## 冥想与大脑 Meditation and the brain

Hello. This is 6 Minute English from BBC Learning English. I'm Neil.

大家好。这里是BBC学习英语栏目的六分钟英语。我是内尔。

And I'm Sam.

我是萨姆。

How do you relax, Sam?

你怎么放松, 萨姆?

Well, I love watching movies and I go swimming.

我喜欢看电影, 我还会游泳。

One thing that millions of people around the world do is meditate to relax and that's the subject of our programme.

全世界几百万人通过冥想来放松,而这也是我们节目的话题。

We'll be looking at experiments by scientists in the US into the Buddhist practice of meditation.

我们会了解美国科学家们对佛教冥想的进行的实验。

We'll find out how Tibetan monks use meditation techniques to focus better and manage their emotions.

我们会发现藏族和尚如何利用冥想的技巧来更好地集中注意力,以及管理他们的情绪。

But what exactly is meditation?

但是究竟什么是冥想呢?

People just sitting cross-legged on the floor, thinking of nothing?!

人们就是盘腿坐在地上什么都不想吗?!

Well, I think there's a bit more to it than that.

嗯,我想应该不只是这样。

After all, Buddhist meditation is an ancient practice-even science, according to some.

毕竟佛教冥想自古有之——根据某些人的说法,甚至是一种科学。

Which brings me to my quiz question.

这让我想起了今天的问题。

Which is?

是什么呢?

What is the meaning of the Tibetan word for "meditation"?

藏语中的"冥想"是什么意思?

Is it a) to relax, b) to feel blissful, or c) to become familiar?

是 A. 放松, B.感到幸福, 还是 C. 变得熟悉?

## 添加的词汇



每日英语听力

I think it must be either a) to relax, or b) to feel blissful because they sound like positive states of mind.

我想肯定要么是 A. 放松, 要么是 B. 感到幸福, 因为它们听起来都是很积极的心理状态。

But I'm not sure about calling meditation a 'science', Neil.

但是我不是很确定能够把冥想称为一种"科学",内尔。

Isn't it more like a philosophy or a lifestyle?

它难道不是更像一种哲学或生活方式吗?

Not according to Professor Richard Davidson of the Center for Healthy Minds.

健康心理中心的理查德·戴维森教授可不这么认为。

He spoke to Alejandra Martins of BBC World Service programme Witness History about his remarkable scientific experiment which proved for the first time that meditation can actually change the brain.

他向BBC世界服务节目《见证历史》的爱丽加德娜·马丁斯讲述了他卓绝的科学实验,这个实验首次证明了冥想其实可以改变大脑。

He challenged me, he said, 'I understand that you've been using tools of modern neuroscience to study anxiety and depression.

他挑战我说道:"我知道你一直在使用现代神经科学的工具来研究焦虑和抑郁。

Why can't you use those same tools to study kindness and to study compassion?' Neuroscience is the scientific study of the workings of the human brain and nervous system.

你为什么不能用同样的工具来研究善良和同情心呢?"神经科学指的是研究人类大脑和神经系统的各种工作。

Professor Davidson measured negative mental states like depression, in contrast to positive attitudes such as compassion-that's the wish for everyone to be free from suffering.

戴维森教授测量消极的心理状态,比如抑郁,然后对比积极的态度,比如同情心——它指的是 希望每个人都能够免于痛苦。

Right. In his test, Buddhist monks sent out loving thoughts to everyone equally-to friends, enemies and strangers as well as to themselves.

是的。在他的测试中,佛教和尚对每个人平等地发出关爱的想法——对朋友、对敌人,还有陌生人以及他们自己。

Compassionate thoughts such as 'May you be happy and peaceful', 'May you not suffer'.

富有同情心的想法,比如"祝你快乐平和","祝你免受痛苦"。

And the results were astonishing!

而结果令人吃惊!

What did they show, Neil?

结果如何, 内尔?

Very high levels of gamma oscillations-now that's brain waves showing increased connections between different parts of the brain.

非常高水平的伽马波动——就是表明大脑各个部分连接增加的脑电波。

This is what you or I might experience as a flash of insight-a moment of sudden understanding and clarity.

也就是你我可能体验过的灵光一闪——突然顿悟的时刻。

For us, it might last less than a second.

对我们来说可能只会持续不到一秒。

But for these experienced Buddhist monks, the gamma waves lasted minutes!

但是对于那些有经验的佛教和尚, 伽马波能够持续好几分钟!

Furthermore, as Richard Davidson explains, brain changes as a result of meditation can be long-lasting.

