

# Daytime Sleepiness

DNA Health Report

REPORT CATEGORY —



Sample Client

Report date: 15 January 2026

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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.

# Personal information

NAME

Sample Client

SEX AT BIRTH

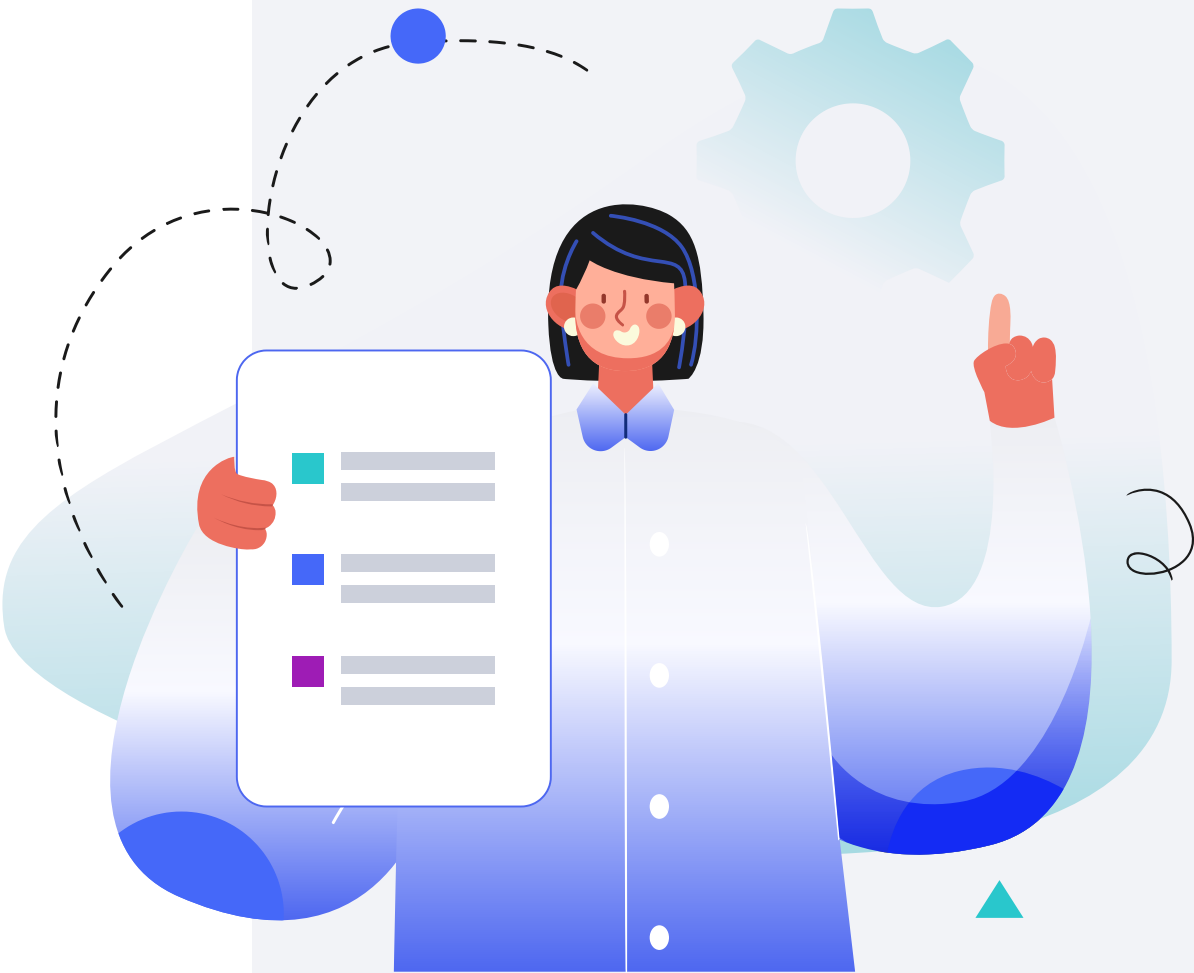
Male

HEIGHT

5ft 5" 165cm

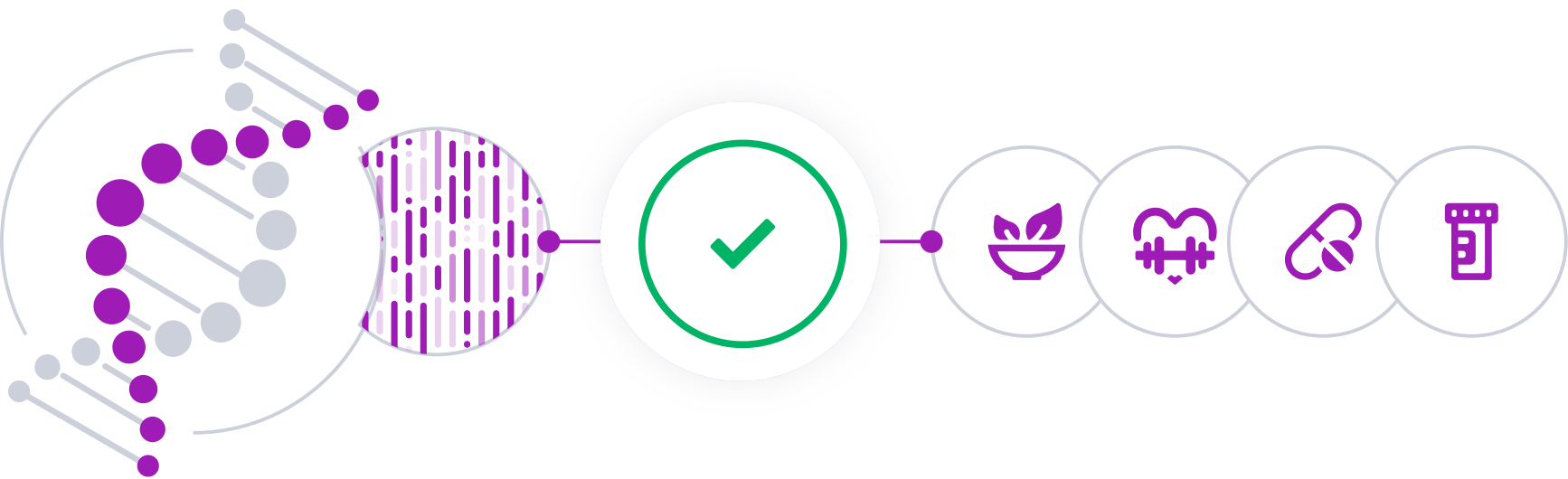
WEIGHT

137lb 62kg



# How this works

Our Wellness Reports analyze how your DNA influences your health.  
We then use this analysis to give you personalized risk estimates and recommendations.

