# **Rough Stuff**

You might think that the feel of a surface is what tells you how rough it is. But it turns out that things are not that simple. The sound you hear when you scratch a surface can interfere with what your fingers are trying to tell you. Says an Oxford psychologist, who has measured the effect for the first time.

People get genuinely confused when presented<sup>1</sup> with a conflict between hearing and touch, says Donna Lloyd of the John Radcliffe Hospital. It takes them longer to<sup>2</sup> make judgments about texture, and the effect is generally disconcerting.

To quantify the effect, known as the parchment skin illusion Lloyd asked blindfolded subjects to judge the roughness of sandpaper. At the same time, the sound of the surface being rubbed was relayed to them through headphones. By turning up the high frequencies, Lloyd could make the surface sound smoother. Turning down those frequencies made it sound rougher. Even though the subjects were told to ignore the sounds, they were significantly influenced by what they heard. When presented with a conflict, it took people an average of 80 milliseconds longer to judge the roughness, a full 10 per cent in the time to make a decision, "It's quite a strong sensation," says Lloyd, who say she was surprised by the effect. However, the subjects still generally got the answer right.

"There's no situation where you're using only one sense." She says. She adds that this crossing of sensory inputs can change our behavior, even when we're not aware of it. Lloyd and her group plan to study the effect through functional magnetic resonance imaging.

"We don't like things that sound noisy," Lloyd says. And that could affect out buying habits in everything from clothes to furniture.

### Vocabulary

scratch v. 刮,擦 texture n. 质地 disconcerting a. 令人不安的, 令人惊惶的 parchment n. 羊皮纸 blindfold vt. 蒙住...的眼睛 frequency n.频率 significantly adv. 较大地 functional a. 功能性的 resonance n. 共鸣, 回声

## **Reading Comprehension**

**Directions:** There are four suggested answers to each of the following questions. Choose the best one according to the passage you have just read.

- 1. The Oxford psychologist made tests on
  - A. effects of sound on our sense of touch.
  - B. roughness of different things.
  - C. people's hearing ability.
  - D. sensibility of fingers.
- 2. Donna Lloyd believes that
  - A. people usually confuse hearing with touch.
  - B. it often takes a long time for people to judge about texture.
  - C. people's sense of touch can be strengthened by their hearing.
  - D. people's sense of touch can be affected by presence of sounds.
- 3. Blindfolded subjects were asked to
  - A. rub the surface of sandpaper.
  - B. make sounds of different frequencies.
  - C. listen to the sound of the surface of the sandpaper.
  - D. make judgment about the texture of the sandpaper.
- 4. According to the passage, it usually takes \_\_\_\_\_ for a person to judge the roughness.
  - A. 800 milliseconds.
  - B. 90 milliseconds.
  - C. 80 milliseconds.
  - D. 10 seconds.
- 5. It can be inferred that the findings of Lloyd can
  - A. affect people's behavior.
  - B. be commercially beneficial.
  - C. cause crossing of sensory inputs.
  - D. help people choose goods such as clothes and furniture.

#### **Drink to Think**

Too much alcohol dulls your senses, but a study in Japan shows that moderate drinkers have a higher IQ than teetotalers.

Researchers at the National Institute for Longevity Sciences in Aichi Prefecture, 250kilometres west of Tokyo, tested the IQs of 2000 people between the ages of 40 and 79. They found that, on average, men who drank moderately —defined as less than 540 milliliters of sake or wine a day —had an IQ that was 3.3 points higher than men who did not drink at all. Women drinkers scored 2.5 points higher than female teetotalers did.

The type of alcohol didn't influence the results. The volunteers tried a variety of tipples, which ranged from beer and whisky to wine and sake.

The researchers are quick to point out that the results do not necessarily show that drinking will make you more intelligent. "It's very difficult to show a cause-effect relationship." Says senior researcher Hiroshi Shimokata. We screened subjects for factors such as income and education, but there may be other factors such as lifestyle and nutritional intake."

