Ayşe's Sport Report

Guide your health with your genetic knowledge.

"This report provides personalized insights based on your genetic makeup, helping you make informed decisions for a healthier future."

Reliable | Scientific Approach | Innovative

Table of Contents

Sections

This report contains genetic data.

Please keep this document secure and share only with authorized healthcare providers.

Report Generated: January 16, 2026

Your Personal Health Assessment

This report summarizes your key health insights, descriptions and recommendations to optimize your well-being.

Overall Score:

43%

Medium Risk

Examined

31

Traits

Examined

8

Categories

≤ 10%	11% - 25%	26% - 74%	75% - 89%	≥ 90%
Low Risk	Reduced Risk	Medium Risk	Elevated Risk	High Risk

Percentile-based risk levels

Category Based Distribution

5 Elevated   16 Medium   7 Reduced   3 Low

BONE JOINT		
8 Traits	Medium	**31%**

BODY COMPOSITION		
8 Traits	Medium	**40%**

CARDIORESPIRATORY		
3 Traits	Medium	**40%**

SLEEP RECOVERY		
5 Traits	Medium	**62%**

METABOLIC PERFORMANCE		
3 Traits	Medium	**40%**

MUSCLE STRENGTH		
2 Traits	Reduced	**19%**

LONGEVITY AGING		
1 Traits	Elevated	**84%**

ATHLETIC PERFORMANCE		
1 Traits	Medium	**27%**

Trait Report

Trait by Trait Overview

3	7	16	5	0
LOW RISK	REDUCED RISK	MEDIUM RISK	ELEVATED RISK	HIGH RISK

Percentile-based risk levels: ≤ 10%   11% - 25%   26% - 74%   75% - 89%   ≥ 90%

⚠ Bone Joint — Average: 31%

Trait	%	Level		Trait	%	Level	
Abnormality of the Skeletal System	21%	REDUCED		Bone Quantitative Ultrasound	21%	REDUCED	
Bone Tissue Density	34%	MEDIUM		Heel Bone Mineral Density	13%	REDUCED	
Osteoarthritis	21%	REDUCED		Osteoarthritis, Hip	69%	MEDIUM	
Osteoarthritis, Knee	4%	LOW		Osteoporosis	68%	MEDIUM	

⚠ Body Composition — Average: 40%

Trait	%	Level		Trait	%	Level	
BMI-Adjusted Waist-Hip Ratio	27%	MEDIUM		Body Composition	73%	MEDIUM	
Body Fat Percentage	50%	MEDIUM		Body Mass Index (BMI)	31%	MEDIUM	
Body Weight	72%	MEDIUM		Lean Body Mass	35%	MEDIUM	
Waist Circumference	28%	MEDIUM		Waist-Hip Ratio	7%	LOW	

⚠ Cardiorespiratory — Average: 40%

Trait	%	Level		Trait	%	Level	
FEV/FVC Ratio	76%	ELEVATED		Respiratory System Disease	37%	MEDIUM	
Vital Capacity	7%	LOW					

⚠ Sleep Recovery — Average: 62%

Trait	%	Level		Trait	%	Level	
Sleep Disorder	43%	MEDIUM		Chronotype	62%	MEDIUM	
Insomnia	79%	ELEVATED		Sleep Apnea	88%	ELEVATED	
Sleep Duration Trait	36%	MEDIUM					

⚠ Metabolic Performance — Average: 40%

Trait	%	Level		Trait	%	Level	
Bilirubin Metabolism Disease	15%	REDUCED		Blood Glucose	21%	REDUCED	
Blood Insulin	83%	ELEVATED					

↓ Muscle Strength — Average: 19%

Trait	%	Level		Trait	%	Level	
Forced Expiratory Volume (FEV)	12%	REDUCED		Grip Strength	26%	MEDIUM	

Longevity Aging

Average: **84%**

| Frailty Measurement | 84% | ELEVATED | |

Athletic Performance

Average: **27%**

| Physical Activity | 27% | MEDIUM | |

Polygenic Risk Score Section

Understanding Complex Genetic Traits

This section examines your genetic predisposition for complex traits influenced by multiple genes working together.

Understanding Polygenic Risk Scores

Most human traits—such as height, metabolism, and disease susceptibility—are not controlled by a single gene. Instead, they result from the combined influence of hundreds or thousands of genetic variants, each contributing a small effect.

A Polygenic Risk Score (PRS) aggregates the effects of these many variants to estimate your genetic predisposition relative to the general population. It provides a comprehensive view of how multiple genetic factors work together to influence a trait.

Reading Your Scores

Your scores are presented as percentiles, showing where you rank compared to the general population. A higher percentile indicates a higher genetic predisposition for that trait.

It's important to understand that PRS indicates genetic tendency, not certainty. Environmental factors, lifestyle choices, and other non-genetic influences play significant roles in determining actual health outcomes.

Genetic Predisposition + Lifestyle = Total Risk

What to Expect in This Section

Each trait is analyzed across multiple health categories, from cardiovascular health to metabolic function. For every trait, the 10 genetic markers with the highest effect weights are displayed, representing the strongest contributors to your genetic profile.

Each trait card includes your percentile ranking, key genetic variants (genotypes), and personalized recommendations. QR codes are provided to access detailed variant information and scientific references supporting each analysis.

Bone Joint

This category examines various genetic traits related to this area of analysis.

Average: 31%

8	31%	3	4	1
ANALYZED	AVERAGE	MEDIUM RISK	REDUCED RISK	LOW RISK

Overview

Category Insights

Understanding these genetic factors helps provide personalized insights and recommendations.

Risk Distribution

8 TRAITS

- 🟠 3 Medium Risk
- 🟢 4 Reduced Risk
- 🔵 1 Low Risk

Traits Included in This Category

Abnormality of the Skeletal System	Reduced
Bone Quantitative Ultrasound	Reduced
Bone Tissue Density	Medium
Heel Bone Mineral Density	Reduced
Osteoarthritis	Reduced
Osteoarthritis, Hip	Medium
Osteoarthritis, Knee	Low
Osteoporosis	Medium

The following pages contain detailed analysis of each trait within this category.

● REDUCED RISK

Percentile 21%

21%
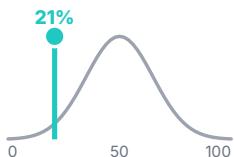
Interpretation

Reduced Risk compared to the population average.

Recommendations

Low-risk individuals should continue with preventive care and focus on maintaining strong bones through healthy habits.

Based on genotype rating

Description

Abnormalities of the skeletal system refer to any deviation from the normal structure or function of bones. This may include conditions like scoliosis, osteoporosis, or skeletal dysplasia. These abnormalities can affect mobility, posture, and overall quality of life. Genetic factors, injuries, or nutritional deficiencies may contribute to skeletal abnormalities, and early diagnosis can help in effective management and treatment.

Result

Your PRS score for Abnormality of the Skeletal System places you in the 19.9 percentile. This suggests a lower risk compared to the general population. While your risk is low, it is still beneficial to maintain a healthy lifestyle that includes regular exercise and proper nutrition. Ensuring sufficient calcium and vitamin D intake will help keep your bones strong and reduce the risk of any future skeletal issues.

Population Distribution

Population distribution data not available

Access Your Full Report

Scan to view full genetic profile

Scientific References

[1] PLOS
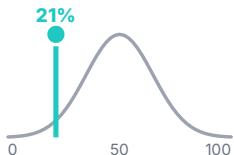DOI: 10.1371/journal.pgen.1010105

[2] Elsevier
DOI: 10.1016/j.ajhg.2021.11.008

Top Genetic Markers

Gene	RS ID	Genotype
CCHCR1	rs3130453	GG
HLA-A	rs2735079	TC
C2	rs7746553	CC
MICA	rs1051786	AA
CPAMD8	rs706761	CC
MSGN1	rs35858730	CC
TYK2	rs2304256	GT
SLC39A8	rs13107325	GG

Bone Quantitative Ultrasound

Category: Bone Joint

● REDUCED RISK

Percentile 21%

21%

0 50 100

Interpretation

Reduced Risk compared to the population average.

Recommendations

Continue with bone-supportive practices, such as a healthy diet and exercise, and monitor bone health occasionally.

Based on genotype rating

Description

Bone quantitative ultrasound measurement is a non-invasive test that uses ultrasound waves to assess bone properties, such as density, cortical thickness, elasticity, and microarchitecture. It is commonly used to evaluate bone health and can be helpful in assessing the risk of osteoporosis. Unlike X-ray-based methods, ultrasound does not use radiation and can provide insights into bone quality beyond just density. Understanding your genetic predisposition to bone properties helps guide preventive measures to maintain strong bones and reduce the risk of fractures.

Result

Your PRS score for bone quantitative ultrasound measurement places you in the 20.5 percentile, indicating a lower predisposition to reduced bone density or poor bone quality. While your risk is reduced, it is still important to engage in a diet rich in bone-supporting nutrients and perform regular weight-bearing exercises to maintain bone strength. Routine monitoring of bone density, even if infrequent, will help ensure that you maintain optimal bone health.

