

COL5A1 (Collagen)

Gene Report

REPORT CATEGORIES —



JOINT & TENDON
HEALTH



INJURIES

Sample Client

Report date: 15 January 2026

Powered by

omicsedge

Table of Contents

03 How this works

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

07 Introduction

08 Your genetics

09 Your recommendations

22 Next Steps

- 22 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

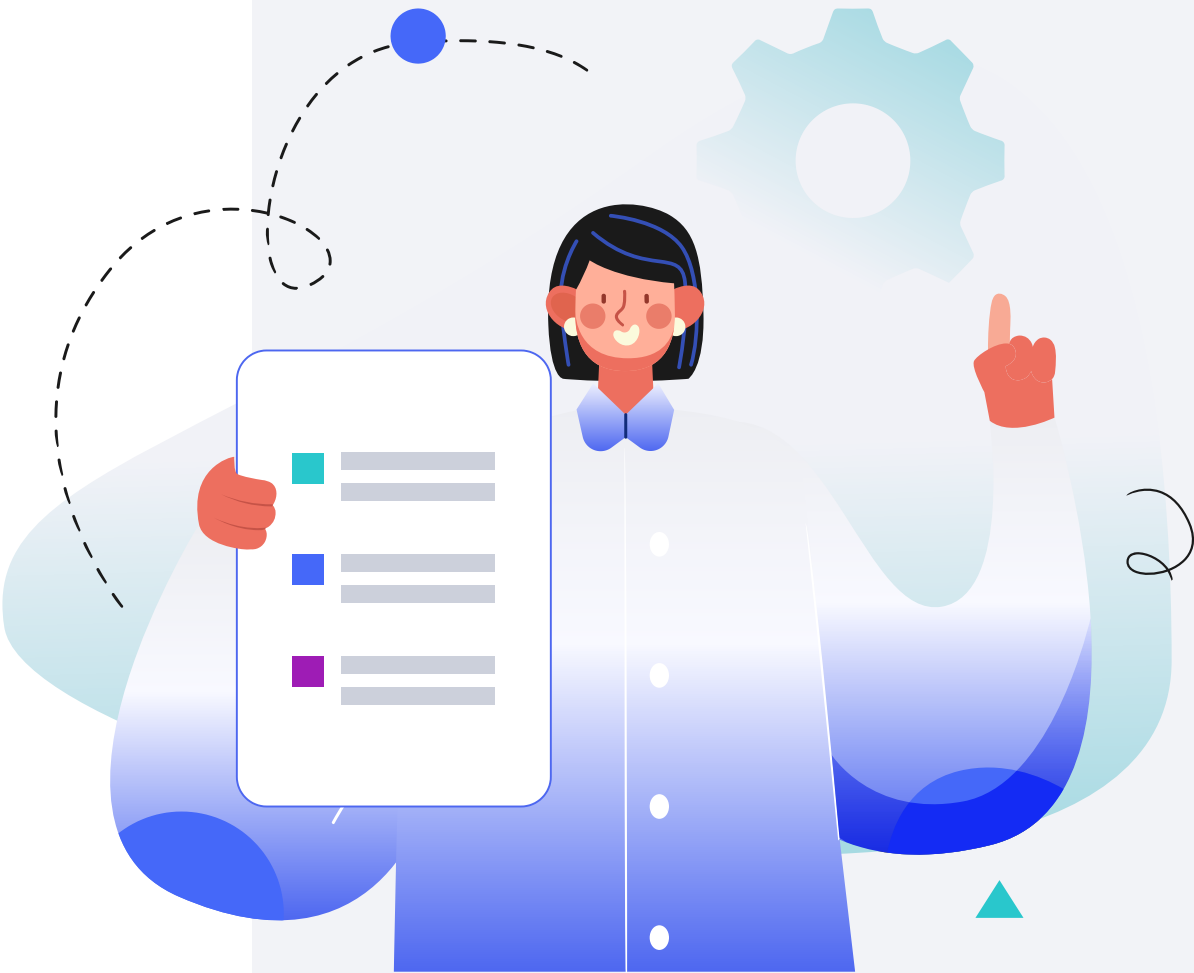
Male

HEIGHT

5ft 5" 165cm

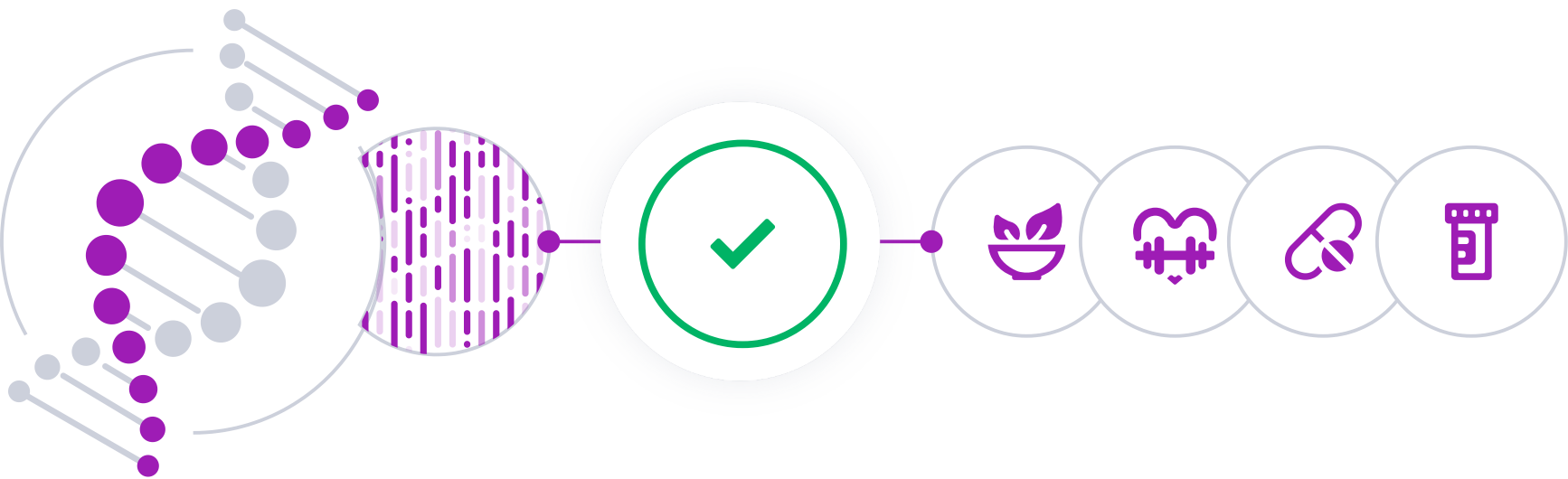
WEIGHT

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.

