

# 英 語

## 注 意

1. 問題は全部で11ページである。
2. 解答用紙に氏名・受験番号を忘れずに記入すること。  
(トにはあらかじめ受験番号がプリントされている。)
3. 解答はすべて解答用紙に記入すること。
4. 問題冊子の余白等は適宜利用してよいが、どのページも切り離してはいけない。
5. 解答用紙は必ず提出のこと。この問題冊子は提出する必要はない。

### マーク・シート記入上の注意

1. 解答用紙(その1)はマーク・シートになっている。HBの黒鉛筆またはシャープペンシルを用いて記入すること。
2. 解答用紙にあらかじめプリントされた受験番号を確認すること。
3. 解答する記号・番号の○を塗りつぶしなさい。○で囲んだり×をつけたりしてはいけない。

解答記入例(解答が1のとき)

1	<input checked="" type="radio"/>	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
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4. 一度記入したマークを消す場合は、消しゴムでよく消すこと。×をつけても消したことになる。
5. 解答用紙をよごしたり、折り曲げたりしないこと。

1

次の英文を読み、以下の問いに答えなさい。

People have been using herbs and spices for thousands of years. Generally, herbs come from the green leaves of plants or vegetables. Spices come from other parts of plants and trees. Some herbs and spices are valued for their taste. They help to sharpen the taste of many foods. Others are chosen for their smell. Still others were used traditionally for health reasons. When people think of improving their diet, they often talk about eating more fruits and vegetables. Others want to eat more fish and less red meat, in addition to reducing the amount of food they eat. But, they can improve their diets even more with just a simple addition.

American researchers have found that a diet rich in spices can help reduce the harmful effects of eating high-fat meals. Researchers at Pennsylvania State University reported the findings. Penn State Associate Professor Sheila West led an investigation of the health effects of a spice-rich diet. Her team knew that a high-fat meal produces high levels of triglycerides, a kind of fat, in the blood. She said, "If this happens too frequently, or if triglyceride levels are raised too much, your risk of heart disease is increased. We found that adding spices to a high-fat meal reduced triglyceride response by about 30 percent, compared to a similar meal with no spices added."

As part of the study, her team prepared meals on two separate days for <sup>11</sup> six men between the ages of 30 and 65. The men were overweight, but healthy. The researchers added about 30 milliliters of spices to each serving of the test meal, which included chicken curry, Italian herb bread and a cinnamon biscuit. The meal for the control group was the same, but it did not include any spices. Ann Skulas-Ray also served on the research team. She said the team used paprika, rosemary, oregano, cinnamon, turmeric, black pepper, cloves and garlic powder. She said these spices were chosen because they had demonstrated strong antioxidant activity under controlled conditions in a

laboratory.

During the experiment, the researchers removed blood from the men every 30 minutes for three hours. They found that antioxidant activity in the blood of the men who ate the spicy meal was 13 percent higher than it was for the men who did not. In addition, insulin activity dropped by about 20 percent in the men who ate the spicy food.

Sheila West says many scientists think that oxidative stress leads to heart disease, arthritis and diabetes. And what exactly is oxidative stress? Think of an apple that has been cut in half and set aside for half an hour or so. The cut side of the apple turns brown. That is a simple explanation of what happens when oxidative stress comes in contact with the inside and outside of our bodies. Professor West says, "Antioxidants, like spices, may be important in reducing oxidative stress and thus reducing the risk of chronic disease." She adds that the level of spices used in the study provided the same amount of antioxidants found in 150 milliliters of red wine or about 38 grams of dark chocolate.

Other scientists are helping to uncover the secrets of spices and herbs. For example, Purdue University <sup>12</sup>researchers in Indiana say red pepper may help people lose weight. They say this could be especially true for people who do not usually add peppers to their food. The researchers reported on the effects of dried and ground cayenne red pepper in the journal *Physiology & Behavior* in 2011. They found that small changes in diet, like adding the pepper, may reduce the desire to eat. Most chili peppers contain capsaicin — a substance that makes chili peppers taste hot and spicy. Other studies have shown that capsaicin can reduce hunger and burn calories, the energy stored in food.

One spice that often is at the top of a healthy spices list is cinnamon. It comes from the inner bark of several trees and is used in both sweet and savory cooking. For centuries, cinnamon has been used in traditional medicine.

Now, it is earning respect in the medical field. German researchers found that cinnamon can reduce blood sugar by 10 percent. They were not sure why, but said it could be that substances in cinnamon activate enzymes that excite insulin receptors. Research also shows the spice can help lower levels of cholesterol and triglycerides, blood fats that may cause diabetes.

