SelfDecode™

Egg Allergy

DNA Health Report

REPORT CATEGORIES

ALLERGIES

FOOD SENSITIVITIES

Sample Client

Report date: 15 January 2026

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Table of Contents

Personal information

NAME

Sample Client

SEX AT BIRTH

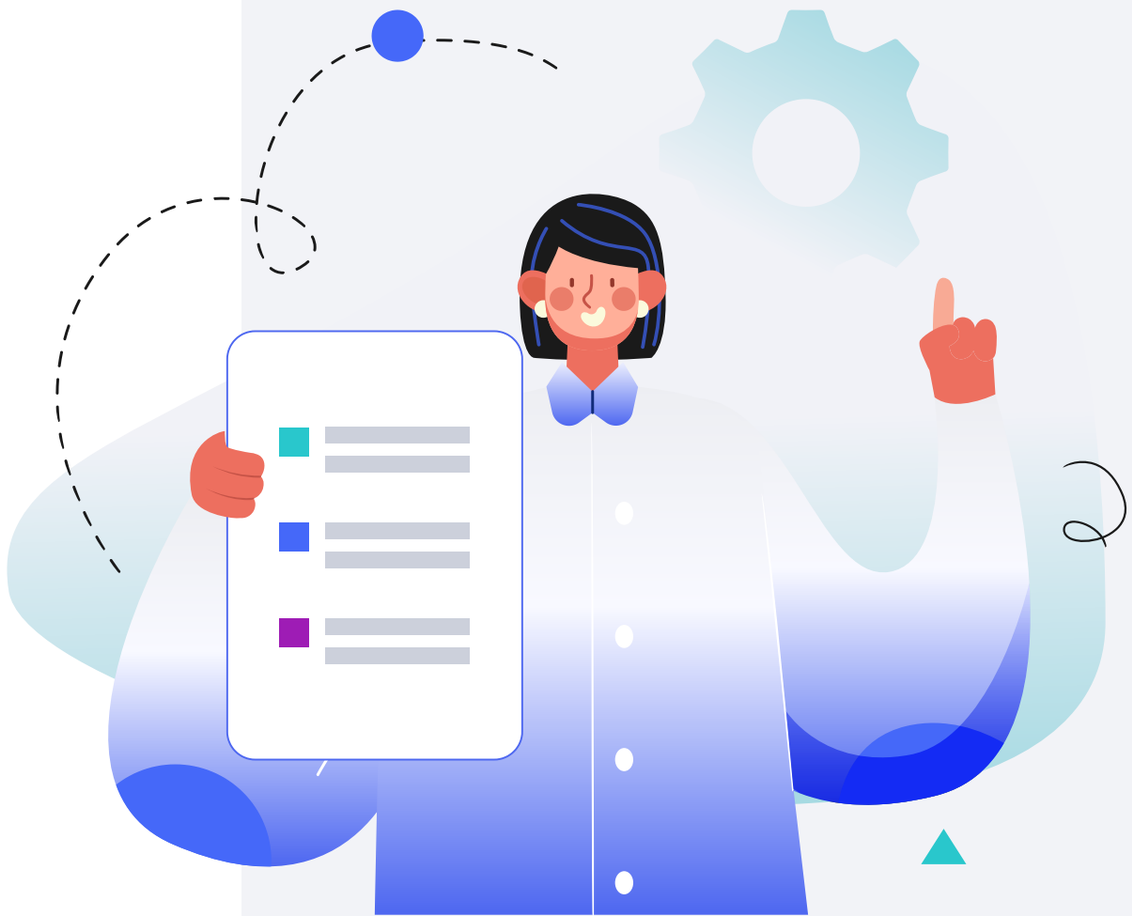
Male

HEIGHT

5ft 5" 165cm

