

Appendicitis

DNA Health Report

REPORT CATEGORIES —



INFLAMMATION &
AUTOIMMUNITY



IMMUNITY &
INFECTIONS

Sample Client

Report date: 15 January 2026

Table of Contents

03 How this works

- 04 Impact
- 05 Evidence
- 06 Some things to keep in mind

07 Introduction

08 Your genetics

10 Your recommendations

20 Next Steps

- 20 Your Lab Results

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

In the 4.5 billion years that earth has existed, life has been around for about 4 billion of those [\[R\]](#).

Over the years, life has changed a lot; the original life on earth consisted of very basic microbes, until the first fish crawled out of the sea 400 million years ago [\[R\]](#).

Nowadays, land animals come in all kinds of different shapes and sizes. It’s crazy to think that everything from humans to giraffes may stem from one bold fish.

As humans evolved, we inherited a lot of features from our cousins in the animal kingdom.

Certain features are more useful than others. But some, like male nipples or wisdom teeth, are entirely useless. These body parts are called **vestigial features**.

The appendix has long been considered a vestigial feature.

Charles Darwin believed that the appendix was inherited from our ancestors, who once relied on it to help digest a herbivore diet.

However, recent research points to a different conclusion. Scientists now suggest that the appendix provides a safe haven for your friendly gut bacteria, allowing them to restore your gut back to normal after digestive problems [\[R\]](#).

While the exact purpose of the appendix may not be certain, one thing is clear: the consequences of an inflamed appendix can be severe.

When your appendix is inflamed, this is called **appendicitis**. It is more common than you might think. About 7-8% of people in the U.S. will experience the condition in their lifetime [\[R\]](#). Left untreated, your appendix can rupture and become infected. **Some people may be more prone to appendicitis than others. This may partly be due to their DNA** [\[R\]](#), [\[R\]](#).

Read on to find out more about:

- **How your genetics play a role in appendicitis**
- **Your genetic risk score based on over 844,000 genetic variants**

Risk Factors And Genetics

Key Takeaways:

- Up to **56%** of differences in people's chances of developing appendicitis may be due to genetics.
- Other risk factors include being young and male.
- Appendicitis is not rare, happening to about 7-8% of people in their lifetime.
- If your genetic risk is high, know the symptoms and seek medical attention if you have them.
- Click the **Recommendations** tab for potential dietary and lifestyle changes and **next steps** for relevant labs.

The **appendix** is a small, finger-shaped pouch near the beginning of the large intestine. It is in the lower right of your abdomen [R, R].

The function of the appendix has been debated for many years. More recent studies suggest that the appendix is a safe house for good bacteria that live in the gut. If an illness wipes out large numbers of these bacteria in the gut, the ones from the appendix can help replace them [R].

Appendicitis is inflammation of the appendix. It is likely caused by something blocking the lining of the appendix, leading to an infection. If left untreated, the appendix can rupture and the infection can spread. This can be life-threatening [R].

Although anyone can develop appendicitis, it most often occurs in people between 10 and 30 years old. Men are slightly more likely to experience it than women [R, R].

The symptoms of appendicitis include [R]:

- Sudden pain in the lower right abdomen
- Sudden pain around the belly button that shifts to the lower right abdomen
- Pain that worsens if you move suddenly
- Nausea and vomiting
- Loss of appetite
- Fever



LESS LIKELY

Less likely to have appendicitis based on **809,853** genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
ENPEP	rs2129979	TG
TUB	rs72848490	TC
MTARC1	rs3738182	GG
PITX2	rs7697491	TA
PITX2	rs13121924	GA
LTBR	rs10849448	AG
DLEU7	rs201768	TC
/	rs77114860	TT
KRT73	rs146783619	AA
OSR1	rs56259011	CC
NKX2-3	rs41290504	CC
NKX2-3	rs7095491	TT

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

- Gut issues

The standard treatment for appendicitis is surgery to remove the appendix [\[R\]](#).