而且如理查德·戴维森解释的那样,因为冥想而发生的大脑改变会持续很久。

There is no question at this point in time based upon the current science that has been conducted over the last 10 years, that meditation can change the brain in enduring ways; and the circuits that are involved are multiple, but they include circuits that are important for regulating attention and regulating emotion.

毫无疑问,目前基于过去十年进行的当代科学,冥想能够长期改变大脑;而且涉及其中的回路 有很多,但是它们包括对于管控注意力和情绪很重要的回路。

So, this was proof of neuroplasticity-our brain's ability to change in response to conscious effort.

所以这就是神经可塑性的证明——我们的大脑能够通过有意识的努力发生改变。

In other words, the meditating monks were intentionally reshaping their minds.

换句话说, 那些冥想的和尚故意重塑了他们的思维!

And this was possible because the brain circuits-different parts of the brain responsible for different functions-start talking to each other in new ways that created enduring-meaning long-lasting-changes.

这是可能的,因为大脑回路——大脑里负责不同功能的不同部位——开始以新的方式互相交流,这种方式能够产生持久的——即可以延续很长时间——改变。

The meditators gained insight into how their minds work.

冥想者能够洞悉他们思维运转的模式。

They were more focused and emotionally balanced and less likely to get upset.

他们能更加专注,情绪更加稳定,并且更不可能不开心。

How cool is that?

是不是很酷?

Pretty cool!

非常酷!

But these Tibetan monks sound like Buddhas!

但是藏族和尚听上去像佛陀!

They spend thousands of hours sitting in meditation.

他们花几千个小时坐在那里冥想。

I've got to go to work, Neil!

我还得工作呢, 内尔!

What good is meditation to me?

冥想对我来说有什么好处呢?

Well, Sam, in fact the experiment showed that 30 minutes of meditation a day significantly increased feelings of loving kindness in the new meditators too!

嗯, 萨姆, 事实上实验表明, 每天30分钟的冥想也能让冥想新手的善心显著提高!

OK, maybe I'll give meditation a go after all.

好的,也许我终究会尝试一下冥想的。

But not before I find out the answer to today's quiz, please.

但是我要先知道今天问题的答案,请说吧。

Yes, I asked you what the Tibetan word for 'meditation' meant.

是的,我之前问你藏语里"冥想"是什么意思。

And I said either a) to relax, or b) to feel blissful.

我说要么是 A. 放松, 要么是 B. 感到幸福。

And I'm feeling pretty confident of getting it right this time, Neil.

我很自信这次我答对了, 内尔。

Well, Sam, if the answer came to you in a flash of insight then I'm afraid you need more practice because the correct answer is c) to become familiar, in this case with more positive thoughts and emotions.

嗯,萨姆,如果这个答案是你灵光一闪想到的,那么恐怕你需要更多练习,因为正确答案是 C. 变得熟悉,在这里指的是熟悉更积极的想法和情绪。

You mean emotions like kindness and compassion-the thought wishing everyone to be free from their problems.

你指的是向善良和同情心——希望每个人都能摆脱他们的问题——这样的情绪。

What other vocabulary did we learn today, Neil?

我们今天还学了什么其它词汇呢, 内尔?

Well, it turns out meditation is actually a science.

嗯,事实证明冥想其实是一种科学。

Neuroscience in fact, which is the study of the human brain and nervous system.

事实上是神经科学,也就是对人类大脑和神经的研究。

Meditation experiments proved neuroplasticity-the brain's ability to restructure.

冥想实验证明了神经可塑性——大脑重新构架的能力。

By generating and sending out the compassionate wish, 'May all beings be happy', Buddhist meditators change their brain circuits-different parts of the brain responsible for different functions.

通过产生和发出富有同情心的愿望,"希望所有人都幸福",佛教冥想者改变了他们的大脑回路——大脑里负责不同功能的不同部分。

And this is an enduring change, meaning it lasts and increases over a long period of time.

而且这是一种持久的变化,意思是它会在很长一段时间内持续并增长。

I must say, Sam, you took it pretty well when you guessed the wrong answer just then.

我得说,萨姆,你刚刚猜错答案的时候情绪控制得非常好。

Thanks, Neil.

谢谢,内尔。

I... I don't like getting upset, so I'm trying out some breathing meditation! 我不喜欢心情不好,所以我要试一下呼吸冥想。

Breathing in the positive, breathing out the negative.

吸进积极想法, 吐出消极想法。

Join us again soon for another interesting discussion on 6 Minute English from BBC Learning English.

请收听我们下一期由BBC学习英语栏目的六分钟英语带来的有趣的讨论。

Bye for now!

再见!

Bye bye.

再见。