

# Insomnia

## DNA Health Report

REPORT CATEGORY —



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Sample Client

Report date: 03 September 2025

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## Personal information

NAME

**Sample Client**

SEX AT BIRTH

**Male**

HEIGHT

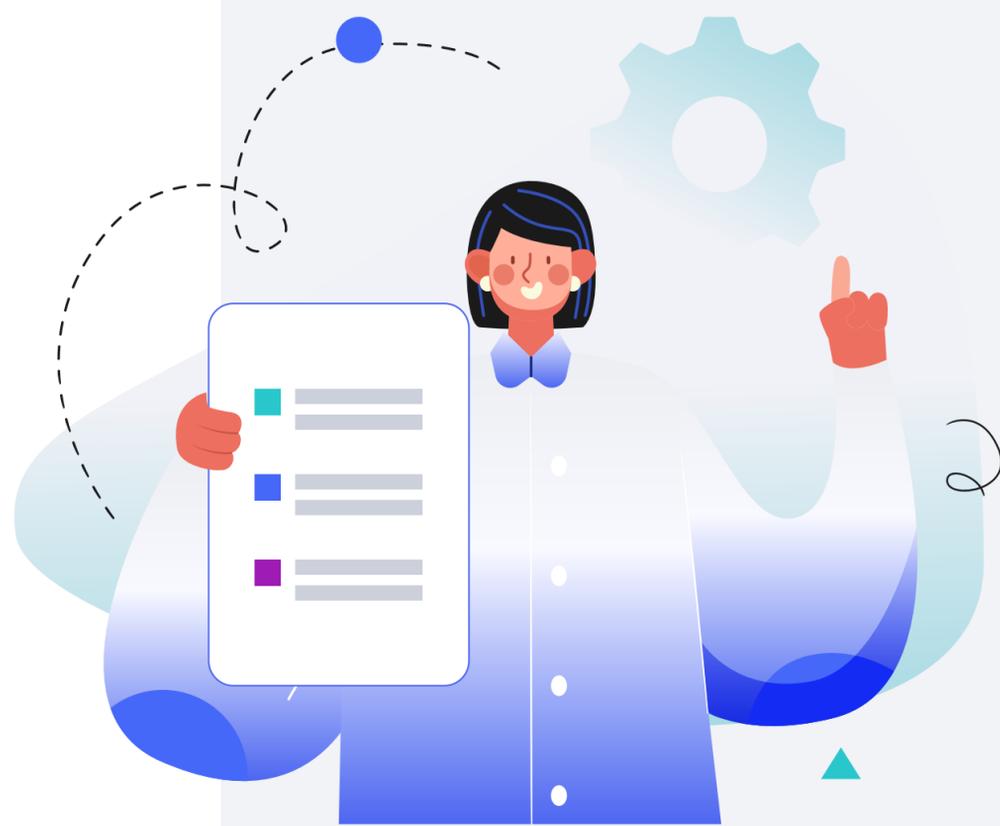
**5ft 9" 175.0cm**

WEIGHT

**165lb 75.0kg**

### DISCLAIMER

This report does not diagnose this or any other health conditions. Please talk to a healthcare professional if this condition runs in your family, you think you might have this condition, or you have any concerns about your results.



# Introduction

**At one point or another, we've all tossed and turned in bed, desperately trying to get some much needed rest.**

Trouble sleeping can lead to chronic tiredness, irritability, difficulty concentrating, and a general lack of energy [\[R\]](#).

**Every year, 1 in 3 people in the US experience issues getting a good night's sleep.** But thankfully, these problems are short-lived for most [\[R\]](#), [\[R\]](#).

So what's the secret behind a long and refreshing night's sleep? Well, **the best way to get more ZZZs may be hidden in your DNA!**

A great example of this is the *PER2* gene. This gene produces a protein that's an important part of our internal clock [\[R\]](#).

This internal clock is synchronized to the light and dark cycle of the day. This cycle is called the *circadian rhythm* [\[R\]](#), [\[R\]](#).

**People who carry a certain variant of the [PER2](#) gene are more likely to experience imbalanced circadian rhythms than others** [\[R\]](#).

