SelfDecode™

SLC2A2 (Sugar Intake)

Gene Report

REPORT CATEGORIES

NUTRITION

BLOOD SUGAR CONTROL

Sample Client

Report date: 15 January 2026

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Table of Contents

03 How this works

04 Impact

05 Evidence

06 Some things to keep in mind

07 Introduction

08 Your genetics

09 Next Steps

09 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

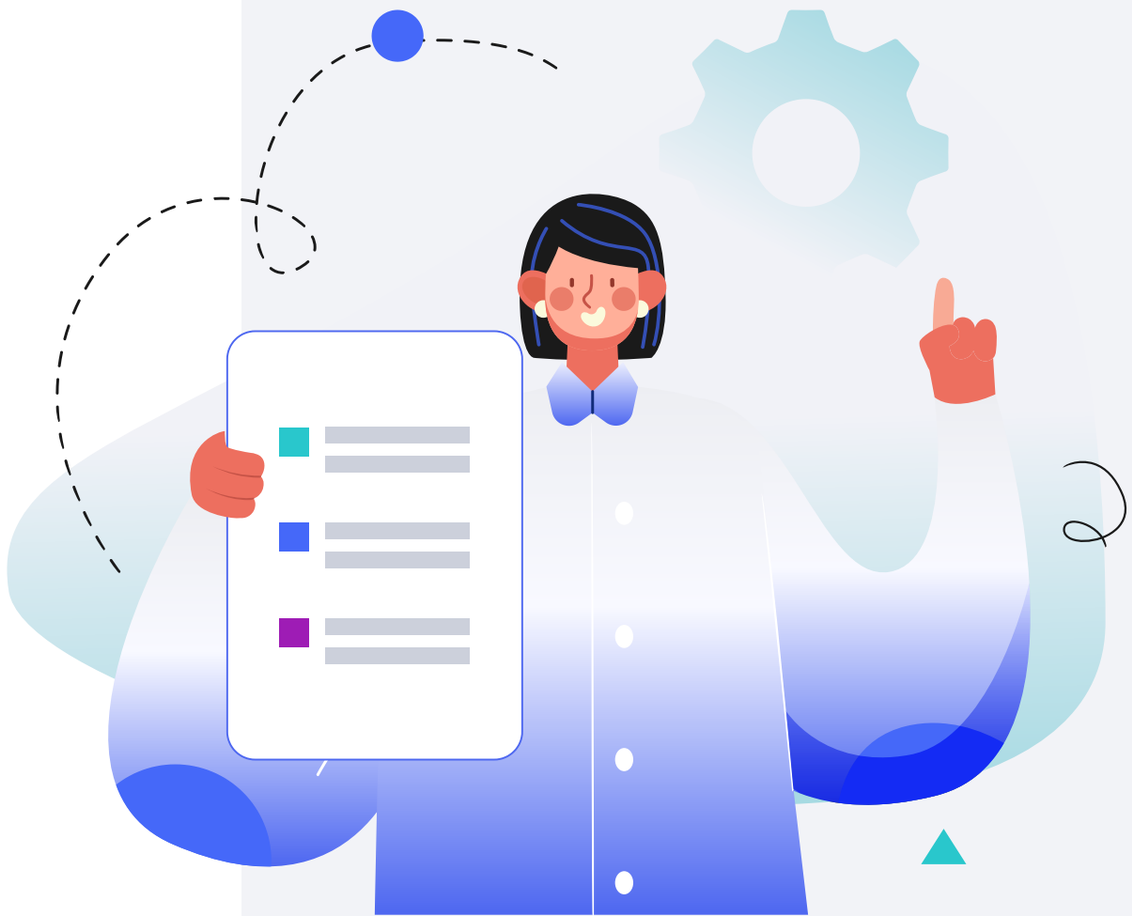
Male

HEIGHT

5ft 5" 165cm

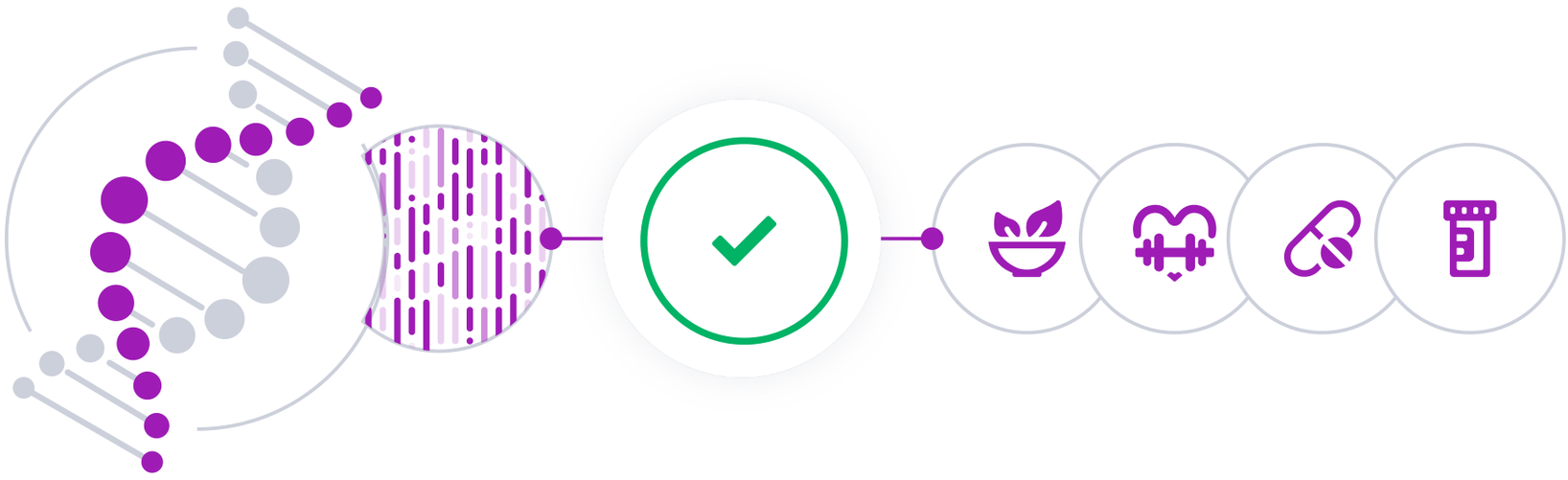
WEIGHT

137lb 62kg



How this works

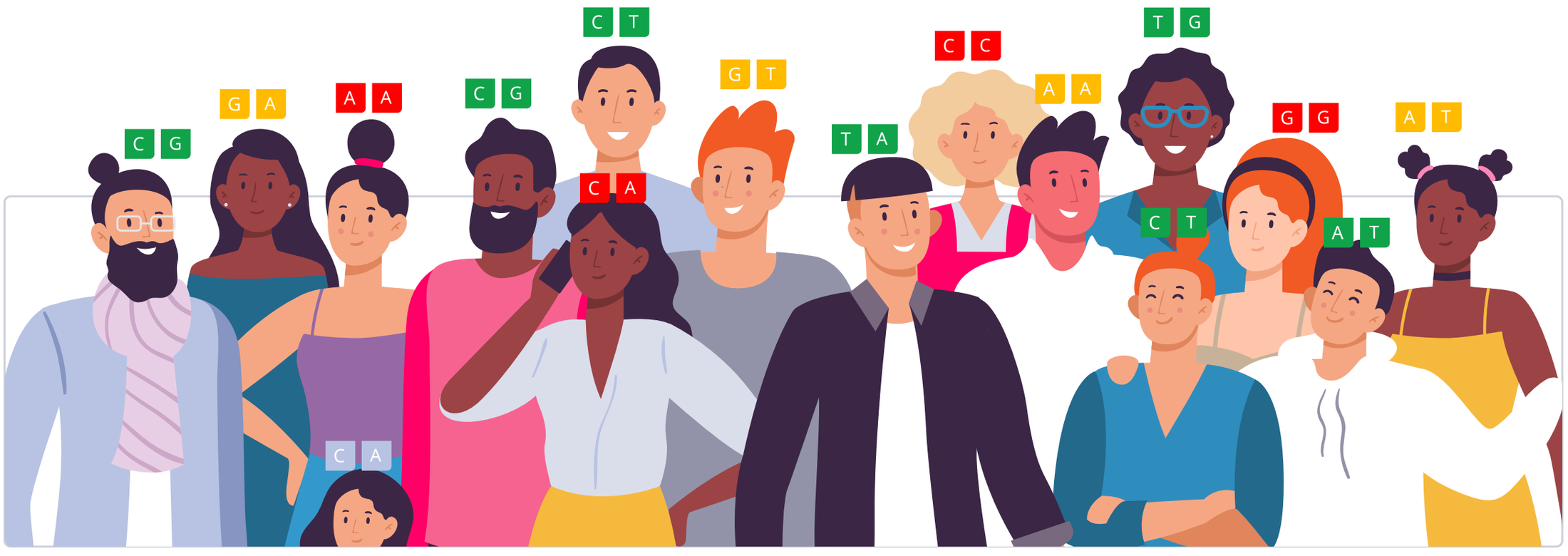
Our Wellness Reports analyze how your DNA influences your health.
We then use this analysis to give you personalized risk estimates and recommendations.



