令和 5 年度一般選抜 個別学力試験問題(前期日程)

英

語

学部	問題
法文学部,人間科学部,	1, 2, 4, 5-A
総合理工学部,生物資源科学部	11, 2, 4, 5-A
医学部医学科	1, 2, 3, 4, 5-B

注 意

- 1. 問題紙は指示があるまで開いてはいけません。
- 2. 問題紙は10ページ,解答用紙は法文学部,人間科学部,総 合理工学部,生物資源科学部受験生は1枚,医学部医学科受 験生は2枚です。指示があってから確認し,解答用紙の所定 の欄に受験番号を記入してください。
- 3. 法文学部, 人間科学部, 総合理工学部, 生物資源科学部受験 生は 1, 2, 4, 5-Aの問題を, 医学部医学科受験 生は 1, 2, 3, 4, 5-Bの問題を解答してくだ さい。
- 4. 答えはすべて解答用紙の所定のところに記入してください。
- 5. 解答用紙は持ち帰ってはいけません。
- 6. 試験終了後、問題紙は持ち帰ってください。



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1

A researcher recently made a study of the nation's walking habits and found that the average person in the United States walks less than 75 miles a year—about 1.4 miles a week, barely 350 yards a day. That's shockingly little. I get more mileage than that just by looking for the TV remote control.

One of the things my wife and I wanted when we decided to move back to America was to live in a moderate-sized town within walking distance of a central business district. Hanover, where we settled, is a small, typical New England town. It is a pleasant, easy place to go about one's business on foot, and yet as far as I can tell, almost no one does.

I walk to town nearly every day. I go to the post office or library or bookstore, and sometimes I stop at a café for a cappuccino. Occasionally in the evenings my wife and I stroll up to the theater for a movie or to the local bar for a beer. All this is a big part of my life and I wouldn't dream of doing it other than on foot. People have gotten used to this unusual behavior now, but several times in the early days, passing acquaintances would slow by the sidewalk and ask if I wanted a ride.

"But I'm going your way," they would insist when I politely declined. "Really, it's no bother."

"Honestly, I enjoy walking."

"Well, if you're absolutely *sure*," they would say and depart reluctantly, even guiltily, as if leaving the scene of an accident without giving their name.

People have become so used to using the car for everything that it would never occur to them to stretch their legs and see what they can do. It is worth noting that 93 percent of all trips outside the property in the United States now involve the use of a car.

An acquaintance of ours was complaining the other day about the difficulty of finding a place to park outside the local gym. She goes there several times a week to walk on a running machine. The gym is, at most, a six-minute walk from her front door. I asked her why she didn't walk to the gym and do six minutes less on the running machine.

She looked at me as if I were tragically simple-minded and said, "But I have a program for the running machine. It records my distance and speed and calorie-burn rate, and I can adjust it for degree of difficulty." It had not occurred to me how imperfect nature is in this regard.

According to a recent editorial in the *Boston Globe*, the United States spends less than 1 percent of its \$25 billion-a-year highway budget on facilities for pedestrians. Actually, I'm surprised it's that much. Go to almost any suburb and you will not find a sidewalk anywhere. Often you won't find a single pedestrian crossing. The fact is, we not only don't walk anywhere anymore in this country, but won't walk anywhere. And if that isn't sad, I don't know what is.

(Bill Bryson, I'm a Stranger Here Myselfより 一部改変)

- 1. 下線部(1)を日本語に直しなさい。
- 2. 下線部(2)の具体的内容を、本文にそって日本語で説明しなさい。
- 3. 下線部(3)を日本語に直しなさい。
- 4. 筆者の知人が下線部(4)のように考える理由を、本文にそって日本語で説明しなさい。
- 5. 筆者が下線部(5)のように考えるにいたった背景を、本文にそって日本語で説明しなさい。

2

We often enjoy hearing different accents. The way we talk simply reflects the sounds of the language in the environment in which we grew up. It should not have any social significance. But in reality, people do attribute value to accents and discriminate against non-native speakers. Research into English speakers in the US and UK shows that a foreign accent is often perceived negatively. For example, people rate salespeople as less knowledgeable and convincing if they have an accent.

Part of <u>such discrimination</u> seems to derive from the fact that a foreign accent signals a person as an outgroup member — someone who is not part of their usual circles — and people tend to favor ingroup over outgroup members. This is a behavior that starts when we are little, probably because it's a direct cue as to whether someone is familiar and part of our "social group."

In our recent study we show that people might discriminate against non-native speakers even if they are not prejudiced. That's because it can be harder to process foreign-accented speech, which is pronounced differently to the native norms. And people tend to believe information less if it's harder to process. When we presented participants with recordings of trivia statements such as "the sun shrinks five feet every hour," participants rated the same trivia statements as more likely to be true when they were said by a native speaker compared with a Polish-accented speaker.