Lots of things can throw our internal clock off balance, but **one of the most common causes is being exposed to bright light late at night.** We're all guilty of this, whether it's watching one more episode of our favourite TV show, or lying in bed scrolling through social media [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

**The good news is that if your internal clock isn't set to the right time, you can potentially reset it.** There are a few ways to do this.

You can try to **avoid bright light late at night** and try to **get some natural light first thing in the morning** [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

You can also try waking up and going to bed at the same time every day [\[R\]](#), [\[R\]](#), [\[R\]](#).

These lifestyle changes may get your clock ticking optimally again, and help you get a better night's sleep -- particularly if your issue is rooted in the *PER2* gene variant.

**Don't waste your time counting sheep! Use your DNA to target the root cause of your sleep issues.**

**This report focuses on the genetics of insomnia. Read more to find out:**

- **How your genetics play a role in insomnia**
- **Your genetic risk score based on over 800,000 genetic variants**
- **Personalized recommendations based on your genetics**

# About Insomnia

## Key Takeaways:

- About **40%** of differences in people's chances of getting insomnia may be due to genetics.
- Insomnia is common, affecting about **1 in 4 Americans**.
- Even if your genetic risk is low, your overall risk can still be high due to other factors.
- Risk factors include: depression, shift work, caffeine, inconsistent bedtimes, and more.
- Insomnia can contribute to fatigue, high blood pressure, obesity, heart disease, and diabetes.
- Click the **next steps** tab for relevant labs and lifestyle factors.

You have a 'clock' inside your body that regulates sleep and other 24-hour cycles. These cycles are called *circadian rhythms* [R].

### If your internal clock is disrupted, it can lead to *insomnia*.

People with insomnia have trouble falling asleep, staying asleep, or both [R, R].

### Insomnia is the most common sleep condition in the US.

In fact, **about 1 in 4 Americans are struggling with it** [R, R].

If you've ever struggled to fall or stay asleep, you're likely to [R, R]:

- Feel tired
- Have trouble focusing
- Have trouble remembering things
- Feel irritable

Insomnia may also lead to more serious problems, such as [R]:

- High blood pressure
- Heart disease
- Obesity
- Diabetes
- Asthma



TYPICAL LIKELIHOOD

## Typical likelihood of insomnia based on 776,133 genetic variants we looked at



### Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
OLFM4	rs117352467	GG
ISL1	rs116701328	GG
SPATS2L	rs75671770	GG
OLFM4	rs4884401	CC
OLFM4	rs79169188	GG
ZFP64	rs1033714	AA
ELAVL2	rs141890451	AA
OLFM4	rs4883690	CC
OLFM4	rs9536382	CC
OLFM4	rs7996330	CC
OLFM4	rs9536412	GG
MPZL2	rs148118632	GA
MEIS1	rs62144054	GA
OLFM4	rs17059996	TT
MDFIC2	rs1074163	AA
LSAMP	rs817493	TT
OLFM4	rs12552	AA
LSAMP	rs9861346	TT
OLFM4	rs2491124	TT
OLFM4	rs9596775	CT

Luckily, **there are many things you can try to potentially help with insomnia.** Doctors often recommend medication, talk therapy, or changing your sleep habits [R, R].

**People are more likely to develop insomnia if they're under a lot of stress.** Other risk factors for insomnia include [R, R]:

- Depression
- Shift or night work
- Noise or light at night
- Traveling to different time zones
- Going to bed at different times every night
- Taking a lot of naps during the day
- **Genetics**

In fact, **about 40% of differences in people's chances of getting insomnia may be attributed to genetics.** Genes that may contribute to insomnia influence [R, R, R, R, R]:

- Circadian rhythm ([CLOCK](#), [PER2](#), [MTNR1A](#))
- Brain function ([CACNA1C](#), [RBFOX3](#))
- Stress response and alertness ([SLC6A4](#))

Moreover, genetically low L-carnitine levels may be causally associated with insomnia in Parkinson's disease [R].

