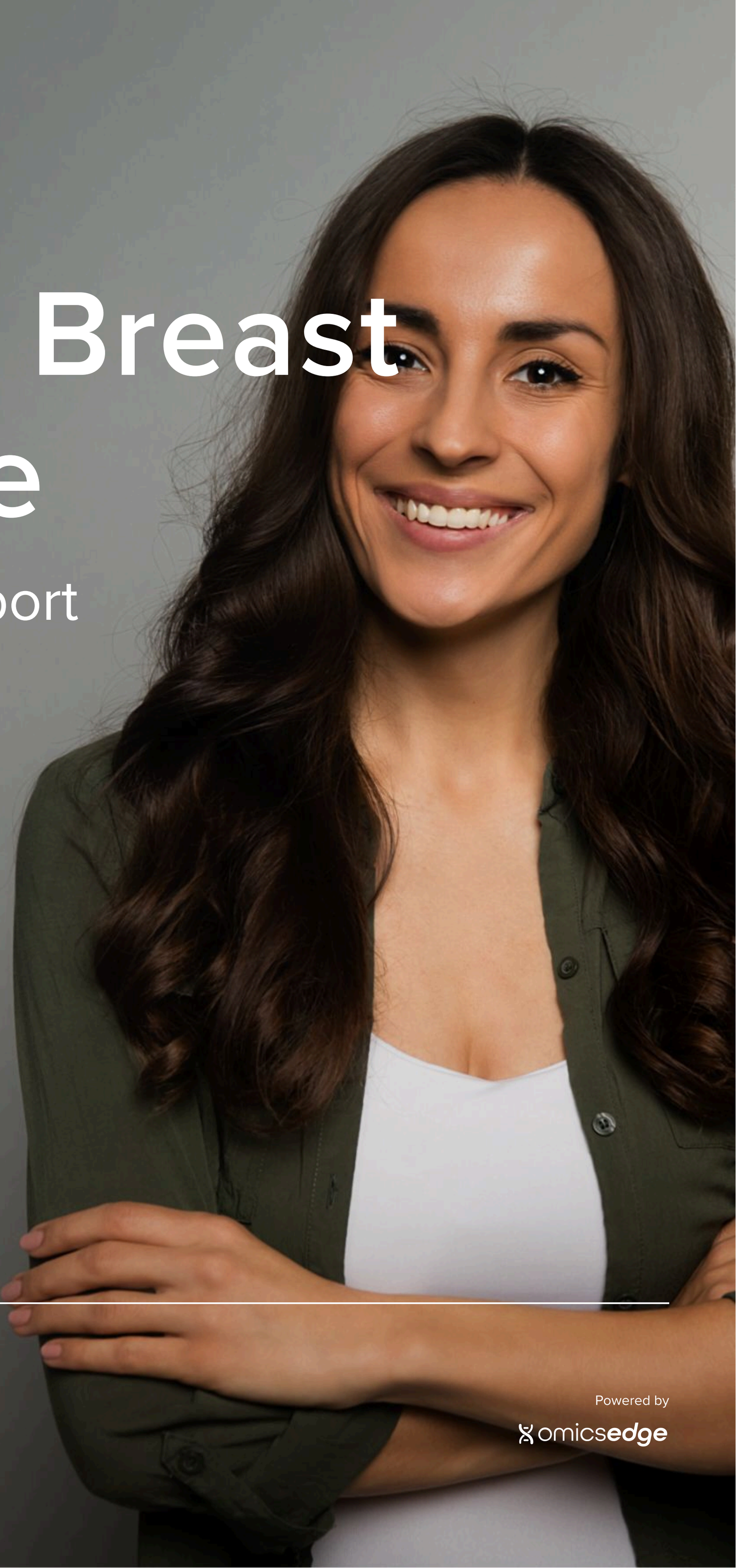
SelfDecode™

Benign Breast Disease

DNA Health Report



REPORT CATEGORY

REPRODUCTIVE HEALTH

Sample Client

Report date: 15 January 2026

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Personal information

