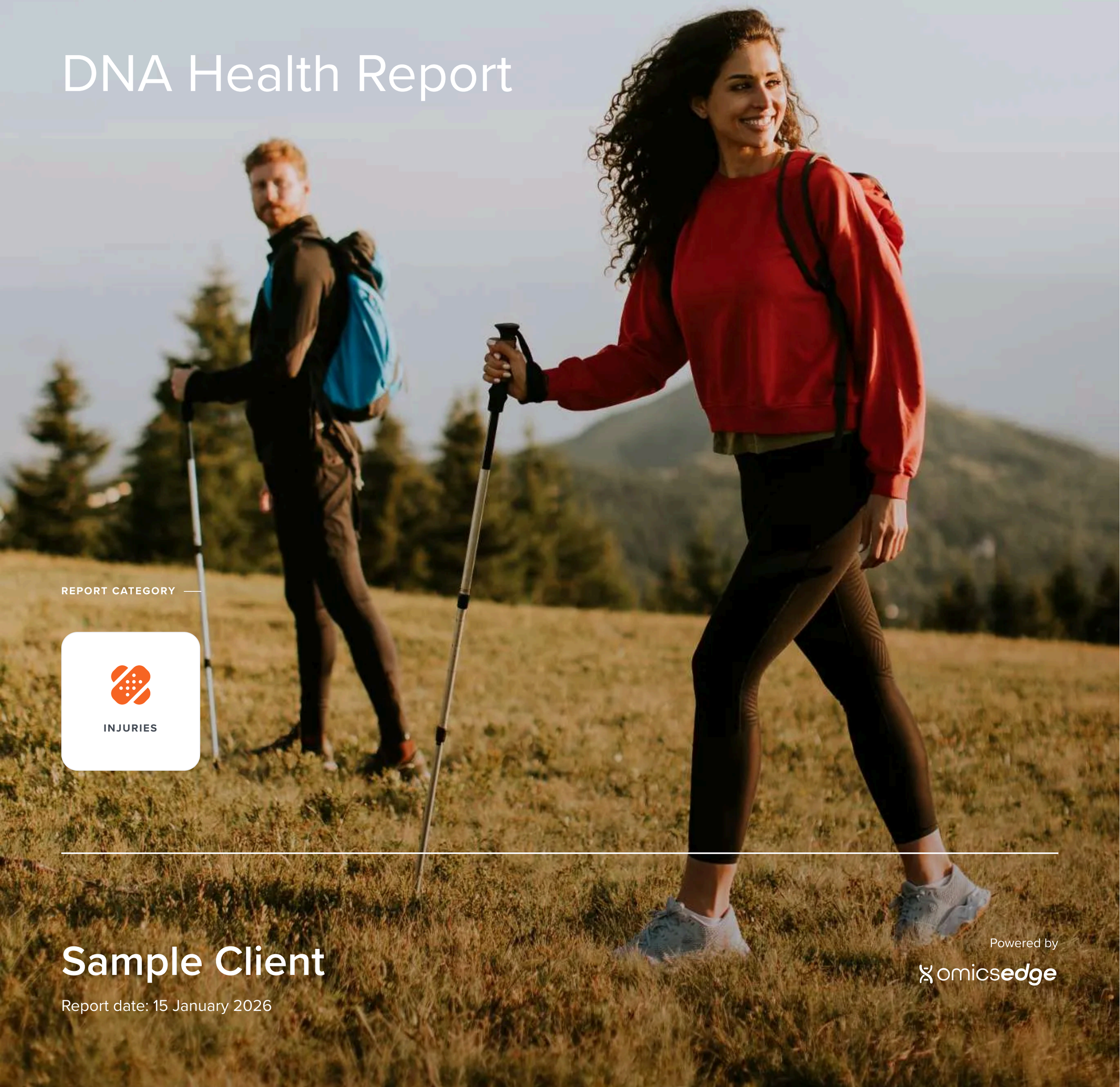
SelfDecode™

Abdominal Hernia

DNA Health Report



REPORT CATEGORY

INJURIES

Sample Client

Report date: 15 January 2026

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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

