



# Sleep Support

## A Good Night's Sleep Supports Overall Health

The reasons people do not sleep aren't always the same.

### Sleep and Overall Health

Between 50–70 million US adults suffer from sleep disorders, which are associated with several health problems including heart disease, stroke, diabetes, obesity, cancer and high blood pressure! The significant impact of sleep on overall health has led to research sponsored by the US National Institutes of Health which shows that sleep influences learning and emotional health, cardiovascular health, as well as overall health of cells throughout the body.<sup>1-2</sup>

### How Much Sleep Do You Need?

The consensus from various organizations is that sleep requirements vary slightly among individuals, but generally changes with age: with school-age children needing 10 hours of sleep daily, teenagers requiring 9–10 hours daily, and adults needing 7–8 hours of sleep daily.<sup>2-4</sup>

### Factors That Influence Sleep

Healthy sleep is important for both physical and mental health, and is also essential for balancing stress in our daily life. There are various factors you can consider to help support good quality sleep and ensuring that you receive enough.\* Sleep and the immune system are also closely linked. Adequate sleep allows for a well-functioning immune system and for both innate and adaptive immunity to work effectively; the way the immune system responds to an antigen or foreign substance also affects sleep.<sup>5</sup> According to the National Sleep Foundation individuals should consider their sleep hygiene for better sleep quality. Apply any or all of these as needed from this sleep hygiene checklist as recommended by the Sleep Foundation:

- **Avoid large meals before bedtime.** Larger meals consumed close to bedtime can make it harder to fall asleep.
- **Set your sleep schedule.** It is important to prioritize sleep and have a set wake-up time each day, even on the weekends.
- **Make small changes.** If you are looking to adjust your sleep time, it is important to not do it all at once. Make small changes up to an hour or two at a time to help settle into your new schedule.
- **Optimize your sleep environment.** This is a key component to sleep hygiene and includes a cool yet comfortable temperature, as well as a comfortable mattress and pillow. Room darkening curtains and ways to drown out noise (e.g. earplugs, white noise machine or fan) also help to induce a good sleep environment.
- **Follow a regular night routine.** Implement a consistent night time routine. Take 30 minutes to wind down each night (read, relax in a bath, soft music), and dim the lighting to help the production of melatonin - our sleep-wake cycle hormone to help the body sleep.

- **Relaxing before bedtime** - avoiding stimulants such as caffeine and nicotine, and establishing a good sleep environment that is free of distractions.<sup>2,4</sup> Avoiding exposure to blue light from devices (smart phone, ipad, TV, etc.) which can inhibit release of melatonin from the pineal gland.
- **Consider incorporating supplements** with ingredients that help relax your mind such as L-theanine and GABA. Supplements that help support sleep, such as melatonin, may also be beneficial for your sleep hygiene routine.<sup>†</sup>

### Supplements That May Help Support Sleep

#### WHAT IS L-THEANINE?

L-theanine is an amino acid, which was originally discovered as a constituent of green tea in 1949, and is now used in its synthetic and natural form globally. Clinical studies have shown that it helps relax the mind.<sup>6-10</sup> † L-theanine also stimulates the release of a certain neurotransmitter, known as 'GABA', which stimulates the production of serotonin and induces calm and focused alpha brain waves. L- theanine helps you to manage stress when needed to help relax the mind and works quickly, typically within 30-60 minutes, to support a relaxed mental state in doses  $\geq 50$  mg.

#### WHAT IS GABA?

Gamma aminobutyric acid (GABA) is a naturally occurring amino acid that works as a neurotransmitter or a chemical messenger released from one nerve cell to another. GABA is an inhibitory neurotransmitter, and helps to "put the brakes on" an overactive mind because it inhibits or slows down certain brain signals and decreases activity in the nervous system.<sup>11</sup> GABA produces a calming effect in the brain, and therefore, may help with sleep, as well as feelings of anxiety or stress.

As far as obtaining GABA in the diet, GABA it is not abundant in many foods and supplementation with GABA may be helpful to manage stress and to help support good sleep. The only foods that contain GABA are those that are fermented, such as kimchi, miso, and tempeh.

#### WHAT IS MELATONIN?

Melatonin is a natural hormone produced in the pineal gland that helps to regulate the body's natural biorhythm, or sleep/wake cycle. Melatonin production by the body is linked to time of day and aids in setting the internal body clock, creating what are known as circadian rhythms--the body rhythms which regulate everything from sleep to digestion. It has been studied for various sleep disorders including jet lag, sleep issues among people working night shifts, and insomnia.<sup>12</sup> A meta-analysis demonstrated how melatonin can help those with sleep disorders by significantly improving various sleep parameters such as sleep latency, total sleep time and sleep quality.<sup>13†</sup>

Delayed Sleep Phase Syndrome (DSPS): DSPS is the amount of time needed to fall asleep. Melatonin has shown to be effective for reducing DSPS for both adults and children, at doses of (0.3- 5 mg/day for up to 9 months in adults and 1-6 grams before bedtime for up to one month in children, respectively)<sup>14-16</sup>

For melatonin to work effectively, it should be taken at least 30 minutes and up to 1 hour prior to bedtime.

## ABOUT MELATONIN USE

- Melatonin is not intended for women who are pregnant or nursing, or are attempting to become pregnant.
- Consult a pediatrician prior to using melatonin in children if a child is taking any medications, has any chronic medical conditions, continues to experience sleep difficulties, or for use beyond 2 weeks. Use as directed for occasional sleeplessness and do not exceed the suggested dose. Melatonin should not be a good substitute for a good bedtime routine.
- Use in individuals taking any medications or have any chronic disease, including hypertension (high blood pressure), diabetes, or an endocrine, auto-immune, depressive, bleeding or seizure disorder should not be considered without first consulting with a healthcare professional.
- Individuals should not drive a motor vehicle or operate machinery within 8 hours of taking melatonin.

- Melatonin is recommended to help support short term sleep needs and is not for persistent sleep difficulties. It is important for those using melatonin supplements consult with their preferred health care provider if they are experiencing prolonged sleep issues, beyond 4 weeks.

## Sleep Support Discussion

It is important for people to work with their health care practitioner to understand their sleep support needs, and encourage them to follow good sleep hygiene habits. For those who are still unable to meet their sleep needs, discuss the potential use of sleep aids as a safe and effective way to gain a good night's sleep.

## Should I Take a Dietary Supplement?

It's important for patients to communicate with their healthcare professionals about any changes to their daily regimen including dietary supplements. Work together to understand personal nutrition needs as well as current dietary patterns to identify nutrient gaps. For those who are still unable to meet their nutrient needs from diet alone, it's important to discuss the need to fill any potential nutrient gaps with dietary supplements, as a safe and effective way to ensure adequate intake of all essential nutrients.

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## About Nature Made®

Over the last 50 years, Nature Made has been a trusted leader in the wellness industry. They have helped pioneer quality standards for vitamin, mineral and herbal supplements, and remain dedicated to formulating products backed by science. Committed to Good Manufacturing Practices (GMPs), Nature Made's quality extends to every aspect of production, from purchasing high-quality raw materials to routine testing for purity and potency. In fact, they were the first national supplement brand to have a product verified by United States Pharmacopeia (USP), and it is the national supplement brand with the most products carrying the USP Verified Mark, verification that products meet stringent quality criteria for purity and potency. Nature Made is also the #1 Pharmacist Recommended Supplement Brand in 9 Categories\*\*

*\*\*Based on U.S. News & World Report – Pharmacy Times Survey, 2021*

*†These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.*

## References

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