



FITNESS REPORT





**LIVE HEALTHY.
STAY YOUNG.**



PATIENT NAME



Participant Age

40 Years



Case ID

YT24A100



Date of Birth

18 Jan 1985



Participation Date

26 Jun 2025



Participant Sample

Saliva



Received Date

07 Jul 2025



National ID

1000100010



Reported Date

05 Aug 2025



WELCOME *to* YOUTH

At Youth, we're transforming the way you approach wellness by providing science-based, personalized insights grounded in your unique genetic makeup. Our mission is to empower individuals to make informed lifestyle choices that enhance health, vitality, and overall well-being. We believe that true wellness comes from understanding and embracing the one-of-a-kind blueprint that is your DNA.

Within this report, you'll uncover how specific genetic markers influence various aspects of your health—from fitness and nutrition to sleep, mental resilience, skin, and hair. By gaining insight into these areas, you can begin to tailor your lifestyle choices for optimal outcomes. We analyze carefully selected genes based on robust scientific research, providing you with reliable information to enhance your approach to health and wellness.

Genetics is just one part of the wellness equation, interacting with your environment, habits, and lifestyle. This report offers a glimpse into your genetic foundation, serving as a guide to better personalize your daily choices and long-term health strategies.

We're excited to be part of your journey toward a healthier, more empowered you! Let's get started and unlock your full wellness potential.

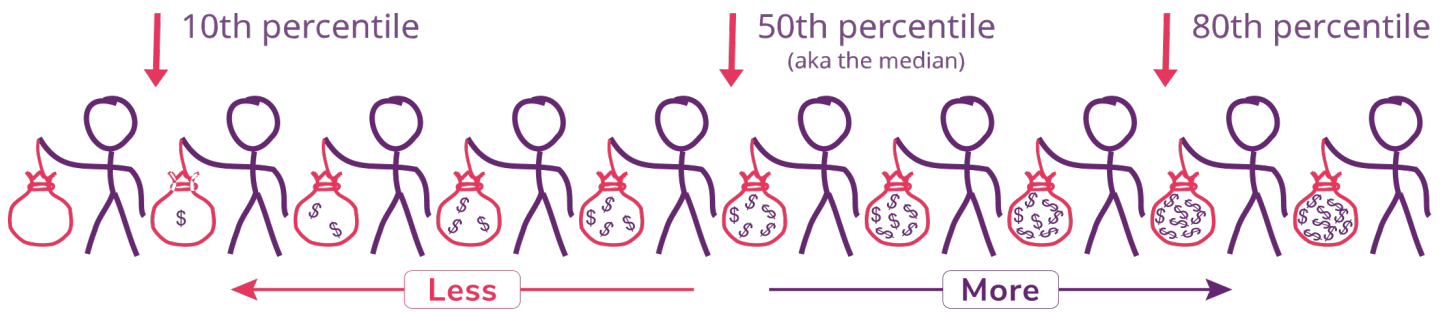


HOW TO READ

YOUR YOUTH WELLNESS REPORT

Your Youth report is designed to give you clear, actionable insights based on your unique genetic profile. To help you understand these insights, we use **polygenic risk scores (PRS)**, which combine the effects of multiple genetic markers associated with a specific trait. This score is then converted into a **percentile**, giving you a sense of where you stand relative to the general population.

- **What is a Percentile?** The percentile ranking shows how your genetic profile compares to others. For example, if your percentile score for a particular trait (like endurance potential) is 85%, it means that based on your genetics, your potential is higher than that of 85% of the population.



- **Report Sections:** Each section of your report covers different wellness areas. Here's how to interpret each:
 - 1. Trait Overview:** Each wellness area begins with a description of the trait (e.g., endurance, recovery, skin elasticity), outlining why it's relevant to your health.
 - 2. Your Percentile Score:** Below each trait, you'll find your percentile score. This score is based on your PRS and tells you where you fall in the distribution of genetic predispositions for that trait. Higher percentiles typically indicate a stronger genetic predisposition toward the trait, while lower percentiles may indicate a lesser predisposition.
 - 3. How to Interpret Your Score:**
 - 1. High Percentile (75-100%):** You have a strong genetic predisposition toward this trait. Consider using this information to make lifestyle adjustments that capitalize on this advantage.
 - 2. Average Percentile (26-74%):** Your genetic predisposition is average, meaning you may benefit from targeted lifestyle choices to optimize this area.
 - 3. Low Percentile (0-25%):** A lower percentile indicates a lesser predisposition. However, remember that genetics is only one piece of the puzzle; lifestyle factors can still significantly influence your outcomes.
 - 4. Recommendations:** Each section provides recommendations based on your percentile score. These include lifestyle, dietary, and fitness suggestions to help you optimize each wellness trait based on your unique genetic profile.



● **A Few Important Notes:**

◦ *Genetics Is Only One Piece of the Puzzle:*

While this report offers valuable insights into your genetic makeup, your overall health and wellness are also shaped by lifestyle, environment, and daily habits. These non-genetic factors can influence, reinforce, or offset your genetic tendencies—empowering you to take control of your well-being.

◦ *Your Scores Reflect Tendencies, Not Guarantees:*

Your polygenic risk scores (PRS) highlight genetic tendencies, not certainties. These scores indicate how your genetics may influence certain traits or health risks compared to others, but they do not predict specific outcomes. Use these insights as a tool to make informed, proactive lifestyle and health decision.

WE HOPE This guide helps you make the most of your Youth wellness report & supports you on your journey to **A HEALTHIER LIFESTYLE!**



**LIVE HEALTHY.
STAY YOUNG.**

THIS REPORT --- **CAN TELL YOU ABOUT HOW GENES**

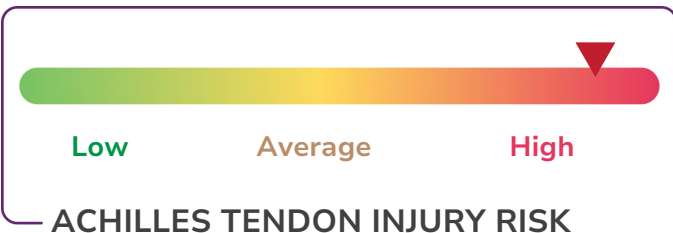
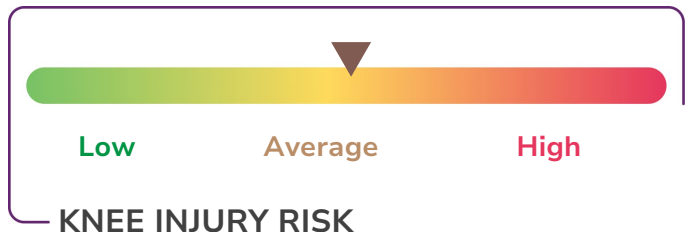
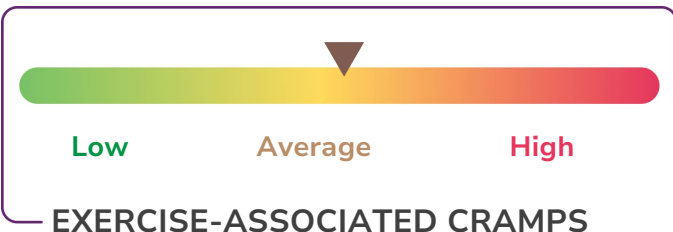
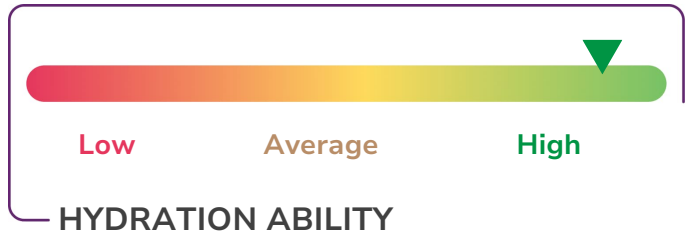
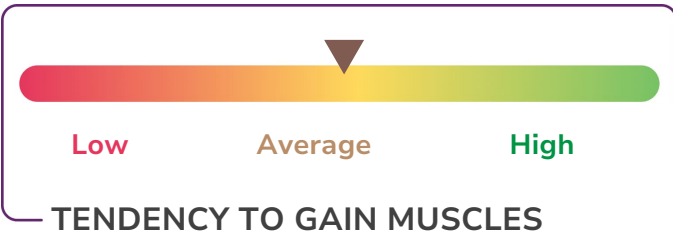
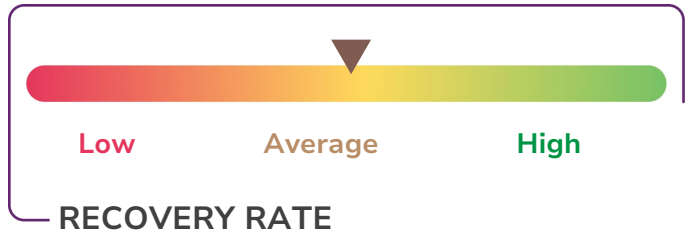
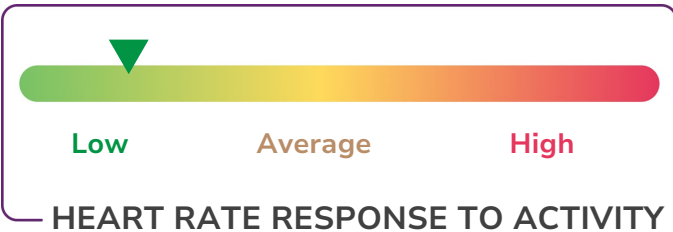
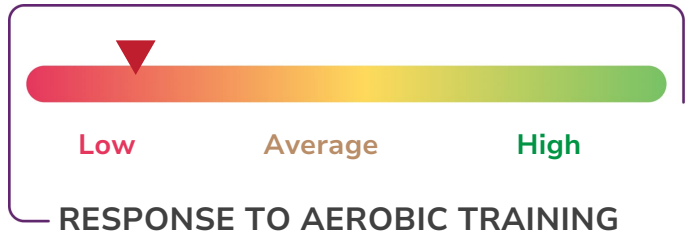
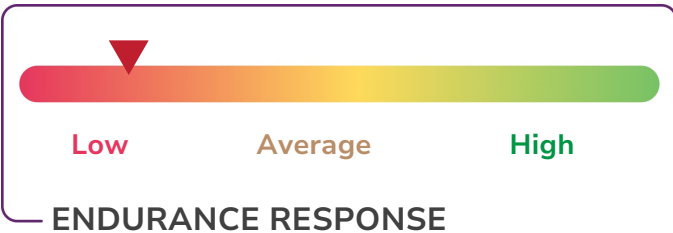
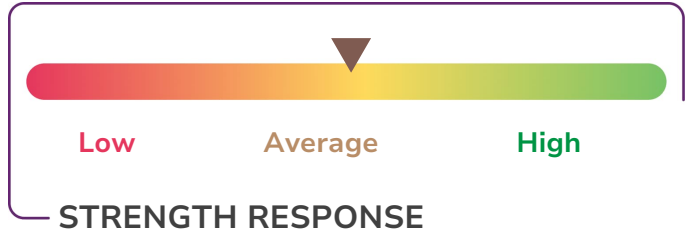
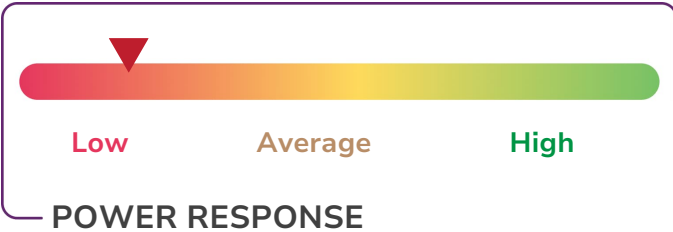
might affect your body's reactions to training and exercise. It helps determine the best ways to train based on your genes. It can also find out if you're more likely to get hurt in certain ways during sport, so you can avoid those injuries. Plus, it can give an idea of how fast you might bounce back after tough workouts, which helps you plan how to recover well for top performance. Overall, it helps us know more about how your body works and why people react differently

