

Allergies

DNA Health Report

REPORT CATEGORY —



Sample Client

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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

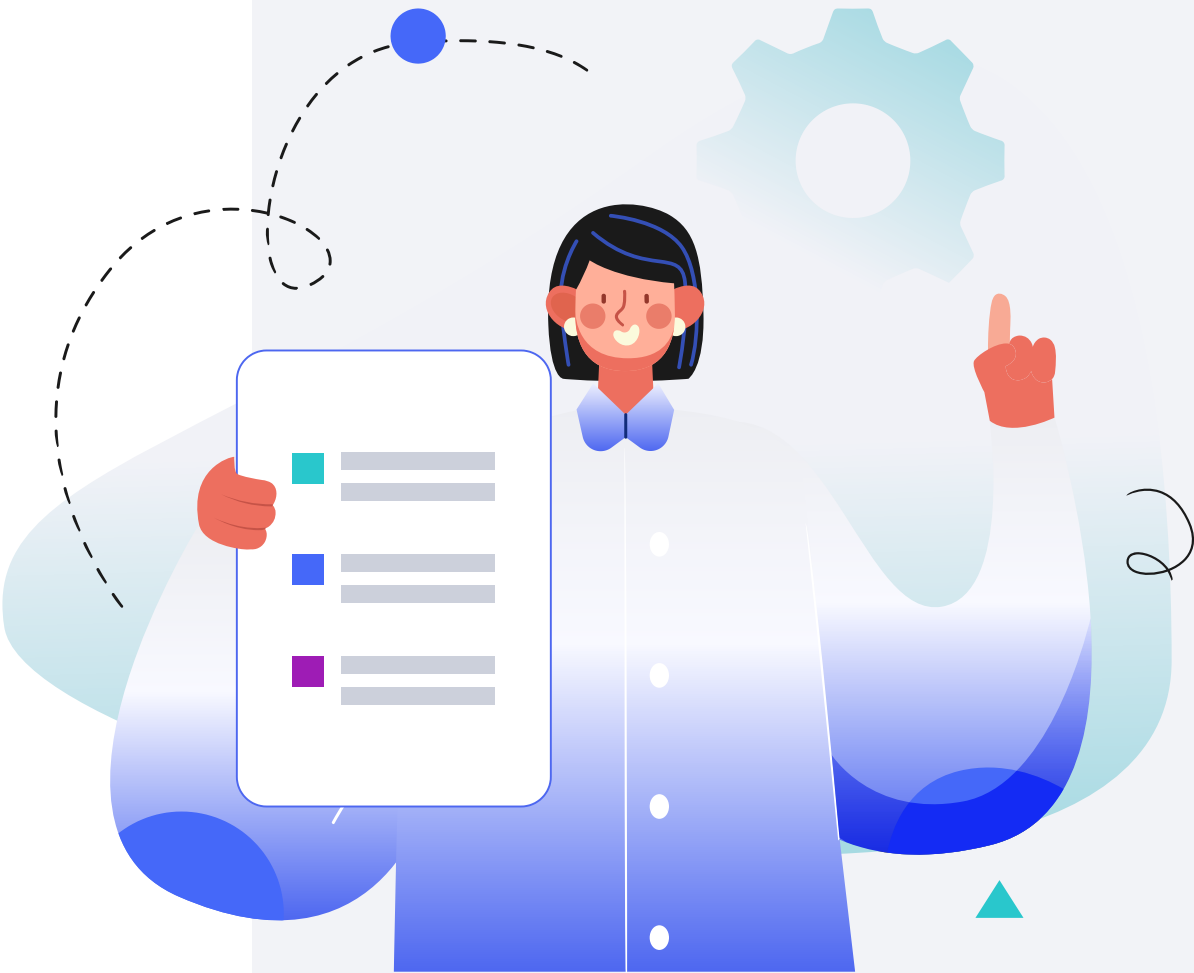
Male

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

Can’t cuddle your family pet without sneezing? Have to pop an antihistamine before visiting a fluffy friend?

If you answered yes to either of these questions, you aren’t alone. **Up to 20% of all people have an allergy to cats or dogs** [R].

Unfortunately, if you’re one of the 20%, then coming into contact with pet *allergens* (allergy triggers) is almost unavoidable. In fact, around 67% of US households now own a pet [R].

Cat allergies are a particular problem in the US. For those with cat allergies, about 47% of hospital visits are caused by exposure to cat allergens [R].

Thankfully, scientists may have found a way to make cats hypoallergenic by altering their DNA!

This may sound like the beginning of Franken-cat’s monster, but the proposed fix for feline allergies might actually be quite simple: removing the genes responsible for making the key cat allergen, a protein named Fel d 1.

This protein is found in cats’ saliva and on their skin. When cats self-groom, they spread this protein all over—and they groom a lot!

When allergy sufferers inhale this protein, it activates an immune response that leads to the production of [histamine](#). Histamine is what causes the typical sneezing, itchiness, and congestion associated with an allergic reaction.

Preliminary studies suggest that decreasing the amount of Fel d 1 protein in cats may help alleviate allergy symptoms in cat owners, allowing them to spend more time around their beloved pets [R]!

Based on this, scientists are working on a technique to remove the genes responsible for producing the Fel d 1 protein entirely, as it doesn’t seem to have any important function [R].

This approach could be revolutionary in providing allergy sufferers with relief. But there’s still some work to do before it’s completely viable!

While you may not be able to target your pet’s genes to relieve your allergy symptoms yet, you can target your own! Genes like *OVOL1* and *STAT6* may increase your likelihood of allergies, but specific strategies may be able to lessen their impact!

From pet to pollen, your genes may help determine the best strategies to potentially lessen the impact allergies have on your life.

This report focuses on the genetics of allergies. Read more to find out:

- **How your genetics play a role in allergies**
- **Your genetic risk score based on almost 2,500 genetic variants**
- **Personalized recommendations based on your genetics**

About Allergies

Key Takeaways:

- Up to **85%** of differences in people's chances of having allergies may be due to genetics.
- Up to **20%** of people are allergic to cats or dogs, and **40%** have allergies in general.
- Even with low genetic risk, your overall risk of allergies is relatively high because they are increasingly common.
- Click the **Recommendations** tab for potential dietary and lifestyle changes and **next steps** for relevant labs.

It's hard to say exactly how many people have allergies because they vary so much. **Up to 42% of American adults say that they have some kind of allergy** [\[R\]](#), [\[R\]](#), [\[R\]](#).

Some allergies may even become more common due to climate change. As temperatures and carbon dioxide levels rise, plants may produce more pollen. This could lead to more people developing seasonal allergies [\[R\]](#).

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 peanuts and pollen. However, people can be allergic to just about anything, including [\[R\]](#), [\[R\]](#):

- Animals
- Foods
- Insect stings and bites
- Medications
- Metals
- Latex
- Perfume
- Dust

An allergic reaction begins when the body recognizes an allergen. White blood cells release [histamine](#) and other molecules that cause inflammation. This inflammation can be mild or very dangerous. Its consequences can range from sneezing to death [\[R\]](#), [\[R\]](#).

There are also different types of allergies, including:



TYPICAL LIKELIHOOD

Typical likelihood of allergies based on 2,373 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
STAT6	rs3024971	TT
PTGER4	rs7720838	TT
LPP	rs9865818	GG
RUNX3	rs760805	TT
LRRC32	rs2155219	GT
TSLP	rs1438673	CT
HLA-DQA1	rs6906021	CT
IL4R	rs8832	AG
SH2B3	rs10774625	AG
GSDMB	rs9303280	TC
NFATC2	rs6021270	TC
GATA3	rs10795656	GA
SLC22A5	rs2243250	CC
IL2	rs2069762	AC
FLG	rs1933064	AG
CCR7	rs112401631	TT
KIAA1109	rs17454584	AA
IL33	rs144829310	GG
IL2RA	rs61839660	CC
SRA1	rs2569191	TT
FCER1A	rs2251746	TT
IL21R	rs1859308	GG
IL4R	rs1801275	AA
IL1RL1	rs950880	CC

- **Food allergies:** Some foods cause a dangerous reaction that can stop your breathing. Others may cause stomach upset, sneezing, or tingling in the mouth [R].
- **Respiratory allergies:** Pollen and dust can cause a stuffy nose and itchy eyes [R].
- **Contact allergies:** Metal or latex can cause skin rashes if they touch the skin [R].

If you suspect you're allergic to something, you can get an allergy test. The most common types of allergy tests are [R, R, R]:

- **Skin prick test:** The allergen is mixed into water or oil. The doctor places a droplet on your arm and pricks the surface of the skin. If the skin becomes red and swollen, you are having an allergic reaction.
- **Patch test:** A patch is soaked with the allergen and placed on the skin for 1-3 days. This test is used to find allergies that don't cause a fast, dramatic reaction.
- **Provocation test:** In a lab setting, you are exposed to an allergen. If you are testing for seasonal allergies, a doctor may spray specific types of pollen up your nose. This test is only used when other tests haven't produced clear results.

Once identified, allergies generally cannot be treated. 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. People with nickel allergies should not wear jewelry that contains nickel [R, R].

Respiratory allergens are tougher to avoid. If you have seasonal allergies, pollen is everywhere. If you're sensitive to fragrance, you never know when someone wearing heavy perfume will pass you in the street [R, R, R].

Thus, **people with respiratory allergies often look for ways to control their reactions.** Doctors may recommend medications, lifestyle changes, and nasal cleansing. Some people try supplements or diet changes [R, R].

Allergies tend to run in families. In fact, **up to 84% of differences in people's chances of having allergies may be attributed to genetics.** Genes that may contribute to allergies influence [R, R, R]:

GENE	SNP	GENOTYPE
IRF4	rs11242709	CC
IL13	rs20541	GG
SERPINB10	rs12964116	AA
OVOL1	rs479844	AA
LINGO4	rs12123821	CC
NOD2	rs2066844	CC
TLR1	rs17616434	CC
OR2B6	rs7767176	GG
SMAD3	rs17228058	AA

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

- Immune response ([HLA-DRB1](#), [HLA-DQB1](#), [HLA-DPB1](#), [CD14](#))
- Inflammation ([IL10](#), [IL4](#), [IL6](#), [IL13](#), [TNF](#))
- Skin barrier function ([OVOL1](#))

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	Avoid Contact With Dust	2	Nasal Cleansing
3	Avoid Contact With Pollen	4	Probiotics10 billion
5	Exercise At Least One Hour a Day1 hour	6	Black Seed Oil2 tsp
7	Wear Facemasks	8	Avoid Ozone Exposure
9	Avoid Formaldehyde Exposure	10	Black Seed (Black Cumin)1000 mg
11	Acupuncture1 hour	12	Butterbur75 mg
13	Aerobic Exercise (Cardio)1 hour	14	Avoid Perfluorooctanoic Acid (PFOA) Exposure
15	Avoid Air Pollution	16	Quercetin200 mg
17	Pycnogenol100 mg	18	Beta-Glucans
19	Mediterranean Diet	20	Nasal Light Therapy25 minutes
21	Breathing Techniques10 minutes	22	Dietary Vitamin E
23	Maintain Optimal Vitamin D Levels1000 iu	24	Lactobacillus Plantarum10 billion CFU
25	Air Purifier	26	Lactobacillus Paracasei10 billion CFU
27	Forskolin500 mg	28	Avoid Exposure to Molds
29	CLA (Conjugated Linoleic Acid)3 g	30	Artemisia Extract200 mg

31	Lactobacillus Acidophilus	10 billion CFU	32	Lactobacillus Gasseri	10 billion CFU
33	Choline Supplements	425 mg	34	Curcumin	500 mg
35	Spirulina	500 mg	36	Moringa	400 mg
37	Boswellia	350 mg	38	Agaricus Blazei	500 mg
39	Milk Thistle (Silymarin)	300 mg	40	Tomato	
41	Lactobacillus Casei	10 billion CFU	42	Bentonite	1 tsp
43	Avoid Phthalate Exposure		44	Self-Hypnosis	20 minutes
45	Apple Polyphenols	500 mg	46	Perilla	
47	Hatha Yoga	1 hour	48	Lactobacillus Johnsonii	10 billion CFU
49	Tinospora Cordifolia	300 mg	50	Lactobacillus Salivarius	10 billion CFU
51	Seawater Spray		52	Ginger	500 mg
53	Astragalus	500 mg	54	Stinging Nettle	300 mg
55	Lactobacillus Rhamnosus GG	10 billion CFU	56	Methylsulfonylmethane (MSM)	1 g
57	Lactobacillus Rhamnosus	10 billion CFU	58	Bifidobacterium Breve	10 billion CFU
59	B. Lactis Bi-04 and L. Acidophilus NCFM	10 billion CFU	60	Stinging Nettle Root Extract	250 mg
61	Lactobacillus Rhamnosus HN001	10 billion CFU	62	Saffron	20 mg
63	Apples		64	Broccoli Sprouts	2 tbsp
65	Ginkgo	120 mg	66	Perilla Oil	600 mg
67	Lactobacillus Helveticus	10 billion CFU	68	Bifidobacterium Longum	10 billion CFU
69	Chlorophyll	100 mg	70	Honey	

71

Bacillus Clausii

72

Avoid Exposure to Parabens

1



Avoid Contact With Dust

IMPACT

4 / 5

EVIDENCE

4 / 5

How to implement

To avoid contact with dust, clean surfaces with a damp cloth at least twice a week, use a vacuum cleaner with a HEPA filter regularly on carpets and upholstery, and avoid using feather dusters that disperse dust into the air. Additionally, consider using air purifiers in rooms where you spend the most time and keep windows closed on windy days to prevent outdoor dust from coming in.