Population Distribution

Population distribution data not available

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Scientific References

[1] PLOS

DOI: 10.1371/journal.pgen.1010105

Top Genetic Markers

Gene	RS ID	Genotype
WNT16	rs2908007	AA
SPTBN1	rs11898505	GG
INSC	rs17507577	GG
ADCY6	rs3730071	GG
INTERGENIC	rs7105881	CC
RSPO3	rs4620145	GA
LRP5	rs4988321	AG
ESR1	rs2941740	AG
CTNNB1	rs10490823	CT
AKAP11	rs9594738	TC

Bone Tissue Density

Category: Bone Joint

● MEDIUM RISK

Percentile 34%

34%

0 50 100
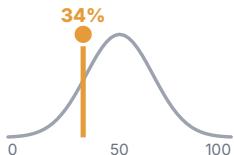
Interpretation

Medium Risk compared to the population average.

Recommendations

Moderate predisposition; ensure regular exercise and sufficient intake of calcium and vitamin D.

Based on genotype rating

Description

Bone tissue density refers to the mass density of bone, representing the mineral content and structural integrity of skeletal tissue. It serves as a key indicator of bone strength and fracture risk. Bone density naturally varies with age, hormonal balance, physical activity, and nutrition, and is influenced by genetic factors regulating calcium metabolism, collagen formation, and bone remodeling. Understanding your genetic predisposition helps guide prevention of osteoporosis and maintenance of skeletal health through lifestyle and dietary interventions.

Result

Your PRS score for bone tissue density places you in the 34.7 percentile, suggesting an average genetic predisposition. Maintain balanced nutrition rich in calcium, vitamin D, and magnesium, and engage in regular physical activity to sustain healthy bone mass. Routine screening is advisable if risk factors such as menopause or family history of osteoporosis exist.

Population Distribution

100.0%

EUR

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Scientific References

[1] **Nature**
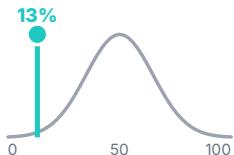DOI: 10.1038/s41588-022-01036-9

Heel Bone Mineral Density

Category: Bone Joint

● REDUCED RISK

Percentile 13%

13%

0   50   100

Interpretation

Reduced Risk compared to the population average.

Recommendations

Maintain a healthy lifestyle to support bone health.

Based on genotype rating

Description

Heel bone mineral density (BMD) is the quantification of the mineral density of the heel bone, which is an indicator of bone strength and overall skeletal health. Low bone mineral density is associated with conditions like osteoporosis and increased fracture risk. Measuring BMD in the heel is a common, non-invasive method used to estimate the likelihood of developing osteoporosis.

Result

Your PRS score for heel bone mineral density places you in the 12.2 percentile, indicating a lower genetic predisposition to reduced BMD. However, maintaining a healthy lifestyle, including balanced nutrition and weight-bearing activities, is important to ensure long-term bone health.

Population Distribution

Population distribution data not available

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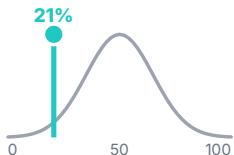
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Scientific References

[1] Elsevier
DOI: 10.1016/j.ajhg.2021.11.008

Top Genetic Markers

Gene	RS ID	Genotype
WNT16	rs3779381	AA
RSPO3	rs9491699	CT
CCDC170	rs1871859	CC
SPTBN1	rs11898505	GG
MBL2	rs1159798	GG
ZBTB40	rs12568930	TT
INSC	rs1945627	AA
RHPN2	rs10411210	GG

Osteoarthritis

Category: Bone Joint

● REDUCED RISK

Percentile 21%

21%

0   50   100

Interpretation

Reduced Risk compared to the population average.

Recommendations

Low risk; continue staying active and healthy to support joint function.

Based on genotype rating

Description

Osteoarthritis (OA) is a noninflammatory degenerative joint disease characterized by the gradual breakdown of articular cartilage and changes in the synovial membrane. It primarily affects older individuals, leading to pain, stiffness, and reduced mobility. Assessing the polygenic risk for OA helps in understanding the likelihood of developing the disease, guiding preventive measures and early intervention.

Result

Your PRS score for osteoarthritis places you in the 20.5 percentile, indicating a low genetic predisposition to developing OA. While the risk is low, it is still advisable to stay active and maintain a healthy lifestyle to support long-term joint health and mobility.

Population Distribution

Population distribution data not available
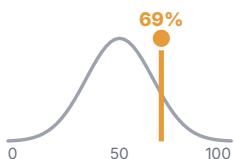
Access Your Full Report

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Scientific References

[1] Elsevier
DOI: 10.1016/j.ajhg.2021.11.008

Top Genetic Markers

Gene	RS ID	Genotype
KLHL42	rs10843013	AC
ZC3H11B	rs2820444	CC
SMAD3	rs12901071	AA
NACA2	rs7221010	GG
INTERGENIC	rs2056116	GG

Osteoarthritis, Hip

Category: Bone Joint

● MEDIUM RISK

Percentile 69%

69%

0   50   100

Interpretation

Medium Risk compared to the population average.

Recommendations

Moderate risk; regular strengthening exercises and monitoring symptoms can help.

Based on genotype rating

Description

Osteoarthritis of the hip is a noninflammatory degenerative disease affecting the hip joint, commonly occurring in late middle age or old age. It is characterized by growth disturbances in the femoral neck and head, as well as acetabular dysplasia. The primary symptom is pain experienced during weight-bearing or motion, which can severely affect mobility and quality of life.

Result

Your calculated PRS for hip osteoarthritis places you in the 68.7 percentile, indicating a moderate risk of developing this condition. Regular physical activity that strengthens the hip muscles and avoids undue stress on the joints is advised. Monitoring any hip pain or stiffness with a healthcare professional can help in early intervention.

Population Distribution

Population distribution data not available

## Access Your Full Report

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Scientific References

[1] PLOS

DOI: 10.1371/journal.pgen.1010105

Top Genetic Markers

Gene	RS ID	Genotype
ZC3H11B	rs4846567	CC
CREB3L2	rs273957	GG
KLHL42	rs10843013	AC
TBX15	rs10494217	CC
C17orf67	rs4794665	CT
RNASE9	rs891297	GG
COL11A2	rs9277934	GG
SMPD2	rs1476387	TG
THADA	rs33979934	AA
XKR6	rs755856	CC
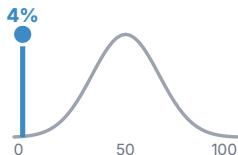
Osteoarthritis, Knee

Category: Bone Joint

● LOW RISK

Percentile 4%

4%

0   50   100

Interpretation
Low Risk compared to the population average.

Recommendations
Low risk; continue with healthy practices to maintain joint well-being.

Based on genotype rating

Description
Osteoarthritis of the knee is a noninflammatory degenerative disease that affects the knee joint. It is classified into three categories based on the movement disruptions they cause

Result
Your PRS score for knee osteoarthritis places you in the 4.9 percentile, indicating a low genetic predisposition to this condition. Continuing with physical activity that avoids excessive joint impact, and maintaining an appropriate body weight, can help support joint health throughout life.

Population Distribution

Population distribution data not available

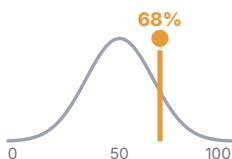## Access Your Full Report

Scan to view full genetic profile

Scientific References

[1] **PLOS**
DOI: 10.1371/journal.pgen.1010105

Top Genetic Markers

Gene	RS ID	Genotype
SBNO1	rs1060105	AG
WSCD2	rs3764002	TT
H2BC6	rs7766641	AA
GDF5	rs143384	TC
USP8	rs11638390	AA
UQCC1	rs4911494	AG
MAML1	rs6895902	GA
AP3B1	rs4298241	GA
RXRA	rs9409929	GA

Osteoporosis

Category: Bone Joint

● MEDIUM RISK

Percentile 68%

68%

0   50   100

Interpretation
Medium Risk compared to the population average.

Recommendations
Moderate risk; regular exercise and balanced diet support bone density.

Based on genotype rating

Description
Osteoporosis is characterized by reduced bone mass with decreased cortical thickness and a reduction in the number and size of the trabeculae of cancellous bone, leading to an increased risk of fractures. This condition can be primary (including postmenopausal, age-associated, or idiopathic osteoporosis) or secondary due to identifiable factors such as nutritional deficiencies, endocrine disorders, or prolonged medication use.

Result
Your calculated PRS for osteoporosis places you in the 69.1 percentile, indicating a moderate risk. Maintaining a balanced diet rich in calcium and vitamin D, along with regular physical activity, can help support bone health. Routine bone density screenings may also be helpful.

Population Distribution

Population distribution data not available

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Scientific References

[1] PLOS
DOI: 10.1371/journal.pgen.1010105

[2] Elsevier
DOI: 10.1016/j.ajhg.2021.11.008

Top Genetic Markers

Gene	RS ID	Genotype
FAM3C	rs917727	GG
SFRP4	rs1524058	GA
HLA-B	rs9265882	AA
AKAP11	rs9594738	TC
LRP5	rs3736228	TC
ZBTB40	rs7524102	AA
MEPE	rs1471403	CC
VEGFA	rs1003167	TG
INTERGENIC	rs11098092	AG
WLS	rs983034	GA

Body Composition

This category examines various genetic traits related to this area of analysis.

