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 aslee. 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.

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?

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

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

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 and 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