Description

Avoiding exposure to dust can help alleviate allergy symptoms such as sneezing, runny nose, and itchy eyes, promoting respiratory comfort and overall well-being, particularly for individuals with allergies or allergic conditions.

How it helps

Measures to reduce exposure to house dust mite allergens, such as using allergen-impermeable covers for bedding and removing carpets, may decrease allergen levels. These interventions can lead to improvements in allergic symptoms and asthma outcomes [\[R\]](#).

Clinical trials demonstrate that dust mite avoidance measures may result in reduction in house dust mite allergens and corresponding decreases in symptoms among asthmatic and allergic individuals [\[R\]](#).

2



Nasal Cleansing

IMPACT4 / 5

EVIDENCE4 / 5

How to implement

Perform nasal cleansing using a saline solution twice a day, in the morning and evening. Tilt your head sideways over a sink and gently pour the saline solution into the upper nostril, allowing it to flow out of the lower nostril, then switch sides.

Description

Nasal cleansing, often done using saline solutions or neti pots, helps clear nasal passages, alleviate congestion, and reduce allergy symptoms, promoting better respiratory comfort and improved breathing.

Nasal cleansing involves rinsing your nasal passages with a sterile salt solution. This is done with a squeeze bottle or a teapot-like container called a neti pot [\[R\]](#), [\[R\]](#).

People mainly use nasal cleanses to relieve a stuffy nose, which may be caused by [\[R\]](#), [\[R\]](#):

- Allergies
- Colds
- Sinus problems

How it helps

If you suffer from respiratory allergies, experts recommend cleansing your nose with a sterile salt solution. The process flushes out allergens and helps relieve congestion [\[R\]](#), [\[R\]](#).

Nasal cleansing may improve hay fever symptoms and the quality of life. Best of all, **it’s cheap, safe, and easy to use** [\[R\]](#), [\[R\]](#).

3



Avoid Contact With Pollen

IMPACT

4 / 5

EVIDENCE

4 / 5

How to implement

Stay indoors during high pollen count days, usually during early morning or late afternoon. Close windows and use air purifiers to keep indoor air clean. Shower and change clothes after being outside to remove pollen.

Description

Avoiding exposure to pollen can help alleviate allergy symptoms such as sneezing, runny nose, and itchy eyes, promoting respiratory comfort and overall well-being, particularly for individuals with allergies and allergic conditions.

How it helps

Exposure to high, moderate, or even low levels of pollen can exacerbate allergy symptoms such as nasal congestion, watery eyes, and respiratory issues. Staying in environments with lower pollen exposure, like certain alpine locations or indoors, tends to alleviate these symptoms [\[R\]](#), [\[R\]](#).

Green spaces can mitigate pollen allergy symptoms when allergenic tree density is low. However, exposure to certain air pollutants alongside pollen can increase the severity of allergic reactions, suggesting that multiple environmental factors influence the efficacy of pollen avoidance [\[R\]](#).

4



Probiotics

IMPACT

4 / 5

EVIDENCE

3 / 5

How to implement

Take a probiotic supplement containing 10 billion or more live cultures once daily, preferably with a meal or as directed by the packaging or a healthcare provider.

TYPICAL STARTING DOSE

10 billion

Description

Probiotics are live beneficial bacteria and yeasts that can support gut health and digestive function when consumed as supplements or found in fermented foods like yogurt and sauerkraut. They may be beneficial to gut health, immune function, blood sugar, and mood.

Probiotic bacteria are “good” bacteria found mainly in the large intestine. They support your body and mind by [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Maintaining gut health
- Supporting a healthy immune system
- Improving your mood
- Helping to maintain healthy blood sugar

Prebiotics are certain types of fiber and other complex carbs that serve as food for gut bacteria. **They support gut health by helping boost the activity and growth of “good” bacteria** [\[R\]](#), [\[R\]](#).

Prebiotics are also added to foods and supplements. Common prebiotic ingredients are [\[R\]](#), [\[R\]](#):

- Oligo-fructose
- Oligo-galactose
- [Inulin](#)

Mixtures of probiotics and prebiotics are known as **synbiotics** [\[R\]](#).

How it helps

The following [probiotics](#) may help with allergies caused by dust mites or pollen:

- [Lactobacillus paracasei](#) (strain LP-33) [\[R\]](#), [\[R\]](#), [\[R\]](#)
- [L. acidophilus](#) (strain L-92) [\[R\]](#), [\[R\]](#)
- [L. casei](#) (strain Shirota) [\[R\]](#)
- [Bifidobacterium animalis](#) (strain NCC2818) [\[R\]](#)
- [L. gasseri](#) (strain OLL2809) [\[R\]](#)
- [B. longum](#) (strain BB536) [\[R\]](#)

Probiotics likely help by balancing the immune response and lowering inflammation [\[R\]](#), [\[R\]](#), [\[R\]](#).

5

Exercise At Least One Hour a Day

IMPACT

4 / 5

EVIDENCE

3 / 5

How to implement

Dedicate a minimum of 60 minutes to moderate-intensity activities such as brisk walking, swimming, or cycling. Do this most days of the week, aiming for at least 5 days to optimize benefits.

TYPICAL STARTING DOSE

1 hour

Description

[Exercise](#) can do wonders for your health. It can help you lose weight, improve your heart health, boost your mood, and more [\[R\]](#).

There are many ways you can be active. You can walk, run, swim, dance, or play team sports. **Everything counts, and it's never too late to start!**

Try to get at least **60 minutes of moderate physical activity on most days**, including walking. **Getting a mix of cardio (min 150 min/day) and strength training (min 2 times a week) may be optimal.**

How it helps

Studies show that in people with asthma, **regular exercise** may improve symptoms and the quality of life [\[R, R, R, R, R\]](#).

Experts recommend exercise but don’t agree on whether it helps with asthma. Some say that it may improve asthma by strengthening your lungs. Others say that it has no benefits on asthma symptoms or lung function [\[R, R\]](#).

Cardio in particular may help improve the symptoms of hay fever [\[R\]](#).

Exercise may help with hay fever and asthma by reducing inflammation [\[R, R\]](#).

PERSONALIZED TO YOUR GENES

A sedentary lifestyle may worsen the impact of your [ADRB2](#) gene variant on asthma [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
ADRB2	rs1042713	GA	

6



Black Seed Oil

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take one to two teaspoons (5-10ml) of black seed oil twice daily, preferably before meals. For capsule forms, follow the manufacturer's instructions, commonly 500mg capsules twice daily. Continue this regimen for up to 8 weeks to evaluate its effects.

TYPICAL STARTING DOSE

2 tsp

Description

Both black seed extract and black seed oil have been traditionally used for their potential health benefits, including anti-inflammatory and antioxidant properties. They may support overall wellness and immune function when incorporated into a balanced diet.

[Black seed](#) (black cumin) and its oil are used in cooking and traditional medicine [\[R\]](#).

People mainly use black seed for [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Allergies
- Joint pain

How it helps

Black seed oil may help with asthma or hay fever in people with allergies [\[R\]](#), [\[R\]](#).

Black seed may help by [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Boosting lung function
- Lowering inflammation
- Balancing the immune response
- Blocking histamine release

7



Wear Facemasks

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Place a clean facemask over your nose and mouth before going into public spaces, especially indoor or crowded areas, making sure it fits snugly against the sides of your face without gaps. Keep it on throughout your exposure to these areas and replace the mask with a new one if it becomes damp or after each use. For cloth masks, wash them after a day’s use.

Description

Wearing facemasks is a preventive measure to reduce the transmission of infectious diseases, particularly respiratory illnesses. It is used to protect individuals and communities from viral infections by preventing the spread of respiratory droplets.

How it helps

Facemasks may reduce the inhalation of allergens, particularly pollen, which is a common trigger for allergic reactions. A clinical study demonstrated that facemasks lowered pollen invasion in the nose suggesting a protective effect against allergens [R].

Facemasks are generally recommended during high pollution days when particulate matter can exacerbate allergic symptoms. They are effective in reducing the intake of these particles, thus potentially alleviating symptoms related to air quality [R].

8



Avoid Ozone Exposure

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Stay indoors during times when ozone levels are reported to be high, typically on hot sunny days, especially during afternoon and early evening hours. Ensure that air filters in your home and vehicle are regularly maintained to decrease indoor ozone levels. Limit outdoor exercise or strenuous physical activity during high ozone days to reduce ozone exposure.

Description

Avoiding prolonged exposure to ground-level ozone, a component of air pollution, can protect lung health and reduce the risk of respiratory problems. Reducing outdoor activities during high ozone levels and using air purifiers indoors can minimize exposure.

How it helps

Ozone exposure may be associated with asthma [R].

9



Avoid Formaldehyde Exposure

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

To minimize formaldehyde exposure, choose household products and building materials labeled low-VOC (Volatile Organic Compounds) or formaldehyde-free. Ensure proper ventilation in your living and working spaces, especially when using products known to contain formaldehyde like certain adhesives, cleaning agents, and cosmetics. Aim to reduce use of pressed wood products and seek out alternatives when possible.

Description

Avoiding exposure to formaldehyde, a chemical commonly found in building materials and certain products, is crucial to prevent respiratory problems and potential carcinogenic effects.

How it helps

Formaldehyde exposure may be associated with asthma [\[R\]](#).

10



Black Seed (Black Cumin)

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Take 1000 mg of black seed (black cumin) supplement daily, preferably split into two doses of 500 mg each, one in the morning and one in the evening.

TYPICAL STARTING DOSE
1000 mg

Description

Black seed, also known as black cumin or *Nigella sativa*, has been used for its potential health benefits in traditional medicine. It is believed to have anti-inflammatory, antioxidant, and immune-boosting properties.

[Black seed](#) (black cumin) and its oil are used in cooking and traditional medicine [\[R\]](#).

People use black seed for [\[R, R, R, R, R\]](#):

- Asthma
- Allergies
- High blood sugar
- High blood pressure
- Joint pain

How it helps

In people with **asthma, black seed extract (1 g/day for 1-3 months)** may help improve the symptoms and well-being [\[R, R, R, R, R\]](#).

Black seed oil may also help with asthma or hay fever [\[R, R\]](#).

Black seed may help by [\[R, R, R\]](#):

- Boosting lung function
- Lowering inflammation
- Balancing the immune response
- Blocking histamine release

 PERSONALIZED TO YOUR GENES

Your [TSLP](#) gene variant is linked to allergic inflammation. Black seed may help balance the immune response and lower inflammation [\[R, R, R, R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
TSLP	rs1837253	CC	

11



Acupuncture

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Visit a licensed acupuncturist for a session, typically lasting between 30 to 60 minutes, once or twice a week. Depending on your specific condition, a course of treatment might range from a few weeks to several months.

TYPICAL STARTING DOSE

1 hour

Description

Acupuncture is a part of traditional Chinese medicine. It involves inserting thin needles at specific points on the body. People use it to relieve pain and allergies, as well as reduce nausea and improve sleep.

[Acupuncture](#) is a part of traditional Chinese medicine. It involves **inserting thin needles at specific points on the body**. People use it to [\[R, R, R, R, R\]](#):

- Relieve pain
- Improve sleep quality
- Relieve allergies
- Reduce nausea

How it helps

Acupuncture may potentially improve allergies. It may help by balancing the immune response [\[R, R, R\]](#).

In people with respiratory allergies, acupuncture may [\[R, R, R, R, R\]](#):

- Improve the symptoms
- Boost the quality of life

Please note: *Acupuncture is generally safe for most people. However, it may come with extra risks for pregnant women, people with pacemakers, and people with bleeding disorders. Consult your doctor or a licensed acupuncturist for more information* [\[R\]](#).