Average: 40%

8	**40%**	**7**	**1**
ANALYZED	AVERAGE	MEDIUM RISK	LOW RISK

Overview

Category Insights

Understanding these genetic factors helps provide personalized insights and recommendations.

Risk Distribution

8 TRAITS

- 7   Medium Risk
- 1   Low Risk

Traits Included in This Category

BMI-Adjusted Waist-Hip Ratio	Medium
Body Composition	Medium
Body Fat Percentage	Medium
Body Mass Index (BMI)	Medium
Body Weight	Medium
Lean Body Mass	Medium
Waist Circumference	Medium
Waist-Hip Ratio	Low

The following pages contain detailed analysis of each trait within this category.

BMI-Adjusted Waist-Hip Ratio

Category: Body Composition

● MEDIUM RISK

Percentile 27%

27%

0   50   100
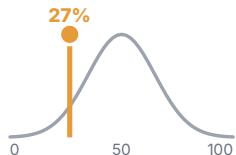
Interpretation

Medium Risk compared to the population average.

Recommendations

Maintain an active lifestyle with cardiovascular and strength training, and monitor body fat distribution periodically.

Based on genotype rating

Description

BMI-adjusted waist-hip ratio is a measure of body fat distribution, specifically the ratio of the circumference of the waist to that of the hips, adjusted for body mass index (BMI). A higher waist-hip ratio, especially when adjusted for BMI, is an indicator of visceral fat, which is linked to increased risks of metabolic diseases like type 2 diabetes and cardiovascular disease. Understanding your genetic predisposition to an elevated waist-hip ratio can help guide lifestyle changes to promote a healthier body composition and reduce health risks.

Result

Your PRS score for BMI-adjusted waist-hip ratio places you in the 27.8 percentile, suggesting a moderate predisposition to an elevated waist-hip ratio. Maintaining an active lifestyle, incorporating both cardiovascular and strength training exercises, can help in managing fat distribution. Eating a diet rich in fiber, reducing intake of sugary foods, and staying hydrated are also beneficial strategies. Monitoring waist and hip circumference periodically can help identify any changes in body fat distribution and guide further lifestyle adjustments.

Population Distribution

100.0%

EUR

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Scientific References

[1] Diabetes Journals
DOI: 10.2337/db23-0131

[2] Circ Genom Precis Med
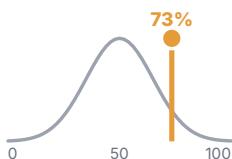DOI: 10.1161/circgen.119.002775

[3] Nature
DOI: 10.1038/s41588-021-00948-2

Top Genetic Markers

Gene	RS ID	Genotype
RSPO3	rs1936805	CT
FLRT1	rs11231693	GG
PLIN1	rs139271800	TT
HOXC12	rs10783615	AA
ZC3H11B	rs2820443	AA
CEBPA	rs4081724	CC
INTERGENIC	rs10245353	AC
WARS2	rs2645294	GG
LY86	rs1294410	CC

Body Composition

Category: Body Composition

● MEDIUM RISK

Percentile 73%

73%

0   50   100

Interpretation

Medium Risk compared to the population average.

Recommendations

Maintain a balanced diet, engage in both resistance and aerobic exercises, and monitor body composition regularly.

Based on genotype rating

Description

Body composition measurement refers to assessing the percentages of fat, muscle, and bone in the body. Understanding body composition is important for evaluating overall health, fitness, and risk for conditions like obesity, osteoporosis, and sarcopenia. Genetic predisposition influences how the body distributes fat, builds muscle, and maintains bone density. By understanding these tendencies, individuals can take proactive measures, such as adjusting diet and exercise routines, to optimize body composition for better health outcomes.

Result

Your PRS score for body composition measurement places you in the 72.4 percentile, suggesting a moderate predisposition to variations in body composition. Maintaining a balanced diet that includes an appropriate amount of protein, healthy fats, and carbohydrates is important. Engaging in a combination of resistance training and aerobic exercises will help manage fat and muscle percentages effectively. Routine body composition assessments can help track progress and make necessary adjustments to your fitness regimen.

Population Distribution

Population distribution data not available

Access Your Full Report

Scan to view full genetic profile

Scientific References

[1] PLOS

DOI: 10.1371/journal.pgen.1010105

Top Genetic Markers

Gene	RS ID	Genotype
FTO	rs1421085	CT
MC4R	rs2229616	GG
PPARG	rs1801282	CC
SEC16B	rs543874	TT
GIPR	rs1800437	CG
SLC39A8	rs13107325	GG
NRXN3	rs10146997	GG
ADCY3	rs11676272	TT
MC4R	rs10871777	TT
WSCD2	rs3764002	TT

Body Fat Percentage

Category: Body Composition

● MEDIUM RISK

Percentile 50%

50%
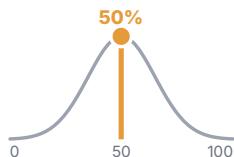
Interpretation

Medium Risk compared to the population average.

Recommendations

Maintain a balanced exercise routine and diet, and monitor body fat percentage periodically to stay on track.

Based on genotype rating

Description

Body fat percentage is the proportion of total body mass that is composed of fat. It includes both essential body fat, which is necessary for maintaining life and reproductive functions, and storage fat, which protects internal organs. A high body fat percentage is linked to increased risks for conditions such as obesity, type 2 diabetes, and cardiovascular disease, while an extremely low percentage can also be harmful. Understanding your genetic predisposition to body fat percentage can help in planning effective diet and exercise strategies to achieve and maintain a healthy balance.

Result

Your PRS score for body fat percentage places you in the 50.8 percentile, suggesting a moderate predisposition. Engaging in a mix of cardiovascular exercises and resistance training will help in maintaining a healthy body fat percentage. It is also important to follow a balanced diet that includes appropriate portions of protein, carbohydrates, and healthy fats. Monitoring body fat percentage periodically will help you stay on track with your fitness and health goals.

Population Distribution

Population distribution data not available

Access Your Full Report

Scan to view full genetic profile

Scientific References

[1] Elsevier
DOI: 10.1016/j.ajhg.2021.11.008

Top Genetic Markers

Gene	RS ID	Genotype
FTO	rs1421085	CT
MC4R	rs11873305	TT
SEC16B	rs543874	TT
GIPR	rs11672660	TC
MC4R	rs571312	GG
THBS3	rs35154152	AA
SKAP1	rs208015	GG
WSCD2	rs3764002	TT
INTERGENIC	rs13130484	CT
TMEM18	rs4854344	AA

Body Mass Index (BMI)

Category: Body Composition

● MEDIUM RISK

Percentile 31%

31%
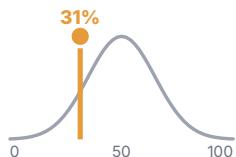
Interpretation

Medium Risk compared to the population average.

Recommendations

Maintain a healthy diet, engage in exercise regularly, and monitor BMI changes periodically.

Based on genotype rating

Description

Body Mass Index (BMI) is an indicator of body density determined by the relationship between body weight and height, calculated as weight in kilograms divided by height in meters squared (kg/m^2). BMI is commonly used to assess body fat levels and categorize individuals into underweight, normal weight, overweight, and obese. While BMI is an important tool for assessing health risks related to weight, such as diabetes, cardiovascular disease, and hypertension, its limitations should also be recognized, as it does not differentiate between muscle and fat mass. Understanding your genetic predisposition to BMI can help in planning appropriate lifestyle strategies to achieve and maintain a healthy weight.

Result

Your PRS score for BMI places you in the 31.5 percentile, suggesting a moderate predisposition to variations in BMI. It is beneficial to maintain a balanced diet, paying attention to portion sizes and choosing nutrient-dense foods. Regular exercise, including a mix of aerobic and resistance training, will help regulate weight. Periodic monitoring of your BMI can provide insight into changes over time, helping you to make necessary adjustments to your lifestyle as needed.

Population Distribution

Population distribution data not available

Access Your Full Report

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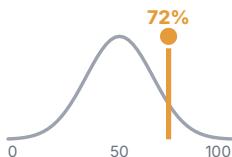

Scientific References

[1] Elsevier

DOI: 10.1016/j.ajhg.2021.11.008

Top Genetic Markers

Gene	RS ID	Genotype
FTO	rs1421085	CT
TMEM18	rs2867105	CC
MC4R	rs476828	AA

Body Weight

Category: Body Composition

● **MEDIUM RISK**

Percentile 72%

72%

0   50   100

Interpretation

Medium Risk compared to the population average.

Recommendations

Maintain a nutrient-rich diet, exercise regularly, and monitor weight changes periodically.

Based on genotype rating

Description

Body weight refers to the total mass of an individual and is typically measured in kilograms or pounds. Body weight is influenced by various factors, including genetics, diet, lifestyle, and overall health. Maintaining a healthy body weight is important for reducing the risk of health issues like cardiovascular disease, diabetes, and joint problems. Understanding genetic predisposition to body weight can guide personalized lifestyle adjustments for achieving and maintaining an optimal weight, contributing to overall well-being.

Result

Your PRS score for body weight places you in the 72.0 percentile, suggesting a moderate predisposition to variations in body weight. Maintaining a consistent exercise regimen and a balanced diet, including nutrient-dense foods, can help regulate weight effectively. It is also beneficial to be mindful of portion sizes and maintain an active lifestyle. Monitoring your weight periodically can help identify any changes early, enabling necessary lifestyle adjustments.

