

II 次の文を読んで、以下の設問に答えよ。

Fever is an example of a biological defence mechanism that is often regarded as merely an unpleasant symptom of disease. A raised body temperature is a standard biological response to infection by bacteria and viruses, and a good indicator of illness.

In ancient Greece, fever was understood as a natural response to infection. The Greeks believed that a moderate fever could assist the patient to overcome infection. ^(a) This view changed radically in later centuries. Fevers are unpleasant and therefore considered undesirable. Drugs that could make the symptoms disappear were welcomed enthusiastically. By the end of the nineteenth century the use of fever-reducing drugs had become a common practice. Nowadays when we have a mild fever we reach for the drugs, but the theory of evolution suggests that the ancient Greeks were nearer the mark in their attitude towards fever. ⁽¹⁾

Animals are equipped with specific biological mechanisms for generating just the right amount of fever in response to infection. As a defence mechanism, it is biologically costly: animals use considerably more energy when their body temperature is raised. The logic of evolution implies that fever should have biological benefits to offset its obvious costs. Today we think that natural selection has favoured fever because it helps those who are sick to combat infection. Fever is designed to make life harder for the offending bacteria or viruses. Like all organisms, bacteria and viruses work best at a particular temperature. ⁽²⁾ Alter that temperature and they cease to thrive.

This explanation for fever suggests that taking drugs to 'cure' fever might do more harm than good. Experiments have shown that in certain circumstances suppressing a fever can actually delay recovery from infection. In one experiment, chickenpox* sufferers were either treated with

a drug often used to lower their body temperature, or were given no treatment at all. 薬を与えられた人たちのほうが病気からの回復にはより時間がかかった。^(A) The message of the experiment is that suppressing the body's natural reactions to infection can have disadvantages as well. Fever-reducing drugs are undoubtedly beneficial in many cases and can be vital when a high fever threatens the patient's health. But their careless use⁽³⁾ to suppress the mild fevers that accompany common infections might be a mistake.

*chickenpox : 水痘瘡^{みずぼうそう}

II- 1. 下線部(a)の内容を日本語でわかりやすく説明せよ。

II- 2. 下線部(1), (2), (3)を和訳せよ。

II- 3. 下線部(A)を英訳せよ。

II- 4. Here is a dialogue between two friends. Think freely, and fill in the blank in English.

JOHN : What's the matter? You look pale.

PAUL : I have a headache and fever. [*Cough, cough.*]

JOHN : Oh, you have a cold. My advice to you is _____

PAUL : Thank you, I will.