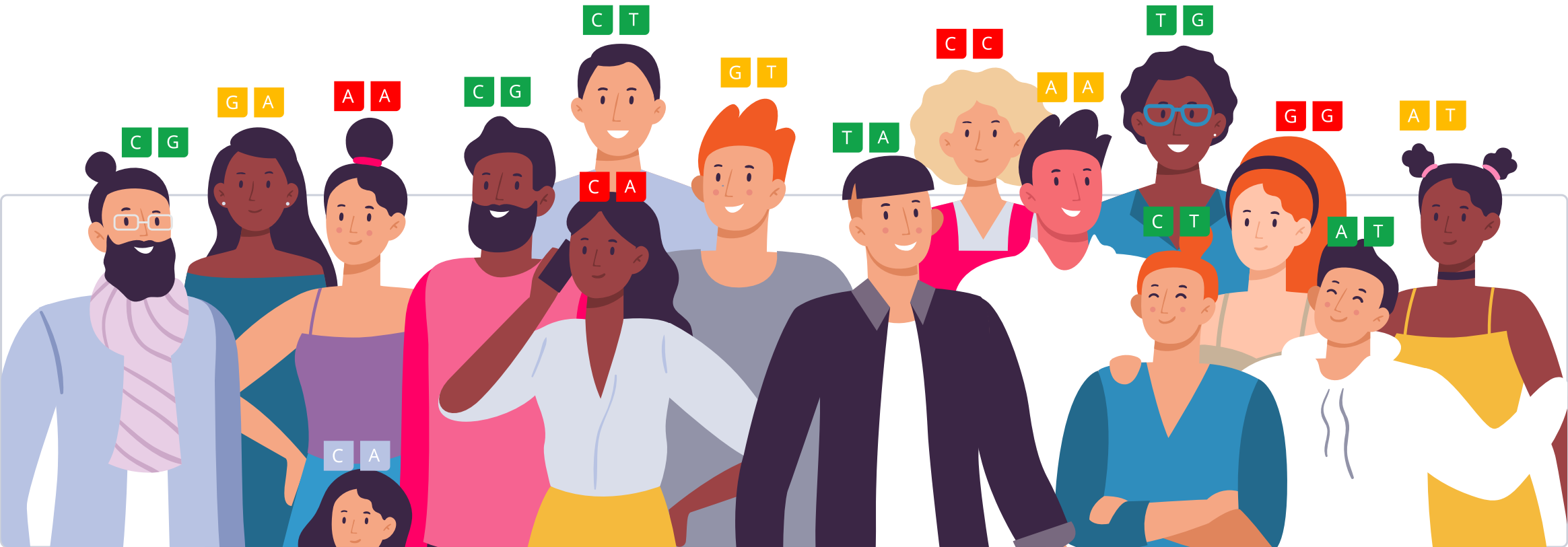


Similarly, our Trait Reports look at how your DNA influences your traits.



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

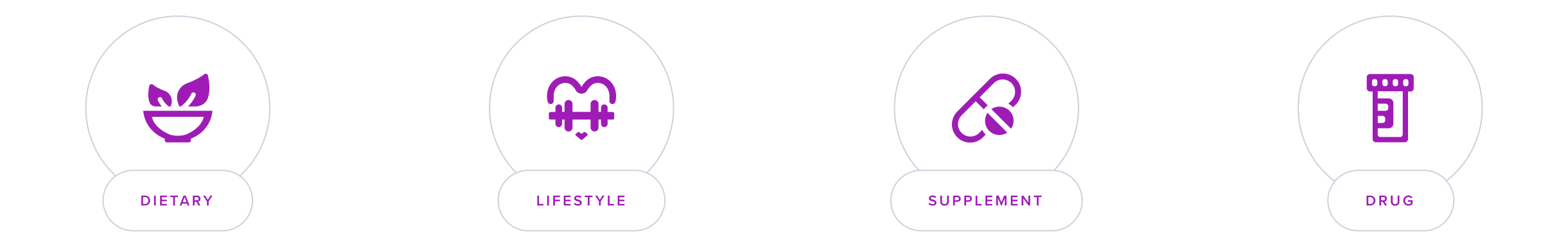
You have 2 risk alleles

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

The [COL5A1](#) gene encodes a component of type V collagen called the pro- α 1(V) chain. Collagens are a family of proteins that strengthen and support many tissues in the body, including skin, ligaments, bones, tendons, and muscles [\[R\]](#).

Collagens begin as rope-like procollagen molecules that are each made up of three chains. Two combinations of chains can produce type V collagen: three pro- α 1(V) chains or two pro- α 1(V) chains and one pro- α 2(V) chain (which is produced from the [COL5A2](#) gene). Type V collagen regulates the width of those fibrils. Studies suggest that type V collagen also controls the assembly of other types of collagen into fibrils in several tissues [\[R\]](#).

COL5A1

Genetics and Injuries

Variants resulting in reduced type V collagen may increase the risk of injuries. This may be because carriers of these variants may have weaker ligaments, tendons, and muscles. One of such variants is [rs12722](#). Its minor ‘T’ allele has been associated with an increased risk of:

- Achilles tendon injury [\[R, R\]](#)
- Anterior cruciate ligament injury [\[R, R\]](#)
- Tennis elbow [\[R, R\]](#)
- Carpal tunnel syndrome [\[R\]](#)
- Muscle cramps [\[R\]](#)

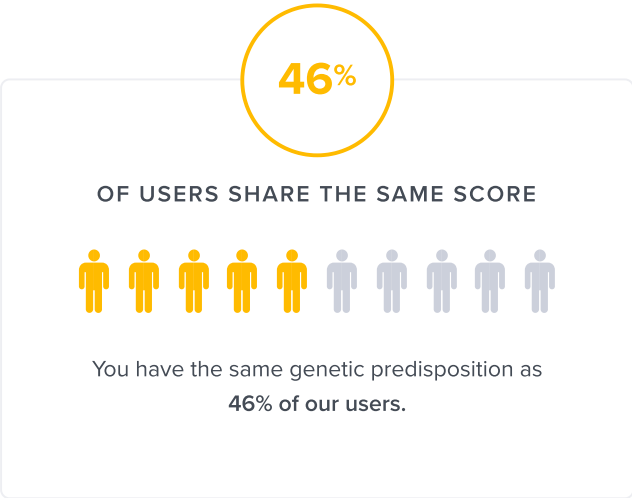
People with the ‘TT’ genotype may also have more severe (but not more frequent) muscle injuries. Probably due to the association of this variant with soft tissue injuries, carriers may have lower odds of elite rugby status [\[R, R\]](#).