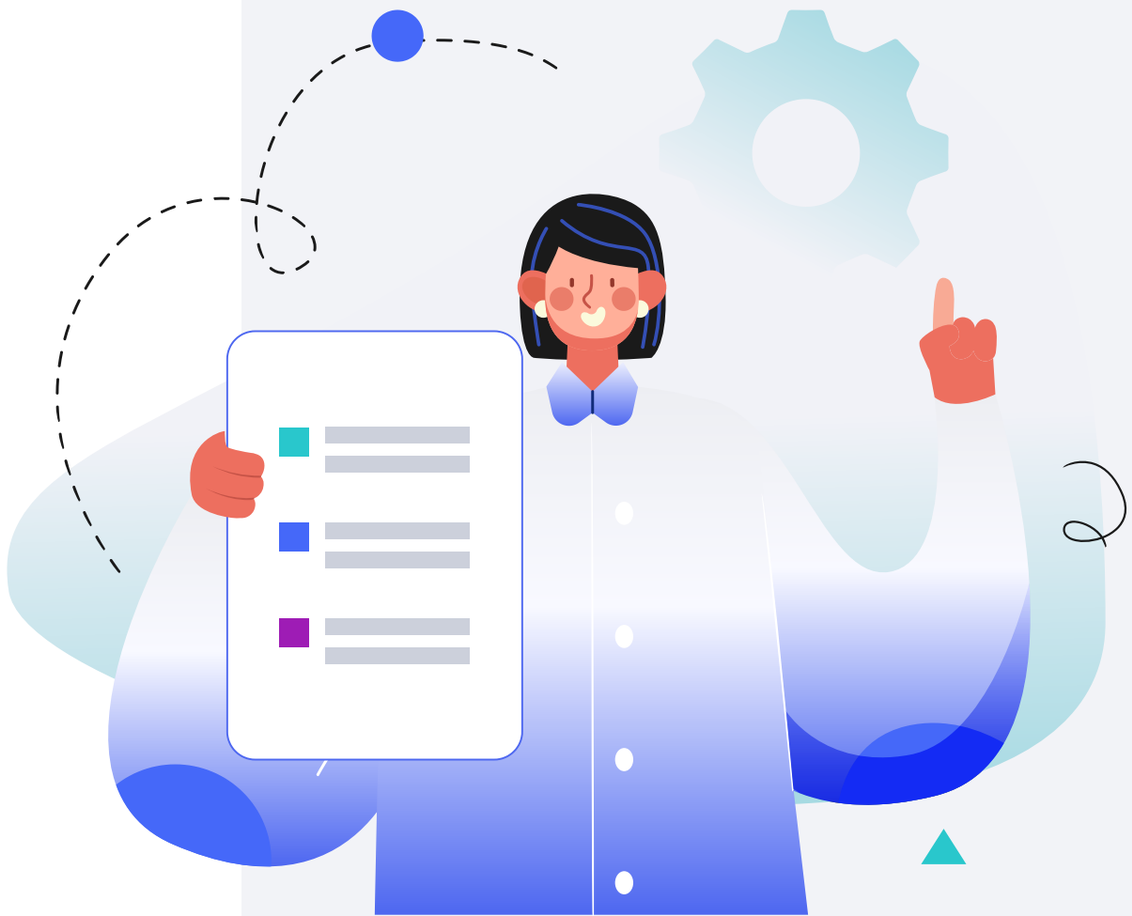
Male

HEIGHT

5ft 5" 165cm

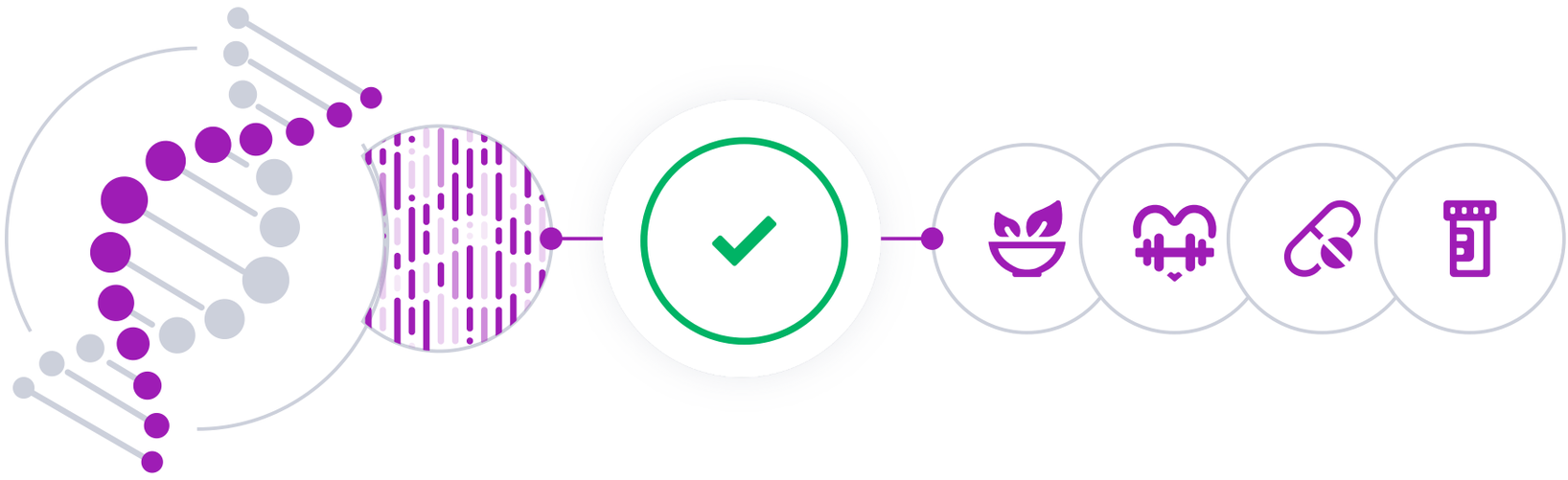
WEIGHT

137lb 62kg



How this works

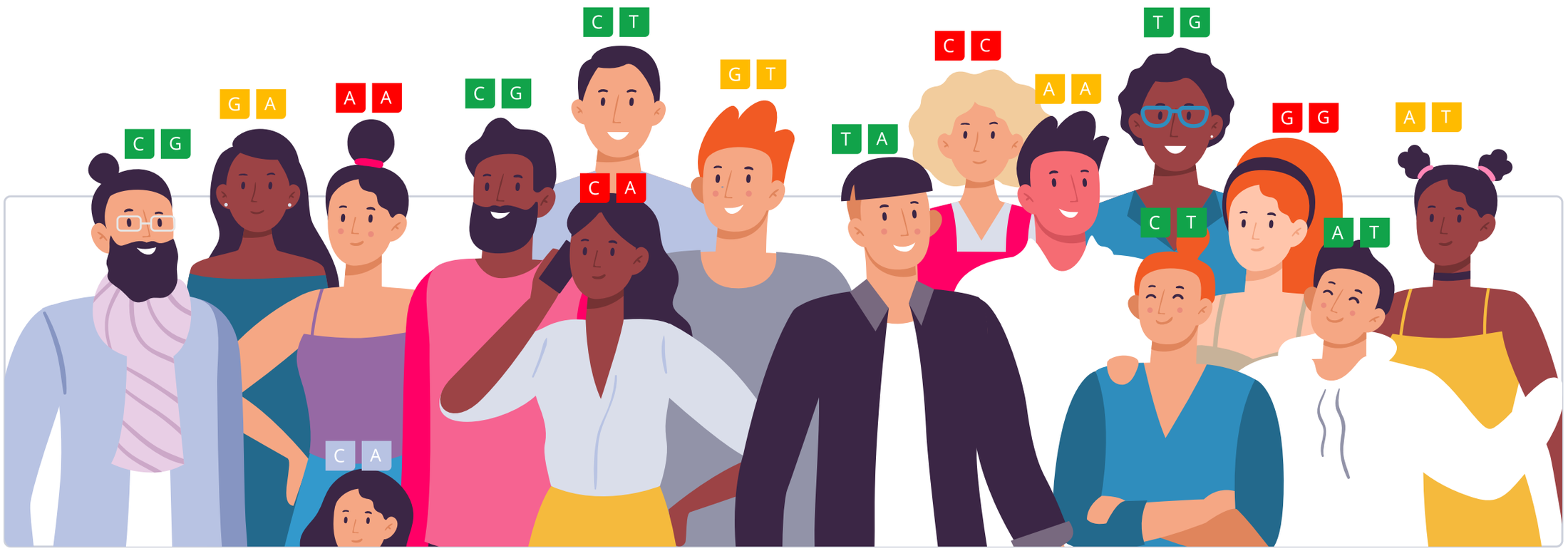
Our Wellness Reports analyze how your DNA influences your health.
We then use this analysis to give you personalized risk estimates and recommendations.



