

## 日本研发可“增强咸味”的电子筷 Japan

researchers develop electric chopsticks to enhance salty taste

据路透社 4 月 19 日报道，日本研究人员已经开发出能够增强咸味的电子筷子。该电子筷是由明治大学教授宫下和美和日本麒麟公司合作研发，筷子连接佩戴在手腕上的微型计算机，通过电流刺激增强咸味。增强咸味的筷子在日本可能会很有市场，因为日本的传统饮食偏咸。



Japanese researchers have developed computerized chopsticks that enhance salty tastes, potentially helping those who need to reduce sodium in their diets.

日本研究人员研发了一种可以增强咸味的电子筷子，有可能帮助到那些需要低钠饮食的人。

Co-developed by Meiji University professor Homei Miyashita and beverage maker Kirin Holdings Co., the chopsticks enhance tastes using electrical stimulation and a mini-computer worn on a wristband.

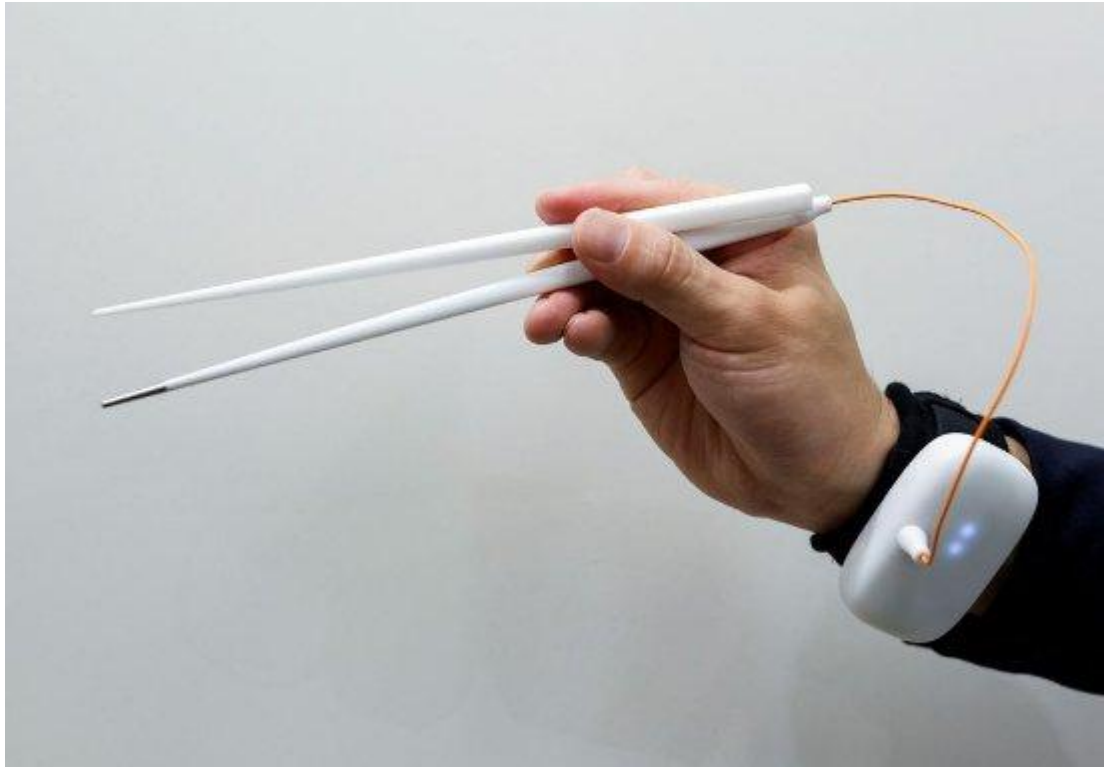
这种电子筷由明治大学教授宫下和美（音译）和饮品制造商麒麟控股有限公司共同开发，通过电流刺激和佩戴在腕带上的微型计算机来增强味道。

The device uses a weak electrical current to transmit sodium ions from food, through the chopsticks, to the mouth where they create a sense of saltiness, said Miyashita.

宫下称，这种装置利用微电流将食物中的钠离子通过筷子传递到口腔，从而产生咸味。

"As a result, the salty taste enhances 1.5 times," he said.

他表示：“这样可以将咸味放大 1.5 倍。”



Miyashita and his lab have explored various ways that technology can interact with and stimulate human sensory experiences. He's also developed a lickable TV screen that can imitate various food flavours.

宫下和他的实验室一直在人类感官互动与刺激的体验上进行科学探索。他还研发了一个可品尝味道的电视屏，屏幕可以模拟各种食物的味道。

The taste-enhancing chopsticks may have particular relevance in Japan, where the traditional diet favours salty tastes. The average Japanese adult consumes about 10 grams of salt per

day, double the amount recommended by the World Health Organization.

增强咸味的筷子在日本可能会很有市场，因为日本的传统饮食偏咸。日本成年人平均每天摄入约 10 克盐，是世界卫生组织推荐摄入量的两倍。

Excess sodium intake is related to increased incidence of high blood pressure, strokes and other ailments.

过量摄入钠与高血压、中风和其他疾病的发病率增加有关。

"To prevent these diseases, we need to reduce the amount of salt we take," said Kirin researcher Ai Sato.

麒麟公司研究员佐藤爱（音译）称：“为了预防这些疾病，我们需要减少盐的摄入量。”

"If we try to avoid taking less salt in a conventional way, we would need to endure the pain of cutting our favourite food from our diet, or endure eating bland food."

“传统的减盐饮食需要我们忍受清淡饮食，让我们无法大快朵颐。”

Miyashita and Kirin are refining their chopsticks prototype and hope to commercialize them as early as next year.

宫下和麒麟公司正在改进产品原型，并希望最早在明年将其商业化。