

Sports
Performance Report

Name:	Report ID: SA
Date of Birth:	Subject ID: 30005
Gender: Female	Date: 2026-10-30

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Introduction

This report provides insights into your genetic predispositions related to sports performance, nutrition, metabolism, and overall wellness. By analyzing specific genetic markers (variants) in your DNA, we aim to offer personalized information that can help you understand your unique biological profile.

The analysis covers traits such as endurance potential, muscle strength, recovery speed, metabolic efficiency, nutrient processing, and susceptibility to certain exercise-related conditions. Understanding these predispositions can empower you to tailor your training, nutrition, and lifestyle choices for optimal results and well-being.

It is crucial to understand that this report is not diagnostic. Genetic predispositions indicate potential tendencies, not certainties. Environmental factors, lifestyle choices (like training intensity, diet quality, sleep), and other non-genetic influences play a significant role in determining actual outcomes. Always consult with healthcare professionals, registered dietitians, or certified trainers before making significant changes based on this report.

We recommend reviewing the "Summary of Characteristics" first for an overview, followed by the "Detailed Trait Analysis" for specific gene information. The "Frequently Asked Questions" section addresses common queries. Use this information as a tool for informed discussion and personalized planning with qualified experts.

Frequently Asked Questions

How accurate is this report?

Our genetic analysis uses validated scientific methods and technology with high accuracy for identifying the specific genetic markers tested. However, the interpretation of how these markers influence traits is based on current scientific understanding, which evolves over time. The report reflects predispositions, not guarantees.

Are these results definitive predictions?

No. This report identifies genetic predispositions, meaning an increased or decreased likelihood for certain traits compared to the general population. It does not definitively predict whether you will express a trait. Lifestyle, environment, diet, training, and other factors significantly impact actual outcomes.

What should I do with these results?

Use this report as a tool for self-awareness and discussion. Share it with your doctor, a registered dietitian, a certified coach, or other relevant professionals. They can help you interpret the findings in the context of your personal health, goals, and circumstances and guide you in making informed decisions about training, nutrition, and wellness strategies.

How is my genetic data protected?

We are committed to protecting your privacy and data security. Your genetic data is handled according to strict privacy policies and security measures. We do not share your identifiable genetic information with third parties without your explicit consent, except as required by law. Please refer to our full Privacy Policy for details.

Can my genes change over time?

Your core DNA sequence generally does not change throughout your life. However, scientific understanding of how genes influence traits is constantly evolving. New research may lead to updated interpretations or the inclusion of additional genetic markers in future analyses. Furthermore, epigenetics (how gene expression is modified by environment/lifestyle) can change, but this report focuses on the underlying DNA sequence.

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Summary of Analysed Characteristics

Athleticism

(11 Traits)

This section explores genetic factors related to physical performance, endurance, strength, power, recovery, and injury susceptibility relevant to athletic activities.

- Achilles Tendinopathy
- Endurance 5
- Exercise Response
- Ligament Injury Susceptibility
- Lumbar Disc Disease Susceptibility
- Muscle Strength 1
- Muscle Volume
- Muscular Endurance 1
- Muscular Power 1
- Power 12
- Strength 8

Nutrition and Diet

(6 Traits)

Discover how your genes may influence the way your body processes nutrients like vitamins, fats, and carbohydrates, as well as potential intolerances and metabolic responses to different dietary patterns.

- Polyunsaturated Fats 1
- Vitamin B12
- Vitamin B6 1
- Vitamin C
- Vitamin D
- Vitamin E

Wellness

(7 Traits)

Learn about genetic influences on aspects of general well-being, including sleep patterns, stress response, and other factors contributing to overall health maintenance.

- Alcohol Flush
- Caffeine Metabolism
- Deep Sleep
- Lactose Intolerance
- Muscle Performance 1
- Saturated Fat and Weight
- Sleep Movement 1

Metabolism

(4 Traits)

This section focuses on genetic markers associated with metabolic rate, energy expenditure, weight management tendencies, and the risk of metabolic conditions.

- Metabolic Syndrome
- Obesity 1
- Resting Metabolic Rate
- Weight Gain

How to Interpret this Summary



This bar shows the proportion of impactful genes found for this trait. A fuller bar indicates a higher proportion.

3

The number in the circle indicates the total count of impactful genes identified for this trait.

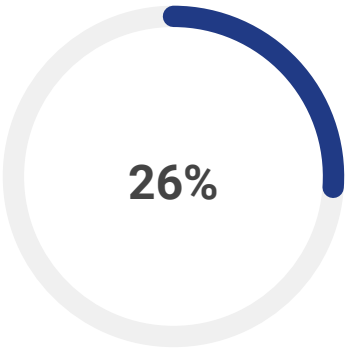
Athleticism

Power

Description

Several characteristics are positively associated with power performance, including circulating levels of testosterone, percentage and cross-sectional area of fast-twitch muscle fibres, muscle mass and strength, body and calcaneus height, muscle fascicle length, and reaction time, among others [3,238,239,240,241,242,243,244]. The heritability of power-related phenotypes has been reported in the literature to range from approximately 49 to 86% in a range of phenotypes, including jumping ability [245,246]. Typically, genetic markers associated with power athlete status are determined by comparing allelic frequencies between power athletes (e.g., 100 m runners, shot putters, arm wrestlers, etc.) and untrained subjects.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
NRXN3	rs8011870	G/G

Great news! The G/G genotype in the NRXN3 gene could potentially boost your power-oriented skills.

The rs8011870 allele G is related allele, see the Studies with Positive Results (if available)[49] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
ILRUN	rs205262	A/A

For your power trait with the ILRUN gene (rs205262), having the A/A genotype could boost your sprinting or weightlifting prowess.

The rs205262 allele A is related allele, see the Studies with Positive Results (if available)[49] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
ADRB2	rs1042713	G/G

With the G/G genotype in your ADRB2 gene, you might excel in power-demanding activities.

The rs1042713 allele GÊ is related allele, see the Studies with Positive Results (if available)[41,174] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
ACTN3	rs1815739	C/C

For your Power trait with the ACTN3 gene (rs1815739), having the C/C genotype might help you perform explosive movements.

The rs1815739 allele CÊ is related allele, see the Studies with Positive Results (if available)[17,161,162,168,170,250,258,259,260,261,262,263,264] and see the Studies with Negative or Controversial Results (if available)[159,165,254,265,266].

Your Genomics

Gene	rsID	Your Genotype
FHL2	rs55680124	C/C

For those with the C/C genotype, you might have a better predisposition for power activities, perhaps benefiting from improved muscle strength.

The rs55680124 allele C is related allele, see the Studies with Positive Results (if available)[49] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
TRHR	rs7832552	C/C>T/T

Having the T/T genotype in the TRHR gene variant rs7832552 might favor your power performance, supporting activities like sprinting or weightlifting.

The rs7832552 allele T is related allele, see the Studies with Positive Results (if available)[65,294,295] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
ADRB2	rs1042714	G/G

Your G/G genotype could notably boost power traits, as G allele is commonly associated with this.

The rs1042714 allele GÊ is related allele, see the Studies with Positive Results (if available)[41,174] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
NUP210	rs2280084	C/C>C/A

With your A/C genotype here, you might enjoy a moderate boost in power-related activities.

The rs2280084 allele C is related allele, see the Studies with Positive Results (if available)[45] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
CRTAC1	rs2439823	A/A

Having the A/A genotype in the CRTAC1 gene can positively be linked to enhanced power traits like muscle strength.

The rs2439823 allele A is related allele, see the Studies with Positive Results (if available)[49] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
AUTS2	rs10452738	A/A

With the A/A genotype in the AUTS2 gene (rs10452738), you might exhibit traits that align with power athleticism, like increased fast-twitch muscle fibers.

The rs10452738 allele A is related allele, see the Studies with Positive Results (if available)[49] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
PPARG	rs2920503	C/C>T/T

With the T/T genotype in your PPARG gene, you could see improved power and strength.

The rs2920503 allele T is related allele, see the Studies with Positive Results (if available)[49] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
ADAM15	rs11264302	G/G>G/A

Possessing the A/G genotype in your ADAM15 gene might give you some advantages in power activities.

The rs11264302 allele G is related allele, see the Studies with Positive Results (if available)[49] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
PIEZO1	rs572934641	TCCTCCTC CTCCTCCT CCTCCTC CT/TCCTC CTCCTCCT CCTCCTC CTCCT

The rs572934641 allele D is related allele, see the Studies with Positive Results (if available)[288] and see the Studies with Negative or Controversial Results (if available).

CCT3	rs11548200	T/T>T/C

Your C/T genotype doesn't indicate a significant effect on power abilities.

The rs11548200 allele T is related allele, see the Studies with Positive Results (if available)[49] and see the Studies with Negative or Controversial Results (if available).

BDNF	rs10501089	C/C

There's not enough evidence to suggest that the C/C genotype impacts power abilities.

The rs10501089 allele A is related allele, see the Studies with Positive Results (if available)[271] and see the Studies with Negative or Controversial Results (if available).

SLC39A8	rs13107325	C/C>C/T

The C/T genotype isn't clearly linked to power-related traits.

The rs13107325 allele C is related allele, see the Studies with Positive Results (if available)[49] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
UBR5	rs10505025	A/A>A/G

If your genotype is A/G for the UBR5 gene variant rs10505025, we don't see any notable implications for power.

The rs10505025 allele A is related allele, see the Studies with Positive Results (if available)[296] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
AMPD1	rs17602729	G/G

We see no strong evidence of G/G affecting your power traits.

The rs17602729 allele CÊ is related allele, see the Studies with Positive Results (if available)[184,269,270] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
HSD17B14	rs7247312	A/A>A/G

An A/G genotype might give you a slight edge in power performance, linked to HSD17B14.

The rs7247312 allele G is related allele, see the Studies with Positive Results (if available)[41] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
CNTFR	rs41274853	G/G

The G/G genotype doesn't exhibit a strong connection with power traits.

The rs41274853 allele T is related allele, see the Studies with Positive Results (if available)[275] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
PPARA	rs4253778	G/G

For G/G in PPARA, no meaningful impact on power is evident.

The rs4253778 allele C is related allele, see the Studies with Positive Results (if available)[159,220,289] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
HIF1A	rs11549465	C/C

For the C/C genotype, there isn't a significant impact on power-related traits observed in HIF1A.

The rs11549465 allele TÊ is related allele, see the Studies with Positive Results (if available)[277,278,279] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
CPNE5	rs3213537	C/C>C/T

Having a C/T genotype doesn't strongly correlate with changes in your Power trait.

The rs3213537 allele G is related allele, see the Studies with Positive Results (if available)[41,48] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
IGSF3	rs699785	G/G

For your Power trait with the IGSF3 gene (rs699785), the G/G genotype isn't strongly associated with power performance changes.