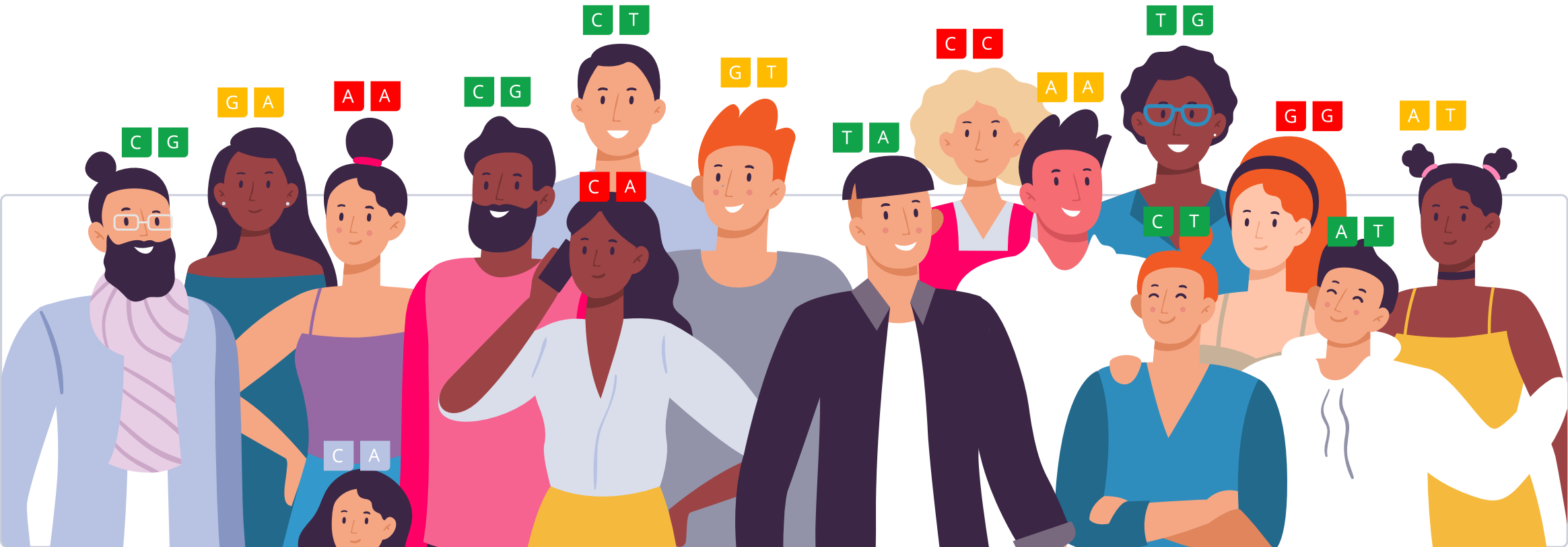


Similarly, our Trait Reports look at how your DNA influences your traits.



Your DNA is like an instruction manual — it contains a lot of information.  
You can think of it as a blueprint for your body.

Genetic variants are parts of DNA that differ from person to person. Some can make you more vulnerable to certain health issues, while others may influence traits such as eye color.



We use artificial intelligence and machine learning to analyze all this information.  
We then summarize your results as a risk score or display it on a gauge.

In total, we analyze up to 83 million genetic variants.

When we give a risk score, the risk icon tells you if you are at a higher or lower risk compared to other people:



Genotype color info:

AA

You don't have any risk alleles

AA

You have 1 risk allele

AA

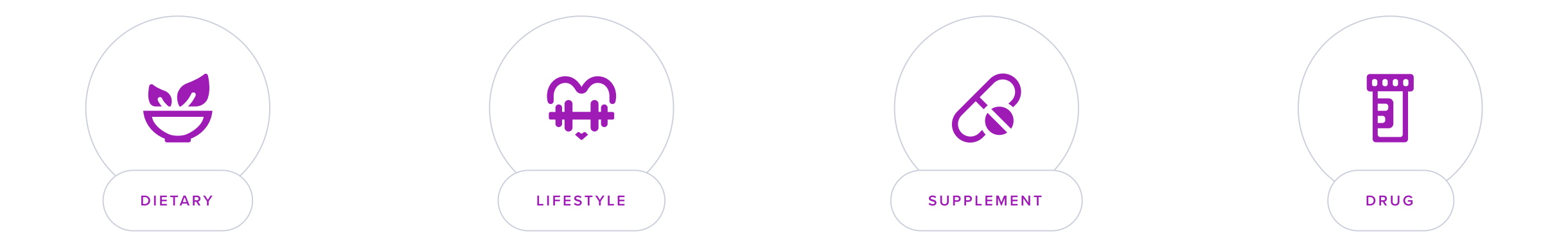
You have 2 risk alleles

Your risk is also displayed as a percentile. This will tell you how your risks compare to our sample population. The lower your percentile number, the lower your risk. The "50th percentile" would be an average risk.

Similarly, the gauge tells you your relative risk score compared to our sample population, or it indicates a specific trait or haplotype you are more likely to have based on your genetic variants.

**When applicable, we also list top evidence-based recommendations that may help lower your risk. The focus is on recommendations that may be of benefit to you, based on your genetics.**

Our recommendations come in four categories: lifestyle, diet, supplements and drugs.  
The following icons tell you which category a recommendation falls into:



**Our team of scientists also ranks each recommendation.**  
**We rank based on impact and the strength of evidence in the medical literature.**

Impact shows how strongly a recommendation will affect your health in a certain area.  
Evidence is how much scientific support there is for the recommendation. Rankings are from 1 to 5 (low to high):





# Impact

Impact scores range from 1-5. These scores reflect how much of an effect each recommendation can have. An impact score of 5 predicts the biggest effect.

When a recommendation affects something we can measure, we use those measurements to assign the impact score. For example, a recommendation that decreases cholesterol by 20% will have a higher impact score than one that decreases it by 5%.

Some recommendations affect things that we cannot directly measure, like stress or mood. For these, the impact score is based on how well they work relative to other recommendations and standard treatments. The best ones get the highest scores.

If there is a lot of research that shows a recommendation works especially well for your genotype, the impact score gets increased.

## Recommendation Evidence

- 5 / 5
- Recommendations that are considered effective and generally recommended by experts and medical bodies.
- 
- 4 / 5
- Recommendations that are considered likely effective and that have multiple independent meta-analyses and a great many studies supporting them.
- 
- 3 / 5
- Recommendations that are considered possibly effective and have many studies supporting them
- 
- 2 / 5
- Recommendations that have insufficient evidence, with two or several clinical trials supporting them, or many studies but with ambiguous results.
- 
- 1 / 5
- Recommendations that have insufficient evidence, with a single clinical trial, or with many studies most of which didn't find support for the recommendation.
- 
- 0 / 5
- No evidence in humans.

