SelfDecode™

BPA Sensitivity

Biohacker Report

REPORT CATEGORY

DETOX

Sample Client

Report date: 15 January 2026

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Personal information

NAME

Sample Client

SEX AT BIRTH

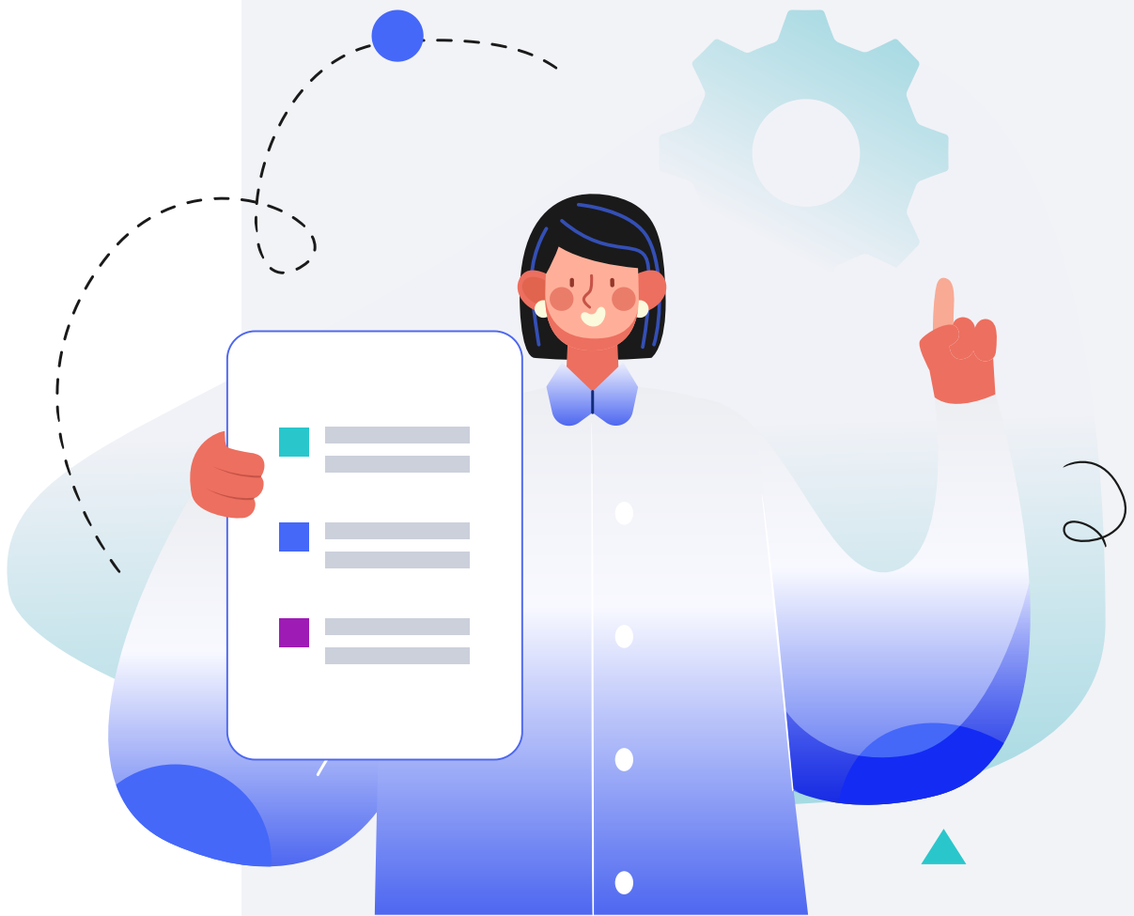
Male

HEIGHT

5ft 5" 165cm

WEIGHT

137lb 62kg

