

英 語

I. Read the following article and answer the questions (1-7).

September 25, 2015—Nestlé Foods, Inc. has sunk \$50 million into a new frozen foods research center, which opened in July, in a bold effort to re-energize its frozen foods business, which has recently suffered in a serious downturn in the United States. “We test more than 2,500 recipes every year here, using more than 800 raw materials, and it typically takes 100 recipes to get to a single product,” said the director of the new center.

Nestlé is not the only one (A)throwing money into its frozen offerings, either. Other top food companies are following their lead: Healthy Choice Foods is re-inventing its frozen food brands, and when Christine Day left her chief executive officer (CEO) position at a fitness company, she invested in a new frozen foods company called “Fresh Frozen.”

“I was looking for convenient food options that my dad, who has taken over the cooking, could make easily for my mother, who suffers from an illness,” said Ms. Day, who is now Fresh Frozen's CEO. “But standing in the frozen food aisle, looking at what was available, I wasn't impressed.”

Other consumers have apparently shared her disappointment. According to data from Nielsen Research Company, sales of frozen food in the United States have struggled along, growing at a rate of less than 1 percent on average over the last four years. Todd Hale, a consultant for Nielsen Research Company said, “(B)Only time will tell whether efforts to revive traditional frozen food brands will pay off. They've lost their way in terms of keeping up with the latest flavor and other trends and now are trying to catch up. I'm not saying it will work for every segment of the business out there, but there's certainly a lot of effort going into driving growth again.”

Frozen foods' current circumstances are not so surprising. Consumers today are seeking out foods with intense flavors, high protein, minimal and fresh ingredients, turning their backs on the frozen section at a time when frozen food executives have been working hard to reduce sodium and sugar, eliminate additives and otherwise improve their products. “There's been a lot of baggage in this industry with consumers thinking we use a lot of preservatives,” said the president of Healthy Choice's frozen business. “But we don't add preservatives to our frozen products, because (C)freezing is like nature's pause button.”

But Nestlé Foods, Inc. and Healthy Choice, as well as other top producers of frozen food no longer dominate the freezer aisle the way they once did. Established frozen brands are facing stiff competition from smaller, more responsive competitors like Fresh Frozen. Only two of Fresh Frozen's meals have more than 4 grams of added sugar, and none contain more than 500 milligrams of salt. Its products are packed in patented paper pouches that consumers can open onto their own plates. “No one likes eating out of a black plastic tray,” Ms. Day said.

Products like Fresh Frozen's are helping revive a category that still generates a handsome piece of grocery store sales. Frozen foods accounted for more than 6 percent of \$810.8 billion in sales in the 52 weeks that ended June 27, according to Nielsen Research Company—or more than four times the revenue generated by the fresh foods department. The manager of Walmart's frozen food business said

its frozen sales had actually grown, thanks to such new brands. “With everybody promoting fresh and local, there's a lot of noise out there for those type of items and **(D)**not a whole lot of noise about frozen foods,” he said. “A lot of the traditional suppliers of frozen food let the conversation get away from them, and now they're having to catch up.”

As an example, in 2015, Nestlé introduced new and reformulated versions of a dozen products and put the entire line in new, more contemporary packaging that proclaims attributes like “22g protein” out front. The company believes that what the consumer today wants is foods that are indulgent but healthy.

Healthy Choice has also identified pockets of growth in frozen food and is working to develop them. Sales of its meat pies, for instance, have grown by more than \$100 million over the last four years, and 10 months ago, the company added a family-size meat pie that has already generated \$10 million in retail sales. Soon it will introduce a vegetarian pie, hoping to draw even more consumers to the category.

“When you think about young people who are just learning how to cook, building that skill set, frozen foods are easy and perfect for them,” said the senior vice president at Healthy Choice.

1. According to the article, which is NOT an advantage of frozen foods?
 - a. They are convenient.
 - b. They are easy to cook.
 - c. They contain no preservatives.
 - d. They have impressive ingredients.