If at least part of the bias was due to difficulty in processing foreign-accented speech, then making it easier for participants to understand the accent should increase their tendency to believe non-native speakers. We know from prior research that exposure to accent makes it easier to understand it. So, we exposed half of our participants to stories read by Polish-accented speakers before they rated the trivia task. The other half listened to the same stories read by native speakers.

First, we checked whether exposure to Polish-accented speakers improved

participants' comprehension of Polish-accented speech. An accent comprehension task showed that it did.

A key finding of our study was that the exposure to Polish-accented speech also reduced participants' bias against non-native speakers. While participants who were first exposed to Polish-accented speech still rated trivia statements as more likely to be true when they were read by native speakers than when they were read by Polish-accented speakers, the difference was smaller. We also found that the participants who performed better on the accent comprehension task were more likely to believe the trivia statements read by the Polish-accented speakers.

Our study shows that simply increasing exposure to foreign-accented speech can reduce difficulties in accent processing and bias. So by creating more diverse environments where native and non-native speakers regularly interact, we could potentially help avoid any unconscious discrimination on the basis of accent.

At the same time, a <u>cultural change is needed</u>. In addition to promoting diversity, we should all, as a first step, be aware of the fact that each of us has an accent. Accents do not reflect intelligence, and nor are they related to our proficiency in a language. Indeed, non-native speakers can of course be highly fluent in a language even with their native accent.

(Shiri Lev-Ari, "Here's Why People Might Discriminate against Foreign Accents — New Research" より 一部改変)

- [注] process (聞き取ったことを)分析・処理する trivia 雑学的知識Polish ポーランド語の
- 1. 下線部(1)を日本語に直しなさい。
- 2. 下線部(2)の内容を、本文にそって簡潔に日本語でまとめなさい。
- 3. 下線部(3)を日本語に直しなさい。
- 4. 下線部(4)の具体的内容を、本文にそって日本語で説明しなさい。
- 5. 下線部(5)の具体的内容を、本文にそって日本語で説明しなさい。
- 6. 下線部(6)の具体的内容を、本文にそって日本語で説明しなさい。

A central rationale for high lifelong milk consumption has been to meet calcium requirements for bone health. Paradoxically, countries with the highest intakes of milk and calcium tend to have the highest rates of hip fractures. Although this correlation may not be causal and might be due to confounding by factors such as vitamin D status and ethnicity, low dairy consumption is clearly compatible with low rates of hip fracture.

The basis for the U.S. recommendations for milk consumption derives from studies assessing the balance of calcium intake and excretion in just 155 adults in whom the estimated calcium intake needed to maintain balance was 741 mg per day. Beyond small size, these balance studies have other serious limitations, including short duration (2 to 3 weeks) and high habitual calcium intakes. By contrast, the estimated balance was attained at approximately 200 mg of dietary calcium per day among Peruvian men with low habitual calcium intake, a finding when dietary calcium is low. In randomized trials that used bone mineral density as a surrogate for fracture risk, calcium supplements of 1,000 to 2,000 mg per day resulted in 1 to 3% greater bone mineral density than placebo. If sustained, this small divergence could be important. However, after 1 year, the rate of change in bone mineral density among late middle-aged and elderly women equaled that of placebo; with discontinuation of supplementation, the small difference in bone mineral density is lost. Because of this transient phenomenon, trials lasting 1 year or less can be misleading, and the 2-to-3-week balance studies used to establish calcium requirements have limited relevance to fracture risk. We therefore think that cross-sectional studies can provide additional useful information on steadystate bone mineral density. Among nearly 10,000 men and women representative of the U.S. population, calcium intake was unrelated to bone mineral density at the hip.

In a meta-analysis of prospective studies, total calcium intakes ranging from less than 555 mg to more than 1,100 mg per day were unrelated to the risk of hip fracture. In other such analyses, milk intake (ranging from fewer than 1.5 servings to 30 or more servings per week) or total dairy food consumption was unrelated to the risk of hip fracture in men or women. Both positive and inverse associations have been observed in subsequent studies; the overall evidence does not support (a benefit / dairy consumption / for / higher / hip fractures / of / of / prevention).

Clinical trials examining calcium supplements and the risk of fractures are complicated to interpret because most supplements included both calcium and vitamin D; studies of calcium alone are limited in size, number, and duration. In a meta-analysis of five trials in which a total of 6,740 patients with a total of 814 nonvertebral fractures received either calcium-only supplements or placebo, no significant benefit from calcium was seen in reducing the number of all nonvertebral fractures, and the risk of hip fracture was greater among persons who received calcium supplements than among those who received placebo.