## Genotype-specific Evidence

- High-quality
- Direct evidence that a recommendation helps more in people with your gene variant (many clinical trials, a few large clinical trials, or a meta-analysis).
- 
- Medium-quality
- Direct evidence that a recommendation helps more in people with your gene variant (a few clinical trials or one large clinical trial).
- 
- Low-quality
- Direct evidence that a recommendation helps more in people with your gene variant (a single clinical trial or more trials with inconsistent results).
- 
- Indirect
- A recommendation may help more in people with your gene variant because it targets a specific gene or protein affected by your variant (e.g., MTHFR, dopamine).
- 
- In theory
- A recommendation may help more in people with your gene variant because it targets a specific mechanism affected by your variant (e.g., inflammation, oxidative stress).

## Some things to keep in mind:

- Genetics doesn’t play a considerable role in a condition or a trait.
- There is not enough research available to estimate a genetic predisposition.
- There are technical limitations to estimating or presenting a genetic predisposition.
- The topic is sensitive, and a genetic predisposition should only be estimated and presented by a healthcare professional.

# Introduction

Getting good sleep is critical for optimal health and feeling rested during the day. When you sleep, your brain processes new memories. Meanwhile, your body repairs your muscles and organs [\[R\]](#).

Daytime sleepiness is the feeling of excessive sleepiness during the day. The condition is very common: **up to 33% of American adults and 41% of American adolescents report feeling sleepy during the day**. People with excessive daytime sleepiness often complain of one or more of the following [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Not feeling well-rested
- Having difficulty waking up
- Accidentally falling asleep during the day
- Frequent napping
- Irritability
- Reduced alertness, memory, and concentration

Daytime sleepiness is linked to [\[R\]](#):

- Poorer performance at work or school
- Increased risk of vehicle and work accidents
- Social and emotional problems
- Increased risk of cognitive decline
- Worse quality of life

# Causes of Daytime Sleepiness

Daytime sleepiness is the feeling of excessive sleepiness during the day. People with excessive daytime sleepiness often complain of not feeling well-rested, having difficulty waking up, or accidentally falling asleep during the day, among others [\[R\]](#), [\[R\]](#), [\[R\]](#).

Daytime sleepiness is usually a consequence of poor sleep duration or quality. Other risk factors include [\[R\]](#):

- Shift work [\[R\]](#)
- Sleep disorders (obstructive sleep apnea, narcolepsy) [\[R\]](#), [\[R\]](#)
- Mood disorders (depression, bipolar disorder) [\[R\]](#)
- Allergies (asthma, hay fever) [\[R\]](#), [\[R\]](#)
- GERD [\[R\]](#)
- Parkinson’s disease [\[R\]](#)
- Epilepsy [\[R\]](#)
- Obesity [\[R\]](#)
- **Genetics**

Up to 40% of differences in people’s chances of experiencing daytime sleepiness may be due to genetics. Genes involved may influence the sleep/wake cycle and sleep duration or quality [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Interventions aimed at improving sleep duration and quality may also reduce daytime sleepiness. These include [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Reducing your bright light exposure (screen time) in the evenings
- Maintaining a sleep area that’s cool, dark, and quiet
- Sticking to a regular sleep schedule
- Avoiding hunger or large meals before bed
- Avoiding nicotine, caffeine, and alcohol before bed



LESS LIKELY

Less likely to experience daytime sleepiness based on 999,088 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

| GENE     | SNP         | GENOTYPE |
|----------|-------------|----------|
| ASB3     | rs76645968  | GG       |
| PATJ     | rs12140153  | GG       |
| /        | rs920065    | CC       |
| TMEM144  | rs115320831 | AA       |
| AP3B2    | rs17507216  | GA       |
| FGGY     | rs371398972 | AA       |
| AR       | rs73536079  | G        |
| /        | rs573716401 | GG       |
| /        | rs553962214 | TT       |
| SLC24A3  | rs565444861 | GG       |
| PTPRM    | rs558006880 | GG       |
| LBP      | rs6099524   | CC       |
| SLC2A9   | rs543431433 | TT       |
| TENT5A   | rs189689339 | CC       |
| FGGY     | rs192315283 | TT       |
| TMEM132B | rs142261172 | GG       |
| /        | rs182765975 | GG       |

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      | Sleep for 7+ Hours                     | 2      | Relaxation Techniques30 minutes |
| 3      | Limit Caffeine Intake                  | 4      | Psychotherapy1 hour             |
| 5      | Melatonin500 mcg                       | 6      | Behavioral Sleep Extension      |
| 7      | Morning Bright Light Therapy20 minutes | 8      | Yoga30 minutes                  |
| 9      | Listen to Music30 minutes              | 10     | Aerobic Exercise (Cardio)1 hour |
| 11     | Exercise At Least One Hour a Day1 hour | 12     | Circadian Rhythm Alignment      |
| 13     | Reduce Artificial Light at Night       | 14     | Blue-Blocking Glasses           |
| 15     | Take Naps20 minutes                    | 16     | Aromatherapy30 minutes          |
| 17     | Mediterranean Diet                     | 18     | Thiamine Supplements100 mg      |
| 19     | Chewing                                | 20     | Rosemary400 mg                  |
| 21     | Blue Light Therapy30 minutes           | 22     | Mindfulness30 minutes           |
| 23     | Regular Sleep Schedule                 | 24     | Massage30 minutes               |
| 25     | Avoid Meals 3-4 Hours Before Bedtime   | 26     | Glycine3 g                      |
| 27     | Tai Chi1 hour                          | 28     | Avoid Long Naps                 |
| 29     | Avoid Sugary Foods At Night            | 30     | DASH Diet                       |
| 31     | Mindfulness Meditation30 minutes       | 32     | Meditation30 minutes            |

## Sleep for 7+ Hours

5 / 5

5 / 5

Ensure you allocate enough time in your schedule to achieve a minimum of 7 hours of sleep each night. This might involve going to bed earlier or adjusting your evening routine to promote relaxation and make it easier to fall asleep.

Optimizing sleep involves adopting healthy sleep habits and creating a sleep-conducive environment to ensure restorative and sufficient sleep duration. It supports cognitive function, mood stability, and overall physical health. Most experts recommend getting **at least 7 hours of good-quality sleep each night**.