GENE	SNP	GENOTYPE
OLFM4	rs1443914	CT
MYLK2	rs62204637	TC
SDK1	rs549417529	AA
SDK1	rs75218827	CC
SDK1	rs187543070	AA
MEIS1	rs72826719	GG
MEIS1	rs115179220	CC
SMAD5	rs56290970	CC
CA10	rs56340216	CC
MEIS1	rs76502257	GG
NEGR1	rs12724444	GG
RWDD3	rs75639751	CC
PDE2A	rs79693059	CC
MEIS1	rs60751869	GG
MEIS1	rs58658674	TT
NEGR1	rs12134600	CC
HNF4G	rs6996367	CC
PTPRD	rs12685098	GG
PTPRD	rs72704308	CC

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

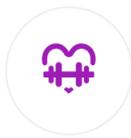
# Your Recommendations

Your recommendations are prioritized according to the likelihood of it having an impact for you based on your genetics, along with the amount of scientific evidence supporting the recommendation.

You'll likely find common healthy recommendations at the top of the list because they are often the most impactful and most researched.

	DOSAGE		DOSAGE
1		2	
<b>Cognitive-Behavioral Therapy (CBT)</b>		<b>Limit Caffeine Intake</b>	
3		4	
<b>Lemborexant</b>		<b>Zaleplon</b>	
5	20 minutes	6	
<b>Sunlight Exposure</b>		<b>Behavioral Sleep Extension</b>	
7		8	
<b>Low-Dose Trazodone</b>		<b>Avoid Overeating</b>	
9	30 minutes	10	1 hour
<b>Music Therapy</b>		<b>Acupuncture</b>	
11	20 minutes	12	10 minutes
<b>Morning Bright Light Therapy</b>		<b>Breathing Techniques</b>	
13	30 minutes	14	30 minutes
<b>Mindfulness</b>		<b>Listen to Music</b>	
15	100 mg		
<b>5-HTP</b>			

1



## Cognitive-Behavioral Therapy (CBT)

IMPACT

5 / 5

EVIDENCE

5 / 5

### How to implement

Schedule weekly sessions with a certified cognitive-behavioral therapist for a period of 5 to 20 weeks. Engage actively in exercises assigned by your therapist both during sessions and as homework to apply CBT strategies to daily life.

### Description

Cognitive-behavioral therapy (CBT) is a psychotherapeutic approach that has been effective in treating various mental health conditions by helping individuals identify and change negative thought patterns and behaviors. It is widely used for conditions like depression, anxiety, and phobias.

**Psychotherapy (talk therapy) involves talking about your health with a licensed therapist.** It may improve the way you react to certain experiences [\[R\]](#).

**Talk therapy is a great way to improve many conditions,** including [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Depression
- Anxiety disorders
- PTSD
- OCD
- Substance use disorder
- Bipolar disorder

**Cognitive-behavioral therapy (CBT)** is a type of talk therapy. CBT aims to change the way you think about your life and yourself. Through CBT, a therapist can help you develop healthy coping mechanisms [\[R\]](#).

### How it helps

Psychotherapy (talk therapy) may help you fall asleep faster. It may also improve the quality of your sleep [\[R\]](#), [\[R\]](#), [\[R\]](#).

**Cognitive-behavioral therapy (CBT) is the best type of talk therapy for insomnia.** During CBT, a therapist helps you change the way you think about sleep and improve your sleep habits [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

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## Limit Caffeine Intake

IMPACT

5 / 5

EVIDENCE

4 / 5

## How to implement

Limit your caffeine consumption to less than 200 milligrams per day, equivalent to about two 6-ounce cups of coffee. Aim to avoid caffeine-containing foods and beverages such as tea, chocolate, and some soft drinks, especially in the late afternoon and evening to minimize sleep disturbances.

## Description

Although caffeine is the world's most popular stimulant, some people choose to limit or avoid it due to potential adverse effects on their sleep, mood, or blood pressure.

## How it helps

**Caffeine is a well-known stimulant.** It blocks [adenosine](#) and [melatonin](#), two chemicals that induce sleep. As a result, caffeine may **reduce your sleep length and quality** [\[R, R, R, R\]](#).

**Caffeine's effects on sleep tend to be strongest 3-6 hours before bedtime.** Thus, if you plan to go to sleep at 11:00 pm, you should avoid caffeine any time after 5:00 pm [\[R, R, R\]](#).

Older people and those who sleep less may be more sensitive to caffeine [\[R, R\]](#).



