Yoga nidra’s alleged and seemingly supernatural sleep properties commonly circulate among yoga communities. Understandably so, as such sentiments trace back to its most popular contemporary revivers:

A single hour of yoga nidra is as restful as four hours of conventional sleep.
—Swami Satyananda

If the “brain and mind” can be made quiescent at the same time, a couple hours of sleep is enough.
—Swami Rama

The first time I heard statements about yoga nidra’s ability to replace sleep was many years ago, when I was suffering with clinical insomnia and at a loss for sustainable solutions—as such, my interest was naturally piqued. I quickly realized, however, that these bold claims had some critical fine print. Here, we will explore those contextual nuances that are often omitted, yet are ethically imperative to consider before promoting yoga nidra in this way.

Can Yoga Nidra Really Replace Sleep?
By Kimberley Luu

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LEARNING OBJECTIVES
1. Identify the factors that may allow certain individuals to replace some portion of their total sleep need with yoga nidra, understanding that these factors do not apply to the general population.
2. Describe the evidence-based sleep benefits of yoga nidra.
Conscious Slow-Wave Sleep Is Powerful

As a crucial background, we must familiarize ourselves with the human states of consciousness and their corresponding brain-wave signatures. Brain waves are patterns of electrical activity occurring in the brain, which can be measured through electroencephalography. As a general categorical summary, there are five major brain-wave patterns:

1. **gamma waves** (30+ Hz), associated with conscious perception;
2. **beta waves** (13–30 Hz), associated with activity and alertness;
3. **alpha waves** (8–13 Hz), associated with rest and relaxation;
4. **theta waves** (4–8 Hz), associated with hypnagogia (transitioning into sleep), light sleep, and dream; and
5. **delta waves** (< 4 Hz), associated with deep, slow-wave sleep (SWS).

SWS is often considered the most restorative stage of sleep, as it facilitates cellular growth and repair, rests previously active brain areas, maintains cognitive function, and regulates homeostatic processes. This deep sleep typically makes up 1–2 hours of our total sleep time, during which we are completely unconscious and difficult to arouse.

It has been proposed that yoga nidra is a state where the individual experiences all physiological elements of SWS, while paradoxically remaining fully aware. Case reports in the 1970s suggested that Swami Rama could intentionally enter delta-predominant SWS within a few minutes, remain there for a determined period of time, and upon waking, recall all conversations the scientists had been having. Three decades later, these reports were replicated with Swami Veda Bharati. The idea that these swamis are proposing is that if you can train yourself to swiftly enter concentrated bouts of conscious SWS, you can maximize restorative efficiency.

But Most of Us Are Not Swamis

So, can non-ascetics (“householders”) do this? Swamis are devoted renunciates, and although these case reports are certainly fascinating, it is important to also consider general populations—including ourselves and the clients we work with! Electroencephalography studies have found that during yoga nidra practices, college students’ brain waves slowed from beta to alpha predominance, and experienced yoga teachers’ brain waves slowed even more, to theta predominance. These findings suggest that yoga nidra practices do not always provide direct entry into SWS but can still facilitate significantly restful states. Stephen Parker, PsyD, LP, E-RYT 500, C-IAYT, hypothesized that conscious SWS can be trained and measured in generalizable populations within a logistically feasible timeframe for study. Until such studies are undertaken, though, the questions of “How long?” and “How much?” remain.

In addition to the undetermined amount of training needed to develop refined brain-wave control, we must consider a much broader context. These statements originated from swamis who spent most of their lives in meditative discipline. An accumulation of evidence supports that intensive meditation training is associated with decreased sleep duration without adverse health effects. For instance, Indian meditators who practiced focused-breath awareness 2+ hours/day for at least 3 years slept 2.6 hours less than age- and sex-matched controls. Moreover, gradually decreasing sleep needs are commonly seen in intensive retreat settings (e.g., 12+ hours of meditation/day for 3 months). Interestingly, one retreat attendee reported that she naturally went from sleeping 8 hours/night at the start to between 1.5 and 3 hours/night by the end. This intensive training is unlike the case of aging, which is also associated with decreased sleep duration, but to the detriment of cognitive functioning, mental health, and energy levels; in fact, the opposite tendency is observed with meditation.

Although existing discussions are not entirely conclusive, there are a few reasonable theories for why this phenomenon might occur. Many forms of meditation increase alpha and theta brain-wave power and synchrony across multiple brain regions in a manner similar to the majority of regular sleep. However, if intense practitioners are spending most of their days in these restful states with limited external stimulation, they likely don’t require as much sleep at night. The structural and functional brain changes associated with meditation training (e.g., enhanced sensory processing and acuity) could also allow for more efficient daily performance and as a result, less recovery time.

With all of this in mind, we can now revisit the original question: Can yoga nidra really replace sleep? My best answer: Maybe, if you

1. define yoga nidra as the state of conscious SWS, into which you are able to quickly enter and remain, thereby increasing sleep efficiency; and
2. meditate intensively on a long-term daily basis, thereby decreasing sleep need.

Note that I emphasized “maybe”—it is unlikely that all populations could train toward this. In other words, individual biological prerequisites may facilitate the ability to do so. Therefore, I caution against promoting that yoga nidra can replace sleep. Such a recommendation would not only be inconsiderate of modern context but also unethical, as sleep deprivation is globally pervasive and contributes to a multitude of adverse health outcomes.

Householders Can Still Benefit

However, it is reasonable to share yoga nidra’s evidence-based benefits, which are certainly still plentiful! For instance, short-term yoga nidra interventions (4–10 weeks) improved self-reported sleep quality across studies targeting general populations, older adults with insomnia, and women who have experienced sexual trauma. Similarly, several studies that employed yoga nidra in combination with other interventions (e.g., mindful movement and breathing exercises for 2–12 weeks) also demonstrated improved self-reported sleep quality in various subclinical and clinical populations.

Perhaps most intriguing was that the two studies incorporating...
polysomnography (sleep study) measurements found significant increases in night-time SWS following yoga nidra interventions in older adults, a population that typically experiences diminishing levels of SWS.\textsuperscript{22,23} This finding is key because more SWS arose during regular sleep irrespective of whether conscious SWS was achieved during the yoga nidra practice itself. Furthermore, a dose-response relationship was observed; that is, participants who practiced more experienced greater sleep improvements.\textsuperscript{25} Overall, yoga nidra may improve sleep quality, independent of yoga nidra state achievement.

Hence, it is worth integrating yoga nidra into client practice plans, especially if they are experiencing challenges with sleep. Although it isn’t the magical sleep-replacer we may wish it could be, the steadily growing evidence base of yoga nidra’s benefits holds promise for those in need of sustainable rest solutions. But unless they are ascetic meditators, it is safest to uphold standard sleep duration recommendations (8 hours/night is the adult average)\textsuperscript{22} while sharing yoga nidra as a fruitful complement.

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References