2. What word or phrase is closest in meaning to **(A)**?
 - a. getting rid of money for
 - b. growing interest in
 - c. losing money because of
 - d. spending money on

3. According to the article, which of the following is NOT true of packaging for frozen foods?
 - a. Newer packages are becoming smaller and smaller.
 - b. Patented packages can be opened directly onto a plate.
 - c. The design of packaging is gradually getting more contemporary.
 - d. The exterior of packages advertises the contents.

4. Which of the following is closest in meaning to **(C)**?
- a. Being frozen allows foods to maintain natural preservatives.
 - b. Freezing stops foods from losing freshness in a natural way.
 - c. In nature, cold temperatures assist the frozen food industry.
 - d. Nature preserves food growth by freezing quickly.
5. Approximately how many dollars in sales could frozen foods have generated between June 2014 and June 2015?
- a. \$8 million
 - b. \$486 million
 - c. \$50 billion
 - d. \$405.4 billion
6. Which of the following is closest in meaning to **(D)**?
- a. Frozen foods are not promoted as much as fresh foods.
 - b. Frozen food suppliers do not communicate enough.
 - c. New brands advertise more than traditional brands.
 - d. People do not enjoy frozen foods.
7. What would be the best possible title for this article?
- a. Frozen Food Failures in the 21st Century
 - b. Frozen Food is Serious Business
 - c. Frozen Food Sales Freeze No Longer in 2015
 - d. Frozen Food Sales Far Behind Fresh Food

次の問題 **1** , **2** の解答は記述式解答用紙に記入しなさい。

- 1** Translate the underlined part **(B)** in the article into Japanese.
- 2** If you worked for a frozen foods company, how would you increase the appeal of frozen food?
Write your own ORIGINAL answer within 25 words.
Do NOT write more than 25 words.

II. In each of the following passages (8-10), insert the underlined sentence into the most appropriate position from <a> to <d>.

8.

More than a decade ago, Erik Sorto, 34, was paralyzed after a gunshot wound to the neck. Now, using a robotic arm that he controls with his brain, he can pick up a drink and bring it to his lips in one smooth motion. <a>

Neural prosthetic* devices are generally implanted in the motor cortex, the part of the brain responsible for executing movements. The robotic arms work, but in delayed, jerky movements. The new device results in motion that is more natural and fluid, researchers reported on Thursday in the journal *Science*.

“We decode the imagined movement, and the limb executes it,” said Richard Andersen, a neuroscientist at the California Institute of Technology.

The neural prosthetic was developed by a team of researchers and doctors from the California Institute of Technology, the University of Southern California, and Rancho Los Amigos Rehabilitation Center in Downey, California. <c>

Now the researchers want to implant similar devices in the sensory cortexes of patients’ brains, with the hopes of simulating a touch sensation in paralyzed patients. <d>

But unlike other experimental robotic arms, this one relies on signals sent from a device implanted in Mr. Sorto’s posterior parietal cortex – a part of the brain that plans and imagines activities.

<注>

* prosthetic: 人工器官(の)

9.

<a> A study published on Friday involving two species from South Africa, *Australopithecus africanus* and *Paranthropus robustus*, showed they had better hearing than either chimps or people in a frequency range that may have facilitated vocal communication in a savanna habitat.

Both species inhabited grassland ecosystems with widely spaced trees and shrubs, as opposed to the forests of earlier members of human lineage*¹.

In both species, maximum hearing sensitivity was shifted toward slightly higher frequencies compared to chimpanzees and both had better hearing than chimps or humans in the range from about 1 to 3 kilohertz, paleoanthropologist*² Rolf Quam of Binghamton University in New York said. <c>

“It turns out that this auditory pattern may have been particularly favorable for living on the savanna. In more open environments, sound waves don’t travel as far as in the rain-forest canopy, so short-range communication is favored on the savanna,” he said. <d>

The human lineage split from chimps roughly 7 million to 5 million years ago, Quam said, and our ancestors’ hearing abilities began to adapt to lifestyle changes.