 PERSONALIZED TO YOUR GENES

Your [STAT6](#) gene variant is linked to higher odds of allergies. This gene helps make STAT6, a protein that contributes to allergy progression. Acupuncture may help by lowering STAT6 activity [\[R, R, R, R, R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
STAT6	rs1059513	TT	

12

Butterbur

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take a 75 mg butterbur supplement twice daily with meals to help manage your condition. Continue this regimen as advised by your healthcare provider.

TYPICAL STARTING DOSE

75 mg

Description

Butterbur is an herbal remedy commonly used for its potential to alleviate migraines and allergy symptoms. It contains compounds that may have anti-inflammatory and antispasmodic properties, providing natural relief for these conditions.

[Butterbur](#) is a shrub that has been used in traditional medicine for thousands of years. People even used it to treat plague during the Middle Ages [\[R\]](#).

Today, people mainly use a species of butterbur called *Petasites hybridus*. It may help relieve migraines and allergies [\[R\]](#), [\[R\]](#).

How it helps

Butterbur may improve the symptoms of hay fever and asthma. It may help by lowering inflammation [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Studied doses include:

- Butterbur extract containing **16-32 mg petasin** (active compound) for **1-2 weeks** [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#)
- 100-150 mg butterbur extract** for **1-8 weeks** [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#)

Please note: Make sure to get butterbur extract that’s labeled as “pyrrolizidine alkaloid (PA)-free.” PAs are toxic to your lungs, liver, and other organs. Avoid butterbur if you’re allergic to ragweed, daisies, or chrysanthemums because it belongs to the same plant family [\[R\]](#), [\[R\]](#).

PERSONALIZED TO YOUR GENES

Your [BCL6](#) gene variant is linked to allergies. This gene may influence the levels of IL-4, a crucial inflammatory protein. Butterbur may help by reducing IL-4 levels and inflammation [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
LPP	rs9865818	GG	

13



Aerobic Exercise (Cardio)

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Engage in at least 150 minutes of moderate-intensity aerobic exercise or 75 minutes of vigorous-intensity activity each week. Distribute this time over at least 3 days per week, avoiding consecutive days of vigorous exercise to allow for recovery.

TYPICAL STARTING DOSE

1 hour

Description

Engaging in regular aerobic exercise, such as running, swimming, or cycling, offers numerous health benefits, including improved cardiovascular fitness, weight management, and mood enhancement. It supports overall physical and mental well-being while reducing the risk of chronic diseases.

Cardio, short for cardiovascular exercise, is any type of physical activity that temporarily increases your heart rate. Examples include **running, cycling, swimming, and brisk walking**.

Regular cardio exercise has many benefits for your overall health. It can help lower your risk of heart disease and diabetes, support weight loss, and improve your mood and energy levels. To get the most out of cardio, try to do it for at **least 30 minutes, 3-5 times a week**.

Interval training is a type of cardio that combines periods of high-intensity training with brief rest periods.

How it helps

Studies show that in people with asthma, **regular exercise** may improve symptoms and the quality of life [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Experts recommend exercise but don’t agree on whether it helps with asthma. Some say that it may improve asthma by strengthening your lungs. Others say that it has no benefits on asthma symptoms or lung function [\[R\]](#), [\[R\]](#).

Cardio in particular may help improve the symptoms of hay fever [\[R\]](#).

Exercise may help with hay fever and asthma by reducing inflammation [\[R\]](#), [\[R\]](#).

14



Avoid Perfluorooctanoic Acid (PFOA) Exposure

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

To avoid PFOA exposure, refrain from using non-stick cookware and opt for stainless steel, ceramic, or cast iron options instead. Additionally, avoid fast-food packaging and stain-resistant products for carpets and fabrics. Check labels for PFOA or related chemicals and seek alternatives.

Description

Avoiding exposure to perfluorooctanoic acid (PFOA), commonly found in non-stick cookware and certain consumer products, can reduce the risk of potential health issues, including hormonal disruption and adverse reproductive effects.

How it helps

Perfluorooctanoic acid may be associated with rhinitis and asthma [\[R\]](#).

15

Avoid Air Pollution

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Stay indoors on days when air quality indexes (AQI) indicate high pollution levels, which are often reported by weather services or government environmental agencies. **Install air purifiers** in your home, especially in bedrooms, to reduce indoor pollutants. Limit outdoor exercise when air pollution warnings are issued, opting for indoor activities instead.

Description

Avoiding air pollution by reducing exposure to pollutants in the environment is essential for respiratory and overall health. It can help lower the risk of respiratory diseases, cardiovascular conditions, and other health issues associated with poor air quality.

While city life is convenient in a lot of ways, it comes with some health hazards. Cars, factories, and other sources increase air [pollution](#) [\[R\]](#).

Air pollution plays a role in [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Lung disease
- Heart disease
- Diabetes
- Asthma
- Skin conditions

How it helps

Some experts say that people with respiratory allergies should take special care to avoid air pollution. It may increase the risk of developing respiratory allergies and may worsen the symptoms [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Using air purifiers with HEPA filters may help [\[R\]](#).

Air pollution may contribute to allergies by [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Causing [oxidative stress](#)
- Increasing inflammation
- Causing the airway to overreact to allergens

PERSONALIZED TO YOUR GENES

People with your [NQO1](#) gene variant may be more prone to asthma when exposed to air pollution [\[R\]](#).

In people with your [TGFB1](#) gene variant, air pollution may have a stronger impact on asthma [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
NQO1	rs2917666	GG	
B3GNT8	rs1800469	AA	

16



Quercetin

IMPACT

3 / 5

EVIDENCE

2 / 5

How to implement

Take 250-1000 mg of quercetin supplement daily with a glass of water, preferably with a meal to aid in its absorption.

TYPICAL STARTING DOSE
200 mg

Description

Quercetin is a natural plant flavonoid found in various foods, particularly in fruits and vegetables like apples, onions, and broccoli. It is used as a dietary supplement and is valued for its potential antioxidant and anti-inflammatory properties.

[Quercetin](#) is a **plant-based antioxidant**. It supports the immune system and helps lower inflammation [\[R\]](#), [\[R\]](#).

Good sources of quercetin include [\[R\]](#):

- Apples
- Onions
- Tea

People mainly use quercetin supplements to relieve allergies [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

Quercetin (100 mg/day for 8 weeks) may improve some symptoms of **Japanese cedar pollen allergy** [\[R\]](#), [\[R\]](#).

Quercetin may help by blocking the release of [histamine](#). In this way, it may reduce inflammation [\[R\]](#), [\[R\]](#).

Please note: *quercetin may inhibit the production of the thyroid hormone T4 (thyroxine). Individuals with thyroid disorders, particularly hypothyroidism or low T4 levels, should exercise caution when using quercetin and always consult with a healthcare provider before taking this supplement* [\[R\]](#).

Please note: *quercetin may interfere with iron absorption due to its iron-chelating properties, potentially exacerbating anemia or making it harder to manage. If you have anemia, consult your healthcare provider before using quercetin supplements* [\[R\]](#).

 PERSONALIZED TO YOUR GENES

Your [IL33](#) gene variant is linked to higher odds of allergies. This gene helps make IL-33, a protein that increases airway inflammation. Quercetin may help by blocking IL-33 and reducing inflammation [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
ERMP1	rs928413	GG	

17



Pycnogenol

IMPACT

3 / 5

EVIDENCE

2 / 5

How to implement

Take 100 mg of pycnogenol supplement daily. This can be taken in a single dose or divided into two doses of 50 mg each, one in the morning and one in the evening.

TYPICAL STARTING DOSE
100 mg

Description

Pycnogenol (pine bark extract) is derived from the bark of the maritime pine (Pinus pinaster). It has been used in traditional n European folk medicine for centuries, and more recently as a supplement. The extract contains a group of bioactive compounds known as proanthocyanidins, which may be beneficial in supporting cardiovascular health, promoting skin health, and aiding in the management of various conditions related to inflammation and oxidative stress.

Pycnogenol comes from the bark of pine trees that grow in the Mediterranean [\[R, R\]](#).

It may improve [\[R, R, R, R, R, R\]](#):

- Athletic performance
- Seasonal allergies
- Cognitive function
- Joint health
- Varicose veins

How it helps

Pine bark extract (100-200 mg/day for 1-6 months) may improve asthma symptoms. It likely helps by [\[R, R, R, R, R\]](#):

- Blocking the release of [histamine](#)
- Lowering inflammation
- Boosting lung function

Pine bark extract (100 mg/day) may also improve the symptoms in people with **seasonal allergies**. It may help when taken at least 5 weeks **before allergy season** [\[R\]](#).

 PERSONALIZED TO YOUR GENES

Your **STAT6** gene variant is linked to higher odds of allergies. This gene helps make STAT6, a protein that contributes to allergy progression. Pine bark extract may help by blocking STAT6 [\[R, R, R, R, R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
STAT6	rs1059513	TT	

18



Beta-Glucans

IMPACT

3 / 5

EVIDENCE

2 / 5

How to implement

Take a beta-glucan supplement daily, with a dosage ranging from 250mg to 500mg. It is best consumed with a meal to enhance absorption. Continue this routine daily to support immune health.

Description

Beta-glucans are types of soluble fiber found in foods like oats and barley. They have been associated with immune system support and may help lower cholesterol levels when consumed as part of a heart-healthy diet.

Beta-glucan is a type of soluble fiber with antioxidant properties. It is abundant in [\[R\]](#) [\[R\]](#):

- Baker's yeast
- Cereals (e.g., oats, barley)
- Mushrooms (e.g., maitake)
- Seaweeds

People use beta-glucans to [\[R\]](#) [\[R\]](#) [\[R\]](#) [\[R\]](#) [\[R\]](#):

- Improve immunity (e.g., fight infections)
- Reduce blood sugar
- Reduce cholesterol

How it helps

In a study of 48 ragweed allergy sufferers, supplementation with beta-glucans (250 mg/day for 4 weeks) reduced the incidence and severity of the symptoms and improved overall physical health and well-being [\[R\]](#).

Similarly, beta-glucans reduced and prevented cedar pollen allergy symptoms such as runny and stuffy nose, sneezing, and itchy and watery eyes in a study of 60 people. In another study of 24 people allergic to olive tree pollen, beta-glucans reduced inflammation [\[R\]](#) [\[R\]](#).

19



Mediterranean Diet

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

Incorporate a variety of primarily plant-based foods, such as fruits, vegetables, whole grains, nuts, and legumes, into every meal. Choose healthy fats, like olive oil, over saturated fats and consume fish and poultry at least twice a week. Limit red meat to a few times a month and include a moderate amount of dairy products. Opt for water and red wine in moderation as your beverages.

Description

The [Mediterranean diet](#) is based on the traditional cuisine from the Mediterranean regions. It moderates the intake of red meat and dairy, while being rich in fruits and vegetables, whole grains, and healthy fats ([olive oil](#)).

The [Mediterranean diet](#) focuses on traditional cuisine from the Mediterranean regions. It’s rich in [\[R\]](#):

- [Olive oil](#)
- Fruits and vegetables
- Whole grains
- Nuts and seeds
- Fish

This type of diet may **reduce inflammation and protect the brain and heart** [\[R, R, R, R\]](#).

Limited intake of animal products, saturated fat, and refined sugar likely contribute to the health benefits of the Mediterranean diet [\[R\]](#).

How it helps

Following the Mediterranean diet may improve asthma symptoms. This type of diet is rich in fruits, veggies, and whole grains, which may benefit people with asthma [\[R, R, R, R, R\]](#).

The Mediterranean diet may help by reducing airway inflammation [\[R\]](#).

 PERSONALIZED TO YOUR GENES

Your [BCL6](#) gene variant is linked to allergies. This gene influences the levels of IL-4, a crucial inflammatory protein. The Mediterranean diet may help by reducing IL-4 and inflammation [\[R, R, R, R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
LPP	rs9865818	GG	

20



Nasal Light Therapy

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Use a nasal light therapy device for about 25 minutes per day. Insert the device gently into the nose, and turn it on to allow the light to work. This can be done once daily for several weeks or according to the specific product's instructions or until symptoms improve.

TYPICAL STARTING DOSE

25 minutes

Description

Nasal light therapy involves the use of low-level light to stimulate blood flow in the nasal cavity, potentially improving symptoms of sinusitis and congestion, and promoting better respiratory health.

Nasal light therapy involves shining different types of light into the nostrils. It’s mainly used to help relieve hay fever symptoms [\[R\]](#).

How it helps

Nasal light therapy may relieve symptoms and boost the quality of life in people with hay fever [\[R\]](#).

Some types of light that may help include [\[R\]](#), [\[R\]](#):

- A combination of visible and [UV](#) light
- [Red](#) light
- [Infrared](#) light

Nasal light therapy may help by balancing the immune response [\[R\]](#), [\[R\]](#).