- Support brain health [[R](#), [R](#)]
- Maintain a healthy weight and appetite [[R](#), [R](#), [R](#)]
- Regulate blood pressure [[R](#), [R](#)]
- Balance blood sugar [[R](#), [R](#)]

- Reducing your bright light exposure (screen time) in the evenings
- Sticking to a regular sleep schedule
- Avoiding hunger or large meals before bed
- Avoiding nicotine, caffeine, and alcohol before bed
- Maintaining a sleep area that's cool, dark, and quiet

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2



Relaxation Techniques

IMPACT

4 / 5

EVIDENCE

4 / 5

## How to implement

Incorporate relaxation techniques such as deep breathing exercises, meditation, or yoga into your daily routine. Spend at least 15-30 minutes each day practicing one of these techniques, preferably in a quiet, comfortable space without interruptions.

TYPICAL STARTING DOSE

30 minutes

## Description

Relaxation techniques encompass various methods like deep breathing, yoga, meditation, and progressive muscle relaxation, aimed at reducing stress and promoting mental and physical relaxation. Practicing these techniques regularly can help manage stress, improve mental clarity, and enhance overall emotional well-being.

We all get stressed from time to time.

[Stress](#) can help you deal with a challenge or avoid danger. However, **it’s not healthy to be stressed for a long time** [\[R, R\]](#).

**Relaxation techniques such as [yoga](#) and [meditation](#) can relieve stress in different ways.** Most of them focus on breathing and help you get rid of negative thoughts and emotions [\[R\]](#).

People use relaxation techniques to improve conditions like [\[R, R, R\]](#):

- Anxiety
- Depression
- Chronic pain

**Progressive muscle relaxation is another relaxation technique.** In this technique, you focus on tensing and relaxing different parts of your body. It is common to start with the toes and slowly work your way up to the neck and head [\[R, R\]](#).

**Autogenic training is a relaxation technique** that a person may carry out on their own. It uses exercises that take the mind’s attention to bodily sensations such as warmth and heaviness [\[R, R\]](#).

## How it helps

**Stress often makes it difficult to sleep.** Concerns about work, school, family, health, and finances are linked to both poor sleep quality and daytime sleepiness [\[R, R, R\]](#).

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

Relaxation techniques that may help with daytime sleepiness by improving sleep quality include:

- Mindfulness [\[R, R, R, R\]](#)
- Yoga [\[R, R, R, R\]](#)
- Tai chi [\[R, R, R, R\]](#)
- Listening to music [\[R, R, R\]](#)
- Lavender aromatherapy [\[R, R, R, R, R\]](#)
- Massage [\[R, R\]](#)



PERSONALIZED TO YOUR GENES

People with your **CLOCK** gene variant may be more prone to sleep issues when they’re stressed [R, R]. Practice relaxation techniques to reduce your stress and improve sleep quality.

YOUR GENETIC VARIANTS

| GENE  | SNP       | GENOTYPE | EVIDENCE                                                           |
|-------|-----------|----------|--------------------------------------------------------------------|
| CLOCK | rs1801260 | AG       | <div><div></div><div></div><div></div><div></div><div></div></div> |



Limit Caffeine Intake



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].

**People who drink high amounts of coffee and other caffeinated beverages may be at increased risk of daytime sleepiness** [R, 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].



4



Psychotherapy

IMPACT

3 / 5

EVIDENCE

4 / 5

## How to implement

Schedule and attend regular sessions with a licensed psychotherapist, typically once a week for 50-60 minutes, over a period of several months to years depending on your individual needs and progress. Consistency is key, and the duration can vary widely based on personal goals and the type of psychotherapy being practiced.

TYPICAL STARTING DOSE

1 hour

## Description

Psychotherapy is a broad term for therapeutic approaches that address mental and emotional health issues through talking and counseling. It can be used to treat a wide range of psychological and emotional challenges.

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

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

- Depression
- Anxiety disorders
- PTSD
- OCD
- Weight problems
- Eating disorders

**Cognitive-behavioral therapy (CBT)** is a type of psychotherapy. 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. By improving sleep, talk therapy may help with daytime sleepiness [\[R\]](#), [\[R\]](#), [\[R\]](#).

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

Combining CBT with mindfulness meditation may also help [\[R\]](#), [\[R\]](#), [\[R\]](#).



5



Melatonin

IMPACT3 / 5

EVIDENCE3 / 5

## How to implement

Take 500 mcg of melatonin orally, about 30 minutes before bedtime, to help with sleep. It can be taken daily as needed.

TYPICAL STARTING DOSE

500 mcg

## Description

Melatonin is a natural hormone produced by the pineal gland in the brain that helps regulate the sleep-wake cycle. It plays a crucial role in promoting sleep onset and maintaining a consistent sleep pattern, making it a commonly used supplement for managing sleep disorders and jet lag.

[Melatonin](#) is an important sleep hormone. Bright light at night may prevent your body from making enough melatonin [\[R, R, R\]](#).

Your body makes melatonin on its own. However, some people take melatonin supplements to help them sleep. It may help with jet lag in particular [\[R, R, R\]](#).

## How it helps

People with sleep problems may not produce enough melatonin for a healthy sleep cycle [\[R\]](#).

Melatonin supplements may help you fall asleep and stay asleep longer. As a result, **they may reduce daytime sleepiness** [\[R, R, R, R, R\]](#).

In healthy people, melatonin levels spike about two hours before sleep, which is the best time to take melatonin supplements [\[R, R, R, R, R, R\]](#).

6



Behavioral Sleep Extension

IMPACT

3 / 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

Behavioral Sleep Extension increases your total sleep time each night, which directly reduces daytime sleepiness. Prolonged sleep can improve alertness, cognitive function, and overall daytime performance.

A meta-analysis of 17 studies concluded that at-home sleep interventions improve sleep duration and quality while reducing daytime sleepiness. However, the authors warned about the high heterogeneity of the included studies [\[R\]](#).

7



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 exposes you to bright, artificial light mimicking natural outdoor light, which can help regulate your body's sleep-wake cycle. It boosts alertness, reduces daytime sleepiness, and improves overall sleep quality.

A crossover study examined the impact of two white light conditions (bright 4000K at 1200lx or dim 4000K at 5lx) at varying room temperatures (26°C, 29°C, and 32°C). Morning bright light exposure reduced cortisol, body temperature, and skin temperature while increasing alertness, regardless of room temperature [\[R\]](#).

A study involving 14 dementia patients and 10 elderly controls found that four weeks of morning light therapy improved sleep and behavior disorders in dementia patients, increasing total and nocturnal sleep time while reducing daytime sleep [\[R\]](#).

Thirty-three Veterans with a history of TBI were prospectively enrolled in a single-arm, open-label intervention using a lightbox (~10,000 lux at the eye) for 60 minutes every morning for 4 weeks. Post-intervention improvements were observed in self-reported symptoms related to insomnia, mood, and pain; actigraphy-derived measures of sleep [\[R\]](#).