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.

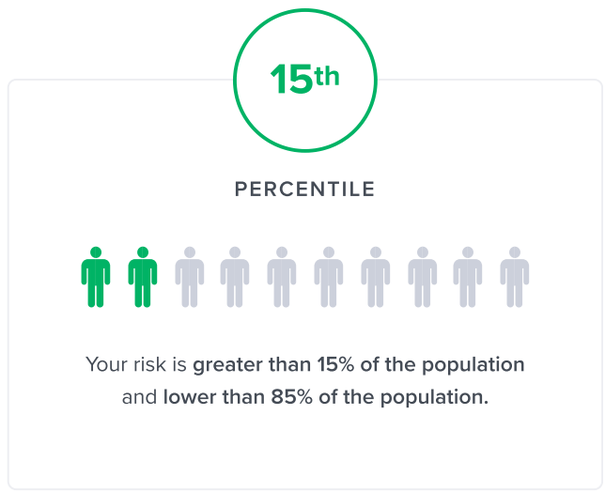
Genetic variants are parts of DNA that differ from person to person. Some can make you more vulnerable to certain health issues, while others may influence traits such as eye color.



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.

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

The *SLC2A2* gene encodes a transporter protein called GLUT2, which moves glucose and other simple sugars in and out of cells [R].

GLUT2 proteins are present in the liver, brain, kidney, intestines, and pancreas, and become more active after meals in response to a sugar increase in the body [R].

GLUT2 function is important for healthy blood sugar levels [R].

SLC2A2 Variant & Sugar Intake

A study of two distinct populations linked the SLC2A2 variant **rs5400** with appetite for sugary foods.

The first group of individuals, 194 men and women over 45 with pre-diabetic symptoms, had **increased sugar intake if they carried an "A" allele** [R].

This finding was replicated in a group of 700 healthy men and women aged 20-29 [R].

This variant is also linked to [R]:

- Higher cholesterol and triglyceride levels
- Liver health issues (higher GGT and bilirubin)
- Higher body weight (BMI)

Interestingly, it is also linked to **lower** blood sugar levels and lower odds of diabetes [R].

A potential explanation for these seemingly contradictory findings is that this variant might have different effects on GLUT2 activity in different tissues. In the brain, it may reduce its activity and thus make sugar "less sweet", increasing a person's hunger for it [R].

On the other hand, the variant might increase GLUT2 activity in the liver and pancreas, leading to enhanced glucose uptake and metabolism. This could explain lower blood sugar but higher blood lipids, liver enzymes, and body weight.

However, scientists have yet to confirm the exact mechanism behind these findings.

TYPICAL

Predisposed to typical sugar intake based on the genetic variants we looked at

OF USERS SHARE THE SAME SCORE

You have the same genetic predisposition as **75% of our users.**

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
SLC2A2	rs5400	GG

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

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.

Glucose, Urine		Negative / Positive	9 Nov 2025
HbA1c	30 mmol/mol	26 / 36 / 48	29 Dec 2025
Glucose, Fasting	97 mg/dL	55 / 65 / 80 / 95 / 100 / 126	9 Nov 2025
HbA1c (%)	4 %	4.3 / 4.5 / 5.4 / 5.6 / 6.5	29 Dec 2025