The rs699785 allele A is related allele, see the Studies with Positive Results (if available)[49] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
E2F3	rs4134943	C/C>C/T

Having C/T could modestly support your power attributes, but it's not highly conclusive.

The rs4134943 allele T is related allele, see the Studies with Positive Results (if available)[49] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
AGRN	rs4074992	C/C>T/T

T/T hasn't been linked to significant changes in Power trait for this specific gene.

The rs4074992 allele C is related allele, see the Studies with Positive Results (if available)[45] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
CRTC1	rs11881338	T/T>T/A

Having the A/T genotype doesn't seem to offer significant changes in your Power trait.

The rs11881338 allele A is related allele, see the Studies with Positive Results (if available)[49] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
ZNF568	rs1667369	A/A>A/C

Having the A/C genotype of ZNF568 could give you a moderate boost in power-related traits, balancing both athletic potentials.

The rs1667369 allele A is related allele, see the Studies with Positive Results (if available)[49] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
AKAP6	rs12883788	C/C>T/T

Currently, no significant effects have been noted for the T/T genotype related to power.

The rs12883788 allele C is related allele, see the Studies with Positive Results (if available)[49] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
IGF2	rs680	T/T

For your Power trait and IGF2 gene (rs680), having the T/T genotype doesn't show notable effects on power abilities.

The rs680 allele GÊ is related allele, see the Studies with Positive Results (if available)[41,281,282] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
GALNTL6	rs558129	G/G

G/G genotype holds no distinct influence over your power trait.

The rs558129 allele T is related allele, see the Studies with Positive Results (if available)[47,276] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
ACVR1B	rs2854464	A/A>A/G

There's no strong evidence linking A/G in ACVR1B (rs2854464) to changes in power ability.

The rs2854464 allele A is related allele, see the Studies with Positive Results (if available)[255,256] and see the Studies with Negative or Controversial Results (if available)[256,257].

Gene	rsID	Your Genotype
CKM	rs8111989	T/T

Having the T/T genotype doesn't show relevant effects on power performance.

The rs8111989 allele G is related allele, see the Studies with Positive Results (if available)[65,272,273] and see the Studies with Negative or Controversial Results (if available)[274].

Gene	rsID	Your Genotype
GDF5	rs143384	G/G>A/A

Currently, there's no strong evidence linking the A/A genotype with power traits related to the GDF5 gene.

The rs143384 allele G is related allele, see the Studies with Positive Results (if available)[49] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
CDKN1A	rs236448	A/A

For your Power trait with the CDKN1A gene (rs236448), there's no strong evidence of notable effects with the A/A genotype.

The rs236448 allele C is related allele, see the Studies with Positive Results (if available)[43] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
NOS3	rs2070744	C/C>C/T

The C/T genotype doesn't seem to have a noteworthy impact on your power capabilities.

The rs2070744 allele T is related allele, see the Studies with Positive Results (if available)[219,279,287] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
SOD2	rs4880	A/A>G/G

The G/G genotype doesn't demonstrate notable effects on your power performance.

The rs4880 allele C is related allele, see the Studies with Positive Results (if available)[293] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
UBR5	rs4734621	T/T>C/C

For the C/C genotype in UBR5 rs4734621, there doesn't seem to be a significant correlation with power.

The rs4734621 allele A is related allele, see the Studies with Positive Results (if available)[296] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
MTHFR	rs1801131	T/T

The T/T genotype in MTHFR doesn't seem to have a significant impact on your power trait.

The rs1801131 allele C is related allele, see the Studies with Positive Results (if available)[285,286] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
ACE	rs4341	G/G

For your power trait with the ACE gene (rs4341), having the G/G genotype might give you a minor boost.

The rs4341 allele G is related allele, see the Studies with Positive Results (if available)[16,128,145,169,247,248,249,250] and see the Studies with Negative or Controversial Results (if available)[150,251,252,253,254].

Gene	rsID	Your Genotype
ACE	rs4343	G/G

With the G/G genotype in your ACE gene (rs4343), you might have a slight edge in power-related activities.

The rs4343 allele G is related allele, see the Studies with Positive Results (if available)[16,128,145,169,247,248,249,250] and see the Studies with Negative or Controversial Results (if available)[150,251,252,253,254].

Gene	rsID	Your Genotype
AGTR2	rs11091046	A/A

For your Power trait with the AGTR2 gene (rs11091046), having the A/A genotype might offer moderate benefits in power activities.

The rs11091046 allele A is related allele, see the Studies with Positive Results (if available)[176,177] and see the Studies with Negative or Controversial Results (if available)[55].

Your Genomics

Gene	rsID	Your Genotype
AGT	rs699	A/A

For your Power trait with the AGT gene (rs699), having A/A doesn't appear to provide notable effects.

The rs699 allele CÊ is related allele, see the Studies with Positive Results (if available)[41,267,268] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
IGF1	rs35767	A/A

For your Power trait with the IGF1 gene (rs35767), having the A/A genotype doesn't seem to have a notable impact on your power performance.

The rs35767 allele T is related allele, see the Studies with Positive Results (if available)[280,281] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
IL6	rs1800795	C/C

Carrying a C/C genotype in the IL6 gene doesn't notably impact your power performance.

The rs1800795 allele GÊ is related allele, see the Studies with Positive Results (if available)[41,283,284] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
PPARG	rs1801282	C/C

C/C might not greatly influence your power characteristics based on current data.

The rs1801282 allele G is related allele, see the Studies with Positive Results (if available)[279,290,291] and see the Studies with Negative or Controversial Results (if available)[292].

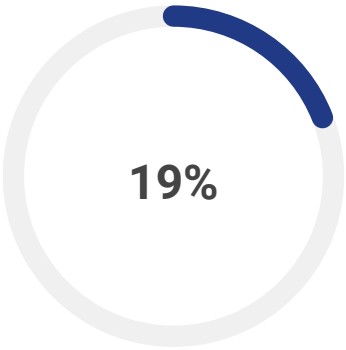
Athleticism

Strength

Description

Performance in strength-based sports is based on multiple factors. However, the factors considered to contribute substantially to strength phenotypes include skeletal muscle hypertrophy (muscle fibre size), hyperplasia, the predominance of fast-twitch muscle fibres, a greater muscle fascicle pennation angle, improved neurological adaptation, high glycolytic capacity, and increased circulatory testosterone [297]. Importantly, evidence exists that strength athletes exhibit vastly different transcriptomic, biochemical, anthropometric, physiological, and biomechanical characteristics compared to endurance athletes and/or controlsÊ

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
IL6	rs1800795	C/C>G/G

Having the G/G genotype could give you a boost in strength-focused activities due to the G allele's association.

The rs1800795 allele G is related allele, see the Studies with Positive Results (if available)[51,283] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
RASGRF1	rs1521624	C/C>A/A

For your Strength trait with the RASGRF1 gene (rs1521624), having the A/A genotype might enhance your potential in strength-based sports.

The rs1521624 allele A is related allele, see the Studies with Positive Results (if available)[35,51] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
RMC1	rs303760	C/C

Your C/C genotype in RMC1 (rs303760) might boost your strength potential in athletic endeavors.

The rs303760 allele C is related allele, see the Studies with Positive Results (if available)[35,51] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
ALDH2	rs671	G/G

Possessing the G/G genotype in the ALDH2 gene may correlate with improved strength performance!

The rs671 allele G is related allele, see the Studies with Positive Results (if available)[66,67,68] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
HIF1A	rs11549465	C/C>C/T

The C/T genotype for HIF1A (rs11549465) might give you a moderate edge in strength performance.

The rs11549465 allele T is related allele, see the Studies with Positive Results (if available)[278,295,318] and see the Studies with Negative or Controversial Results (if available)[51].

Gene	rsID	Your Genotype
DHODH	rs12599952	G/G>A/A

For your Strength trait with the DHODH gene (rs12599952), having the A/A genotype might provide some advantages in strength sports, though it's not a major factor.

The rs12599952 allele A is related allele, see the Studies with Positive Results (if available)[35,51] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
ACE	rs4343	G/G

For your Strength trait with the ACE gene (rs4343), having the G/G genotype could enhance your performance in activities requiring strength.

The rs4343 allele G is related allele, see the Studies with Positive Results (if available)[299,300,301,302,303,304] and see the Studies with Negative or Controversial Results (if available)[305].

Gene	rsID	Your Genotype
ACE	rs4341	G/G

With the G/G genotype for the ACE gene (rs4341), you may gain a beneficial edge in strength-related activities.

The rs4341 allele G is related allele, see the Studies with Positive Results (if available)[299,300,301,302,303,304] and see the Studies with Negative or Controversial Results (if available)[305].

Your Genomics

Gene	rsID	Your Genotype
TFAP2D	rs56068671	G/G>G/T

A G/T genotype hasn't shown remarkable effects on strength performance for the TFAP2D variant.

The rs56068671 allele T is related allele, see the Studies with Positive Results (if available)[35,51] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
PPARG	rs1801282	C/C>C/G

Your C/G genotype may offer you a moderate advantage in strength-focused sports.

The rs1801282 allele G is related allele, see the Studies with Positive Results (if available)[51,290,291] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
ANGPT2	rs890022	G/G>G/A

We haven't found strong effects for the A/G genotype in relation to strength performance here.

The rs890022 allele A is related allele, see the Studies with Positive Results (if available)[51,312] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
SLC39A8	rs13135092	A/A>A/G

For A/G in SLC39A8 (rs13135092), there's no notable effect on your strength capabilities.

The rs13135092 allele A is related allele, see the Studies with Positive Results (if available)[35,51] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
CNTFR	rs41274853	G/G>G/A

For CNTFR, having A/G seems to lack strong evidence of strength impact.

The rs41274853 allele T is related allele, see the Studies with Positive Results (if available)[275,316] and see the Studies with Negative or Controversial Results (if available)[51].

Gene	rsID	Your Genotype
ZNF608	rs4626333	C/C>C/T

For a C/T genotype, there isn't much evidence supporting a connection to strength traits.

The rs4626333 allele G is related allele, see the Studies with Positive Results (if available)[312,317] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
KIF1B	rs11121542	G/G

With your G/G genotype for the KIF1B gene (rs11121542), you might perform well in activities involving strength.

The rs11121542 allele G is related allele, see the Studies with Positive Results (if available)[35,51] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
PPARA	rs4253778	G/G

The G/G genotype for Strength with PPARA doesn't indicate a significant impact on your capabilities.

The rs4253778 allele C is related allele, see the Studies with Positive Results (if available)[220,320,321] and see the Studies with Negative or Controversial Results (if available)[51].