TO EXERCISE AND SPORTS.



SUMMARY OF

YOUR FITNESS TRAITS



PART 1

PERFORMANCE POTENTIAL



THIS PART ASSESSES YOUR FOUNDATIONAL GENETIC PREDISPOSITIONS for key components of athletic performance: **endurance, strength, and power potential**. Each trait represents your body's natural capacity in a specific area.

HOW TO USE THIS PART: By understanding your natural tendencies in these areas, you can tailor your training to align with your strengths. For example, if you have a high endurance potential, incorporating long-distance cardio into your routine may suit you well. If your strength potential is high, weightlifting or resistance training could be a beneficial focus. This section helps you make informed decisions on which types of exercises **MAY BEST SUPPORT YOUR FITNESS GOALS.**



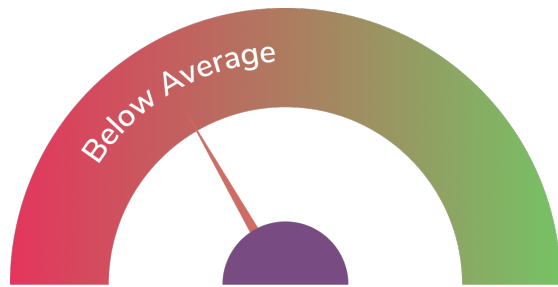
POWER RESPONSE ■■■■■

The Power Response trait indicates your body's natural potential for generating explosive strength and performing high-intensity, quick-burst activities. Power response is often associated with fast-twitch muscle fibers, which are activated during short, intense movements such as sprinting, jumping, or heavy lifting. Understanding your power response can guide you in selecting exercises that align with your body's natural tendencies, helping you optimize performance and achieve specific fitness goals.

What Power Response Means for You

Your power response trait reflects how your body may respond to activities that rely on strength and speed. A high power response means you have a genetic advantage in exercises that require explosiveness, such as sprinting or plyometrics, whereas a lower power response suggests focusing on building power gradually to improve performance in these activities.

YOUR RESULTS



CATEGORY	Low	Below Average	Average	Above Average	High
PERCENTILE RANGE	0-10	11-25	26-74	75-89	90-100
YOUR GENETIC SCORE (PERCENTILE)		20			

Your genetic analysis shows that your power response is in the **Below Average** range. Out of every 100 people with a similar background, your power response is **higher than 20** and **lower than 80**.

- ▶▶ Genetic Markers Used to Calculate the Score: 21
- ▶▶ Total Genetic Markers Surveyed in this Analysis: 40,663,299



LOW POWER RESPONSE

INTERPRETATION

Your genetic results indicate that your power response capacity seems to be lower than average. This doesn't mean you lack power altogether; rather, it suggests that high-intensity, explosive exercises may not naturally align with your body's genetic tendencies. Activities like sprinting, jumping, or heavy Olympic lifting might be more challenging, but with a tailored approach, you can still develop and enhance your power.

How to Work with a Low Power Response

Although power may not be your genetic strength, there are effective strategies to improve your explosive strength over time

Start with Foundational Strength Exercises

Focus on compound movements such as squats, deadlifts, and lunges to build a solid strength foundation. These exercises help establish the stability and muscle endurance needed for future power training.

Incorporate Low-Impact Plyometrics

Begin with gentle plyometric exercises, like step-ups or mini box jumps, to gradually improve muscle reactivity and coordination without placing excessive strain on your body.

Prioritize Rest and Recovery

Power exercises can be taxing, so adequate recovery between sessions is essential to prevent muscle fatigue and enhance training effectiveness.

Progress Gradually

Start with lighter weights and shorter sets, emphasizing form and control. As your body adapts, you can increase resistance or introduce low-weight power movements at a comfortable pace.

Practical Takeaway

While high-power activities might not be your natural strength, you can still develop functional power through a gradual, supportive approach. This strategy will allow you to build power safely, boosting your overall fitness and performance in high-intensity activities over time.



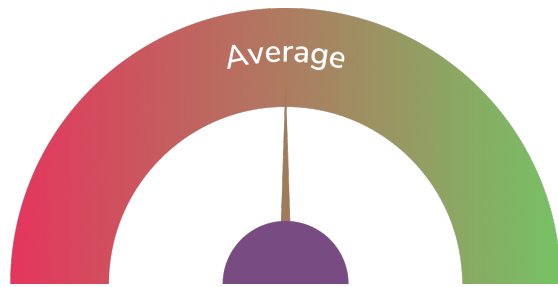
STRENGTH RESPONSE

The Strength Response trait indicates your body's potential for building muscle strength and adapting to strength-based exercises such as weightlifting, resistance training, or bodyweight exercises. Strength response is influenced by genetic factors such as muscle fiber composition and protein synthesis, which play a crucial role in your ability to develop and maintain strength. Understanding your strength response can guide you in selecting training methods that align with your genetic predisposition, helping you maximize strength gains and achieve specific fitness goals.

What Strength Response Means for You

Your strength response trait reflects how your body may adapt to strength-focused activities. A high strength response means you have a genetic advantage in exercises that involve resistance or weight training, allowing for faster gains in muscle strength. A lower strength response suggests focusing on consistent, progressive training to gradually build and improve strength performance.

YOUR RESULTS



CATEGORY	Low	Below Average	Average	Above Average	High
PERCENTILE RANGE	0-10	11-25	26-74	75-89	90-100
YOUR GENETIC SCORE (PERCENTILE)			66		

Your genetic analysis shows that your strength response is in the **Average** range. Out of every 100 people with a similar background, your strength response is **higher than 66** and **lower than 34**.

- ▶ Genetic Markers Used to Calculate the Score: 278
- ▶ Total Genetic Markers Surveyed in this Analysis: 40,663,299



AVERAGE STRENGTH RESPONSE

INTERPRETATION

Your genetic results indicate that your strength response capacity seems to be around average. This suggests that while strength training may not come as naturally, you still have the ability to develop strength effectively with a balanced approach. Resistance training, weightlifting, and bodyweight exercises can all be beneficial for building muscle and improving overall strength.

How to Optimize an Average Strength Response

With an average strength response, a balanced approach to strength training will help you build muscle and stability gradually

Use Moderate Weights and Higher Reps

Focus on controlled movements with moderate weights, aiming for 8-10 reps per set. This approach helps you build muscle endurance and strength without risking overexertion.

Incorporate Compound and Accessory Movements

Exercises like squats, push-ups, and rows will help build functional strength, while accessory exercises like lunges and planks improve stability.

Combine Strength with Core Training

Core exercises such as planks and Russian twists will provide added stability and support strength development across the body.

Allow for Steady Progression

Gradually increase weights, reps, or sets as your strength improves. Track your progress and make incremental changes to avoid plateaus.

Practical Takeaway

With an average strength response, a well-rounded approach that includes compound movements, accessory exercises, and core work will help you build a strong foundation. Focusing on consistent, controlled progress will allow you to improve strength gradually and maintain overall balance in your fitness routine.