Up to 56% of differences in people's chances of developing appendicitis may be attributed to genetics.

Involved genes may influence [\[R\]](#), [\[R\]](#):

- Gut development
- Gut function
- Inflammation

Genetically predicted higher levels of fasting insulin may be associated with appendicitis [\[R\]](#).

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 Exposure to Heavy Metals	2	Anti-Inflammatory Diet
3	Probiotics30 billion CFU	4	Apples
5	Address Food Sensitivities	6	Elimination Diet
7	Reduce Arachidonic Acid Intake	8	Prebiotics125 mg
9	Limit Dairy Intake		

1



Avoid Exposure to Heavy Metals

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

To avoid exposure to heavy metals, ensure you're not using cosmetic products with heavy metals, opt for organic foods to minimize pesticide exposure, and use filters for drinking water to remove possible contaminants. Check for lead-based paints in older homes and avoid cooking or storing food in uncoated metal containers. When possible, choose glass or BPA-free plastics instead.

Description

Heavy metals are elements naturally found in the environment. They are also used for agricultural, industrial, and medicinal purposes. Some can even be found in small amounts in your body [\[R, R\]](#).

Long-term exposure to high amounts of heavy metals can be harmful to your health [\[R, R\]](#).

Heavy metals that are most often linked to health problems include [\[R, R\]](#):

- Lead
- Cadmium
- Arsenic
- Chromium
- Mercury

How it helps

Avoiding exposure to heavy metals can help reduce the risk of further complications during recovery from appendicitis by minimizing systemic inflammation and supporting overall organ function. This is particularly important, as any added stress on the body can hinder healing processes.

2



Anti-Inflammatory Diet

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate foods rich in omega-3 fatty acids, such as salmon and flaxseeds, fruits, vegetables, nuts, and whole grains into your daily meals. Avoid processed foods, red meats, and refined sugars. Aim for a balanced diet consisting mostly of plant-based foods and lean protein sources, adjusting portions sizes to meet your individual nutritional needs and health goals.

Description

An anti-inflammatory diet focuses on reducing inflammation in the body by emphasizing foods rich in anti-inflammatory compounds, such as fruits, vegetables, fatty fish, nuts, and seeds, while minimizing processed foods and those high in added sugars and trans fats.

Anti-inflammatory diets use healthy foods to reduce inflammation. These diets are generally high in [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Colorful fruits and vegetables
- Nuts and seeds
- Fish
- Olive oil
- Tea

They also tend to restrict [\[R\]](#), [\[R\]](#):

- Processed food
- Sugar and refined carbs
- Red meat

The [Mediterranean diet](#) and the DASH diet are good examples of anti-inflammatory diets [\[R\]](#), [\[R\]](#).

How it helps

Adopting an anti-inflammatory diet can help mitigate post-surgical inflammation in appendicitis patients, promoting faster recovery and reducing the risk of complications by providing the necessary nutrients for healing and minimizing oxidative stress.

3



Probiotics

IMPACT

1 / 5

EVIDENCE

1 / 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
30 billion CFU

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

Probiotics may help restore the gut microbiome balance, potentially alleviating inflammation and promoting healing in appendicitis. They can support immune function and improve digestive health during recovery from the acute inflammatory process.

4



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

Apples are rich in dietary fiber, which aids in digestive health, promoting regular bowel movements and preventing constipation during recovery from appendicitis. Additionally, their antioxidants can support overall health and reduce inflammation in the gut.

5



Address Food Sensitivities

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Begin by eliminating common allergens and irritants from your diet, such as dairy, gluten, soy, and nuts, for a period of 4 weeks. After this elimination phase, gradually reintroduce each food group one at a time over a period of 2-3 days each, monitoring for any adverse reactions to pinpoint specific sensitivities.

Description

Food sensitivities refer to adverse reactions to specific foods or food components that can cause symptoms like digestive issues, skin problems, or headaches, without involving the immune system as in allergies.