Your Genomics

Gene	rsID	Your Genotype
ITPR1	rs901850	G/G

As a G/G carrier, we don't find a strong relationship with strength for your ITPR1 variant.

The rs901850 allele T is related allele, see the Studies with Positive Results (if available)[35,51] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
R3HDM1	rs6759321	G/G>G/T

G/T in R3HDM1 may give you a moderate edge in strength performance.

The rs6759321 allele T is related allele, see the Studies with Positive Results (if available)[35,51] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
ZKSCAN5	rs3843540	T/T>T/C

A C/T genotype isn't significantly linked with strength variations in the current research on ZKSCAN5.

The rs3843540 allele C is related allele, see the Studies with Positive Results (if available)[35,51] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
PLEKHB1	rs7128512	A/A>A/G

The A/G combination in your Strength trait with PLEKHB1 lacks strong effects on physical prowess.

The rs7128512 allele G is related allele, see the Studies with Positive Results (if available)[51,312] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
IGF1	rs35767	A/A>A/G

The A/G genotype under IGF1 for strength doesn't have a strong correlation with particular traits.

The rs35767 allele T is related allele, see the Studies with Positive Results (if available)[51,280,319] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
ADCY3	rs10203386	T/T>T/A

Having the A/T genotype in ADCY3 isn't linked to noticeable strength enhancement.

The rs10203386 allele T is related allele, see the Studies with Positive Results (if available)[35,51] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
LRPPRC	rs10186876	A/A>A/G

For your Strength trait with the LRPPRC gene (rs10186876), having the A/G genotype doesn't show notable effects.

The rs10186876 allele A is related allele, see the Studies with Positive Results (if available)[34,51,298] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
ABHD17C	rs7165759	G/G

For your Strength trait, currently, we don't see a notable effect of the G/G genotype with your ABHD17C gene.

The rs7165759 allele A is related allele, see the Studies with Positive Results (if available)[35,51] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
ARPP21	rs1513475	T/T

We haven't identified significant effects for strength with the T/T genotype in ARPP21.

The rs1513475 allele C is related allele, see the Studies with Positive Results (if available)[35,51] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
GLIS3	rs34706136	-/-

The rs34706136 allele TG is related allele, see the Studies with Positive Results (if available)[50] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
GALNTL6	rs558129	G/G

Having a G/G genotype in the GALNTL6 gene (rs558129) hasn't been shown to impact your strength notably.

The rs558129 allele T is related allele, see the Studies with Positive Results (if available)[47] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
PHACTR1	rs6905419	C/C>T/T

For your PHACTR1-related Strength trait, T/T doesn't appear to influence your abilities in strength sports.

The rs6905419 allele C is related allele, see the Studies with Positive Results (if available)[35,51,298] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
CKM	rs8111989	T/T>T/C

For CKM, having the C/T genotype doesn't have a noticeable role in strength.

The rs8111989 allele G is related allele, see the Studies with Positive Results (if available)[54,315] and see the Studies with Negative or Controversial Results (if available)[51,274].

Your Genomics

Gene	rsID	Your Genotype
CRTAC1	rs563296	G/G>A/A

The A/A genotype in CRTAC1 (rs563296) does not appear to influence your strength noticeably.

The rs563296 allele G is related allele, see the Studies with Positive Results (if available)[35,51] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
MMS22L	rs9320823	T/T>C/C

A C/C genotype for MMS22L doesn't appear to have notable effects on your strength.

The rs9320823 allele T is related allele, see the Studies with Positive Results (if available)[35,51,298] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
AGT	rs699	A/A>G/G

The G/G genotype in your AGT gene isn't known to influence strength performance notably.

The rs699 allele C is related allele, see the Studies with Positive Results (if available)[310,311] and see the Studies with Negative or Controversial Results (if available)[51].

Gene	rsID	Your Genotype
GBE1	rs9877408	A/A>A/G

With the A/G genotype in the GBE1 gene (rs9877408), there's no strong impact connected to strength performance.

The rs9877408 allele A is related allele, see the Studies with Positive Results (if available)[35,51] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
BCDIN3D	rs12367809	C/C>T/T

We haven't found the T/T genotype to affect strength notably with BCDIN3D.

The rs12367809 allele C is related allele, see the Studies with Positive Results (if available)[35,51] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
MLN	rs12055409	A/A

For your Strength trait with the MLN gene (rs12055409), having the A/A genotype doesn't show notable effects.

The rs12055409 allele G is related allele, see the Studies with Positive Results (if available)[35,317] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
MTHFR	rs1801131	T/T>T/G

G/T in MTHFR generally doesn't correlate with significant strength changes.

The rs1801131 allele C is related allele, see the Studies with Positive Results (if available)[51,286,298] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
ADPGK	rs4776614	C/C>G/G

The G/G genotype in your ADPGK gene doesn't seem to affect your strength performance notably.

The rs4776614 allele C is related allele, see the Studies with Positive Results (if available)[35,51] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
PPARGC1A	rs8192678	C/C

Having C/C for PPARGC1A isn't strongly linked to strength improvements.

The rs8192678 allele A is related allele, see the Studies with Positive Results (if available)[51,305,308] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
ACTG1	rs6565586	T/T

The T/T genotype in ACTG1 reveals no known effects on your strength performance.

The rs6565586 allele A is related allele, see the Studies with Positive Results (if available)[34,51] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
GBF1	rs2273555	G/G

The G/G genotype with the GBF1 gene (rs2273555) doesn't display significant impacts on your strength ability.

The rs2273555 allele A is related allele, see the Studies with Positive Results (if available)[34,317] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
ACTN3	rs1815739	C/C>T/T

For your strength trait with ACTN3 (rs1815739), T/T could be less beneficial for maximum power output.

The rs1815739 allele C is related allele, see the Studies with Positive Results (if available)[302,306,307,308] and see the Studies with Negative or Controversial Results (if available)[51,305,309,310].

Your Genomics

Gene	rsID	Your Genotype
NPIPB6	rs2726036	A/A

With the A/A genotype in NPIPB6, you might enjoy enhanced strength benefits.

The rs2726036 allele A is related allele, see the Studies with Positive Results (if available)[35,51] and see the Studies with Negative or Controversial Results (if available).

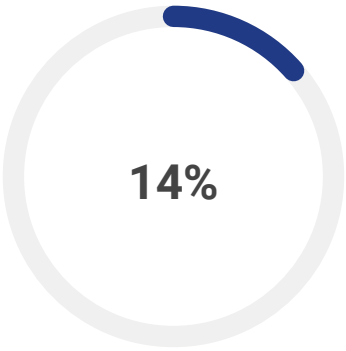
Athleticism

Endurance

Description

An individualÕs endurance capacity is determined by many factors, including their muscle fibre typology, haemoglobin mass, mitochondrial biogenesis, maximal cardiac output, and maximal rate of oxygen consumption (VO2max), among others [118,119,120,121,122,123,124]. Indeed, there is evidence that these intermediate phenotypes have a substantial genetic influence, with literature indicating that genetic factors account for up to 70% of the variability in endurance-related traits [125]. Usually, genetic markers associated with endurance athlete status are determined by comparing allelic frequencies between endurance athletes (e.g., biathletes, road cyclists etc.) and controls.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
PPARA	rs4253778	G/G

Having G/G in PPARA might really help you excel in endurance sports with an advantageous endurance capacity.

The rs4253778 allele G is related allele, see the Studies with Positive Results (if available)[20,220,221,222] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
GSTP1	rs1695	A/A>G/G

Your G/G genotype in the GSTP1 gene is linked to potentially improved endurance, as the G allele shows some beneficial effects.

The rs1695 allele G is related allele, see the Studies with Positive Results (if available)[202,203] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
NFATC4	rs2229309	G/G

Having the G/G genotype could be beneficial for your endurance, potentially aiding your performance.

The rs2229309 allele G is related allele, see the Studies with Positive Results (if available)[144] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
CDKN1A	rs236448	A/A

With an A/A genotype in the CDKN1A gene (rs236448), you might have a genetic edge in endurance tasks.

The rs236448 allele A is related allele, see the Studies with Positive Results (if available)[43] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
VEGFA	rs2010963	C/C

For your endurance trait with the VEGFA gene, having the C/C genotype might help you in endurance-based activities.

The rs2010963 allele C is related allele, see the Studies with Positive Results (if available)[144,234,235] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
GABPB1	rs7181866	A/A

For your Endurance trait with the GABPB1 gene (rs7181866), having the A/A genotype doesn't show a strong impact, so your endurance might be determined more by other factors.

The rs7181866 allele G is related allele, see the Studies with Positive Results (if available)[199,201] and see the Studies with Negative or Controversial Results (if available)[200].

Gene	rsID	Your Genotype
ADRB3	rs4994	A/A

For your Endurance trait with the ADRB3 gene (rs4994), having the A/A genotype doesn't reveal any notable effects on endurance.

The rs4994 allele G is related allele, see the Studies with Positive Results (if available)[170,173] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
TFAM	rs1937	G/G>G/C

The C/G genotype for the TFAM gene doesn't show a significant effect on endurance.

The rs1937 allele C is related allele, see the Studies with Positive Results (if available)[144,231]Ê and see the Studies with Negative or Controversial Results (if available)[216].

Your Genomics

Gene	rsID	Your Genotype
HFE	rs1799945	C/C>C/G

For your Endurance trait, having the C/G genotype in the HFE gene doesn't seem to have a significant influence.

The rs1799945 allele G is related allele, see the Studies with Positive Results (if available)[153,204,205,206,207] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
NFIA-AS2	rs1572312	G/G>G/T

For G/T, there's no notable evidence for an effect on endurance in this genetic context.

The rs1572312 allele C is related allele, see the Studies with Positive Results (if available)[39,46] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
AMPD1	rs17602729	G/G

For your Endurance trait with the AMPD1 gene (rs17602729), G/G doesn't have a notable effect.

The rs17602729 allele C is related allele, see the Studies with Positive Results (if available)[19,153,181,182,183] and see the Studies with Negative or Controversial Results (if available)[184].

Gene	rsID	Your Genotype
PPARGC1B	rs7732671	G/G

The G/G genotype in PPARGC1B lacks robust data linking it to endurance differences.

The rs7732671 allele C is related allele, see the Studies with Positive Results (if available)[144,226]Ê and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
TRPM2	rs1785440	A/A>A/G

No substantial endurance-related effects noted with the A/G genotype in TRPM2.

The rs1785440 allele G is related allele, see the Studies with Positive Results (if available)[45] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
PRDM1	rs10499043	C/C>C/T

For your C/T in PRDM1, no standout effects on endurance have been observed.