Estimation of calcium requirements for children is problematic because a positive balance is needed for growth, and recommendations reflect this uncertainty. In the United States, the recommended daily allowance of calcium is 1,000 mg per day for children 4 to 8 years of age, whereas in the United Kingdom 450 to 550 mg per day is considered adequate. Among girls in the early stages of puberty, calcium balance was positive even with an intake of less than 400 mg per day, and among children 4 to 8 years of age, calcium intake was uncorrelated with bone mineral density. Studies of calcium or dairy supplementation and bone mineral density in children show the same transient phenomenon observed in adults. Although with supplementation a small increase — or no increase — in bone mineral density is observed, increases do not persist after discontinuation, thus providing no evidence that high calcium intake is needed during childhood to serve as a "bank" for calcium throughout life. In a randomized trial, consumption of three additional servings of milk or equivalent dairy foods per day for 18 months

by pubescent girls and boys having calcium intakes below 800 mg per day had no effect on bone mineralization. These findings suggest a fairly low threshold for calcium intake, above which higher intake has little additional effect on bone mineralization. Although concern has been raised about the effects on calcium balance of the high phosphorous content of cow's milk, in a large cross-sectional study in the United States, phosphorus intake tended to be positively associated with bone mineral density.

Because milk increases attained height, and taller height is strongly related to fractures of the hip and other bones, high milk consumption during adolescence was examined in relation to the risk of hip fractures later in life in two large groups. Among men, milk intake during adolescence was linearly associated with a 9% greater risk of hip fracture later in life for every additional glass consumed per day. No association with hip fracture risk was seen among women. Thus, existing data do not support high intakes of milk during adolescence for fracture prevention later in life and suggest that such intakes may contribute to the high incidence of fractures in countries with the greatest milk consumption.

(Walter C. Willett and David S. Ludwig, "Milk and Health" より 一部改変)

[注] hip fracture 大腿骨近位部骨折 placebo (対照実験用の)偽薬, プラセボ phosphorous リンを含む

- 1. 下線部(1)を, this の具体的内容を示しながら, 本文にそって日本語で説明しなさい。
- 2. 下線部(2)の()内の語句を意味が通じるように並び替えなさい。
- 3. 下線部(3)について、筆者らの指摘するこれまでの研究のやり方の問題点を、本文にそって日本語で説明しなさい。
- 4. 下線部(4)の()内の語句を意味が通じるように並び替えなさい。
- 5. 下線部(5)を日本語に直しなさい。
- 6. 下線部(6)について、筆者らはどのような証拠がないと述べているのか、本文にそって日本語で説明しなさい。
- 7. 下線部(7)について、どのような調査結果が得られたのか、本文にそって日本語で説明しなさい。

4 次の英語の指示に従って、60 語程度の英語で答えなさい。なお、解答用紙の指定した()欄に、使用した語数を記入すること。ただし、コンマやピリオドなどの記号は語数には入れない。(共通問題)

You are talking to your friend, Mike, in an online chat forum. He loves outdoor activities such as camping and cycling. He asks: "How about you? Do you or your friends like outdoor activities?" Write a paragraph to respond to Mike.



- 5 法文学部, 人間科学部, 総合理工学部, 生物資源科学部受験生はAの問題に, 医学部医学科受験生はBの問題に答えなさい。
 - A. 次の日本文の下線部(1), (2)を英語に直しなさい。

他人のことばやペースに惑わされないためには, つねに「現在進行形中」の 人間になるのがいちばん確実です。

仕事や勉強をしている最中には、自分の目の前の課題しか目に入りません。
(1)
とにかくその課題を片づけることだけに専念しています。

家事でも何かの作業でもすべて同じです。

いま現在, やっていることがあるというのは, 余計なことは何も考えなくて(2) 済む幸せなことなのです。

(和田秀樹『自分は自分人は人』より 一部改変)

B. 次の日本文の下線部(1), (2)を英語に直しなさい。

我が国における医療及び介護の提供体制は、世界に冠たる国民皆保険を実現した医療保険制度及び創設から22年目を迎え社会に定着した介護保険制度の下で、着実に整備されてきました。しかし、高齢化の進展に伴う高齢者の慢性疾患の罹患率の増加により疾病構造が変化し、医療ニーズについては、病気と共存しながら、生活の質(QOL)の維持・向上を図っていく必要性が高まってきています。一方で、介護ニーズについても、医療ニーズを併せ持つ重度の要介護者や認知症高齢者が増加するなど、医療及び介護の連携の必要性はこれまで以上に高まってきています。特に、認知症への対応については、地域ごとに、認知症の状態に応じた適切なサービス提供の流れを確立するとともに、早期からの適切な診断や対応等を行うことが求められています。また、人口構造が変化していく中で、医療保険制度及び介護保険制度については、給付と負担のバランスを図りつつ、両制度の持続可能性を確保していくことが重要です。

(厚生労働省「医療と介護の一体的な改革」より 一部改変)

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