SelfDecode™

POTS

DNA Health Report

REPORT CATEGORIES

- HEART & BLOOD VESSELS
- NERVE HEALTH

Sample Client

Report date: 15 January 2026

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Personal information

NAME

Sample Client

SEX AT BIRTH

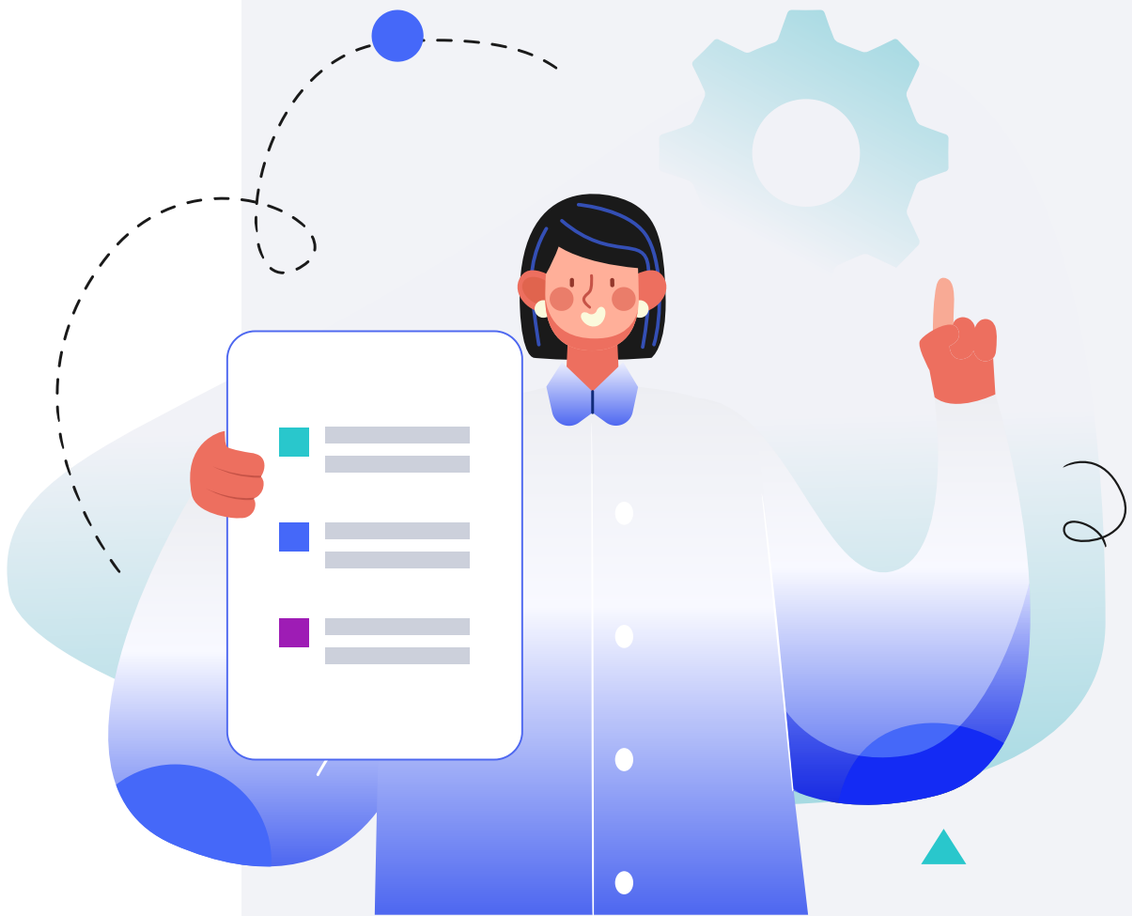
Male

HEIGHT

5ft 5" 165cm

WEIGHT