 PERSONALIZED TO YOUR GENES

Your [ID2](#) gene variant is linked to higher odds of allergies. This gene plays a role in the immune response. Nasal light therapy may help balance the immune response [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
ID2	rs10174949	GG	

21



Breathing Techniques

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Practice deep breathing exercises for 10 minutes daily, preferably in a quiet space where you won't be disturbed. Sit or lie down in a comfortable position, slowly inhale through your nose, allowing your chest and lower belly to rise, hold the breath for a moment, and then exhale slowly through your mouth or nose. This can be done at any time of day to reduce stress and improve focus.

TYPICAL STARTING DOSE

10 minutes

Description

Breath awareness and specific breathing techniques, such as deep breathing or mindfulness-based practices, can help reduce stress, improve focus, and enhance overall mental well-being. These techniques are valuable tools for managing anxiety and promoting relaxation.

Most breathing techniques involve taking slow and even breaths. Their main goal is to prevent rapid breathing (**hyperventilation**) [\[R\]](#).

Breathing techniques tend to help with [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Stress
- Anxiety
- Sleep problems
- Asthma

One example is the **Buteyko breathing technique**. It’s often used by people with asthma or other conditions that affect the lungs [\[R\]](#).

Another example is **yogic breathing**. [Yoga](#) is a practice that combines breathing techniques with exercise and meditation [\[R\]](#), [\[R\]](#).

How it helps

Experts recommend doing breathing exercises to help manage asthma [\[R\]](#), [\[R\]](#).

In people with asthma, the **Buteyko breathing technique** may [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Improve the quality of life
- Improve breathing rate

Yoga may similarly improve the quality of life and asthma symptoms [\[R\]](#), [\[R\]](#), [\[R\]](#).

Breathing techniques may help by boosting lung function [\[R\]](#).

22



Dietary Vitamin E

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

Incorporate foods high in Vitamin E into your daily diet. This includes almonds, hazelnuts, sunflower seeds, and green leafy vegetables such as spinach and broccoli. Aim for a daily intake of 15mg of Vitamin E from your diet, which is roughly a handful of almonds (about 23 almonds) or 2 tablespoons of sunflower seeds.

Description

Dietary vitamin E is a fat-soluble antioxidant vitamin found in nuts, seeds, and vegetable oils. It helps protect cells from oxidative damage and supports immune function.

[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

Low levels of vitamin E may increase the odds of asthma. **Eating nuts rich in vitamin E** may help [\[R, R, R\]](#).

Vitamin E intake during pregnancy may also be important. Maintaining healthy vitamin E levels during pregnancy may lower the odds of wheezing or asthma in children [\[R, R, R\]](#).

Supplementing with vitamin E may also improve asthma and hay fever. **However, the evidence is mixed** [\[R, R, R, R, R\]](#).

Vitamin E may help by [\[R, R, R, R\]](#):

- Fighting [oxidative stress](#)
- Lowering inflammation
- Preventing damage to the airways
- Balancing the immune response

Please note: *While dietary vitamin E is generally considered safe, vitamin E supplements have been linked to prostate cancer. They may also not be the best option for people who are pregnant or have heart disease, bleeding disorders, or other conditions. Consult your doctor before taking vitamin E supplements* [\[R\]](#).



PERSONALIZED TO YOUR GENES

The [TSLP](#) gene helps make a protein that activates Th2 cells. Allergies are considered [Th2-dominant](#) conditions, since Th2 cells stimulate [histamine](#) release, [IgE](#) antibody production, and other components of allergic inflammation [[R](#), [R](#), [R](#)].

Your genotype for [rs1837253](#) may increase TSLP and Th2 cell activity. It correlates with more severe allergic inflammation [[R](#), [R](#)].

In animal studies, vitamin E ingestion reduced TSLP activity [[R](#), [R](#), [R](#)].

>>> *To learn more about the link between the TSLP gene and allergic conditions, check out the full SelfDecode blog post [here](#).*

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
TSLP	rs1837253	CC	

23

Maintain Optimal Vitamin D Levels

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Check your vitamin D levels, they should ideally be in the 30-66 ng/mL range. If your levels are lower than that, take a vitamin D supplement, 1000-4000 IU daily, to reach an optimal range.

TYPICAL STARTING DOSE

1000 iu

Description

Vitamin D, often referred to as the "sunshine vitamin," can be synthesized by the skin when exposed to sunlight, as well as being found in fish, eggs, and fortified milk. It helps regulate calcium absorption, promoting strong bones and a healthy immune system. Vitamin D deficiency can lead to conditions like rickets in children and osteoporosis in adults.

Your body needs [vitamin D](#) for strong bones. Vitamin D also plays a role in [\[R\]](#):

- Mood
- Immunity
- Heart health
- Blood sugar control

[Sunlight](#) is our main source of vitamin D. Experts recommend getting at least **5-15 minutes of midday sun, 2-3 times per week**. People with darker skin and those living at high latitudes may need longer periods of sun exposure [\[R\]](#), [\[R\]](#).

Foods like fish, eggs, and fortified milk provide small amounts of vitamin D. **People lacking vitamin D should consider taking a supplement** [\[R\]](#).

How it helps

Low levels of vitamin D have been linked to **hay fever, but the evidence is mixed. Vitamin D (up to 4000 IU/day for at least 8 weeks)** may help manage the symptoms [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

The evidence is also mixed for people with asthma. Both low and high levels of vitamin D are linked to asthma in children. However, it’s unclear whether vitamin D supplements help [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Vitamin D may help with allergies by [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Lowering inflammation
- Balancing the immune response
- Boosting lung function

However, the evidence connecting vitamin D to allergies is fairly weak [\[R\]](#), [\[R\]](#), [\[R\]](#).

Please note: *Experts recommend getting 600-800 IU of vitamin D per day. Medical bodies recommend against taking more than 4,000 IU per day* [\[R\]](#).



PERSONALIZED TO YOUR GENES

The [PTGER4](#) gene helps make a receptor for [prostaglandin](#) E2 (PGE2). Activation of this receptor by PGE2 promotes inflammation and may thus play a role in allergic reactions [[R](#), [R](#), [R](#)].

Your genotype for [rs7720838](#) may increase PTGER4 activity and correlates with higher odds of allergies [[R](#), [R](#), [R](#)].

[Vitamin D](#) may counteract your variant by reducing PTGER4 activity [[R](#), [R](#)].

>>> *To learn more about the link between the PTGER4 gene and allergic conditions, check out the full SelfDecode blog post [here](#).*

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
PTGER4	rs7720838	TT	

24



Lactobacillus Plantarum

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take a probiotic supplement containing *Lactobacillus plantarum* 299V daily. The typical dosage is 10 billion colony-forming units (CFUs). Continue for at least 4 weeks to assess benefits on digestive health.

TYPICAL STARTING DOSE
10 billion CFU

Description

Lactobacillus plantarum is a [probiotic](#) bacterium found in many fermented plant products such as sauerkraut, pickles, brined olives, and Korean kimchi [\[R\]](#).

People take *L. plantarum* supplements to improve [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Diarrhea
- Skin appearance
- IBD
- High cholesterol

How it helps

Lactobacillus Plantarum is a probiotic that may boost your immune system, making it better equipped to deal with allergy-inducing substances. It has also been shown to reduce inflammation in the body, which can help alleviate often severe allergy symptoms.

In clinical trials, fermented orange juice with heat-killed *L. plantarum* LP0132 improved cedar pollen allergy symptoms and preserved Treg cell levels during peak season. Additionally, fermented citrus juice with the same strain reduced symptoms and immune markers in subjects with perennial allergic rhinitis. Fermented milk with *L. plantarum* HSK201 also showed benefits in allergic individuals by maintaining immune balance and reducing pollen-specific IgE levels. [\[R\]](#), [\[R\]](#), [\[R\]](#).

In a [placebo-controlled trial of 62 subjects with birch pollen allergy](#), taking *L. plantarum* CBS125632 for 4 weeks **decreased birch pollen-specific IgE counts and the levels of IL-5 and IL-13** [\[R\]](#).

A probiotic with *L. plantarum* and *Bifiobacterium longum* **improved total nasal symptoms, Dermatophagoides farinae-specific IgE levels, and IL-10 levels** in a [placebo-controlled trial of 95 subjects with dust mite allergy](#) [\[R\]](#).

In a [placebo-controlled trial of 53 female students with seasonal allergies](#), supplementation with *L. plantarum* LP14 (8.7 x 10⁸ cfu/day) for 6 weeks **increased Th1 cell count** [\[R\]](#).

25



Air Purifier

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Install an air purifier in your home, ideally in the rooms you spend the most time in, such as your bedroom and living room. Keep the air purifier on for at least 12 hours each day, or continuously if possible, to effectively reduce airborne contaminants. Regularly clean or replace the filters according to the manufacturer's instructions to maintain its efficiency.

Description

Air purification is the process of cleaning the air around us. Using a high-quality air purifier with a HEPA filter helps remove harmful particles like dust, smoke, and bacteria. Having clean air to breathe can help boost your health by reducing allergies, asthma problems, and even certain infections.

How it helps

Air purification helps in allergies by removing allergens such as dust, pet dander, mold, and pollen from the air. This reduces exposure to these triggers, alleviating allergic symptoms like sneezing, runny nose, or itchy eyes.

In a placebo-controlled trial of 90 patients with allergic rhinitis to artemisia pollen, air purification reduced rhinitis symptom severity. Using air purifiers for 6 weeks reduced medication requirements, but not symptom severity, in a placebo-controlled trial of 44 patients with house dust mite allergy. In a placebo-controlled trial of 32 subjects with allergic rhinitis, using HEPA air purifiers reduced the amount of allergens and improved activity limitation, non-nasal-eye symptoms, practical problems, and nasal symptoms [\[R\]](#), [\[R\]](#), [\[R\]](#).

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Lactobacillus Paracasei

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take a supplement containing Lactobacillus paracasei daily, with a dose of around 10 billion colony-forming units (CFUs). Consume the supplement with or without food, but consistently at the same time each day for at least 4 weeks to observe beneficial effects.

TYPICAL STARTING DOSE
10 billion CFU

Description

Lactobacillus paracasei is a beneficial probiotic strain that can support digestive health and contribute to a balanced gut microbiome. It may help improve gut function, enhance nutrient absorption, and bolster the immune system, promoting overall well-being.

[Lactobacillus paracasei](#) is a type of bacteria naturally found in the intestine. It is considered a [probiotic bacteria](#), which means “good” bacteria that has health benefits when taken in adequate amounts [\[R\]](#).

L. paracasei is used in the production of the following fermented foods [\[R\]](#):

- Yogurt
- Cheese
- Sauerkraut

It may help [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Improve gut and skin health
- Boost immunity
- Fight allergies

How it helps

Lactobacillus paracasei (2x/day, 5 x 10^9 CFU/capsule for 4-6 weeks) may improve perennial allergic rhinitis [\[R\]](#), [\[R\]](#).

27



Forskolin

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take 250 mg of a 10% forskolin extract twice a day. For best results, consume it on an empty stomach about 15-30 minutes before meals. This regimen should be followed daily for at least 12 weeks to evaluate its effectiveness.

TYPICAL STARTING DOSE

500 mg

Description

Forskolin is a natural compound found in the roots of the Indian coleus plant, and it has been studied for its potential to support weight management and heart health.

[Forskolin](#) is a popular supplement and research tool that entered medical practice from Ayurvedic medicine. It is obtained from the dried root of an Indian plant known as *Plectranthus barbatus* or *Coleus forskohlii* [\[R\]](#).

Forskolin is especially popular as a weight loss supplement, but the research behind it is limited [\[R, R, R\]](#).

How it helps

In a study of 16 people with asthma, forskolin dry powder (10 mg/day) combined with a medicated inhaler caused measurable bronchodilation. However, it may have increased more side effects [\[R\]](#).

Oral forskolin (10 mg/day) also prevented asthma attacks in studies of 100 people [\[R, R\]](#).

 PERSONALIZED TO YOUR GENES

The [ID2](#) gene encodes a protein that moves the immune system away from the allergy-associated [Th2](#) response. It does so by reducing the production of [IgE](#) antibodies, which play a central role in allergic reactions [\[R, R, R\]](#).

Your genotype for [rs10174949](#) has been associated with relatively lower ID2 activity and higher odds of allergies [\[R, R\]](#).

[Forskolin](#), an active compound from the coleus plant, may increase *ID2* activity [\[R\]](#).

>>> To learn more about the link between the *ID2* gene and allergic conditions, check out the full SelfDecode blog post [here](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
ID2	rs10174949	GG	

28



Avoid Exposure to Molds

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Keep indoor humidity levels below 50% by using dehumidifiers or air conditioners, ensure proper ventilation in areas like bathrooms and kitchens, fix leaks promptly, and clean up any water damage within 24-48 hours to prevent mold growth. Regularly check and clean places where mold tends to accumulate, such as shower curtains, window sills, and refrigerator drip pans.

