ULTAGENOMICS

DECODE YOUR DNA. GUIDE YOUR HEALTH.

Genetic Sleep Insights

GENETICS REPORT

1	8	59
Report	Report Panels	Gene Variants

Example Client
Prepared for

September 19, 2026
Report Date

Our genetic test provides insights into how your unique genetic profile influences health areas. By understanding these genetic tendencies, you and your healthcare provider can make more informed lifestyle and wellness choices to support long-term health goals.

THESE GENE RESULTS MIGHT TELL YOU

- ✓ How your body may respond to certain nutrients
- ✓ Dietary patterns and environmental factors
- ✓ Potential predispositions in detoxification, metabolism, and physical performance
- ✓ Why some wellness strategies may work differently for you

THESE GENE RESULTS WILL NOT TELL YOU

- ✕ Any medical diagnoses
- ✕ Cancer diagnoses or clinical cancer risk assessments
- ✕ Predictions about future health conditions
- ✕ How lifestyle factors outside of genetics impact health outcomes

This report is intended for informational purposes only and does not constitute medical advice. Results reflect genetic predispositions, not guarantees of health outcomes. Always consult a qualified healthcare practitioner before making changes to your health regimen.

A typical or decreased result does not mean there is no risk, and an increased result does not mean a condition will develop. Environment, lifestyle and family history also play a role. Any result that mentions cancer reflects a genetic tendency only. It is not a clinical cancer risk assessment and does not replace recommended cancer screening.

Talk with a healthcare provider before starting any supplement, especially if pregnant or breastfeeding, taking prescription medications, or managing a medical condition. Do not start, stop or change any medication based on these results without first talking with the prescribing provider.

Statements about supplements in this report have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

Research on how genes relate to health is still developing. Some recommendations are based on limited evidence and may be updated as new research becomes available.

Testing is performed by a CLIA-certified, CAP-accredited laboratory. Genotyping is highly accurate, but no laboratory test is completely error-free. Results that will change clinical decisions may warrant confirmatory testing.

OVERVIEW

Results at a Glance

This report covers 8 panels and 12 individual results. The summary below shows where the genetic profile indicates areas worth focusing on, areas to monitor, and areas where results are favorable. The Moderate results are where targeted support may have the most impact.

2

NEEDS ATTENTION

- Sleep Deprivation Sensitivity
- Mood-induced Sleeplessness Risk

2

MODERATE

- Jittery Legs Risk
- Sleep Movement Risk

8

OPTIMAL

- Ideal Sleep Window
- Ideal Total Time in Bed
- Sleep Length Propensity
- Micro-Awakenings Propensity
- Deep Sleep Quality
- Stress-Induced Sleeplessness Risk
- Excessive Sleepiness Risk
- Melatonin Metabolism (CYP1A2)

1 Ideal Sleep Window

11 variants analyzed

In plain terms: The Ideal Sleep Window is the optimal period of time to get the most restful and rejuvenating sleep based on circadian rhythm. Circadian rhythm refers to the internal clock that regulates various biological processes in the body, including sleep-wake cycles. Every person has a unique circadian propensity, and it determines levels of alertness and restfulness throughout the day.

There are three categories of individuals associated with varying sleep windows: morning larks, intermediate, and night owls. Morning larks are early risers who feel most alert during the first half of the day, with the earliest sleep window. On the other hand, night owls tend to feel more alert in the evening and night hours and have a later sleep window. Intermediate types fall somewhere in between morning larks and night owls.

When individuals regularly sleep outside of their ideal sleep window, performance can diminish significantly. Understanding one's ideal sleep window can provide valuable insights into how the body responds to different sleep patterns, and provide the opportunity to create the optimal sleep schedule.

YOUR RESULTS

Ideal Sleep Window



INTERMEDIATE HUMMINGBIRD

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with intermediate sleep window genetic results have a typical circadian rhythm with no strong preference for early or late wake times. Bedtimes between 9 PM and midnight and wake times between 5 and 8 AM tend to suit this result, and a consistent schedule within this window supports daytime alertness.

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
CSNK1D T130C	rs104894561	**TT**	**CLOCK A*213G**	rs1801260	**AA**
PER3 T1916G	rs10462020	**TG**	**CRY1 G636A**	rs8192440	**GG**
PER3 A3473G	rs10462021	**AG**	**PER3 C2566G**	rs228697	**CC**
PER2 T1984C	rs121908635	**TT**	**PER3 A1247G**	rs139315125	**AA**
CRY1 T1657+3G	rs184039278	**TT**	**PER3 C1240G**	rs150812083	**CC**
AANAT G385A	rs28936679	**GG**			

2 Time in Bed

10 variants analyzed

In plain terms: Getting the right amount of sleep is essential for overall health and well-being. There are many different aspects to time in bed; there's the time it takes to fall asleep, our actual sleep length, the micro-awakenings that occur each night, and are forgotten, and the true disruptions in sleep which wake us up.

