

## **D**irections

Read this article. Then answer questions 29 through 35.

# Getting Lost in a Good Book Can Help Keep You Healthy

by Hilary Freeman

Reading is good for you. I would say that, of course. I'm a novelist—I've written five books for teenagers—and it's obviously in my interest to encourage people to read.

But there's increasing evidence that reading for pleasure isn't just another leisure pursuit, or merely a way of improving literacy skills and factual knowledge.

5 It might actually be good for our mental and physical health too.

In an age of Twitter and short attention spans, reading novels—which requires intense concentration over a long period of time—could be the antidote.

Neuroscientist Baroness Susan Greenfield says that reading helps to lengthen attention spans in children and improves their ability to think clearly.

10 “Stories have a beginning, a middle and an end—a structure that encourages our brains to think in sequence, to link cause, effect and significance,” she says.

“It is essential to learn this skill as a small child, while the brain has more plasticity,<sup>1</sup> which is why it's so important for parents to read to their children.”

“The more we do it, the better we get at it.”

15 Reading can enrich our relationships by increasing our understanding of other cultures and helping us learn to empathize.

20 A recent study at the University of Michigan found that there had been a 48 percent decrease in empathy among college students, with the sharpest decline in the past ten—most technology dependent—years, suggesting, although not proving, a correlation. Encouraging reading could counteract this.

“In a computer game, you might have to rescue a princess, but you don't care about her, you just want to win,” explains Baroness Greenfield.

“But a princess in a book has a past, present and future, she has connections and motivations. We can relate to her. We see the world through her eyes.”

<sup>1</sup> **plasticity:** flexibility or capability to grow and change

25 According to John Stein, emeritus professor of neuroscience at Magdalen College, Oxford, reading is far from a passive activity. “Reading exercises the whole brain,” he explains.

“When we ‘get lost’ in a good book, we’re doing more than simply following a story. Imagining what’s happening is as good at activating the brain as ‘doing’ it.”

30 New MRI scanning techniques now enable science to prove this. In 2009, an American brain-imaging study showed that when we read and imagine the landscapes, sounds, smells and tastes described on the page, the various areas of the brain that are used to process these experiences in real life are activated, creating new neural pathways.

In other words, our brains simulate real experiences, just as if we were living them ourselves. This doesn’t happen when we’re watching TV or playing a computer game.

Getting stuck into a good novel appears to be beneficial to our mental health. As the old saying goes: “You’re never alone with a book.” Reading not only staves off<sup>2</sup> feelings of loneliness, it helps us to wind down, de-stress and forget our own problems for a while.

40 In 2009, researchers at the University of Sussex found that just six minutes of reading can reduce stress levels by more than two-thirds, more than listening to music or going out for a walk.

It is thought that the concentration required to read distracts the mind, easing muscle tension and slowing the heart rate.

Reading may be good for physical health too, preventing brain aging and disease.

45 A study, just published in the Archives of Neurology, from the University of California, Berkeley, found that engaging in brain-stimulating pursuits including reading on a daily basis—from a young age—could help prevent Alzheimer’s by inhibiting the formation of the amyloid (protein) plaques which are found in the brains of those with the disease.

50 Scientists scanned the brains of healthy adults aged 60 and over (average age was 76) with no signs of dementia and found those who had been doing daily brain-stimulating activities, such as reading, playing chess, and writing letters since they were six years old showed very low levels of amyloid plaques.

But those who did not enjoy these activities had lots of plaques.

55 Although the study was small and did not take socio-economic effects into account, it is certainly an indication that reading may be as good for the brain as it is for the mind.

<sup>2</sup> **staves off**: holds back; stops

- 29 Lines 6 through 14 are important to the article because they
- A show the potential effects of reading over time
  - B highlight the value of scientific research
  - C emphasize the challenges beginning readers face
  - D provide examples of the problems scientists face
- 30 Why is it important for parents to encourage reading at a young age?
- A Children are more likely than adults to follow stories all the way through.
  - B Children are more likely than adults to use technology for information.
  - C Children have longer attention spans than college students and older adults.
  - D Children can more easily grasp new ideas and abilities than adults.
- 31 What is the meaning of the word “simulate” as it is used in line 34 of the article?
- A to expect
  - B to illustrate
  - C to remember
  - D to imitate
- 32 How do lines 45 through 53 illustrate possible ways to prevent brain disease?
- A by including the positive effects of certain activities on the brain
  - B by describing how harmful substances form in the brain
  - C by emphasizing the importance of brain scans for older adults
  - D by proving that brain-based activities should be enjoyed by adults

- 33 How does the author support John Stein’s claim that “Reading exercises the whole brain” (line 26)?
- A by describing how other physical functions in the body work
  - B by explaining which parts of the brain connect to senses
  - C by explaining how functions of the brain are triggered
  - D by describing a new method of creating pathways
- 34 Which statement **best** conveys the central idea of the article?
- A “I’m a novelist—I’ve written five books for teenagers—and it’s obviously in my interest to encourage people to read.” (lines 1 and 2)
  - B “But there’s increasing evidence that reading for pleasure isn’t just another leisure pursuit, or merely a way of improving literacy skills and factual knowledge.” (lines 3 and 4)
  - C “When we ‘get lost’ in a good book, we’re doing more than simply following a story.” (line 28)
  - D “As the old saying goes: ‘You’re never alone with a book.’” (lines 36 and 37)
- 35 What is the author’s **main** purpose for writing the article?
- A to encourage teens to read books that she has written
  - B to convince people that reading is a worthwhile activity
  - C to demonstrate why reading is a good form of entertainment
  - D to show the negative effects of playing games instead of reading

**STOP**