

# Scientists synchronized, and those during rem sleep much

[Science](#)



**ASSIGN  
BUSTER**

Scientists have investigated why we sleep from a lot of different angles.

They have had many studies, but, despite all their work, the question has been difficult to answer.

There are many theories as to why we sleep such as the Inactive Theory and the Energy Conservation Theory. The Inactivity Theory suggests that inactivity at night is an adaptation that has served as a survival function.

The Energy Conservation Theory states that sleep is used to reduce an individual's energy call and waste during the day or night, especially at times when it is least productive to search for food. No one knows if one single theory will ever be proven correct. How Much Sleep Do We Need Some people believe that you need 8 hours of sleep, others believe that depending on your age the time is different. Most people believe that infants need 12 to 15 hours of sleep, toddlers need 11 to 14 hours, and preschoolers need 10 to 13 hours of sleep. School age kids need 9 to 11 hours of sleep, teenagers need 8 to 10 hours, young adults need 7 to 9 hours, adults need 7 to 9 hours, and older adults need 7 to 8 hours of sleep.

Everyone needs healthy sleep because we all need to store information and learn skills to thrive in life. This is likely part of the reason children need more sleep than adults. Types and Stages of Sleep There are many different types and stages of sleep. The different types and stages can be identified using polysomnography, which measures many body functions such as brain wave activity, eye movement, respiration, muscle activity, heart rhythm etc. There are two main types of sleep, rapid eye movement (REM) sleep and non-rapid eye movement (non-REM or NREM) sleep. Each type can be divided into three or four separate stages.

<https://assignbuster.com/scientists-synchronized-and-those-during-rem-sleep-much/>

Non-REM sleep is sometimes referred to as “ quiet sleep” and REM as “ active sleep”, but these are not scientific terms. Non-REM sleep is characterized by slow but relatively high amplitude or high voltage oscillations REM sleep shows a faster and lower amplitude trace, much more similar to normal waking activity. Brain waves during non-REM sleep tend to be highly synchronized, and those during REM sleep much more unsynchronized.

Electromyogram traces of skeletal muscle activity displays that, while the body is paralyzed during REM sleep, the body does make some little movements during non-REM sleep, containg a major change in body position around once every twenty to thirty minutes on average.