PERSONALIZED TO YOUR GENES

**Caffeine may contribute to insomnia in people with your [MTNR1B](#) gene variant [\[R\]](#). Take special care to limit your caffeine intake.**

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
MTNR1B	rs10830964	CC	<div style="display: flex; align-items: center;"> <div style="width: 20px; height: 8px; background-color: #800080; margin-right: 2px;"></div> <div style="width: 20px; height: 8px; background-color: #800080; margin-right: 2px;"></div> <div style="width: 20px; height: 8px; background-color: #800080; margin-right: 2px;"></div> <div style="width: 20px; height: 8px; background-color: #800080; margin-right: 2px;"></div> <div style="width: 20px; height: 8px; background-color: #ccc; margin-right: 2px;"></div> </div>



## Lemborexant

IMPACT  4 / 5

EVIDENCE  4 / 5

## How to implement

Lemborexant is typically taken once a day, just before bedtime, with or without food. The usual recommended dose for adults is 5 mg, but it can be adjusted based on individual needs and the prescribing doctor's advice. It's important to take it only when you can get a full night's sleep (7 or more hours) to reduce the risk of drowsiness the next day. The dose may be increased to 10 mg if needed, but it should not exceed this amount. Always follow your healthcare provider's instructions and never take more than the prescribed dose. Additionally, avoid alcohol and other sedatives while taking lemborexant to reduce the risk of side effects.

## Description

Lemborexant is a prescription medication used to treat insomnia, specifically for people who have difficulty falling asleep or staying asleep.

It is a dual orexin receptor antagonist (DORA) that works by blocking the action of orexin, a neurotransmitter involved in regulating wakefulness. By doing so, it helps promote sleep by making it easier to fall asleep and stay asleep throughout the night.

It is commonly prescribed for short-term or long-term use in adults and has been shown to improve sleep quality and reduce the time it takes to fall asleep.

## How it helps

In people with insomnia, lemborexant (5-10 mg/day) may improve total sleep time, sleep onset latency, sleep efficiency, and awake time after sleep onset without causing major adverse effects. Lemborexant may be more effective than other drugs. However, it may also increase the risk of drowsiness [[R](#), [R](#), [R](#), [R](#), [R](#), [R](#), [R](#)].

4  **Zaleplon**

**IMPACT**  
 4 / 5

**EVIDENCE**  
 4 / 5

## How to implement

Zaleplon is usually taken once a day, right before bedtime, to help with falling asleep. The typical dose for adults is 10 mg, though a lower dose of 5 mg may be prescribed for those who are sensitive to medications or have liver issues. It is important to take zaleplon only when you can get a full night's sleep (7 or more hours) to reduce the risk of daytime drowsiness. Zaleplon should be taken on an empty stomach for the quickest effect, and it should not be taken with alcohol or other sedatives. Always follow your healthcare provider's instructions and never take more than the prescribed dose.

## Description

Zaleplon is a medication primarily used to treat short-term insomnia, particularly for individuals who have difficulty falling asleep. It belongs to a class of drugs called hypnotics or sedative-hypnotics and works by enhancing the effects of the sedative neurotransmitter gamma-aminobutyric acid (GABA) in the brain.

Zaleplon is fast-acting, helping users fall asleep quickly, and has a relatively short half-life, meaning it doesn't stay in the system long and reduces the risk of daytime drowsiness. It is typically prescribed for short-term use due to its potential for dependence and should be taken under the guidance of a healthcare provider.

## How it helps

In people with insomnia, zaleplon may improve total sleep time, sleep onset latency, and sleep quality. Zaleplon may also be better tolerated and produce fewer adverse effects than other drugs. However, lemborexant may be more effective [[R](#), [R](#), [R](#), [R](#), [R](#), [R](#)].

5  **Sunlight Exposure**

**IMPACT**  **EVIDENCE** 

## How to implement

Expose your skin to direct sunlight for about 10-30 minutes several times per week, preferably during midday when the sun is strongest. Adjust duration based on your skin sensitivity and local climate to avoid sunburn.

