Select Readings, Second Edition Upper-intermediate, IELTS[™]-Style Midterm

Read the passage and answer **Questions 1–15** which follow.

Boosting Brain Power

The human brain is surprisingly malleable. The adult brain has an amazing ability to change and remold itself, even to the point of growing new cells. Our behavior and environment can have a staggering effect on the functions of our brains. For example, it has been observed that surgeons who spend at least a few hours a week playing video games tend to make nearly one-third fewer errors in the operating room than non-gaming doctors do. In fact, research shows that video games can improve mental skills, while boosting¹ hand-eye coordination, depth perception, and pattern recognition. Attention spans and information-processing skills are far higher in regular gamers than the normal guy on the street.

Pundits² suggest that there are six basic factors that can contribute to good mental function. The following habits can help us all fine-tune our minds.

1. Exercise

The mood-boosting effects of exercise have been widely known for many years. However, recent studies also show that exercise can significantly increase the brain's executive functions—things such as planning, organizing, and multi-tasking. In addition, people who exercise retain better executive functions and seem less likely to get dementia³ as they age.

2. Diet

Your brain is part of your body. So it only makes sense that your body requires a good diet to function at optimum levels. So just what should we feed our brains? And more importantly, what should we avoid? As with our bodies, it seems that the brain does not cope well with saturated fats. However, not all fat is bad. In particular, the omega-3 fatty acids found in fish, nuts, and seeds seem to be vital to a brain's well-being. In addition, fruits and vegetables appear to be brain 'super foods.'

3. Caffeine

Caffeine is the most commonly used stimulant in the world. Stimulants are substances that give the nervous system a 'kick-start' by increasing heart rate, blood pressure, energy, breathing, and more. Don't overdo it. In high doses, caffeine causes some unwanted side effects. However, in moderate doses, caffeine boosts arousal⁴ and alertness, and may increase mental function in the long term.

4. Video Games

boosting improving

² **pundits** experts in the field

³ **dementia** a brain disorder, usually including chronic problems with mental processing

⁴ **arousal** a feeling of being awake or excited

Select Readings, Second Edition Upper-Intermediate IELTS[™]-Style Midterm ©Oxford University Press. Permission granted to reproduce for instructional use.

As mentioned before, the stimulation that comes with playing video games seems to increase mental dexterity and improve visual perception skills. However, as with caffeine, limit time spent on video games. Too much can have the opposite effect, and might just turn you into a social outcast.

5. Music

It seems that when we hear a piece of music that appeals to our senses, our brain's reward centers are activated, and fear and negative emotions are reduced. Reduced stress and anxiety, lower blood pressure, and a slowing in the progression of age-related dementia are all associated with listening to music. There is still no agreement as to whether music actually makes you smarter, but it certainly appears that it can't hurt.

6. Relaxation

If you believe what you read, then believe this: Meditation—taking time to turn your mind inward and contemplate—and relaxation can reward us with tremendous benefits to both our minds and our bodies. Brain-imaging machines show that people who meditate actually show changes in the brain. Regular meditators say they feel more at ease and creative, in addition to experiencing less anxiety, pain, high blood pressure, asthma, insomnia, depression, and a vast array of other disorders than non-meditators.

Following these simple tips may not turn you into a genius, but they may make you perform better and live a longer and happier life.

QUESTIONS 1-5

The Reading Passage describes several cause and effect relationships. Match each Cause in List A (1-5) with an Effect in List B (A-H).

Write the correct letter **A**–**H** in boxes 1–5 on your answer sheet. There are more Effects than you will need, so you will not use all of them.

Causes: List A

- 1 Playing video games a few hours a week
- 2 Listening to music you like
- **3** Having too many saturated fats in your diet
- 4 Playing video games too often
- 5 Meditating regularly

Effects: List B

- A Can make you feel less stressed and more creative
- B Can turn you into a social outcast
- C Boosts arousal and alertness
- D Impacts brain functions negatively
- E Increases your heart rate and blood pressure
- F Improves hand-eye coordination

Select Readings, Second Edition Upper-Intermediate IELTS[™]-Style Midterm ©Oxford University Press. Permission granted to reproduce for instructional use.

- **G** Activates the brain's reward centers
- H Turns omega-3 fatty acids into 'super foods'

QUESTIONS 6-9

Do the following statements agree with the information given in the Reading Passage? In boxes 6–9 on your answer sheet write

TRUE	if the statement agrees with the information
FALSE	if the statement contradicts the information
NOT GIVEN	if there is no information on this

- 6 Not all fats are necessarily bad for brain functions.
- 7 Playing video games can improve pattern recognition.
- 8 Meditation is most effective when accompanied by music.
- **9** Caffeine doesn't help brain functions in the long term.

QUESTIONS 10–12

Complete the summary of the reading. Choose ONE word from the Reading Passage for each blank.

Recent studies show that there are many day-to-day things that we can do to boost brain functions. The brain is part of the body, and as such, a proper (10)______ and regular exercise can have a tremendous effect on its functions. Other things like caffeine and video games can also provide (11)______ that can boost mental functions, but too much of either of these can have a negative effect. Listening to music and engaging in a practice of regular meditation can play a key role in increasing (12)______ functions as well, by lowering anxiety and stress.

QUESTIONS 13–15

Choose the correct letter, A, B, C or D. Write your answers in boxes 13–15 on your answer sheet.

- **13** According to the story, behavior and environment
 - A are being studied by surgeons.
 - **B** are different in people who play video games regularly.
 - **C** are responsible for growing new cells in the brain.
 - **D** play a significant role in how the brain functions.
- **14** Which of the following is true about studies on exercise and the brain?
 - A People who exercise often are less likely to develop dementia.
 - **B** The effect of exercise on executive functions has been long known.

Select Readings, Second Edition Upper-Intermediate IELTS[™]-Style Midterm ©Oxford University Press. Permission granted to reproduce for instructional use.

- **C** Multi-tasking can boost a person's mood when exercising.
- **D** Exercise has less effect on executive functions as people age.
- 15 The author's purpose in writing this article is primarily to
 - A talk about the latest trends in brain research.
 - **B** discuss why dementia is increasing among older people.
 - **C** give information about simple techniques that can improve brain power.
 - D indicate common practices among geniuses.