In a study with 61 participants, exposure to blue light for 10 minutes on workday mornings showed significant improvements in sleepiness, night sleep, and fatigue compared to non-exposure periods [\[R\]](#).

A study on 10 healthy elderly women found that exposure to 8000 lux morning bright light improved sleep quality by reducing nighttime activity levels, without affecting daytime activity [\[R\]](#).

A study with 30 participants having sleep issues found that those exposed to 1 hour of bright light (10,000 lux) improved sleep efficiency and reduced sleep latency compared to those exposed to dim light (<300 lux) over two weeks [\[R\]](#).

However, in a study with 54 older caregiver/care recipient pairs, bright light phototherapy for memory-impaired care recipients led to decreased sleep duration, but no change in perceived insomnia. Caregivers experienced improved sleep quality and reduced depressive symptoms. [\[R\]](#).

8



Yoga

IMPACT

3 / 5

EVIDENCE

3 / 5

## How to implement

Practice yoga for at least 20 to 30 minutes a day, most days of the week. Choose a style that matches your fitness level and goals, and consider attending a class or using online resources to guide your practice.

TYPICAL STARTING DOSE

30 minutes

## Description

Yoga is a mind-body practice that combines physical postures, breathing exercises, and meditation. It enhances flexibility, strength, and mental well-being and is used for stress reduction, relaxation, and overall health improvement.

[Yoga](#) combines breathing, stretching, and relaxation techniques. Practicing yoga may help [\[R, R, R\]](#):

- Reduce [stress](#)
- Improve fitness
- Lower blood pressure and heart rate
- Manage pain

## How it helps

**Stress often makes it difficult to sleep.** Concerns about work, school, family, health, and finances are linked to both poor sleep quality and daytime sleepiness [\[R, R, R, R\]](#).

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

Relaxation techniques that may help with daytime sleepiness by improving sleep quality include yoga [\[R, R, R, R\]](#).



9



Listen to Music

IMPACT3 / 5

EVIDENCE3 / 5

## 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.** Concerns about work, school, family, health, and finances are linked to both poor sleep quality and daytime sleepiness [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 help with daytime sleepiness by improving sleep quality include:

- Mindfulness [R, R, R, R]
- Yoga [R, R, R, R]
- Tai chi [R, R, R, R]
- Listening to music [R, R, R]
- Lavender aromatherapy [R, R, R, R, R]
- Massage [R, R]



10

Aerobic Exercise (Cardio)

IMPACT3 / 5

EVIDENCE3 / 5

## How to implement

Engage in at least 150 minutes of moderate-intensity aerobic exercise or 75 minutes of vigorous-intensity activity each week. Distribute this time over at least 3 days per week, avoiding consecutive days of vigorous exercise to allow for recovery.

TYPICAL STARTING DOSE

1 hour

## Description

Engaging in regular aerobic exercise, such as running, swimming, or cycling, offers numerous health benefits, including improved cardiovascular fitness, weight management, and mood enhancement. It supports overall physical and mental well-being while reducing the risk of chronic diseases.

Cardio, short for cardiovascular exercise, is any type of physical activity that temporarily increases your heart rate. Examples include **running, cycling, swimming, and brisk walking**.

Regular cardio exercise has many benefits for your overall health. It can help lower your risk of heart disease and diabetes, support weight loss, and improve your mood and energy levels. To get the most out of cardio, try to do it for at **least 30 minutes, 3-5 times a week**.

**Interval training** is a type of cardio that combines periods of high-intensity training with brief rest periods.

## How it helps

[Exercise](#) makes it easier for you to fall asleep at night. People who are active during the day also tend to feel more rested when they wake up [\[R, R, R, R, R\]](#).

Exercise, including cardio, may improve daytime sleepiness associated with poor sleep quality and sleep apnea [\[R, R, R, R\]](#).

11



Exercise At Least One Hour a Day

IMPACT

3 / 5

EVIDENCE

3 / 5

## How to implement

Dedicate a minimum of 60 minutes to moderate-intensity activities such as brisk walking, swimming, or cycling. Do this most days of the week, aiming for at least 5 days to optimize benefits.

TYPICAL STARTING DOSE

1 hour

## Description

[Exercise](#) can do wonders for your health. It can help you lose weight, improve your heart health, boost your mood, and more [\[R\]](#).

There are many ways you can be active. You can walk, run, swim, dance, or play team sports. **Everything counts, and it's never too late to start!**

Try to get at least **60 minutes of moderate physical activity on most days**, including walking. **Getting a mix of cardio (min 150 min/day) and strength training (min 2 times a week) may be optimal.**

## How it helps

[Exercise](#) makes it easier for you to fall asleep at night. People who are active during the day also tend to feel more rested when they wake up [\[R, R, R, R, R\]](#).

Exercise may improve daytime sleepiness associated with poor sleep quality and sleep apnea [\[R, R, R, R\]](#).

12



Circadian Rhythm Alignment

IMPACT

3 / 5

EVIDENCE

2 / 5

## Description

Circadian rhythm alignment is the process of adjusting your sleep-wake cycle to match the natural 24-hour cycle of the Earth's rotation. Circadian rhythm alignment has been linked to a number of health benefits, including improved sleep quality, better mood, and reduced risk of obesity, heart disease, and diabetes.

## How it helps

In a non-placebo-controlled trial of 57 nurses, a circadian rhythm alignment intervention based on evening light reduced fatigue and sleepiness, ultimately resulting in fewer errors. Partial re-entrainment to a permanent night shift schedule reduced fatigue and improved mood in a non-placebo-controlled trial of 24 workers [\[R, R\]](#).

13



Reduce Artificial Light at Night

IMPACT

2 / 5

EVIDENCE

2 / 5

## How to implement

Starting at least two hours before your usual bedtime, avoid using electronic devices such as smartphones, tablets, and computers. Also, consider using dim red lights for night lights, as red light has the least power to shift circadian rhythm and suppress melatonin. Try to make your sleeping environment as dark as possible by using blackout curtains or a sleep mask.

## Description

Reducing artificial light exposure at night involves minimizing exposure to artificial lighting sources, which can disrupt circadian rhythms and sleep patterns. Doing so supports better sleep quality and overall well-being.

[Sunlight](#) or bright light during the day can benefit your body and mind. It may improve your mood, performance, and sleep quality [\[R, R, R\]](#).

However, **exposure to artificial light at night**, for example through the use of phones, tablets, and computers may be harmful [\[R, R, R\]](#).

It may reduce [melatonin](#) production and throw off your [circadian rhythm](#). People with high exposure to artificial light at night like night-shift workers may have an increased risk of [\[R, R, R\]](#):

- Mood disorders (e.g., depression)
- Sleep problems
- Obesity
- Diabetes
- Cancer

## How it helps

Excessive exposure to artificial light at night messes with your body's biological clock a.k.a. circadian rhythm, making it harder for you to fall asleep. This can result in daytime sleepiness because your body didn't get enough rest during the night.