Shimokata says that people who drink sale, or Japanese rice wine, tend to eat more raw dish, This could be a factor in enhanced intelligence, as fish often contain essential fatty acids that have been linked to brain development. Similarly, wine drinkers eat a lot of cheese, which is not something Japanese people normally consume or buy. Shimokata says the high fat content of cheese is thought to be good for the brain.

If alcoholic drinks are directly influencing IQ, Shimokata believes chemicals such as polyphenols could be the critical factor. They are known to have antioxidant properties and other beneficial effects on aging bodies, such as dilating constricted coronary arteries.

The study is part of a wider research project to find out why brain function deteriorates with age.

### Vocabulary

teetotaler *n*. 绝对戒酒者 longevity *n*. 长寿 tipple *n*. 烈酒 screen *v*. 筛选 enhance *v*. 提高,增强 polyphenols *n*. 多酚 antioxidant *a*. 防氧化的 coronary *a*. 冠状的 deteriorate *v*. (使)恶化

#### **Reading Comprehension**

**Directions:** There are four suggested answers to each of the following questions. Choose the best one according to the passage you have just read.

- 1. The Japanese test finds that
  - A. alcohol dulls our senses.
  - B. alcohol makes people less intelligent.
  - C. moderate alcohol drinkers have a higher IQ than non-drinkers.
  - D. all men drinker are more intelligent than any women drinkers.
- 2. According to the passage, if all the volunteers drank only beer,
  - A. the differences in IQ points would remain the same.
  - B. the study would show completely different results.
  - C. the average IQ points of them would be higher.
  - D. all the volunteers would have scored the same.
- 3. All the following concerning the subjects in the study were taken into consideration except
  - A. their educational background.
  - B. their financial status.
  - C. their dietary contents.
  - D. their body weight.
- 4. The parents of teenagers may be advised to do which of the following based on the passage you have just read?
  - A. Ask their children to drink as much alcohol as possible.
  - B. Spend more money on the education of their children.
  - C. Include more fish in the diet of their children.
  - D. Let their children grow fat by eating cheese.
- 5. The study was conducted with the final purpose of
  - A. persuading people to give up drinking.
  - B. warning people of the danger of drinking.
  - C. telling people how to get more intelligent.
  - D. finding out effects of aging on brain function.

# Passage 3

**Directions:** There are 10 blanks in the following passage. For each blank there are four choices marked **A**, **B**, **C**, and **D**. You should choose the ONE that best fits into the passage.

The period from time of diagnosis through <u>1</u> of treatment of cancer is a time of crisis when a person's world is <u>2</u> upside down. When I was diagnosed with breast cancer in 1990, I was stunned by the <u>3</u>. There had been no <u>4</u> signs or symptoms. I was in the prime of my life and feeling great, and overnight the rug was pulled out from under me. Initially, I had surgery <u>5</u> radiation and chemotherapy over 8 months. It took many months after that for my energy to return, but I knew I was going to be alright.

The insights I, as both a patient and a nurse, have learned from my own cancer experiences are <u>6</u>. We now recognize that the time of a diagnosis and treatment are <u>7</u> exhausting for patients and family members. However, it not well understood that once treatment ends that people can continue to have periods of <u>8</u> psychologically overwhelmed. I have also come to believe that these experiences have made me a better nurse. Being a patient has given me <u>9</u> to the personal courage that it takes to endure the despair that creeps in when overwhelmed with fatigue and the resilience of the human spirit to <u>10</u> the body and mind.

1.	A.	indication	B.	initial	C.	initiation	D.	commence
2.	A.	changed	B.	turned	C.	put	D.	made
<b>3.</b>	A.	relapse	B.	diagnosis	C.	prognosis	D.	announcement
4.	A.	warming	B.	waning	C.	warning	D.	wanting
<b>5.</b>	A.	followed	B.	followed after	C.	followed	D.	followed then
		by						
6.	A.	prolonged	B.	profound	C.	problematic	D.	professional
7.	A.	emotively	B.	motivationally	C.	physiologically	D.	emotionally
8.	A.	being	B.	having	C.	have been	D.	having been
9.	A.	signs	B.	signals	C.	sights	D.	insights
10.	A.	treat	B.	heal	C.	recover	D.	cure