Description

[Molds](#) are tiny fungi that live all around us: in the soil and air, on food crops, and even on our skin. Some of them are beneficial while others can wreak havoc on our health. Inhaled mold may cause a range of respiratory symptoms, like infections, asthma, and coughing.

[Molds](#) are tiny fungi that live all around us: in the soil and air, on food crops, and even on our skin. Some of them are beneficial while others can wreak havoc on our health [\[R\]](#).

Inhaled mold may cause a range of respiratory symptoms, including [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Respiratory infections
- Reduced lung function
- Caugh
- Asthma worsening

Mycotoxins are the most dangerous aspect of **foodborne mold**. Exposure to higher amounts of these toxins can damage the organs and promote cancer growth [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

Avoiding exposure to molds may reduce allergy symptoms like rhinitis, cough, headaches, and respiratory symptoms. Individuals with mold allergies often experience a variety of symptoms, which can be mitigated through reduced exposure [\[R\]](#).

Exposure to indoor molds is associated with allergic sensitization, and higher fungal spore counts in homes have been linked to increased risks of allergic sensitization and respiratory health issues [\[R\]](#).

Mold exposure, particularly in people sensitive to molds, may exacerbate asthma symptoms. Reducing exposure to molds, both indoors and outdoors, can lead to decreased asthma symptoms and improved respiratory health [\[R\]](#).

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CLA (Conjugated Linoleic Acid)

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 3 to 4 grams of CLA (conjugated linoleic acid) supplements daily, divided into two doses, preferably with meals to enhance absorption. Continue this regimen daily for at least 6 months to potentially see beneficial results.

TYPICAL STARTING DOSE

3 g

Description

CLA is a fatty acid found in meat and dairy products and is often used as a dietary supplement. Some studies suggest that CLA may have potential benefits for weight management and body composition by promoting fat loss and muscle preservation.

[Conjugated linoleic acids](#) (CLA) are **polyunsaturated fats** (PUFAs). They’re mainly found in meat and dairy. People also take them as supplements [\[R\]](#), [\[R\]](#).

CLA supplements are often marketed as weight loss aids [\[R\]](#).

How it helps

Supplementation with 2 g/day conjugated linoleic acids (CLA) during the 8 weeks before pollen season reduced sneezing and improved the overall feeling of well-being in a study of 40 people with allergy to birch pollen [\[R\]](#).

CLA (3-4.5 g/day for 12 weeks) also reduced inflammation and airway hyperresponsiveness in 2 studies of 47 people with allergic asthma. However, CLA (4.8 g/day) supplementation did not help in a study of 6 people with asthma [\[R\]](#), [\[R\]](#), [\[R\]](#).

Please note: *CLA supplementation may increase CRP, a marker of inflammation* [\[R\]](#), [\[R\]](#), [\[R\]](#).

30



Artemisia Extract

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take an artemisia extract supplement, usually available in capsule form, with a typical dosage ranging from 200 to 400 mg daily. This should be taken with water, preferably after meals to reduce the risk of stomach upset. Follow the specific dosage recommended on the product label or by a healthcare provider for up to 4 weeks.

TYPICAL STARTING DOSE

200 mg

Description

Artemisia extract is derived from various species of the Artemisia plant, and it is used in traditional medicine for its potential medicinal properties. It is being studied for its possible role in supporting digestive health and immune function.

How it helps

In an uncontrolled trial of 12 patients with allergic rhinitis, using a nasal spray with *Artemisia abrotanum* essential oils (4 mg/mL) and flavonols (2.5 microg/mL) rapidly improved the symptoms. Completing 12 weeks-2 years of immunotherapy with *Artemisia vulgaris* extract improved nasal symptoms, skin sensitivity, and eye sensitivity in 3 placebo-controlled trials of 179 patients with seasonal allergic rhinitis [R, R, R, R].

Artemisia extract may help by reducing the body's inflammatory response to allergens. Additionally, it boosts the immune system, potentially decreasing the severity of allergic reactions.

31



Lactobacillus Acidophilus

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take a probiotic supplement containing Lactobacillus acidophilus. Look for products that offer around 10 billion CFUs (colony-forming units) and take it once daily, preferably on an empty stomach, either first thing in the morning or right before bed.

TYPICAL STARTING DOSE
10 billion CFU

Description

Lactobacillus acidophilus is a [probiotic](#) bacterium that has been traditionally and widely used in the dairy industry to make yogurt [\[R\]](#).

More recently, *L. acidophilus* has been used as a probiotic. People take it to help with [\[R, R, R, R\]](#):

- High cholesterol
- Gut diseases
- Allergies
- Vaginal infections

How it helps

Lactobacillus acidophilus (2x/day for 6 weeks) may improve Japanese cedar pollinosis and perennial allergic rhinitis [\[R, R\]](#).

32



Lactobacillus Gasseri

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take a Lactobacillus gasseri supplement containing around 10 billion colony-forming units (CFUs) daily, ideally with a meal, for at least 2 weeks to 4 months to observe benefits. Continuous daily intake is recommended for ongoing support.

TYPICAL STARTING DOSE
10 billion CFU

Description

Lactobacillus Gasseri is a beneficial probiotic strain that can support digestive health and contribute to a balanced gut microbiome. It may help improve gut function, enhance nutrient absorption, and bolster the immune system, promoting overall well-being.

How it helps

In several trials involving participants with allergic conditions, the consumption of products containing *L. gasseri* strains showed beneficial effects. These effects included a reduction in total IgE levels and specific IgE levels related to allergens, improved symptoms of allergic rhinitis and asthma, and alterations in cytokine levels [R, R, R, R, R, R, R].

L. gasseri may aid in reducing allergy symptoms by lowering inflammation and inhibiting allergic reactions.

33



Choline Supplements

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take choline supplements at a dosage of 425 mg to 550 mg daily, depending on age and gender, with a glass of water. It is best to consume choline supplements with a meal for optimal absorption. Continue this regimen daily as part of your dietary supplement routine.

TYPICAL STARTING DOSE

425 mg

Description

Choline is an essential nutrient that plays a crucial role in various bodily functions, including brain health, liver function, and metabolism. Incorporating choline-rich foods into your diet supports cognitive function and overall nutritional well-being.

[Choline](#) is a nutrient required for optimal health. Although the body makes some, we need to get choline from our diets to avoid deficiency [\[R\]](#).

It plays key roles in supporting [\[R\]](#), [\[R\]](#):

- DNA production
- Cell structure and function
- Brain, nerve, and heart health

Eggs and beef liver are the best sources of choline. If you can’t meet your daily requirements with food, consider taking a choline supplement such as [\[R\]](#):

- [Phosphatidylcholine](#) (PC)
- [Citicoline](#) (CDP-choline)
- [Alpha-GPC](#)
- [Lecithin](#)

They all supply choline, but each one has unique health perks you may prefer. Check out our posts on different choline-containing supplements to find out which one suits you best.

How it helps

Choline supplementation (500-1,500 mg/day for 3-6 months) brought symptom relief and reduced inflammation in 3 studies of over 100 people with asthma [\[R\]](#), [\[R\]](#), [\[R\]](#).

However, choline may offer smaller benefits compared to standard therapy [\[R\]](#), [\[R\]](#), [\[R\]](#).

Please note: Most manufacturers source choline from soybean and eggs. People allergic to these foods should read the labels carefully to avoid unwanted reactions.

34



Curcumin

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take a 500 mg curcumin supplement daily with food. To enhance absorption, take it with a meal that contains fats or oils since curcumin is fat-soluble.

TYPICAL STARTING DOSE

500 mg

Description

Curcumin is a compound found in turmeric known for its anti-inflammatory and antioxidant properties. It has been studied for its potential to reduce inflammation, support joint health, and contribute to overall well-being.

[Turmeric](#) is a yellow spice from India. It may reduce inflammation and [oxidative stress](#) [R].

The most important active compound in turmeric is **curcumin**. People use curcumin for [R, R, R, R, R, R]:

- Joint pain
- Hay fever
- Mood
- High blood sugar
- Gut health
- Liver health

How it helps

In people with **hay fever**, **curcumin (0.5 g/day for 2 months)** may improve symptoms like sneezing and congestion. It likely helps by balancing the immune response [R].

Powdered turmeric (0.5-1 g/day for 3-6 months) may improve symptoms in children with **asthma** [R].

Note that curcumin is hard to absorb. Look for supplements with *bioavailable* curcumin, which is easier to absorb. Combining it with [piperine](#) (a compound in black pepper) may also help [R, R].

Please note: *curcumin may interfere with iron absorption due to its iron-chelating properties, potentially exacerbating anemia or making it harder to manage. If you have anemia, consult your healthcare provider before using curcumin or turmeric supplements* [R, R, R].

35



Spirulina

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 1-8 g of spirulina supplements daily, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

500 mg

Description

Spirulina is a blue-green algae. It is rich in nutrients like protein, vitamins, and minerals, particularly vitamin B12 and iron, and is a source of antioxidants, chlorophyll, and phycocyanin. It can be found in powdered or tablet form as a supplement, and is often used to boost energy, support the immune system, and enhance overall nutrition. Additionally, spirulina.

[Spirulina](#) is a supplement made from blue-green algae that grows in fresh and marine water [\[R, R\]](#).

Dried spirulina is up to 70% protein. It’s also rich in vitamins, antioxidants, and healthy fats. This makes it a great source of nutrition for both people and livestock [\[R, R, R\]](#).

People use spirulina supplements to reduce [\[R, R\]](#):

- Cholesterol
- Blood pressure
- Blood sugar

How it helps

In people with hay fever, **spirulina (2 g/day for 6 months)** may improve symptoms like runny nose and sneezing. It likely blocks white blood cells that trigger allergic reactions [\[R, R, R\]](#).

36



Moringa

IMPACT

2 / 5

EVIDENCE

1 / 5

How to implement

Take 400-800 mg of moringa leaf powder capsule form once daily, preferably with meals to enhance absorption. For fresh moringa leaves, a dose of 10 grams daily can be consumed directly or added to meals. Continue this regimen for at least 3 to 6 months to observe significant benefits.

TYPICAL STARTING DOSE

400 mg

Description

Moringa is a nutrient-dense plant known for its high levels of vitamins, minerals, and antioxidants. It is used in traditional medicine for a range of issues due to it's potential anti-inflammatory, antioxidant, and antimicrobial properties.

How it helps

Powdered moringa seed kernels (3 g, 2x/day for 3 weeks) reduced asthmatic symptoms and improved lung function and airway flow in a study of 20 people [\[R\]](#).

Moringa may help by reducing inflammation [\[R\]](#), [\[R\]](#).

37



Boswellia

IMPACT2 / 5

EVIDENCE1 / 5

How to implement

Take a 350 mg Boswellia supplement daily, ideally with a meal to enhance absorption.

TYPICAL STARTING DOSE

350 mg

Description

Boswellia is an herbal remedy derived from the resin of certain trees. It's known for its potential anti-inflammatory properties and is often used to support joint health.

[Boswellia](#), also known as frankincense, is the hardened sap of the *Boswellia serrata* tree [\[R\]](#).

In traditional medicine, boswellia is used for joint pain and gut conditions [\[R\]](#).

Today, some people use boswellia for [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Osteoarthritis
- IBD
- Skin aging
- Asthma
- Gum health

How it helps

Gum resin of boswellia (300 mg, 3x/day for 6 weeks) improved difficulty breathing, wheezing lung sound, and the number of attacks in a 6-week study of 40 people with bronchial asthma [\[R\]](#).

38



Agaricus Blazei

IMPACT

2 / 5

EVIDENCE

1 / 5

How to implement

Take an Agaricus blazei supplement in capsule form, usually ranging from 500 mg to 1500 mg per day, divided into two or three doses. This should be done with water, preferably 30 minutes before meals to help with absorption. Continue this regimen daily for a period of up to 3 months, then assess the effects and decide whether to continue based on your health goals.

TYPICAL STARTING DOSE

500 mg

Description

Agaricus blazei is a mushroom native to Brazil and Japan, known for its potential health benefits, attributed to its polysaccharide compounds, such as beta-glucans. It has been used in traditional medicines to help support immune system function. It may also be beneficial for cancer, diabetes, and high cholesterol.

How it helps

Agaricus blazei extract (60 mL/day for 7 weeks before birch pollen season) reduced allergic and asthmatic symptoms, medication use, and the levels of specific antibodies during the season in a study of 60 people [\[R\]](#).

39



Milk Thistle (Silymarin)

IMPACT2 / 5

EVIDENCE1 / 5

How to implement

Take a 300 mg milk thistle (silymarin) supplement daily with water, preferably with a meal for better absorption. Continue this regimen as advised by your healthcare provider.