14



Blue-Blocking Glasses

IMPACT2 / 5

EVIDENCE2 / 5

## How to implement

Wear blue-blocking glasses starting two to three hours before bedtime every night to help improve sleep quality by reducing blue light exposure from screens and indoor lighting.

## Description

Blue-blocking sunglasses help reduce exposure to blue light emitted by screens and artificial lighting, potentially improving sleep quality and reducing eye strain. Wearing them in the evening can promote better circadian rhythm regulation and overall eye comfort.

## How it helps

Blue-blocking glasses filter out blue light, which can inhibit melatonin production, a hormone that aids sleep. Wearing them especially in the evening can help your body prepare for sleep, reducing daytime sleepiness by improving sleep quality.

A review of multiple studies found that using color-tinted lenses like orange or amber before sleep can improve sleep efficiency and total sleep time, especially benefiting individuals with insomnia, bipolar disorder, delayed sleep phase syndrome, or ADHD, although the evidence is mixed. Blue-light-blocking glasses have been shown to reduce anxiety and improve subjective sleep time in insomnia patients. Amber-lens glasses improved sleep onset latency and quality for athletes but showed no objective changes. Amber lenses also improved sleep quality, mood, and positive effect in volunteers. However, blue-blocking glasses had varying effects on sleep in individuals with different conditions, and limited consistent evidence supports their widespread use [\[R, R, R, R, R, R, R, R, R, R, R\]](#).

15



Take Naps

IMPACT2 / 5

EVIDENCE2 / 5

## How to implement

Take short naps of about 20-30 minutes in the early afternoon, preferably between 1 pm and 3 pm, to avoid interfering with nighttime sleep.

TYPICAL STARTING DOSE

20 minutes

## Description

Taking short naps, typically lasting 20-30 minutes, can improve alertness, mood, and cognitive performance. Napping can be a beneficial practice for combating fatigue and enhancing daytime productivity.

## How it helps

Taking naps helps manage daytime sleepiness by providing extra rest and rejuvenation to the body and mind, reducing fatigue. It has a direct impact on improving alertness, enhancing work performance, and reducing mistakes and accidents caused by sleepiness.



16



Aromatherapy

IMPACT

2 / 5

EVIDENCE

2 / 5

## How to implement

Select essential oils like lavender, peppermint, or eucalyptus. Use a diffuser to disperse the scent into your room for 30-60 minutes at a time, up to 3 times a day. Alternatively, apply a few drops diluted in a carrier oil directly to your skin, such as on your temples or wrists, twice a day.

TYPICAL STARTING DOSE

30 minutes

## Description

Aromatherapy is a holistic practice that uses the scents and aromas of essential oils to promote physical, mental, and emotional well-being. It is often used for relaxation, stress reduction, and to address various health concerns through inhalation or topical application of essential oils.

Aromatherapy uses concentrated plant extracts known as **essential oils**. They can be inhaled using a diffuser (a device that releases small amounts of oil into the air) or applied to the skin using a roller [\[R\]](#).

[Lavender](#) is a decorative flower and a calming herb and its essential oil is commonly used in aromatherapy. People use it to [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Reduce anxiety [\[R\]](#)
- Improve sleep quality [\[R\]](#), [\[R\]](#)
- Relieve pain [\[R\]](#), [\[R\]](#)

Essential oils can be harmful if not used properly. Tips for using them safely include [\[R\]](#), [\[R\]](#):

- Diluting them properly using a plant-based carrier oil (such as olive oil or almond oil)
- Using diffusers in a well-ventilated area for a maximum of 1 hour
- If using on the skin, testing a small area first and waiting a day before using more
- Keeping essential oils away from candles or other heat sources

## How it helps

In 8 placebo-controlled trials of 98 healthy sleepers and 201 people suffering from insomnia, aromatherapy with the essential oil of [lavender](#) (*Lavandula angustifolia*) for 1-4 weeks improved sleep quality and quantity, the percentage of deep or slow-wave sleep, and reduced morning sleepiness and anxiety [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Aromatherapy may reduce stress and anxiety, which can interfere with sleep.

17



Mediterranean Diet

IMPACT

2 / 5

EVIDENCE

2 / 5

## How to implement

Incorporate a variety of primarily plant-based foods, such as fruits, vegetables, whole grains, nuts, and legumes, into every meal. Choose healthy fats, like olive oil, over saturated fats and consume fish and poultry at least twice a week. Limit red meat to a few times a month and include a moderate amount of dairy products. Opt for water and red wine in moderation as your beverages.

## Description

The [Mediterranean diet](#) is based on the traditional cuisine from the Mediterranean regions. It moderates the intake of red meat and dairy, while being rich in fruits and vegetables, whole grains, and healthy fats ([olive oil](#)).

The [Mediterranean diet](#) focuses on traditional cuisine from the Mediterranean regions. It’s rich in [\[R\]](#):

- [Olive oil](#)
- Fruits and vegetables
- Whole grains
- Nuts and seeds
- Fish

This type of diet may **reduce inflammation and protect the brain and heart** [\[R, R, R, R\]](#).

Limited intake of animal products, saturated fat, and refined sugar likely contribute to the health benefits of the Mediterranean diet [\[R\]](#).

## How it helps

Adherence to a [Mediterranean diet](#) may improve sleep quality and reduce the incidence of daytime sleepiness [\[R, R, R\]](#).

In a non-placebo-controlled trial of 127 people with obstructive sleep apnea, two lifestyle interventions including the adoption of a Mediterranean diet reduced daytime sleepiness and other symptoms of this condition [\[R\]](#).



18



Thiamine Supplements

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take thiamine supplements orally, starting with a dose of 100 mg daily. This can be taken with or without food, but consistently at the same time each day for at least one month to help improve deficiency symptoms.

TYPICAL STARTING DOSE

100 mg

Description

Your doctor may recommend thiamine supplements. You can also discuss magnesium supplements with your doctor if your magnesium levels are low [\[R\]](#).

How it helps

In a study of 80 elderly Irish women with marginal thiamin deficiency, thiamine supplementation (10 mg daily) led to increased appetite, energy intake, body weight, well-being, and reduced fatigue compared to placebo. It also improved sleep patterns and increased activity. [\[R\]](#)

19



Chewing

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate chewing thoroughly into your daily eating habits by ensuring each bite is chewed 20-30 times before swallowing. Practice this technique at every meal and with snacks to improve digestion and satiety.