Sleep length refers to the total amount of time spent sleeping, not including the time it takes to fall asleep or any awakenings during the night. Most people tend to focus on recommendations for sleep length as recommendations for time in bed, which can result in consistently low sleep length and quality.

Micro-awakenings are brief interruptions in sleep that can occur throughout the night. While they are normal, they can affect the overall quality of sleep. Some individuals may experience more frequent or longer micro-awakenings, which can play a role in determining ideal time in bed.

This page provides genetic propensities for the most ideal sleep length and time in bed, as well as the expected amount of micro-awakenings.

YOUR RESULTS

Ideal Total Time in Bed



LONGER - 9.5 TO 10 HOURS

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with longer sleep genetic results typically require 9.5-10 hours in bed per night, often due to higher sleep latency or more frequent awakenings. A biometric tracker can help monitor sleep quality and identify opportunities for improvement.

YOUR RESULTS

Sleep Length Propensity



LONGER

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with longer sleep genetic results typically require more than 9 hours of sleep to feel fully rested. A biometric tracker can assist in measuring sleep quality and confirming that the additional time in bed results in restorative sleep.

YOUR RESULTS

Micro-Awakenings Propensity



TYPICAL

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with typical micro-awakenings genetic results typically experience up to 50-60 minutes of micro-awakenings per night, which is within the normal range. Consistent sleep hygiene practices can help minimize disruptions within this window.

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
DEC2 G1151C	rs121912617	**GG**	**CLOCK G-446-4252A**	rs12649507	**GG**
COMT G472A	rs4680	**GA**	**PPARGC1B C78+13951G**	rs6888451	**CC**
CLOCK A*213G	rs1801260	**AA**	**BTBD9 G1154+104406A**	rs3923809	**AA**
ABCC9 G3474-1222A	rs11046205	**AG**	**MEIS1 T965+6302G**	rs2300478	**TT**
CLOCK A793-1130G	rs11932595	**AA**	**PTPRD G103-113009A**	rs1975197	**AG**

3 Sleep Deprivation Sensitivity

3 variants analyzed

In plain terms: Sleep deprivation can have significant impacts on physical and mental well-being, affecting cognitive function, mood, performance, and overall health. However, not everyone experiences the same effects of sleep deprivation, in fact, there are individuals who seem to function relatively well even with less sleep.

It is important to note that while genetics play a role, other factors such as lifestyle, stress levels, and sleep hygiene practices also influence sleep deprivation sensitivity. Maintaining a healthy sleep routine, creating a conducive sleep environment, and managing stress can all contribute to better sleep quality and minimize the impact of sleep deprivation.

This page explores the genetic predisposition for sleep deprivation sensitivity, suggesting how different individuals may respond to sleep loss.

YOUR RESULTS

Sleep Deprivation Sensitivity



INCREASED

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with increased sleep deprivation sensitivity genetic results are more susceptible to cognitive impairment, mood changes and performance decline during periods of sleep loss, and recovery from sleep deprivation typically takes longer. Consistent, adequate sleep is especially important for this result.

RECOMMENDATIONS

SUPPLEMENT

Melatonin

1 to 3 mg 30 to 60 min before bed

Regulates the sleep-wake cycle; helps improve sleep onset especially with disrupted circadian rhythms.

SUPPLEMENT

Magnesium

200 to 400 mg before bed (glycinate or citrate)

Supports relaxation by regulating GABA, reduces cortisol levels, and supports muscle relaxation.

DIET

Limit Caffeine After 2 PM

Caffeine's half-life is 5 to 7 hours; afternoon intake significantly delays sleep onset and reduces deep sleep.

DIET

Butternut Squash Seeds

1 oz with last meal

High in L-tryptophan, a melatonin and serotonin precursor that supports sleep readiness.

LIFESTYLE

Consistent Sleep Schedule

7 to 8 hours/night

Establishing consistent sleep and wake times is the highest-leverage sleep intervention.

LIFESTYLE

Turn Off Electronics at Night

1 hour before bed

Blue light suppresses melatonin production; screen-free wind-down is essential for sleep onset.

FURTHER TESTING

Sleep Study (PSG)

Rules out sleep apnea, restless leg syndrome, and other disorders that cause sleep deprivation.