NAME

Sample Client

SEX AT BIRTH

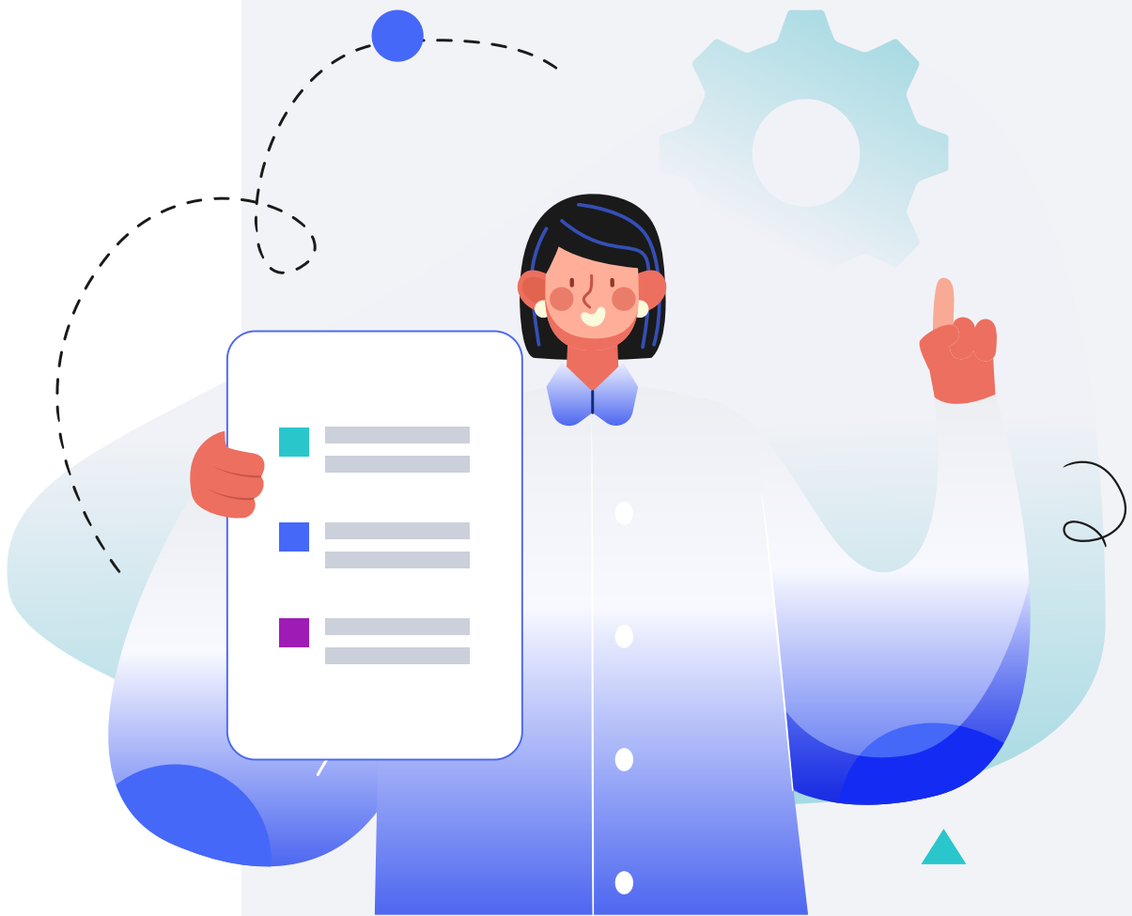
Male

HEIGHT

5ft 5" 165cm

WEIGHT

137lb 62kg

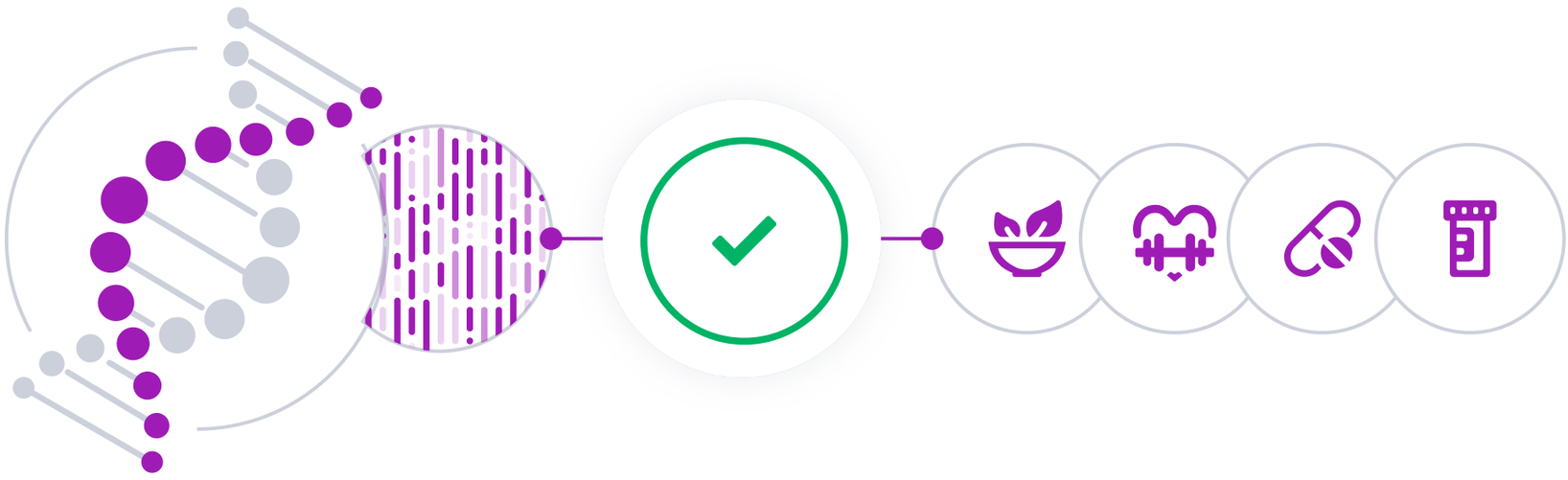


DISCLAIMER