Sounds in that range include vowels and some consonants*³, Quam said.

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*¹ lineage: 系統

*² paleoanthropologist: 古人類学者

*³ consonant(s): 子音

10.

Salmon fishing in North America dates from the end of the ice age, a study reports.

<a>

In a cooking hearth at the Upward Sun River archaeological site in central Alaska, researchers discovered salmon remains that are 11,500 years old. The hearth sits atop a grave in which two infants were buried.

“Before this, we really had no idea that Paleo-Indians were using salmon or fish of any kind,” said Carrin Halfman, an archaeologist at the University of Alaska Fairbanks and an author of the report. “Sites had been dominated by bones of other animals.”

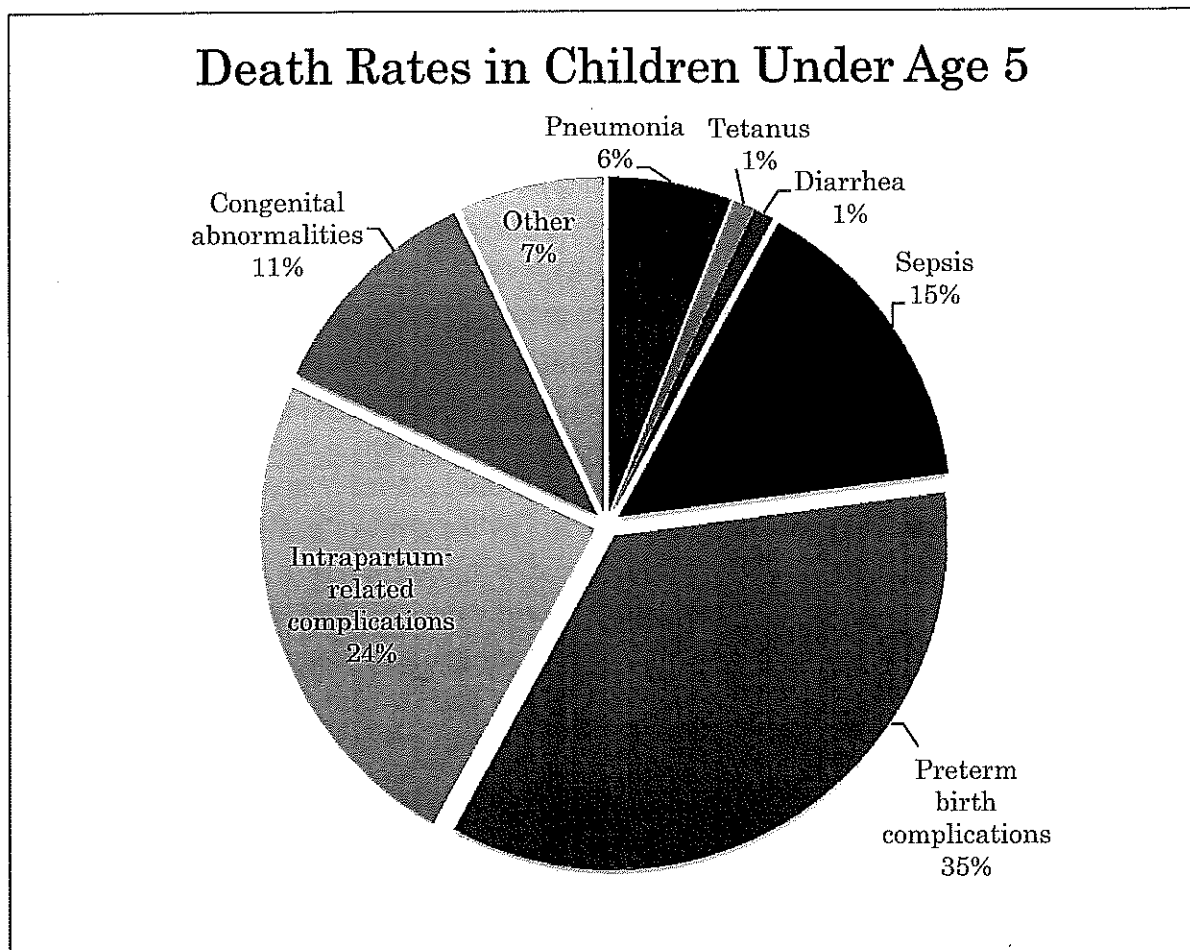
<c>

The study appears in the current issue of the Proceedings of the National Academy of Sciences.

