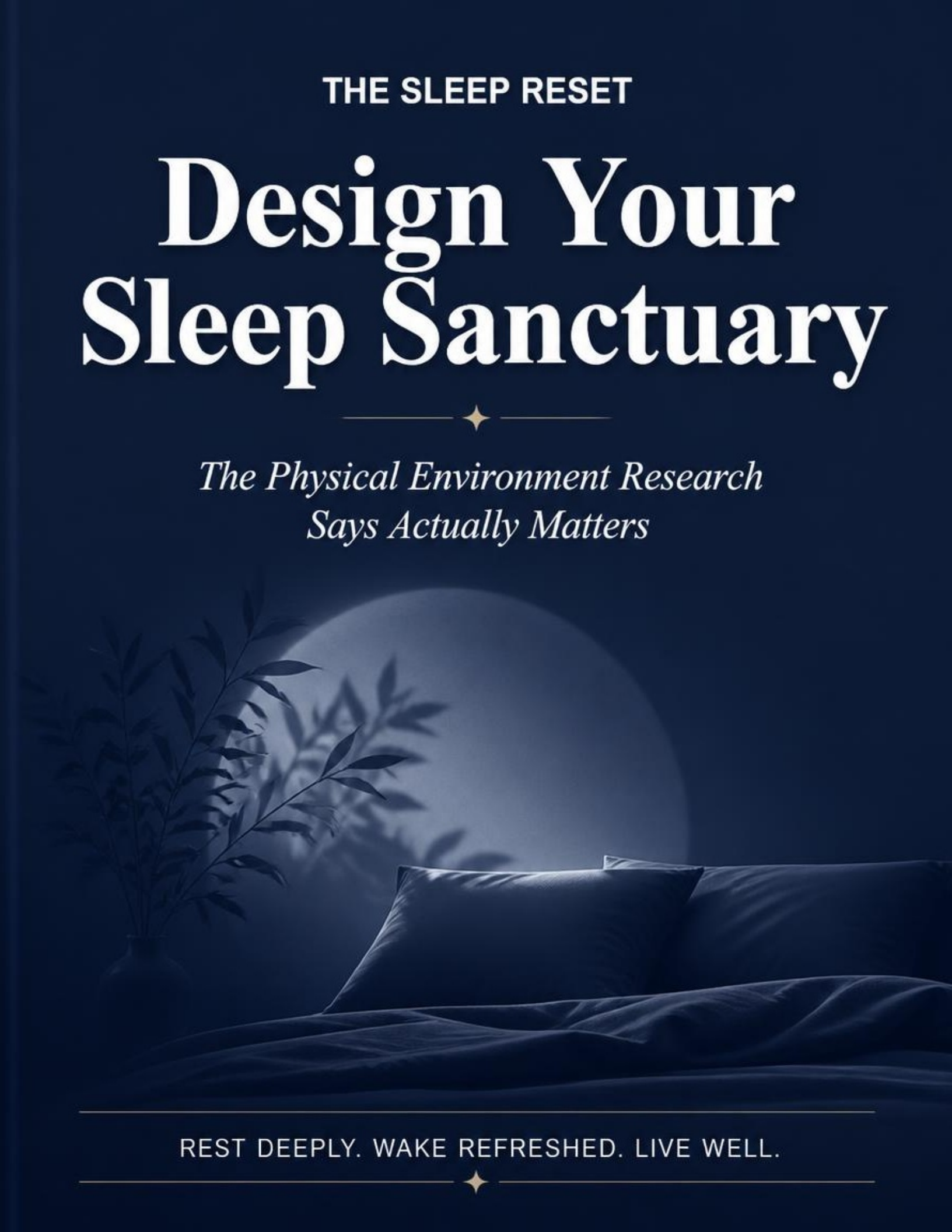


THE SLEEP RESET

Design Your Sleep Sanctuary

*The Physical Environment Research
Says Actually Matters*



REST DEEPLY. WAKE REFRESHED. LIVE WELL.

YOUR SLEEP ENVIRONMENT & RHYTHM

You can practice every relaxation technique perfectly and still sleep poorly if your bedroom itself is working against you. A room that's too warm, too bright, too loud, or built around an unsupportive mattress can undo a lot of good habits before you even close your eyes.

The good news is that your sleep environment is one of the most fixable parts of the whole sleep equation — and unlike a lot of sleep advice, the research on temperature, light, sound, and sleep surfaces is genuinely strong. This guide walks through what the evidence actually supports for each one.

ELEMENT 1

Temperature

Of all the environmental factors covered in this guide, temperature has some of the strongest research behind it — because it connects directly to your body's own sleep biology. About two hours before your usual bedtime, your core body temperature begins to drop as part of the process that initiates sleep. A bedroom that's too warm works against that natural cooling, which is why a hot room so often means a restless night.

What to Aim For

- Most adults sleep best with a bedroom temperature around 60–67°F (15–19°C).
- If you consistently run warm or cold, personal preference matters — the ideal range varies from person to person and tends to shift somewhat with age.
- Breathable bedding and moisture-wicking sleepwear can help even if you can't fully control the room temperature.

THE SCIENCE BEHIND IT

A 2023 longitudinal study by Baniassadi and colleagues, published in *Science of the Total Environment*, tracked bedroom temperature and sleep quality in community-dwelling older adults using wearable sensors and environmental monitors over an extended period. The study found that nighttime temperature was significantly associated with sleep duration, efficiency, and restlessness — and that the ideal temperature varied meaningfully between individuals, reinforcing that the commonly cited 60–67°F range is a useful starting point rather than a one-size-fits-all rule.