FURTHER TESTING

Melatonin Timing (DLMO)

Dim-light melatonin onset test identifies circadian phase delay, guiding optimal timing of melatonin use.

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
ADA C22T	rs73598374	**TC**	**COMT G472A**	rs4680	**GA**

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
DEC2 G1151C	rs121912617	**GG**			

4 Deep Sleep Quality

9 variants analyzed

In plain terms: Getting a good night's sleep is essential for overall health and well-being. Poor sleep quality can lead to fatigue, decreased productivity, and a host of other health problems. Practicing good sleep hygiene can improve deep sleep quality and promote restfulness and rejuvenation.

However, some individuals may benefit from additional support when it comes to deep sleep quality, while others may have a natural advantage. Genetics provide a blueprint for the length and quality of deep sleep.

Additionally, deep sleep length and quality as measured by specialized equipment can be different from reported sleep quality. Some individuals may have high quality sleep, and yet be genetically inclined to report otherwise. Understanding genetic propensities can assist in providing more awareness of sleep quality and additional ways to improve it.

Some examples of good sleep hygiene which can support deep sleep quality include: creating a bedtime routine, avoiding caffeine or alcohol before bed, using sleep aids, and creating an effective sleep environment.

This page provides personalized insights into genetic predispositions for sleep quality and offers practical recommendations for improving sleep habits.

YOUR RESULTS

Deep Sleep Quality



INCREASED

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with increased deep sleep genetic results tend to get more slow-wave sleep, which may support faster physical recovery and stronger memory consolidation. This advantage depends on getting enough sleep on a consistent schedule, and avoiding alcohol close to bedtime helps protect it.

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
ADA C22T	rs73598374	**TC**	**PPARGC1B C78+13951G**	rs6888451	**CC**
COMT G472A	rs4680	**GA**	**MEIS1 T965+6302G**	rs2300478	**TT**
BTBD9 G1154+104406A	rs3923809	**AA**	**PTPRD G103-113009A**	rs1975197	**AG**
FABP7 C182T	rs2279381	**CC**	**BDNF C196T**	rs6265	**CC**
CLOCK A793-1130G	rs11932595	**AA**			

5 Sleeplessness Risk

5 variants analyzed

In plain terms: Sleeplessness can be caused by a variety of factors, including environmental factors such as mood, stress, emotional fatigue, caffeine, or poor sleep hygiene. This page provides insights into the genetic predisposition for sleeplessness caused by environmental factors.

Stress-induced sleeplessness is common, and can be caused by a variety of stressors, such as work, family, or financial worries. This can make it difficult to fall asleep, stay asleep, or get restful sleep, leading to fatigue, irritability, and other negative consequences.

Mood-induced sleeplessness is another common difficulty among individuals with emotional fatigue or low mood. Depression can also interfere with the ability to fall asleep or stay asleep, leading to sleep deprivation and other negative effects on physical and mental health. In those cases, it may be most effective to work with a medical provider to assist.

This page provides personalized insights into genetic risk for environmentally-induced sleeplessness and offers practical recommendations based on the results.

YOUR RESULTS

Mood-induced Sleeplessness Risk



INCREASED

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with increased mood-induced sleeplessness genetic results are more susceptible to sleep disruption from low mood or emotional fatigue. Low mood and poor sleep can reinforce each other, so addressing both early matters. A consistent sleep schedule, fewer evening screens, avoiding late caffeine and relaxation or mindfulness practices can help. If sleeplessness is persistent, psychotherapy or cognitive behavioral therapy for insomnia may help, and a healthcare provider can help rule out depression.

RECOMMENDATIONS

SUPPLEMENT

Kava

120 mg daily

Binds GABA receptors to enhance sedation and reduce anxiety-driven sleeplessness.

SUPPLEMENT

Glycine

3 g about an hour before bed

An amino acid that may improve how rested sleep feels.

DIET

Tart Cherry Juice

8 oz in the evening

A natural source of melatonin that may modestly improve sleep.

DIET

Evening Snack With Complex Carbs and Protein

For example, yogurt with oats

A small balanced snack can support calm and steady blood sugar overnight.

LIFESTYLE

Meditation

10 to 20 min before bed

Pre-sleep meditation reduces arousal and quiets mood-driven thought loops that delay sleep.

LIFESTYLE

Wind-Down Routine

30 to 60 minutes before bed without screens

A predictable routine helps the mind settle before sleep.

FURTHER TESTING

Depression and Anxiety Screening (PHQ-9, GAD-7)

With a healthcare provider

Mood and sleep affect each other, so a short screen can guide next steps.

FURTHER TESTING

Ferritin

Low iron stores can disrupt sleep and are easy to correct.