A *food intolerance* is a non-allergic reaction that makes it hard to digest certain foods. For example, those with lactose intolerance can’t digest dairy [\[R\]](#).

A *food sensitivity* is similar to a food intolerance. However, the cause may be more difficult to pinpoint [\[R\]](#), [\[R\]](#).

People with food sensitivities may have symptoms ranging from gut problems to migraines [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

Addressing food sensitivities during recovery from appendicitis can minimize gastrointestinal distress, allowing for better nutrient absorption and overall healing. Ensuring a balanced diet free from irritants supports optimal recovery and reduces the risk of complications.

6



Elimination Diet

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

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

Description

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

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

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

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

How it helps

The elimination diet can help patients recovering from appendicitis by identifying specific food triggers that may exacerbate digestive discomfort or inflammatory responses, facilitating personalized dietary adjustments for improved recovery and gastrointestinal health.

7



Reduce Arachidonic Acid Intake

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Limit consumption of arachidonic acid-rich foods such as egg yolks, red meats, and shellfish. Aim to eat these foods no more than once or twice a week. Preferably, incorporate more lean proteins, fruits, and vegetables into your diet to balance your intake.

Description

Arachidonic acid (AA or ARA), is an omega-6 fatty acid. Arachidonic acid is important for normal human functioning and has both inflammatory and anti-inflammatory effects. [\[R\]](#), [\[R\]](#)

Metabolites made from arachidonic acid are important for [\[R\]](#), [\[R\]](#):

- Proper immune system function
- Muscle growth
- Brain function
- Mood
- Appetite

Too much arachidonic acid has been linked to vascular diseases like high blood pressure and heart disease [\[R\]](#), [\[R\]](#).

Arachidonic acid is primarily consumed from animal products like poultry, dairy, beef, eggs and sausage [\[R\]](#).

How it helps

Reducing arachidonic acid intake may help mitigate inflammation associated with appendicitis, potentially alleviating symptoms and preventing exacerbation of the condition. This dietary adjustment can support better overall inflammatory management.

8



Prebiotics

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 125 mg of a prebiotic supplement daily. Consistent daily intake is key for maintaining gut health.

TYPICAL STARTING DOSE

125 mg

Description

Prebiotics are primarily plant-based sources of dietary fiber that provide nourishment for beneficial gut bacteria. These foods, like garlic, onions, and asparagus, promote a healthy gut microbiome, support digestion, and enhance nutrient absorption.

Prebiotics are certain fibers 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** [\[R, R\]](#).

Some natural sources of prebiotics include [\[R, R\]](#):

- Whole grains
- Bananas
- Onions
- Soybeans

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

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

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

How it helps

Prebiotics may aid in optimizing gut microbiota composition, which can support overall digestive health and potentially enhance recovery post-appendicitis by improving nutrient absorption and promoting a balanced inflammatory response.

9



Limit Dairy Intake

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Reduce your consumption of dairy products, such as milk, cheese, yogurt, and butter, to no more than one serving per day. A serving is equivalent to 1 cup (240 ml) of milk, 1 cup of yogurt, 1.5 ounces (42 grams) of natural cheese, or 2 ounces (56 grams) of processed cheese.

Description

Limiting dairy intake may benefit individuals who are lactose intolerant or have dairy allergies, as it helps prevent digestive discomfort and symptoms like bloating and diarrhea. Exploring dairy-free alternatives supports overall gastrointestinal comfort.

Dairy products are made from milk. They include [\[R\]](#):

- Cheese
- Yogurt
- Kefir
- Butter
- Cream

Dairy products contain high levels of [calcium](#). Calcium helps build strong bones. However, eating a lot of dairy products is linked to acne and certain health conditions like Parkinson's disease [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

Limiting dairy intake in patients recovering from appendicitis can help prevent exacerbation of digestive symptoms, such as bloating and diarrhea, especially in those with lactose intolerance. This reduction promotes gastrointestinal comfort and aids in recovery.

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 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.

