

Nightmares, or bad dreams, are common in children and adults. Often nightmares are caused by:

- Stress, conflict, and fear
- Trauma
- Emotional problems
- Medication or drug use
- Illness



Have you ever had a dream where you knew you were dreaming during your dream? This is called a lucid dream. Research has shown that lucid dreaming is accompanied by an increased activation of parts of the brain that are normally suppressed during sleep. Lucid dreaming represents a brain state between REM sleep and being awake.

Some people who are lucid dreamers are able to influence the direction of their dream, like changing the story. While this may be a good tactic to take, especially during a nightmare, many dream experts say it is better to let your dreams occur naturally.

Dreams can occur anytime during sleep. But most vivid dreams occur during deep, REM (rapid eye movement) sleep, when the brain is most active. Some experts say we dream at least four to six times per night.

Studies have shown the importance of dreams to our health and well-being. In one study, researchers woke subjects just as they were drifting off into REM sleep. They found that those who were not allowed to dream experienced:

- ◇ Increased tension
- ◇ Anxiety
- ◇ Depression
- ◇ Difficulty concentrating
- ◇ Lack of coordination
- ◇ Weight gain
- ◇ Tendency to hallucinate

Why do nightmares occur?



What are lucid dreams?

WHY DO WE DREAM?

A dream is a succession of images, ideas, emotions, and sensations that usually occur involuntarily in the mind during certain stages of sleep. The purpose of dreams and what they contain are not fully understood, but they have been a great topic of interest. Dream interpretation is the attempt at drawing meaning from dreams and searching for an underlying message. The scientific study of dreams is called oneirology.

One theory is that dreams work hand in hand with sleep to help the brain sort through everything it collects during the day when you are awake. Your brain is met with lots of inputs each day. Some are minor sensory details like the color of a passing car, while others are much more complex, like the big presentation you're putting together for school. During sleep, the brain works through all of this information to decide what to hang on to and what to forget. Some researchers feel like dreams play a role in this process.

There are many theories about why we dream, but no one knows for sure. Some researchers say dreams have no purpose or meaning and are nonsensical activities of the sleeping brain. Others say dreams are necessary for mental, emotional, and physical health.

There's also a theory that dreams don't really have any purpose at all, that they're just a pointless byproduct of the brain while we sleep. The back portion of our brain gets pretty active during REM sleep, when most dreaming occurs. Some think that it's just the brain relaxing for the night and that dreams are random and meaningless firings of the brain that we don't have when we're awake.



Another theory is that dreams usually reflect our emotions. During the day, our brains are working hard to make connections to achieve certain functions. When faced with a hard math problem, your brain is incredibly focused on that one thing. And the brain doesn't only serve mental functions. If you're building a table, for example, your brain is focused on making the right connections to allow your hands to use a saw and some wood to make an exact cut. The same goes for simple tasks like hitting a nail with a hammer. Have you ever lost focus and smashed your finger because your mind was elsewhere?

Some have theorised that at night everything slows down. We aren't required to focus on anything during sleep, so our brains make very loose connections. It's during sleep that the emotions of the day clash with each other in our dream cycle. If something is weighing heavily on your mind during the day, it's likely that you might dream about it either specifically, or through imagery. For instance, if you're worried about failing an exam, you may dream about falling off a high ledge as you may feel like everything is out of your control.



There is some research to back up the idea that dreams are tied to how we form memories. Studies indicate that as we're learning new things while we're awake, dreams increase while we sleep. Participants in a dream study who were taking a language course showed more dream activity than those who were not. As a result of these studies, the idea that we use our dreams to sort through and convert short-term memories into long-term memories has gained some popularity in recent years.



The truth is, as long as the brain remains such a mystery, we probably won't be able to figure it out.