WEIGHT

137lb 62kg

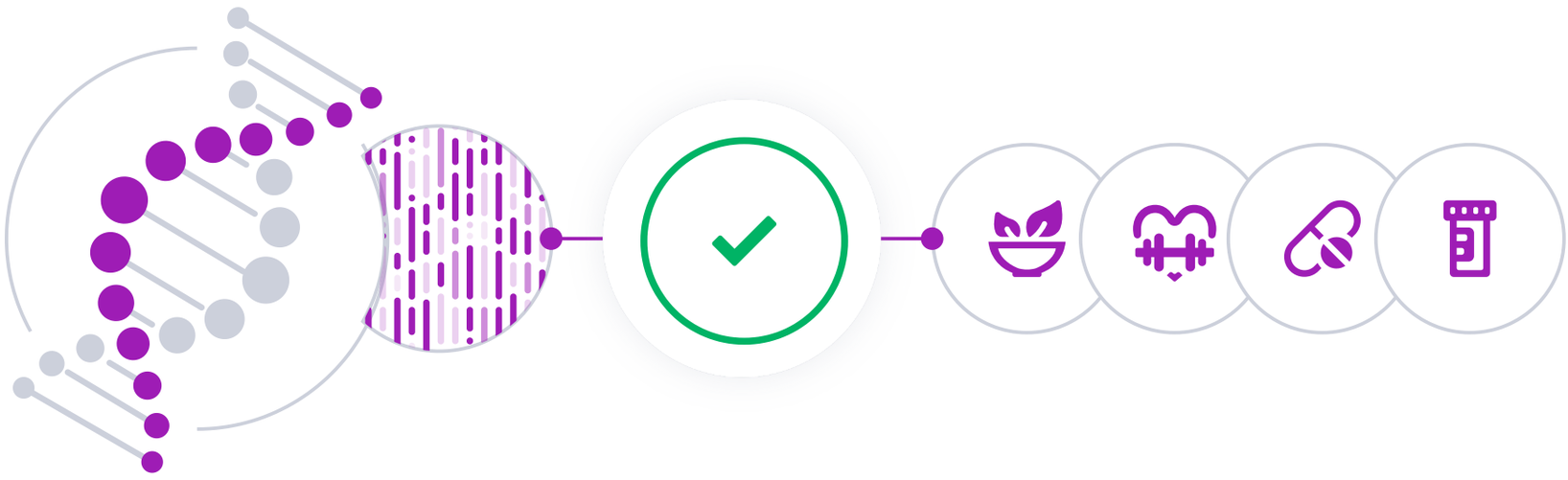


DISCLAIMER

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

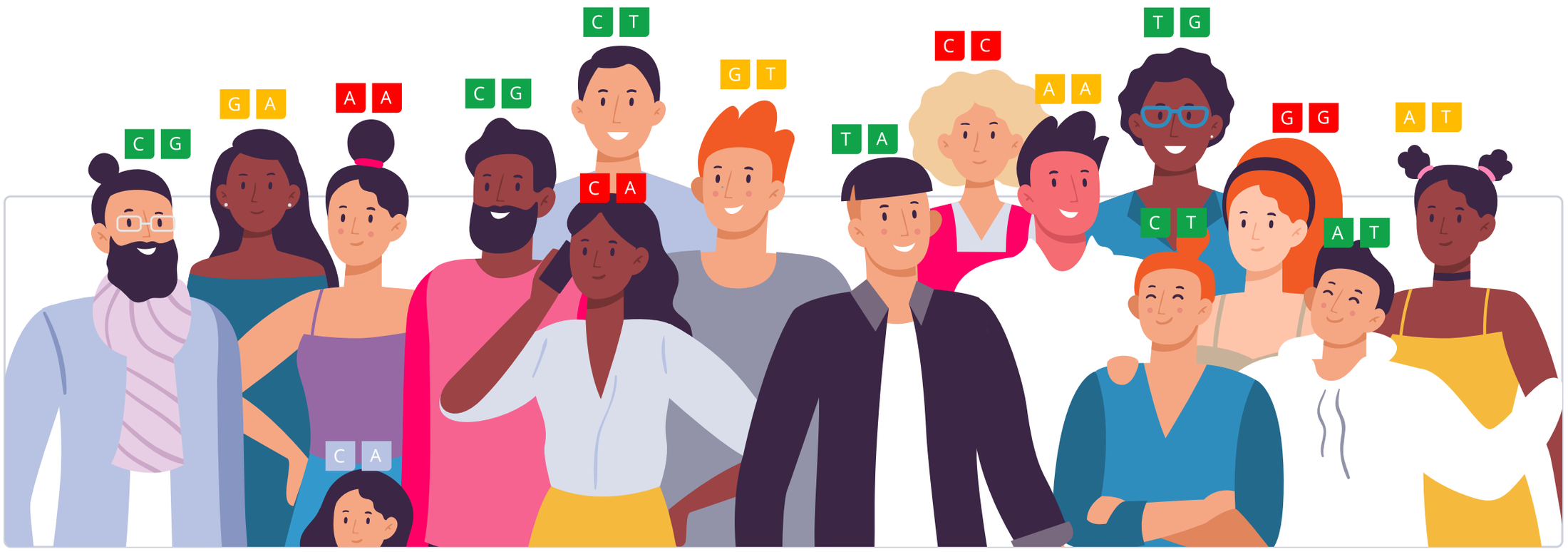
Our Wellness Reports analyze how your DNA influences your health.
We then use this analysis to give you personalized risk estimates and recommendations.