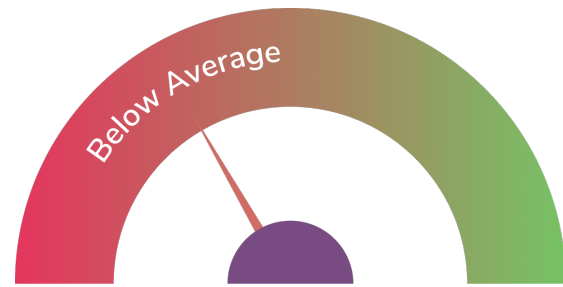
ENDURANCE RESPONSE

The Endurance Response trait indicates your body's potential for performing and adapting to prolonged, steady-state physical activities such as running, cycling, or swimming. Endurance response is influenced by genetic factors such as oxygen utilization, cardiovascular efficiency, and muscle fiber composition. These factors play a critical role in determining your ability to sustain physical activity over extended periods. Understanding your endurance response can guide you in tailoring your training to align with your genetic tendencies, helping you optimize performance and achieve specific fitness goals.

What Endurance Response Means for You

Your endurance response trait reflects how your body may adapt to aerobic and endurance-based activities. A high endurance response means you have a genetic advantage in sustained physical activities, such as long-distance running or cycling. A lower endurance response suggests focusing on structured endurance training to gradually build stamina and improve aerobic capacity.

YOUR RESULTS



CATEGORY	Low	Below Average	Average	Above Average	High
PERCENTILE RANGE	0-10	11-25	26-74	75-89	90-100
YOUR GENETIC SCORE (PERCENTILE)		16			

Your genetic analysis shows that your endurance response is in the **Below Average** range. Out of every 100 people with a similar background, your endurance response is **higher than 16** and **lower than 84**.

- ▶▶ Genetic Markers Used to Calculate the Score: 8
- ▶▶ Total Genetic Markers Surveyed in this Analysis: 40,663,299



LOW ENDURANCE RESPONSE

INTERPRETATION

Your genetic results indicate that your endurance response capacity seems to be lower than average. This doesn't mean you cannot build endurance; rather, it suggests that prolonged aerobic activities may not align naturally with your genetic tendencies. You may find long-duration activities more challenging, but with a gradual approach, you can still improve cardiovascular fitness and stamina effectively.

How to Work with a Low Endurance Response

Although endurance may not be your genetic strength, there are effective ways to build it gradually

Start with Shorter, Low-Impact Cardio

Begin with low-impact cardio activities like brisk walking, cycling, or swimming for shorter durations (e.g., 15-20 minutes) to build a cardiovascular foundation without excessive strain.

Incorporate Gentle Interval Training

Try moderate intervals, such as 1 minute of faster pace followed by 2 minutes of easy pace, for a total of 20-25 minutes. This can build stamina gradually without overtaxing your body.

Progress Gradually

Increase workout duration by about 5 minutes each week to avoid burnout and allow your body to adapt to endurance exercises at a comfortable pace.

Use Active Recovery

Include active recovery days (e.g., stretching, yoga, light walking) to prevent fatigue and support muscle recovery between endurance sessions.

Practical Takeaway

With a low endurance response, a gradual, supportive approach is best for building stamina safely. By starting with shorter, low-intensity sessions and gradually increasing duration, you can improve endurance capacity over time and enjoy a well-rounded fitness routine without overexertion.

PART 2

TRAINING AND RESPONSE



THIS PART FOCUSES ON YOUR BODY'S EXPECTED RESPONSE to different types of exercise, **aerobic training**, and **the ability to recover**. Understanding these can help you plan a balanced and sustainable training routine.

HOW TO USE THIS PART: By understanding your heart response to activity and recovery rate, you can optimize your training intensity and recovery strategy. If your aerobic training effects and heart response are high, moderate to high-intensity cardio could be effective for cardiovascular conditioning. Alternatively, if your recovery rate is lower, incorporating rest days or active recovery into your routine will support sustainable progress. This section offers insights to help you maximize your performance while **MINIMIZING THE RISK OF OVERTRAINING**.



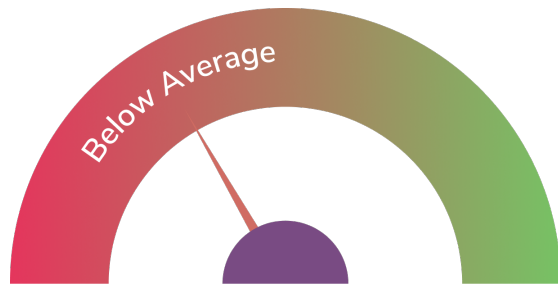
RESPONSE TO AEROBIC TRAINING ■■■■■

The Response to Aerobic Training trait indicates your body's potential for improving cardiovascular fitness and aerobic capacity in response to endurance-based exercises such as jogging, cycling, or swimming. This trait is influenced by genetic factors related to oxygen delivery, cardiovascular efficiency, and muscle adaptation to aerobic exercise. Understanding your response to aerobic training can guide you in designing an effective workout plan that aligns with your genetic predisposition, helping you optimize fitness gains and achieve specific health goals.

What Response to Aerobic Training Means for You

Your response to aerobic training trait reflects how your body may adapt to activities that improve aerobic fitness, such as sustained moderate-intensity exercises. A high response to aerobic training means you have a genetic advantage in improving your endurance and cardiovascular fitness through aerobic exercises. A lower response suggests focusing on consistent training and gradually increasing intensity to achieve measurable improvements in aerobic capacity.

YOUR RESULTS



CATEGORY	Low	Below Average	Average	Above Average	High
PERCENTILE RANGE	0-10	11-25	26-74	75-89	90-100
YOUR GENETIC SCORE (PERCENTILE)		14			

Your genetic analysis shows that your response to aerobic training is in the **Below Average** range. Out of every 100 people with a similar background, your response to aerobic training is **higher than 14** and **lower than 86**.

- ▶▶ Genetic Markers Used to Calculate the Score: 29
- ▶▶ Total Genetic Markers Surveyed in this Analysis: 40,663,299



LOW RESPONSE TO AEROBIC TRAINING

INTERPRETATION

Your genetic results indicate that your response to aerobic training seems to be lower than average. This suggests that aerobic activities, such as running or cycling, may not yield rapid improvements in cardiovascular fitness for you. However, a gradual approach to aerobic training can still help you build stamina and support overall health.

How to Work with a Low Aerobic Training Response

Although aerobic training may not be your genetic strength, there are effective ways to build endurance and cardiovascular health safely and gradually

Start with Low-Impact Cardio

Begin with low-impact, shorter-duration cardio activities, like walking, swimming, or cycling, for 15-20 minutes to ease into aerobic training without overexertion.

Use Gentle Interval Training

Instead of long steady-state cardio, try moderate intervals (e.g., 1 minute brisk, 2 minutes slower) for a total of 20-25 minutes. This approach can prevent fatigue while building endurance.

Gradually Increase Workout Time

Each week, add 5 minutes to your cardio sessions to improve endurance without overwhelming your body. Keep the pace comfortable and prioritize consistency.

Focus on Consistency Over Intensity

Regular, manageable cardio sessions (3-4 times per week) will allow your body to adapt to aerobic training gradually, supporting cardiovascular health in the long term.

Practical Takeaway

With a low response to aerobic training, a gradual, supportive approach is best for building stamina and cardiovascular health safely. By starting with low-impact, shorter sessions and gradually increasing duration, you can improve endurance capacity over time without risking burnout or excessive fatigue.



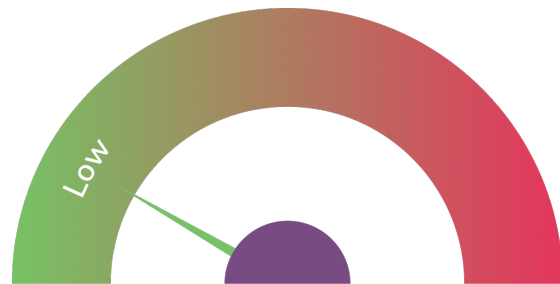
HEART RATE RESPONSE TO ACTIVITY

The Heart Rate Response to Activity trait indicates your body's natural response to physical activity in terms of heart rate elevation and recovery. This trait is influenced by genetic factors that affect cardiovascular function, autonomic nervous system regulation, and overall fitness. Understanding your heart rate response can help you tailor your workouts to maximize cardiovascular efficiency and ensure safe, effective training aligned with your body's capabilities.

What Heart Rate Response to Activity Means for You

Your heart rate response trait reflects how your heart rate increases during activity and how quickly it recovers afterward. A high heart rate response means that your heart rate elevates more rapidly during exercise, which could be an indicator of sensitivity to intensity. A lower heart rate response suggests a more moderate elevation in heart rate, potentially indicating greater cardiovascular efficiency.

YOUR RESULTS



CATEGORY	Low	Below Average	Average	Above Average	High
PERCENTILE RANGE	0-10	11-25	26-74	75-89	90-100
YOUR GENETIC SCORE (PERCENTILE)	6				

Your genetic analysis shows that your heart rate response to activity is in the **Low** range. Out of every 100 people with a similar background, your heart rate response to activity is **higher than 6** and **lower than 94**.

- ▶ Genetic Markers Used to Calculate the Score: 53
- ▶ Total Genetic Markers Surveyed in this Analysis: 40,663,299



LOW HEART RATE RESPONSE TO ACTIVITY

INTERPRETATION

Your genetic results indicate that your heart rate response to physical activity seems to be lower than average. This means that your heart rate increases more gradually during exercise, which can make it easier for you to perform longer aerobic sessions at a consistent intensity. A low heart rate response is well-suited to endurance training but may require additional focus on warm-up and intensity variation for high-intensity workouts.

How to Work with a Low Heart Rate Response

With a low heart rate response, focusing on endurance activities and gradually incorporating intensity will support balanced cardiovascular development

Prioritize Steady-State Cardio

Longer, moderate-intensity aerobic sessions such as running, cycling, or rowing are ideal for building cardiovascular health with a low heart rate response. Aim for 30-60 minutes at a moderate pace.

