**Sleep is a dynamic activity.**
The five stages of sleep progress in a cycle from **stage 1** to REM sleep, then the cycle starts over.

**What are the stages?**

1. **Stage 1** is known as the lightest stage of sleep. The body starts slowing down and it's easy to drift in and out of actual sleep. It's also the easiest to come out of when awakened.
2. **Stage 2** is sleep that continues to slow down.
3. **Stage 3** has both slow brain waves (delta waves), and faster, smaller ones appear during this stage.
4. **Stage 4** is mostly made up of slow brain waves (delta waves). The entire body is deeply relaxed. This is the deepest stage from which to wake.

**Deep sleep**
- Growth hormones are released during deep sleep.
- Cells also increase in production and protein production.
- Dreaming is at its lowest during REM sleep.

**REM sleep**
- Brain waves are fast and irregular.
- During REM sleep, there is an increase in heart rate and blood pressure.
- REM sleep tends to occur in 90-minute cycles.
- It lasts longer during evening than those in the afternoon.

**Cycles of sleep**
- As time goes on...

---

**The brain is always active.**
Since the 1950s, we’ve learned that our brains are very active during sleep. Neurotransmitters, or nerve-signaling chemicals in our brains, control whether we are asleep or awake. Neurons, which connect the brain to the spinal cord, produce other neurotransmitters which keep some parts of the brain active during sleep and while awake.

**What are dreams?**
- Infant REM sleep was first studied in SPS. However, scientists still do not fully understand the need for and purpose of dreams.
- Sigmund Freud believed that dreams are part of a person's unconscious desires.

---

**ACTION ITEMS**

The ABCs of catching ZZZZZZ

What’s the best way to help your child develop good sleep habits? There are many expert views about what role parents should play when it comes to helping their children develop good sleep habits. Ultimately, the choice is yours. If you like an approach that:

1. **is lenient** about responding to your baby when he cries at bedtime and emphasizes consistent bedtime routines and positive sleep associations, check out Dr. Jodi Mindell’s book, Sleeping Through the Night: How Infants, Toddlers and Their Parents Can Get a Good Night’s Sleep.
2. **advises sticking firmly to routine** and letting your child cry at bedtime for extended intervals of time before you provide her with comfort, read Dr. Richard Ferber’s book, Solve Your Child’s Sleep Problems.
3. **focuses on training your baby to go to sleep and comfort himself** on his own by keeping nighttime feedings short, waking him if his daytime naps last more than a few hours and using your voice or a pacifier to comfort him when he cries, try the American Academy of Pediatrics’ book, Guide to Your Child’s Sleep.
4. **promotes the family bed and other ways of being there for your child to provide a comforting, relaxing sleep environment**, look at Dr. William Sears’ book, Nighttime Parenting.
5. **emphasizes the prevention of sleep problems** and teaches healthy sleep habits by synchronizing soothing techniques with your child’s natural rhythms, read Dr. Marc Weissbluth’s book, Healthy Sleep Habits, Happy Child.

---