Registered dietician Wendy Bazilian says spices are being considered more seriously because the added taste they bring helps people reduce the salt, fat and sugar in their cooking. She has written a book called, "The Super Foods Rx Diet", on how people can lose weight by basing their diet on what she calls "super nutrients". She says she likes oregano, for example, because she considers it a mini salad. She says, "one teaspoon has as much antioxidant power as three cups of chopped broccoli." But, she says, do not get rid of the broccoli. Instead, eat both.

Herbs and spices are not used just to lessen unwanted chemical effects. They make food taste better. Some spices also destroy bacteria. Spices have long been used to keep food safe to eat. Spices have influenced world history.

Notes:

Penn State = Pennsylvania State University, triglyceride(s) トリグリセリド,  
cinnamon biscuit シナモンビスケット, control group 対照群,  
paprika パプリカ, rosemary ローズマリー, oregano オレガノ,  
turmeric ウコン, clove(s) クローブ, antioxidant 酸化を抑制する,  
insulin インスリン, oxidative stress 酸化ストレス,  
antioxidant(s) 酸化防止剤, arthritis 関節炎, diabetes 糖尿病,  
chronic disease 慢性疾患, ground 粉にした,  
cayenne red pepper 赤唐辛子の一種, bark 樹皮, savory 味のよい,  
activate 活性化する, enzyme(s) 酵素,  
insulin receptor(s) インスリン受容体, registered dietician 公認栄養士,  
Rx 処方, nutrient(s) 栄養素, bacteria 細菌

〔1〕 下線部 A, B を日本語にきなさい。(解答用紙その 2)

〔2〕 1～15 の質問に対して英文の内容から判断し, 最も適切だと思われるものをひとつ選び, その番号をマークきなさい。(解答用紙その 1)

1. What is the best title for this reading passage?

- (1) Spices Have Influenced World History
- (2) Herbs and Spices May Be Good for Your Health
- (3) Spices Can Reduce the Dangers of High-fat Meals
- (4) Herbs and Spices Reduce the Desire to Eat

2. Which statement is NOT true regarding some herbs?

- (1) They help to improve the taste of some foods.
- (2) They usually come from the roots of plants or vegetables.
- (3) They are used because of their smell.
- (4) They were used as traditional medicine.

3. The author believes that the easiest way to improve one's diet is to consume

- (1) fewer herbs and spices.
- (2) more fruits and vegetables.
- (3) more herbs and spices.
- (4) less red meat.

4. During Sheila West's experiment, researchers
  - (1) fed spicy meals to one group.
  - (2) ate high-fat meals every 30 minutes.
  - (3) found that insulin activity did not change among any of those who participated in the study.
  - (4) removed blood from those who participated in the study every three hours.
  
5. Sheila West's study chose particular spices because they
  - (1) are low in antioxidants.
  - (2) increase triglyceride response.
  - (3) are valued for their taste.
  - (4) show strong antioxidant activity.
  
6. The Pennsylvania State University study is exploring a possible connection between antioxidants in certain herbs and spices and
  - (1) an increase in oxidative stress in people who consume them.
  - (2) a reduction in oxidative stress in people who consume them.
  - (3) an increase in heart disease, arthritis and diabetes among people who consume them.
  - (4) the weight loss in healthy, overweight men between the ages of 30 and 65.

7. Purdue University researchers believe that by eating red peppers some people may

- (1) store more energy from their food.
- (2) make great changes to their diet.
- (3) not notice the effects of eating dried and ground cayenne red pepper.
- (4) lose some weight.

8. Which statement is NOT true about cinnamon?

- (1) It is used as a medicine.
- (2) It is an ingredient in cooking.
- (3) It comes from the cinnamon plant.
- (4) It has been receiving attention in the medical field.

9. According to research, cinnamon may be useful for

- (1) making food taste better.
- (2) increasing blood sugar.
- (3) increasing triglyceride and cholesterol levels.
- (4) lowering levels of certain blood fats.

10. Registered dietician Wendy Bazilian believes that by including spices in their diet, people can

- (1) lose weight and decrease salt, fat and sugar in their foods.
- (2) gain weight and decrease salt, fat and sugar in their foods.
- (3) lose weight while increasing salt, fat and sugar in their foods.
- (4) gain weight while increasing salt, fat and sugar in their foods.