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.

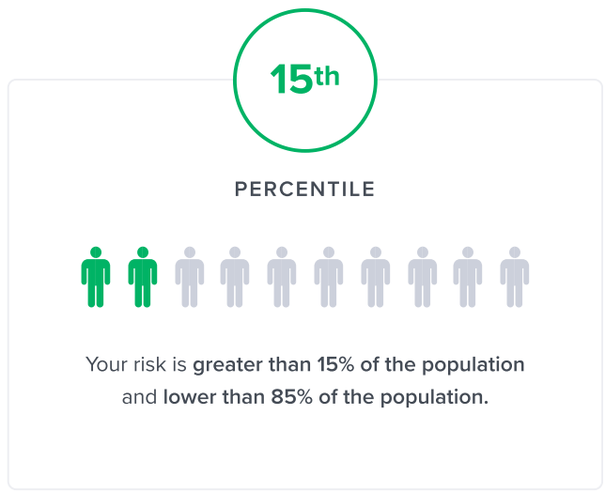
Genetic variants are parts of DNA that differ from person to person. Some can make you more vulnerable to certain health issues, while others may influence traits such as eye color.



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.

When we give a risk score, the risk icon tells you if you are at a higher or lower risk compared to other people:

In total, we analyze up to 83 million genetic variants.



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

Your risk is also displayed as a percentile. This will tell you how your risks compare to our sample population. The lower your percentile number, the lower your risk. The "50th percentile" would be an average risk.

Similarly, the gauge tells you your relative risk score compared to our sample population, or it indicates a specific trait or haplotype you are more likely to have based on your genetic variants.

When applicable, we also list top evidence-based recommendations that may help lower your risk. The focus is on recommendations that may be of benefit to you, based on your genetics.

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

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

Impact shows how strongly a recommendation will affect your health in a certain area.
Evidence is how much scientific support there is for the recommendation. Rankings are from 1 to 5 (low to high):

Impact

Impact scores range from 1-5. These scores reflect how much of an effect each recommendation can have. An impact score of 5 predicts the biggest effect.

When a recommendation affects something we can measure, we use those measurements to assign the impact score. For example, a recommendation that decreases cholesterol by 20% will have a higher impact score than one that decreases it by 5%.

Some recommendations affect things that we cannot directly measure, like stress or mood. For these, the impact score is based on how well they work relative to other recommendations and standard treatments. The best ones get the highest scores.

If there is a lot of research that shows a recommendation works especially well for your genotype, the impact score gets increased.

Recommendation Evidence

5 / 5

Recommendations that are considered effective and generally recommended by experts and medical bodies.

4 / 5

Recommendations that are considered likely effective and that have multiple independent meta-analyses and a great many studies supporting them.