On the bright side, this genotype has also been associated with improved endurance performance in runners. Moreover, the ‘T’ variant may reduce the risk of rotator cuff injury [\[R, R\]](#).



TYPICAL ACTIVITY

Likely typical COL5A1 activity based on the genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
COL5A1	rs12722	TC

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		DOSAGE	
1	Avoid High-Impact Exercise	2	Reduce Knee Strain
3	Reduce Tendon Strain	4	Reduce Leg Strain
5	Limit Calorie Intake	6	Reduce Wrist Strain
7	Chondroitin800 mg	8	Collagen (Non-Hydrolyzed)5 g
9	SAM-e400 mg	10	Collagen Peptides10 g
11	Curcumin500 mg	12	Pycnogenol100 mg

1



Avoid High-Impact Exercise

IMPACT

4 / 5

EVIDENCE

4 / 5

How to implement

Opt for low-impact activities such as swimming, cycling, or walking instead of running or jumping exercises. Engage in these alternative exercises for at least 150 minutes per week, spread out over several days to ensure rest periods between sessions.

Description

For individuals with certain medical conditions or joint issues, avoiding high-impact exercise can help prevent injuries and joint strain. Choosing lower-impact activities like swimming or cycling can provide similar cardiovascular benefits while minimizing the risk of overuse injuries.

How it helps

Some studies suggest that certain types of high-impact training, such as running on stiffer surfaces and specific mechanical loading exercises, may strengthen the Achilles tendon and reduce injury risk [\[R\]](#).

However, during recovery from Achilles tendon injury, it's preferable to reduce the pace of recovery runs and avoid soft surfaces [\[R\]](#).

High propulsive forces and fast training sessions may increase stress on the tendon and potentially lead to injury [\[R, R\]](#).

2



Reduce Knee Strain

IMPACT

4 / 5

EVIDENCE

4 / 5

How to implement

Avoid activities that put excessive stress on your knees, such as jumping and running on hard surfaces. Opt for low-impact exercises like swimming or cycling. When engaging in activities that involve knee bending, ensure proper form and use supportive footwear. Aim to strengthen your leg muscles through exercises such as leg lifts and squats, doing these 2-3 times per week.

Description

The knee bears a great deal of stress from everyday activities. This makes it one of the most easily injured joints. Reducing knee strain can be achieved by maintaining proper alignment during physical activities and incorporating strength training exercises to support the knee joint. These practices promote knee health and reduce the risk of injuries.

The knee is a very complex joint that connects the bones of the thigh and the lower leg. It allows the leg to bend and straighten, which is required to sit, squat, jump, and run [\[R\]](#).

The knee bears a great deal of stress from everyday activities. This makes it one of the most easily injured joints [\[R\]](#), [\[R\]](#).

Knee injuries usually occur during sports that involve sudden stops, aggressive twisting and pivoting of the knee, jumping, and landing. Sports most commonly associated with knee injuries include [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Soccer
- Basketball
- Football
- Rugby
- Gymnastics
- Lacrosse
- Alpine skiing
- Volleyball
- Tennis
- Running
- Golf

Working an intense job that requires you to jump, pivot, or climb may increase the risk of ACL injury. On the other hand, kneeling, squatting, climbing stairs, and lifting or carrying heavy weights at work may increase the risk of meniscus tears [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

Experts recommend the following strategies to minimize the risk of ACL injuries [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Being mindful of your technique when you change direction or land from a jump
- Warming up before exercise
- Wearing properly-fitting sports shoes
- Making sure your ski bindings are adjusted correctly
- Avoiding exercise on artificial turf

However it may be practically impossible for athletes to eliminate the risk completely.