**TYPICAL STARTING DOSE**

**20 minutes**

## Description

Sunlight exposure provides the body with essential vitamin D when the skin is exposed to UVB rays. Vitamin D is crucial for bone health, immune function, and mood regulation. It can also help regulate circadian rhythms.

**Sunlight or bright light during the day can benefit your body and mind.** It may [\[R, R, R\]](#):

- Boost your mood
- Boost your performance and energy
- Improve sleep quality

Experts recommend getting **at least 5-15 minutes of midday sun, 2-3 times per week**. People with darker skin and those living at high latitudes may need longer periods of sun exposure [\[R, R\]](#).

However, **excessive sun exposure may lead to sunburn, skin aging, and skin cancer**, so make sure to find the right balance [\[R, R\]](#).

**Light therapy is an option when you can't get sufficient sunlight.** It typically involves placing a "light box" nearby for 30 minutes each morning. A light therapy box should [\[R, R, R\]](#):

- Provide 10,000 lux of light
- Filter out UV light

## How it helps

**Many behaviors that alter your sleep schedule may have a negative impact on your internal clock.** These include:

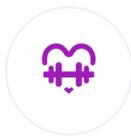
- Travelling across different time zones [\[R\]](#)
- Working night or irregular shifts [\[R, R, R\]](#)
- Increased bright light exposure in the evening [\[R, R\]](#)

**You can lower your exposure to bright light in the evening by minimizing your screen time.** This strategy may improve your sleep quality and duration [\[R, R, R\]](#).

On the other hand, **light exposure in the morning may improve your sleep.** It helps rebalance your internal clock by boosting the sleep hormone [melatonin](#) at night. As a result, it can help you go to bed and wake up earlier [\[R, R, R, R, R\]](#).

**Getting a healthy dose of sunlight** is the easiest way to get more bright light during the day. Light therapy is also an option [\[R, R, R, R\]](#).

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## Behavioral Sleep Extension

IMPACT

 4 / 5

EVIDENCE

 3 / 5

### How to implement

To implement behavioral sleep extension, aim to increase your total sleep time by going to bed 15 to 30 minutes earlier than your usual bedtime, or by allowing yourself to sleep later in the morning. Gradually increase this time as needed to reach a target of 7 to 9 hours of sleep per night, consistently, including on weekends. Adjust your daily schedule to accommodate this change, making sleep a priority.

### Description

Behavioral sleep extension involves adopting healthier sleep habits to extend the duration and improve the quality of sleep. It can lead to improved cognitive function, mood, and overall well-being by addressing sleep deficiency.

### How it helps

A meta-analysis of 42 studies concluded that behavioral sleep extension interventions improve sleep duration in a variety of populations, including those with sleep complaints [\[R\]](#).

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## Low-Dose Trazodone

IMPACT

 3 / 5

EVIDENCE

 4 / 5

## How to implement

Low-dose trazodone is typically taken once a day, usually before bedtime, to help with sleep. The common starting dose ranges from 25 to 100 mg, depending on individual needs and the prescribing doctor's recommendations. It is important to take trazodone exactly as prescribed, without exceeding the recommended dose, to minimize potential side effects. It can be taken with or without food, but taking it with food may reduce the likelihood of stomach upset. Always follow your healthcare provider's instructions and allow for a full night's sleep (7 or more hours) after taking trazodone to avoid next-day drowsiness.

## Description

Trazodone is a medication commonly used off-label to treat insomnia, anxiety, and depression at lower doses compared to its typical use for depression.

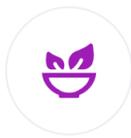
Trazodone is a serotonin antagonist and reuptake inhibitor (SARI) that works by affecting the balance of serotonin in the brain, helping to promote relaxation and sleep.

At lower doses, typically ranging from 25 to 100 mg, trazodone is often prescribed to improve sleep quality and reduce the time it takes to fall asleep, with fewer side effects than other sleep medications.

## How it helps

In people with insomnia, low-dose trazodone may extend total sleep time (but not perceived sleep duration), sleep quality, and continuity but has minor effects on sleep latency, efficiency, and daytime impairment. However, trazodone is associated with adverse effects and lower tolerability than other drugs [R, R, R, R, R].