TYPICAL STARTING DOSE

300 mg

Description

Silymarin is a natural plant extract derived from the milk thistle plant (*Silybum marianum*). It has been traditionally used for its potential anti-inflammatory and liver-protective properties. Silymarin consists of several flavonolignans, including silybin, silydianin, and silychristin.

Milk thistle (*Silybum marianum*) is a purple flowering plant in the daisy family. Traditionally, it has been used for liver problems. Some people also eat the leaves in salads [\[R\]](#), [\[R\]](#).

The extract of milk thistle is called *silymarin* [\[R\]](#), [\[R\]](#), [\[R\]](#).

People use milk thistle to help with [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Liver problems
- Blood sugar control
- Indigestion
- Skin problems

How it helps

In a study of 60 people with allergic rhinitis, treatment with the milk thistle compound silymarin (140 mg, 3x/day for 1 month) as an add-on to standard therapy improved the symptoms better than the placebo [\[R\]](#).

40



Tomato

IMPACT

2 / 5

EVIDENCE

1 / 5

How to implement

Incorporate fresh or cooked tomatoes into your daily diet. This can be achieved by adding them to salads, sandwiches, pastas, and sauces or simply eating them on their own. Aim for at least one serving (approximately 1 medium-sized tomato or 1/2 cup of chopped or cooked tomatoes) per day.

Description

Tomatoes are a fruit grown widely in numerous varieties, and are rich in vitamins C and K, as well as the antioxidant lycopene, which may contribute to heart health and protect against certain chronic diseases when incorporated into a balanced diet.

Tomato (*Solanum lycopersicum*) is a fruit originally from the Andes in South America. It is usually consumed as a vegetable in juices, sauces, or fresh. Tomato is an important source of [\[R\]](#):

- [Vitamin C](#)
- Potassium
- Antioxidants (e.g., [lycopene](#))
- Vitamin B9 ([folate](#))

Tomato is traditionally used for [\[R\]](#), [\[R\]](#):

- High cholesterol
- High blood pressure

How it helps

Tomatoes are high in vitamin C and antioxidants such as lycopene, which may help reduce inflammation and boost the immune system. However, if you're allergic to tomatoes, consuming them may potentially aggravate your allergies rather than help.

In a [placebo-controlled trial of 33 patients with perennial allergic rhinitis](#), supplementation with tomato extract (360 mg/day) for 8 weeks **decreased sneezing, rhinorrhea, and nasal obstruction while increasing quality of life** [\[R\]](#).

41



Lactobacillus Casei

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a supplement containing Lactobacillus casei daily, with a dosage recommended by the product's manufacturer or a healthcare professional. The specific amount can vary, but it is commonly found in doses around 10 billion colony-forming units (CFUs). Continue this regimen for at least 4 weeks to observe potential health benefits.

TYPICAL STARTING DOSE

10 billion CFU

Description

Lactobacillus casei is a probiotic bacterium known for its potential to support gut health and immune function. It contributes to a balanced gut microbiome and may help alleviate digestive issues like diarrhea.

[Lactobacillus casei](#) is a [probiotic](#) bacterium found in fermented foods (e.g., cheese), as well as in the reproductive and gastrointestinal tracts of humans and other animals [\[R, R\]](#).

People mainly take *L. casei* to support a healthy gut microbiota [\[R\]](#).

How it helps

Drinking milk with *Lactobacillus casei* Shirota (for 5 months) may improve allergic rhinitis [\[R\]](#).

42



Bentonite

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 1 to 2 teaspoons of bentonite clay mixed with water daily on an empty stomach, ideally at least one hour before or after other medications or supplements. Continue this regimen for up to 2 weeks, then take a break or consult a healthcare professional for further guidance.

TYPICAL STARTING DOSE

1 tsp

Description

Bentonite is a natural clay often used in skincare and detoxification products. It is believed to have absorbent properties that can help remove impurities from the skin or digestive tract, but its use should be approached with caution and under proper guidance.

How it helps

In a placebo-controlled trial of 20 subjects with rhinitis due to dust mite allergy, a nasal spray with bentonite reduced total nasal symptom scores at 60-90 min after an allergen challenge and mucosa changes. Another nasal spray with bentonite reduced total nasal symptom scores over a 4-hour period at least as effectively as hydroxypropyl methylcellulose in a non-placebo-controlled trial 35 patients with rhinitis due to grass pollen allergy [\[R, R\]](#).

Bentonite clay may help by attracting and binding to allergens in the body for their removal.

43



Avoid Phthalate Exposure

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

To avoid phthalate exposure, check product labels and choose phthalate-free options for personal care items, plastics (look for recycling codes 3 and 7 or the letters 'V' or 'PVC'), and household products. Additionally, reduce the use of plastic containers for food storage, especially those not marked as 'phthalate-free', and avoid microwaving food in plastic containers. Aim to make these changes consistently in your daily life for long-term health benefits.

Description

Avoiding phthalate exposure involves choosing phthalate-free products, such as personal care items and plastics, to minimize potential endocrine-disrupting effects and protect reproductive and hormonal health.

How it helps

NHANES: The HMW phthalate metabolite monobenzyl phthalate (MBzP) was the only metabolite positively associated with current allergic symptoms in adults (wheeze, asthma, hay fever, and rhinitis). Mono-(3-carboxypropyl) phthalate and the sum of diethylhexyl phthalate metabolites (both representing HMW phthalate exposures) were positively associated with allergic sensitization in adults [\[R\]](#).

44



Self-Hypnosis

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Practice self-hypnosis for 20-30 minutes daily. Find a quiet, comfortable place where you won't be disturbed. Close your eyes, take deep breaths, and focus on positive affirmations or imagery that addresses your specific needs, such as reducing stress or pain management.

TYPICAL STARTING DOSE

20 minutes

Description

Self-hypnosis involves using relaxation techniques and focused attention to enter a state of heightened suggestibility, often for the purpose of self-improvement or managing certain conditions like stress or pain.

How it helps

In a non-placebo-controlled trial of 66 patients with allergic rhinitis to grass or birch pollen, learning self-hypnosis during a mean of 2.4 sessions reduced pollinosis symptoms, restriction of well-being, and the odds of reaching a critical flow of 70% in nasal provocation tests [\[R\]](#).

Self-hypnosis may help by reducing stress and anxiety, which can intensify allergic reactions.

45



Apple Polyphenols

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 500 mg of an apple polyphenol supplement daily, preferably with meals to enhance absorption. It is recommended to continue this supplementation for at least 4 weeks to start observing potential health benefits.

TYPICAL STARTING DOSE

500 mg

Description

Polyphenols are antioxidants found in many plants. High amounts are found in fruits like grapes, cherries, and apples. Apple polyphenols may help reduce hair loss and oxidative stress.

Polyphenols are antioxidants found in many plants. High amounts are found in fruits like grapes, cherries, and apples [\[R\]](#).

Apple polyphenols may help reduce hair loss and oxidative stress [\[R\]](#), [\[R\]](#).

How it helps

In 2 studies of 69 people with rhinitis due to allergies to cedar pollen and dust mites, taking apple polyphenols (50-500 mg/day for 4-12 weeks) reduced sneezing attacks, nose discharge, and turbinate swelling. Apple polyphenols may work by reducing histamine release [\[R\]](#), [\[R\]](#).

46



Perilla

IMPACT

1 / 5

EVIDENCE

1 / 5

Description

Perilla frutescens is a plant native to Asia. The leaves, stems, and seeds of this plant are edible and can be used as medicine. *P. frutescens* has been studied extensively in medicine, food, health care, and chemical fields because of its abundant nutrients and bioactive components [\[R\]](#), [\[R\]](#).

How it helps

Supplementation with perilla extract (with 50-200 mg rosmarinic acid for 21 days) improved itchy nose, itchy and watery eyes, and the number of white blood cells in the nose airways, in a study of 29 people with seasonal allergies [\[R\]](#).

47



Hatha Yoga

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Practice Hatha Yoga for 60 minutes at least twice a week. Choose a quiet, comfortable space and consider guided sessions for beginners or those unfamiliar with the poses. Consistency over a period of months to years is beneficial for appreciating its full effects.

TYPICAL STARTING DOSE

1 hour

Description

Hatha yoga is a gentle and accessible form of yoga that combines physical postures, breathing exercises, and meditation. Practicing hatha yoga regularly can promote flexibility, stress reduction, and overall physical and mental well-being.

How it helps

Hatha Yoga aids in controlling your breathing, reducing stress, and boosting your immune system, all of which can lower your body's allergic responses. Moreover, particular yoga poses can help clear your nasal passages, making it easier to breathe during an allergy flare-up.

In a study with 27 allergic rhinitis patients, the yoga group (YOG) who underwent 8 weeks of Hatha yoga training (3 times/week) showed increased peak nasal inspiratory flow (PNIF), reduced rhinitis symptoms, decreased nasal blood flow (NBF), and higher nasal secretion of interleukin (IL)-2 compared to the control group (CON) [R].

48



Lactobacillus Johnsonii

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a Lactobacillus johnsonii supplement daily with a glass of water, preferably on an empty stomach or before meals. The dosage varies, but a common amount is 10 billion CFUs (colony forming units). Continue this regimen for at least four weeks to observe benefits.

TYPICAL STARTING DOSE

10 billion CFU

Description

Lactobacillus Johnsonii is a beneficial probiotic strain that can support digestive health and contribute to a balanced gut microbiome. It may help improve gut function, enhance nutrient absorption, and bolster the immune system, promoting overall well-being.

How it helps

In a non-placebo-controlled trial of 63 children with perennial allergic rhinitis, supplementation with *L. johnsonii* EM1 as an add-on to levocetirizine for 12 weeks **decreased total symptom scores and eosinophil percentage in nasal smears better than levocetirizine alone** [R].

By regulating the immune function and reducing inflammation, *L. johnsonii* can help lessen the severity and frequency of allergy symptoms.

49



Tinospora Cordifolia

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a Tinospora cordifolia supplement in a dosage of 300 to 500 mg per day, ideally with meals to improve absorption. This should be continued for a duration of 8 to 10 weeks to observe beneficial effects. Always check the supplement label for specific instructions regarding dosage.

TYPICAL STARTING DOSE

300 mg

Description

Tinospora cordifolia, also known as Guduchi or Giloy, is a climbing plant native to India used in traditional Ayurvedic medicine. It is believed to have immune-boosting and anti-inflammatory properties, due its main compounds, including alkaloids, glycosides, and steroids.

How it helps

In a placebo-controlled trial of 75 patients with allergic rhinitis, supplementation with *Tinospora cordifolia* extract for 8 weeks improved sneezing, nasal discharge, nasal discomfort, and nasal pruritus [R].

Tinospora cordifolia may help by boosting the immune system and inhibiting the release of histamines, which may prevent the hypersensitive response to allergens.

50



Lactobacillus Salivarius

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a probiotic supplement containing Lactobacillus salivarius daily, preferably with a meal to enhance absorption. The exact dosage can vary, but a common amount is around 10 billion CFUs (colony forming units). It is generally recommended to continue taking the probiotic for at least four weeks to observe benefits.

TYPICAL STARTING DOSE

10 billion CFU

Description

Lactobacillus saliverius is a beneficial probiotic strain that can support digestive health and contribute to a balanced gut microbiome. It may help improve gut function, enhance nutrient absorption, and bolster the immune system, promoting overall well-being.

How it helps

In a placebo-controlled trial of 199 atopic children with allergic rhinitis, supplementation with *L. salivarius* (4 x 10^9 cfu/day) for 12 weeks reduced rhinitis symptoms and drug scores [R].

L. salivarius supports the immune system by helping to regulate immune responses, which can reduce allergic reactions.

51



Seawater Spray

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Use the seawater nasal spray according to the product's instructions, typically 2-3 sprays per nostril, 2-4 times a day. The duration of use may vary depending on the condition being treated, but it is often used for the duration of symptoms or as needed for nasal congestion relief.

Description

Seawater spray is a natural product made from seawater and is used for its potential to soothe nasal congestion and support respiratory health due to its trace mineral content.

How it helps

A study of 123 allergic rhinitis patients found that nasal mucociliary clearance times improved with both isotonic seawater spray with chamomile liquid extract and isotonic seawater spray [\[R\]](#).

Please note: *Seawater contains much more salt than the human body can handle. Hence, the human body can safely ingest only small amounts of seawater. Drinking seawater may increase the risk of gastrointestinal infections [\[R\]](#), [\[R\]](#).*

52



Ginger

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a 500 mg ginger supplement daily, preferably with a meal to enhance absorption and minimize potential stomach discomfort.

