

Deep sleep... Why do we

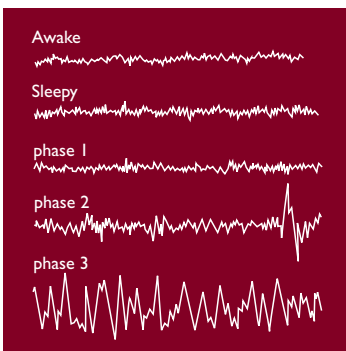


Diagram of sleep

Sleep in different countries

Did you know that adults in Denmark, sleep longer than women in the USA, and that the British have the greatest difficulty in getting out of bed in the morning? See the typical sleep figures below:

Country	Men	Women
USA	6 hr 48 min	6 hr 48 min
Denmark	6 hr 36 min	6 hr 55 min
Norway	6 hr 50 min	7 hr 10 min
Sweden	7 hr 12 min	7 hr 12 min
UK	7 hr 15 min	7 hr 30 min

An adult sleeps six to eight hours a night. Only one of these hours is used on deep sleep. However, it is this deep sleep hour which is the most important for body and brain regeneration.

Sleep is one of life's first, biggest and perhaps most mysterious inventions. You pass through, from the point in time you fall asleep until you wake again six to eight hours later, a process which can only be described as fantastic. You have cleared your head of thoughts, your body and brain have developed and regenerated, you have produced hormones, strengthened your immune defence system, strengthened memory and creativity ... just to name just a few.

We should in fact be exhausted after all that night time activity and nurturing. However, even though most people feel tired in the morning, sleep is why you can meet another day with vigour and energy.

Planned sleep rhythms

When you go to bed, what takes place in your brain and body is not a coincidence. And the same smart process takes place night after night and follows the same smart plan:

The first half hour is used on falling asleep. The brain moves from the awake state, your breathing becomes deeper, your body temperature falls, your muscles relax and you become drowsy.

After half an hour of this, you fall into deep sleep. You then become completely empty of all thought, your brain achieves complete calm - a state that the brain has a great need of. Deep sleep is the only point of time of the day when you do not think. Deep sleep is also the period in which your brain and body regenerate.

After an hour's deep sleep, you slide into REM sleep, which is the playground of dreams. Your brain activity suddenly increases. Your breathing, pulse and blood pressure become irregular; your muscles become paralysed from the neck down and your

eyes begin to move rapidly under your closed eyelids. This is because your brain mass produces dreams, and does so for periods of approximately 90 minutes at a time. These periods are followed by periods of dreamlessness and (as the hours pass by) shallower and shallower sleep.

Almost unconscious

You are almost unconscious in the one hour in which you sleep deeply. I.e. your brain is empty and consciousness is lost. It can sound frightening. Deep sleep is actually the closest people come to death. We are that deep down into the darkness. You fortunately don't need to lose any sleep over this. Think instead of all the good and vital things deep sleep does for you. Both physical and mental. It is in this state in which the pituitary gland on the underside of the brain generates 80 per cent of the day's total growth hormone requirement. This hormone forms new proteins, which build up body tissue and repair wear and tear.

The brain also regenerates during deep sleep and repairs the damage that has been inflicted during the high metabolic rate periods of the awake state. Recent research has in addition shown that deep sleep is important when storing new experiences, knowledge and impressions in our memory. The reason for this is probably that deep sleep is the only time all activity is shut down, which allows the brain to use all its capacity on processing the many new impulses and placing them in our memory.

So if you want to be clever and learn from life, or perhaps learn from the latest book ... then make sure you get your deep sleep!

Source: Peter Lund Madsen, www.scansleep.dk, Jerk W. Langer, QOD .et. al.

need deep sleep?



Efficient power napping

A power nap of 10-20 minutes is, according to American sleep researchers, very efficient if you want to increase your alertness, reactions and mood. Just 20 minutes is enough for your body to relax and provide you with renewed energy. Find a good place to sit or lie, where there is calm, where you can pull a blanket around you and where you will not be disturbed. Have a good nap!