YOUR RESULTS

Stress-Induced Sleeplessness Risk



TYPICAL

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with typical stress-induced sleeplessness risk genetic results have a standard susceptibility to stress-related sleep disruption, consistent with the general population. Stress management strategies such as mindfulness, relaxation techniques, and cognitive-behavioral approaches can further support sleep quality.

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
GSK3B A-1001G	rs334558	**GG**	**PER2 T1151-647G**	rs7602358	**TT**
CLOCK A*213G	rs1801260	**AA**	**GABRA6 C*135T**	rs3219151	**TT**
TPH2 A1125T	rs4290270	**TA**			

6 Excessive Sleepiness

5 variants analyzed

In plain terms: Excessive sleepiness is a condition where the brain struggles to keep a regular sleep-awake pattern. This can lead to feeling sleepy during the day, falling asleep unexpectedly, and having vivid dreams.

This kind of sleepiness can be caused by a combination of genetic and environmental factors, and certain variants are known to increase the risk of developing the issue. Yet these genetic results are not deterministic or diagnostic

There are many ways to support excessive sleepiness with lifestyle change such as improving sleep hygiene, managing micronutrient levels, and avoiding caffeine. In extreme cases, it is advisable to work with a medical provider for support.

YOUR RESULTS

Excessive Sleepiness Risk



TYPICAL

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with typical excessive sleepiness genetic results are similar to the typical population in having symptoms of narcolepsy or excessive daytime sleepiness. Good sleep hygiene and consistent sleep habits are always key to solid sleep.

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
HLA-DRB1*15:01 (G>A)	rs3135388	**AG**	**P2RY11 G*638A**	rs2305795	**GG**
TRCA/TRA (T>G)	rs1154155	**TT**	**GDNF-AS (C>A)**	rs62360233	**CC**
HLA/TPMT (A>C)	rs2858884	**AA**			

7 Sleep Movement

11 variants analyzed

In plain terms: Excessive sleep movement and jittery legs are two different sleep conditions that can significantly impact sleep quality. Excessive sleep movement relates to having a high number of general movements throughout the night, usually at least 15/hour on average. This level of movement reduces sleep quality, and can contribute to sleep awakenings and ultimately reduced recovery.

Having jittery legs, on the other hand, is more associated with an irresistible urge to move the legs, typically accompanied by unpleasant sensations, such as crawling, creeping, or tingling in the legs. This can also make it difficult to fall asleep and stay asleep, leading to fatigue and daytime sleepiness.

Both of these sleep movement issues have genetic components in addition to environmental factors. There are many ways to support sleep movement such as practicing relaxation techniques, managing micronutrient levels, and improving sleep hygiene. In extreme cases, it is advisable to work with a medical provider for support.

YOUR RESULTS

Jittery Legs Risk

INCREASED

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with increased genetic risk for jittery legs genetic results have a higher likelihood of developing this condition due to genetic factors. Monitoring and addressing environmental triggers, such as iron deficiency, sedentary behavior, and certain medications, is especially important for this genetic profile.

RECOMMENDATIONS

SUPPLEMENT

Iron (guided by ferritin)

Only if ferritin is under 75 ng/mL, per provider

Restless legs guidelines recommend iron when ferritin is low-normal, and it can reduce symptoms.

SUPPLEMENT

Vitamin D3 (if low)

1,000 to 2,000 IU daily, or as guided by testing

Low vitamin D has been linked with restless legs symptoms.

DIET

Iron-Rich Foods With Vitamin C

Lean red meat, lentils, spinach; pair with citrus or peppers

Vitamin C at the same meal improves iron absorption, which helps keep ferritin in a healthy range.

DIET

Finish Caffeine by Noon

Caffeine can worsen restless legs symptoms.

LIFESTYLE

Limit Evening Caffeine, Alcohol and Nicotine

None within 4 to 6 hours of bed

These can worsen restless leg symptoms and disrupt sleep.

LIFESTYLE

Stretch or Massage the Legs Before Bed

5 to 10 minutes of calf and hamstring stretches

Gentle stretching, massage or a warm bath may reduce the urge to move the legs at night.

FURTHER TESTING

Kidney Function and Thyroid Tests

Kidney and thyroid problems can cause restless legs symptoms.

YOUR RESULTS

Sleep Movement Risk

INCREASED

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with increased sleep movement genetic results have a higher likelihood of experiencing more than 15 movements per hour during sleep, which can reduce sleep quality and cause daytime fatigue. Good sleep hygiene and stress management can help. A biometric tracker can help measure sleep movements and assess the impact of interventions.

