

Sleep & Dreams



What are Dreams?



- Dreams are experiences of imaginary images, sounds, voices, words, thoughts or sensations during sleep. They usually seem real while your dream is taking place. When you wake up, you either don't remember it, or you realize it never happened.
- Dreaming usually occurs during the REM (Rapid Eye Movement) stage of sleep, which is when brain activity is high and signalled by quick horizontal movements of the eye. Dreams can occur during other stages of sleep, but these are much less memorable and clear. They can sometimes last for a few minutes, or up to twenty minutes.
- Dreams are a link to the inner core of the human subconscious. They can be normal and realistic, or even bizarre and surreal.

Why do we dream?

- Scientists are still trying to find out why we dream. There are many theories, but none have actually been scientifically proven.
- There are two main theories as to why we dream, The Physiological theory and The Psychological Theory.



The Sleep Cycle

- One sleep cycle consists of four stages, each lasting 90-120 minutes. Some people believe that there are five stages. They think the first 5-10 minutes while you are falling asleep, but this is more of a transitional phase and the other stages of sleep repeat throughout the night, this phase does not, so it is not considered as a stage of sleep.
- Dreams can occur in all stages but the most memorable dreams occur in the last stage of sleep, when they are closest to waking up (REM). The sleep cycle repeats itself on an average of 4 to 5 times per night, but they may repeat as many as 7 times. This is how a person dreams several times in one night. But just because u do not recall those dreams, it doesn't mean that they never happened. Some people swear that they do not dream, but in reality they just don't remember.

The Sleep Cycle 2

- Stage 1: When a person enters light sleep. This stage is characterized by non-rapid eye movements (NREM). Muscles become relaxed, body temperature lowers, and the body is getting prepared to fall into deep sleep.
- Stage 2: Also characterized by NREM. There is a further drop in body temperature and relaxation of muscles. The body's immune system gets working on repairing the days damage and the endocrine glands secrete growth hormone. Blood is sent to the muscles to be reconditioned. By now, you are completely asleep.
- Stage 3: Even deeper sleep. Still in the NREM stage. Metabolic levels are extremely slow now.
- Stage 4: Now in the REM stage, or delta stage. Your eyes move back and forth rapidly underneath the eyelids. You go into this stage 90-100 minutes after you have fallen asleep. Blood pressure rises, breathing becomes heavier, heart rate speeds up and brain activity increases. Your involuntary muscles become paralyzed and your mind is being revitalised and your emotions are being fine tuned. Majority of dreaming occurs in this stage.

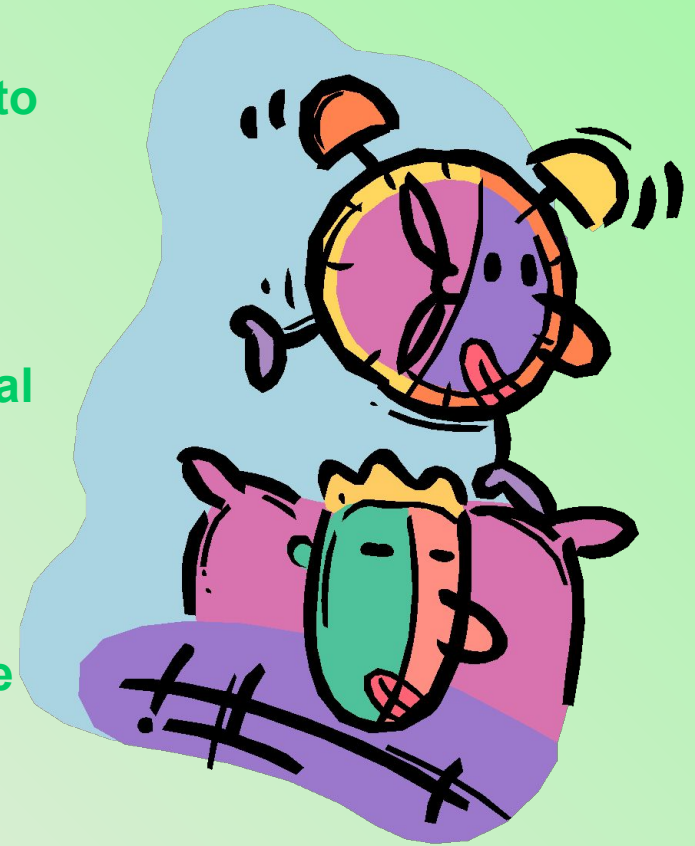
About Dreaming

- When you dream, your body faces some changes. Your adrenaline rises, your blood pressure increases, and your heart beats faster. This is why a person with a weak heart may die in their sleep. From the point you fall asleep, it takes 30-90 minutes before you fall asleep. We go through the four stages of sleep and may enter the REM phase 4-7 times in one night. REM sleep takes place in the fourth stage of sleep, and it takes up about 15-20% of our sleep time. During REM our heart rate and blood pressure increases. Our bodies are completely immobile during this time, and our muscles stay relaxed. We might move in our bed throughout the night, but this doesn't happen during REM. This is known as "REM Paralysis".



The Importance of Dreaming

- In an experiment, volunteers were woken up before entering the dreaming state. They were put back to sleep and again woken up before entering the dreaming state. They continued to do this during the night. The volunteers slept the same amount as they did usually, but the next day they seemed to be depressed, disoriented, and crabby. Some even ate more than usual. As this study continued for several nights, results became more noticeable. Deprivation of REM sleep causes lack of concentration, over-sensitivity and memory loss. This shows the importance of dreaming and its roll in our health. Some people believe that dreams help us fight stress. It recharges our mind and revitalizes our body.



Lucid Dreaming

- In some dreams, the dreamer recognises the dream that they are dreaming. This is called Lucid Dreaming. Dreamers say that this is a very satisfying type of dreaming. If the dream involves fear or negative things happening, the dreamer can reassure him/herself that it is only a dream and that he or she will soon awaken. It is believed that some people can lead themselves to wake up from a frightening dream.



Nightmares

- We have all had nightmares at some point of our lives. These dreams are quite normal. Nightmares are a subcategory of dreams. A nightmare is a dream including frightening and/or emotional content. When having a nightmare, it is possible to wake up in fear. You tend to remember nightmares and its details because of it being frightening. Sometimes, the images from a nightmare might stay with you throughout the day.
- One reason for nightmares may be a way of our unconscious to get our attention about a problem that you have been avoiding. Nightmares serve an important purpose in showing you what is troubling and causing you problems. Discussing, analyzing, and understanding your nightmares can lead to a solution for some problems.