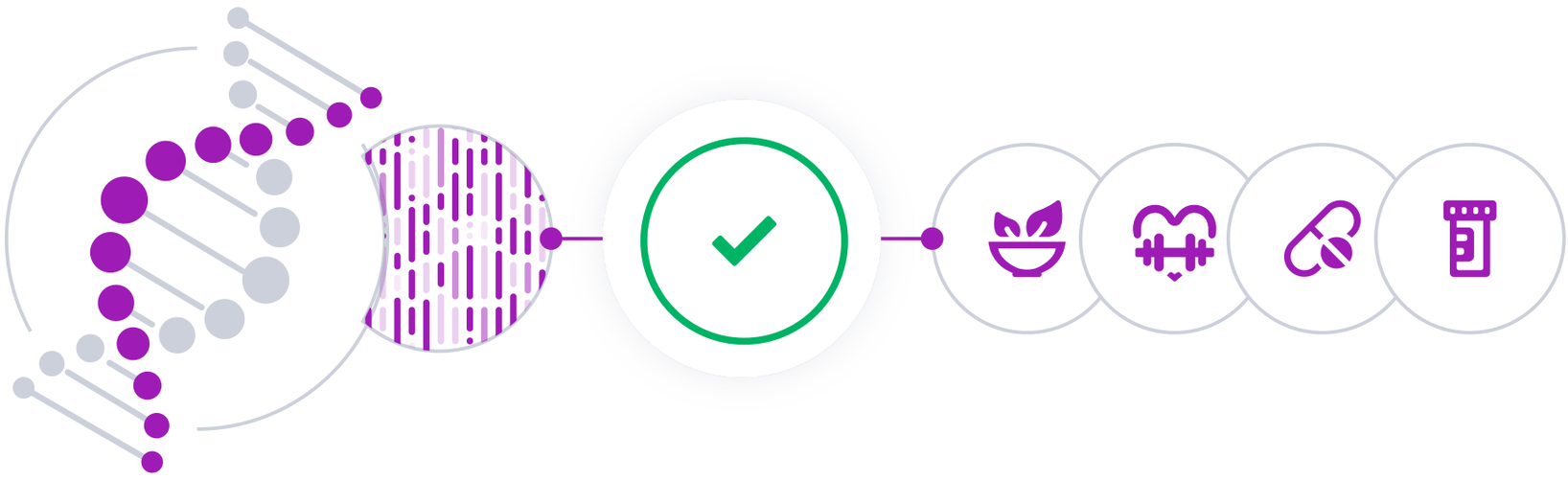


DISCLAIMER

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

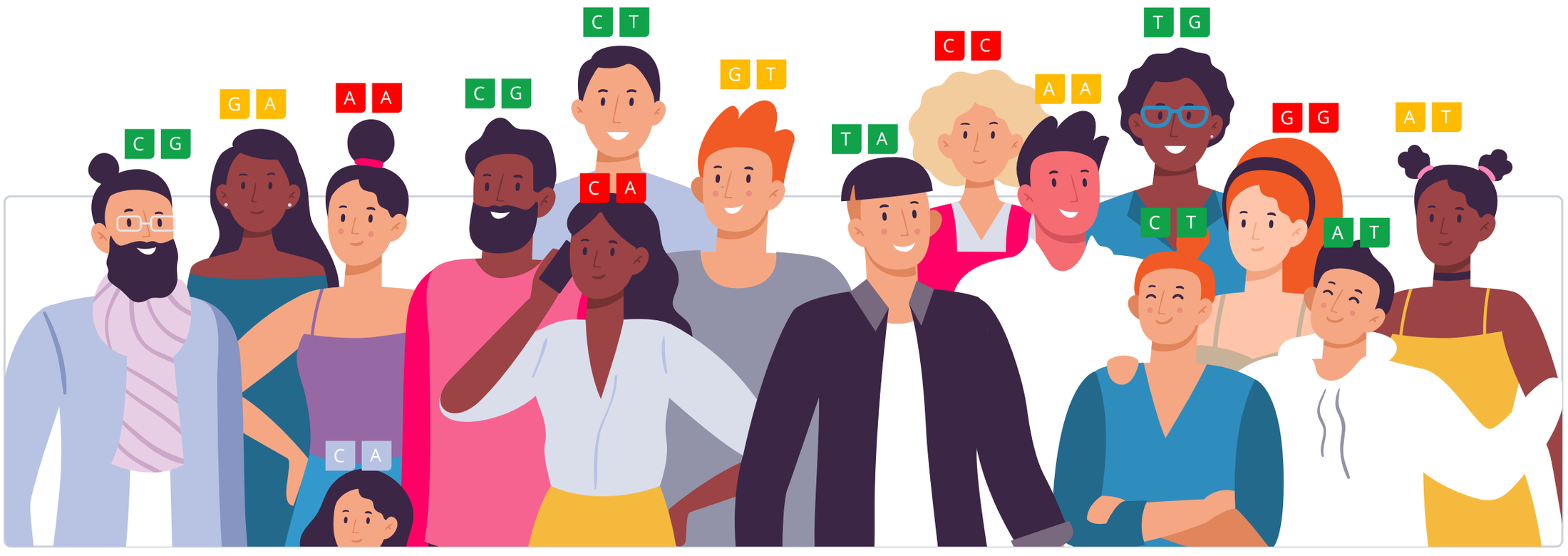
Our Wellness Reports analyze how your DNA influences your health.
We then use this analysis to give you personalized risk estimates and recommendations.