<d>

The remains are the earliest confirmed evidence of salmon consumption in North America, the researchers said.

III. Based on the graph below, choose the most appropriate answer to fill in each blank (11-23).



[Source: WHO and Maternal and Child Epidemiology Estimation Group provisional estimates 2015]

Global health officials haven't met their targets for reducing deaths in children under age 5 because of continued, preventable health problems during and after birth that occur primarily in developing countries. Annual mortality rates for children under 5 have dropped by more than half since 1990 – from 12.7 million to 5.9 million – but officials say a more targeted effort is (11) to meet the goal of reducing such deaths by two-thirds worldwide.

According to the World Health Organization (WHO), 45% of all deaths among children under the age of 5 occur in the neonatal period meaning the period of time just after the live birth, including Caesarean delivery*¹, of a child. This period is typically (12) as lasting for up to 28 days after birth. Preterm birth complications, Intrapartum-related complications, and Sepsis*² are the (13) causes of death for children under the age of 5. "Preterm" means occurring (14) to birth whereas "intrapartum" refers to the period from the beginning of labor to immediately after the delivery of the placenta*³. "Sepsis" refers to the infection of a wound, usually by bacteria. In addition to these 3 causes, Congenital*⁴ abnormalities, Pneumonia*⁵, and Other account for approximately (15). Tetanus*⁶ and Diarrhea*⁷ account for (16) each, respectively.

Altogether nearly half of all deaths in children under the age of 5 can be (17) to undernutrition. Undernutrition refers to the (18) of not having enough high-quality food available. Malnutrition is a type of undernutrition, which refers to a lack of (19) or nutrients. Both undernutrition and malnutrition occur due to many reasons, including food shortages, inability to transport food over long distances, perishability of food, and poor infrastructure to deliver and distribute food. People who suffer from undernutrition and malnutrition may also require vitamins and minerals, and dietary supplements in order to recover. If left (20), malnutrition may progress to starvation, which can lead to death from infections or other illnesses which are usually treatable under normal circumstances.

(21) modern medicine has made progress in recent decades, children worldwide have continued to suffer. Even in 2016, easily accessible medicine and affordably-priced treatments remain (22) for the average citizen, particularly in low-income countries. Until assistance can be given more readily, babies and children under the age of 5 will continue to (23) the largest number of deaths daily on the planet.

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*¹Caesarean delivery: 帝王切開による出産

*²sepsis: 敗血症

*³placenta: 胎盤

*⁴congenital: 先天性の

*⁵pneumonia: 肺炎

*⁶tetanus: 破傷風

*⁷diarrhea: 下痢

- | | | | | |
|-----|-------------------|----------------|----------------|-----------------|
| 11. | a. defended | b. needed | c. overlooked | d. rescued |
| 12. | a. accused | b. defined | c. said | d. traded |
| 13. | a. killing | b. leading | c. trendy | d. upper |
| 14. | a. before | b. post | c. preceding | d. prior |
| 15. | a. 7% | b. 24% | c. 35% | d. 98% |
| 16. | a. 1% | b. 2% | c. 49% | d. 98% |
| 17. | a. attributed | b. decided | c. dedicated | d. subjected |
| 18. | a. commission | b. commonality | c. condition | d. corruption |
| 19. | a. body | b. calories | c. gases | d. viruses |
| 20. | a. discovered | b. processed | c. separated | d. untreated |
| 21. | a. Accordingly | b. Although | c. However | d. Since |
| 22. | a. out of context | b. out of hand | c. out of mind | d. out of reach |
| 23. | a. comply | b. condemn | c. constitute | d. control |

