

Text 1

How exercise in old age prevents the immune system from declining

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01 *Doing lots of exercise in older age can prevent the immune system from declining and protect*
02 *people against infections, scientists say.*

03

04 They followed 125 long-distance cyclists, some now in their 80s, and found they had the
05 immune systems of 20-year-olds.

06 Prof Norman Lazarus, 82, of King's College London, who took part in and co-authored the
07 research, said: "If exercise was a pill, everyone would be taking it. It has wide-ranging benefits
08 for the body, the mind, for our muscles and our immune system." The research was published
09 in the journal *Aging Cell*.

10 Prof Janet Lord, director of the Institute of Inflammation and Ageing, at the University of
11 Birmingham, and co-author of the research, said: "The immune system declines by about 2-
12 3% a year from our 20s, which is why older people are more susceptible to infections,
13 conditions like rheumatoid arthritis and, potentially, cancer. Because the cyclists have the
14 immune system of a 20-year-old rather than a 70- or 80-year-old, it means they have added
15 protection against all these issues."

16 The researchers looked at markers in the blood for T-cells, which help the immune system
17 respond to new infections. These are produced in the thymus, a gland in the chest, which
18 normally shrinks in size in adulthood.

19 They found that the endurance cyclists were producing the same level of T-cells as adults in
20 their 20s, whereas a group of inactive older adults were producing very few.

21 The researchers believe that being physically active in old age will help people respond better
22 to vaccines, and so be better protected against infections such as flu.

Available on: <<http://www.bbc.com/news/health-43308729>>. [Adapted]. Accessed on: April 2nd, 2018.

Questão 13

Select the correct proposition(s) according to the information in Text 1.

01. The study was conducted by more than one researcher.
02. Infections are more frequent in older people.
03. The immune system hardly benefits from cycling.
04. The study examined the routine of professional cyclists.
05. The study found that there are no T-cells in older adults.

Resposta: 03

O sistema imunológico se beneficia do ciclismo, o texto não afirma que os ciclistas estudados eram profissionais, e as células T são produzidas em pessoas mais velhas, porém produzem poucas.

Questão 14

Choose the correct proposition(s) in regards to reference in Text 1.

- 01. The pronoun 'they', in line 04 (They followed 125 long-distance cyclists), refers to the word 'cyclists'.
- 02. The pronoun 'they', in line 14 (it means they have added protection), refers to 'cyclists'.
- 04. The pronoun 'it', in line 07 (everyone would be taking it), refers to 'pill'.
- 06. The pronoun 'who', in line 06 (who took part in and co-authored the research), refers to 'King's College'.
- 16. The pronoun 'these', in line 17 (These are produced in the thymus), refers to 'infections'.

Resposta: 06

O *they* da linha 04 refere-se aos cientistas, *who* na linha 06 se refere ao Prof. Norman Lazarus, *these* na linha 17 se refere às células T.

Questão 15

Select the proposition(s) which contains (contain) correct translations for the boldfaced words as they are used in Text 1.

- 01. Found: fundaram
- 02. Declines: decai
- 04. Susceptible: sucedido
- 06. Conditions: condicionamentos
- 16. Adulthood: vida adulta
- 18. Such as: tanto assim

Resposta: 18

Found no texto tem o sentido de descobriram ou encontraram, *susceptible* é susceptível, *conditions* no texto representa doenças, e *such as* pode ser traduzido como ou tal qual.

Questão 16

According to Text 1, select the correct statement(s).

- 01. Norman Lazarus was one of the study's participants.
- 02. Norman Lazarus helped to conduct the study.
- 04. Norman Lazarus believes that exercising should be replaced by medicine.
- 06. Janet Lord is a long-distance cyclist.
- 16. Janet Lord is a researcher.

Resposta: 19

Prof. Norman Lazarus não acredita que exercícios possam ser substituídos por medicamentos, e Janet Lord não é ciclista.

Questão 17

Which of the following questions can be answered according to Text 1?

