

1 次の英文を読んで各問に答えなさい。

Your nose is blocked, your eyes are streaming and your head aches. You may or may not feel like eating. But if you are hungry there are plenty of ideas about what you should and shouldn't eat and it's (①) in particular that are often ruled out.

Some say that ice cream, cheese and above all, milk, should be avoided. The reason given for this isn't pleasant; it's that dairy products will (②) the production of *mucus. But is this really true?

We ③tend to feel disgusted by the whole idea of mucus, but it does play an important role in our physiology. Mucus *membranes protect (④) from irritation or damage in many parts of the body, including the windpipe, the lungs, the *oesophagus and the stomach. So we do need it, but of course ⑤(too / no one / of / wants / it / much), especially if they are already producing extra as a result of their cold.

The idea that there is a link between milk and mucus production has (⑥) for centuries: it can be found in traditional Chinese medicine and in the writings of the 12th Century doctor Moses Maimonides. A study from 2004 found 58% of people still believed it, and some heard it first from their own doctors.

And it would seem that you don't need to (⑦) much for there to be an effect. Research from 1993 found almost two-thirds of people believed that just ⑧(glass / led / a single / of / the presence / to / milk) of more mucus in the throat. The words used to ⑨ describe the feeling were sticky, thick, blocked, heavy and clogged.

This is very different from ⑩a serious allergy to milk, experienced by a very small number of adults, with serious symptoms such as vomiting, rashes and difficulty breathing. And it's not the same as lactose intolerance where people who don't have the right enzymes to digest the lactose in milk, feel bloated or sick or get diarrhea after drinking it.

So what is this other effect? To find out you need to ask people to drink a substance which might or might not contain cow's milk and then ask them for symptoms later on. ⑪Researchers at a hospital in South Australia did just this, giving 125 people either cow's milk or soya (soybean) milk. Heat treatment with a cocoa peppermint flavour meant the drink tasted indistinguishable, and when questioned afterwards a proportion of the cow's milk drinkers did say they found it harder to swallow, that their saliva felt thicker or that they could feel a coating in their throat.

(Adapted from <http://www.bbc.com/future/story/20170421>)

[注] *mucus = 粘液

*membrane = 膜

*oesophagus = 食道

(5-2)

問1 空所 ①、②、④、⑥、⑦ に入る最も適切な語句を (ア) ~ (エ) よりそれぞれ 1つ選び、その記号を書きなさい。

① :

(ア) developing phenomena

(イ) human diseases

(ウ) individual differences

(エ) dairy products

② :

(ア) increase

(イ) nod

(ウ) neglect

(エ) yield

④ :

(ア) joints

(イ) nails

(ウ) skins

(エ) tissues

⑥ :

(ア) remarked

(イ) ceased

(ウ) persisted

(エ) stepped

⑦ :

(ア) consume

(イ) surrender

(ウ) avoid

(エ) refer

問2 下線部 ③ と ⑨ の名詞形を書きなさい。ただし、動名詞の形は除く。

問3 下線部 ⑤ と ⑧ の語句を文意に合うように並べ替えなさい。

問4 下線部 ⑩ にはどのような症状が見られるか。本文に沿って説明しなさい。

問5 下線部 ⑪ について、どのような実験を行い、どのような結果になったか。本文に沿って説明しなさい。

- 2 次の文章中の ①～⑤ に最もあてはまるものを下記の (ア) ～ (オ) から1つずつ選び、その記号を書きなさい。

Wind is a form of solar energy. Winds (①), the irregularities of the earth's surface, and rotation of the earth. Wind flow patterns are modified by the earth's terrain, bodies of water, and vegetative cover. This wind flow, or motion energy, when "harvested" by modern wind turbines, can be used to generate electricity.

The terms "wind energy" or "wind power" (②) or electricity. Wind turbines convert the kinetic energy in the wind into mechanical power. This mechanical power can be used for specific tasks (such as grinding grain or pumping water) or a generator can convert this mechanical power into electricity to power homes, businesses, schools, and the like.

Wind turbines, like aircraft propeller blades, (③) that supplies an electric current. Simply stated, a wind turbine is the opposite of a fan. Instead of using electricity to make wind, like a fan, wind turbines use wind to make electricity. The wind turns the blades, which spin a shaft, which connects to a generator and makes electricity.

Although wind power plants (④) fossil fuel power plants, there is some concern over the noise produced by the rotor blades, aesthetic impacts, and birds and bats having been killed by flying into the rotors. Most of these problems (⑤) or by properly siting wind plants.

(Adapted from <http://windeis.anl.gov/guide/basics/>)

- (ア) have relatively little impact on the environment compared to
- (イ) are caused by the uneven heating of the atmosphere by the sun
- (ウ) have been resolved or greatly reduced through technological development
- (エ) turn in the moving air and power an electric generator
- (オ) describe the process by which the wind is used to generate mechanical power

3 次の下線部の意味に最も合う語句を (ア) ~ (エ) から 1 つ選び、その記号を書きなさい。

問 1 You should get back the money you overpaid.

- | | |
|--------------|-----------------|
| (ア) praise | (イ) retrieve |
| (ウ) distress | (エ) subordinate |

問 2 I have every confidence that he is telling me the truth.

- | | |
|---------------|-----------------|
| (ア) imitation | (イ) corporation |
| (ウ) zest | (エ) conviction |

問 3 Please look out for your health.

- | | |
|------------------|---------------|
| (ア) come down to | (イ) run out |
| (ウ) take care of | (エ) wait upon |

問 4 The player felt out of humor to be treated unfairly.

- | | |
|------------------|-------------|
| (ア) dissatisfied | (イ) pleased |
| (ウ) confused | (エ) harmed |

問 5 It is odd that he should get angry at what you said.

- | | |
|-------------|--------------|
| (ア) distant | (イ) sensible |
| (ウ) content | (エ) weird |

4 日本文に合うように () に入る最も適切な語句を (ア) ~ (エ) から1つずつ選び、その記号を書きなさい。

問1 ナンシーは私に「ひょっとして彼の住所を知っていますか」と言った。

Nancy said to me, “()?”

- (ア) Do you know where he is likely to live
- (イ) Do you get to know his place
- (ウ) Is it possible for you to tell me his resident
- (エ) Do you happen to know his address

問2 彼はきっと有名な映画スターになるというのは言い過ぎではない。

() he will certainly be a famous movie star.

- (ア) You can say enough to the degree whether
- (イ) It is not too much to say that
- (ウ) Nobody won't greatly tell you if
- (エ) We bet in confidence that

問3 審判は勝者にメダルを贈呈した。

The judge ().

- (ア) gave a medal to the offender
- (イ) turned over a medal as the winner
- (ウ) presented the winner with a medal
- (エ) gifted the champion to a medal

問4 この自転車を修理するのに2、3時間かかるだろう。

I guess it will () this bicycle.

- (ア) need a few days to recover
- (イ) require me two or three hours to fix on
- (ウ) work on some times to mend
- (エ) take me a couple of hours to repair

問5 ドライバーたちはこの新しい装置のおかげで交通事故を避けることができるだろう。

The new device will ().

- (ア) enable drivers to avoid traffic accidents
- (イ) make drivers comfortable to heavy traffics
- (ウ) be stuck against traffic incidents
- (エ) set aside terrible car accidents to prevent