3



Reduce Tendon Strain

IMPACT

4 / 5

EVIDENCE

4 / 5

How to implement

To reduce tendon strain, modify your daily activities to avoid motions that cause discomfort or pain. If you engage in repetitive tasks or sports, take regular breaks, approximately every 30 minutes, to rest or gently stretch the affected tendon. Additionally, ensure to properly warm up before any physical activity and cool down afterwards.

Description

Repetitive or intense strain on the tendons of the upper and lower limbs can cause their inflammation or breakdown. Reducing tendon strain entails avoiding repetitive movements or overuse of specific muscles and tendons, which can help prevent injuries such as tendinitis and support overall musculoskeletal health.

Repetitive or intense strain on the tendons of the upper and lower limbs can cause their inflammation or breakdown. Certain sports, especially if practiced using improper technique or equipment, are most commonly associated with tendon injuries. These include [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Baseball
- Basketball
- Bowling
- Golf
- Running
- Swimming
- Tennis
- Gymnastics

On the other hand, tendon injuries can also occur in the workplace. Works involving repetitive movements, awkward positions, forced movements, using vibrating tools, and overhead reaching may lead to tendon injuries. Examples of tasks that increase the risk include [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Gardening
- Lifting
- Landscaping
- Painting
- Scrubbing
- Shoveling
- Typing
- Woodworking

Working on a chair, keyboard, or desktop that are positioned incorrectly for your height, arm length, and the tasks may also lead to tendon injuries [\[R\]](#), [\[R\]](#).

How it helps

Tendon inflammation is more common in people whose jobs involve [\[R\]](#):

- Repetitive motions
- Awkward positions
- Frequent overhead reaching
- Vibration
- Forceful exertion

You may be more likely to develop tendon inflammation if you participate in certain sports that involve repetitive motions, especially if your technique isn't optimal. This can occur with [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Baseball
- Basketball
- Bowling
- Golf

- Running
- Swimming
- Tennis

Experts recommend reducing strain to prevent tendon inflammation. Strategies that may help include [\[R\]](#), [\[R\]](#):

- Limiting repetitive activities, especially if performed for long periods of time
- Making sure the workplace is ergonomically adjusted
- Stretching and strengthening the muscles
- Alternating high-impact sports with low-impact ones (e.g., alternating running with walking)
- Avoiding exercising on hard, uneven, or slippery surfaces
- Using proper equipment (e.g., well-fitting, cushioned running shoes)
- Slowly increasing the intensity of the activity

4



Reduce Leg Strain

IMPACT

4 / 5

EVIDENCE

4 / 5

How to implement

Avoid standing or sitting in one position for prolonged periods. Every hour, make a point to stand if you've been sitting, or sit or walk if you've been standing, for at least 5-10 minutes. Incorporate leg stretches or gentle exercises into your daily routine, especially if your job involves long periods of sitting or standing.

Description

Leg strain is caused by too much pressure being placed on the legs. Reducing leg strain involves avoiding overexertion and implementing proper techniques during physical activities, as well as wearing properly fitted clothing. It can help prevent muscle fatigue and promote overall leg strength.

Leg strain is caused by too much pressure being placed on the legs. Examples of things that can lead to leg strain include [\[R\]](#):

- Wearing clothing that’s too tight
- Standing or sitting for long periods of time
- Excess weight

Leg strain can block the flow of blood from the legs to the heart. This can lead to varicose veins [\[R\]](#), [\[R\]](#).

People with certain professions may be more prone to leg strain and varicose veins. This may be because their professions require them to stand for longer periods of time. These include:

- Nurses [\[R\]](#), [\[R\]](#)
- Customer service workers (e.g., hairdressers, salespeople, caterers) [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#)
- Teachers [\[R\]](#)

How it helps

Experts recommend reducing strain to prevent Achilles tendon and anterior cruciate ligament injuries. Strategies that may help include [\[R\]](#), [\[R\]](#):

- Stretching and strengthening your calf muscles
- Alternating high-impact sports with low-impact ones (e.g., alternating running with walking)
- Avoiding running on hard, uneven, or slippery surfaces
- Using proper equipment (e.g., well-fitting, cushioned running shoes)
- Slowly increasing the intensity of the activity

5



Limit Calorie Intake

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Consume fewer calories than your body needs for maintenance. Calculate your daily caloric needs using an online calculator based on your sex, age, weight, height, and activity level, then reduce that number by 500-1000 calories per day to safely lose 1-2 pounds per week. Adjust the caloric intake as needed based on your progress.