TYPICAL STARTING DOSE

500 mg

Description

Ginger is a versatile spice known for its potential anti-inflammatory and digestive benefits. It may help alleviate nausea, reduce muscle soreness, and support gastrointestinal comfort when consumed as part of a balanced diet.

[Ginger root](#) is a cooking spice and a traditional remedy. People mostly use it to relieve [\[R\]](#):

- Nausea
- Menstrual cramps
- Joint pain

How it helps

Ginger contains compounds like gingerol and shogaol, which have anti-inflammatory and antihistamine properties. These help in reducing the immune system's response to allergens, thereby relieving allergy symptoms.

In a [non-placebo-controlled trial of 80 patients with allergic rhinitis](#), supplementation with ginger extract (500 mg/day) for 6 weeks was **as effective as loratadine (10 mg) at improving the symptoms but also increased the estimated volume of the nasal cavity and decreased distances from the nostril and caused fewer adverse effects such as drowsiness, fatigue, dizziness and constipation** [\[R\]](#).

53



Astragalus

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a 500 mg astragalus supplement once daily with a meal. Continue this regimen for at least 4 to 6 weeks to evaluate its effectiveness on your overall health.

TYPICAL STARTING DOSE

500 mg

Description

Astragalus is an herb used in traditional Chinese medicine. It is believed to have immune-boosting properties and may help reduce stress and support overall vitality.

[Astragalus](#) (*Astragalus membranaceus*) is an herb used in traditional Chinese medicine. It is commonly used for “tonifying Qi” or fatigue. It may help [\[R\]](#), [\[R\]](#):

- Reduce inflammation
- Fight [oxidative stress](#)

Astragalus root is a staple of traditional Chinese medicine, where it is also known as *Huang Qi*.

How it helps

Oral astragalus (80 mg/day) improved allergic rhinitis symptoms and quality of life in a study of 48 people with seasonal allergy to weed pollen [\[R\]](#).

54



Stinging Nettle

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take a 300 to 600 mg capsule of stinging nettle extract daily with water, ideally with a meal to reduce the risk of stomach discomfort. Continue for at least 3 months to observe benefits.

TYPICAL STARTING DOSE

300 mg

Description

Stinging nettle is a plant known for its stinging hairs on its leaves and stems, and is native to parts of Europe and Asia. It has been used in traditional medicine as an herbal remedy and today as a dietary supplement. It contains compounds like flavonoids, polyphenols, and vitamins A and C, iron, and calcium. This helps it provide potential benefits for allergies and arthritis.

[Stinging nettle](#) (*Urtica dioica*), also known as common nettle, is a herb that grows all over the world. Coming in contact with the stinging hairs on the leaves and stems may cause a burning sensation [\[R\]](#), [\[R\]](#), [\[R\]](#).

In ancient Egypt, it was commonly used to treat arthritis. Stinging nettle has also been used to [\[R\]](#):

- Reduce inflammation
- Relieve allergies
- Control blood pressure
- Improve wound healing
- Support prostate health

Stinging nettle is available in many forms, including:

- Capsules
- Tincture
- Tea
- Cream
- Leaves

How it helps

Freeze-dried stinging nettle leaves (300 mg/day) may improve the severity of allergic rhinitis [\[R\]](#).

Stinging nettle may help with allergies through its ability to reduce inflammation and histamine production [\[R\]](#), [\[R\]](#).

Please note: Stinging nettle, especially the leaves and hairs, contains histamine and some people may experience an allergic reaction to raw puréed nettle or nettle juice [\[R\]](#).



PERSONALIZED TO YOUR GENES

The [PTGER4](#) gene helps make a receptor for [prostaglandin](#) E2 (PGE2). Activation of this receptor by PGE2 promotes inflammation and may thus play a role in allergic reactions [[R](#), [R](#), [R](#)].

Your genotype for [rs7720838](#) may increase PTGER4 activity and correlates with higher odds of allergies [[R](#), [R](#), [R](#)].

In lab experiments, [stinging nettle](#) inhibited an enzyme that produces PGE2 and other prostaglandins [[R](#), [R](#), [R](#), [R](#)].

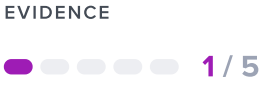
>>> To learn more about the link between the PTGER4 gene and allergic conditions, check out the full SelfDecode blog post [here](#).

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
PTGER4	rs7720838	TT	



Lactobacillus Rhamnosus GG



How to implement

TYPICAL STARTING DOSE

10 billion CFU

Description

Lactobacillus rhamnosus GG (LGG) is a probiotic that has been shown to have a number of health benefits, including reducing the risk of diarrhea, improving gut health, and boosting the immune system. LGG can be taken as a supplement or found in some yogurts and other fermented foods.

How it helps

In a placebo-controlled trial of 100 children with allergic rhinitis to grass pollen, supplementation with Lactobacillus rhamnosus as an add-on to sublingual immune therapy increased CD4(+)CD25(+)Foxp3(+) induction. This strain also showed immuno-stimulating effects (increased IgA and IgG levels) in a placebo-controlled trial of 38 adolescents and adults with birch pollen allergy [[R](#), [R](#)].

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Methylsulfonylmethane (MSM)

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 1 to 3 grams of Methylsulfonylmethane (MSM) per day, divided into three doses. This can be in the form of capsules or powder that is mixed with water. It is recommended to start with a lower dose to assess tolerance, then gradually increase to the desired dose over a period of 1 to 2 weeks.

TYPICAL STARTING DOSE

1 g

Description

MSM is a naturally occurring sulfur compound found in foods and used in dietary supplements. It has anti-inflammatory properties and may be used to support joint health and reduce exercise-related muscle soreness.

A molecule of MSM is broken down in the body into a sulfate (sulfur) group and two methyl groups.

The following may increase people’s needs for sulfur and methyl groups: physical activity, recovery from injuries, inflammation, infections/sickness, toxins, etc.

People also need more sulfur when taking hormones (DHEA, pregnenolone, etc.), drugs (Aspirin, Tylenol, NSAIDs, birth control, etc.) or supplements (flavonoids & polyphenols - resveratrol, quercetin, curcumin, etc.) that undergo sulfation.

How it helps

Several allergy symptoms, such as runny nose, watery and itchy eyes, stuffy nose, sneezing, coughing, shortness of breath were reduced in people with seasonal allergic rhinitis after methylsulfonylmethane supplementation (2,600 mg/day for 4 weeks) in study of 55 people. However, MSM worsened the allergic symptoms in rare cases [R].

MSM may alleviate allergies through its anti-inflammatory and antioxidant properties [R, R].

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Lactobacillus Rhamnosus

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a probiotic supplement containing Lactobacillus rhamnosus. Typically, the suggested dose is 10 billion CFUs (colony-forming units) per day. This can be taken as a single daily dose or divided into two doses, morning and evening, with or without food. Continue this regimen for at least 4 weeks to observe benefits.

TYPICAL STARTING DOSE
10 billion CFU

Description

Lactobacillus rhamnosus is a beneficial probiotic strain that can support digestive health and contribute to a balanced gut microbiome. It may help improve gut function, enhance nutrient absorption, and bolster the immune system, promoting overall well-being.

[Lactobacillus rhamnosus](#) is a [probiotic](#) bacterium, part of the normal gut microflora. Various foods may have added *L. rhamnosus*, including yogurt, cheese, and fermented legumes [\[R, R\]](#).

People take *L. rhamnosus* supplements to balance their immune system and help with infections, allergies, and dermatitis [\[R\]](#).

How it helps

In a placebo-controlled trial of 100 children with allergic rhinitis to grass pollen, supplementation with Lactobacillus rhamnosus as an add-on to sublingual immune therapy increased CD4(+)CD25(+)Foxp3(+) induction. This strain also showed immuno-stimulating effects (increased IgA and IgG levels) in a placebo-controlled trial of 38 adolescents and adults with birch pollen allergy [\[R, R\]](#).

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Bifidobacterium Breve

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a Bifidobacterium breve supplement according to the product's specific instructions, usually 1-2 capsules daily with water, ideally before meals for better absorption. This regimen should be followed for at least 2-4 weeks to start observing benefits.

TYPICAL STARTING DOSE
10 billion CFU

Description

Bifidobacterium breve is another probiotic strain that can contribute to digestive health and support a balanced gut microbiome. People use *B. breve* as a supplement to improve skin health and combat allergies and infection.

[Bifidobacterium breve](#) is a probiotic species found in human breast milk and the gastrointestinal tracts of infant and adult humans. As an individual ages, the total population of B. breve within their gut decreases [\[R\]](#).

People use *B. breve* as a supplement to improve skin health and combat allergies and infections [\[R, R, R\]](#).

How it helps

Bifidobacterium Breve is a probiotic that can potentially enhance your immune system. By doing this, it could help to manage allergic reactions by reducing your body's response to allergens.

In a placebo-controlled trial of 29 patients with asthma and dust mite allergy, a synbiotic with fructo-oligosacchardies and *B. breve* M-16V taken for 4 weeks reduced systemic production of Th2-cytokines after an allergen challenge and improved peak expiratory flow but had no effect on bronchial inflammation and LAR. This synbiotic also prevented asthma-like symptoms in a placebo-controlled trial of 75 children with atopic dermatitis [\[R, R\]](#).

59



B. Lactis Bi-04 and L. Acidophilus NCFM

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

TYPICAL STARTING DOSE

10 billion CFU

Description

Bifidobacterium lactis Bi-04 and Lactobacillus acidophilus NCFM are live cultures that are similar to the "good" bacteria found naturally in the human gut. They may help to improve digestion, boost the immune system, and reduce the risk of certain diseases.

How it helps

The combination of *Bifidobacterium lactis* Bi-04 and *Lactobacillus acidophilus* NCFM taken for 4 months prevented the pollen-induced infiltration of eosinophils into the nasal mucosa and indicated a trend for reduced nasal symptoms in a placebo-controlled trial of 47 children with birch pollen allergy [\[R\]](#).

60



Stinging Nettle Root Extract

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a capsule of stinging nettle root extract, usually available in dosages ranging from 250 to 500 mg, once daily with water. It's best consumed with a meal to enhance absorption and minimize potential stomach discomfort. Continue this routine daily for relief of symptoms, commonly for conditions such as benign prostatic hyperplasia, but always consult with a healthcare provider for duration specific to your condition.

TYPICAL STARTING DOSE

250 mg

Description

Stinging nettle root extract is derived from the root of the stinging nettle plant (*Urtica dioica*), and is native to Europe and Asia. Traditionally, it has been used in herbal medicine, and is known for its potential as a natural remedy for conditions like benign prostatic hyperplasia (BPH) and urinary tract issues. Stinging nettle root extract contains several bioactive compounds, including sterols and lignans.

How it helps

Stinging nettle root extract (150 mg/day for 4 weeks) may improve the severity of allergic rhinitis [R].

Stinging nettle may help with allergies through its ability to reduce inflammation and histamine production [R, R].

Please note: Stinging nettle, especially the leaves and hairs, contains histamine and some people may experience an allergic reaction to raw puréed nettle or nettle juice [R].

 PERSONALIZED TO YOUR GENES

The [PTGER4](#) gene helps make a receptor for [prostaglandin](#) E2 (PGE2). Activation of this receptor by PGE2 promotes inflammation and may thus play a role in allergic reactions [R, R, R].

Your genotype for [rs7720838](#) may increase PTGER4 activity and correlates with higher odds of allergies [R, R, R].

In lab experiments, [stinging nettle](#) inhibited an enzyme that produces PGE2 and other prostaglandins [R, R, R, R].

>>> To learn more about the link between the *PTGER4* gene and allergic conditions, check out the full SelfDecode blog post [here](#).

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
PTGER4	rs7720838	TT	

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Lactobacillus Rhamnosus HN001

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

L. rhamnosus HN001 is available in various forms, including capsules, powders, and sometimes as an ingredient in fermented dairy products like yogurts and kefirs. Typically, doses range from 1 billion to 10 billion colony-forming units (CFUs) per day. It is often recommended to start with a lower dose and gradually increase it to gauge how your body responds. Consistency is key. Taking *L. rhamnosus* HN001 regularly can help maintain its effectiveness.

TYPICAL STARTING DOSE

10 billion CFU

Description

Lactobacillus rhamnosus HN001 is a probiotic strain originally isolated from dairy products. Research suggests that *L. rhamnosus* HN001 can have several beneficial impacts, particularly in the areas of digestive health and immune system support.

People mainly take *L. rhamnosus* HN001 to help with:

- IBS
- Diarrhea
- Respiratory infections
- Eczema
- Anxiety
- Depression

How it helps

In a placebo-controlled trial of pregnant women, supplementation with *L. rhamnosus* HN001 (6x10^9 cfu/day) from 35-week gestation to 6 months post-partum in mothers while breastfeeding and from birth to age 2 years in infants reduced the prevalence of hay fever, atopic sensitization, wheezing, and eczema [R].