The rs10499043 allele T is related allele, see the Studies with Positive Results (if available)[228,229] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
HIF1A	rs11549465	C/C

For the HIF1A gene, having the C/C genotype might contribute moderately to your endurance levels.

The rs11549465 allele C is related allele, see the Studies with Positive Results (if available)[208,209] and see the Studies with Negative or Controversial Results (if available)[144,210].

Gene	rsID	Your Genotype
UCP3	rs1800849	G/G>G/A

The A/G genotype doesn't indicate any notable impact on your Endurance related to the UCP3 gene.

The rs1800849 allele T is related allele, see the Studies with Positive Results (if available)[130,144] and see the Studies with Negative or Controversial Results (if available)[233].

Your Genomics

Gene	rsID	Your Genotype
TSHR	rs7144481	C/C>C/T

With a C/T genotype, we don't see distinct impacts on your Endurance performance related to the TSHR gene.

The rs7144481 allele C is related allele, see the Studies with Positive Results (if available)[39] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
VEGFR2	rs1870377	T/T

For endurance, the T/T genotype in VEGFR2 doesn't appear to impact your potential significantly.

The rs1870377 allele A is related allele, see the Studies with Positive Results (if available)[236,237] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
COL5A1	rs12722	C/C

The C/C genotype does not appear to significantly affect your endurance capabilities.

The rs12722 allele T is related allele, see the Studies with Positive Results (if available)[194,195] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
AQP1	rs1049305	G/G

No meaningful connection to endurance has been found for the G/G genotype in the AQP1 gene.

The rs1049305 allele C is related allele, see the Studies with Positive Results (if available)[178,179,180] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
GALNTL6	rs558129	G/G

With a G/G genotype, there's no significant effect on endurance ascribed to the GALNTL6 gene in available studies.

The rs558129 allele C is related allele, see the Studies with Positive Results (if available)[40] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
FTO	rs9939609	T/T

Having a T/T genotype does not appear to strongly influence endurance in any notable way.

The rs9939609 allele T is related allele, see the Studies with Positive Results (if available)[196,197] and see the Studies with Negative or Controversial Results (if available)[198].

Gene	rsID	Your Genotype
CKM	rs8111989	T/T

For T/T at CKM, we don't find any major impact on endurance traits.

The rs8111989 allele A is related allele, see the Studies with Positive Results (if available)[190,191,192] and see the Studies with Negative or Controversial Results (if available)[133,193].

Gene	rsID	Your Genotype
MYBPC3	rs1052373	C/C>C/T

C/T genotype for MYBPC3 is not linked with significant changes in Endurance.

The rs1052373 allele G is related allele, see the Studies with Positive Results (if available)[42] and see the Studies with Negative or Controversial Results (if available).

Gene	rsID	Your Genotype
RBFOX1	rs7191721	A/A>A/G

With A/G in RBFOX1, no clear evidence points to an effect on your endurance.

The rs7191721 allele G is related allele, see the Studies with Positive Results (if available)[39] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
SPEG	rs7564856	G/G>A/A

For your Endurance trait with the SPEG gene (rs7564856), the A/A genotype doesn't indicate strong effects on your endurance.

The rs7564856 allele G is related allele, see the Studies with Positive Results (if available)[230] and see the Studies with Negative or Controversial Results (if available).

UCP2	rs660339	G/G

Your G/G genotype does not strongly affect your Endurance trait for the UCP2 gene.

The rs660339 allele T is related allele, see the Studies with Positive Results (if available)[130,144,232]Ê and see the Studies with Negative or Controversial Results (if available).

GABPB1	rs12594956	C/C>C/A

Your A/C genotype in the GABPB1 gene doesn't show significant effects on endurance.

The rs12594956 allele A is related allele, see the Studies with Positive Results (if available)[199,200] and see the Studies with Negative or Controversial Results (if available).

SIRT1	rs41299232	C/C>C/G

There is no significant endurance effect tied to the C/G genotype in SIRT1.

The rs41299232 allele G is related allele, see the Studies with Positive Results (if available)[45] and see the Studies with Negative or Controversial Results (if available).

Your Genomics

Gene	rsID	Your Genotype
PPARGC1A	rs8192678	C/C

The C/C genotype in PPARGC1A suggests standard endurance potential without strong genetic influence.

The rs8192678 allele G is related allele, see the Studies with Positive Results (if available)[18,20,170,223] and see the Studies with Negative or Controversial Results (if available)[216,224,225].

Gene	rsID	Your Genotype
ADRB2	rs1042713	G/G

For your Endurance trait with the ADRB2 gene (rs1042713), having the G/G genotype doesn't show notable effects.

The rs1042713 allele A is related allele, see the Studies with Positive Results (if available)[160,171,172] and see the Studies with Negative or Controversial Results (if available)[173,174].

Gene	rsID	Your Genotype
ACE	rs4343	G/G

Having G/G in ACE hasn't shown notable impact on endurance traits.

The rs4343 allele A is related allele, see the Studies with Positive Results (if available)[14,15,16,128,129,130,131,132,133,134,135,136,137,138,139,140,141] and see the Studies with Negative or Controversial Results (if available) [133,142,143,144,145,146,147,148,149,150,151,152,153].

Gene	rsID	Your Genotype
ACTN3	rs1815739	C/C

For your Endurance trait with the ACTN3 gene (rs1815739), having the C/C genotype doesn't show notable effects.

The rs1815739 allele T is related allele, see the Studies with Positive Results (if available)[17,154,155,156] and see the Studies with Negative or Controversial Results (if available) [152,157,158,159,160,161,162,163,164,165,166,167,168,169,170].

Your Genomics

Gene	rsID	Your Genotype
AGTR2	rs11091046	A/A

There's no strong indication for the A/A genotype in affecting your endurance traits based on the AGTR2 gene (rs11091046).

The rs11091046 allele C is related allele, see the Studies with Positive Results (if available)[176] and see the Studies with Negative or Controversial Results (if available)[177].

Gene	rsID	Your Genotype
NOS3	rs2070744	C/C

C/C doesn't seem to strongly affect endurance, according to the NOS3 gene data.

The rs2070744 allele T is related allele, see the Studies with Positive Results (if available)[153,217,218] and see the Studies with Negative or Controversial Results (if available)[219].

Gene	rsID	Your Genotype
ADRB2	rs1042714	G/G

For your Endurance trait with the ADRB2 gene (rs1042714), having the G/G genotype doesn't show notable effects.

The rs1042714 allele C is related allele, see the Studies with Positive Results (if available)[153,175] and see the Studies with Negative or Controversial Results (if available)[173,174].

Gene	rsID	Your Genotype
ACE	rs4341	G/G

Possessing the G/G genotype in ACE could mean a reduced predisposition towards endurance traits.

The rs4341 allele C is related allele, see the Studies with Positive Results (if available)[14,15,16,128,129,130,131,132,133,134,135,136,137,138,139,140,141] and see the Studies with Negative or Controversial Results (if available) [133,142,143,144,145,146,147,148,149,150,151,152,153].

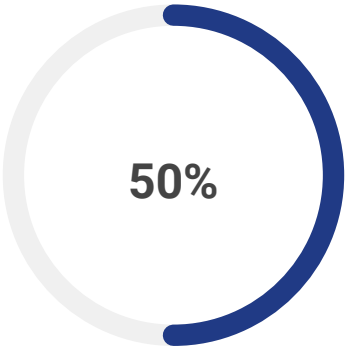
Athleticism

Muscular Endurance

Description

Muscular endurance refers to the ability of muscles to exert strength over an extended period at a submaximal (less than the maximum) capacity. Sports that demand endurance often involve activities such as cycling, swimming, long-distance running, triathlons, and cross-country skiing.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
PPARA	rs4253778	G/G

Your G/G genotype in the PPARA gene is an excellent match for endurance athletes, potentially enhancing your long-distance capabilities.

The rs4253778 GG genotype and G allele has been associated with increased performance in endurance sports, as reported in a study (PMID: 26985127)*, compared to CC genotype.Note:Further studies recruiting athletes that represented different sports disciplines have revealed that it was more likely to find C allele carriers in a group of power-oriented athletes who were involved in short and very intense anaerobic effort (Ahmetov et al., 2006), while GG homozygotes were more prevalent among endurance-type athletes performing predominantly prolonged aerobic exertion (Eynon et al., 2010; Maciejewska et al., 2011). Gineviciene et al. (2010) confirmed the results of previous studies in Lithuanian male athletes showing that those with allele PPARA rs4253778 C had significantly higher muscle mass and better results in explosive strength of lower extremities than GG homozygotes (Ginevi_ien_ et al., 2010). Those results were in part explained by the analysis of muscle fiber composition of young men. It was shown that GG homozygotes had a higher percentage of slow-twitch fibers compared to CC homozygotes and the C allele was associated with the propensity to skeletal muscle hypertrophy (Ahmetov et al., 2006).

ADRB2	rs1042713	G/G

G/G in the ADRB2 gene typically aligns with average endurance capacities. Explore diverse activities to find your strength zone!

The rs1042713 AG genotype may be associated with increased performance in endurance sports, while GG is a major allele with normal performance according to studies (PMID(s): 17998016, 20044476). rs1042713, also known as Arg16, G16R, and 16Arg>Gly, is a SNP in the adrenergic, beta-2-, surface receptor ADRB2 gene. The rs1042713(G) allele encodes the G/glycine form that is the more common one in most populations, while rs1042713(A) encodes the R/arginine residue at this position of the ADRB2 protein.[PMID 20044476]. The presence of the rs1042713 A allele (Arginine) has been associated with increased power and speed, which are essential components of muscular endurance.

Athleticism

Ligament Injury Susceptibility

Description

A ligament is a band of tissue that connects bone to bone. Ligament injuries, often involving the knee, are common. The knee has several ligaments, each serving a specific function. The Medial Collateral Ligament (MCL) runs along the inside of the knee, preventing it from bending inward, while the Lateral Collateral Ligament (LCL) runs along the outside, preventing excessive outward bending. The Anterior Cruciate Ligament (ACL), located in the middle, helps prevent the shin bone from sliding forward. The Posterior Cruciate Ligament (PCL) complements the ACL by preventing the shin bone from sliding backward under the thigh bone. Injuries to these ligaments can range from stretching to partial or complete tears, leading to symptoms such as pain, swelling, and a sensation of the knee ""giving out"" when pressure is applied.

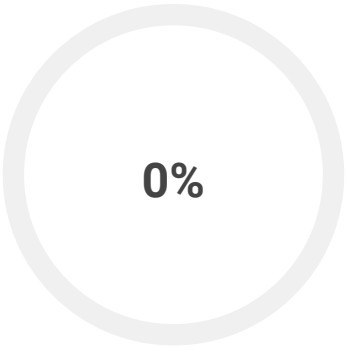
Your Genomics

Gene	rsID	Your Genotype
COL1A1	rs1800012	C/C>C/A

The A/C genotype doesn't have a strong link to ligament injury susceptibility.