Description

People often limit their calorie intake to help them lose weight [\[R, R\]](#). However, moderate calorie restriction may also help you stay healthier and age better [\[R, R, R, R, R\]](#).

There are different ways to take in fewer calories. You can:

- **Eat low-calorie foods**, such as those rich in proteins, fiber, and water. Avoid fatty and sugary foods, which tend to be high in calories [\[R\]](#).
- Try [intermittent fasting](#), which involves changing how often you eat [\[R\]](#).

If you are restricting your calories, make sure your diet remains healthy and balanced. Experts also recommend being physically active, to prevent the loss of muscle and bone mass.

How it helps

Health experts strongly recommend weight loss to overweight or obese people with joint problems [\[R, R\]](#).

You may lose weight by changing your diet. Having a healthy weight may help improve joint function and quality of life [\[R, R, R, R, R\]](#).

Please note: *Limiting calorie intake too much or fasting for too long can cause malnutrition, anemia, eating disorders, and other health problems. Talk to your doctor before making any drastic changes to your calorie intake* [\[R\]](#).

6



Reduce Wrist Strain

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Take regular breaks, ideally every 30 minutes, to stretch and rest your wrists when using a computer or engaging in activities that require repetitive motion. Ensure your workspace is ergonomically set up with the keyboard at elbow height and wrists in a neutral position. Use wrist supports if necessary.

Description

Wrist strain occurs when tendons or ligaments in the wrist get stretched or torn. It can happen suddenly or develop over time. Reducing wrist strain means implementing ergonomic practices and exercises to alleviate tension and discomfort in the wrist area, which can help prevent conditions like carpal tunnel syndrome and promote better hand and wrist health.

Wrist strain occurs when tendons or ligaments in the wrist get stretched or torn. It can happen suddenly or develop over time as a result of [\[R\]](#), [\[R\]](#):

- Repetitive tasks
- Sudden force to the hands or fingers
- Temperatures that are too hot or cold
- Poor wrist posture

Activities that strain the wrist can cause pain and swelling. They may also contribute to carpal tunnel syndrome [\[R\]](#), [\[R\]](#).

How it helps

Repetitive or forceful movements of the wrist may increase the risk of carpal tunnel syndrome. Contributing factors may include [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Using tools that vibrate
- Assembly line work
- Driving or holding a phone for a long time
- Gardening

Spending too much time at the computer, and especially using a mouse, is also linked to carpal tunnel syndrome [\[R\]](#), [\[R\]](#), [\[R\]](#).

Making some ergonomic changes may help reduce wrist strain. These include [\[R\]](#):

- Taking frequent breaks from repetitive tasks
- Relaxing your grip and keeping your wrist in a neutral position
- Keeping your hands and wrists warm
- Using a keyboard and mouse that don’t strain the wrist

However, it is unclear if these changes would improve symptoms in people who already have carpal tunnel syndrome [\[R\]](#).

7



Chondroitin

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Take 400 mg of chondroitin sulfate orally, three times a day or 800 mg once daily. This supplement regimen is typically followed for up to 6 months to support joint health.

TYPICAL STARTING DOSE

800 mg

Description

Chondroitin is often used as a supplement to support joint health and reduce the symptoms of osteoarthritis. It may help improve joint mobility and reduce discomfort in individuals with joint-related issues.

Chondroitin is a major component of cartilage. It helps keep cartilage healthy, and it provides the building blocks for the body to produce new cartilage.

People often combine chondroitin with glucosamine as supplements for joint health [\[R\]](#), [\[R\]](#).

How it helps

Five meta-analyses (the largest one with 18 trials) concluded that chondroitin sulfate improves pain, physical function, and minimum joint space width (by 0.07-0.13 mm/year) in people with joint problems. Pharmaceutical-grade preparations and doses higher than 1200 mg/day were found most effective. However, a meta-analysis of 50 trials found the certainty of the evidence was very low [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Chondroitin may help due to its anti-inflammatory and shock-absorbing properties.

8



Collagen (Non-Hydrolyzed)

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take 5 grams of non-hydrolyzed collagen supplement daily. You can mix it with a beverage of your choice, such as water or juice, for easier consumption.

