

MentalHealthMap™

We all know that getting enough sleep is essential to our physical and mental health, but how many of us are actually able to do so? This seemingly simple quest for a good night's sleep and the health benefits it provides can often prove to be surprisingly challenging. This section of your Mental Health Map explores the genetic influences that may be impacting your SLEEP and provides personalized insight into how to improve your sleep behavior.



WATCH GENOMIND'S SLEEP VIDEO



Sleep Cycle



Why do some people naturally wake up early and feel ready for action, while others hit the snooze button several times and struggle in the morning? It turns out that whether you are a morning person or a night owl is largely driven by the genetics that impact your SLEEP CYCLE. This is also referred to as our CIRCADIAN RHYTHM, which drives our sleep-wake pattern and can predispose some people to be 'early birds' or 'night-owls' based on genetics and other factors. This can have a large impact on the duration and quality of our sleep.

GENE: CLOCK, HCRTR2

YOUR GENOTYPE: T/C, G/G

genotype.

25% of the population share this

PREDISPOSITION:

WATCH GENOMIND'S SLEEP CYCLE

VIDEO

NIGHT OWL

We detected a variant in one of your key CIRCADIAN RHYTHM genes (CLOCK) which predisposes you toward being a NIGHT OWL. Your genotype is associated with increased activity of specific proteins that push the natural CIRCADIAN RHYTHM toward having more energy later at night. Being a NIGHT OWL is not necessarily a bad thing, but may cause difficulty in adapting to a sleep schedule that requires waking up early in the morning.

LEARN MORE ABOUT SLEEP





Falling Asleep

BRAIN CELL SIGNALING is an important aspect when it comes to FALLING ASLEEP. In fact, some of the most important benefits of sleep occur when BRAIN CELL SIGNALING processes shut down specific areas of the brain at specific times to allow the brain cells to recharge and heal. We test for variants in a gene that affects this process and influence how easily we fall asleep at night.



TRAIT

YOUR GENOTYPE: T/T, G/G

39% of the population share this genotype.

PREDISPOSITION:

NORMAL ACTIVITY

STRENGTH OF EVIDENCE: Preliminary, based on multiple studies

When we sleep, BRAIN CELL SIGNALING mechanisms slow down the speed at which neurons communicate. This allows these cells to rest and renew themselves. We test for genetic variants that affect this mechanism and predispose some people to having trouble falling asleep. However, your genotype is associated with NORMAL ACTIVITY.





Sleeping Behavior



WATCH GENOMIND'S SLEEPING

BEHAVIORS VIDEO

Involuntary behaviors during sleep are surprisingly common. SNORING is one of these behaviors, and it can disturb not only the sleep of the snorer, but also anyone they are sleeping with or near. Simple, repetitive, muscle movements in your limbs can also happen during sleep. These LIMB MOVEMENTS IN SLEEP are referred to as periodic limb movements and are most likely to happen in the lower parts of the body like toes, ankles, knees or hips but can appear in the upper extremities as well. While most people are not aware of these behaviors they can lead to sleep disruptions like frequent awakenings, non-restorative sleep and daytime fatigue or sleepiness. These movements may also disturb your sleeping partner.



YOUR GENOTYPE: A/G, T/T 19% of the population share this genotype.

PREDISPOSITION:

NORMAL ACTIVITY

SNORING is a common SLEEP BEHAVIOR and has been linked to several factors such as age, gender (males are more likely to snore than females), alcohol consumption, nasal congestion and increased weight. There is also a genetic component to being prone to snore. We test for genetic variants that affect the BRAIN-BODY CONNECTION that predispose some people to SNORING more than others. However, your genotype is associated with NORMAL ACTIVITY.



PREDISPOSITION:

NORMAL ACTIVITY

MOTOR CONTROL refers to the systems connecting the brain to the body that allow us to control our limbs. MOTOR CONTROL is usually important while we are awake, but some MOTOR CONTROL systems also ensure that limbs stay relaxed when we are asleep. We test for genetic variants that affect MOTOR CONTROL and predispose some people to more frequent LIMB MOVEMENTS IN SLEEP. However, your genotype is associated with NORMAL ACTIVITY.





GENE: BTBD9

MOTOR CONTROL

Daytime energy

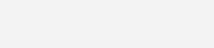


It goes without saying that your ability to SLEEP affects your DAYTIME ENERGY levels. Everyone experiences some days when they lack energy and crave a nap, but if this is a regular occurrence and is interfering with mental sharpness and productivity, it is time to get to the bottom of the problem. There are many things that can lead to a drop in your energy level during the day including your genetic makeup. Some of us are wired to have a particular SENSITIVITY TO SLEEP DEPRIVATION, and some people are genetically predisposed to experiencing DAYTIME LETHARGY. Understanding some of the science behind SLEEP will shed light on these traits and how to overcome them.



YOUR GENOTYPE: C/C

90% of the population share this genotype.







PREDISPOSITION:

WATCH GENOMIND'S DAYTIME ENERGY

VIDEO

NORMAL ACTIVITY

SLEEP DEBT refers to how much sleep we need to recuperate from the demands of the day. When you wake up fully rested, your SLEEP DEBT is at a minimum. As you go about your day, your brain uses energy that must be recharged by sleeping. We test for variants in a gene that controls this mechanism and predisposes some people to be more affected by sleep loss than others. However, your genotype is associated with NORMAL ACTIVITY.



PREDISPOSITION:

NOT ASSOCIATED WITH DAYTIME LETHARGY

BRAIN CELL GROWTH AND REPAIR is an important process during sleep. Sleep allows our brain to rest, repair, and grow new brain cell connections which strengthen new memories. We test for variants in a key BRAIN CELL GROWTH AND REPAIR gene (MAPT) that predispose some people toward daytime sleepiness. However, your genotype is NOT ASSOCIATED with this predisposition.