Research involving individuals of European ancestry suggests that the rs1800012 GG genotype is associated with an average likelihood of tendon and/or ligament injuries, and rs1800012 GT/TT polymorphism may be associated with the reduced risk of sports-related tendon or ligament injuries(PMID: 28206959).rs1800012 represents a common (allele frequency ~20%) polymorphism consisting of a G-to-T substitution at the first base of a consensus site for the transcription factor Sp1 in the first intron of the COL1A1 gene. COL1A1 rs1800012 polymorphism (G-to-T) may be associated with the reduced risk of sports-related tendon or ligament injuries, especially in ACL injuries, and that rare TT may played as a protective role.The rs1800012(T) allele has been extensively studied, with most observations supporting at least some association with decreased bone mineral density, and increased risk for osteoporosis, fractures, and intervertebral disc disease.

Impactful Genes



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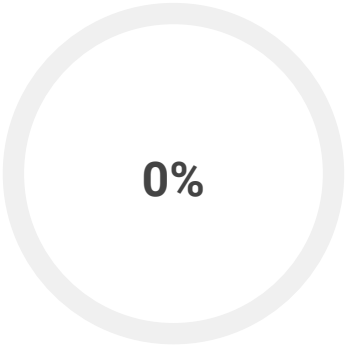
Athleticism

Exercise Response

Description

The body's response to exercise involves coordination among various systems, including musculoskeletal, cardiovascular, respiratory, endocrine, immune, and others. Genetic variants have the potential to influence this exercise response. For instance, certain variants may be associated with a lower VO2 max, a higher body fat percentage, or a more pronounced decrease in blood pressure following exercise.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
PPARD	rs2267668	G/G>A/A

For your Exercise Response with the PPARD gene (rs2267668), having the A/A genotype might provide you with average exercise benefits.

The rs2267668 AA genotype has been associated with average exercise benefits in studies (PMID(s): 17327385, 18252792). The minor allele 'G' is independently linked to a less increase in individual anaerobic threshold (P = 0.002),and also decreased aerobic physical fitness. This allele (G) is also significantly associated with dynamic balance performance (P = 0.015, Pcorrected < 0.05). Moreover, young carriers of the 'G' allele exhibit low skeletal muscle mitochondrial function (P = 0.02). Furthermore, the GA genotype/polymorphism of rs2267668 is connected to polycystic ovary syndrome (PCOS) (OR = 1.24, P = 0.008).

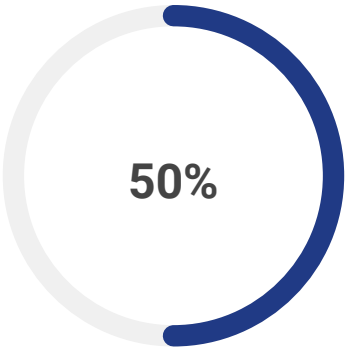
Athleticism

Muscle Strength

Description

Muscle strength is defined as the maximum amount of force that a group of muscles (such as biceps, triceps, quadriceps, etc.) can apply to an object simultaneously. The growth and development of muscles are influenced by specific genetic variants, leading to variations in muscle strength among individuals. Additionally, environmental factors, including physical activity and the type of exercise training, play a significant role in determining muscle strength.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
ACVR1B	rs2854464	A/A

With the A/A genotype in the ACVR1B gene for Muscle Strength, you might experience increased knee muscle strength and performance in sprint/power activities.

The ACVR1B A allele (rs rs2854464) has previously been associated with increased muscle-strength in non-athletic cohort. Thus, the AA genotype is associated with increased knee muscle strength, specifically higher dynamic knee flexion and extension strength (PMID: 21063444). In this study,a relatively large cohort of athletes from Europe and South America have shown that the ACVR1B rs2854464 A allele is associated with sprint/power performance in Caucasians but not in Brazilian athletes. The C allele might represents a normal muscle strength.

Gene	rsID	Your Genotype
CNTF	rs1800169	G/G

If you have the G/G genotype, expect typical muscle strength, with studies highlighting its role, especially in women.

The rs1800169 GG genotype has been associated with typical muscle strength and grip strength in women, as reported in studies (PMID(s): 16696750, 17539378, 19628720).CNTF 1357 G _ A (rs1800169), which is GA or AA genotype is associated with muscle strength/power phenotypes in women. The associations in men still need furture investigation.

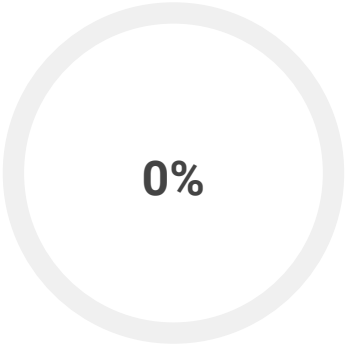
Athleticism

Muscle Volume

Description

Muscle volume refers to the overall size of one's muscles, particularly skeletal muscles responsible for movement. These muscles are composed of bundles of muscle fibers within individual muscle cells. The augmentation of muscle volume is typically attributed to the enlargement of muscle cell size rather than an increase in the number of cells. Environmental factors, such as exercise, can impact muscle volume, and genetic factors play a role in determining both one's inherent muscle volume and how effectively muscles respond to training.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
IL15RA	rs2228059	T/T>T/G

We don't have strong data linking the G/T genotype to changes in Muscle Volume here.

The rs2228059 CC genotype has been associated with typical muscle volume and typical baseline cortical bone volume in males, according to a study (PMID: 18514540).The A-allele (CA,AA genotype) in rs2228059 was also reported associated with larger muscle volume but lower muscle quality in men (Pistilli et al., 2008).

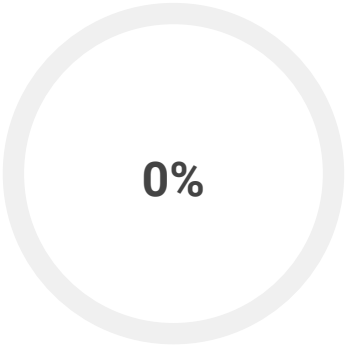
Athleticism

Lumbar Disc Disease Susceptibility

Description

Lumbar disc disease is a term commonly used to encompass various causes of back pain or sciatica. While muscle strain or ligament sprain can contribute to low back pain (LBP), the intervertebral disc is often implicated more frequently as a source of discomfort. However, it's essential to note that no single lumbar disc injury has been definitively identified as the sole cause of pain associated with lumbar disc disease.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
CILP	rs2073711	A/A

Having the A/A genotype does not show significant links to lumbar disc disease susceptibility.

In summary, the rs2073711 CC genotype has been associated with a typical risk of intervertebral disc degeneration (IVD), while CT and TT are representing lower risk of Lumbar Disk Disease.The rs2073711 SNP (1184T_C) is located in exon 8 of the cartilage intermediate layer protein gene (CILP). However, CILP gene is primarily known to be expressed abundantly in intervertebral discs, and was reported to have increased expression when degeneration occurs [PMID 15864306]. For the rs2073711 SNP, the ancestral allele is T and the disease associated risk allele is C. A study of Asian patients with lumbar disc disease (LDD) implicates each copy of a (C) allele of SNP rs2073711 (as oriented with respect to dbSNP) as increasing risk about 1.6 fold. [PMID 15864306].

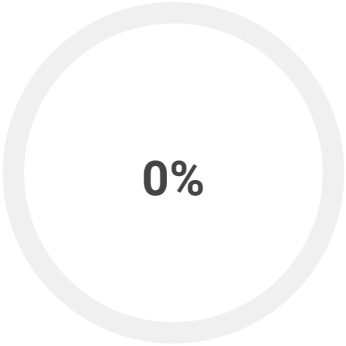
Athleticism

Achilles Tendinopathy

Description

Achilles tendinopathy is characterized by the degeneration of collagen in the tendons connecting calf muscles to heel bones, leading to pain, swelling, and stiffness during and after activities like walking. More strenuous pursuits, such as running and jumping, can exacerbate these symptoms. The condition is often attributed to persistent overuse of the tendon without adequate rest, making it particularly prevalent among athletes, including runners.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
MMP3	rs679620	T/T>C/C

For your Achilles Tendinopathy trait, C/C in the MMP3 gene doesn't indicate a significant association.

The rs679620 AG genotype is associated with the typical likelihood of Achilles tendinopathy, as indicated by various studies (PMID(s): 19042922, 27222816, 28358823), while individuals with the GG genotype face a heightened risk for Achilles tendinopathy. In cases of Achilles tendon rupture (RUP), the MMP3 rs679620 GG genotype is notably more prevalent (44.0%) compared to controls (19.1%), where the AG genotype is more common (54.2%) (PMID: 19042922). Another study, albeit relatively small (~100 patients), found associations between Achilles tendinopathy risk and single nucleotide polymorphisms (SNPs) in the MMP3 gene. For rs679620, they found individuals with the (G;G) genotype exhibited an odds ratio of 2.5 (CI: 1.2 - 4.90, p = 0.010). Moreover, there's evidence of an interaction between rs679620(G) and COL5A1 rs12722(T) alleles, contributing to an increased risk for Achilles tendinopathy with a p-value of 0.006.

Athleticism

Muscular Power

Description

Muscular power is the capacity to generate a substantial amount of force as rapidly as possible, often measured at the muscles' maximum capacity. Sports that emphasize high muscular power include activities like sprinting, jumping sports, and powerlifting.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
ACTN3	rs1815739	C/C

With C/C in the ACTN3 gene, you're likely to excel in sports requiring maximum power and speed. Sprint away towards your goals!

The rs1815739 has been associated with muscle power sport performance, according to studies (PMID(s): 26840443, 12879365, 23358679, 21542061)*.This SNP, in the ACTN3 gene, encodes a premature stop codon in a muscle protein called alpha-actinin-3. CC Genotype (Also known as RR): This version of the gene allows for full production of a protein that helps with fast and powerful muscle contractions. People with this genotype tend to excel in sports that require a burst of speed and strength, like sprinting or weightlifting.CT Genotype (Also known as RX): This genotype results in a mix of muscle types, giving a balance between power and endurance. Athletes with CT may be good at sports that require both speed and stamina, but they might not be the fastest sprinters or the most enduring long-distance runners.TT Genotype (Also known as XX): This genotype leads to a lack of the protein mentioned earlier, which can make it harder for muscles to contract quickly and powerfully. While some research suggests that individuals with TT might not be as successful in power sports, there's also evidence that they could have an advantage in endurance sports, where sustained effort is more important than quick bursts of power.