Population Distribution

Population distribution data not available

Access Your Full Report

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Scientific References

[1] **PLOS**

DOI: 10.1371/journal.pgen.1010105

Top Genetic Markers

Gene	RS ID	Genotype
FTO	rs1421085	CT
R3HCC1L	rs11189513	AA
HHIPL2	rs3748666	CC
TTBK2	rs6493068	TT
MST1R	rs2230590	AG
BCL11A	rs243021	TT
TRMT9B	rs502882	AA
LIF	rs9614163	TC
FSIP1	rs16969386	GG
SLC2A2	rs8192675	AA

Lean Body Mass

Category: Body Composition

● MEDIUM RISK

Percentile 35%

35%

0   50   100
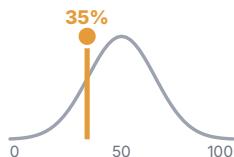
Interpretation

Medium Risk compared to the population average.

Recommendations

Include strength-training exercises and maintain an active lifestyle.

Based on genotype rating

Description

Lean Body Mass (LBM) refers to the total weight of an individual excluding body fat. It consists of the muscles, bones, organs, water, and connective tissues that make up the body's structural and functional components. Having a higher proportion of lean body mass is generally associated with better metabolic health, muscular strength, and physical performance. Factors like exercise, diet, and genetics all play important roles in determining lean body mass. Maintaining a higher lean body mass can aid in reducing the risk of obesity, diabetes, and other metabolic conditions.

Result

Your PRS score for lean body mass places you in the 33.6 percentile, suggesting an average genetic predisposition. Incorporating strength-training exercises and consuming balanced nutrition with adequate protein can help maintain healthy lean body mass. Consistency in physical activity and maintaining an active lifestyle are key factors in optimizing body composition.

Population Distribution

Population distribution data not available

Access Your Full Report

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Scientific References

[1] PLOS
DOI: 10.1371/journal.pgen.1010105

[2] Elsevier
DOI: 10.1016/j.ajhg.2021.11.008

Top Genetic Markers

Gene	RS ID	Genotype
FTO	rs1421085	CT
ACAN	rs28407189	AA
MC4R	rs2229616	GG
CHCHD7	rs9650315	GT
GDF5	rs143384	TC
SERPINA1	rs28929474	GG
LCORL	rs16896068	CC
ENPP2	rs10283100	CC
SRSF9	rs145350287	AA
C14orf39	rs33912345	GG

Waist Circumference

Category: Body Composition

● **MEDIUM RISK**

Percentile 28%

28%

0   50   100
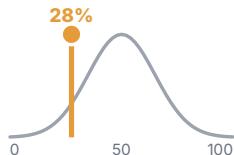
Interpretation

Medium Risk compared to the population average.

Recommendations

Moderate predisposition; maintain active lifestyle and balanced nutrition.

Based on genotype rating

Description

Waist circumference refers to the measurement of the abdominal segment of the trunk, typically taken midway between the lowest rib and the iliac crest. It is an important indicator of central adiposity and metabolic health, reflecting visceral fat accumulation. Increased waist circumference is associated with elevated risks of insulin resistance, type 2 diabetes, cardiovascular disease, and metabolic syndrome. Both genetic and lifestyle factors influence body fat distribution and waist measurements. Understanding your genetic predisposition can help tailor strategies for weight management and metabolic balance.

Result

Your PRS score for waist circumference places you in the 27.6 percentile, indicating an average genetic tendency for abdominal fat distribution. Maintaining regular physical activity, stress management, and balanced eating habits will support healthy body composition.

Population Distribution

Population distribution data not available

Access Your Full Report

Scan to view full genetic profile

Scientific References

[1] Elsevier
DOI: 10.1016/j.ajhg.2021.11.008

Top Genetic Markers

Gene	RS ID	Genotype
FTO	rs1421085	CT
MC4R	rs11873305	TT
MC4R	rs571312	GG
SEC16B	rs543874	TT
GIPR	rs11672660	TC
INTERGENIC	rs12429545	GG
SKAP1	rs208015	GG
BDNF	rs6265	GA
FAIM2	rs7132908	CC
ZC3H4	rs3810291	TT

Waist-Hip Ratio

Category: Body Composition

● LOW RISK

Percentile 7%

7%

0   50   100
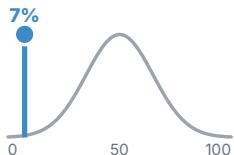
Interpretation

Low Risk compared to the population average.

Recommendations

Lower predisposition; keeping up a healthy lifestyle will support optimal body fat distribution.

Based on genotype rating

Description

Waist-hip ratio (WHR) is calculated by dividing the waist circumference by the hip circumference. It is a useful measure to assess body fat distribution and evaluate health risks. A WHR of 1.0 or higher is associated with increased risks of cardiovascular diseases and other health conditions linked to being overweight. Generally, a healthy WHR is considered to be 0.90 or less for men and 0.80 or less for women.

Result

Your PRS score for waist-hip ratio places you in the 8.5 percentile, indicating a lower predisposition for increased WHR. Continuing a balanced lifestyle will help maintain an optimal WHR.

Population Distribution

100.0%

EUR

Access Your Full Report

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Scientific References

[1] **Nature**
DOI: 10.1038/s41588-022-01036-9

Cardiorespiratory

This category examines various genetic traits related to this area of analysis.

Average: 40%

3	**40%**	**1**	**1**	**1**
ANALYZED	AVERAGE	ELEVATED RISK	MEDIUM RISK	LOW RISK

Overview

Category Insights

Understanding these genetic factors helps provide personalized insights and recommendations.

Risk Distribution

3 TRAITS

- 1 Elevated Risk
- 1 Medium Risk
- 1 Low Risk

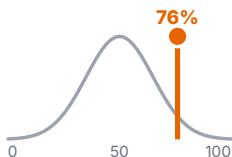## Traits Included in This Category

FEV/FVC Ratio	Elevated
Respiratory System Disease	Medium
Vital Capacity	Low

The following pages contain detailed analysis of each trait within this category.

FEV/FVC Ratio

Category: Cardiorespiratory

● ELEVATED RISK

Percentile 76%

76%

Interpretation

Elevated Risk compared to the population average.

Recommendations

Indicates normal lung function or restrictive pattern; maintain lung health through physical activity.

Based on genotype rating

Description

FEV/FVC ratio is the ratio of forced expiratory volume (FEV) in the first second to forced vital capacity (FVC) of the lungs, used as an important measure in evaluating pulmonary function. It helps diagnose obstructive or restrictive lung diseases. A reduced FEV/FVC ratio typically indicates obstructive lung conditions such as asthma or chronic obstructive pulmonary disease (COPD), while a normal or increased ratio may suggest restrictive diseases.

Result

Your FEV/FVC ratio places you in the 77.0 percentile, which is in the normal or higher range. This result suggests that your lung function is likely normal, or there may be a restrictive pattern rather than obstruction. For a restrictive condition, it might mean your lung capacity is reduced, but without airflow obstruction. Monitoring your lung health and following a healthy lifestyle, including regular physical activity, can help maintain lung capacity.

Population Distribution

Population distribution data not available

Access Your Full Report

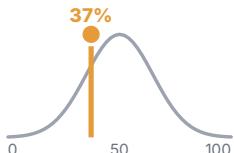**Scan to view full genetic profile**

Scientific References

[1] PLOS

DOI: 10.1371/journal.pgen.1010105

Top Genetic Markers

Gene	RS ID	Genotype
KIAA1210	rs5910522	GG
AGER	rs2070600	GA
ADGRG6	rs17280293	AA
NPNT	rs34712979	AG
LTBP4	rs34093919	GG
ADRB2	rs1800888	CC
TGFBR3	rs1192415	TT
INTERGENIC	rs1435867	TT
CDC123	rs7068966	CT
HHIP	rs1828591	GA

Respiratory System Disease

Category: Cardiorespiratory

● MEDIUM RISK

Percentile 37%

37%

Interpretation

Medium Risk compared to the population average.

Recommendations

Moderate predisposition; maintaining good respiratory hygiene and avoiding triggers can help prevent complications.

Based on genotype rating

Description

Respiratory system diseases encompass a wide range of non-neoplastic and neoplastic disorders affecting the respiratory tract, including conditions like pneumonia, chronic obstructive pulmonary disease (COPD), and lung cancer. Respiratory diseases may have multiple etiologies, including infections, environmental exposures, genetic predispositions, and autoimmune reactions. Symptoms vary depending on the condition but can include cough, wheezing, breathlessness, and chest discomfort. Early diagnosis and appropriate management are critical for improving quality of life and reducing complications associated with respiratory disorders.

Result

Your calculated PRS for respiratory system disease places you in the 37.2 percentile, indicating a moderate genetic risk. Avoiding environmental triggers, practicing good respiratory hygiene, and scheduling regular health check-ups can help in the prevention and early detection of respiratory issues.

Population Distribution

100.0%

EUR

Access Your Full Report

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Scientific References

[1] **Nature**
DOI: 10.1038/s41588-022-01036-9

[2] **Elsevier**
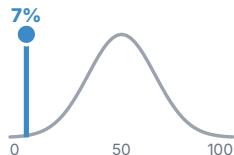DOI: 10.1016/j.ajhg.2022.09.001

Vital Capacity

Category: Cardiorespiratory

● LOW RISK

Percentile 7%

7%

0   50   100

Interpretation

Low Risk compared to the population average.