8



## Avoid Overeating

IMPACT

 3 / 5

EVIDENCE

 3 / 5

## How to implement

Consume meals slowly, taking time to chew your food thoroughly and pausing between bites to allow your body to signal when it is full. Aim to stop eating when you feel about 80% full rather than waiting until you feel uncomfortably full. Implement this practice at every meal and snack, making it a consistent part of your daily eating habits.

## Description

People who overeat take in more food than their body needs. Overeating may contribute to obesity and diabetes, as well as digestive and sleep problems.

**People who overeat take in more food than their body needs.**

Overeating may contribute to [\[R, R, R, R\]](#):

- Obesity
- Diabetes
- Digestive problems
- Sleep problems

## How it helps

A high-calorie diet may **make you more likely to develop insomnia**. It may also make insomnia worse [\[R, R\]](#).

In particular, eating large meals at night may disrupt your internal clock and reduce your sleep quality. This is because **large meals can cause discomfort and promote heartburn, making it harder to sleep** [\[R, R, R\]](#).

9  **Music Therapy**

**IMPACT**  **EVIDENCE** 

## How to implement

Engage in music therapy sessions for at least 30 minutes a day, three times a week. These sessions can involve listening to music, playing an instrument, singing, or writing songs, facilitated by a certified music therapist if possible.

### TYPICAL STARTING DOSE

**30 minutes**

## Description

Music therapy is a therapeutic approach that uses music to address physical, emotional, cognitive, and social needs. It can improve mental health, enhance emotional expression, and support overall well-being.

[Music](#) therapy is a form of therapy that involves making, reflecting on, and/or listening to music. It can be applied individually or in groups and may not require the presence of a therapist [\[R\]](#).

Music therapy provides tools for body relaxation and positive imagery. It aims to improve communication, quality of life, and well-being [\[R, R\]](#).

## How it helps

Listening to relaxing music before bedtime shortened sleep onset time and stage-2 sleep duration while prolonging REM sleep in 4 non-placebo-controlled trials of 156 people with insomnia [\[R, R, R, R\]](#).

Several meta-analyses concluded that music therapy interventions may promote relaxation, reduce the time it takes to fall asleep, and improve subjective sleep quality in people with insomnia [\[R, R, R\]](#).

Music therapy may help by aiding in relaxation and reducing anxiety, which are common causes of sleep problems.

10



Acupuncture

IMPACT  


EVIDENCE  


## How to implement

Visit a licensed acupuncturist for a session, typically lasting between 30 to 60 minutes, once or twice a week. Depending on your specific condition, a course of treatment might range from a few weeks to several months.

**TYPICAL STARTING DOSE**

**1 hour**

## Description

Acupuncture is a part of traditional Chinese medicine. It involves inserting thin needles at specific points on the body. People use it to relieve pain and allergies, as well as reduce nausea and improve sleep.

**Acupuncture** is a part of traditional Chinese medicine. It involves **inserting thin needles at specific points on the body**. People use it to [\[R, R, R, R, R\]](#):

- Relieve pain
- Improve sleep quality
- Relieve allergies
- Reduce nausea

## How it helps

**Acupuncture may help people with insomnia sleep better and longer** [\[R, R, R, R, R, R, R\]](#).

Acupuncture may help you sleep by [\[R, R\]](#):

- Balancing your heart rate and metabolism
- Slowing down brain activity
- Boosting mind-calming brain chemicals
- Decreasing brain chemicals that make you feel nervous and alert

In a non-placebo-controlled trial of 92 participants with insomnia, receiving the combination of acupuncture and cupping therapy increased the number of improved and cured cases, especially among those with moderate insomnia [\[R\]](#).

**Please note:** *Acupuncture is generally safe for most people. However, it may come with extra risks for pregnant women, people with pacemakers, and people with bleeding disorders. Consult your doctor or a licensed acupuncturist for more information* [\[R\]](#).

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## Morning Bright Light Therapy

IMPACT

3 / 5

EVIDENCE

3 / 5

### How to implement

Expose yourself to a light therapy box, which mimics natural sunlight, for about 20-30 minutes each morning within the first hour of waking up. It's important to do this daily, especially during months with less natural sunlight, to help manage symptoms of Seasonal Affective Disorder (SAD) or other conditions influenced by light exposure.