3 / 5

Recommendations that are considered possibly effective and have many studies supporting them

2 / 5

Recommendations that have insufficient evidence, with two or several clinical trials supporting them, or many studies but with ambiguous results.

1 / 5

Recommendations that have insufficient evidence, with a single clinical trial, or with many studies most of which didn't find support for the recommendation.

0 / 5

No evidence in humans.

Genotype-specific Evidence

High-quality

Direct evidence that a recommendation helps more in people with your gene variant (many clinical trials, afew large clinical trials, or a meta-analysis).

Medium-quality

Direct evidence that a recommendation helps more in people with your gene variant (a few clinical trials or one large clinical trial).

Low-quality

Direct evidence that a recommendation helps more in people with your gene variant (a single clinical trial or more trials with inconsistent results).

Indirect

A recommendation may help more in people with your gene variant because it targets a specific gene or protein affected by your variant (e.g., MTHFR, dopamine).

In theory

A recommendation may help more in people with your gene variant because it targets a specific mechanism affected by your variant (e.g., inflammation, oxidative stress).

Some things to keep in mind:

- Genetics doesn’t play a considerable role in a condition or a trait.
- There is not enough research available to estimate a genetic predisposition.
- There are technical limitations to estimating or presenting a genetic predisposition.
- The topic is sensitive, and a genetic predisposition should only be estimated and presented by a healthcare professional.

Introduction

An abdominal hernia occurs when an internal part of the body, such as fat or intestine, pushes through a weakness in the muscle or surrounding tissue wall. This most commonly happens in the abdomen. Hernias can develop at any age and are often caused by a combination of muscle weakness and strain. Depending on its cause, a hernia can develop quickly or over a long period.

The main types of abdominal hernia are:

- Inguinal hernia: The most common type, where tissue pushes through a weak spot in the groin area. This type is more common in men than women.
- Umbilical hernia: It occurs around the belly button and is most common in infants, but it can also affect adults.
- Incisional hernia: It can occur through a scar if you have had abdominal surgery.
- Femoral hernia: It's less common and occurs when tissue pushes through the wall of the femoral canal (near the groin). This type is more common in women.

Signs and symptoms of abdominal hernia include:

- A visible bulge or lump in the abdomen or groin, which may become more obvious when you stand up or strain.
- Pain or discomfort in the area around the bulge, especially when bending over, coughing, or lifting.
- A feeling of heaviness or pressure in the abdomen.
- A burning, gurgling, or aching sensation at the site of the bulge.
- In severe cases, if the hernia is strangulated, symptoms could include severe pain, nausea, vomiting, and the inability to pass gas or have a bowel movement, requiring immediate medical attention.

Risk Factors and Treatment

The following factors increase the risk of an abdominal hernia:

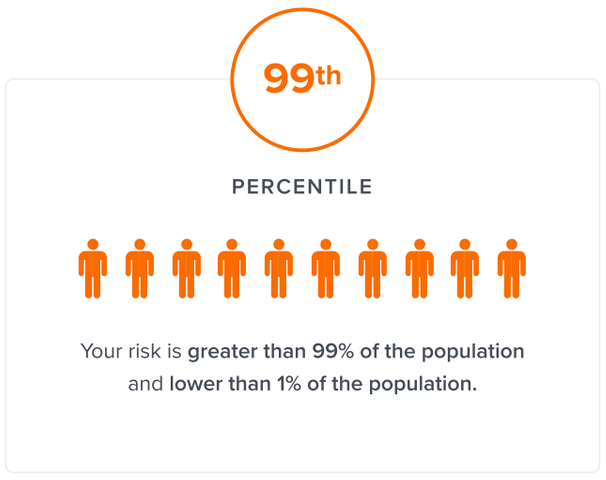
- Increased pressure in the abdomen: This can be due to heavy lifting, diarrhea, constipation, or persistent coughing or sneezing.
- Weakness in the abdominal wall: This may be present at birth or develop later in life, often exacerbated by factors like age, chronic strain, or surgical incisions.
- Pregnancy: It can put extra pressure on the abdomen.
- Obesity: It can contribute to weakened muscles and increased pressure within the abdomen.