62



Saffron

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 20 mg of saffron supplement daily. This can be taken at any time of the day, with or without food.

TYPICAL STARTING DOSE

20 mg

Description

Saffron is a spice derived from the stigma of the saffron crocus flower, and is native to the Mediterranean and Asia. Its main compounds include crocin, picrocrocin, and safranal, which may contribute to its antioxidant properties and potential mood-enhancing effects.

[Saffron](#) is a yellow spice praised for its color, taste, and potential health benefits [\[R\]](#).

Saffron is rich in antioxidants such as *crocin*. Researchers are looking into its potential benefits for [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Gut conditions
- Heart health
- Mental health

How it helps

In a study of 80 people with persistent allergic asthma, supplementation with saffron capsules (100 mg/day for 8 weeks) decreased asthma severity and the frequency of symptoms such as shortness of breath during day- and nighttime, waking up, activity limitation, and use of inhaled medication. Saffron also reduced inflammation in the airways [\[R\]](#).

Please note: Some people may exhibit allergic reactions to the carotenoids found in saffron. These reactions usually take form as hives, nasal congestion, or difficulty breathing [\[R\]](#).

63



Apples

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate at least one whole apple into your daily diet, either as a snack or part of your meals, ensuring to eat them consistently every day for an ongoing period to derive potential health benefits.

Description

Apples are a nutritious fruit known for their fiber content and antioxidant-rich skin. They support overall health by aiding digestion, reducing the risk of chronic diseases, and promoting heart health.

Apples (*Malus domestica Borkh.*) are one of the most widely consumed fruits in the world. They have a high nutritional value and content of antioxidants [\[R, R\]](#).

Eating apples is associated with a lower risk of [\[R, R\]](#):

- Heart disease
- Asthma
- Diabetes

How it helps

People who are allergic to birch pollen may react to apples because these fruits contain proteins similar to those found in birch pollen. In a study of 40 people with allergy to birch pollen, gradually increasing apple consumption (1-128 g/day for 8 months) induced tolerance. However, the effect disappeared when the participants stopped eating apples [\[R, R\]](#).

64



Broccoli Sprouts

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Consume 2-4 tablespoons of fresh broccoli sprouts daily. They can be added to salads, sandwiches, or smoothies to make them easier to consume. Continue this practice daily for at least 3 months to potentially see benefits.

TYPICAL STARTING DOSE

2 tbsp

Description

Broccoli and broccoli sprouts are nutrient-dense vegetables packed with vitamins, minerals, and antioxidants. They are known for their potential to support a healthy immune system, protect against chronic diseases, and promote overall nutritional wellness.

How it helps

Broccoli Sprouts contain sulforaphane, a compound that can boost the capacity of the body's cells to adapt to and survive a broad range of environmental toxins. This process can help reduce immune system hyperactivity, which is the root cause of allergies, thus aiding in allergy management.

A study involving 47 grass-induced allergic rhinitis patients in four groups showed that using a nasal steroid spray with bitter taste exposure (BSE) significantly improved Peak Nasal Inspiratory Flow (PNIF) compared to a placebo. Total Nasal Symptoms Scores (TNSS) were significantly better in the nasal steroid spray + BSE group at certain time points. However, there were no significant differences in cytokine markers before and after the intervention [R].

65



Ginkgo

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 120 mg of Ginkgo supplement daily, preferably with meals to aid absorption. This dosage is typically split into two 60 mg doses taken in the morning and evening for best results.

TYPICAL STARTING DOSE

120 mg

Description

[Ginkgo](#) (*Ginkgo biloba*) is an ancient tree used in traditional Chinese medicine [\[R\]](#), [\[R\]](#).

According to limited evidence, ginkgo leaf extract may help with [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Anxiety
- Dementia
- Eye problems
- Blood vessel problems
- Vitiligo

How it helps

Ginkgo biloba extract supplementation (for 2-4 weeks) relieved inflammation in a study of 75 asthma patients [\[R\]](#).

Please note: Although ginkgo supplements are generally considered as safe, they may cause allergic reactions in rare cases [\[R\]](#).

66



Perilla Oil

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 600-900 mg of perilla oil daily, ideally with meals to enhance absorption. This should be divided into two or three doses throughout the day. Continue this regimen for at least 8 to 12 weeks to evaluate its effectiveness.

TYPICAL STARTING DOSE
600 mg

Description

Perilla oil is an edible oil extracted from the seeds of the *Perilla frutescens* plant, which is native to Asia. It is rich in omega-3 fatty acids, particularly alpha-linolenic acid (ALA), and is known for its potential health benefits, including supporting heart health, reducing inflammation, and providing essential nutrients like vitamin E and omega-3s.

How it helps

In a study of 17 people with asthma, those who consumed perilla oil (10-20 mg/day for 4 weeks) had improved lung function and decreased levels of the inflammation [\[R\]](#).

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Lactobacillus Helveticus

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a supplement containing *Lactobacillus helveticus*, usually available in capsule or powder form. Follow the manufacturer's instructions, commonly involving taking one to two capsules daily, preferably with a meal or as directed by a healthcare provider. Continue this regimen daily for at least 8 to 12 weeks to potentially see benefits.

TYPICAL STARTING DOSE
10 billion CFU

Description

Lactobacillus helveticus is a beneficial probiotic strain that can support digestive health and contribute to a balanced gut microbiome. It may help improve gut function, enhance nutrient absorption, and bolster the immune system, promoting overall well-being.

How it helps

Lactobacillus Helveticus is a probiotic that can assist with allergies by balancing the body's immune response, potentially decreasing allergic reactions. It does this by increasing the body's production of regulatory T cells, which reduces overreactions to allergens.

In a placebo-controlled trial of 200 patients with mild to moderate perennial allergies, supplementation with *L. helveticus* SBT2171 for 16 weeks reduced symptom severity (especially stuffy nose) and eosinophil counts in the nasal fluid [\[R\]](#).

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Bifidobacterium Longum

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a Bifidobacterium longum supplement daily, with a typical dosage around 10 billion colony-forming units (CFUs). It can be consumed any time of day, but taking it with a meal might improve its absorption and effectiveness. Continue this regimen for at least 4 weeks to assess its benefits on digestive health.

TYPICAL STARTING DOSE

10 billion CFU

Description

Bifidobacterium longum is a beneficial probiotic strain known for its potential to support digestive health and boost the immune system.

[Bifidobacterium longum](#) is a [probiotic](#) bacterium naturally present in the human gastrointestinal tract. Its subspecies *B. longum subsp. infantis* is one of the earliest bacteria to colonize the infant gut [\[R\]](#).

People take *B. longum* to enhance immunity against infections and support gut health [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

Bifidobacterium longum (2x/day for 4 weeks) may improve Japanese cedar pollinosis [\[R\]](#).

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Chlorophyll

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take chlorophyll supplements once daily, with a dose ranging from 100 to 300 milligrams. Consume it with a glass of water, preferably in the morning to coincide with your digestive cycle. It's advisable to continue this regimen daily for at least 3 to 4 weeks to assess its benefits.

TYPICAL STARTING DOSE

100 mg

Description

Chlorophyll is a pigment found in plants that may have antioxidant and anti-inflammatory properties. Some proponents suggest that consuming chlorophyll supplements or chlorophyll-rich foods may support detoxification and overall health

How it helps

Chlorophyll can aid in allergies by boosting the immune system due to its antioxidant properties, potentially helping your body fight off allergens. Also, it has anti-inflammatory aspects that could lessen allergic reaction symptoms like swelling or itching.

In a placebo-controlled trial of 66 patients with seasonal allergic rhinitis, supplementation with chlorophyll c2 (0.7 mg/day) for 12 weeks reduced the use of rescue medication [\[R\]](#).

70



Honey

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Consume 1-2 tablespoons of raw honey daily, either directly or by mixing it into warm water, tea, or yogurt. Continue this practice regularly to observe benefits.

Description

Honey is a natural sweetener known for its antimicrobial properties and potential benefits for wound healing. It contains antioxidants and may have soothing effects on sore throats and coughs.

[Honey](#) is a thick, sweet substance. It’s made by honeybees from the nectar of flowering plants. There are many different types of honey. Besides sugar, honey also contains amino acids (protein building blocks), vitamins, and minerals [\[R\]](#).

People use honey for its anti-inflammatory and antioxidant properties. It can potentially help with [\[R\]](#):

- Heart problems
- Gut problems
- Cough
- Burns

How it helps

Experts include honey among the herbal remedies they recommend for seasonal allergies [\[R\]](#).

In a study of 40 people with allergic rhinitis, honey ingestion (1 g/kg bodyweight) improved the symptoms after 8 weeks and was suggested as a complementary approach to rhinitis. However, honey did not help in a study of 36 people [\[R, R\]](#).

71



Bacillus Clausii

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take Bacillus clausii as an oral probiotic supplement, usually found in liquid or capsule form. For adults and children, the typical dosage is one or two capsules (or one or two vials of liquid, if using that form) daily. The duration of use can vary; some may take it for a few weeks during or after antibiotic treatment, while others might use it for longer periods to support digestive health.

Description

Bacillus causii is a type of beneficial bacteria that can be found in probiotic supplements, potentially contributing to digestive health and a balanced gut microbiome.

How it helps

In an uncontrolled trial of 10 subjects with allergic rhinitis, supplementation with B clausii (Enterogermina: 2 billion spores/vial) 3x/day for 4 weeks lowered IL-4 while increasing IFN-gamma, TGF-beta, and IL-10 levels in the nasal lavage fluid [R].

Bacillus clausii may help by strengthening the immune system and regulating its response to allergens. It also improves gut health, which is pivotal as a lot of immune system activity happens in the digestive tract.

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Avoid Exposure to Parabens

IMPACT

1 / 5

EVIDENCE

0 / 5

How to implement

Check the labels of personal care products such as lotions, shampoos, and cosmetics. If they list methylparaben, propylparaben, butylparaben, or ethylparaben among the ingredients, choose alternative products that are paraben-free. Aim to do this consistently for all personal care purchases.

Description

Avoiding exposure to parabens involves avoiding personal care and cosmetic products that contain these synthetic preservatives. This is done to minimize the potential risk of skin irritation and to reduce the likelihood of exposure to compounds that may disrupt hormone regulation.

How it helps

A study of 1458 Korean children linked certain urinary chemicals (phthalates, BPA, parabens) to atopic dermatitis and allergic rhinitis, especially in preschoolers [R].

Next Steps

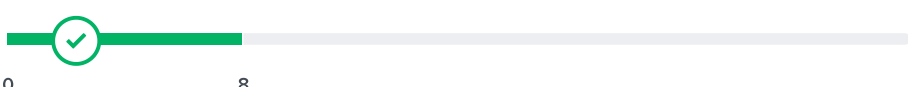
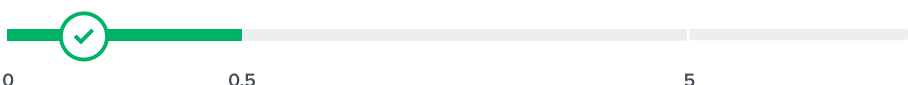
Remember, your genes only tell one important part of your health story!

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.

	Eosinophils (%)	2.3 %		9 Nov 2025
	Eosinophils (Absolute)	0.16 x10^9/L		9 Nov 2025

Your Lifestyle Assessments

Ever heard of the term Nature vs. Nurture?

The thing is, both DNA and environment play a role in determining your health risks. The following assessments shows how much of an impact your lifestyle, environment and medical history are having on your health risks.



LIFESTYLE

You have a **slightly increased risk** of hay fever based on the answers you provided.

Your Lifestyle Risk

LowDecreasedAverageIncreasedHigh

Factors impacting your risk:

Have you experienced a stressful life event in the past 12 months (e.g., loss of a loved one, loss of job, moving homes, etc.)? Yes	Increasing Risk !
Was your biological mother exposed to second-hand tobacco smoke while pregnant with you? Yes	Increasing Risk !
Did your biological mother experience a high amount of stress while pregnant with you? Yes	Increasing Risk !
Do you spend 8 hours or more per day sitting? Yes	Increasing Risk !
Have you ever been diagnosed with atopic dermatitis (eczema)? Yes	Increasing Risk !
Do you have a parent or sibling who has ever been diagnosed with allergic rhinitis (hay fever)? No	Decreasing Risk ✓
Have you ever been diagnosed with asthma? No	Decreasing Risk ✓
Are you often exposed to second-hand smoke in your home or at work? No	Decreasing Risk ✓
How would you describe the environment you live in? Suburban	Decreasing Risk ✓
Do you have dry eyes? No	Decreasing Risk ✓