TYPICAL STARTING DOSE

20 minutes

### Description

Bright light therapy, often used to treat conditions like seasonal affective disorder (SAD) and certain sleep disorders, involves exposure to specific wavelengths of light. It can help regulate sleep patterns, improve mood, and alleviate symptoms associated with mood disorders.

**Bright light therapy** involves exposing people to artificial indoor light via a "light box." This box is often placed nearby for 30 minutes each morning. A light therapy box should [\[R, R, R\]](#):

- Provide 10,000 lux of light
- Filter out UV light

Light therapy may improve mood and help with certain mental health conditions [\[R, R\]](#).

### How it helps

Light therapy regulates your body's internal clock, which can help you sleep better. It increases the body's production of melatonin, a sleep-inducing hormone produced at night, and decreases it during the day, improving your sleep-wake cycle.

Two meta-analyses (the largest one with 53 studies) concluded that light therapy helps with sleep problems (particularly circadian rhythm rebalance and insomnia symptoms). In those with insomnia, it may help improve wake after sleep onset [\[R, R\]](#).

A study involving individuals aged 60+ with insomnia found that 45 minutes of daily exposure to 10,000 lux light for 60 days led to greater improvement compared to 20 minutes. After 6 months, benefits persisted in the 45-min group, while the 20-min group returned to baseline [\[R\]](#).

A study with 33 veterans having a history of TBI used a 4-week lightbox intervention, resulting in improved self-reported insomnia, mood, pain, and sleep quality [\[R\]](#).

Another study assessed the effects of bright light therapy (LT) on sleep quality in 14 insomnia patients. LT improved daytime sleepiness but not cortisol levels or clock genes' expression, suggesting potential benefits for sleep disorders [\[R\]](#).

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## Breathing Techniques

IMPACT

 3 / 5

EVIDENCE

 2 / 5

### How to implement

Practice deep breathing exercises for 10 minutes daily, preferably in a quiet space where you won't be disturbed. Sit or lie down in a comfortable position, slowly inhale through your nose, allowing your chest and lower belly to rise, hold the breath for a moment, and then exhale slowly through your mouth or nose. This can be done at any time of day to reduce stress and improve focus.

TYPICAL STARTING DOSE

**10 minutes**

### Description

Breath awareness and specific breathing techniques, such as deep breathing or mindfulness-based practices, can help reduce stress, improve focus, and enhance overall mental well-being. These techniques are valuable tools for managing anxiety and promoting relaxation.

Most breathing techniques involve taking slow and even breaths. Their main goal is to prevent rapid breathing (**hyperventilation**) [\[R\]](#).

Breathing techniques tend to help with [\[R, R, R\]](#):

- Stress
- Anxiety
- Sleep problems
- Asthma

One example is the **Buteyko breathing technique**. It's often used by people with asthma or other conditions that affect the lungs [\[R\]](#).

Another example is **yogic breathing**. [Yoga](#) is a practice that combines breathing techniques with exercise and meditation [\[R, R\]](#).

### How it helps

**Stress often makes it difficult to sleep** [\[R, R, R, R\]](#).

This is because [cortisol](#) and other stress hormones can throw off your body's internal clock [\[R, R, R\]](#).

Relaxation techniques that may improve sleep include [\[R, R\]](#):

- **Listening to music**, which promotes relaxation and supports good sleep habits [\[R, R\]](#)
- **Mindfulness**, which helps you be non-judgmental and aware of the present moment [\[R, R, R\]](#)
- **Yoga**, which combines breathing, stretching, and meditation [\[R, R\]](#)
- **Lavender aromatherapy**, which involves inhaling [lavender](#) essential oil [\[R, R, R\]](#)
- **Massage**, which relaxes your body and mind through pleasant physical touch [\[R, R\]](#)

13  **Mindfulness**

IMPACT ●●●○ 3/5

EVIDENCE ●●○○○ 2/5

## How to implement

Set aside 5-10 minutes each day to practice mindfulness meditation. Find a quiet place, assume a comfortable seated position, close your eyes, focus on your breathing, and observe your thoughts and sensations without judgment.

