



SAT LONG READING 3



1 Reading passage

The liberal use of spices in cooking is commonly thought to be correlated with hot climate. Analyzing nearly 5,000 recipes published in traditional cookbooks from 36 countries, researchers confirmed that, as a rule, the hotter the country's climate, the more spices are called for in its recipes, and that many of the spices commonly used in tropical and subtropical areas are used little, if at all, in colder climates. Spice use varies in this way not only between countries, but also between regions of the same country with significant temperature differences, such as northeastern and southwestern China. Several explanations for the phenomenon have been suggested: hot spices cool people by promoting perspiration; food spoils faster in hot climates, and potent seasonings can make spoiled foods palatable; spices grow plentifully in the tropics, and people tend to eat what is locally available; and spices provide important nutrients that foods otherwise lack.

But each of these explanations is flawed. The purpose of spices cannot be primarily to provide nutrients, because most are used in such tiny quantities that they contribute little of nutritive value. The "cooling" explanation fails to account for the use of spices in general since, among the multitude of prominently used spices, only hot peppers induce sweating, and even they do so only in some people. The claim that spice use originally developed to make spoiled foods more palatable is also questionable, since the practice would have been naturally discouraged by increased illness from food poison-

ing. Nor is agricultural convenience an adequate explanation; researchers have found no relationship between mean annual temperature and numbers of spices that grow in each country, and indeed have found that people will eschew locally grown spices while going to great lengths to obtain imported ones.

A recent study suggests another pragmatic basis for the correlation: Many spices naturally contain chemicals that kill or suppress microorganisms that cause spoilage and food poisoning. Many spices that appear most often and most abundantly in recipes from hot climates—especially garlic, onion, and hot peppers—inhibit most of the bacteria species against which they have been tested. And many spices that have relatively weak antibiotic effects when used alone become much more potent when combined, for example in chili powder (typically a mixture of red pepper, paprika, garlic, cumin, and oregano).

The researchers acknowledge that flavor is the obvious reason for using spices. But as they point out, the flavors of many widely used spices are not initially appealing. Rather, people have to learn to like them, which suggests that using spices is more than a matter of taste. In climates that are particularly favorable for the growth of food-borne microbes, people may have acquired and culturally maintained this preference for spicy foods ultimately because spices help cleanse foods of pathogens and thereby contribute to the health and longevity of people who consume them.

2 Question

1. Which one of the following most accurately expresses the main point of the passage?

- (A) There is evidence that the use of highly spiced foods may have developed in hot climates because spices can inhibit the growth of microorganisms, thus helping to prevent illness by protecting foods against spoilage.

- (B) There is inadequate evidence for the commonly proposed theories that explain the correlation between spice use and climate in terms of the cooling properties of spices, their health benefits, or their local availability in warm regions.
 - (C) Recent research provides statistical support for the widespread belief that people in hot climates use a wider variety and a greater abundance of spices in their foods than do people in cooler climates.
 - (D) A recent study tends to corroborate the widespread belief of people in hot climates that spices inhibit the spread of harmful microorganisms.
 - (E) Research indicates a direct correlation between mean annual temperature and the consumption of the kinds of spices that inhibit the growth of microorganisms, but this correlation has yet to be explained.
2. Which one of the following does the author cite in support of the suggestion that using spices is more than a matter of taste?
- (A) Researchers have found a statistical correlation between spice consumption and longevity in tropical countries.
 - (B) Research has shown that many spices strengthen the human immune system.
 - (C) Spice combinations are traditionally used mainly in foods that otherwise would be especially vulnerable to spoilage.
 - (D) An appreciation of the flavors imparted by many commonly used spices must be acquired.
 - (E) Many spices that are traditionally combined in recipe from hot climates are used singly in recipes from cooler climates.
3. It can be inferred from the passage that the author would be most likely to agree with which one of the following statements?
- (A) People in general do not initially like the flavors of highly nutritious foods.
 - (B) Given the choice between imported foods and locally grown ones, people in warm climates usually prefer the former.
 - (C) The ultimate reason for the use of spices is not necessarily flavor.
 - (D) Many of the most frequently and abundantly used spices are expensive and difficult to obtain in the areas in which they are produced.
 - (E) Telltale flavors of stale foods cannot be masked by the liberal use of potent spices.
4. The passage includes examples of which one of the following?
- (A) previously advanced theories attempting to explain the preservative properties of spices
 - (B) traditionally used food seasonings that are not considered to be spices
 - (C) specific recipes that originated in hot regions and call for the liberal use of spices
 - (D) specific foods that are especially vulnerable to the development of pathogenic microorganisms
 - (E) specific spices that are among the most effective in inhibiting bacterial growth

3 **Answer**

Question	1	2	3	4
Answer	A	D	C	E