Name:
Date of Birth:
Gender: female
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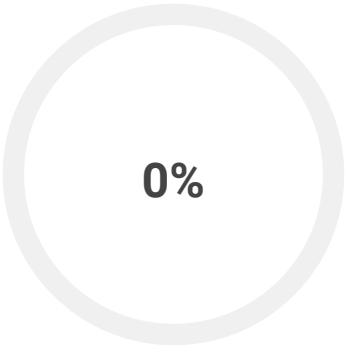
Nutrition and Diet

Vitamin C

Description

Vitamin C (L-ascorbic acid) is a compound utilized in various biological processes, including the synthesis of collagen (a skin component), immune system function, and acting as an antioxidant. Antioxidants like vitamin C help eliminate free radicals and reactive oxygen species that could harm cells. Natural sources of vitamin C include citrus fruits, vegetables, and fortified foods, and it is also available in vitamin supplements. Severe vitamin C deficiency may lead to scurvy, characterized by symptoms such as fatigue, anemia, skin issues, and immune system deficiencies. Specific genetic variations have been identified as influencing the levels of circulating vitamin C in the bloodstream.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
SLC23A1	rs33972313	C/C

With C/C, Vitamin C levels aren't clearly impacted in any direction, so keep munching on those veggies!

The rs33972313 GG genotype is associated with typical or higher serum levels of vitamin C (PMID(s): 20519558, 23737080,25948669).The GA and AA genptype is more likely to have lower plasma vitamin C levels.

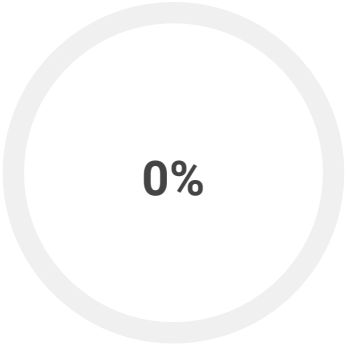
Nutrition and Diet

Vitamin E

Description

Vitamin E is an antioxidant that contributes to immune system function and metabolic processes. It can be obtained from various sources, including vegetable oils, nuts, seeds, leafy greens like spinach, and fortified foods or drinks. In most cases, people receive sufficient vitamin E from their diet, and supplements are usually unnecessary. However, individuals with specific conditions like cystic fibrosis, liver diseases, or Crohn's disease might require additional vitamin E.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
Intergenic	rs12272004	C/C>C/A

A/C doesn't have a specific connection to Vitamin E, so maintain a balanced diet as usual.

The rs12272004 CC genotype is associated with typical vitamin E levels (PMID(s): 19185284, 21729881).The A allele of rs12272004 was associated with 0.07 SD higher _-tocopherol (a type of vitamin E), with a p value of 7.8 _ 10_10.

Name:
Date of Birth:
Gender: female
Report ID: SA
Subject ID: 30005
Date: 2026-10-30

Nutrition and Diet

Polyunsaturated Fats

Description

This type of fat, known as polyunsaturated fatty acids (PUFAs), remains in a liquid state at room temperature. Two main categories of PUFAs are omega-6 and omega-3. Omega-6 fatty acids are present in liquid vegetable oils like corn oil, safflower oil, and soybean oil. On the other hand, omega-3 fatty acids are derived from plant sources such as canola oil, flaxseed, soybean oil, and walnuts, as well as from seafood, including fatty fish (e.g., salmon, tuna, trout) and shellfish (e.g., crab, mussels, oysters). Specific omega-3 fatty acids like EPA and DHA are abundant in seafood, while another type, ALA (alpha-linolenic acid), is found in various foods, including some vegetable oils like canola and soy. Omega-3s are also available in dietary supplements, with fish oil supplements containing EPA and DHA, and flaxseed oil supplements containing ALA. While there is moderate evidence supporting the health benefits of consuming seafood, the health advantages of omega-3 dietary supplements remain unclear (Source: National Center for Complementary and Integrative Health; National Institutes of Health; U.S. Department of Health and Human Services). For additional information, you can visit https://ods.od.nih.gov/factsheets/Omega3FattyAcids-HealthProfessional/.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
FADS1	rs174547	T/T>T/C

As a C/T carrier, you might notice lower levels of certain polyunsaturated fatty acids and modest influences on fat distribution.

The genomic variant c.1248+52 A to G , or T to C, also known as rs174547. Studies involving individuals of European descent indicate that those with the rs174547 homozygous mutated GG/CC genotype exhibit lower levels of polyunsaturated fatty acid(PMID: 24823311) and also for CT genotype as the risk allele carrier.The "C" allele was associated with lower LDL (low density lipoprotein) concentration (P = 0.03) [PMID: 22451038].This rs174547 C minor allele was associated with a higher proportion of linoleic acid, lower arachidonic acid and docosahexaenoic acid, as well as lower delta-6-desaturase and delta-5-desaturase activity. Female C allele carriers had lower android fat percentages and lower levels of low-density lipoprotein-cholesterol, while male C allele carriers had lower gynoid fat percentages and higher triglyceride after adjusting for age, income, BMI, behavioral risk factors, and regional fat percentages(PMID: 28359317).

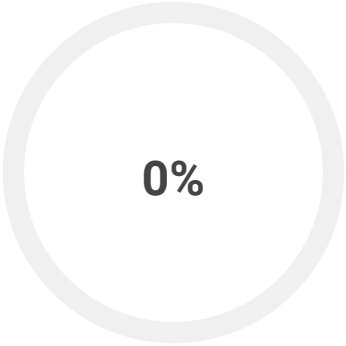
Nutrition and Diet

Vitamin D

Description

Vitamin D plays multiple roles in the body and is technically classified as a hormone rather than a vitamin. It facilitates the absorption of calcium, a crucial component for bone formation. Inadequate levels of vitamin D can contribute to bone disorders like osteoporosis or rickets. Additionally, vitamin D is involved in the proper functioning of the nervous, muscular, and immune systems.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
GC	rs2282679	T/T

T/T doesn't show a particular influence on Vitamin D levels, so your regular routine should be just fine.

The rs2282679 AA genotype is linked to typical vitamin D levels (PMID(s): 20541252, 23924835, 23191998, 25174667).rs2282679, located in the group-specific component (vitamin D binding protein) GC gene on chromosome 4p12, has been linked by several studies to vitamin D serum concentrations.In both studies, the allele associated with lower vitamin D, and thus the potential for vitamin D insufficiency, is rs2282679(C). Carriers of two such alleles have lower vitamin D than carriers of one allele, who in turn on average have lower vitamin D levels than rs2282679(AA) individuals.In comparision, CC genotype represents lower vitamin D levels.

Nutrition and Diet

Vitamin B6

Description

Vitamin B6 is composed of six compounds that play crucial roles in various metabolic processes in the body, including the production of neurotransmitters used for nerve communication and other vital biological functions. It is naturally present in meats, animal organs (such as beef liver), starchy vegetables, and non-citrus fruits. Additionally, vitamin B6 can be found in lower amounts in fortified plant-based foods, grains, and vitamin supplements. Inadequate levels of vitamin B6 may lead to anemia, skin issues, and a weakened immune system. Specific gene variants have been identified as influencers of the circulating levels of vitamin B6 in the bloodstream.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
NBPF3	rs4654748	C/C>C/T

As a C/T carrier, you might experience modest reductions in vitamin B6 levels.

The rs4654748 CT and CC genotype is linked to reduced serum levels of vitamin B6 (PMID: 19303062), especially CC geotype on a biger extent.TT genptype is more likely to have normal levels of serum Vitamin B6.

Name:
Date of Birth:
Gender: female
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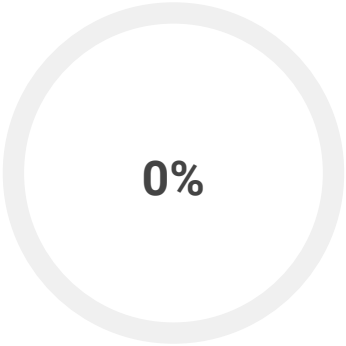
Nutrition and Diet

Vitamin B12

Description

Vitamin B12 (cobalamin) is a compound crucial for various metabolic processes in the body. It naturally occurs in animal products like meat, organs, and dairy. Additionally, lower levels of vitamin B12 are present in fortified plant-based foods and grains, as well as in vitamin supplements. Inadequate levels of vitamin B12 can lead to conditions such as anemia, fatigue, constipation, and peripheral neuropathy, affecting nerve sensation in the hands and feet. Specific genetic variants have been identified to influence the circulating levels of vitamin B12 in the bloodstream.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
FUT2	rs602662	G/G

The G/G genotype suggests lower levels of vitamin B12, which might affect your energy levels.

The rs602662 AG genotype is linked to reduced vitamin B12 levels (PMID(s): 18776911, 27995393)*.In comparison, AA represents Higher vitamin B12 levels, GG represents Lower vitamin B12 levels.

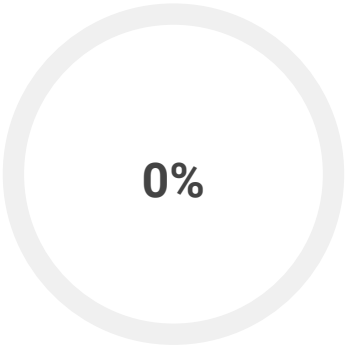
Wellness

Alcohol Flush

Description

Alcohol sensitivity, also recognized as alcohol flush reaction or alcohol intolerance, is associated with the body's capacity to metabolize alcohol. This response commonly manifests as facial flushing (reddening of the face), heart palpitations (rapid, irregular, or fluttering heartbeat), lightheadedness, and nausea. These symptoms arise mainly from the accumulation of acetaldehyde, a byproduct formed when the enzyme aldehyde dehydrogenase fails to convert ethanol (alcohol) into acetate at an adequate pace. There are identifiable genetic variations that play a role in influencing alcohol sensitivity.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
ALDH2	rs671	G/G

With the G/G genotype, you likely have a typical reaction to alcohol without the flush.

AA: Commonly referred to as ""Asian Flushers,"" individuals with this genotype have an increased risk of esophageal cancer, particularly those of East Asian ancestry. Disulfiram, a medication used to treat alcoholism, is usually not effective for individuals with this genotype.AG: Individuals with this genotype also experience the Asian Flush phenomenon and may have worse hangovers. They share an increased risk of esophageal cancer, especially among those of East Asian ancestry. Disulfiram is also likely ineffective for treating alcoholism in individuals with this genotype.GG: Individuals with this genotype do not typically experience the alcohol flush reaction. They have normal hangovers and are at average risk for alcoholism and esophageal cancer. Disulfiram is considered effective for treating alcoholism in individuals with this genotype.