Use Extended Warm-Ups for High-Intensity Exercise

When engaging in high-intensity or interval training, start with a longer warm-up to gradually elevate your heart rate before moving to higher-intensity exercises.

Incorporate Progressive Intensity in Intervals

For interval training, begin with lower-intensity intervals and increase the intensity over time. Short bursts of intensity followed by longer recovery periods can help adapt your heart rate response.

Focus on Consistency and Duration

Given your heart rate's gradual response, consistent, longer sessions will help improve endurance and overall cardiovascular fitness effectively without overwhelming your heart rate.

Practical Takeaway

With a low heart rate response, you are naturally suited to endurance-based workouts. Longer, steady-state cardio sessions will help you build cardiovascular fitness efficiently. When engaging in high-intensity training, focus on extended warm-ups and gradually increasing intensity to improve heart rate adaptability safely.



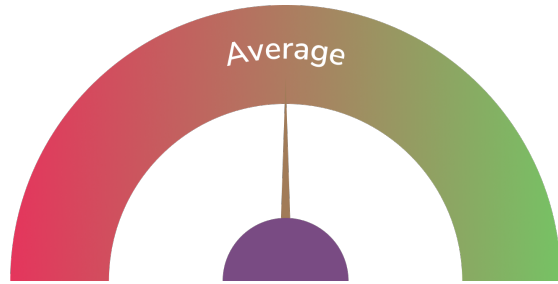
RECOVERY RATE

The Recovery Rate trait indicates your body's ability to recover after physical activity, including how quickly your heart rate, energy levels, and muscle function return to baseline. Recovery rate is influenced by genetic factors related to inflammation, muscle repair, and cardiovascular efficiency. Understanding your recovery rate can help you optimize your training intensity, rest periods, and overall fitness strategy to align with your body's natural tendencies.

What Recovery Rate Means for You

Your recovery rate trait reflects how efficiently your body recovers after physical exertion. A high recovery rate means your body can quickly bounce back after intense workouts, allowing you to train more frequently. A lower recovery rate suggests focusing on proper rest, nutrition, and recovery strategies to improve performance and reduce the risk of overtraining.

YOUR RESULTS



CATEGORY	Low	Below Average	Average	Above Average	High
PERCENTILE RANGE	0-10	11-25	26-74	75-89	90-100
YOUR GENETIC SCORE (PERCENTILE)			50		

Your genetic analysis shows that your recovery rate is in the **Average** range. Out of every 100 people with a similar background, your recovery rate is **higher than 50** and **lower than 50**.

- ▶ Genetic Markers Used to Calculate the Score: 64
- ▶ Total Genetic Markers Surveyed in this Analysis: 40,663,299



AVERAGE RECOVERY RATE

INTERPRETATION

Your genetic results indicate that your recovery rate seems to be around average. This suggests that while your body repairs and replenishes energy effectively, it may require a moderate amount of rest and recovery between workouts. An average recovery rate allows you to train consistently but may benefit from a balanced approach to prevent fatigue and support long-term progress.

How to Optimize an Average Recovery Rate

With an average recovery rate, a balanced approach to training and rest will help you progress steadily while supporting muscle repair

Alternate Intensity Levels

Rotate between high-intensity and moderate-intensity workouts (e.g., HIIT one day, steady-state cardio the next) to give your body ample recovery time without interrupting your workout schedule.

Use a Split Routine

Engage in a split routine (e.g., training different muscle groups on different days) to allow individual muscles more time to recover.

Schedule Rest Days

Include at least 1-2 full rest days per week to support muscle repair and prevent cumulative fatigue.

Incorporate Active Recovery

Low-intensity activities such as stretching, light swimming, or walking on rest days can improve circulation and promote recovery without overtaxing your system.

Practical Takeaway

With an average recovery rate, a balanced approach to training frequency and rest will help you make steady progress. By rotating workout intensity, including active recovery, and scheduling regular rest days, you'll support sustainable fitness improvements and help prevent overtraining.

PART 3

PHYSICAL BUILD AND MUSCLE CHARACTERISTICS



THIS PART PROVIDES INSIGHTS INTO HOW YOUR BODY IS NATURALLY INCLINED To **build and support muscle, manage hydration**, These traits can help you make strategic adjustments to your training and hydration routines.

HOW TO USE THIS PART: Knowing your tendency to gain muscle can help in setting realistic strength and physique goals, while understanding hydration ability can inform your hydration strategy during workouts, especially in high-intensity or outdoor settings. With these insights, you can optimize your physical training environment, adjust your exercise hydration practices, and tailor your fitness routine to fit your body's **NATURAL CHARACTERISTICS.**



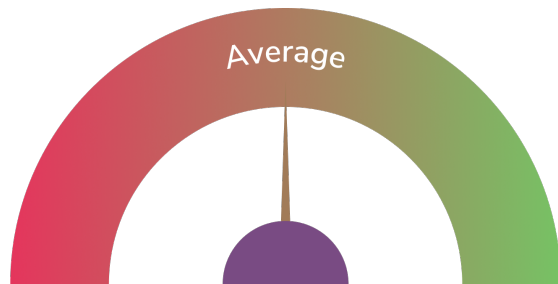
TENDENCY TO GAIN MUSCLES

The Tendency to Gain Muscles trait indicates your body's natural ability to build and maintain muscle mass in response to strength training and other resistance exercises. This trait is influenced by genetic factors such as muscle fiber composition, protein synthesis, and hormonal regulation. Understanding your tendency to gain muscles can help you tailor your fitness regimen to maximize muscle development and achieve specific physique or performance goals.

What Tendency to Gain Muscles Means for You

Your tendency to gain muscles trait reflects how your body may respond to strength training and muscle-building exercises. A high tendency to gain muscles means you have a genetic advantage in increasing muscle mass quickly with appropriate training. A lower tendency suggests focusing on consistent, progressive training and proper nutrition to gradually enhance muscle growth.

YOUR RESULTS



CATEGORY	Low	Below Average	Average	Above Average	High
PERCENTILE RANGE	0-10	11-25	26-74	75-89	90-100
YOUR GENETIC SCORE (PERCENTILE)			74		

Your genetic analysis shows that your tendency to gain muscles is in the **Average** range. Out of every 100 people with a similar background, your tendency to gain muscles is **higher than 74** and **lower than 26**.

- ▶▶ Genetic Markers Used to Calculate the Score: 56
- ▶▶ Total Genetic Markers Surveyed in this Analysis: 40,663,299



AVERAGE TENDENCY TO GAIN MUSCLES

INTERPRETATION

Your genetic results indicate that your tendency to gain muscle seems to be around average. This suggests that while building muscle may not come exceptionally easily, you can still achieve muscle growth effectively with consistent training and the right approach. Strength and resistance training can lead to steady progress in muscle tone and size over time.

How to Optimize an Average Tendency to Gain Muscles

With an average tendency to gain muscle, a balanced approach to strength training and progressive overload will help you see gains

Focus on Compound and Isolation Exercises

Include both compound lifts (e.g., squats, lunges, rows) and isolation exercises (e.g., bicep curls, leg extensions) to target all major muscle groups and encourage well-rounded growth.

Aim for Moderate Weights and Reps

Use moderate weights and aim for 8-12 reps per set to build muscle gradually. Adjust the weight or reps as your strength improves.

Incorporate Rest Days

Allow muscles adequate recovery time by scheduling 1-2 rest days between training the same muscle groups. This prevents overtraining and supports muscle repair.

Ensure Adequate Protein Intake

A balanced diet with sufficient protein will support muscle repair and growth. Include protein-rich foods like lean meats, legumes, and dairy.

Practical Takeaway

With an average tendency to gain muscle, consistent strength training and balanced nutrition will help you build muscle gradually. By focusing on a variety of compound and isolation exercises, allowing recovery time, and progressively increasing workout intensity, you can achieve steady muscle gains over time.



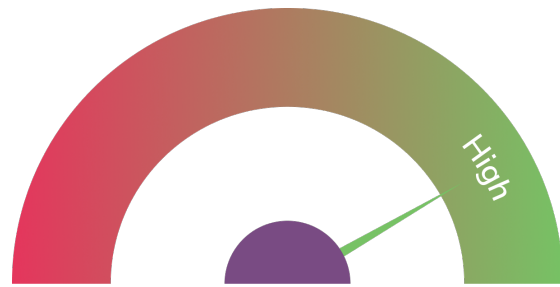
HYDRATION ABILITY ■■■■■

The Hydration Ability trait indicates your body's natural capacity to maintain optimal hydration levels during physical activity or in response to environmental conditions. This trait is influenced by genetic factors that affect fluid retention, electrolyte balance, and the body's ability to regulate water levels efficiently. Understanding your hydration ability can help you adjust your fluid intake and recovery strategies to stay properly hydrated and support optimal performance during exercise.

What Hydration Ability Means for You

Your hydration ability trait reflects how well your body manages hydration, especially during intense physical activity or in hot environments. A high hydration ability suggests that your body is more efficient at retaining water and regulating electrolyte levels, allowing you to perform longer without becoming dehydrated. A lower hydration ability could indicate that you may need to focus more on hydration strategies before, during, and after exercise to maintain optimal performance and reduce the risk of dehydration.

YOUR RESULTS



CATEGORY	Low	Below Average	Average	Above Average	High
PERCENTILE RANGE	0-10	11-25	26-74	75-89	90-100
YOUR GENETIC SCORE (PERCENTILE)					94

Your genetic analysis shows that your hydration ability is in the **High** range. Out of every 100 people with a similar background, your hydration ability is **higher than 94** and **lower than 6**.