- 01. Why do old long-distance cyclists have better immune systems?
- 02. What are some disadvantages of long-distance cycling?
- 04. What are some benefits of exercising when you are old?
- 08. How is exercising related to the performance of the immune system?
- 16. Can we reduce infections in old-aged people?
- 29. When is the perfect time to become a cyclist?

Resposta: 29

O texto não fala das desvantagens do ciclismo, nem quando é o momento perfeito para nos tornarmos ciclistas.

Text 2

A brain training computer game developed by British neuroscientists has been shown to improve the memory of patients in the very earliest stages of dementia and could help such patients avert some symptoms of cognitive decline.

Researchers who developed the "game show"-like app and tested its effects on cognition and motivation in a small trial found that patients who played the game over a period of a month had around a 40 percent improvement in their memory scores.

"We hope to extend these findings in future studies of healthy ageing and mild Alzheimer's disease," said George Savulich, who led the study at Cambridge University.

Dementia is a huge global health problem. The World Health Organization says some 47.5 million people had dementia in 2015, and that number is rising rapidly as life expectancy increases and societies age.

The condition is incurable and there are few drugs that can alleviate the symptoms – which include declining memory, thinking, behavior, navigational and spatial skills and the gradual loss of ability to perform everyday tasks.

Publishing his results in the International Journal of Neuropsychopharmacology, Savulich said that as well as improving their memory scores in the game, patients who played it retained more complex visual information than those who didn't.

Independent experts said the study's findings were encouraging, but that the app needed be tested against other forms of brain training in trials involving more people.

"While this type of brain training will not ultimately be able to prevent or cure memory diseases like dementia, it is a promising way to improve early memory symptoms of the disease," said Tara Spiers-Jones of the University of Edinburgh.

Source: Kate Kelland, editing by David Evans, available on: <<http://www.reuters.com/article/us-health-brains-idUSKBN19N0YB>>. [Adapted]. Accessed on: April 2nd, 2018.

Questão 18

Which of the title(s) below best summarize(s) the main idea of the text?

- 13. Patients suffering from severe Alzheimer's disease can now be cured.
- 14. The app developed by researchers at Cambridge can completely cure dementia.
- 15. Severe Alzheimer's disease can be eradicated by means of an app.
- 16. Cure for lack of memory could be in an app.
- 16. 'Brain training' app improves memory in people with cognitive decline.

Resposta: 16

O texto não menciona a cura do Alzheimer e demência em nenhuma das circunstâncias, apenas melhora os sintomas.

Questão 19

Select the correct proposition(s) from Text 2.

- 01. Dementia is incurable and few drugs can be used to treat it.
- 02. The application was tested on people with no symptoms of memory loss.
- 04. George Savulich conducted the studies at the University of Edinburgh.
- 05. Tara Spire-Jones believes the app can cure dementia.
- 16. The application was tested on people in the very earliest stages of dementia.

Resposta: 17

O aplicativo foi testado em pessoas com declínio de memória. George Savulich conduziu um estudo na universidade de Cambridge, e o aplicativo não objetiva a cura da demência.

Questão 20

In the English language, the suffix -ing (the gerund) can be used as a verb, a noun, or an adjective. Select the proposition(s) in which the use is correctly shown, according to the underlined words in Text 2.

- 01. Rising – verb.
- 02. Declining – noun.
- 04. Findings – verb.
- 05. Improving – adjective.
- 06. Encouraging – adjective.
- 07. Training – verb.
- 08. Ageing – adjective.

Resposta: 17

No texto *rising* é verbo, *declining* é adjetivo, *findings* é substantivo, *improving* é verbo, *encouraging* é adjetivo, *training* é substantivo, e *ageing* é substantivo.

Obs.: Embora o gabarito oficial indique somente a alternativa 01 como correta, a palavra *encouraging*, no texto, qualifica as descobertas do estudo como sendo encorajadoras, exercendo a função de um adjetivo, além dos dicionários Oxford, Merriam-Websters e Tesseract classificarem-na exclusivamente como adjetivo.