Recommendations

Lower predisposition; maintaining regular exercise routines will help support optimal lung capacity.

Based on genotype rating

Description

Vital capacity is the volume of air exhaled after taking a maximal breath in, providing a measure of lung capacity and overall respiratory health. It is a key parameter used in diagnosing and monitoring pulmonary diseases such as chronic obstructive pulmonary disease (COPD), asthma, and pulmonary fibrosis. Maintaining respiratory fitness through regular physical activity, breathing exercises, and avoiding smoking can support lung health and improve vital capacity.

Result

Your PRS score for vital capacity places you in the 8.3 percentile, indicating a lower predisposition. Continuing regular exercise and avoiding lung irritants will help maintain healthy respiratory function.

Population Distribution

Population distribution data not available

Access Your Full Report

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Scientific References

[1] PLOS
DOI: 10.1371/journal.pgen.1010105

[2] Elsevier
DOI: 10.1016/j.ajhg.2021.11.008

Top Genetic Markers

Gene	RS ID	Genotype
KIAA1210	rs5910522	GG
ADAMTS17	rs72755233	CC
EFEMP1	rs3791679	TC
SERPINA1	rs28929474	GG
SMIM29	rs1150781	CC
CENPW	rs1490384	TT
HMGA1	rs2780226	CC
MAPT	rs10445337	TT
CHCHD7	rs9650315	GT
ENPP2	rs10283100	CC

CATEGORY • MEDIUM RISK

Sleep Recovery

This category examines various genetic traits related to this area of analysis.

Average: 62%

5	**62%**	**2**	**3**
ANALYZED	AVERAGE	ELEVATED RISK	MEDIUM RISK

Overview

Category Insights

Understanding these genetic factors helps provide personalized insights and recommendations.

Risk Distribution

5 TRAITS

- 🔴 **2** Elevated Risk
- 🟠 **3** Medium Risk

Traits Included in This Category

Sleep Disorder	Medium
Chronotype	Medium
Insomnia	Elevated
Sleep Apnea	Elevated
Sleep Duration Trait	Medium

The following pages contain detailed analysis of each trait within this category.

Sleep Disorder

Category: Sleep Recovery

● MEDIUM RISK

Percentile 43%

43%

0   50   100
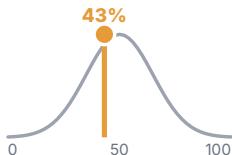
Interpretation

Medium Risk compared to the population average.

Recommendations

Moderate predisposition; good sleep hygiene and a comfortable environment can help mitigate sleep disturbances.

Based on genotype rating

Description

Sleep disorders refer to conditions that disrupt normal sleep patterns, which can include difficulties in falling asleep, staying asleep, or sleep quality. Sleep disorders encompass a range of conditions such as insomnia, sleep apnea, restless legs syndrome, and parasomnias. These disorders can negatively impact cognitive functioning, mood, and physical health, including immune response. Proper evaluation and treatment are crucial for restoring normal sleep and minimizing long-term health risks.

Result

Your calculated PRS for sleep disorders places you in the 43.2 percentile, suggesting a moderate predisposition. Practicing good sleep hygiene, such as limiting caffeine intake and creating a comfortable sleep environment, can help reduce your risk of developing sleep-related issues.

Population Distribution

100.0%

EUR

Access Your Full Report

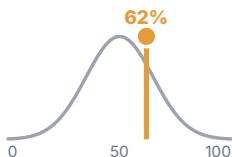**Scan to view full genetic profile**

Scientific References

[1] Elsevier
DOI: 10.1016/j.ajhg.2022.09.001

Top Genetic Markers

Gene	RS ID	Genotype
GDPD5	rs117746743	CC
PTPRD	rs4740998	GG

Chronotype

Category: Sleep Recovery

● **MEDIUM RISK**

Percentile 62%

62%

0   50   100

Interpretation

Medium Risk compared to the population average.

Recommendations

Understand your body's sleep-wake cycle, optimize your schedule, and maintain consistent sleep routines.

Based on genotype rating

Description

Chronotype measurement refers to the quantification of individual differences in daily activity patterns and sleep preferences, such as the ease of getting up in the morning or staying awake at night. People have different chronotypes, ranging from "morning types" (early risers) to "evening types" (night owls). Chronotype is influenced by both genetic and environmental factors and can impact overall health, productivity, and well-being. Understanding your chronotype can help you optimize your daily schedule to improve sleep quality, productivity, and overall health.

Result

Your PRS score for chronotype measurement places you in the 61.0 percentile, suggesting a moderate genetic predisposition to a specific chronotype, which may vary between morning and evening preferences. It is important to understand your body's natural sleep-wake cycle to make necessary adjustments to your daily routine. Sticking to a consistent sleep schedule and reducing exposure to artificial light before bedtime can help improve sleep quality. Optimizing your schedule to match your most productive hours will enhance overall well-being and productivity.

Population Distribution

Population distribution data not available

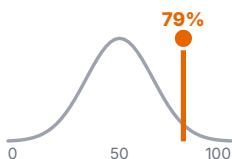### Access Your Full Report

Scan to view full genetic profile

Scientific References

[1] **Elsevier**
DOI: 10.1016/j.ajhg.2021.11.008

Top Genetic Markers

Gene	RS ID	Genotype
RGS16	rs1144566	GG

Insomnia

Category: Sleep Recovery

● ELEVATED RISK

Percentile 79%

79%

Interpretation

Elevated Risk compared to the population average.

Recommendations

Establish a regular sleep schedule, practice relaxation techniques, and consult a healthcare provider if needed.

Based on genotype rating

Description

Insomnia is a common sleep disorder characterized by difficulty falling asleep, staying asleep, or waking up too early and not being able to go back to sleep. It can significantly affect daily functioning, leading to daytime fatigue, irritability, impaired concentration, and reduced quality of life. Insomnia can be caused by stress, anxiety, depression, medication, or lifestyle factors like irregular sleep schedules or excessive caffeine intake. Long-term insomnia may increase the risk of developing mental health issues, cardiovascular diseases, and weakened immune function. Treatment may involve behavioral interventions, cognitive therapy, and sometimes medication.

Result

Your PRS score for insomnia places you in the 78.6 percentile, indicating a higher genetic predisposition to sleep disturbances. Establishing a regular sleep schedule, creating a relaxing bedtime routine, and minimizing screen time before bed can help improve sleep quality. Avoiding caffeine and alcohol close to bedtime, along with practicing relaxation techniques such as meditation or deep breathing exercises, may also be helpful. Consulting with a healthcare provider for cognitive behavioral therapy for insomnia (CBT-I) or other interventions is recommended if insomnia persists.

Population Distribution

Population distribution data not available

Access Your Full Report

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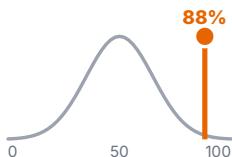

Scientific References

[1] Elsevier
DOI: 10.1016/j.ajhg.2021.11.008

Top Genetic Markers

Gene	RS ID	Genotype
AS3MT	rs11191454	AG
ACBD4	rs4986172	TC
PAX8	rs1823125	TC
ACTR1A	rs2296580	CA
FIGN	rs1239137	TT
SNAPC1	rs17099239	AA
ZNF585B	rs11673344	TC
KCNMB4	rs7138222	AA
GPR139	rs1886715	GT

Sleep Apnea

Category: Sleep Recovery

● ELEVATED RISK

Percentile 88%

88%

Interpretation

Elevated Risk compared to the population average.

Recommendations

Increased predisposition to sleep apnea; proactive sleep assessments and lifestyle changes are highly recommended.

Based on genotype rating

Description

Sleep apnea is a sleep disorder characterized by multiple cessations of breathing during sleep, which results in partial arousals and interferes with maintaining restful sleep. The most common forms are obstructive sleep apnea (OSA), caused by the blockage of the airway, and central sleep apnea (CSA), related to central nervous system signaling issues. Symptoms include loud snoring, gasping, restless sleep, and daytime fatigue. If left untreated, sleep apnea can increase the risk of hypertension, heart disease, and cognitive impairment.

Result

Your calculated Polygenic Risk Score (PRS) for sleep apnea places you in the 88.2 percentile, indicating a higher genetic predisposition to developing sleep apnea. Proactive measures such as maintaining a healthy weight, avoiding alcohol and sedatives, and considering sleep assessments are advised to manage risk effectively.

Population Distribution

100.0%

EUR

Access Your Full Report

Scan to view full genetic profile

Scientific References

[1] Elsevier
DOI: 10.1016/j.ajhg.2022.09.001

Top Genetic Markers

Gene	RS ID	Genotype
PTPRD	rs4740998	GG
CFD	rs12985692	TT
CHST11	rs12315181	GG
DOCK1	rs2890087	TT
JHY	rs17126967	TT
PNPLA2	rs11246321	AA

● **MEDIUM RISK**

Percentile 36%

36%

0   50   100
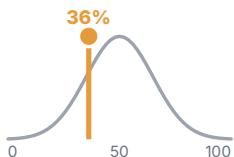
Interpretation

Medium Risk compared to the population average.

