How to Deepen Sleep

There are several ways that sleep can go wrong:

1. Trouble falling asleep
2. Oversleeping
3. Poor sleep quality

Most people try to control their sleep on the front end, by trying to fall asleep. This is a losing battle. Struggling to fall asleep activates the body's fight-or-flight system, which is well designed to keep people alert and awake.

The other two sleep problems are more solvable. Working on them will indirectly improve your ability to fall asleep and reduce symptoms of depression.

Oversleeping

Sleep is a 24-hour cycle that starts when you wake up. Oversleeping disrupts that cycle and makes sleep less efficient. When people lay in bed too long, the brain loses its drive to make good use of that time. That drive is called *sleep efficiency*, and strengthening it will help you fall asleep faster and sleep deeper.

To improve sleep efficiency, rise out of bed at the same time each day and avoid daytime naps. Do this even if you are sleep deprived. Sleep deprivation will train the brain to sleep deeper, and fall asleep faster, on the following nights. That training may not yield results at first, but after a few weeks it actually yields better results than sleep medicine.

There are many innovative ways to help wake up in the morning, including dawn simulators, aromatherapy, and behavioral techniques. Read more at:

moodtreatmentcenter.com/dawnsimulator.pdf
moodtreatmentcenter.com/briskawakening.pdf

What is Deep Sleep?

The brain gradually slows down during sleep, and deep sleep is the phase where the brain waves are the slowest (stages 3-4 below):

Deep sleep is when the body heals itself. It's what makes sleep feel restorative. It's followed by stage 5 (also called REM), a more active phase where dreaming occurs.

During depression, the brain spends too much time in REM sleep and not enough in the deep stages. The next sections will show you how improve the quality and depth of your sleep.

Evening Wind Down

You can get a head start on deep sleep by shifting into slower brainwaves in the half hour before sleep. Relaxing, meditative activities create alpha brainwaves that are on the border of sleep and wakefulness. Mindfulness is a formal practice that generates alpha waves. There are audio CDs or apps (e.g. Head Space) that can guide you through it.

Avoid goal-directed activity, like social media and online shopping. Avoid problem-solving, worrying, and heated topics (including those news channels). If you find it hard to control worry, schedule a designated time and place away from evening and away from your bedroom where you worry on purpose. Then, if

you still worry at night, don't fight it – just let it come and go. Gradually, your worries will shift away from evening as your brain starts to build associations around your designated worry time.

Activity	Brain waves
Complex learning, heightened attention, compassionate thought	Gamma, 40-100 Hz
Active, engaged, high energy, stress, worry	Mid to High beta, 15-40 Hz
Quiet, focused, introverted concentration	Low beta, 12-15 Hz
Relaxation, meditation	Alpha, 8-12 Hz
Drifting in and out of sleep (stage 1)	Theta, 2-4 Hz
Light sleep (stage 2)	Splindle, 4-15 Hz
Deep sleep (stage 3)	Splindle and slow, 2-4 Hz
Deep delta sleep (stage 4)	Slow and delta, 0.5-2 Hz
REM sleep (stage 5, dreaming)	15-30 Hz

Hot Bath, Cold Room

Drops in temperature trigger the body to shift into sleep mode, and you can accentuate that process by taking a very hot bath at night and then sleeping in a colder room.

It has to be a bath, not a shower, and you need to soak in it for 20-30 minutes. The temperature should be as hot as you can comfortably touch (100-104 degrees Fahrenheit), but not so hot that it's painful. The bath works best if it's taken 1-2 hours before bedtime.

You can cozy up with warm blankets, but should keep your bedroom on the colder side (60-65 degrees Fahrenheit). A programmable thermostat can help, and if using that you can set it to rise back to room temperature about an hour before you plan to awake. Just as the drop in temperature triggers sleep, the rise will signal to your body that it's morning and time to wake up.

The cold room is fully safe, but there are a few warnings to consider with the hot bath. Avoid sedatives, alcohol and sleep medications to prevent accidental drowning. People with heart disease, skin disease, cuts, or active infections should consult their physician. Be careful when rising out of the bath, as the heat can lower blood pressure and lead to falls. If a hot bath is not safe or feasible, a foot bath (soaking both feet in hot water for 20-30 minutes) can also improve sleep, though not as effectively as a bath.

Low Blue Lights

Evening light shuts down melatonin, a hormone involved in sleep, particularly light of the blue wavelength. Dimming the lights can help, and you can get further benefits by blue-light filtering glasses. The two models below were recommended by *Consumer Reports*:

Uvex Ultraspec

Uvex Skyper

- Uvex Ultraspec 2000, model S0360X ($7 at Amazon). This one fits over regular glasses.
- Uvex Skyper, model 3S1933X ($7-11 at Amazon).

Creating an electronic-free space in the half hour before bed is essential for good sleep. There are also ways to automatically lower the blue light on your devices after sundown, such as justgetflux.com and *Night Shift* on iPhone.

Any ambient light in your bedroom will disrupt sleep. If you can't get it pitch dark, try a sleep mask.

Exercise

Light aerobic exercise in the afternoon will deepen sleep. 30 minutes is ideal, and it should be vigorous enough to raise your heart rate by 10 beats per minute. Examples include swimming, dancing, brisk walking, jump rope.

—Chris Aiken, M.D., updated 11/25/2016