- ▶▶ Genetic Markers Used to Calculate the Score: 930,461
- ▶▶ Total Genetic Markers Surveyed in this Analysis: 40,663,299



HIGH HYDRATION ABILITY

INTERPRETATION

Your genetic results indicate that you may have a higher genetic predisposition for maintaining hydration during physical exertion or in varying environmental conditions. This suggests that your body may be more efficient at retaining water and balancing electrolytes, allowing you to stay hydrated longer, even during intense or prolonged physical activity. This natural advantage can help you maintain peak performance during exercise and recover more effectively afterward.

How to Manage a High Hydration Ability

With a high genetic score for hydration ability, you can still take steps to optimize your hydration and enhance your athletic performance

Stay Consistently Hydrated

While your body may retain hydration well, ensure that you're drinking enough water throughout the day, especially during exercise, to maintain your performance and prevent dehydration.

Balance Electrolytes

Although your body may be efficient at maintaining hydration, balancing electrolytes (e.g., sodium, potassium, magnesium) is still key to supporting muscle function and avoiding cramping during strenuous activities.

Monitor Your Environment

Even with strong hydration ability, hot or humid conditions can still impact your hydration levels. Pay attention to the environment when exercising and adjust fluid intake accordingly.

Fuel with Proper Nutrition

A balanced diet that supports hydration with water-rich foods and electrolytes can complement your body's natural hydration ability, helping to maintain energy levels and performance.

Practical Takeaway

By continuing to hydrate regularly and balance electrolytes, you can enhance your hydration ability and maintain high performance during physical activity. Your natural advantage allows you to focus on optimizing other aspects of your training, like strength and endurance, without worrying about dehydration.

PART 4

INJURY RISK & PREVENTION



THIS PART EVALUATES YOUR GENETIC PREDISPOSITION

to common **sports-related injuries**, such as **muscle cramps** and **joint issues**. Understanding your susceptibility in these areas allows you to take proactive steps to reduce injury risk and stay consistent with your exercise routine.

HOW TO USE THIS PART: Understanding your injury risks allows you to incorporate specific warm-up routines, strength training, and supportive practices to minimize vulnerabilities. These insights support a safer, longer-lasting approach to physical activity and training. For instance, if you have a high risk for knee injuries, strengthening surrounding muscles and maintaining proper form can help mitigate that risk. By recognizing areas of potential vulnerability, you can make adjustments that reduce injury risk and **SUPPORT LONG-TERM PHYSICAL HEALTH AND EXERCISE SUSTAINABILITY.**



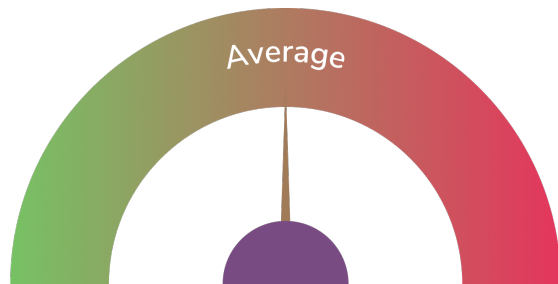
EXERCISE-ASSOCIATED CRAMPS

The Exercise-Associated Cramps trait indicates your body's natural tendency to experience muscle cramps during or after physical activity. This trait is influenced by genetic factors related to muscle function, electrolyte balance, and hydration status. Understanding your tendency for exercise-associated cramps can help you adjust your training and recovery strategies to minimize discomfort and improve performance during physical activity.

What Exercise-Associated Cramps Means for You

Your exercise-associated cramps trait reflects how likely you are to experience muscle cramps during intense or prolonged physical activity. A high tendency for cramps suggests a higher risk of cramping during exercise, which could be managed through proper hydration, nutrition, and stretching techniques. A lower tendency indicates that you may be less prone to cramps and can focus on optimizing your training without as much concern for cramping.

YOUR RESULTS



CATEGORY	Low	Below Average	Average	Above Average	High
PERCENTILE RANGE	0-10	11-25	26-74	75-89	90-100
YOUR GENETIC SCORE (PERCENTILE)			50		

Your genetic analysis shows that your exercise-associated cramps is in the **Average** range. Out of every 100 people with a similar background, your exercise-associated cramps is **higher than 50** and **lower than 50**.

- ▶ Genetic Markers Used to Calculate the Score: 5
- ▶ Total Genetic Markers Surveyed in this Analysis: 40,663,299



AVERAGE EXERCISE-ASSOCIATED CRAMPS

INTERPRETATION

Your genetic results indicate that your risk for exercise-associated cramps is average. This suggests that while you may experience occasional cramps during or after exercise, they are less frequent or severe compared to individuals with a higher genetic predisposition. With proper care, such as maintaining hydration and balancing electrolytes, you can effectively manage and minimize cramps.

How to Manage an Average Risk for Exercise-Associated Cramps

With an average genetic risk for cramps, you can follow a balanced approach to prevent them while still pushing yourself in workouts

Hydrate Regularly

Stay hydrated during exercise, especially in hot or humid environments, to reduce the likelihood of cramps.

Maintain a Balanced Diet

Focus on a diet rich in vitamins and minerals, particularly those essential for muscle function (e.g., potassium, magnesium), to reduce cramping risk.

Stretch Before and After Exercise

Make stretching part of your routine to maintain flexibility and reduce muscle tension, both of which can prevent cramps.

Moderate Exercise Intensity

Listen to your body and adjust exercise intensity or recovery periods if you notice signs of muscle fatigue that could lead to cramps.

Practical Takeaway

With an average risk for cramps, focusing on hydration, diet, and proper warm-up/cool-down techniques will help you manage cramps effectively. Maintaining a balanced approach to exercise and recovery will reduce your risk while allowing you to stay active and perform at your best.



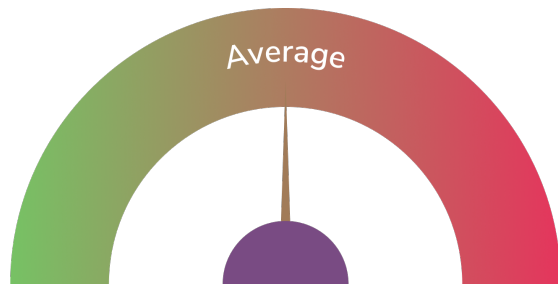
KNEE INJURY RISK ■■■■■

The Knee Injury Risk trait indicates your body's natural susceptibility to knee injuries during physical activity, especially in sports or exercises that involve running, jumping, or sudden directional changes. This trait is influenced by genetic factors related to joint stability, muscle strength, and connective tissue health. Understanding your knee injury risk can help you take preventive measures to reduce the likelihood of injury and enhance your overall performance and mobility.

What Knee Injury Risk Means for You

Your knee injury risk trait reflects how prone you may be to knee injuries during physical activity. A high knee injury risk indicates a greater likelihood of experiencing knee injuries such as sprains, strains, or ligament tears, which may require incorporating strengthening exercises, proper footwear, and injury prevention strategies into your fitness routine. A lower knee injury risk suggests that you may have more natural joint stability, but it's still important to maintain proper technique and conditioning to prevent potential injuries.

YOUR RESULTS



CATEGORY	Low	Below Average	Average	Above Average	High
PERCENTILE RANGE	0-10	11-25	26-74	75-89	90-100
YOUR GENETIC SCORE (PERCENTILE)			48		

Your genetic analysis shows that your knee injury risk is in the **Average** range. Out of every 100 people with a similar background, your knee injury risk is **higher than 48** and **lower than 52**.

- ▶ Genetic Markers Used to Calculate the Score: 118
- ▶ Total Genetic Markers Surveyed in this Analysis: 40,663,299



AVERAGE KNEE INJURY RISK

INTERPRETATION

Your genetic results indicate that your risk for knee injury is average, meaning you have a typical level of susceptibility to knee injuries compared to the general population. While you may still be at risk, your chances of injury are not significantly higher or lower than most individuals. Proper care, technique, and preventive measures can help manage this average risk.

How to Manage an Average Knee Injury Risk

With an average genetic risk for knee injuries, a balanced approach to exercise and knee care can help prevent injuries and maintain joint health

Strengthen Your Legs and Core

A strong foundation of leg and core muscles is key to supporting the knees. Incorporate strength training that targets the quadriceps, hamstrings, calves, and glutes, as well as core exercises to improve overall stability.

Practice Proper Form

Whether you're running, lifting, or engaging in sports, focus on maintaining proper posture and technique to reduce stress on your knees. Consider working with a coach or trainer if you're unsure about your form.

Incorporate Flexibility and Mobility Training

Stretching and foam rolling can help maintain flexibility in the muscles around the knee and improve joint mobility, reducing the likelihood of stiffness or strain.

Balance High-Impact and Low-Impact Activities

Mix higher-impact exercises, like running or sports, with lower-impact activities, such as walking, swimming, or cycling, to give your knees time to recover and reduce strain.

Practical Takeaway

With an average risk for knee injury, maintaining a balanced exercise routine that includes strength training, flexibility work, and proper technique can help you manage and protect your knees. By incorporating both high- and low-impact exercises into your routine and staying mindful of your body mechanics, you can reduce your overall risk of injury.



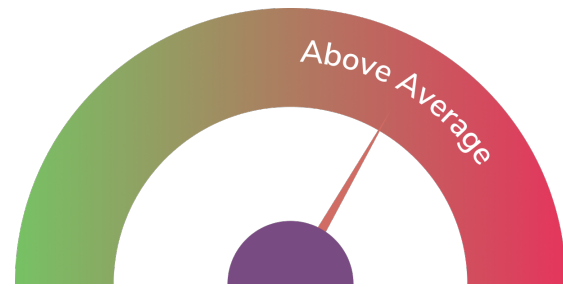
ACHILLES TENDON INJURY RISK

The Achilles Tendon Injury Risk trait indicates your body's natural susceptibility to injuries of the Achilles tendon, particularly during activities that involve running, jumping, or rapid changes in direction. This trait is influenced by genetic factors related to tendon structure, muscle strength, and overall joint health. Understanding your Achilles tendon injury risk can help you take preventive steps to reduce the likelihood of injury and improve your performance in high-impact activities.