TYPICAL STARTING DOSE

5 g

Description

Collagen is a protein that plays a crucial role in maintaining skin, joint, and connective tissue health. Collagen supplements are believed to support skin elasticity, joint mobility, and overall skin and joint health.

[Collagen](#) is a protein that helps build skin, bones, and joints [\[R, R\]](#).

People use collagen supplements for [\[R, R, R, R\]](#):

- Joint pain
- Skin health
- Hair growth

How it helps

Collagen is a major part of cartilage. It helps protect and rebuild the cartilage in your joints [\[R\]](#).

Taking collagen supplements (10 mg/day) may improve joint problems [\[R, R\]](#).

You can get either whole collagen or collagen that has been broken down (hydrolyzed). Both types may help with joint pain and stiffness [\[R, R\]](#).

However, the overall evidence for collagen is mixed. Not everyone will notice improvements [\[R\]](#).

9



SAM-e

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 400-1600 mg of SAM-e as a supplement daily, preferably on an empty stomach to enhance absorption. It is often recommended to start with low dosage and observe how your body responds over a few weeks, adjusting as necessary under the guidance of a healthcare provider.

TYPICAL STARTING DOSE
400 mg

Description

[SAM-e](#) is a chemical that helps maintain liver and brain health. Your body makes SAM-e from the amino acid *methionine*, but it’s also available as a supplement [\[R\]](#).

SAM-e supplementation may help with:

- Joint pain [\[R\]](#)
- Liver disease [\[R\]](#)
- Depression [\[R\]](#)

Please note: SAM-e may not be safe for people with a bipolar disorder. It may also interact with 5-HTP, St. John’s wort, and different medications. Combining it with antidepressants can be dangerous and even life-threatening. Never take SAM-e supplements without consulting your doctor [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

SAM-e (600-1200 mg/day) may relieve pain and stiffness from osteoarthritis. It likely helps reduce joint inflammation and build cartilage [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

10



Collagen Peptides

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 10-20 grams of collagen peptides daily, mixing the powder into a glass of water, juice, or a smoothie. It is recommended to consume this supplement on an empty stomach to improve absorption, ideally first thing in the morning or right before bedtime for a period of at least 8-12 weeks to observe beneficial effects.

TYPICAL STARTING DOSE

10 g

Description

Collagen peptides are a form of collagen that is broken down into smaller, more easily absorbed molecules. They are commonly used in supplements and skincare products for their potential to promote skin elasticity, hair strength, and nail health.

[Collagen](#) is a protein that helps build skin, bones, and joints [\[R\]](#), [\[R\]](#).

People use collagen supplements for [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Joint pain
- Skin health
- Hair growth

How it helps

Taking collagen supplements (10 mg/day) may improve joint health[\[R\]](#).

You can get either whole collagen or collagen that has been broken down (hydrolyzed). Both types may help with joint pain and stiffness [\[R\]](#), [\[R\]](#).

Collagen peptides, when consumed, stimulate the body to produce more natural collagen, a primary component of joints. This helps rebuild joint tissues, reduce inflammation, and can alleviate joint pain over time.

How to implement

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

Curcumin (turmeric extract) may reduce inflammation and pain in the joints. It may even protect cartilage [R, R].

Studied doses include 1-2 g of curcumin per day for 1-3 months. Some supplements may work in lower doses (170-200 mg) because they contain *bioavailable curcumin*. This means they are easily absorbed [[R](#), [R](#), [R](#), [R](#), [R](#), [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].

12



Pycnogenol

IMPACT1 / 5

EVIDENCE2 / 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

Taking pine bark extract (100-200 mg/day for 3 months) may **improve joint pain and stiffness in people with joint problems** [\[R, R, R\]](#).

This compound may **reduce inflammation and protect cartilage** [\[R, R, R\]](#).

Next Steps

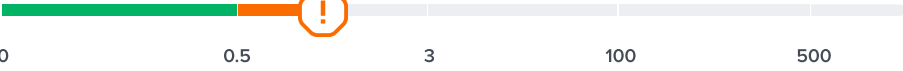
Remember, your genes only tell one important part of your health story!

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.

	Vitamin D, 25-Hydroxy, Total	58.59 ng/mL		9 Nov 2025
	Creatine Kinase	173 IU/L		9 Nov 2025
	hs-CRP	1.6 mg/L		9 Nov 2025