Recommendations

Moderate predisposition; maintain consistent routines for healthy sleep.

Based on genotype rating

Description

Sleep duration trait refers to the measurement of total sleep time, typically expressed in hours per night. It reflects the balance between restorative rest and wakefulness and is an important determinant of cognitive performance, emotional well-being, and metabolic health. Both genetic and environmental factors influence sleep duration, including circadian rhythm regulation, melatonin signaling, and lifestyle behaviors. Understanding your genetic predisposition can help optimize sleep habits for overall physical and mental health.

Result

Your PRS score for sleep duration places you in the 37.2 percentile, suggesting an average genetic predisposition. Maintaining regular sleep habits, moderate caffeine intake, and a balanced lifestyle can help ensure adequate and restorative sleep.

Population Distribution

Population distribution data not available

Access Your Full Report

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Scientific References

[1] PLOS
DOI: 10.1371/journal.pgen.1010105

[2] Elsevier
DOI: 10.1016/j.ajhg.2021.11.008

Top Genetic Markers

Gene	RS ID	Genotype
PAX8	rs1823125	TC
MAPT	rs63750417	CC
ZKSCAN7	rs13081859	TT
WWOX	rs11545029	AA
NOSIP	rs2288920	CC
ADCY3	rs11676272	TT
TERF1	rs9298210	AC
POLL	rs3730477	CC

Metabolic Performance

This category examines various genetic traits related to this area of analysis.

Average: 40%

3	40%	1	2
ANALYZED	AVERAGE	ELEVATED RISK	REDUCED RISK

Overview

Category Insights

Understanding these genetic factors helps provide personalized insights and recommendations.

Risk Distribution

3 TRAITS

- 1 Elevated Risk
- 2 Reduced Risk

Traits Included in This Category

Bilirubin Metabolism Disease	Reduced
Blood Glucose	Reduced
Blood Insulin	Elevated

The following pages contain detailed analysis of each trait within this category.

Bilirubin Metabolism Disease

Category: Metabolic Performance

● REDUCED RISK

Percentile 15%

15%
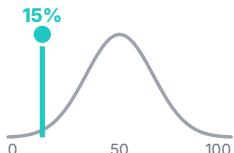
Interpretation

Reduced Risk compared to the population average.

Recommendations

Maintain general liver health practices and seek medical advice if jaundice occurs, despite a lower risk.

Based on genotype rating

Description

Bilirubin metabolism disease refers to conditions affecting the metabolism or processing of bilirubin by the liver. These diseases can lead to the buildup of bilirubin in the body, resulting in jaundice and other health complications. Examples include Gilbert's syndrome, where bilirubin is not properly processed, leading to mild jaundice. Understanding genetic predisposition to bilirubin metabolism disorders helps guide monitoring and lifestyle adjustments to prevent or minimize symptoms.

Result

Your PRS score for bilirubin metabolism disease places you in the 16.4 percentile, indicating a lower predisposition to bilirubin metabolism issues. Despite a lower risk, it's still important to maintain liver health through a balanced diet, regular hydration, and avoiding known liver stressors. If any symptoms of jaundice occur, early evaluation will help in determining the underlying cause.

Population Distribution

Population distribution data not available

Access Your Full Report

Scan to view full genetic profile

Scientific References

[1] Elsevier
DOI: 10.1016/j.ajhg.2021.11.008

Top Genetic Markers

Gene	RS ID	Genotype
UGT1A8	rs11689628	CC
UGT1A8	rs1054804	CC
UGT1A8	rs6723506	AA
UGT1A8	rs6714634	TT
UGT1A8	rs17863787	TT
UGT1A8	rs17862875	GG
UGT1A8	rs11891311	GG
UGT1A8	rs11568318	CC
UGT1A8	rs17868338	CC
UGT1A8	rs4294999	GA

Blood Glucose

Category: Metabolic Performance

● REDUCED RISK

Percentile 21%

21%

0   50   100
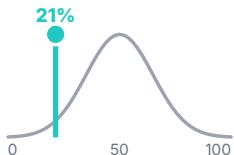
Interpretation

Reduced Risk compared to the population average.

Recommendations

Lower predisposition; maintain current healthy habits to support glucose stability.

Based on genotype rating

Description

Blood glucose amount refers to the concentration of glucose measured in the blood, reflecting how efficiently the body regulates blood sugar through insulin and other metabolic pathways. It serves as a key indicator of energy balance, carbohydrate metabolism, and diabetes risk. Both genetic and lifestyle factors (diet, exercise, body weight) contribute to variation in blood glucose levels. Understanding your genetic predisposition helps in adopting dietary and lifestyle strategies to maintain optimal glucose control.

Result

Your PRS score for blood glucose amount places you in the 22.3 percentile, indicating a lower genetic risk for elevated blood glucose. Continue maintaining a healthy lifestyle with balanced nutrition and regular movement to preserve optimal metabolic health.

Population Distribution

100.0%

EUR

Access Your Full Report
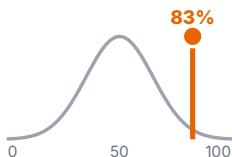
Scan to view full genetic profile

Scientific References

[1] **Elsevier**
DOI: 10.1016/j.ajhg.2022.09.001

Blood Insulin

Category: Metabolic Performance

● ELEVATED RISK

Percentile 83%

83%

Interpretation

Elevated Risk compared to the population average.

Recommendations

Higher predisposition; emphasize exercise, low-glycemic diet, and weight control to enhance insulin sensitivity.

Based on genotype rating

Description

Blood insulin refers to the concentration of insulin measured in the blood, which reflects how effectively the pancreas secretes insulin and how well body tissues respond to it. Insulin plays a central role in glucose uptake, lipid metabolism, and overall energy homeostasis. Genetic variation can influence both insulin secretion and sensitivity, affecting metabolic balance and risk for conditions such as insulin resistance and type 2 diabetes. Understanding your genetic predisposition can help guide nutritional and lifestyle strategies for optimal metabolic function.

Result

Your PRS score for blood insulin places you in the 81.7 percentile, suggesting a higher genetic tendency toward elevated insulin levels or reduced insulin sensitivity. A balanced diet with low-glycemic carbohydrates, regular aerobic and resistance exercise, and maintaining a healthy weight are recommended to improve insulin responsiveness and prevent long-term metabolic complications.

Population Distribution

100.0%

EUR

Access Your Full Report

Scan to view full genetic profile

Scientific References

[1] **Circ Genom Precis Med**
DOI: 10.1161/circgen.119.002775

[2] **Nature**
DOI: 10.1038/s41588-021-00948-2

Top Genetic Markers

Gene	RS ID	Genotype
PPP1R3B	rs983309	CC
FTO	rs1421085	CT
TCF7L2	rs7903146	CC
TET2	rs9884482	TC
HIP1	rs1167800	TT
ZC3H11B	rs2820436	GG
MAP3K19	rs1530559	TT
PEPD	rs731839	CT
INTERGENIC	rs2972143	GG
RSPO3	rs2745353	CT

Muscle Strength

This category examines various genetic traits related to this area of analysis.

Average: 19%

2	**19%**	**1**	**1**
ANALYZED	AVERAGE	MEDIUM RISK	REDUCED RISK

Overview

Category Insights

Understanding these genetic factors helps provide personalized insights and recommendations.

Risk Distribution

2 TRAITS

- 🟠 **1** Medium Risk
- 🟢 **1** Reduced Risk

Traits Included in This Category

Forced Expiratory Volume (FEV)	Reduced
Grip Strength	Medium

The following pages contain detailed analysis of each trait within this category.

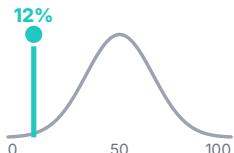# Forced Expiratory Volume (FEV)

Category: Muscle Strength

● REDUCED RISK

Percentile 12%

12%

0   50   100

Interpretation

Reduced Risk compared to the population average.

Recommendations

Reduced lung capacity; seek medical evaluation and consider pulmonary rehabilitation.

Based on genotype rating

Description

Forced Expiratory Volume (FEV) measures the maximum amount of air that can be forcefully exhaled in a given number of seconds during a forced vital capacity (FVC) determination. FEV is often denoted as FEV1, FEV2, etc., representing the volume exhaled in 1 second, 2 seconds, and so on. It is a key parameter in diagnosing and assessing the severity of obstructive and restrictive lung diseases.

Result

Your FEV score places you in the 11.6 percentile, which is below the average range, potentially indicating reduced lung capacity. This may be suggestive of obstructive or restrictive lung conditions. It is strongly recommended to consult a healthcare provider for further evaluation and consider pulmonary rehabilitation exercises to enhance lung function. Quitting smoking, avoiding air pollution, and practicing breathing exercises can also be beneficial.

Population Distribution

Population distribution data not available

Access Your Full Report

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Scientific References

[1] Elsevier
DOI: 10.1016/j.ajhg.2021.11.008

Top Genetic Markers

Gene	RS ID	Genotype
HMGA1	rs2780226	CC
ENPP2	rs10283100	CC
PDE11A	rs17400325	AA
ARMC2	rs2798641	CC
BOK	rs4675801	TC
HMGA2	rs7968682	TT
ENSA	rs11204675	AA
KCNS3	rs2345493	GG

Grip Strength

Category: Muscle Strength

● MEDIUM RISK

Percentile 26%

26%

0 50 100
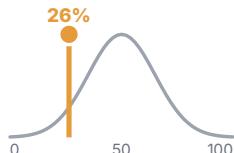
Interpretation

Medium Risk compared to the population average.