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

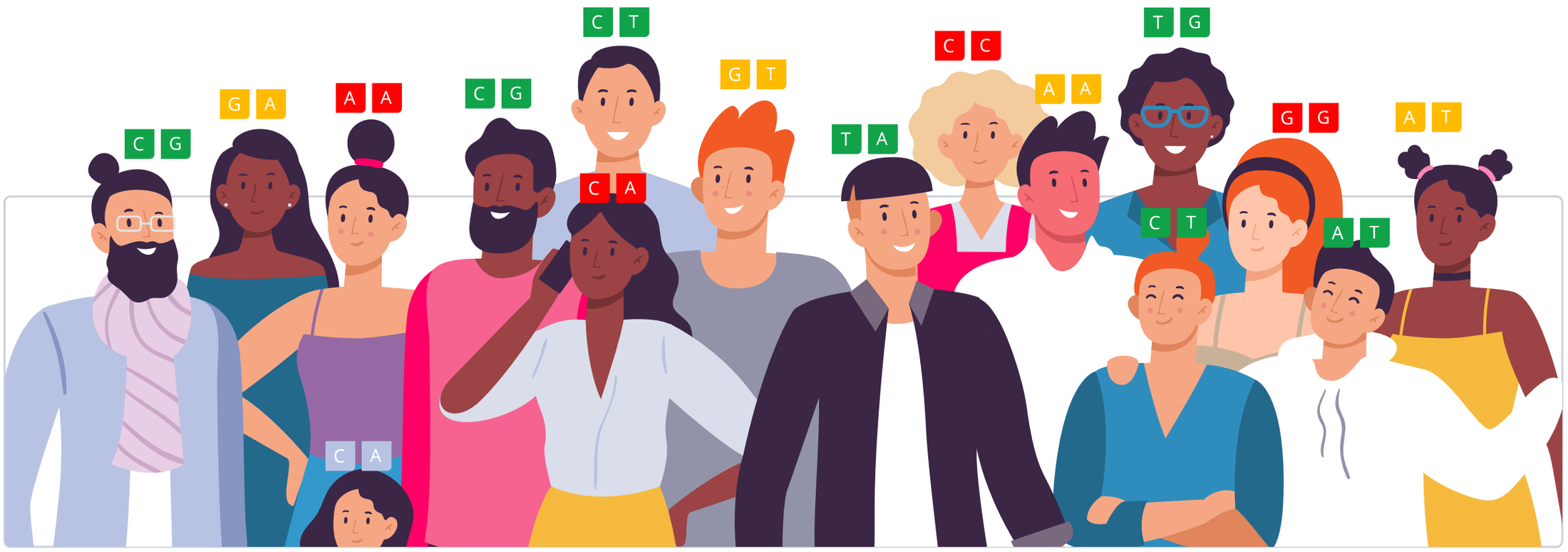
Our Wellness Reports analyze how your DNA influences your health.
We then use this analysis to give you personalized risk estimates and recommendations.