RECOMMENDATIONS

DIET

Lighter Evening Meals

Finish dinner 2 to 3 hours before bed

Large or late meals can disrupt sleep and make restless sleep more likely.

LIFESTYLE

Keep the Bedroom Cool and Dark

About 65 to 68°F

A comfortable sleep environment reduces awakenings.

LIFESTYLE

Regular Moderate Exercise

Most days, finished at least 3 hours before bed

Regular activity may reduce sleep movements and improve sleep quality.

FURTHER TESTING

Vitamin D (25-OH)

Low vitamin D is linked with restless sleep.

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
BTBD9 G1154+104406A	rs3923809	**AA**	**MAP2K5 A1075-3717G**	rs12593813	**AG**
MEIS1 T965+6302G	rs2300478	**TT**	**PTPRD G202-78374A**	rs4626664	**AG**
PTPRD G103-113009A	rs1975197	**AG**	**ADH1B T143C**	rs1229984	**CC**
BTBD9 T1155-53004C	rs9357271	**TT**	**HMOX1 A-413T**	rs2071746	**TA**
BTBD9 T1155-52972C	rs9296249	**TT**	**VDR taq A1056G**	rs731236	**AA**
MAP2K5 T1242+6985G	rs4489954	**TG**			

8 Melatonin Metabolism

5 variants analyzed

In plain terms: This section contains additional genetics related to Sleep which do not yet have their own category or which have limited evidence or research.

YOUR RESULTS

Melatonin Metabolism (CYP1A2)



RAPID METABOLISM

UNDERSTANDING WHAT THIS MAY MEAN

Individuals with rapid CYP1A2 metabolism genetic results may break down melatonin more quickly, potentially reducing its duration of effect and effectiveness. While formal genetic studies have shown minimal measurable impact on melatonin metabolism, clinical evidence suggests some variability. Higher doses or sustained-release formulations may be more effective.

GENETIC SUMMARY

GENE	RS ID	YOUR GENOTYPE	GENE	RS ID	YOUR GENOTYPE
CYP1A2 C-729T	rs12720461	**CC**	**CYP1A2 G-3860A**	rs2069514	**GG**
CYP1A2 C1291T	rs28399424	**CC**	**CYP1A2 C-163A**	rs762551	**AC**
CYP1A2 T739G	rs2069526	**TT**			

APPENDIX A

Supplement Recommendations

Based on your results

Supplements listed below are recommended for panels where at least one result was outside the typical range.

SUPPLEMENT	RATIONALE	PANEL
Melatonin 1 to 3 mg 30 to 60 min before bed	Regulates the sleep-wake cycle; helps improve sleep onset especially with disrupted circadian rhythms.	Sleep Deprivation Sensitivity
Magnesium 200 to 400 mg before bed (glycinate or citrate)	Supports relaxation by regulating GABA, reduces cortisol levels, and supports muscle relaxation.	Sleep Deprivation Sensitivity
Kava 120 mg daily	Binds GABA receptors to enhance sedation and reduce anxiety-driven sleeplessness.	Sleeplessness Risk
Glycine 3 g about an hour before bed	An amino acid that may improve how rested sleep feels.	Sleeplessness Risk
Iron (guided by ferritin) Only if ferritin is under 75 ng/mL, per provider	Restless legs guidelines recommend iron when ferritin is low-normal, and it can reduce symptoms.	Sleep Movement
Vitamin D3 (if low) 1,000 to 2,000 IU daily, or as guided by testing	Low vitamin D has been linked with restless legs symptoms.	Sleep Movement

APPENDIX B

Further Testing Recommendations

Based on your results

Lab tests and assessments recommended for panels where at least one result was outside the typical range.

TEST / ASSESSMENT	CLINICAL RATIONALE	PANEL
Sleep Study (PSG)	Rules out sleep apnea, restless leg syndrome, and other disorders that cause sleep deprivation.	Sleep Deprivation Sensitivity
Melatonin Timing (DLMO)	Dim-light melatonin onset test identifies circadian phase delay, guiding optimal timing of melatonin use.	Sleep Deprivation Sensitivity
Depression and Anxiety Screening (PHQ-9, GAD-7) With a healthcare provider	Mood and sleep affect each other, so a short screen can guide next steps.	Sleeplessness Risk
Ferritin	Low iron stores can disrupt sleep and are easy to correct.	Sleeplessness Risk
Kidney Function and Thyroid Tests	Kidney and thyroid problems can cause restless legs symptoms.	Sleep Movement
Vitamin D (25-OH)	Low vitamin D is linked with restless sleep.	Sleep Movement