11. The phrase “on two separate days” means
- (1) the day before the second day.
  - (2) the day after the first day.
  - (3) on two different days.
  - (4) twice a day.
12. The word with the **least** similar meaning to “uncover” is
- (1) reveal.
  - (2) conceal.
  - (3) show.
  - (4) expose.
13. The phrase “basing their diet on” means to
- (1) use as a foundation for making daily food choices.
  - (2) use as a way to lose weight.
  - (3) reduce the amount of salt, fat and sugar in their diet.
  - (4) reduce unwanted chemical effects.
14. Which of the following statements is **NOT** true regarding spices?
- (1) Some kill bacteria.
  - (2) They make food taste better.
  - (3) They are used only to lessen unwanted chemical effects.
  - (4) Some have been used for a long time to keep food safe.
15. Herbs and spices
- (1) can help keep food safe and taste better.
  - (2) can help raise cholesterol levels in blood.
  - (3) have been used for only a few centuries.
  - (4) have been discovered as one cause of heart disease.



- 2 以下のそれぞれの定義に従って、最初と最後の文字が与えられた最も適切な単語を書きなさい。ただし、1下線に1文字が入る。(解答用紙その2)

(解答例)

someone who is trained in science, especially someone whose job is to do scientific research

⇒(s \_\_\_\_\_ t)

正解(scientist)

1. a careful or organized plan that controls the way something is done

⇒(m \_\_\_\_\_ d)

2. a drawing that uses a series of dots, lines, etc., to show how much or how quickly something changes

⇒(g \_\_\_\_\_ h)

3. a document, chart, etc., that shows the days, weeks and months of the year

⇒(c \_\_\_\_\_ r)

4. one of the five natural powers (touch, taste, smell, sight and hearing) through which you receive information about the world around you

⇒(s \_\_\_\_\_ e)

5. a specialist in a particular branch of study

⇒(s \_\_\_\_\_ r)

3

次の会話文を読んで、以下の問いに答えなさい。

Koji: Hi Jill. Do you ( 16 ) if I ask what you are reading?

Jill: It's a book I've been reading for the last few months.

Koji: No ( 17 ). That's way too long.

Jill: Tell me about it! Because it's such a difficult story, I have to keep going back to Chapter 3.

Koji: I'm sorry. I don't follow you. Why Chapter 3?

Jill: That's where the story gets complicated. You know what I ( 18 )?

Koji: I guess so. In other words, this novel is way ( 19 ) your head.

Jill: Don't be so mean. I'm sure that I can ( 20 ) it. Just give me another few months.

Koji: Sure. It's your book and your time. Good luck!

[1] 下の選択肢1～0の中から、上の空欄16～20に最も適切だと思われるものをひとつ選び、その番号をマークしなさい。(解答用紙その1)

1. mean	6. speak
2. begin	7. mind
3. guess	8. look
4. way	9. over
5. trouble	0. handle

[2] 次の文で、会話文の内容と一致するのは1を、一致しないものは2をマークしなさい。(解答用紙その1)

21. Koji is reading a book with Jill.
22. Jill is having trouble finishing the story.
23. Koji thinks the book is too difficult for Jill.
24. Koji will help Jill read the difficult part of the story.
25. Jill will continue reading the book.

4

次の日本語の文を表す英文を、与えられた語句を用いて完成させた場合、2番目と4番目になる語句を番号で答えなさい。(解答用紙その1)

26. その公園を歩いたら、カナダでの子供の頃のことを思い出した。

Walking       .  
2番目 4番目

- ① of                                      ② in Canada                                      ③ through  
 ④ reminded me                                      ⑤ my childhood days                                      ⑥ the park  
 1) ③-④                                      2) ③-⑤                                      3) ⑥-①                                      4) ⑥-④

27. 実のところ、宿題についてのルールを変更するという先生の決定に私は同意していない。

As  ,      .  
2番目 4番目

- ① homework                                      ② my teacher's decision                                      ③ a matter of fact  
 ④ about                                      ⑤ I don't agree with                                      ⑥ to change the rule  
 1) ⑤-⑥                                      2) ②-①                                      3) ⑤-④                                      4) ⑥-①

28. 自信を持つことは、他者に肯定的な自己イメージを投影するのに必要である。

Self-confidence       .  
2番目 4番目

- ① is necessary                                      ② self-image                                      ③ project  
 ④ to others                                      ⑤ in order to                                      ⑥ a positive  
 1) ③-④                                      2) ④-⑤                                      3) ⑤-⑥                                      4) ⑥-①

29. 専門家の中には、コーヒーを飲むことによる健康面の利点について意見が一致しない人もいます。

Some       .  
2番目 4番目

- ① drinking coffee                                      ② experts                                      ③ about  
 ④ of                                      ⑤ the health benefits                                      ⑥ disagree  
 1) ⑤-①                                      2) ②-③                                      3) ③-②                                      4) ⑥-⑤