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.

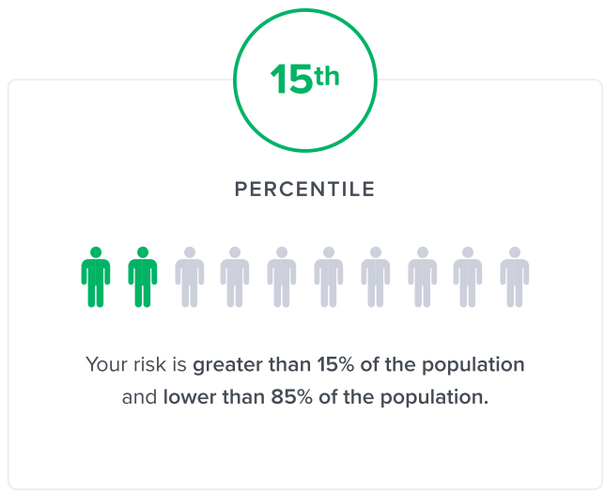
Genetic variants are parts of DNA that differ from person to person. Some can make you more vulnerable to certain health issues, while others may influence traits such as eye color.



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

Benign breast disease encompasses a variety of noncancerous conditions that affect the breast tissue. Common manifestations include breast lumps, cysts, fibroadenomas, and mastitis, among others.

While these conditions do not represent cancer, they can sometimes mimic its symptoms, causing physical discomfort and emotional distress due to the uncertainty and fear they provoke. Patients may experience tenderness, pain, and changes in breast texture which can fluctuate with the menstrual cycle.

Management

Management and outcomes of benign breast disease can vary based on the specific diagnosis and severity of symptoms. Most benign breast conditions do not increase the risk of breast cancer; however, certain types such as atypical hyperplasia may carry a slightly elevated risk.

Treatment typically involves monitoring, lifestyle modifications, medication to manage symptoms, or surgical interventions if necessary. Regular clinical check-ups are advised to monitor changes within the breast tissue and to ensure that any suspicious changes are investigated promptly.

TYPICAL LIKELIHOOD

Typical likelihood of benign breast disease based on 644,729 genetic variants we looked at

75th

PERCENTILE

Your risk is **greater than 75% of the population** and **lower than 25% of the population.**

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	Barberry	500 mg
2	Dietary Omega-3 Fatty Acids	
3	Cruciferous Vegetables	
4	Indole-3-Carbinol	200 mg
5	Evening Primrose Oil	
6	Soy	
7	Selenium Supplements	50 mcg
8	Chasteberry	150 mg
9	Avoid Secondhand Smoke	
10	Vitamin E	200 iu
11	Topical Cabbage Leaf	

1

Barberry

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Take a barberry supplement of 500-1000 mg daily, divided into two or three doses with meals for up to 12 weeks. Do not exceed the recommended dose without consulting a healthcare provider.

TYPICAL STARTING DOSE

500 mg

Description

Barberry is an herbal remedy used in traditional medicine for its potential to support digestive health and reduce inflammation. It contains compounds that may have antimicrobial and antioxidant properties.

How it helps

In a placebo-controlled trial of 85 women with benign breast disease, drinking barberry juice (480 mL/day) for 8 weeks reduced the levels of biomarkers and the expression of genes associated with breast cancer [R].