IV. Based on the following dialogue, article, and graph, answer the questions (24-36).**University Library – A group of students is working together on a project****Jin Hee:** I wonder where Carlos is.**John:** I'm not exactly sure where he is. He said something about running an errand before meeting us, though.**Marie:** While we're waiting for him, let's look at the article by Dr. Becker-Phelps first. Let's try to summarize what it says. What's the main idea?**John:** It seems like **(A)**.**Marie:** OK, sounds okay to me. Jin Hee, can you summarize the first two or three points?**Jin Hee:** Sure. Basically the first two points of the article say that **(B)**.**John:** I read it twice already, but I'm not really sure that I understand the very end of it.**Marie:** I think the point is that you should **(C)** be persistent.**Carlos:** Sorry I'm late! What did I miss?**Marie (to Carlos):** Don't worry, we've just gotten started. Did you bring the textbook we need?**Carlos:** Ah, no, I'm so sorry, I forgot to pick it up at the bookstore. I can go run and get it now.**John:** Oh. **(D)**. I can go grab a copy from the shelf. Be back in a few minutes.**Marie:** Maybe we should check out the graph until he gets back.**Carlos:** Here, take a look. I enlarged a copy for us all to look at.**Marie:** Looks like we have the highest number of friends in 2014. Except for John, he's in the third highest group.**Jin Hee:** Anyone got an idea what the "P12+" category means?**Carlos:** I'll **(E)** it means people over 12 years old who didn't say their exact age. What do you all think?**Marie:** Agreed.**Jin Hee:** You're probably right.**Carlos:** The 12-17 age range had **(F)** from 2013 to 2014. Why do you think that is?**Marie:** It might be because they are in school all day with the same people and can't make new friends as easily.**Jin Hee:** OK, now that we understand the article and the graph, we can start our project.**Carlos:** So we have to synthesize the article and graph into one project?**John:** Sorry I took so long. Someone must've checked **(G)** it out already.**Carlos:** I'll go pick it up later.**Jin Hee:** What if we talk about the reasons why people gain friends on Facebook?**Marie:** That is one possible idea. Any others?**John:** Maybe we can find out which of the article's points are most important.**Carlos:** Or which of the article's points lead to the most number of friends.**Librarian (to John):** It just came back, if you still want it.**John (to Librarian):** Okay, **(H)**.**Marie:** Let's take a break and go get the other materials we need.**Carlos:** I'll head over to the bookstore now.

