

Sleep matters

The science of sleep is more than 50 years old, but much remains a mystery. We still don't really know exactly what sleep is for or why we dream, but there are some interesting theories.

Most scientists agree that we have periods of REM (rapid eye movement) sleep and non-REM sleep. Although previously scientists believed that all dreaming happened during REM sleep, recent research shows that we have different kinds of dreams, with non-REM dreams being short and dull and REM dreams being long and vivid. Some scientists believe that one function of dreaming is probably to process information and find meaning. There is some experimental evidence that REM sleep promotes creative thinking.

The idea that sleep plays an important role in learning and memory isn't new. But there is now considerable evidence that REM sleep is strongly connected with learning how to do something, for example how to play an instrument. This contrasts with non-REM sleep, which seems to be connected with spatial memories, for instance learning to find your way around a new city.

How you feel when you wake up depends on what stage of sleep you're in. If you wake up feeling wide awake and refreshed, you probably woke up during a phase of light sleep. On the other hand, if you wake up feeling groggy, this is probably because you've woken up during a deeper phase of sleep, so you're still half asleep. Fortunately, research shows a short nap of 10–15 minutes could help you catch up, but avoid a longer siesta as it could leave you feeling groggy. Some sleep researchers believe that a 10-minute snooze can improve your overall performance and could prevent accidents for overtired drivers and nurses.

Researchers agree we need between about 6 and 8 hours' sleep a night for good mental and physical health, but studies show about 1 in 10 people have problems sleeping. To avoid insomnia and get a good night's sleep, it's important to go to bed at about the same time every night. Avoid watching TV, using a computer or doing exercise shortly before going to bed and make sure you're neither too hot nor too cold. If you're worrying about something when you go to bed, there's no point in telling yourself not to think about it. Instead, think about a pleasant, relaxing scene, which should soon help you to fall asleep.

1 Before reading the text, think about why we sleep and dream. Now read the text. How many of your ideas are talked about in the text?

2 Which paragraph in the text (2–5) talks about the following?

- | | |
|---------------------------------------|-----------------|
| 1 tips for improving your sleep | paragraph _____ |
| 2 how dreams differ | paragraph _____ |
| 3 waking up and short sleeps | paragraph _____ |
| 4 sleep and different kinds of memory | paragraph _____ |

3 Read the article and decide if the sentences are true (T) or false (F), according to the text. Circle the correct statements and correct those that are false.

- | | |
|---|-----|
| 1 All dreaming happens during REM sleep. | T/F |
| 2 REM sleep might help you think creatively. | T/F |
| 3 REM sleep would probably help you to learn to ski. | T/F |
| 4 A short nap will leave you feeling groggy. | T/F |
| 5 A short sleep could help avoid accidents caused by tiredness. | T/F |
| 6 Watching television should help you get to sleep. | T/F |

4 Complete the sentences with words and expressions connected with sleeping and dreaming. They are in the same order as they appear in the text.

- 1 Non-REM dreams are short and _____ .
- 2 REM dreams are long and _____ .
- 3 If you woke up feeling _____ awake, you probably woke during a phase of light sleep.
- 4 If you woke during a deeper phase of sleep, you're probably still _____ asleep.
- 5 Research shows a short _____ could help you catch up.
- 6 Avoid a longer _____ .
- 7 Some researchers believe a 10-minute _____ can improve your performance.
- 8 To avoid _____ , it's important to go to bed at about the same time every night.
- 9 Think about a pleasant, relaxing scene, which should help you to _____ asleep.

5 Which words or expressions from exercise 4 have the following meanings?

- 1 a short sleep, usually during the day _____
- 2 difficulty sleeping _____
- 3 boring _____
- 4 begin to sleep _____
- 5 completely awake _____
- 6 having or producing very clear and detailed images _____
- 7 not fully awake _____

6 Match the following expressions in the box to the meanings below.

to sleep on it to be fast asleep to sleep like a log / a baby to nod off to sleep in

- 1 to continue sleeping after the time that you usually wake up _____
- 2 to sleep very well _____
- 3 to think about something for a while _____
- 4 to go to sleep, especially when you do not plan to _____
- 5 to be sleeping in a way that makes it difficult to wake you _____

7 Use words and expressions from exercises 5 and 6 to complete the questions.

- 1 Do you sometimes find it difficult to _____ at night?
- 2 If you have _____ , what do you do to help you get to sleep?
- 3 Do you have _____ dreams or are they _____ and boring?
- 4 Do you usually feel _____ and refreshed when you wake or do you feel _____ ?
- 5 Do you enjoy having a short _____ during the day?
- 6 Do you sometimes _____ at the weekend until 10am or later?
- 7 If you're worried about something, it's a good idea to _____ .
- 8 Do you sometimes _____ while watching TV or on a train?

8 Ask your partner(s) the questions in exercise 7.

Glossary

REM sleep (*noun*) – a stage of sleep when you dream and your eyes make small quick movements.

function (*noun*) – the job that something is designed to do

evidence (*noun*) - facts or physical signs that help to prove something

promote (*verb*) – help to develop

considerable (*adj*) – large in size, amount, or degree

spatial (*adj*) – relating to people's ability to understand size, shape, position, and depth

refreshed (*adj*) – feeling more comfortable after you have rested, washed, eaten etc

groggy (*adj*) – feeling tired or confused, especially because you have not had enough sleep