137lb 62kg

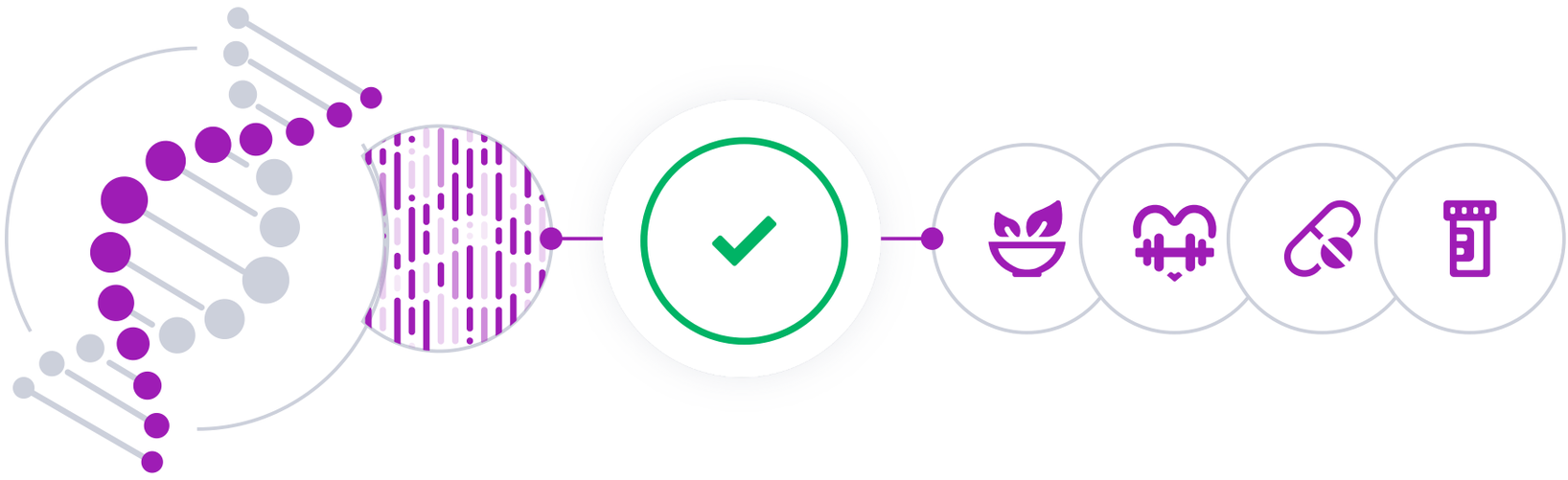


DISCLAIMER

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.

How this works

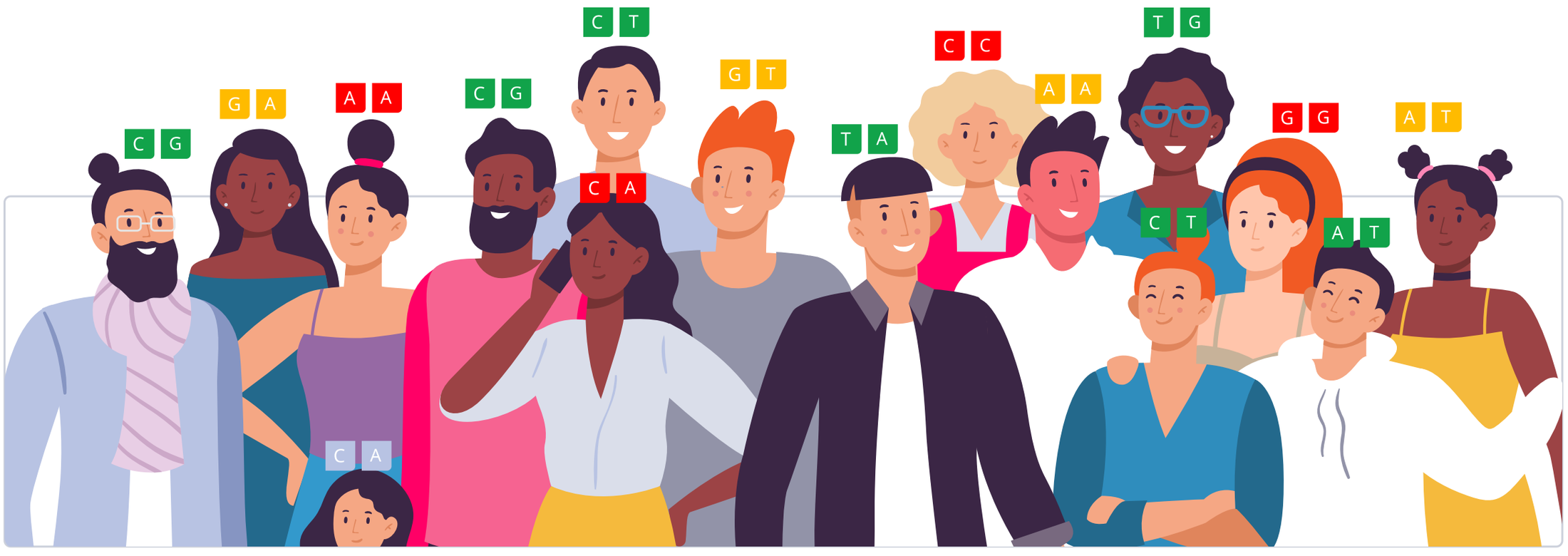
Our Wellness Reports analyze how your DNA influences your health.
We then use this analysis to give you personalized risk estimates and recommendations.