Name:
Date of Birth:
Gender: female
Report ID: SA
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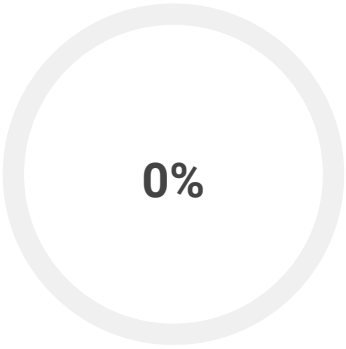
Wellness

Caffeine Metabolism

Description

Caffeine, a bitter substance, naturally occurs in over 60 plants, including coffee beans, tea leaves, kola nuts (used to flavor colas), and cacao pods (utilized in chocolate production). Synthetic caffeine is also artificially created and added to certain medicines, foods, and beverages. Examples include pain relievers, cold medicines, over-the-counter alertness medications, energy drinks, as well as energy-boosting gums and snacks.The primary sources of caffeine consumption are beverages, with varying caffeine content in different drinks. Generally, the caffeine amounts are as follows: 8-ounce cup of coffee = 95-200 mg, 12-ounce can of cola = 35-45 mg, 8-ounce energy drink = 70-100 mg, 8-ounce cup of tea = 14-60 mg. Caffeine affects the body's metabolism in various ways; it stimulates the central nervous system, providing a feeling of wakefulness and energy boost. Caffeine acts as a diuretic, promoting the elimination of excess salt and water through increased urination. It also enhances stomach acid release, potentially causing upset stomach or heartburn. Moreover, caffeine may impact calcium absorption and elevate blood pressure.Upon consumption, caffeine reaches its peak level in the bloodstream within one hour, with effects lasting for four to six hours. For more detailed information, you can visit https://medlineplus.gov/caffeine.html#summary.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
Near CYP1A2	rs2472297	C/C

For your Caffeine Metabolism trait with the Near CYP1A2 gene (rs2472297), having the C/C genotype is linked to average coffee consumption.

The rs2472297 CC genotype has been associated with average daily coffee consumption, as indicated by studies (PMID(s): 21357676, 21876539, 25288136).A meta-analysis of four GWAS studies of coffee consumption among a total of ~8,000 coffee drinkers of European ancestry found that the? s2472297(T) was strongly associated with increased consumption (p = 5.4 x 10e-14). The estimated effect was an increase of 0.2 cups a day per allele for both this SNP and one other (rs6968865).[PMID 21357676]. CYP1A2 contains instructions for an enzyme that breaks down caffeine.CT-Associated with (slightly) increased coffee consumption.TT-Associated with (slightly) increased coffee consumption.

Near AHR	rs4410790	T/T>C/C

For your Caffeine Metabolism trait with the Near AHR gene (rs4410790), having the C/C genotype suggests you might consume less caffeine.

The C allele is linked to lower levels of caffeine intake. Individuals with the TT genotype tend to consume about one-third more coffee per day compared to those with the CT or CC genotypes. A genome-wide meta-analysis has pinpointed regions on chromosomes 7p21 (AHR) and 15q24 (CYP1A2) as key determinants of habitual caffeine consumption. The AHR protein enhances the production of enzymes CYP1A1 and CYP1A2, responsible for metabolizing caffeine. This finding is supported by research indicating associations between genetic variations in the AHR and CYP1A1-CYP1A2 gene regions and habitual caffeine consumption.

CYP1A2	rs762551	C/C

C/C suggests you might metabolize caffeine a bit more slowly, so consider moderating your intake.

A meta-analysis conducted by Denden et al. showed that the rs762551 AA genotype is associated with higher coffee intake and faster caffeine clearance than CC and CA genotype. CA genotype is associated with a slightly faster rate of caffeine metabolism than CC genptype (PMID(s): 29282363, 20390257,27173183).

Name:
Date of Birth:
Gender: female
Report ID: SA
Subject ID: 30005
Date: 2026-10-30

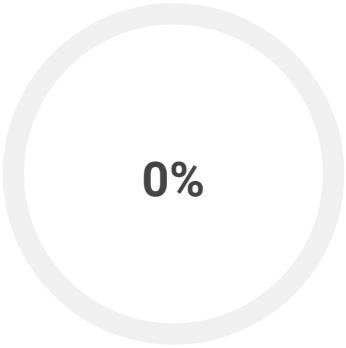
Wellness

Lactose Intolerance

Description

Lactose intolerance refers to an impaired ability to digest lactose, a sugar present in milk and other dairy products. In infancy, lactose is typically broken down by an enzyme called lactase, produced by cells in the lining of the small intestine. However, the production of this enzyme ceases during or after weaning, and most adult mammals, including humans, become unable to efficiently digest lactose. Primary lactase deficiency, also known as lactase nonpersistence, is the most prevalent type of lactase deficiency.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
MCM6	rs4988235	G/G

For lactose intolerance, with the MCM6 gene (rs4988235), your G/G genotype doesn't show notable effects.

The rs4988235 CC genotype is associated with lactose intolerance in adults.Individuals with the CC genotype at the rs4988235 SNP are typically unable to continue producing lactase into adulthood, leading to lactose intolerance. This intolerance manifests as gastrointestinal symptoms such as bloating, diarrhea, and abdominal pain following the consumption of dairy products due to the undigested lactose fermenting in the gut.On the other hand, individuals with the CT or TT genotypes are more likely to continue producing lactase throughout their lives, allowing them to digest milk and other dairy products without adverse effects. The TT genotype is associated with a higher likelihood of being able to digest milk in adulthood compared to the CT genotype.

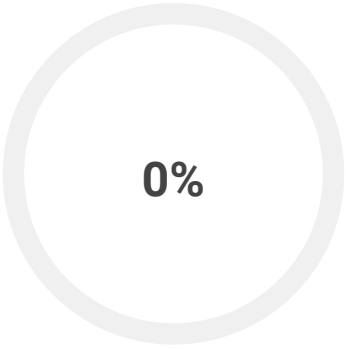
Wellness

Deep Sleep

Description

Deep sleep, also called slow-wave sleep,?ccurs in the third stage of?on-rapid eye movement?NREM) sleep. During deep sleep, electrical activity in the brain appears in long, slow waves called delta waves. These waves have a frequency of 0.5 to 2 Hertz.Research studies have identified a variation in the ADA gene, revealing its influence on deep sleep. The ADA gene, responsible for producing the adenosine deaminase enzyme, plays a crucial role in breaking down adenosine? molecule central to the regulation of various physiological processes. Alterations in the ADA gene correlate with a diminished conversion of adenosine, potentially resulting in an accumulation of adenosine and heightened fatigue. This insight underscores the significance of genetic factors in shaping the intricacies of deep sleep and its impact on overall physiological well-being.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
ADA	rs73598374	C/C

For your Deep Sleep trait with the ADA gene (rs73598374), having a C/C genotype doesn't show notable effects.

The rs73598374 polymorphism with T allele leading to decreased adenosine deaminase (ADA) activity due to an amino acid substitution, has been extensively studied regarding its impact on sleep patterns and cognitive functions in humans. ADA enzyme is vital in the metabolic pathway of adenosine, a key regulator of sleep and arousal. A study (PMID: 21734253) highlights that this functional ADA polymorphism, particularly the T allele (TT genotype) of rs73598374, results in reduced ADA activity due to an amino acid substitution, and is associated with deeper sleep and decreased vigilant attention. Consequently, individuals carrying the T allele may experience more profound sleep phases and might find it challenging to sustain alertness during specific tasks.

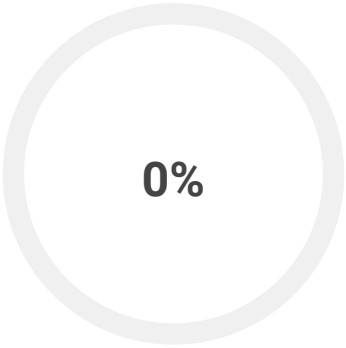
Wellness

Saturated Fat and Weight

Description

Saturated fat is a type of?ietary fat. It is one of the unhealthy fats, along with?rans fat. These fats are most often solid at room temperature. Foods like butter, palm and coconut oils, cheese, and red meat have high amounts of saturated fat.Weight gain. Many high-fat foods such as pizza, baked goods, and fried foods have a lot of saturated fat. Eating too much fat can add extra calories to your diet and cause you to gain weight. All fats contain 9 calories per gram of fat. This is more than twice the amount found in carbohydrates and protein.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
Near APOA2	rs5082	G/G>G/A

The A/G genotype near APOA2 doesn't show a significant connection to weight changes with saturated fat consumption.

rs5082 is a SNP in the apolipoprotein APOA2 gene, and may influence obesity and heart disease risk.Individuals homozygous for the -265T>C polymorphism in rs5082, i.e. individuals with the rs5082(CC) genotype of the Apolipoprotein A-II gene (APOA2) promoter, are associated with increased Body Mass Index and food intake in the Genetics of Lipid Lowering Drugs and Diet Network (GOLDN) Study of ~1000 individuals. The odds ratio for obesity in (CC) individuals compared to rs5082(T) allele carriers was 1.70 (CI: 1.02-2.80, p=0.039). Total energy, total fat, and total protein intake were all significantly higher in (CC) individuals.[PMID 17446329].CC genotype is associated with saturated fat contributes to obesity, but 0.57 % lower risk for coronary artery disease.

Wellness

Sleep Movement

Description

Abnormal movements and behaviors during sleep are part of a larger group of nocturnal events that may occur during sleep, wake, or the transitions into or out of sleep. These events are most common early in life, affecting approximately 15 to 20 percent of children and 4 percent of adults?"This SNP, located in an intron of the BTBD9 gene, has a variant that is seen somewhat more frequently in individuals with restless legs syndrome. The risk allele is rs3923809(A). Carriers of two such alleles, i.e. those with rs3923809(AA) genotypes, are estimated to be 1.9 fold more likely to have restless legs syndrome than rs3923809(G;G) individuals. The authors of this study suggest that perhaps half of the cases of restless legs syndrome may involve the rs3923809 risk genotypes. [PMID 17634447]Consistent with this finding, another report about rs3923809 links the (G) minor allele to a lower frequency of restless legs syndrome with an overall odds ratio of 0.57 (CI: 0.48-0.68). [PMID 17637780].AA genotype represents 1.9x risk for developing restless legs syndrome; AG genotype represents slightly increased risk of developing restless legs syndrome;GG genotype represents normal risk of developing restless legs syndrome."

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
BTBD9	rs3923809	A/A

Your A/A genotype in the BTBD9 gene increases your likelihood of experiencing restless legs syndrome.

