The New Sleep Science

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How many hours of sleep do you get a night? How many hours of sleep does the World Health Organisation recommend you get a night?

Listen to the report and answer the questions:

1 How many hours were people sleeping on average in the 1940s?

2 How many hours are people sleeping on average in the modern age?

3 What things in the modern world reduce the sleep we get?

4 Which of these world leaders sleep/slept the most: Donald Trump, Barack Obama, Margaret Thatcher or George W. Bush?

5 Based on about 10,000 research study papers, what percentage of people can survive on six hours of sleep or less and show no impairment?

6 Which major diseases in the developed world have direct and very strong causal links to deficient sleep?

7 What percentage of people would say they feel as though they would like more sleep now, compared to back in the mid-1980s?

Do you feel as though you would like more sleep? Are you more impressed by Donald Trump, Barack Obama and Margaret Thatcher's lack of sleep or George W. Bush's ability to get nine hours a night?

Read the article below and underline all the facts that were mentioned in the report you just heard. Then summarise the additional information in your own words.

The Observer September 2017

'Catastrophic' lack of sleep in modern society is killing us, warns leading sleep scientist

A "catastrophic sleep-loss epidemic" is causing a host of potentially fatal diseases, a leading expert has said.

In an interview with the Observer, Professor Matthew Walker, director of the Centre for Human Sleep Science at the University of California, Berkeley, said that sleep deprivation affected "every aspect of our biology" and was widespread in modern society.

And yet the problem was not being taken seriously by politicians and employers, with a desire to get a decent night's sleep often stigmatised as a sign of laziness, he said.

Electric lights, television and computer screens, longer commutes, the blurring of the line between work and personal time, and a host of other aspects of modern life have contributed to sleep deprivation, which is defined as less than seven hours a night.

Sleep deprivation has been linked to cancer, diabetes, heart disease, stroke, Alzheimer's disease, obesity and poor mental health among other health problems. In short, a lack of sleep is killing us.

"But when did you ever see an NHS poster urging sleep on people? When did a doctor

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prescribe, not sleeping pills, but sleep itself? It needs to be prioritised, even incentivised.

"Sleep loss costs the UK economy over £30bn a year in lost revenue, or 2 per cent of GDP. I could double the NHS budget if only they would institute policies to mandate or powerfully encourage sleep."

"I take my sleep incredibly seriously because I have seen the evidence," said Professor Walker, whose book Why We Sleep: The New Science of Sleep and Dreams is due out next month.

"Once you know that after just one night of only four or five hours' sleep, your natural killer cells – the ones that attack the cancer cells that appear in your body every day – drop by 70 per cent, or that a lack of sleep is linked to cancer of the bowel, prostate and breast, or even just that the World Health Organisation has classed any form of night-time shift work as a probable carcinogen, how could you do anything else?"

While healthcare workers, employers and politicians all needed to pay greater attention to the benefits of sleep, Professor Walker said people needed to do so on an individual level.

"No one wants to give up time with their family or entertainment, so they give up sleep instead," he said.

"And anxiety plays a part. We're a lonelier, more depressed society.

"Alcohol and caffeine are more widely available. All these are the enemies of sleep."

And there is a tendency to boast about needing little sleep to function. Margaret Thatcher and Ronald Reagan were said to survive on a few hours a night. Both developed dementia in later life.

"We have stigmatised sleep with the label of laziness," Professor Walker said.

"We want to seem busy, and one way we express that is by proclaiming how little sleep we're getting. It's a badge of honour.

"When I give lectures, people will wait behind until there is no one around and then tell me quietly: 'I seem to be one of those people who need eight or nine hours' sleep.' It's embarrassing to say it in public.

"They're convinced that they're abnormal, and why wouldn't they be? We chastise people for sleeping what are, after all, only sufficient amounts. We think of them as slothful."

Has a doctor ever suggested more sleep to you? What government policies could mandate or powerfully encourage sleep? Do you find yourself giving up sleep for more time with your famliy or entertainment? Is sleep stigmatised where you live?