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.

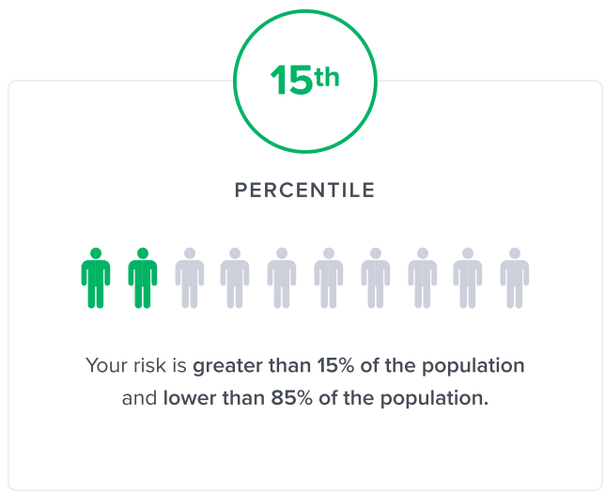
Genetic variants are parts of DNA that differ from person to person. Some can make you more vulnerable to certain health issues, while others may influence traits such as eye color.



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

Postural orthostatic tachycardia syndrome (POTS) is a disorder that affects the autonomic nervous system, primarily influencing heart rate and blood circulation. POTS is characterized by an excessive increase in heart rate upon standing up, which is often accompanied by a range of symptoms that can significantly impact quality of life [R].

The primary symptom of POTS is a significant increase in heart rate by 30 beats per minute or more within ten minutes of standing or during a tilt table test. Alongside tachycardia, patients may experience a variety of symptoms including [R]:

- Dizziness or lightheadedness upon standing, which can lead to fainting
- Palpitations
- Fatigue
- Tremulousness and anxiety
- Nausea, abdominal pain and bloating
- Headaches
- Exercise intolerance
- Temperature dysregulation, resulting in sweats or chills.
- Sleep disturbances

Causes and Treatment

The exact cause of POTS is not fully understood, but it is thought to involve several factors:

- Viral infections
- Physical deconditioning following an illness or extended period of inactivity
- Blood volume deficiencies and nerve dysfunction in the legs
- **Genetics:** POTS can run in families and certain variants in genes such as *GNB3*, *SLC6A2*, and *NOS3* have been associated with this condition [R, R, R]

There is no cure for POTS, but various treatments and lifestyle adjustments can help manage symptoms [R]:

- **Increased salt and fluid intake** to boost blood volume and improve blood pressure control.
- **Medications** such as beta-blockers (to lower heart rate), fludrocortisone (to increase blood volume), or midodrine (to raise blood pressure).
- **Compression garments** to prevent blood pooling in the legs.
- **Exercise programs** to improve physical conditioning without exacerbating symptoms.
- **Dietary changes** such as small, frequent meals to prevent postprandial hypotension (drop in blood pressure after eating).
- **Consistent sleep schedule** to improve overall autonomic function.
- **Avoiding triggers** such as prolonged standing, extreme temperatures, and large meals that divert blood to the stomach.
- **Elevating the head of the bed** to improve blood volume distribution.
- **Mindfulness and stress management** to help cope with the impact of symptoms on mental health.