What Achilles Tendon Injury Risk Means for You

Your Achilles tendon injury risk trait reflects how likely you are to experience Achilles tendon injuries during physical activity. A high Achilles tendon injury risk suggests that you are more prone to tendinopathy or tendon ruptures, which could be managed through proper warm-up, strengthening exercises, and gradual progression in training intensity. A lower risk indicates that your Achilles tendon may be less susceptible to injury, but it's still important to maintain flexibility, strength, and proper technique to prevent strain.

YOUR RESULTS



CATEGORY	Low	Below Average	Average	Above Average	High
PERCENTILE RANGE	0-10	11-25	26-74	75-89	90-100
YOUR GENETIC SCORE (PERCENTILE)				83	

Your genetic analysis shows that your achilles tendon injury risk is in the **Above Average** range. Out of every 100 people with a similar background, your achilles tendon injury risk is **higher than 83** and **lower than 17**.

- ▶▶ Genetic Markers Used to Calculate the Score: 5
- ▶▶ Total Genetic Markers Surveyed in this Analysis: 40,663,299



HIGH ACHILLES TENDON INJURY RISK

INTERPRETATION

Your genetic results indicate that you may have a higher predisposition to Achilles tendon injuries. This suggests that you may be more susceptible to conditions such as tendonitis, tears, or strains, especially in response to high-impact activities or repetitive stress. Factors like tendon elasticity, collagen structure, and joint stability could make your Achilles tendon more vulnerable to injury during activities that place strain on the lower leg.

How to Manage a High Achilles Tendon Injury Risk

With a high genetic risk for Achilles tendon injury, you should take extra precautions to protect your tendon and reduce the likelihood of injury

Strengthen Lower Leg Muscles

Focus on strengthening the calf muscles (gastrocnemius and soleus) to provide stability to the Achilles tendon. Incorporate calf raises, eccentric calf exercises, and ankle mobility drills.

Warm-Up and Stretch Properly

Ensure a thorough warm-up focusing on the calves, ankles, and Achilles tendon. Include stretching exercises like calf stretches and Achilles tendon stretches.

Gradually Increase Exercise Intensity

Avoid sudden increases in workout intensity or duration, especially in high-impact activities like running or jumping. Gradually build up intensity to allow the tendon time to adapt to increased stress.

Use Proper Footwear

Wear supportive shoes with proper cushioning and arch support to reduce the load on the Achilles tendon. Consider using orthotics to ensure proper alignment during activities.

Practical Takeaway

With a high risk of Achilles tendon injury, strengthening the lower legs, warming up properly, and gradually increasing activity intensity can significantly reduce the likelihood of injury. Taking preventive measures will help protect your Achilles tendon and keep you active.

YOUR PERSONALIZED TRAINING PLAN



DATE: _____

WORKOUT
week 1

S M T W T F S

	S	M	T	W	T	F	S
Monday							
Tuesday							
Wednesday							
Thursday							
Friday							

PLAN
week 2



BLOCK 1

POWER, STRENGTH, AND ENDURANCE POTENTIAL

Foundational Fitness Program

With lower scores in endurance, power, and strength, it's best to adopt a gradual, balanced approach that builds a solid base in each area. Focusing on low-impact, manageable exercises can help you make steady progress, increase motivation, and enhance your long-term fitness. This program combines endurance, strength, and power-building exercises in a way that supports overall improvement.

01

Building Endurance Gradually

Since endurance is low, start with moderate aerobic activities that are low in intensity and gradually increase duration and frequency. Endurance training will improve cardiovascular health, stamina, and overall fitness.

1. Exercises to Include

- **Low-Impact Cardio (e.g., brisk walking, cycling, swimming)** These activities provide gentle cardiovascular conditioning without putting too much strain on your body.
- **Interval Walking or Cycling** Alternate between comfortable and slightly more challenging paces to build stamina.
- **Bodyweight Circuit Training (e.g., light squats, lunges, push-ups)** Circuit training can improve endurance with low-impact, full-body movements.

2. Frequency and Duration

- Start with 2-3 sessions per week of 15-20 minutes each, then gradually increase to 30-45 minutes as your endurance improves.
- For interval workouts, alternate between 2 minutes of brisk walking and 1 minute of a faster pace for a total of 20 minutes.

Progression Increase duration or intensity slowly, aiming for about 10% progression per week. Focus on comfort and consistency rather than speed or distance.

02

Strength Training with Low Resistance

Although strength is a lower potential, starting with bodyweight or light-resistance exercises will build foundational strength without overwhelming your muscles or joints. Strength training will improve muscle tone, stability, and functional fitness.



BLOCK 1

POWER, STRENGTH, AND ENDURANCE POTENTIAL

1. Exercises to Include

- **Bodyweight Exercises (e.g., bodyweight squats, wall push-ups, glute bridges)** These exercises allow you to build strength in a low-impact, manageable way.
- **Resistance Band Exercises (e.g., banded rows, banded leg lifts)** Resistance bands offer light resistance and are excellent for gradual strength building.
- **Core Strength Exercises (e.g., bird dog, modified plank)** Core work helps stabilize the body, providing a strong foundation for all movements.

2. Frequency and Sets/Reps

- Perform 2-3 sessions per week in addition to endurance training.
- Use 2-3 sets of 8-12 reps per exercise, focusing on controlled, steady movements.
- Keep resistance light and focus on form and stability over intensity.

Progression Start with bodyweight and gradually add light resistance (such as light dumbbells or bands) as your form and comfort improve. Aim for controlled movements and increase reps or resistance only as you feel ready.

03

Light Power Training for Functional Movement

Although power is lower, incorporating some light, functional power exercises can improve agility and reaction time. Focus on gentle, low-impact movements that are easy to control.

1. Exercises to Include

- **Modified Plyometrics (e.g., gentle step-ups, mini hops)** Small plyometric movements can help you practice balance and coordination without high impact.
- **Medicine Ball Exercises (e.g., gentle chest pass or standing side throw with a light ball)** Light medicine ball exercises train upper body and core in a functional way.
- **Bodyweight Agility Drills (e.g., side steps, low-intensity ladder drills)** Use light agility drills to build confidence and improve speed.

2. Frequency and Sets/Reps

- Include 1 session per week to start.
- Perform 2-3 sets of 5-8 reps for each exercise, focusing on control rather than speed.
- Keep movements light and low to the ground, avoiding any high-impact jumps or explosive movements.

Progression Start with basic movements and add small increases in speed or reps as comfort improves. Prioritize safety and balance, moving only as fast as you feel stable and controlled.



BLOCK 1

POWER, STRENGTH, AND ENDURANCE POTENTIAL

04

Flexibility and Mobility for Joint Health

With a balanced approach to flexibility and mobility, you can reduce stiffness, improve range of motion, and support functional movement across all activities. Flexibility work can also prevent injury, especially as you build endurance, strength, and power.

1. Focus Areas

- **Dynamic Stretches before exercise (e.g., arm circles, leg swings)** Warm up muscles and joints gently to prepare for movement.
- **Static Stretching after exercise or on rest days** focusing on the lower body, shoulders, and back to improve flexibility and prevent tightness.
- **Foam Rolling or Myofascial Release on key areas, such as calves, hamstrings, and quads,** to ease tension and support recovery.

2. Frequency and Duration

- Perform 5-10 minutes of dynamic stretching before each workout.
- Include 10-15 minutes of static stretching and foam rolling after workouts or on rest days to improve flexibility.

Progression Increase flexibility gradually, aiming to hold stretches longer or deepen them as your range of motion improves.

05

Recovery and Rest for Consistent Progress

Recovery is essential, especially with lower genetic strengths in endurance, power, and strength. Rest days allow muscles to repair, reduce fatigue, and help prevent overuse injuries.

1. Active Recovery

Engage in light activities, such as walking or gentle yoga, on rest days to aid circulation and reduce stiffness.

2. Sleep and Nutrition

Aim for 7-9 hours of quality sleep per night and focus on a balanced diet with plenty of proteins, healthy fats, and complex carbohydrates for muscle repair and energy.

Progression Schedule 2-3 rest days per week or more if needed, depending on workout intensity. Incorporate active recovery sessions to keep circulation up without overtaxing muscles.

06

Sample Weekly Training Schedule



BLOCK 1

POWER, STRENGTH, AND ENDURANCE POTENTIAL

DAY	FOCUS	ACTIVITIES
Monday	Endurance Training	Brisk Walking or Cycling (15-20 minutes)
Tuesday	Strength Training	Bodyweight Squats, Wall Push-Ups, Glute Bridges
Wednesday	Endurance/Interval Training	Interval Walking or Cycling (20 minutes, alternating pace)
Thursday	Power and Flexibility	Gentle Step-Ups, Side Steps, Light Stretching
Friday	Endurance Training	Low-Impact Cardio (e.g., swimming or brisk walking)
Saturday	Core and Flexibility	Bird Dog, Modified Plank, Foam Rolling
Sunday	Rest or Active Recovery	Light Yoga, Hydration Focus

Foundational Fitness Program

With lower scores in endurance, power, and strength, it's best to adopt a gradual, balanced approach that builds a solid base in each area. Focusing on low-impact, manageable exercises can help you make steady progress, increase motivation, and enhance your long-term fitness. This program combines endurance, strength, and power-building exercises in a way that supports overall improvement.