Description

Chewing can help to reduce the tendency to overeat by keeping your mouth busy and providing a sense of fullness. It can also help to improve your metabolic rate and increase your energy levels. Additionally, chewing can help to improve your attention span and reduce stress levels.

How it helps

In a non-placebo-controlled trial of 64 volunteers who stayed awake for one night, chewing gum from midnight until the end of the experiment alleviated sleepiness [\[R\]](#).

Chewing stimulates muscle activity and increases blood flow to the brain, which may promote alertness.

20



Rosemary

IMPACT

1 / 5

EVIDENCE

1 / 5

## How to implement

Take rosemary in supplement form, such as capsules, with a typical dose ranging from 400 to 600 milligrams once daily. It is best taken with food to improve absorption and reduce the risk of stomach irritation. Consult with a healthcare professional before starting, especially if pregnant, nursing, or on medication.

TYPICAL STARTING DOSE

400 mg

## Description

Rosemary is a fragrant herb native to the Mediterranean region. It's a source of nutrients such as vitamin C, vitamin A, and dietary fiber. It contains antioxidants and compounds that may support digestion, improve memory, and have anti-inflammatory properties.

## How it helps

Rosemary is known to boost alertness and mental function due to its fragrant compounds, helping to combat daytime sleepiness. However, it's crucial to remember that rosemary is a supplement and should not replace medical advice and treatment for underlying causes of your condition.

In a [randomized, controlled field trial with 80 shift-working nurses](#), inhaled rosemary essential oil (one drop using a mask) improved the sleepiness and alertness of shift-working nurses. It **reduced the sleepiness score from 12.15 to 8.3**, while it increased from 11.41 to 13.76 in the control group. The alertness mean scores changed from 4.45 to 3.25 and from 4.41 to 5.34 in the intervention and control groups, respectively [\[R\]](#).

21



Blue Light Therapy

IMPACT

1 / 5

EVIDENCE

1 / 5

## How to implement

To utilize blue light therapy, expose your skin or eyes to a blue light therapy device for about 15 to 30 minutes daily. This can be done at home using a personal device or under professional supervision, depending on the condition being treated. Consistency is key, so incorporating it into your daily routine, such as during morning or evening skin care, is recommended.

TYPICAL STARTING DOSE

30 minutes

## Description

Blue light therapy is used to treat various conditions, including seasonal affective disorder (SAD) and acne. It involves exposure to specific wavelengths of blue light, which can have mood-regulating and skin-improving effects when administered correctly.

## How it helps

Adults (18-45) with mild traumatic brain injury (n=35) received 6 weeks of daily 30-minute morning blue light therapy vs. placebo amber light therapy. The blue light therapy group showed significant improvements in sleepiness, depression, concussion symptoms, somatic symptoms, wake-after-sleep onset, total sleep time, and sleep-related functional outcomes compared to the amber light therapy group [\[R\]](#).

22



Mindfulness

IMPACT

0 / 5

EVIDENCE

0 / 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

Mindfulness helps manage daytime sleepiness by improving the quality of your sleep and reducing stress-induced sleep disturbances. It trains your mind to focus on the present, which can help decrease anxiety and boost relaxation, leading to better sleep.

23



Regular Sleep Schedule

IMPACT

0 / 5

EVIDENCE

0 / 5

## How to implement

Go to bed and wake up at the same time every day, even on weekends and holidays. This helps regulate your body's internal clock, leading to better sleep quality. Aim for 7-9 hours of sleep per night.

## Description

Maintaining a regular sleep schedule involves going to bed and waking up at consistent times each day. This practice helps regulate the body's internal clock and promotes better sleep quality, mood, and cognitive function.

## How it helps

Sticking to a consistent sleep schedule reinforces your body's sleep-wake cycle, improving sleep quality and reducing daytime sleepiness.

24



Massage

IMPACT

0 / 5

EVIDENCE

0 / 5

## How to implement

Schedule a massage session, ideally with a licensed therapist, for 30-60 minutes, once a week. Choose a type of massage that suits your specific needs, such as Swedish for relaxation or deep tissue for muscle tension.

TYPICAL STARTING DOSE

30 minutes

## Description

Massage therapy involves the manipulation of soft tissues to relax muscles, reduce stress, and alleviate pain. It can improve circulation, promote relaxation, and provide relief from various physical and mental health concerns.

If you’ve ever had a professional [massage](#), then you probably know how much good it can do. Massages may help with [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Anxiety
- Pain
- Fatigue

**Reflexology** is a type of massage. It involves applying pressure to specific parts of your feet or hands. In theory, by pressing on these areas, you can relieve tension from other parts of the body [\[R\]](#).

**Acupressure** is a similar technique, in which pressure points are used to help with stress and pain [\[R\]](#), [\[R\]](#).

## How it helps

A massage helps to boost serotonin and decrease cortisol, leading to improved sleep quality and reduction in daytime sleepiness. It can also assist in reducing stress and muscle tension, promoting overall well-being and restful sleep.



25



Avoid Meals 3-4 Hours Before Bedtime

IMPACT

0 / 5

EVIDENCE

0 / 5

## How to implement

Finish your last meal of the day at least 3 to 4 hours before you go to sleep. For example, if you usually go to bed at 10 pm, aim to have dinner no later than 6 pm to 7 pm.

## Description

Avoiding meals, especially heavy meals, close to bedtime can help prevent digestive discomfort, indigestion, and disrupted sleep patterns. Opting for lighter evening meals promotes better digestion and overall sleep quality.

## How it helps

Eating heavy meals before bed can lead to discomfort and indigestion, potentially disrupting sleep patterns and contributing to daytime sleepiness.

26



Glycine

IMPACT

0 / 5

EVIDENCE

0 / 5

## How to implement

Take 3 to 5 grams of glycine supplement per day with water, preferably before bedtime for sleep improvement or spread throughout the day for general health benefits. Continue indefinitely as needed, but consult a healthcare provider for long-term use beyond three months.

TYPICAL STARTING DOSE

3 g

## Description

Glycine is an amino acid that may have calming and anti-inflammatory effects, potentially benefiting sleep quality and joint health.

If you can't get enough glycine from food sources, glycine supplements are available. Daily doses of up to **6 g** have been safely used for up to **4 weeks**. Consult your doctor before supplementing.

## How it helps

Glycine is an amino acid that acts as a neurotransmitter in your brain and plays a key role in your sleep cycle. Its supplement intake can assist in improving sleep quality, thus reducing daytime sleepiness by providing a deeper, more restful sleep.

27



Tai Chi

IMPACT

0 / 5

EVIDENCE

0 / 5

## How to implement

Practice Tai Chi for 30 to 60 minutes at least twice a week. Choose a quiet, spacious area and follow along with a qualified instructor, either in person at a class or through an online video tutorial, to ensure proper technique and maximum benefit.