This SNP, located in an intron of the BTBD9 gene, has a variant that is seen somewhat more frequently in individuals with restless legs syndrome. The risk allele is rs3923809(A). Carriers of two such alleles, i.e. those with rs3923809(AA) genotypes, are estimated to be 1.9 fold more likely to have restless legs syndrome than rs3923809(G;G) individuals. The authors of this study suggest that perhaps half of the cases of restless legs syndrome may involve the rs3923809 risk genotypes. [PMID 17634447]Consistent with this finding, another report about rs3923809 links the (G) minor allele to a lower frequency of restless legs syndrome with an overall odds ratio of 0.57 (CI: 0.48-0.68). [PMID 17637780].AA genotype represents 1.9x risk for developing restless legs syndrome; AG genotype represents slightly increased risk of developing restless legs syndrome;GG genotype represents normal risk of developing restless legs syndrome.

Name:
Date of Birth:
Gender: female
Report ID: SA
Subject ID: 30005
Date: 2026-10-30

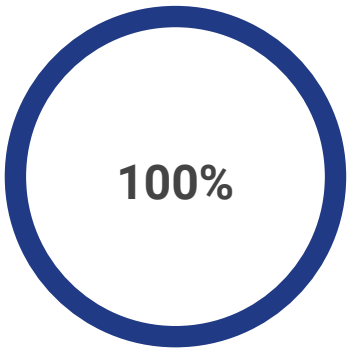
Wellness

Muscle Performance

Description

Human muscle performance most obviously? epends on the size, strength and speed of the relevant muscles?nd these depend on a complex mixture of genetic endowment, training, diet and hormonal balance.Resistance exercise affects muscles by increasing the formation of myofibrils, thereby increasing the thickness of muscle fibers. The power of muscles refers to how quickly the muscles can do this work and transfer the energy.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
ACTN3	rs1815739	C/C

With the C/C genotype, your muscles are inclined towards power and speed—perfect for sprints!

This SNP, in the ACTN3 gene, encodes a premature stop codon in a muscle protein called alpha-actinin-3. The polymorphism alters position 577 of the alpha-actinin-3 protein.TT genotype is representing impaired muscle performance and likely endurance athlete. TT genptype is under-represented in elite strength athletes, consistent with previous reports indicating that alpha-actinin-3 deficiency appears to impair muscle performance. The CC genotype is exhibiting better performing muscles, likely sprinter. CT is representing Mix of muscle types and likely sprinter.

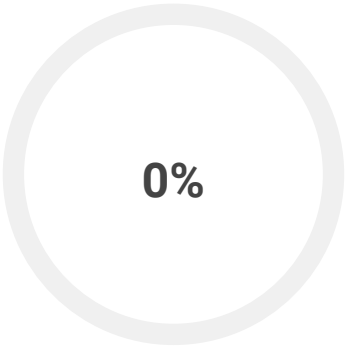
Metabolism

Resting Metabolic Rate

Description

Resting (basal) metabolic rate is a measure that quantifies the energy expended in performing and sustaining basic autonomic functions, including pupillary response, respiration, and heartbeat. These essential functions are typically carried out involuntarily and contribute to the body's overall energy expenditure.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
LEPR	rs8179183	G/G

The G/G genotype suggests a typical resting metabolic rate and reduced weight gain potential with certain antipsychotic medications.

The rs8179183 CG/GG genotype is linked to the usual resting metabolic rate (PMID: 16231024).rs8179183 is a SNP in the leptin receptor LEPR gene.In a study of 101 mostly Caucasian patients prescribed the atypical antipsychotic risperidone, carriers of a rs8179183(G) allele were less likely to gain significant weight compared to rs8179183 CC genotype carriers, as assessed by physiogenomic analysis of corresponding weight profiles. Two other SNPs, rs6837793 and rs705381, were also significantly associated with weight profiles in these patients.[PMID 17199131]

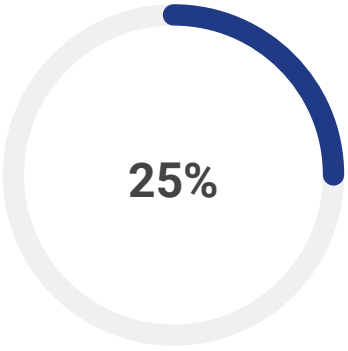
Metabolism

Obesity

Description

Overweight and obesity have become prevalent conditions in the United States, characterized by an increase in the size and number of fat cells in the body. Medical professionals utilize measurements such as body mass index (BMI) and waist circumference to screen and diagnose these conditions. Obesity, a serious medical issue, can lead to complications like metabolic syndrome, high blood pressure, atherosclerosis, heart disease, diabetes, high blood cholesterol, cancers, and sleep disorders. Treatment approaches vary based on the cause, severity, and presence of complications, including lifestyle changes such as heart-healthy eating and increased physical activity, FDA-approved weight-loss medicines, and, in some cases, surgical interventions. (Source: National Heart, Lung, and Blood Institute; National Institutes of Health; U.S. Department of Health and Human Services.)

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
Intergenic	rs12970134	G/G>G/A

Holding an A/G genotype with rs12970134 could associate you with a higher risk of obesity.

The rs12970134 GG genotype is associated with an average likelihood of obesity and GA/AA is associated with higher risk of obesity, as indicated by studies (PMID(s): 18454146, 23049848). The risk allele A is asoociated with high BMI in obese women(PMID: 31429705). A study of 14,000 Indian Asian or Caucasian adults indicates that rs12970134(A) alleles are associated with obesity. The average increase in waist circumference is 0.9cm BMI units per risk allele. [PMID 18454146]

ADRB2	rs1042714	G/G

Having the G/G genotype could mean a higher likelihood of obesity for you, according to ADRB2 data!

Studies have found that individuals with the rs1042714 GG genotype have a higher likelihood of obesity (PMID: 24960039). This SNP affects how changes in diet impact body weight and composition. Specifically, women who carry the Glu allele (C) tend to experience greater reductions in body weight compared to those without the Glu allele (G) (9.5 ? 2.9% vs. 7.0 ? 3.5%, respectively, with a significance of P = 0.002). Additionally, women with the Glu allele (C) tend to lose more lean mass compared to those with the Gln27Gln genotype (5.9 ? 2.7% vs. 4.0 ? 2.7%, respectively, with a significance of P = 0.001).

ADIPOQ	rs17300539	G/G

Your G/G genotype puts you at an average likelihood for obesity, but balancing diet can help.

The rs17300539 GG genotype is associated with an average likelihood of obesity susceptibility, as indicated by studies (PMID: 25223469).The rs17300539(A) allele confered protection from weight regain, particularly at 32-60 weeks after the low-calorie dietary intervention, when improvement in GG subjects had disappeared [PMID 18949681].A: Increased adiponectin levels. G: Lower production of adiponectin.

Your Genomics

Gene	rsID	Your Genotype
Intergenic	rs7138803	G/G

The G/G genotype seems to be associated with a normal likelihood of obesity for you.

The rs7138803 AG genotype has been linked to an increased likelihood of obesity, as reported in studies (PMID(s): 21912638, 21527513). The risk allele A is asoosciated with body mass index[PMID 20935630].The GG genotype seems have anormal likelihood of obesity.

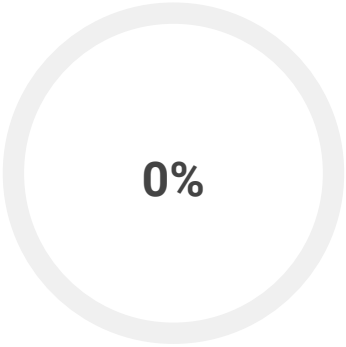
Metabolism

Weight Gain

Description

The ease with which one gains or loses weight is influenced by many factors, such as physical activity and diet. Other biological factors also influence the rate at which one gains or loses weight, including age, sex, and specific genetic variants.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
PPARG	rs1801282	C/C

With a C/C genotype, you are likely at an average risk for weight gain.

The rs1801282 CC genotype is associated with an average risk of weight gain (PMID(s): 23666678, 26361038).In comparison, the minor G allele is associated with reduced weight gain. rs1801282, also known as Pro12Ala, is a common SNP in the peroxisome proliferator-activated receptor PPARG gene. The more common (C) allele (in dbSNP orientation) encodes the 'Pro' amino acid at this SNP position. rs1801282 G allele has been also reported to be associated with:lower PPAR gamma activity,more benefits to exercise(having one G allele makes you more responsive to the beneficial health effects of exercise),increased obesity rates,lower heart disease,lower risk for diabetes,poor response to a high-fat diet,protective against colorectal cancer,protective against psoriatic arthritis.higher risk for rheumatoid arthritishigher risk for sarcoidosis.

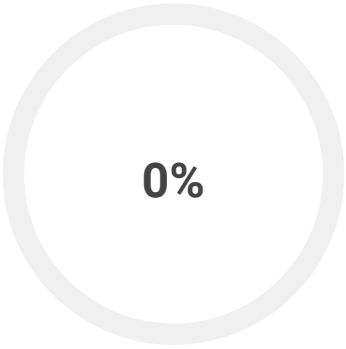
Metabolism

Metabolic Syndrome

Description

Metabolic syndrome is a term used to describe a cluster of risk factors that elevate the likelihood of developing heart disease and other health issues, including diabetes and stroke. The term ""metabolic"" refers to the biochemical processes integral to the body's normal functioning. Risk factors encompass traits, conditions, or habits that increase the probability of disease development. In this context, ""heart disease"" primarily refers to coronary heart disease (CHD), wherein plaque, a waxy substance, accumulates inside the coronary arteries, leading to their hardening and narrowing. This process reduces blood flow to the heart muscle, potentially causing chest pain, heart attacks, cardiac damage, or even death. For more information, you can visit the National Heart, Lung, and Blood Institute; National Institutes of Health; U.S. Department of Health and Human Services website: https://www.nhlbi.nih.gov/health-topics/metabolic-syndrome.

Impactful Genes



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Your Genomics

Gene	rsID	Your Genotype
APOA5	rs662799	G/G>A/A

With the TT/AA genotype in the APOA5 gene, your likelihood of metabolic syndrome is average.

rs662799 (G-A, or C-T) is a SNP in the APOA5 gene.The rarer rs662799(G or C) allele has been associated in multiple other reports to be associated with higher triglyceride levels. The rs662799 AA/TT genotype has been associated with an average likelihood of metabolic syndrome, according to a study (PMID: 23468858). In summary for other studies, The G allele is considered the minor allele and has several associations: each G allele is linked to higher triglyceride levels; the AG genotype is associated with a 1.4 times higher risk of early heart attacks and less weight gain on high-fat diets; while the GG genotype is associated with a 2 times higher risk of early heart attacks and also less weight gain on high-fat diets.



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