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.

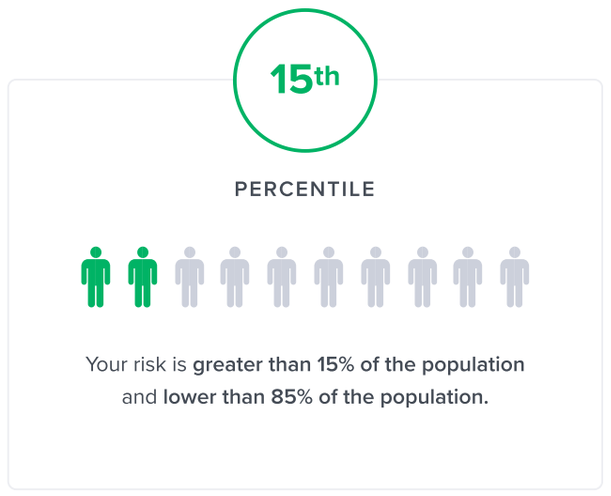
Genetic variants are parts of DNA that differ from person to person. Some can make you more vulnerable to certain health issues, while others may influence traits such as eye color.



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.



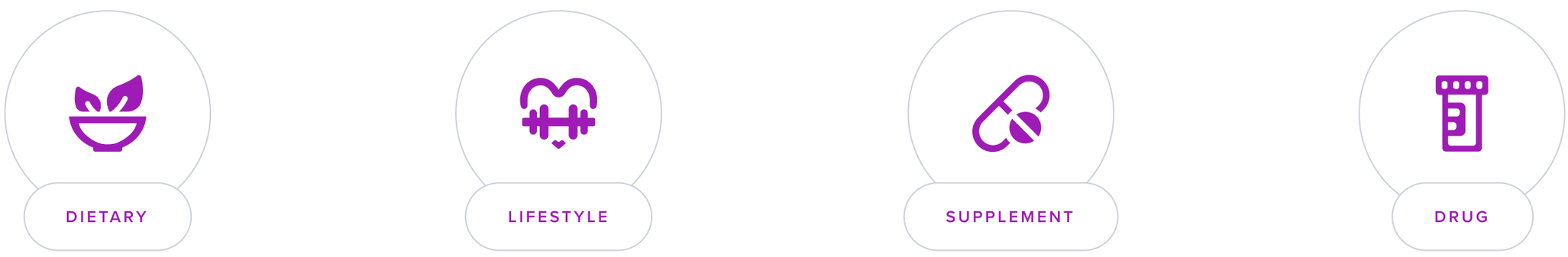
Genotype color info: AA You don't have any risk alleles | AA You have 1 risk allele | AA You have 2 risk alleles

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

An *allergy* is an immune reaction to a trigger that is normally harmless. This allergy trigger is called an *allergen*. The best-known allergens are foods like eggs and peanuts. However, people can be allergic to just about anything [R, R].

An allergic reaction begins when the body recognizes an allergen. White blood cells release **histamine** and other chemicals that cause inflammation. This inflammation can be mild or very dangerous [R, R].

Egg allergies are relatively common, especially in children, and can be very severe. Along with cow's milk allergies, they are the most common allergies in infants. Luckily, the allergy often fades with age [R, R].

A person usually develops a reaction to one or more **egg white proteins** [R, R].

Did you know? According to some recent guidelines, **early introduction** of potential allergens into a baby's diet—**around 6 months of life**—may help prevent food allergies [R].

Genetics of Egg Allergies

Egg allergies are relatively common, especially in children, and can be very severe. A person usually develops a reaction to one or more **egg white proteins.** Luckily, the allergy often fades with age [R, R].

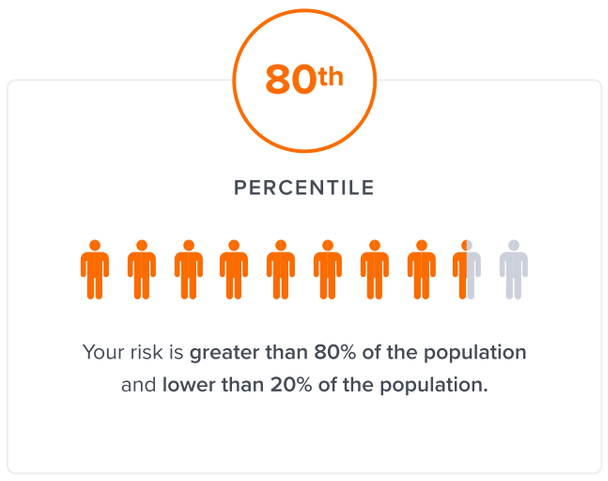
About **80%** of differences in food allergy rates may be due to genetics. Most genes are involved in food allergies in general, rather than in a specific allergy. They may affect [R]:

- The immune response
- The function of skin and mucous membranes

However, keep in mind that your diet, environment, and other factors may play a role in egg allergies.