For small hernias that are not causing discomfort, monitoring for changes may be sufficient. Those that are painful or enlarging may require surgery. It can often be performed laparoscopically, involving small incisions, or through traditional open surgery. The aim is to repair the weakened area of the muscle or tissue. Abdominal hernias can also be repaired through herniorrhaphy (by sewing the muscle layer together) or hernioplasty (by sewing a mesh patch over the weakened area).

Preventing an abdominal hernia involves maintaining a healthy weight, avoiding heavy lifting, and eating a fiber-rich diet to prevent constipation. Regular exercise can also help strengthen muscles and potentially reduce the risk of developing a hernia. For people with existing hernias, wearing a supportive truss as recommended by a healthcare provider can help relieve discomfort and prevent their worsening.

MORE LIKELY

More likely to have an abdominal hernia based on 11,533 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
TGFB2	rs1337102	AA
TGFB2	rs12040264	GG
ZC3H11B	rs10779360	CC
ZC3H11B	rs9662802	GG
ZC3H11B	rs77962041	GG
ZC3H11B	rs11118335	CC
ZC3H11B	rs11118336	CC
ZC3H11B	rs4846567	GT
ZC3H11B	rs2820443	TC
LYPLAL1	rs2820444	GA
ZC3H11B	rs1415287	CT
ZC3H11B	rs1415288	AC
TGFB2	rs2820446	CG
ZC3H11B	rs2494196	CA
TGFB2	rs2785988	CA
ZC3H11B	rs4846569	CT
/	rs55893113	GC
ZC3H11B	rs12131794	CA
ZC3H11B	rs3902972	GA
ZC3H11B	rs7538503	AG
TNS1	rs10204348	GA
NUAK1	rs7297246	AA
NUAK1	rs11112709	CC
NUAK1	rs11112688	AA

GENE	SNP	GENOTYPE
NUAK1	rs67051635	CC
NUAK1	rs66913103	CC
NUAK1	rs61941504	GG
NUAK1	rs11112695	TT
NUAK1	rs11112691	TT
NUAK1	rs10861487	AA
NUAK1	rs17267305	AA
NUAK1	rs11611703	AA
NUAK1	rs11611140	AA

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

Your Recommendations

Your recommendations are prioritized according to the likelihood of it having an impact for you based on your genetics, along with the amount of scientific evidence supporting the recommendation.

You'll likely find common healthy recommendations at the top of the list because they are often the most impactful and most researched.

		DOSAGE
1	Stress Management Therapy	1 hour
2	Avoid Large Meals	
3	Avoid Strenuous Activity	
4	Avoid Lifting Heavy Objects	
5	Walking	30 minutes
6	Core-Strengthening Exercises	20 minutes

1

Stress Management Therapy

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Engage in stress management therapy sessions, such as cognitive-behavioral therapy (CBT), for at least 1 hour per week over a course of 8 to 12 weeks. Techniques can include mindfulness, deep breathing exercises, and identifying stressors to develop coping strategies.

TYPICAL STARTING DOSE

1 hour

Description

Stress management therapy refers to various techniques and approaches aimed at reducing and coping with stress. It can improve mental and physical well-being by helping individuals better manage the effects of stress on their health.

How it helps

Managing stress can prevent activities that may aggravate a hernia, like straining during stress-induced activities.

2

Avoid Large Meals

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Divide your daily food intake into smaller portions spread out over five to six times a day instead of having three large meals. Ensure that each portion is balanced and includes a variety of nutrients. This means having breakfast, a mid-morning snack, lunch, an afternoon snack, dinner, and possibly a light evening snack, depending on your caloric needs.

Description

Eating smaller, more frequent meals may help prevent overeating. This involves eating the same number of meals at about the same times every day. Doing so may help with issues like blood pressure, body weight, cholesterol levels, and migraines.