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.

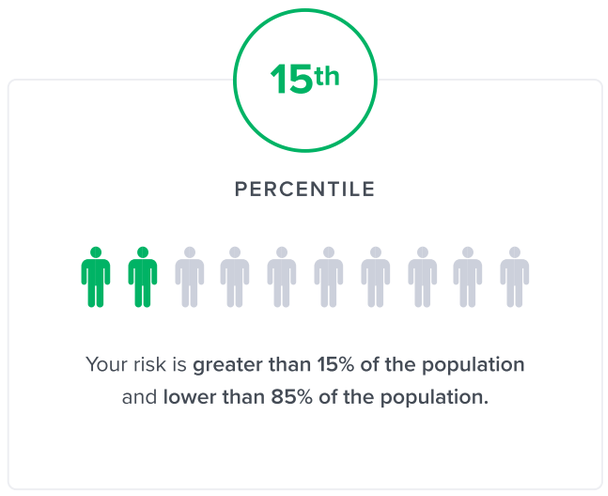
Genetic variants are parts of DNA that differ from person to person. Some can make you more vulnerable to certain health issues, while others may influence traits such as eye color.



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

BPA (bisphenol A) is a chemical used to make certain plastics and resins. BPA-containing plastics are often used in containers that store food and beverages. Plastics marked with **recycle code 3 or 7** may contain BPA [R].

BPA can leach into food and beverages from these containers and enter our bodies. Hence, we are all exposed to BPA to some degree. According to one study, **around 90% of people may have detectable BPA levels in urine** [R, R].

BPA is a well-known hormone disruptor. Research has linked BPA exposure to [R, R]:

- Brain and prostate health problems
- Fetal development problems
- Altered behavior in children
- High blood pressure and heart disease
- Type 2 diabetes

However, **the FDA considers BPA safe** in low amounts present in foods [R].

Genetics of BPA Sensitivity

Key Takeaways:

- We are all exposed to BPA from plastic bottles, food packages, and more.
- BPA is a well-known hormone disruptor.
- Research has linked BPA exposure to heart disease, diabetes, altered behavior, and more.
- People with certain gene variants may be more sensitive to the adverse effects of BPA.

Although we are all exposed to BPA, it won't affect everyone the same. The reason for this is partly in our genes, which can make us more or less susceptible to harmful effects of BPA.

In people with certain gene variants, BPA has shown a stronger potential link with:

- Liver damage [R, R]
- Asthma [R]
- Cancer [R, R, R]
- High blood pressure [R]
- PCOS [R]

These variants affect the genes involved in:

- BPA detox (*UGT2B7*)
- Antioxidant protection (*CAT*, *SOD2*, *GSTP1*)
- DNA repair (*PARP4*, *XRCC3*, *RAD51*, *ERCC5*)
- Blood vessel function (*NOS1*)
- Hormone metabolism (*CYP17A1*, *ESR1*, *ESR2*)

Genes such as UGT1A1 and *UGT2B7* help produce crucial enzymes for BPA detox. Read this post for more information about UGT gene variants and plastic detox.

Please note: Your other gene variants, diet, lifestyle, and environment can also affect BPA sensitivity.