This lines up with decades of thermoregulation research: sleep onset is tied to a roughly 1–2°F drop in core body temperature, triggered partly by melatonin-driven vasodilation that releases heat through the hands and feet. A bedroom that's too warm makes this internal cooling process harder to complete, which is reflected in reduced sleep efficiency in studies tracking sleep across a range of ambient temperatures.

ELEMENT 2

Light

Light is one of the most powerful signals your brain uses to decide whether it's time to be awake or asleep. Even modest amounts of light in the hour before bed — and especially during sleep itself — can suppress melatonin, the hormone that helps initiate and maintain sleep, and measurably affect sleep quality.

What to Aim For

- Dim household lights in the hour before bed rather than switching from bright light straight to darkness.
- Use blackout curtains or an eye mask if streetlight, dawn light, or a partner's schedule brings light into the room.
- If you need a nightlight for safety, choose a dim, warm-toned one placed low, rather than an overhead light.
- Keep phone and device screens out of the bedroom, or at minimum face-down and on silent, since brief light exposure from checking a phone can be enough to disrupt the process.

THE SCIENCE BEHIND IT

A widely cited 2011 study by Gooley and colleagues, published in the *Journal of Clinical Endocrinology & Metabolism*, found that exposure to ordinary room light (under 200 lux) in the hours before bed shortened melatonin duration by about 90 minutes compared to dim light, and that room light exposure during normal sleep hours suppressed melatonin by more than 50%.

More recent research has looked at what light does during sleep itself. A study from Northwestern University, published in the *Proceedings of the National Academy of Sciences*, found that even a single night of moderate bedroom light exposure (around 100 lux) was associated with increased heart rate, reduced heart rate variability, and next-morning insulin resistance — despite participants' melatonin levels looking similar across groups, suggesting light can disrupt the body's rest state through pathways beyond melatonin alone.

ELEMENT 3

Sound

Noise is one of the most disruptive — and most controllable — factors in a bedroom. Unlike the ambient-noise-machine question covered in the main Sleep Reset guide, this section is about unwanted noise: traffic, neighbors, appliances, or a partner's movements, which can fragment sleep even when they don't fully wake you up.

What to Aim For

- The World Health Organization recommends keeping bedroom noise below roughly 30 decibels for undisturbed sleep — quieter than a whisper.
- Foam earplugs are a simple, well-studied option if outside noise (traffic, a snoring partner, street sounds) is the main issue.
- Weatherstripping, heavier curtains, and rugs can meaningfully reduce noise transmission into a bedroom without any major renovation.
- If you already use ambient sound (like the pink or brown noise covered in the flagship Sleep Reset guide), keep the volume low — loud enough to mask disruption, not loud enough to become its own source of stimulation.

THE SCIENCE BEHIND IT

The World Health Organization's Environmental Noise Guidelines for the European Region recommend keeping nighttime bedroom noise below 30 dB(A) for good-quality sleep, based on a systematic review of dozens of studies linking transportation and environmental noise to both objectively measured sleep disruption and self-reported sleep disturbance. The review found a clear dose-response relationship: each 10-decibel increase in nighttime noise was associated with a significantly higher likelihood of sleep disturbance and nighttime awakenings across road, rail, and aircraft noise sources.

ELEMENT 4

Your Mattress

A mattress that doesn't support your spine can quietly undermine sleep quality through discomfort and micro-awakenings you may not fully remember in the morning. The research here is more limited than for temperature or light, but the strongest evidence points in a fairly consistent direction.

What to Aim For

- A medium-firm mattress tends to outperform very soft or very firm options for most sleepers, particularly for people with lower back pain.
- Your ideal firmness still depends on your typical sleep position — side sleepers often prefer more cushioning at the shoulders and hips, while back and stomach sleepers usually benefit from firmer support.
- Most mattresses have a functional lifespan of 7–10 years; if you consistently sleep better away from home (hotels, guest rooms), it may be a sign yours needs replacing.

THE SCIENCE BEHIND IT

A well-known randomized, double-blind, controlled trial by Kovacs and colleagues, published in *The Lancet* in 2003, followed 313 patients with chronic non-specific low back pain who were randomly assigned either firm or medium-firm mattresses. Patients on medium-firm mattresses reported significantly less pain, both while lying in bed and upon rising, than those on firm mattresses — one of the more rigorous pieces of evidence behind the common "medium-firm" recommendation.

A separate 2015 systematic review in *Sleep Health*, examining controlled trials on mattress design, sleep quality, and pain, similarly concluded that medium-firm support tends to promote better outcomes than the extremes of very soft or very firm, though the authors noted that individual factors like body weight and sleep position meaningfully shift what "medium-firm" should mean for a given person.

Bringing It Together

None of these four elements — temperature, light, sound, and mattress support — require an expensive renovation to improve. A cooler thermostat setting, blackout curtains, a pair of earplugs, and an honest look at how old your mattress is will get most bedrooms most of the way there.

You don't need to fix everything at once. If you're not sure where to start, temperature is usually the highest-leverage, lowest-effort change — most people can adjust a thermostat or swap to lighter bedding tonight.

Your sleep sanctuary works alongside your body's internal clock, not instead of it — pairing these environmental changes with a consistent sleep schedule (covered in Reclaim Your Body Clock) tends to produce the biggest overall improvement.

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This guide is for educational purposes and is not a substitute for professional medical advice, diagnosis, or treatment. It is not intended to diagnose, treat, cure, or prevent any condition. If sleep difficulty persists despite environmental changes, please consult a doctor or licensed sleep specialist.