Recommendations

Focus on resistance training targeting hands and forearms, and consider consulting a physical therapist.

Based on genotype rating

Description

Grip strength measurement is the quantification of the force applied by the hand to pull on or suspend from objects. It is commonly used as an indicator of overall muscle strength and has been shown to be associated with health outcomes such as frailty, cardiovascular risk, and mortality. Grip strength can also provide insight into musculoskeletal health, making it a valuable metric in both clinical and research settings.

Result

Your PRS score for grip strength places you in the 25.4 percentile, indicating a lower genetic predisposition to strong grip strength. This may suggest a higher risk of musculoskeletal issues or frailty, particularly in later life. Engaging in resistance training, particularly exercises targeting the hands and forearms, is strongly recommended. Consulting with a physical therapist for tailored exercises may also be beneficial.

Population Distribution

Population distribution data not available

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Scientific References

[1] PLOS
DOI: 10.1371/journal.pgen.1010105

[2] Elsevier
DOI: 10.1016/j.ajhg.2021.11.008

Top Genetic Markers

Gene	RS ID	Genotype
MGP	rs4236	AA
PAPPA2	rs1325598	GA
SLC39A8	rs13107325	GG
IGF1R	rs2871865	CC
HAS1	rs7248778	TC
GDF5	rs143384	TC
ZBTB38	rs1344672	GG
CEP192	rs4499304	CG
CCDC92	rs11057401	TA
LCORL	rs16896068	CC

Longevity Aging

This category examines various genetic traits related to this area of analysis.

Average: 84%

1	**84%**	**1**
ANALYZED	AVERAGE	ELEVATED RISK

Overview

Category Insights

Understanding these genetic factors helps provide personalized insights and recommendations.

Risk Distribution

1
TRAITS

● 1   Elevated Risk

Traits Included in This Category

Frailty Measurement	Elevated

The following pages contain detailed analysis of each trait within this category.
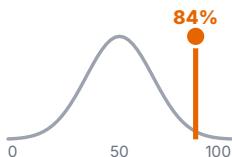
Frailty Measurement

Category: Longevity Aging

● ELEVATED RISK

Percentile 84%

84%

0   50   100

Interpretation

Elevated Risk compared to the population average.

Recommendations

Higher predisposition; focus on strength training, balanced diet, and proactive health monitoring.

Based on genotype rating

Description

Frailty measurement refers to the quantification of physiological or clinical aspects of frailty—a state of increased vulnerability resulting from diminished physiological reserves and resilience. Frailty reflects reduced capacity to maintain homeostasis after stress and is associated with higher risks of falls, disability, hospitalization, and mortality. Both genetic and lifestyle factors (nutrition, physical activity, inflammation, and hormonal regulation) influence frailty development. Understanding your genetic predisposition can guide interventions to maintain strength, balance, and independence with aging.

Result

Your PRS score for frailty measurement places you in the 85.1 percentile, suggesting a higher genetic predisposition to frailty or reduced physiological resilience. Engaging in regular strength and balance exercises, maintaining protein-rich nutrition, and addressing underlying metabolic or inflammatory conditions can improve vitality and functional capacity.

Population Distribution

Population distribution data not available

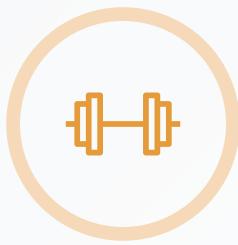## Access Your Full Report

Scan to view full genetic profile

Scientific References

No scientific references available

Top Genetic Markers

Gene	RS ID	Genotype
INTERGENIC	rs116719856	AA
GALNT2	rs632557	GG
GRM5	rs11021359	TT
CCDC148	rs114360999	CC
CDKAL1	rs116824070	TT
TENM2	rs10516034	GG

Athletic Performance

This category examines various genetic traits related to this area of analysis.

Average: 27%

1	**27%**	**1**
ANALYZED	AVERAGE	MEDIUM RISK

Overview

Category Insights

Understanding these genetic factors helps provide personalized insights and recommendations.

Risk Distribution

1
TRAITS

● 1   Medium Risk

Traits Included in This Category

Physical Activity	Medium

The following pages contain detailed analysis of each trait within this category.
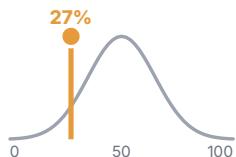
Physical Activity

Category: Athletic Performance

● MEDIUM RISK

Percentile 27%

27%

0   50   100

Interpretation

Medium Risk compared to the population average.

Recommendations

Moderate risk; aim for at least 30 minutes of activity daily.

Based on genotype rating

Description

Physical activity measurement quantifies aspects of physical activity, such as frequency, duration, and intensity. It is an important parameter for assessing overall health status and plays a key role in managing and preventing chronic diseases, such as cardiovascular disease, diabetes, and obesity.

Result

Your calculated PRS for physical activity engagement places you in the 26.3 percentile, suggesting a moderate genetic predisposition to reduced activity. Aim for at least 30 minutes of physical activity on most days, including activities like dancing, swimming, or even household chores.

Population Distribution

Population distribution data not available

Access Your Full Report

Scan to view full genetic profile

Scientific References

[1] **PLOS**
DOI: 10.1371/journal.pgen.1010105

Top Genetic Markers

Gene	RS ID	Genotype
LRRD1	rs6465353	CA
MST1R	rs1062633	AG
TGM3	rs214834	CC
ACTR5	rs2245231	AA
FLRT2	rs17646457	AG
OR4D11	rs7120079	TT
SYNJ2	rs2502620	AG
P3H3	rs1129649	TC
SLC9A4	rs1014286	GG

Access Your PRS Information

Use this access code to view your detailed genetic report online.

YOUR PRS INFORMATION ACCESS CODE

⊘⊘⊘⊘ – ⊘⊘⊘⊘

Visit our website and enter the code above to access your complete genetic profile and personalized recommendations.

How to Use?

1. Scan the QR code with your camera
2. Enter the 8-digit access code above on the website that opens
3. View your PRS and detailed analysis
4. Save or print your results as needed

Important: This access code is only for you. Keep the code in a safe place and do not share it with others. You can get information about the code validity period and terms of use from the website.

Understanding Your Genetic Report

Percentiles, Z-Scores, and Statistical Interpretation

The following report provides an overview of your wellness profile based on the analysis of your DNA. By examining specific genetic markers, we can identify potential predispositions that relate to various health traits, such as metabolism, cardiovascular health, and mental well-being.

What is Genetic Testing?

Genetic testing is a process that involves analyzing your DNA, the unique genetic material you inherit from your parents. DNA contains the instructions for building and maintaining your body, and variations in these instructions can influence your health, traits, and predispositions.

Modern genetic testing examines millions of specific positions in your genome, looking for variations called Single Nucleotide Polymorphisms (SNPs). These genetic variants can provide valuable insights into how your body processes nutrients, responds to exercise, and reacts to environmental factors.

It's important to understand that genetic testing provides probabilistic information, not deterministic predictions. Your genes interact with your environment, lifestyle, and other factors to influence your health outcomes.

> **Key Point:** Genetic testing reveals tendencies and predispositions, not certainties. The results should be interpreted in the context of your overall health, family history, and lifestyle factors.

Understanding Percentiles

What is a Percentile?

A percentile is a statistical measure that indicates the percentage of a population that falls below a particular value. When you see that you're in the 75th percentile for a trait, it means your genetic score is higher than 75% of the reference population.

Percentiles divide the population into 100 equal groups. The 50th percentile represents the median—exactly half the population scores below this point, and half scores above. Higher percentiles (75th, 90th, 95th) indicate you have more of a trait compared to most people, while lower percentiles (25th, 10th, 5th) indicate you have less.

For example, if your genetic predisposition for vitamin D absorption is in the 85th percentile, it means you absorb vitamin D more efficiently than 85% of the population. Conversely, if you're in the 15th percentile, you absorb it less efficiently than 85% of people.

Remember: Percentiles are relative measures, not absolute indicators. Being in a high or low percentile doesn't mean you will definitely experience a particular health outcome—it simply shows your genetic tendency relative to others.

Understanding Z-Scores

What is a Z-Score?

A Z-score (also called a standard score) tells you how many standard deviations a value is from the population mean (average). Z-scores provide a standardized way to compare different measurements on the same scale.

A Z-score of 0 means you're exactly at the population average. Positive Z-scores indicate you're above average, while negative Z-scores indicate you're below average. The magnitude of the Z-score tells you how far from average you are.

Interpreting Z-Score Ranges:
- Z = 0 to ±1: Within normal range (most common)
- Z = ±1 to ±2: Somewhat above or below average
- Z = ±2 to ±3: Significantly above or below average
- Z = beyond ±3: Very rare, extreme values

For instance, if your Z-score for a metabolic trait is +1.5, you're 1.5 standard deviations above the population mean, which is relatively uncommon. A Z-score of -0.5 means you're half a standard deviation below average, which is fairly typical.

