



Sleep and Dreams

"Oh sleep! it is a gentle thing,
Beloved from pole to pole."

Samuel Taylor Coleridge, a famous British poet, wrote these words over 100 years ago. Most people would agree with him. Sleep is very important to humans; the average person spends 220,000 hours of a lifetime sleeping. Until about thirty years ago, no one knew much about sleep. Then doctors and scientists began doing research in sleep laboratories. They have learned a great deal by studying people as they sleep, but there is still much that they don't understand.

Scientists study the body characteristics that change during sleep, such as body temperature, brain waves, blood pressure, breathing, and heartbeat. They also study rapid eye movement (REM). These scientists have learned that there is a kind of sleep with REM and another kind with no rapid eye movement (NREM).

NREM is divided into three stages. In stage one, when you start to go to sleep, you have a pleasant floating feeling. A sudden noise can wake you up. In stage two, you sleep more deeply, and a noise will probably not wake you. In stage three, which you reach in less than thirty minutes, the brain waves are less active and stretched out. Then, within another half hour, you reach REM sleep. This stage might last an hour and a

at for

taking air in and out of the
body



half and is the time when you dream. For the rest
30 of the night, REM and NREM alternate.

Body movement during sleep occurs just before the REM stage. The average person moves about thirty times during sleep each night.

Sleep is a biological need, but your brain
35 never really sleeps. It is never actually blank. The things that were on your mind during the day are still there at night. They appear as dreams, which people have been discussing for centuries. At times people believed that dreams had magical
40 powers or that they could tell the future.

sometimes

Sometimes dreams are terrifying, but they are usually a collection of scattered, confused thoughts. If you dream about something that is worrying you, you may wake up exhausted,
45 sweating, and with a rapid heartbeat. Dreams have positive effects on our lives. During a dream, the brain may concentrate on a problem and look for different solutions. Also, people who dream during a good night's sleep are more likely
50 to remember newly learned skills. In other words, you learn better if you dream.

mixed up

with water on the skin
opposite of negative

Researchers say that normal people may have four or five REM periods of dreaming a night. The first one may begin only a half hour
55 after falling asleep. Each period of dreaming is a little longer, the last one lasting up to an hour. Dreams also become more intense as the night continues. Nightmares usually occur toward dawn.

lengths of time

bad-dreams

60 People dream in color, but many don't remember the colors. Certain people can control some of their dreams. They make sure they have a happy ending. Some people get relief from bad dreams by writing them down and then changing
65 the negative stories or thoughts into positive ones on the written paper. Then they study the paper before they go to sleep again.

Many people talk in their sleep, but it is usually just confused half sentences. They might
70 feel embarrassed when someone tells them they were talking in their sleep, but they probably didn't tell any secrets.

Sleepwalking is most common among children. They usually grow out of it by the time
80 they become adolescents. Children don't remember that they were walking in their sleep, and they don't usually wake up if the parent leads them back to bed.

Some people have the habit of ^{grinding} grinding their teeth while they sleep. They wake up with a sore jaw ^{folco} or a headache, and they can also damage their teeth. Researchers don't know why people talk, walk, or grind their teeth while they are asleep.

85 There are lots of jokes about snoring, but it isn't really funny. People snore because they have trouble breathing while they are asleep. Some snorers have a condition called sleep apnea. They stop breathing up to thirty or forty times an
90 hour because the throat muscles relax too much and block the airway. Then they breathe in some air and start snoring. This is a dangerous condition because, if the brain is without oxygen for 4 minutes, there will be permanent brain damage.
95 Sleep apnea can also cause irregular heartbeats, a general lack of energy, and high blood pressure.

Most people need from 7½ to 8½ hours of sleep a night, but this varies with individuals. Babies sleep eighteen hours, and old people
100 need less sleep than younger people. If someone continually sleeps longer than normal for no apparent reason, there may be something physically or psychologically wrong.

You cannot save hours of sleep the way you
105 save money in the bank. If you have only 5 hours of sleep for three nights, you don't need to sleep

teenagers

always, forever

obvious, adjective for appear

an extra 9 hours on the weekend. And it doesn't do any good to sleep extra hours ahead of time when you know you will have to stay up late.