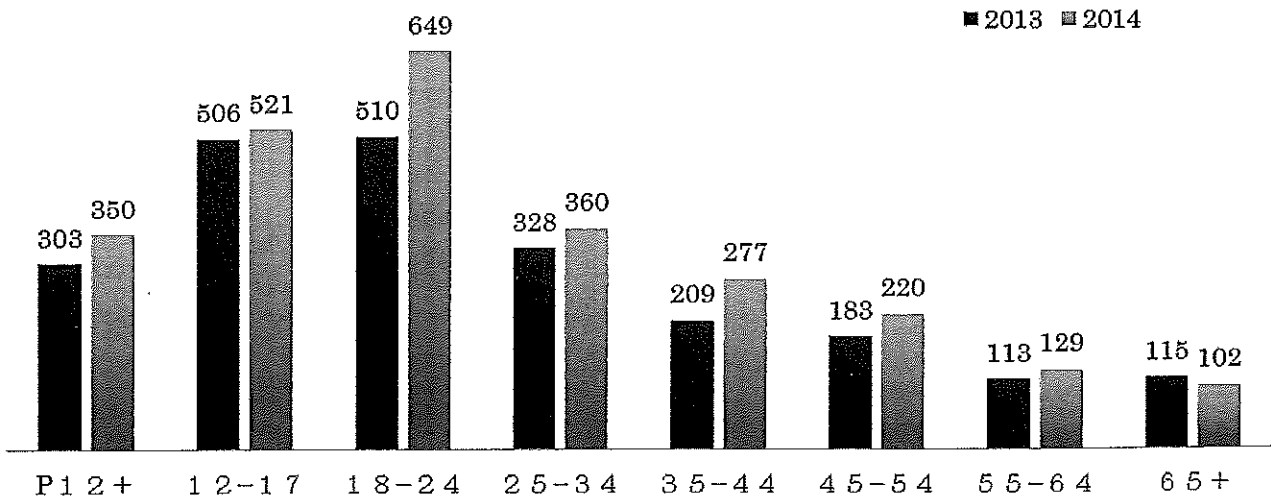
7 Tips for Creating New Friendships

By Dr. Leslie Becker-Phelps

- 1. Be flexible:** If you are flexible in making plans, you increase your chances of developing good relationships. You should be flexible about times to meet or about what you do.
- 2. Be a good friend:** To have a good friend, you must be a good friend. While speaking with others, listen and be respectful, supportive, and caring. Finally, be reliable and trustworthy.
- 3. Share interests:** Sharing common interests is an important way to develop friendships.
- 4. Adjust your expectations:** You may want a friend to have fun, get support, help you, and connect around deep issues. However, it is unlikely that one person will fill all those roles, so you must accept their limitations.
- 5. Share time:** When someone has other priorities, it doesn't mean that you are not a priority, too. You may sometimes need to consider a friend's other commitments.
- 6. Commit to regularly scheduled activities:** If you commit to regularly scheduled activities with others, you create an opportunity for friendships to develop. You might do this by planning to have dinner weekly with a friend.
- 7. Be persistent:** Don't let one bad experience stop you from making and enjoying other friendships in your life.

Average Number of Facebook Friends, by Age Group

among US respondents aged 12+ who have a Facebook profile, self-reported



24. What is the best answer for **(A)**?
- Committing to friends
 - Converting friends
 - Maintaining friends
 - Making friends
25. Which of the following is the most appropriate for **(B)**?
- you must accommodate other people to be friends
 - you must rely on people around you
 - you must choose good friends
 - you must expect a deep friendship
26. Which of the following is closest in meaning to **(C)**?
- be patient
 - feel bad
 - take turns
 - try again
27. Which of the following is the most appropriate for **(D)**?
- Don't worry
 - In the meantime
 - Thanks
 - That'll be fine
28. Which word best completes the sentence in **(E)**?
- bet
 - forget
 - think
 - wonder
29. Using the graph, which of the following is the most appropriate for **(F)**?
- negative growth
 - no growth
 - the least growth
 - the most growth
30. In **(G)**, what does "it" refer to?
- the article
 - the graph
 - the project
 - the textbook
31. What would be the best answer for **(H)**?
- I'll be there tomorrow
 - I'll come get it
 - I'll go and find one
 - I'll return it soon

32. According to the dialogue and graph, how old is John?
- a. 12-17
 - b. 18-24
 - c. 25-34
 - d. unknown
33. What would be a good name for the group's project?
- a. How to Increase Your Number of Friends
 - b. How to Know the Age of Your Friends
 - c. How to Learn to Make Friends
 - d. How to Win and Keep Friends
34. What will the group do next?
- a. They will get more books.
 - b. They will go home.
 - c. They will head to class.
 - d. They will start a second project.
35. Which of the following is the best example of the 5th tip?
- a. Be aware that sometimes your friends won't be able to meet you.
 - b. Don't be late when meeting friends.
 - c. Make sure to meet your friends at the same time.
 - d. Try to schedule appointments in advance.
36. Which of the following is the **most likely** to be an 8th tip to create new friendships?
- a. Ask for gifts
 - b. Be ready to reject people
 - c. Challenge other people
 - d. Invite people to places or events