TYPICAL LIKELIHOOD

Typical likelihood of POTS based on 4 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
NOS3	rs1799983	TT
GNB3	rs5443	CT
MMP2	rs7194256	TC
NOS3	rs2070744	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
1	Avoid Strenuous Activity	
2	Biofeedback	
3	Physical Therapy	30 minutes
4	Potassium Chloride	1 g
5	Aerobic Exercise (Cardio)	1 hour

1

Avoid Strenuous Activity

IMPACT 1 / 5

EVIDENCE 1 / 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

Avoiding strenuous activity in POTS patients helps mitigate symptoms such as tachycardia and fatigue by reducing cardiovascular strain. This approach conserves energy and enables better management of autonomic dysregulation inherent in the condition.

2

Biofeedback

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Attend biofeedback sessions once or twice a week for about 8 to 10 weeks. During these sessions, a therapist will guide you through exercises to control different body functions, such as heart rate or muscle tension, using monitors that provide feedback on your physiological state. Practice the techniques learned during sessions at home daily to improve symptoms and manage your condition.

Description

Biofeedback is a type of therapy that teaches people how to control certain body functions, such as heart rate, blood pressure, and muscle tension. It can be used to treat a variety of conditions, including stress, anxiety, and chronic pain.

Biofeedback is a kind of "**brain training**" in which sensors are attached to your body. They detect information like your heart rate, temperature, and breathing rate. By seeing this information, you may be better able to control these functions [R, R].

Biofeedback is used to help with [R, R]:

- Gut problems
- Chronic pain
- Migraines
- Insomnia
- Attention

Neurofeedback is a form of biofeedback that measures brain activity in real time [R].

How it helps

Biofeedback therapy enhances self-regulation of physiological functions, improving heart rate and blood pressure control in individuals with POTS. This method can reduce anxiety, further supporting autonomic stability and overall symptom management.

3

Physical Therapy

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

Attend physical therapy sessions 2-3 times per week for a duration of 4-6 weeks, depending on your specific condition and the advice of your healthcare provider. Each session typically lasts about 30-60 minutes, where a licensed therapist will guide you through targeted exercises, stretches, and possibly other treatments like electrical stimulation or ultrasound therapy.

TYPICAL STARTING DOSE

30 minutes

Description

Physical therapy is a therapeutic practice focused on optimizing physical function and mobility through specialized exercises, manual techniques, and therapeutic modalities. It helps individuals recover from injuries, manage chronic conditions, and improve overall physical well-being by enhancing strength, flexibility, and pain management.

Physical therapy (**physiotherapy**) helps people regain or maintain their ability to move [R].

Physical therapy can involve [R]:

- Joint or muscle exercises
- Corrective movements
- Massage
- Education and advice

People mainly use physical therapy to help with [R, R]:

- Pain and injury
- Stroke recovery
- Chronic health conditions
- Headaches

Mirror therapy uses a mirror placed between the arms or legs. The image of a moving arm or leg gives the illusion of normal movement in the affected one. This therapy stimulates different brain regions and aims to improve mobility [R].

Constraint-induced movement therapy is another type of physical therapy. It consists of restraining the healthy leg or arm to increase the use of the affected one [R].

How it helps

Physical therapy enhances cardiovascular fitness and muscle strength in POTS patients, which can improve blood circulation and reduce orthostatic intolerance. Tailored exercise programs specifically target symptoms, promoting functional improvement and overall quality of life.

4

Potassium Chloride

IMPACT 1 / 5

EVIDENCE 1 / 5

How to implement

TYPICAL STARTING DOSE

1 g

Description

Potassium chloride is commonly used as a dietary supplement to prevent or treat low levels of potassium in the blood, a condition known as hypokalemia. Potassium is crucial for normal cell function, including maintaining a healthy heart rhythm, proper muscle function, and efficient nerve transmission [R].

Often recommended for individuals taking certain medications like diuretics that can deplete potassium levels, potassium chloride helps balance electrolytes and support overall cardiovascular health [R].

However, it's important to use under medical guidance, as excessive intake can lead to hyperkalemia, a condition where potassium levels become too high, potentially causing serious heart problems [R].

How it helps

Supplementing with potassium chloride helps to restore electrolyte balance in individuals with POTS, addressing dysautonomia-related imbalances that can exacerbate symptoms such as dizziness and fatigue.

5

Aerobic Exercise (Cardio)

IMPACT 1 / 5

EVIDENCE 1 / 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

Aerobic exercise improves cardiovascular fitness and enhances blood volume, which can help alleviate symptoms of POTS by promoting better blood flow and stabilizing blood pressure during daily activities.