Eating smaller, more frequent meals may help prevent overeating. One way to do this is to keep a regular meal schedule. This involves eating the same number of meals at about the same times every day. Doing so may help [R, R, R]:

- Manage blood pressure
- Balance the internal clock
- Maintain a healthy body weight
- Support healthy cholesterol levels
- Prevent migraines

How it helps

Large meals can increase stomach pressure, potentially worsening hernia symptoms. Eating smaller, more frequent meals helps in managing pressure.

3

Avoid Strenuous Activity

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Refrain from participating in high-intensity physical activities such as running, heavy weightlifting, and high-impact sports. Opt instead for low-impact exercises like walking, swimming, or yoga. It's important to listen to your body's signals and rest as needed, avoiding these strenuous activities until advised otherwise by a health professional.

Description

Avoiding strenuous physical activity in certain medical conditions or during illness can help prevent injury and promote better recovery. It allows the body to conserve energy and supports the healing process.

Strenuous activity is physical activity that requires a lot of effort. Exercise done at 70-85% of a person’s heart rate is considered strenuous. Examples include [R]:

- Running, cycling, or swimming at high speed
- Running or hiking uphill
- Jumping rope
- Single tennis
- Sports that involve a lot of running (soccer, basketball, hockey, etc.)

On the other hand, strenuous daily activities include [R]:

- Lifting and carrying heavy objects
- Gardening with heavy digging
- Shoveling snow
- Fast dancing

How it helps

Engaging in strenuous activities can put significant strain on your abdominal muscles, increasing the risk of worsening the hernia.

4

Avoid Lifting Heavy Objects

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Refrain from picking up items that require significant strain or exertion, typically defined as those weighing more than 25 pounds (11 kilograms), to avoid unnecessary pressure on your body. This restriction should be adhered to as long as your healthcare provider advises, which may be indefinitely for chronic conditions or for a specific recovery period following surgery or injury.

Description

Avoiding improper lifting techniques when handling heavy objects can help prevent back injuries and musculoskeletal strain. Practicing safe lifting methods and using proper equipment promotes spine and musculoskeletal health.

How it helps

Lifting heavy objects can increase pressure on your abdominal area, which could exacerbate a hernia or cause it to recur.

5

Walking

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Incorporate at least 30 minutes of brisk walking into your daily routine, aiming for a minimum of five days a week. This can be done in one continuous session or broken into shorter periods, such as three 10-minute walks throughout the day.

TYPICAL STARTING DOSE

30 minutes

Description

Walking is a low-impact form of exercise that can contribute to cardiovascular fitness, weight management, and improved overall health. It is used to support physical activity goals, enhance mood, and promote better cardiovascular health.

How it helps

Walking is a low-impact exercise that can help maintain general fitness and prevent weight gain, which can reduce pressure on the hernia.

6

Core-Strengthening Exercises

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Incorporate exercises like planks, bridges, abdominal crunches, and leg lifts into your daily routine. Aim to do these exercises for 20-30 minutes, 3 times a week. Each exercise should be performed in sets of 10-15 repetitions.

TYPICAL STARTING DOSE

20 minutes

Description

Core-strengthening exercises target the muscles of the abdomen, lower back, and pelvis, helping improve posture, stability, and reduce the risk of back pain. Regular core workouts support a strong and balanced musculoskeletal system.

The core, or trunk, includes several groups of muscles in your abdomen, back, and pelvis. Keeping these muscles strong helps stabilize your body, twist and bend your back, protect your back from injuries, and enhance your overall fitness [R].

Some exercises that help strengthen the core include [R]:

- Crunches
- Planks
- Bridges
- Supine toe taps
- Bird dogs

The core can also be strengthened by practicing Pilates, kettlebell training, and some types of yoga [R, R, R].

How it helps

Strengthening your core muscles can help provide better support for your abdominal area, potentially reducing discomfort and preventing hernia progression.