MORE LIKELY

More likely to have an egg allergy based on 373 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
BMPR1B	rs17023017	TG
LRRC32	rs2212434	CT
/	rs150212674	TT
LPIN2	rs28794896	GG
SLC35F2	rs79590713	GG
ARHGAP32	rs76670383	CC
GNB5	rs80015591	TT
/	rs16833316	TT
RBFOX1	rs11866945	AA
HSPA13	rs76914408	TT
ADAMTS8	rs12807953	GG
XXYLT1	rs62292087	GG
CSGALNACT1	rs11779828	TT
IRX2	rs1661109	TT
CMTM7	rs9810960	GA
SERPINB10	rs1243064	TT
SERPINB10	rs12964116	AA
LINGO4	rs12123821	CC
ID4	rs114735690	GG
MICAL2	rs11022268	CC
SCAP	rs62263577	TT
PRKD1	rs61978360	AA
PREX1	rs144694238	GG

GENE	SNP	GENOTYPE
H2BC15	rs113469268	CC
STEAP4	rs34386075	AA
CNR1	rs150335804	GG
OVCH1	rs61918685	TT
/	rs34829411	GG
IZUMO3	rs637658	GG
BMP2	rs6085822	TT
/	rs59111564	GG
SHQ1	rs77166467	AA
DLG1	rs192390521	TT
FAM20C	rs73038923	CC
LRIG3	rs61919216	CC
NUCB1	rs78120516	TT
/	rs74612506	AA
EMB	rs71631481	TT
TRPS1	rs117255960	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.

1

Check For Egg Allergy

IMPACT 5 / 5

EVIDENCE 5 / 5

How to implement

Consult with a healthcare provider or an allergist for an egg allergy test, which may include skin prick tests, blood tests, or supervised oral food challenges. Follow their instructions on preparation and scheduling, which typically involves avoiding antihistamines for several days prior to testing.

Description

Testing for food allergies can provide crucial insights into an individual's immune response to specific foods, helping to identify and avoid potential allergens. This proactive approach can prevent allergic reactions, ranging from mild discomfort to severe anaphylaxis, and ensure safer dietary choices for improved overall health and well-being.

In allergic people, egg ingestion can cause different symptoms, ranging from unpleasant to life-threatening.

People with an egg allergy should make sure to read food labels carefully and take other precautions to avoid ingesting eggs.

How it helps

Allergies are difficult to treat. Instead, people try to prevent an allergic reaction from happening in the first place. The most important step is to avoid the allergen. For example, people with egg allergies should not eat food that contains eggs. This includes carefully reading processed food labels to identify eggs as unexpected ingredients of some products [R].

For some people, other foods may also trigger symptoms. This may be due to *cross-contamination* or *cross-reactivity.*

In cross-contamination, a small amount of the allergen may be unknowingly present in the triggering food. For example, a chocolate bar may be made using equipment that also processes egg-containing dough. Cross-contamination can also occur at restaurants or even at home [R].

2

Elimination Diet

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Begin by removing foods you suspect might be causing adverse reactions for 2-3 weeks. These often include dairy, gluten, soy, nuts, eggs, corn, and processed sugars. After this period, reintroduce each food group one at a time every 3 days, while noting any symptoms that may reappear. This process helps identify food intolerances or sensitivities.

Description

An elimination diet involves removing specific foods or food groups from the diet to identify and address potential food sensitivities or allergies. It can help alleviate symptoms such as digestive issues, skin problems, and allergic reactions by pinpointing trigger foods.

An elimination diet omits foods that can cause your body to have a reaction. Foods are removed for a period of time and then added back in. This helps figure out what foods are causing symptoms or making them worse [R].

Salicylates are compounds naturally found in many foods and drinks. These include wine, tea, beans, and tomatoes [R, R].

One form (*salicylic acid*) is found in aspirin. People who are sensitive to salicylates may have a reaction to aspirin and other NSAIDs [R, R].

How it helps

An elimination diet involves removing eggs, which are the allergenic food in this case, from the diet completely to prevent allergic reactions.

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.