BLOCK 2

TRAINING AND RESPONSE GUIDE:

Detailed Recommendations for Aerobic Training, Heart Rate Management, and Recovery

This guide provides tailored training strategies for individuals with high, average, or low scores in aerobic training response, heart rate response, and recovery rate. Each section includes detailed advice to optimize cardio training, manage heart rate, and support recovery based on individual capacity.

1

Optimizing Aerobic Training Response

Your aerobic training response score guides the ideal intensity, frequency, and progression for cardio workouts. Here's how to structure your aerobic training based on your genetic predisposition

Low Aerobic Training Response

- **Training Goals** Individuals with a low aerobic response may experience slower progress with endurance training but can still improve cardiovascular health gradually.
- **Workout Frequency** Start with 1-2 sessions per week.
- **Types of Workouts**
 - **Low-Intensity, Short-Duration Cardio** Start with shorter, lower-intensity sessions (e.g., 15-20 minutes of light walking, cycling, or swimming) to build a cardiovascular base.
 - **Gentle Interval Training** Use gentle intervals, such as alternating 1 minute of moderate effort with 2 minutes of lower effort, for a total of 15-20 minutes.
- **Progression Strategy** Increase workout time by 5 minutes every two weeks or add a low-intensity session gradually to prevent overexertion. Keep intervals manageable and focus on comfort.
- **Recovery Considerations** Include 2-3 days of rest or active recovery between cardio sessions, as your body will benefit from additional recovery time to adapt.

2

Managing Heart Rate Response

With an average response, ensure adequate rest between cardio sessions. Use active recovery (e.g., stretching, walking) between higher-intensity days to prevent fatigue.

Low Heart Rate Response

- **Training Goals** With a low heart rate response, your heart rate rises gradually, making steady-state cardio ideal, as you can sustain longer periods without heart rate strain.
- **Heart Rate-Controlled Zones**
 - **Warm-Up Zone** Spend time in this zone to elevate heart rate before high-intensity activity.
 - **Sustained Moderate Zone** Use steady-state cardio within this zone to maximize cardiovascular health without rapid increases.
- **Training Tips**
 - **Extended Warm-Up** Allow for a longer warm-up period to gradually elevate heart rate before engaging in intense efforts.
 - **Sustained Endurance Sessions** Engage in longer, moderate sessions, such as cycling or brisk walking, which are suited to a gradual heart rate response.



BLOCK 2

TRAINING AND RESPONSE GUIDE:

Detailed Recommendations for Aerobic Training, Heart Rate Management, and Recovery

3

Enhancing Recovery Rate

Your recovery rate score indicates how quickly your body can repair and recover from exercise, helping to determine your optimal rest days, workout frequency, and recovery practices.

Average Recovery Rate

- **Training Goals** With an average recovery rate, maintain balance between workout intensity and rest to avoid fatigue.
- **Active Recovery** Include 1-2 days of active recovery, such as stretching, swimming, or walking, between intense workouts.
- **Weekly Rest Schedule** Plan 1-2 rest days per week to support steady progress. Use these days for full recovery.
- **Post-Workout Nutrition and Hydration** After workouts, ensure protein intake and stay hydrated to aid muscle repair. Focus on sleep quality to support full recovery overnight.



BLOCK 3

TRAINING GUIDE:

Physical Build and Muscle Characteristics

This guide provides tailored recommendations for individuals with high, average, or low scores in muscle gain tendency, and hydration ability. Each section includes detailed guidance on optimizing workouts, and managing hydration needs based on your individual scores.

1

Maximizing Muscle Gain Tendency

Your muscle gain tendency score reflects your body's natural potential to build and retain muscle mass, helping to determine the ideal strength training approach.

Average Muscle Gain Tendency

- **Training Goals** With an average muscle gain potential, a balanced approach to strength training can yield steady gains over time.
- **Workout Frequency** Aim for 3-4 strength training sessions per week, allowing for adequate recovery between sessions.
- **Types of Exercises**
 - **Compound Lifts and Accessory Movements** Combine multi-joint exercises (like rows and lunges) with accessory movements for balanced muscle development.
 - **Sets, Reps, and Progression** Perform 3 sets of 8-10 reps with moderate weights, and gradually increase intensity or volume to stimulate growth.
- **Nutrition and Recovery** Include adequate protein and complex carbs in your diet to support recovery, and schedule 1-2 rest days per week.

2

Hydration Ability

Your hydration ability score influences how well your body retains fluids and maintains hydration, impacting endurance, muscle performance, and recovery. Adjust hydration practices based on your score to optimize physical performance.

High Hydration Ability

- **Hydration Goals** If your body naturally retains water well, your hydration requirements may be more flexible, but regular intake is still crucial for optimal performance.
- **Hydration Strategies**
 - **Consistent Water Intake** Maintain consistent hydration throughout the day with small sips, particularly during intense workouts or hot weather.
 - **Pre-Workout Hydration** Drink water or an electrolyte solution 1-2 hours before exercise to ensure adequate hydration for high-intensity sessions.
 - **During and Post-Workout** Continue hydrating during workouts as needed, especially if sweat loss is high, and replenish fluids post-exercise with water or a light electrolyte drink.
- **Additional Tips** High hydration ability may reduce cramping and fatigue risks, but listen to your body's signals to avoid dehydration.



BLOCK 4

TRAINING GUIDE:

Injury Risk and Prevention

This guide provides tailored recommendations for individuals with high, average, or low scores in exercise-associated cramp risk, knee injury risk, and Achilles tendon injury risk. Each section offers specific strategies to reduce injury risks and support safe, sustainable exercise practices based on individual predispositions.

1

Managing Exercise-Associated Cramp Risk

Your score for exercise-associated cramp risk indicates how likely you are to experience muscle cramps during or after physical activity. Effective hydration, proper warm-ups, and targeted stretching can help reduce cramping regardless of your score.

Average Cramp Risk

- **Training Goals** With an average cramp risk, focus on moderate hydration and a balanced warm-up routine to minimize cramping.
- **Hydration and Electrolytes**
 - **Consistent Hydration** Drink water throughout the day and during exercise, but electrolyte drinks are typically needed only for prolonged sessions.
- **Warm-Up and Stretching**
 - **Light Warm-Up** Engage in dynamic stretching to prime muscles before exercise.
 - **Targeted Stretching** Stretch muscles after intense workouts to maintain flexibility and reduce minor cramping.
- **Additional Tips** Listen to your body's signs of dehydration or fatigue to prevent cramping.

2

Reducing Knee Injury Risk

Your knee injury risk score indicates how susceptible your knees may be to stress or strain during physical activity. Focusing on knee stability, strength, and alignment in workouts is essential for injury prevention.

Average Knee Injury Risk

- **Training Goals** Maintain balanced leg strength and proper form to support knee health and prevent minor strain.
- **Strengthening Exercises**
 - **Balanced Leg Workouts** Include lunges, squats, and calf raises, using moderate weights and focusing on form.
 - **Core and Hip Strength** Incorporate core exercises (e.g., planks) and hip-strengthening moves (e.g., side leg raises) to support knee stability.
- **Mobility and Alignment**
 - **Regular Mobility Work** Include ankle and hip mobility exercises, as these areas affect knee alignment.
- **Additional Tips** Pay attention to knee alignment during workouts, and avoid overextending or locking the knees during movements.



BLOCK 4

TRAINING GUIDE:

Injury Risk and Prevention

3

Minimizing Achilles Tendon Injury Risk

Your Achilles tendon injury risk score reflects the potential for strain in the Achilles area, which can be sensitive to repetitive impact or sudden increases in activity intensity. Achilles care focuses on calf strengthening, ankle stability, and gradual progression in exercise intensity.

High Achilles Injury Risk

- **Training Goals** Prioritize Achilles tendon health by gradually progressing with intensity, focusing on calf and ankle strengthening.
- **Strengthening Exercises**
 - **Calf Strengthening** Include calf raises (e.g., standing and seated) to strengthen the Achilles area.
 - **Ankle Stability Work** Incorporate ankle mobility and stability exercises, such as balance drills or resistance band ankle exercises.
- **Warm-Up and Progression**
 - **Extended Warm-Up** Spend extra time warming up the calves and ankles before high-impact activities.
 - **Gradual Intensity Increase** Avoid sudden jumps in intensity, especially in high-impact activities like running or jumping.
- **Additional Tips** Use supportive footwear and consider ankle braces if participating in high-stress activities like plyometrics.



UNLOCKING YOUR POTENTIAL: THE ROAD AHEAD

Your fitness journey is as unique as your genetic profile, and this report offers a detailed roadmap to help you harness your natural strengths while supporting areas for improvement.

- **Stay Consistent** Your genetics provide a foundation, but steady effort, patience, and focus on form are essential to unlocking your potential.
- **Listen to Your Body** While genetics guide your path, your body's signals day-to-day are just as important. Adapt your workouts, rest days, and intensity based on how you feel to stay balanced and energized.
- **Reevaluate and Evolve** As you gain strength and endurance, revisit and refine your goals. Your fitness plan should grow with you, adapting as you do.



FINALLY,

EMBRACE EACH WORKOUT AS

A building block toward a healthier, stronger, and more resilient you. Here's to a journey of success,

TAILORED UNIQUELY FOR YOU!