TYPICAL

Likely typical BPA sensitivity based on 22 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
PTGS2	rs5277	CC
GSTP1	rs1695	AA
XRCC3	rs12432907	CC
ERCC5	rs2296147	CC
CAT	rs10488736	CC
PARP4	rs3783073	GG
ESR2	rs1256049	CC
RMDN3	rs2412547	AA
UGT2B7	rs7439366	TC
GCHFR	rs2304579	AA
XRCC3	rs861537	TT
NOS3	rs1549758	CT
XRCC3	rs861531	CC
PARP4	rs2275660	TC
CCDC170	rs2046210	AG
BORCS7	rs743572	AG
CAT	rs769217	CC
SOD2	rs4880	GG
ERCC5	rs17655	GG
CAT	rs4755374	AA
TMEM176A	rs11771443	CC
ESR2	rs4986938	CC

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.

1 Avoid BPA (Bisphenol A) Exposure

2 Avoid Endocrine Disruptors

3 Reduce Plastic Use

1

Avoid BPA (Bisphenol A) Exposure

IMPACT 4 / 5

EVIDENCE 3 / 5

How to implement

To avoid BPA exposure, choose BPA-free products, particularly when selecting food containers, water bottles, and baby bottles. Prefer glass, porcelain, or stainless steel containers, especially for hot food or liquids. Reduce use of canned foods as they may be lined with BPA and avoid handling thermal paper receipts, as they can contain BPA. When possible, select fresh or frozen foods over canned goods.

Description

Avoiding BPA (Bisphenol A) exposure involves minimizing contact with products or containers containing this chemical, which is commonly found in plastics and can potentially disrupt hormone regulation.

BPA (bisphenol A) is a chemical used to make certain plastics and resins. BPA-containing plastics are often used in containers that store food and beverages. Plastics marked with **recycling code 3 or 7** may contain BPA [R].

BPA is a well-known hormone disruptor. Research has linked BPA exposure to diabetes, heart disease, altered behavior, and more [R].

How it helps

Reducing exposure to BPA may help reduce its potentially harmful effects on health. If you're concerned about BPA, try following these steps to reduce your exposure [R, R]:

- **Use BPA-free products** (more and more BPA-free plastic products are available)
- **Don’t heat plastics or leave plastic bottles exposed to direct sunlight** (heat may increase BPA release)
- **Focus on fresh foods** (choose fresh food that’s not packaged or canned)
- **Use plastic alternatives** (use glass, porcelain or stainless-steel containers)
- **Dust your home** (dust can be a significant source of BPA, especially for children)

2

Avoid Endocrine Disruptors

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Minimize exposure to endocrine disruptors by opting for organic foods to reduce pesticide intake, using glass or stainless steel instead of plastic containers for food and beverages, avoiding cosmetics and personal care products with parabens or phthalates, and regularly vacuuming and dusting your home to reduce contact with flame retardants found in household dust.

Description

Avoiding exposure to endocrine disruptors, such as certain chemicals found in plastics and pesticides, is crucial for maintaining hormonal balance and reducing the risk of hormone-related health problems.

Endocrine disruptors are chemicals that interfere with the body's hormone (endocrine) system by [R, R]:

- Blocking the function or activity of hormones
- Mimicking the function of hormones

Based on limited studies, long-term exposure to these chemicals can have negative effects on health [R, R].

Endocrine disruptors can be found in cosmetics, food products, pesticides, and other common household items [R].

How it helps

BPA is known as an endocrine disruptor; avoiding products containing it and similar chemicals can reduce the body's exposure and potential sensitivity.

3

Reduce Plastic Use

IMPACT 0 / 5

EVIDENCE 0 / 5

How to implement

Switch to reusable bags instead of plastic ones for shopping, prefer glass or stainless steel containers for food storage over plastic containers, and choose fresh or frozen foods instead of those packaged in plastic. Make these changes gradually but aim to have significantly reduced plastic usage within three months.

Description

Plastic is a synthetic material made from various types of polymers. It is widely used in various products such as packaging, containers, toys, and household items. Reducing plastic use involves using fewer disposable plastic products and opting for eco-friendly alternatives to decrease plastic pollution and its environmental and health impacts.

Plastic is a synthetic material made from various types of polymers. It is widely used in various products such as packaging, containers, toys, and household items. However, plastic has a significant **negative impact on the environment**, especially on oceans and marine life.

Plastic can also **harm human health** by releasing toxic chemicals that can contaminate our food, water, and air.

How it helps

BPA is commonly found in certain plastics; reducing the use of these can significantly decrease the overall BPA exposure and manage sensitivity.

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.