2

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 have anti-inflammatory properties and are found in foods like fish, flaxseeds, and walnuts. Studies suggest that these fatty acids can help reduce breast pain and discomfort associated with benign breast conditions.

3 Cruciferous Vegetables

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Incorporate a serving of cruciferous vegetables, such as broccoli, cauliflower, Brussels sprouts, kale, or cabbage, into at least one meal each day. A serving size is about a half cup cooked or one cup raw. Try to maintain this habit consistently over time for the best health outcomes.

Description

Cruciferous vegetables like broccoli, cauliflower, and kale are rich in vitamins, fiber, and antioxidants. Including them in your diet can promote overall health and may offer cancer-protective properties.

Cruciferous vegetables are a group of vegetables that belong to the Brassicaceae family. They are rich in fiber, vitamins, minerals, and other nutrients.

Some common cruciferous vegetables include broccoli, cauliflower, cabbage, kale, and brussels sprouts.

How it helps

Cruciferous vegetables like broccoli, kale, and Brussels sprouts contain compounds that have been shown to have cancer-preventive qualities. These can help in overall breast health and may alleviate symptoms of benign breast conditions.

4 Indole-3-Carbinol

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Take an indole-3-carbinol supplement with a glass of water, preferably with meals to enhance absorption. Dosages typically range from 200 to 400 mg per day, divided into two doses. Continue daily for as long as recommended by your healthcare provider, which can vary based on the specific condition being addressed.

TYPICAL STARTING DOSE

200 mg

Description

Indole-3-carbinol is a compound found in cruciferous vegetables that may support hormonal balance and has been studied for its potential to reduce the risk of certain cancers.

How it helps

Indole-3-Carbinol (I3C) is a compound derived from cruciferous vegetables like broccoli, cabbage, and cauliflower. Clinical studies suggest that I3C may help in managing benign breast disease by promoting a healthier balance of estrogen in the body. Estrogen can promote the growth of both benign and malignant breast cells, so managing estrogen levels with I3C may reduce the risk or severity of benign breast disease.

5

Evening Primrose Oil

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Take 500mg to 1000mg of evening primrose oil, in capsule form, once daily with a meal to ensure optimal absorption. This regimen is typically recommended for several months to evaluate its effectiveness for the specific condition being addressed.

Description

Evening primrose is a plant known for its seeds, which are a source of gamma-linolenic acid (GLA), an essential fatty acid. Some studies suggest that evening primrose oil, derived from these seeds, may help alleviate symptoms of conditions like premenstrual syndrome (PMS) and eczema, as well as support overall skin health.

Evening primrose (*Oenothera biennis*) is a flowering plant. Its name comes from the fact that its flowers close during the day and open when the sun sets [R].

Evening primrose oil comes from the plant's seeds. It is rich in omega-6 fatty acids like GLA. People use this oil to help with high triglycerides [R, R].

How it helps

Evening Primrose Oil contains gamma-linolenic acid (GLA), which may help reduce the sensitivity and pain associated with benign breast disease. GLA is believed to influence the production of prostaglandins, which are involved in the inflammation and pain processes in the body.

6

Soy

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Incorporate soy-based products such as tofu, soy milk, and edamame into your daily diet. Aim for at least one serving per day, equivalent to about a cup of soy milk, a half-cup of cooked soybeans, or a 3-ounce piece of tofu.

Description

Soy is a legume native to East Asia, and its health benefits include being a source of plant-based protein, fiber, and various vitamins and minerals. It is known for its potential to support heart health, reduce cholesterol levels, and provide essential nutrients in vegetarian and vegan diets.

Soy is a common food in many cuisines around the world, especially Asian cuisines [R].

It's a great source of [R, R]:

- Plant-based protein
- Fiber
- Omega-3 fats
- Antioxidants (isoflavones)

Soy-based foods include [R]:

- Soy beverages
- Tofu
- Tempeh
- Edamame
- Miso
- Natto

Soy protein and soy isoflavones are also available as supplements.

How it helps

Soy foods contain isoflavones, which have estrogen-like properties. These can bind to estrogen receptors in the breast, potentially exerting a protective effect against benign breast disease. Moderate consumption of soy has been suggested to possibly offer benefits in managing or reducing the risk.