TYPICAL STARTING DOSE

1 hour

## Description

Tai Chi is a traditional Chinese mind-body practice involving slow, flowing movements and deep breathing. It is known for its potential to reduce stress, improve balance, and enhance overall physical and mental well-being.

**Tai chi involves gentle movements and breathing to strengthen and relax the mind and body.** Practicing tai chi may help [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Manage pain
- Improve fitness
- Increase well-being
- Improve sleep and mood

## How it helps

Practicing Tai Chi can enhance mindfulness and attention, thereby reducing daytime sleepiness. It can also improve the quality of sleep, leading to less feeling of sleepiness in the day.

28



Avoid Long Naps

IMPACT

0 / 5

EVIDENCE

0 / 5

## How to implement

Limit your daily naps to 20-30 minutes. Try to nap before 3 pm to avoid interfering with nighttime sleep.

## Description

Limiting long naps during the day can help improve nighttime sleep quality and reduce the risk of sleep disturbances. Shorter naps are generally more beneficial for enhancing daytime alertness without interfering with nighttime rest.

## How it helps

Short naps can be beneficial, but long or irregular napping during the day can negatively affect your sleep cycle, leading to increased sleepiness.



29



Avoid Sugary Foods At Night

IMPACT

0 / 5

EVIDENCE

0 / 5

## How to implement

Stop consuming foods and drinks high in sugar at least 3 hours before your bedtime. This includes desserts, soda, and sweetened beverages. Stick to this habit nightly for an ongoing basis to notice improvements in sleep quality and overall health.

## Description

Avoiding sugary foods at night can promote better sleep quality and prevent potential sleep disturbances caused by blood sugar fluctuations.

## How it helps

Consuming sugary foods can lead to fluctuations in blood sugar levels during sleep, which may affect the quality of sleep and result in feeling tired the next day.

30



DASH Diet

IMPACT

0 / 5

EVIDENCE

0 / 5

## How to implement

Adopt a dietary pattern that emphasizes fruits, vegetables, whole grains, lean proteins, and low-fat dairy, while reducing sodium, red meat, sweets, and sugary beverages. Aim for 4-5 servings of both fruits and vegetables per day, 6-8 servings of grains (with at least half being whole grains), and 2-3 servings of low-fat dairy. This diet should be followed daily to manage blood pressure effectively.

## Description

The DASH (Dietary Approaches to Stop Hypertension) diet is a dietary plan designed to reduce high blood pressure. It emphasizes fruits, vegetables, lean proteins, and whole grains while limiting sodium intake.

**Health experts developed the DASH diet to reduce blood pressure.** This diet also helps support weight control while reducing inflammation and cholesterol [\[R\]](#).

It **limits salt, sweets, and saturated fat**, while promoting the intake of [\[R\]](#):

- Fruits (4-5 servings/day)
- Vegetables (4-5 servings/day)
- Whole grains (6-8 servings/day)
- Low-fat dairy (2-3 servings/day)
- Nuts, seeds, and legumes (4-5 servings/week)
- Fish and poultry (up to 6 ounces/day)

The DASH diet focuses on fresh, minimally processed food rich in nutrients. Magnesium, calcium, and potassium-rich foods are particularly important due to their beneficial effects on the heart and blood vessels [\[R\]](#).

Although similar to the [Mediterranean diet](#), DASH is lower in sodium (<2,300 mg a day) and omega-3 fatty acids. On the other hand, it’s higher in red meat and dairy [\[R\]](#).

## How it helps

Adopting a DASH (Dietary Approaches to Stop Hypertension) diet can help reduce daytime sleepiness by improving the overall quality of your sleep. Its emphasis on whole grains, fruits, vegetables, and lean proteins provides the body with sustained energy and nutrients, preventing energy crashes that could lead to daytime sleepiness.

31



Mindfulness Meditation

IMPACT

0 / 5

EVIDENCE

0 / 5

## How to implement

Practice mindfulness meditation for 10-20 minutes daily. Find a quiet, comfortable place to sit or lie down, then focus on your breath, observing thoughts and sensations without judgment. Consistency is key, so try to incorporate it into your daily routine, perhaps in the morning or before bed.

TYPICAL STARTING DOSE

30 minutes

## Description

Mindfulness meditation involves focused attention on the breath or a specific point of focus to cultivate mindfulness and reduce stress. Regular meditation practice is associated with improved mental clarity, emotional regulation, and overall well-being.

## How it helps

Mindfulness meditation can lead to better sleep quality by reducing stress and anxiety, which are common causes of disrupted sleep and daytime sleepiness.

32



Meditation

IMPACT

0 / 5

EVIDENCE

0 / 5

## How to implement

Set aside 10-20 minutes each day in a quiet space without distractions to practice meditation. Focus on your breath or perform guided meditation using an app or audio track.

TYPICAL STARTING DOSE

30 minutes

## Description

Meditation is a mindfulness practice that can reduce stress, improve mental clarity, and promote relaxation. Regular meditation is associated with numerous mental and emotional health benefits, including reduced anxiety and enhanced emotional well-being.

**[Meditation](#) is a relaxation technique that trains your mind to focus and redirect your thoughts.** Some of the main types of meditation are [\[R\]](#):

- Mindfulness
- Focused
- Transcendental
- Mantra
- Moving

People use meditation to improve [\[R\]](#), [\[R\]](#):

- Stress and anxiety
- Mood
- Sleep disturbances
- Pain

## How it helps

Meditation encourages mental calmness and relaxation which can help improve your sleep quality, reducing daytime sleepiness. By training your body to calm down, you can get deeper, restful sleep which can greatly lessen the instances of feeling sleepy during the day.



# Next Steps

Remember, your genes only tell one important part of your health story!

Now that you've seen your DNA-based results for this health topic, let's take a look at other contributing factors.

## Your lab results

Your lab results are impacted by the combined effect of your genes, environment and lifestyle.

Lab tests will give you the best picture of your current health status, while your genes provide insight into your health predispositions and which recommendations are best for you.

|                                                                                     |                              |             |                                                                                       |            |
|-------------------------------------------------------------------------------------|------------------------------|-------------|---------------------------------------------------------------------------------------|------------|
|  | T4 Free (FT4)                | 1.26 ng/dL  |  | 9 Nov 2025 |
|  | TSH                          | 2.76 mIU/mL |  | 9 Nov 2025 |
|  | Vitamin B12                  | 687 pg/mL   |  | 9 Nov 2025 |
|  | Vitamin D, 25-Hydroxy, Total | 58.59 ng/mL |  | 9 Nov 2025 |
|  | T3 Total                     | 0.95 ng/mL  |  | 9 Nov 2025 |