UNDERSTANDING

»» GENETICS





UNDERSTANDING

GENETICS

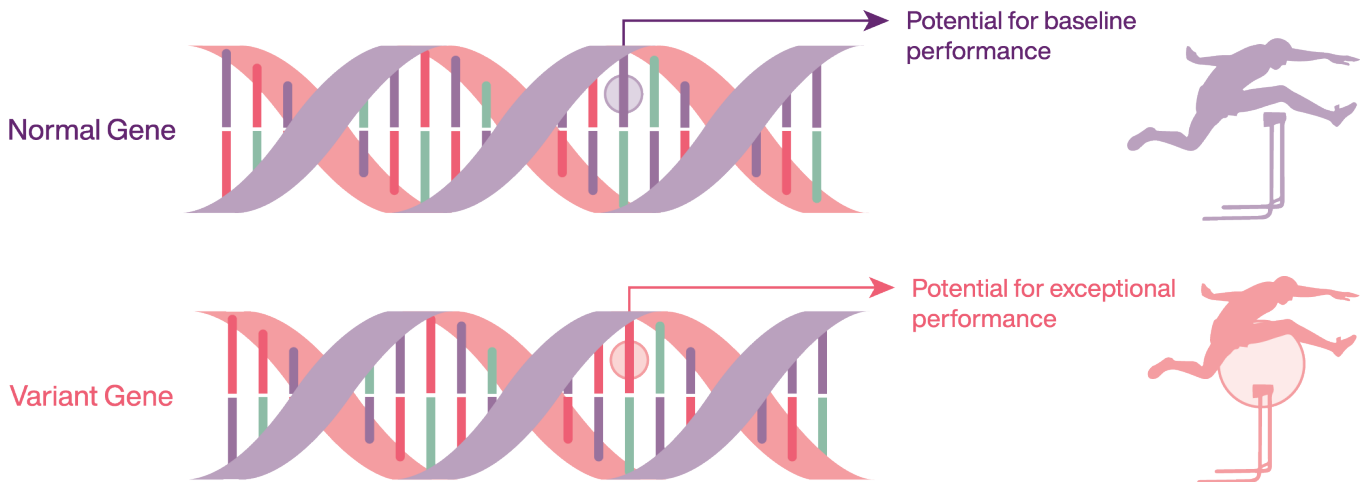
Genetics is the science of how our unique DNA influences traits, health, and even behaviors. By decoding the patterns within our DNA, we can gain valuable insights into what makes each of us unique, from physical characteristics to potential wellness needs. Here's an overview of genetics and how it relates to your health and wellness.

1. What is DNA?

DNA (deoxyribonucleic acid) is the molecule that carries the genetic instructions for all living organisms. Your DNA contains a unique code of four chemical bases (adenine, thymine, cytosine, and guanine) arranged in various sequences to form genes. These genes direct cellular activities and influence traits, such as eye color, height, and even how the body metabolizes nutrients.

2. Genes and Genetic Variants

Each person's DNA is organized into genes, which are segments that instruct cells to produce proteins responsible for various bodily functions. Although we all share similar genes, slight differences, called genetic variants or alleles, make each of us unique. These variants can influence how we respond to different foods, how quickly we recover from exercise, or our sensitivity to certain environmental factors. The most common type of variant is a single nucleotide polymorphism (SNP), which involves a change in a single base pair. SNPs help researchers understand how individual genes may impact specific wellness traits.



3. Polygenic Traits and Complex Conditions

Some traits and conditions, such as height, metabolism, and susceptibility to certain health conditions, are polygenic. This means they are influenced by many genes rather than a single gene. Polygenic traits are complex, with each gene contributing a small amount to the overall outcome. By studying multiple genetic variants, researchers can better understand and predict the likelihood of certain traits or predispositions.

4. Nature and Nurture: Genetics and Environment

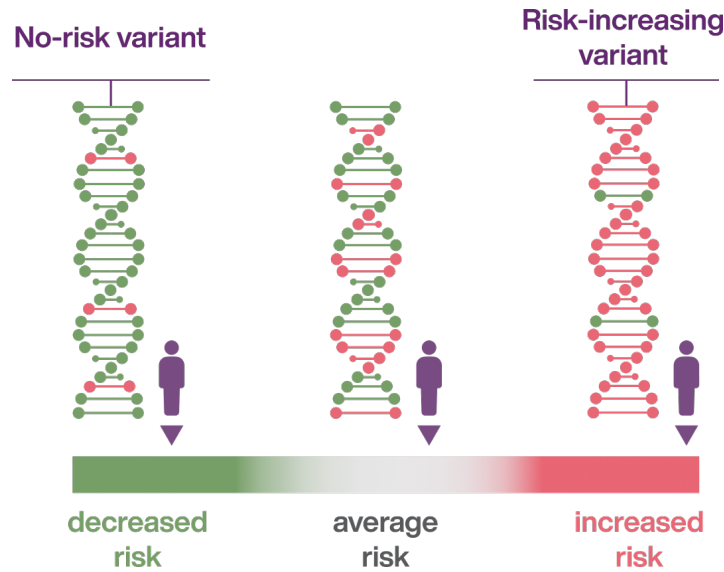
Genetics plays a powerful role in shaping who we are, but it works in tandem with the environment. Lifestyle factors such as diet, physical activity, stress, and sleep interact with our genes, affecting our wellness outcomes. For instance, while genetic predispositions can influence weight or cholesterol levels, diet and exercise can significantly modify these outcomes. Understanding genetics is about recognizing the balance between nature (your genetic makeup) and nurture (your lifestyle choices).



HOW IS MY GENETIC SCORE BEING CALCULATED?

Your genetic score, also known as a polygenic risk score (PRS), is calculated by analyzing multiple genetic variants in your DNA that contribute to specific traits or health risks. Unlike single-gene disorders, where one gene has a major impact, complex traits and common conditions like cardiovascular health, metabolism, and skin characteristics are influenced by many small genetic factors combined with lifestyle and environmental influences.

1. Understanding Genetic Variants Each person's DNA has tiny differences called genetic variants, which are natural variations in the genetic code. These variants can influence how the body processes nutrients, responds to exercise, or predisposes someone to certain health conditions. For example, while one variant might have a minor impact on your metabolism, multiple variants combined can have a more significant effect.



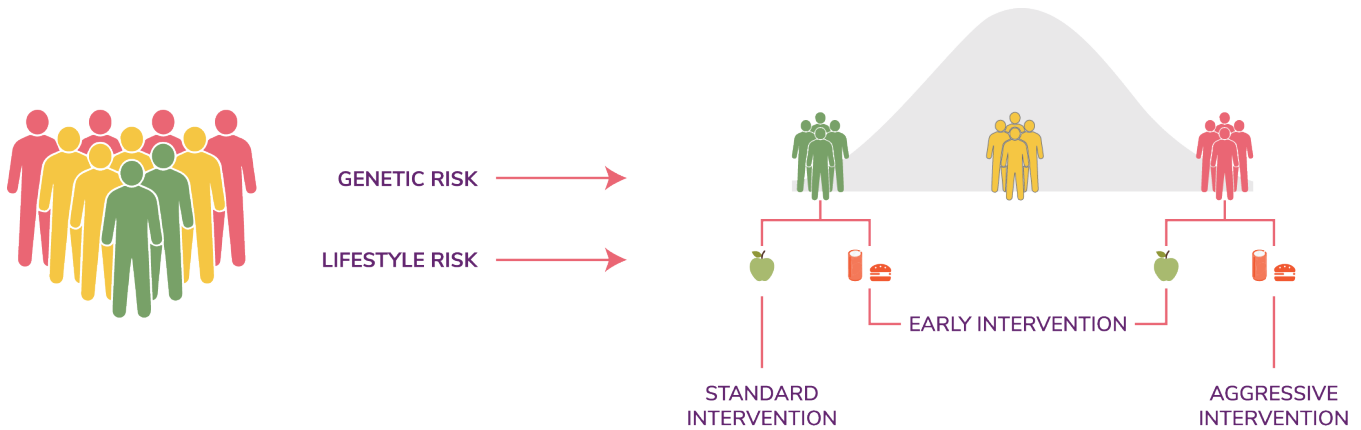
2. Calculating a Polygenic Risk Score (PRS) A polygenic risk score is calculated by combining the effects of many genetic variants across your genome. Each variant contributes a small amount to the overall score, which reflects your relative predisposition for a specific trait or health outcome. Here's how it works:

- **Genome-Wide Analysis:** Scientists analyze thousands of genetic markers across your genome using advanced algorithms.
- **Weighted Contributions:** Each genetic variant has a weight based on how strongly it is associated with a particular trait or condition.
- **Summing Up the Score:** By combining the weighted contributions of each variant, the final polygenic risk score is calculated, representing your genetic predisposition for a specific trait.



3. What Your Score Means Your polygenic risk score is converted into a percentile that shows how your genetic predisposition compares to others in the general population. Here's what different percentiles can indicate:

- **High Percentile (75-100%):** You have a strong genetic predisposition for this trait. This could mean, for example, a greater genetic tendency toward high endurance or certain metabolic traits.
- **Average Percentile (26-74%):** You have an average genetic predisposition. You may benefit from a balanced approach in this area to achieve optimal results.
- **Low Percentile (0-25%):** This indicates a lower predisposition, but lifestyle factors may still significantly influence your outcomes.



4. Limitations of Polygenic Scores While polygenic risk scores offer valuable insights, there are limitations to keep in mind:

- **Not Diagnostic:** A polygenic score indicates genetic predispositions but does not determine certainty. It is not a diagnostic tool and cannot predict health outcomes with absolute accuracy.
- **Excludes Non-Genetic Factors:** Your score does not consider lifestyle, diet, or environmental factors, which can heavily impact health.
- **Specific to Certain Traits:** Polygenic scores are typically validated for common traits and may not account for rare genetic variations that can have a significant individual effect.

5. Putting It All Together Polygenic risk scores provide a personalized look at how your genetics may influence specific wellness traits. However, they work best alongside other personal health information, like lifestyle habits and environmental influences, for a well-rounded understanding of your health and wellness potential.



**LIVE HEALTHY.
STAY YOUNG.**