Read the second part of the article and answer the questions:

1 What are some signs of a lack of sleep?

2 Why does Professor Walker suggest that people set themselves an alarm 30 minutes before they should go to bed?

3 What percentage of adults in developed nations fail to obtain the nightly eight hours of sleep recommended by the World Health Organisation?

4 An adult sleeping only 6.75 hours a night would be predicted to live to what age

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without medical intervention?

5 If you drive a car when you have had less than five hours' sleep, how many times more likely are you to be involved in a crash?

6 Why does a hot bath help you sleep? **7** How does a lack of sleep affect athletes?

8 How many diagnosed sleep disorders exist?

Signs of a lack of sleep include needing caffeine to stay awake during the afternoon or wanting to sleep on after the alarm goes off.

He suggested people should set themselves an alarm 30 minutes before they should go to bed and start to wind down from that point.

Sleep in numbers

■Two-thirds of adults in developed nations fail to obtain the nightly eight hours of sleep recommended by the World Health Organisation.

■An adult sleeping only 6.75 hours a night would be predicted to live only to their early 60s without medical intervention.

■If you drive a car when you have had less than five hours' sleep, you are 4.3 times more likely to be involved in a crash. If you drive having had four hours, you are 11.5 times more likely to be involved in an accident.

■A hot bath helps you sleep not because it makes you warm, but because your dilated blood vessels radiate inner heat, and your core body temperature drops. To successfully initiate sleep, your core temperature needs to drop about 1C.

■The time taken to reach physical exhaustion by athletes who obtain anything less than eight hours of sleep, and especially less than six hours, drops by 10-30%.

■There are now more than 100 diagnosed sleep disorders, of which insomnia is the most common.

Do you personally notice any signs of a lack of sleep? Do you wind down before going to bed and if so, how? Which of the statistics above do you find the most surprising?

Discuss the meaning of the highlighted words and expressions in these extracts from the article:

1 Professor Matthew Walker...said that sleep deprivation affected "every aspect of our biology" and was **widespread** in modern society.

2 When did a doctor **prescribe**, not sleeping pills, but sleep itself?

3 ...the World Health Organisation has classed any form of night-time **shift work** as a probable carcinogen...

4 And there is a tendency to **boast** about needing little sleep to function.

5 We want to seem busy, and one way we express that is by proclaiming how little sleep we're getting. It's **a badge of honour**.

6 We **chastise** people for sleeping what are, after all, only sufficient amounts. We think of them as slothful.

Match the words and expressions to these explanations:

1 something that shows that you have a particular quality

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2 happening or existing in many places, or affecting many people

3 criticise

4 (of a doctor) tell someone to take a certain medicine

5 proudly tell other people about what you have done or can do in a way that other people may find irritating

6 a pattern of work in which you sometimes work during the day and sometimes during the night

What is the meaning of the highlighted expression in this extract from the article?

The Observer September 2017

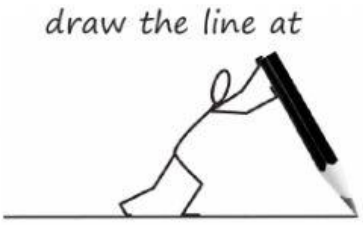
Electric lights, television and computer screens, longer commutes, the **blurring of the line between** work and personal time

There are other expressions with **line** in English. Do you know any? **Discuss what you think these mean and then match them to the definitions below:**

1 out of line
2 draw a line under something
3 read between the lines
4 on the line
5 draw the line at
6 bottom line
7 toe the line
8 a line in the sand

Match the expressions to these explanations:

___ a point beyond which one will not go; a limit to what one will do or accept
___ finish something and not think about it again
___ the most important or fundamental aspect of a situation
___ set the limit
___ understand something which is not actually stated
___ conform strictly to a rule
___ being risked or put in jeopardy; in a vulnerable position
___ inappropriate or offensive



Complete these statements with the expressions above:

1 The new teacher is very strict. She makes the students _____.
2 Our boss lets us work flexihours, but _____ us arriving after noon.
3 We need to _____ this failing project and move on to the next one.
4 His place in the team is _____. If he doesn't score today he won't play again.
5 "I thought it was very rude when Peter criticised Helen's work during the meeting." "Yes, it was really _____."
6 The _____ is if we don't make a profit this year we will go bust.