110 What should you do if you have trouble sleeping? Lots of people take sleeping pills, but these are dangerous because they are habit-forming. If you take them for several weeks, it is hard to stop taking them.

115 Doctors say the best thing is to try to relax and to avoid bad habits. If you always go to bed and get up at about the same time, this sets a good and healthy rhythm in your life. Caffeine keeps people awake, so don't drink caffeine drinks in the evening. Smoking and alcohol can also keep you awake. You may have trouble sleeping if you have a heavy meal just before you go to bed. Eat earlier in the evening.

You may also have trouble sleeping if you have a problem or something else on your mind. 125 This is when you need to relax. As you lie in bed, tense the muscles in your feet and then relax them. Continue up the body; tensing and relaxing the muscles until you reach the head. Start with 130 the feet again if you are still tense. Then remember some pleasant experience you had and relive it. If you are thinking about a problem or about something exciting that is going to happen the next day, get up and write about it. That will help 135 take it off your mind. You can also get up and read or watch television. Be sure to choose a book or show that is not too exciting, or you may get so interested that you won't want to go to sleep even when you feel sleepy.

140 Sleep is important to humans. We spend a third of our lives sleeping, so we need to understand everything we can about sleep.

Sleep well! Sweet dreams!

Vocabulary

stage	periods	normal	habit
origin	embarrassed	confused	positive
a great deal	at times	sweat	concentrate
nightmare	grinds	snore	block

1. It is hard to _____ on your homework if your roommate is playing loud music.
2. It is not _____ to have a headache for a week. You should go to a doctor.
3. In the first _____ of a volcanic eruption, the volcano sends out smoke.
4. A _____ is a bad dream.
5. _____, a headache begins without warning.
6. The school day is divided into several _____, one for each class.
7. Marcel _____ coffee with a coffee grinder.
8. Sylvia has a _____ of having a cup of coffee as soon as she gets home from work.
9. Hard exercise makes you _____.
10. A Mercedes-Benz car costs _____ of money.
11. Do you _____ when you sleep?
12. There is no reason to feel _____ when you make a mistake in class.

Vocabulary

confused	positive	intense	adolescents
jaws	apnea	apparently	sweat
habit	block	permanently	breathe

1. Fish can _____ underwater; people cannot.
2. The _____ summer heat of the Arabian Desert can be very dangerous if you're not careful.
3. *Negative* is the opposite of _____.
4. David was _____ about the date, so he missed the meeting.
5. Someone with sleep _____ stops breathing many times during the night.



6. An immigrant plans to stay in a new country _____.
7. The professor seems to be very busy. _____, he has a lot of work to do.
8. _____ are not children, but they are not grown up either.
9. The teeth are in the upper and lower _____.
10. A car accident can _____ a highway.

Vocabulary Review

Match the words with the definitions.

- | | |
|------------------------|------------------------------------|
| 1. melt _____ | a. middle |
| 2. mid- _____ | b. distance across a circle |
| 3. strip _____ | c. fingerprint |
| 4. crops _____ | d. reasonable |
| 5. diameter _____ | e. no moving parts |
| 6. inexhaustible _____ | f. change from a solid to a liquid |
| 7. solid-state _____ | g. can be seen through |
| 8. source _____ | h. because |
| 9. transparent _____ | i. long, thin piece |
| 10. boundary _____ | j. place |
| 11. since _____ | k. happening |
| 12. position _____ | l. can't be used up |
| 13. event _____ | m. place something comes from |
| | n. border |
| | o. any plants a farmer grows |

True/False/Not Enough Information

- _____ 1. We spend about a third of our lives sleeping.
- _____ 2. Researchers now understand nearly everything about sleep.
- _____ 3. NREM sleep comes before the REM stage.
- _____ 4. After the three stages of NREM, REM lasts the rest of the night.
- _____ 5. Dreams occur during the REM stage, but the brain is normally blank the rest of the time.