BBC LEARNING ENGLISH

Take Away English 随身英语 How cold affects the body

寒冷对身体的影响



词汇: temperature 气温

When we think of low temperature as a danger, we often imagine people working outside in **polar** regions in the **depths of winter** or in **cold storage** facilities, layered in **thermal** clothing to help them deal with **freezing** temperatures. But do we also need to protect ourselves when it's just a bit **chilly** as well as in **arctic conditions**?

As mammals, our bodies have to maintain an internal temperature in a narrow range between 37 and 37.5C. If that temperature drops, the effects can be serious. Below 35C, people can develop hypothermia, with symptoms such as shivering, confusion, and slurred speech. If body temperature drops below 29C, it can lead to loss of consciousness. Fortunately our bodies can regulate their internal temperature, but there are some negative side effects which come with this process.

Ten degrees **Celsius** is hardly **biting cold**, but that's the temperature that BBC journalist James Gallagher was made to **endure** in an experiment at the University of South Wales. As the test room was **cooled** from 21 degrees, his blood pressure, heart rate and breathing rate all increased, while the flow of blood to his brain decreased by 20%. What are the consequences of this? Immediately, it meant that Gallagher took longer to solve some simple puzzles. As a longer-term risk, Professor Damian Bailey points out that increased blood pressure puts us at greater risk of stroke and heart attacks.

Professor Bailey suggests that in the cold, people should wear clothing that provides good **insulation**, eat more carbohydrates, and be more active. Another approach is suggested by Professor Christopher Minson. He believes that people are too reliant on being able to control the temperature around them, and that we can gradually train ourselves to cope with a lack of **warmth** and be **comfortable** at lower temperatures. So, while moderately low temperatures can have an effect on us, there are steps we can take to cope with them.

词汇表

| polar | 极地的 | |
|-------------------|---------------|--|
| depths of winter | 隆冬 | |
| cold storage | 冷藏 | |
| thermal | 保暖的 | |
| freezing | (天气) 极冷的 | |
| chilly | 寒冷的 | |
| arctic conditions | 天气极其寒冷 | |
| range | 范围 | |
| drop | 下降 | |
| hypothermia | 体温过低 | |
| shivering | (因寒冷) 发抖 | |
| regulate | 调节 | |
| Celsius | 摄氏度 | |
| biting cold | 严寒 | |
| endure | 忍受 | |
| cool | (使) 冷却,(使) 变凉 | |
| insulation | 防御寒冷,保暖 | |
| warmth | 温暖 | |
| comfortable | 舒适的 | |

| 测验与练习 | | | | |
|--|------------|---------|-------------|--|
| 1. 阅读课文并回答问题。 | | | | |
| 1. In what range should our internal body temperature be? | | | | |
| 2. What are the symptoms of hypothermia? | | | | |
| 3. What happened to James Gallagher's heart rate during the experiment? | | | | |
| 4. What can be consequences of high blood pressure? | | | | |
| 5. True or false? Professor Minson believes it is good that people can control temperature easily. | | | | |
| 2. 选择意思恰当的单词或词组来完成下列句子。 | | | | |
| 1. Antarctica and the Arctic are regions. | | | | |
| biting | polar | chilly | thermal | |
| 2. January is in the of winter. | | | | |
| drops | ranges | depths | warmths | |
| 3. Below zero degrees Celsius, it is | | | | |
| thermal | cool | polar | freezing | |
| 4. It's important to have clothing that provides | | | | |
| comfortable | insulation | thermal | temperature | |
| 5 is something our body does to keep us warm. | | | | |

Running

Hypothermia

Insulation

Shivering

答案

- 1. 阅读课文并回答问题。
- 1. In what range should our internal body temperature be?

Between 37 and 37.5C.

2. What are the symptoms of hypothermia?

Symptoms of hypothermia include shivering, confusion and slurred speech.

3. What happened to James Gallagher's heart rate during the experiment?

His heart rate increased.

4. What can be consequences of high blood pressure?

Professor Bailey said that high blood pressure could increase the risk of stroke and heart attack.

5. True or false? *Professor Minson believes it is good that people can control temperature easily.*

False. He believes that people are too reliant on being able to control the temperature around them.

- 2. 选择意思恰当的单词或词组来完成下列句子。
- 1. Antarctica and the Arctic are **polar** regions.
- 2. January is in the **depths** of winter.
- 3. Below zero degrees Celsius, it is **freezing**.
- 4. It's important to have clothing that provides **insulation**.
- 5. **Shivering** is something our body does to keep us warm.