Normal Distribution and the Bell Curve

Most genetic traits follow a pattern called normal distribution, also known as the bell curve. This means that most people cluster around the average, with fewer people at the extremes (very high or very low values).

Understanding normal distribution is crucial because it explains why percentiles and Z-scores are meaningful. The bell curve shows that being significantly above or below average (high percentiles or Z-scores beyond ±2) is relatively uncommon in the population.

> **The 68-95-99.7 Rule:**
>
> - 68% of the population falls within 1 standard deviation of the mean (Z-scores between -1 and +1)
> - 95% of the population falls within 2 standard deviations (Z-scores between -2 and +2)
> - 99.7% of the population falls within 3 standard deviations (Z-scores between -3 and +3)

This means that if your Z-score is between -1 and +1, you're in the same range as about 68% of people—perfectly normal. If your Z-score exceeds ±2, you're in the top or bottom 5% of the population for that trait.

How Percentiles and Z-Scores Relate

Percentiles and Z-scores are two different ways of expressing the same information—your position relative to the population. Each Z-score corresponds to a specific percentile, and vice versa.

> **Common Conversions:**
>
> - Z-score of 0 = 50th percentile (average)
> - Z-score of +1 = 84th percentile
> - Z-score of +2 = 97.7th percentile
> - Z-score of -1 = 16th percentile
> - Z-score of -2 = 2.3rd percentile

In your report, both measures are provided to give you a complete picture. The percentile is often easier to understand intuitively ('I'm higher than X% of people'), while the Z-score provides more statistical precision.

Important Considerations

✓ What These Numbers Mean:

- Statistical ranking within a reference population
- Genetic tendencies and predispositions
- Probabilistic information, not certainties
- One factor among many that influence health

✕ What These Numbers DON'T Mean:

- This report does not diagnose diseases or medical conditions
- Genetic predisposition is not deterministic—it is not directly linked to disease
- These results don't account for environmental, lifestyle, or epigenetic factors
- High or low percentiles don't predict specific outcomes with certainty

Genetic information should always be interpreted in consultation with qualified healthcare professionals. This report is for educational and informational purposes only and should not be used as a substitute for professional medical advice, diagnosis, or treatment.

What Should You Do With This Information?

Consult with Healthcare Professionals:

Share your genetic results with your doctor, genetic counselor, or healthcare provider. They can help interpret the findings in the context of your personal and family medical history, current health status, and overall wellness goals.

Develop a Personalized Health Plan:

Work with healthcare providers to create targeted strategies based on your genetic predispositions. This might include specific nutritional adjustments, tailored exercise programs, or proactive health monitoring in areas where you have genetic tendencies.

Make Informed Decisions:

Use this information as one piece of the puzzle in making health decisions. Combine your genetic insights with information about your environment, lifestyle, family history, and current health to make well-rounded choices about your wellness.

Stay Informed:

Genetic science is rapidly evolving. As new research emerges, the interpretation of genetic variants may be refined. Stay in touch with your healthcare providers and consider periodic reviews of your genetic information as scientific understanding advances.

From Sample to Report: Our Process

Your genetic report is the result of a sophisticated multi-step process that combines cutting-edge biotechnology with advanced statistical analysis. Here's how we transform your DNA sample into meaningful insights:

1 Sample Collection

The journey begins with collecting your saliva sample using our GenNext collection kit. This simple, non-invasive process can be completed at home in minutes. Your saliva contains cells with your complete genetic information.

2 DNA Extraction & Purification

Once we receive your sample at our certified laboratory, we extract and purify your DNA. This involves separating the genetic material from proteins, lipids, and other cellular components to ensure we have high-quality DNA for accurate analysis.

3 Genotyping & Data Generation

Using advanced genotyping technology, we analyze hundreds of thousands of specific positions in your genome. This process identifies your unique genetic variants (SNPs) that have been scientifically associated with various health traits and characteristics.

4 Statistical Analysis & Report Generation

Finally, we compare your genetic data to large reference populations to calculate your percentile rankings and Z-scores. Our algorithms integrate data from thousands of peer-reviewed scientific studies to provide you with meaningful, evidence-based insights about your genetic predispositions.

Note on Gene Orientation

For each variant, the gene orientation is indicated as either 5'→3' or 3'→5', showing which strand of DNA the gene is located on and the direction in which it is read.

All alleles are written in the 5'→3' direction for consistency. However, when a gene lies on the 3'→5' (reverse) strand, the displayed genotype represents the reverse complement of the reference sequence.

This may cause your genotype (e.g., A/T) to appear as T/A in some databases or tools — a normal, purely technical difference that does not alter biological meaning.

> **Example:**
> If a variant (rsID) is located on the reverse strand (3'→5') and your genotype is shown as A/G, it corresponds to T/C on the forward strand.

Frequently Asked Questions

What you need to know about the Genetic Test Report

? **What is genotyping?**

Genotyping is the process of examining specific genetic variants in your DNA that are known to influence health and wellness traits. These genetic variants, also called single nucleotide polymorphisms (SNPs), can provide valuable insights into how your body processes certain nutrients, your response to physical activity, and your susceptibility to certain health conditions. Genotyping helps us understand your unique genetic makeup and predict how various environmental and lifestyle factors might impact your health.

? **How do you calculate polygenic risk scores?**

Polygenic risk scores are calculated based on the analysis of multiple genetic variants that collectively influence the likelihood of developing a particular trait or condition. Our proprietary algorithms consider a wide range of genetic markers, each contributing a small effect, to calculate an overall risk score. By combining information from these markers, we provide an overview of your genetic predispositions, which can help guide your wellness and preventive care strategies.

? **Can I make changes to my lifestyle based on this report?**

This report provides information on genetic predispositions, but it is not a diagnostic tool. You should consult with your healthcare provider before making any significant changes to your diet, exercise routine, or lifestyle based on the results. Your healthcare provider can help you interpret the findings in the context of your overall health and medical history, and work with you to create a personalized plan that addresses your unique needs.

? **Is this report clinically valid?**

No, this report is intended for informational and educational purposes only. It provides insights into your genetic tendencies, but it is not a substitute for professional medical advice. The information provided is based on current genetic research and statistical analysis, but it is not intended to diagnose, treat, or prevent any disease. Always seek the advice of a healthcare professional for any health-related questions or concerns.

? **What can I do with this information?**

By understanding your genetic predispositions, you can make informed decisions in collaboration with healthcare professionals to improve your overall wellness. This information may help you better understand your health and adopt habits that align with your genetic profile. Understanding your genetic profile empowers you to take a proactive role in your health management, focusing on preventive measures and personalized wellness strategies.

? Will my genetic results change over time?

Your genetic code itself does not change over time, but our understanding of genetics and the implications of specific genetic variants continues to evolve. Scientific advancements may lead to new insights that could impact how we interpret your genetic data in the future. For this reason, it may be beneficial to revisit your genetic information periodically as new research and updates become available.

? How accurate are the results?

The accuracy of genetic testing depends on several factors, including the quality of the sample provided and the technology used for analysis. Our genotyping and polygenic risk scoring methods are based on validated scientific research and industry standards. However, it is important to note that no genetic test can provide a complete prediction of health outcomes. Genetic predispositions are only one of many factors that contribute to overall health.

? Does having a high polygenic risk score mean I will develop the condition?

No, a high polygenic risk score indicates a higher genetic predisposition, but it does not guarantee that you will develop the condition. Many factors, including lifestyle, environment, and other health conditions, contribute to whether or not a person will develop a specific health trait or condition. It is important to work with your healthcare provider to understand the implications of your polygenic risk scores in the context of your overall health.

? What should I do if my results show a high genetic risk for a condition?

If your results indicate a high genetic risk for a particular condition, it is important to discuss this with your healthcare provider. They can help you understand what the results mean and what steps you can take to manage your risk. In many cases, lifestyle modifications and regular health screenings can help mitigate the risk of developing a condition. Your healthcare provider can help guide you in making informed decisions that promote your long-term health.

? What does 5′→3′ mean?

It shows the natural direction in which DNA is read — from the 5′ end (start) to the 3′ end (finish). This is the way enzymes that copy or read DNA normally work.

? Why is DNA direction (5′→3′ or 3′→5′) important?

DNA has two complementary strands running in opposite directions. All genes are read only in the 5′→3′ direction, so indicating direction helps identify which strand a gene belongs to and how it's read during genetic analysis.

? What does it mean if my gene is on the 3′→5′ strand?

It means the gene is located on the reverse (complementary) strand of DNA. In this case, the displayed genotype represents the reverse complement of the reference sequence — a technical notation difference that doesn't affect biological meaning.

⚠ Disclaimer

The information contained in this report is for educational and informational purposes only. It is not intended for clinical or diagnostic use. This report does not provide medical advice, diagnosis, or treatment. Always seek the guidance of your healthcare provider with any questions you may have regarding a medical condition or changes to your health regimen. This report should never be used to make decisions about your health without consulting a healthcare professional. Genetic predispositions are only one piece of the puzzle—environmental and lifestyle factors, such as diet, exercise, and stress, also play a significant role in determining your health outcomes. The results provided in this report are based on current scientific knowledge, which is constantly evolving, and should be interpreted with caution and in the context of a broader health assessment by a healthcare professional.