7

Selenium Supplements

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

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

TYPICAL STARTING DOSE

50 mcg

Description

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

Selenium supports [R]:

- Reproduction
- Thyroid function
- DNA production
- Immune response

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

How it helps

Selenium is an essential trace mineral that plays a critical role in maintaining overall health, including breast health. Studies suggest that selenium supplementation may help reduce the risk and severity of benign breast disease by supporting the body's antioxidant defenses and immune function. Adequate selenium levels are associated with a reduced risk of developing certain types of breast conditions.

8

Chasteberry

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Take 150-500 mg of chasteberry extract daily, ideally in the morning to align with the body's natural hormonal rhythms. This dose is typically recommended for a duration of at least three months to evaluate its effectiveness on symptoms.

TYPICAL STARTING DOSE

150 mg

Description

Chasteberry, also known as chaste tree or Vitex, is an herb commonly used to support women's health, particularly in addressing symptoms of premenstrual syndrome (PMS) and hormonal imbalances. It may help regulate the menstrual cycle and alleviate some PMS symptoms.

Chasteberry is the fruit of the chaste tree (*Vitex agnus-castus*), a plant native to Europe and Asia [R, R].

Early studies note that chasteberry may help with menstrual problems [R].

How it helps

Chasteberry has been found to help in the reduction of breast pain and tenderness in benign breast disease. It works by influencing hormone levels, particularly lowering prolactin, which can contribute to breast symptoms.

9

Avoid Secondhand Smoke

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Implementing a smoke-free lifestyle involves communicating your needs to family, friends, and coworkers, requesting they respect your choice by smoking away from you. At home, establish strict no-smoking policies indoors. When out, choose smoke-free venues and accommodations. Advocate for smoke-free environments in your community and support legislation that promotes public health by reducing exposure to secondhand smoke. Utilize air purifiers at home to reduce any residual particles.

Description

Avoiding secondhand smoke is crucial for maintaining good health. Exposure to secondhand smoke can lead to respiratory problems, cardiovascular disease, and an increased risk of lung cancer, even in non-smokers. Protecting oneself from secondhand smoke involves staying away from smoking areas, ensuring smoke-free environments at home and work, and advocating for smoke-free policies in public spaces.

How it helps

Exposure to cigarette smoke, including passive smoking, may exacerbate symptoms of benign breast disease. Studies indicate that certain toxic compounds found in cigarette smoke can influence hormonal balance and inflammation in the body, which might affect breast tissue health directly.

10

Vitamin E

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Take 200 IU of Vitamin E daily as a supplement, preferably with a meal that contains fat to enhance absorption.

TYPICAL STARTING DOSE

200 iu

Description

Vitamin E is a fat-soluble antioxidant found in various foods, such as nuts and seeds. It is known for its ability to protect cells from oxidative damage, support immune function, and may play a role in skin health. Vitamin E supplements are used to bolster antioxidant defenses and may be beneficial for conditions related to oxidative stress.

Vitamin E is an antioxidant important for the immune system and for heart health [R].

Plant-based foods have the most vitamin E. These include [R]:

- Wheat germ
- Sunflower seeds
- Almonds
- Plant oils

Adults need about **15 mg** of vitamin E per day [R].

How it helps

Vitamin E has antioxidant properties, which help protect cells from damage. Some studies indicate that it may help reduce breast pain and tenderness associated with benign breast disease.

11

Topical Cabbage Leaf

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Apply a fresh, clean cabbage leaf directly to the affected area. Leave it in place for at least an hour or overnight if possible, securing it with a loose bandage. Repeat daily until symptoms improve.

Description

Cabbage leaf compresses are a natural remedy involving cabbage leaves placed on the skin. They are used topically to relieve breast engorgement in breastfeeding women and reduce swelling and inflammation.

How it helps

Topical cabbage leaves have been shown to reduce pain and improve comfort in women with benign breast conditions. They contain compounds that may have anti-inflammatory and analgesic effects.

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.

Estradiol **101.46 pg/mL** 9 Nov 2025