Food Allergies

Trait

Typical likelihood of food allergies

Client

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Food Allergies

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.

TYPICAL LIKELIHOOD

LESS LIKELY

MORE LIKELY

15th
PERCENTILE

Your risk is **greater than 15% of the population**
and **lower than 85% of the population.**

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.

Our recommendations come in three categories: lifestyle, diet, and supplements. The following icons tell you which category a recommendation falls into:

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.

DIETARY

LIFESTYLE

SUPPLEMENT

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

● ● ● ○ ○ **3** / 5

EVIDENCE

● ● ● ● ○ **4** / 5

Our team of scientists also ranks each recommendation. We rank based on impact and the strength of evidence in the medical literature.

Impact

An impact score can range from 1-5. It can be assigned to a recommendation that helps with a measurable trait, such as cholesterol levels or blood pressure. In this case, the impact score will reflect how much the trait can change in a person who follows the recommendation. An impact score of 1 reflects the smallest change, while 5 reflects the largest.

An impact score can also be assigned to a recommendation that helps with stress levels, mood, or other traits that can't be measured directly. In this case, the recommendation is compared to other recommendations and standard treatments (if they exist). An impact score is assigned based on these relative comparisons.

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.

_____

●●●●● **0** / 5

No evidence in humans.

Some things to keep in mind:

- The scores/gauges use the latest scientific studies. But they are not perfect and will change as the models improve.

- Results might be more accurate for some ethnic groups than others. This depends on the studies used in each report.

- Not everyone with risk variants will develop a health condition.

- People without risk variants can also develop health conditions.

- Genetics is not the whole story. Your health is most often a combination of genetics, lifestyle, and environmental factors.

- Great news, as this means that you can often change your lifestyle to lower your risk.

- It's important to work with your doctor to better understand your risks. Our reports do not diagnose or treat any health condition. They are not a substitute for medical advice. If you're diagnosed with a certain health condition, follow your doctor's advice.

Summary

Your quick takeaway

Typical likelihood of food allergies based on 17,555 genetic variants we looked at

TYPICAL

INCREASED

About Food Allergies

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

Some of the most common food allergies include [R]:

- Peanuts
- Tree nuts
- Seafood
- Milk
- Eggs

Many allergies start in childhood and go away before adulthood. However, peanut, nut, and seafood allergies often continue through a person's lifetime [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].

Some foods cause a dangerous reaction that can stop your breathing. Others may cause [R, R]:

- Stomach upset
- Sneezing
- Tingling in the mouth
- Rashes

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 when possible. For example, people with peanut allergies should not eat food that contains peanuts [R, R].
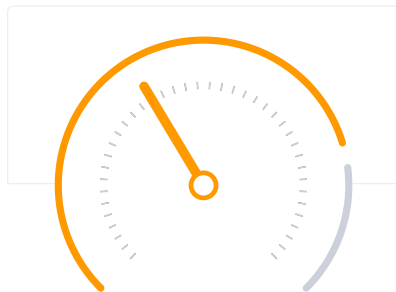
Genetics of Food Allergies

Typical likelihood of food allergies

Up to 80% of differences in people's chances of having food allergies may be attributed to genetics [R].

Many of the genes that influence food allergies affect the immune system [R, R].

⚗ PERSONALIZED TO YOUR GENES

Based on the variants we looked at, you may have a typical likelihood of food allergies. Keep in mind that your environment and lifestyle also influence your risk.

Your recommendations

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Avoid Food Triggers

IMPACT ⓘ	EVIDENCE ⓘ
●●●●● 5 / 5	●●●●● 5 / 5

A "trigger" is something that prompts or worsens the symptoms of a health condition.

Food triggers can lead to a wide range of symptoms in people who are sensitive to them. These may include [R, R, R, R]:

- Gut problems
- Skin problems
- Migraines

How Avoiding Food Triggers Helps With Food Allergies

For those with confirmed food allergies, experts agree that avoiding known allergens is the best way to prevent symptoms. This means avoiding both the food (i.e., peanuts) and products or meals in which the allergen is a known ingredient (i.e., stir fry with peanut sauce) [R, 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 peanuts. Cross-contamination can also occur at restaurants or even at home [R].

In cross-reactivity, a triggering food may have a similar structure to a food that you are allergic to. For example, someone allergic to shrimp may also have symptoms when eating crab [R].

For these reasons, it's best to work with a healthcare professional to determine which foods you should avoid. Once you have a list of food triggers, taking the following steps may help [R, R, R]:

- Consider wearing a medical ID bracelet that identifies any allergies
- Always read food labels carefully
- When dining out, discuss food allergies with those who are preparing the food
- Clean cookware and utensils thoroughly or have a separate set for those with an allergy
- Carry any prescribed medications with you