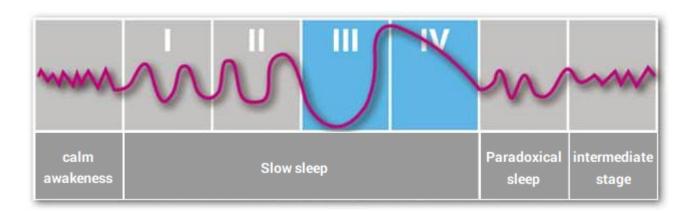
# Is deep sleep important?

Deep sleep can be defined as the phase of slow sleep that precedes the onset of REM sleep (Rapid Eye Movement Sleep). When sleep becomes deep, the frequency of brain waves decreases, as does body temperature, breathing frequency, pulse or blood pressure.

The individual goes through several stages to reach deep sleep after falling asleep. First, the alpha waves in the brain are gradually replaced by theta waves (stage 1). Then, the electroencephalogram trace becomes irregular and waking up becomes more and more difficult (stage 2).

When sleep deepens further, delta waves appear and muscles are more relaxed (stage 3, medium deep sleep). When sleep becomes deep, the electroencephalogram is dominated by delta waves from 1 to 4 Hz (stage 4). The activity of the smooth muscles of the digestive tract increases. It is usually during this deep sleep that enuresis or somnambulism may appear.



#### **Characteristics**

Deep slow sleep is characterized by very slow electrical waves. The activity of vital functions slows down significantly: decrease in heart and respiratory rhythm — decrease in body temperature. At this stage, muscle activity and eye movements almost disappear.

#### Duration

The time of deep slow sleep represents about 40% of the total time (about 90

minutes)<fn>www.doctissimo.fr/html/psychologie/bien\_dormir/ps\_6205\_sommeil\_cycles.htm</fn>. It typically starts about 35-45 minutes after first falling asleep, its duration is longer at the beginning of the night. It decreases with age in favor of phase 2 (light slow sleep).

#### Role

Deep slow sleep promotes hormonal secretion, especially in children, of growth hormone. Its role is also to strengthen the effectiveness of immune defenses and memory.

## When deep sleep is disrupted

Slow sleep has a restorative role for the body: when the individual lacks sleep, slow sleep tends to last longer in the early night.

### How to get more deep sleep

#### Regular bedtime schedules

Maintaining regular hours of sleep, even on weekends and days off, helps us to get into deep sleep more easily. Sleep needs vary for each person but an estimated average of 7 and 9 hours per night is generally such as a sufficient compensatory rest time. And if you decide to change your sleep routine, give your body at least a few days to get used to the change.

#### Spreading essential oils

The sense of smell is very important when setting up a

routine. Using a diffuser of lavender, bergamot or lemon essential oils before bedtime can send a signal to the body that it is time to get ready for a good night's sleep.

#### Relax your feet

Feet cannot be compared to the rest of the body, because they support the body weight all day long. Our feet work hard, especially when we exercise, and they deserve a moment of relaxation at the end of the day. Apply a generous amount of cream or oil and massage your feet every night before going to bed.

#### Turn off screens

Studies have shown that exposure to blue light from screens during the evening can disrupt our biological clock. The production of melatonin and cortisol, the hormones that regulate sleep, is delayed, and falling asleep can become more difficult. Try to turn off electronic devices for one to two hours before closing your eyes.

# Keep a notebook as an ongoing record and reminder of your daily activities

You don't need to have a particular talent for writing: you can keep a journal by writing just a few lines in the evening. This activity allows you to "debrief" your day, and to fall asleep with a lighter heart. Even the simple fact of noting three positive things, for which you are grateful, that happened during the day helps to calm your mind and help you sleep better.