### TYPICAL STARTING DOSE

**30 minutes**

## Description

Mindfulness involves paying focused and non-judgmental attention to the present moment. It can reduce stress, improve emotional regulation, and enhance overall mental clarity and well-being.

**Mindfulness is the practice of being aware of the present moment.** When practicing mindfulness, a person acknowledges their thoughts, feelings, and sensations without any judgment [R].

Mindfulness and other types of [meditation](#) may improve [R]:

- Weight and anxiety
- Low mood
- Sleep disturbances
- Pain
- High blood pressure

## How it helps

**Stress often makes it difficult to sleep** [R, R, R, R].

This is because [cortisol](#) and other stress hormones can throw off your body's internal clock [R, R, R].

Relaxation techniques that may improve sleep include [R, R]:

- **Listening to music**, which promotes relaxation and supports good sleep habits [R, R]
- **Mindfulness**, which helps you be non-judgmental and aware of the present moment [R, R, R]
- **Yoga**, which combines breathing, stretching, and meditation [R, R]
- **Lavender aromatherapy**, which involves inhaling [lavender](#) essential oil [R, R, R]
- **Massage**, which relaxes your body and mind through pleasant physical touch [R, R]

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## Listen to Music

IMPACT

 3 / 5

EVIDENCE

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## How to implement

Select music that aligns with your preference and listen for at least 30 minutes per day. This can be done while engaging in other activities or as a standalone activity to relax or energize yourself, depending on the genre chosen.

TYPICAL STARTING DOSE

30 minutes

## Description

Listening to music can have a positive impact on mental and emotional well-being, reducing stress, improving mood, and even enhancing cognitive performance. Music therapy is used in various healthcare settings to support mental health and overall quality of life.

## How it helps

**Stress often makes it difficult to sleep** [\[R, R, R, R\]](#).

This is because [cortisol](#) and other stress hormones can throw off your body's internal clock [\[R, R, R\]](#).

Relaxation techniques that may improve sleep include [\[R, R\]](#):

- **Listening to music**, which promotes relaxation and supports good sleep habits [\[R, R\]](#)
- **Mindfulness**, which helps you be non-judgmental and aware of the present moment [\[R, R, R\]](#)
- **Yoga**, which combines breathing, stretching, and meditation [\[R, R\]](#)
- **Lavender aromatherapy**, which involves inhaling [lavender](#) essential oil [\[R, R, R\]](#)
- **Massage**, which relaxes your body and mind through pleasant physical touch [\[R, R\]](#)

15  **5-HTP**

**IMPACT**  
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**EVIDENCE**  
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## How to implement

Take 100 mg of 5-HTP as a supplement daily, ideally with a glass of water. It can be taken at any time of the day but taking it at the same time each day may help establish a routine.

**TYPICAL STARTING DOSE****100 mg**

## Description

5-HTP is a building block for serotonin. 5-HTP and serotonin help make melatonin, a hormone that promotes sleep. People mainly use 5-HTP as a mood-boosting supplement. It may also help reduce appetite, help with chronic pain and fatigue, and improve sleep quality.

**5-HTP** is a building block for the “happiness hormone” [serotonin](#). 5-HTP and serotonin help make [melatonin](#), a hormone that promotes sleep [\[R\]](#).

**People mainly use 5-HTP as a mood-boosting supplement** [\[R, R\]](#). According to early research, it may also:

- Reduce appetite [\[R, R, R\]](#)
- Help with chronic pain and fatigue [\[R, R, R\]](#)
- Improve sleep quality [\[R, R\]](#)

**Please note:** 5-HTP can interact with SAM-e, St. John’s wort, and different medications. Combining it with antidepressants can be dangerous and even life-threatening. Never take 5-HTP without consulting your doctor [\[R, R, R\]](#).

## How it helps

In an old placebo-controlled trial of 5 healthy volunteers and 7 patients with insomnia, supplementation with 5-HTP increased total and non-REM sleep [\[R\]](#).

The combination of 5-HTP, tyrosine, lecithin, and L-glutamine improved insomnia and withdrawal scores in a placebo-controlled trial of 83 detoxified heroin addicts [\[R\]](#).

5-HTP increases serotonin levels, potentially helping regulate sleep cycles and improve sleep quality.