参考译文 太空旅行会对旅行者的身体产生什么样的影响

There’s been a lot of talk about space travel in the news, a new mission to the moon, future missions to Mars, spacecraft that have traveled much further away than the red planet. But beyond what’s technologically possible, what’s physically possible? Scientists are studying what kind of effects space travel could have on the bodies of human space travelers.

有很多关于太空旅行的新闻，新的登月任务，未来登上火星的任务，比火星旅行更远的宇宙飞船。但除了技术上的可能性之外，还有生理上的可能性?科学家们正在研究太空旅行会对人类太空旅行者的身体产生什么样的影响。

Think about this, in six months, the average amount of time an astronaut spends onboard the International Space Station, you could never leave your spacecraft. You can’t go outside. You can’t feel raindrops or soak in the sun.

在半年的时间里，想想宇航员在国际空间站上花费的平均时间，因为他们永远不能离开飞船。你不能出去。你不能感觉到雨滴或在阳光下浸泡。

And your body changes. Astronauts have reported problems with their vision after working in orbit. They’ve experienced back pain and weakened muscles after missions. They’re exposed to more radiation in space than they are on Earth, increasing their risks for developing cancer. And this is for a trip that lasts half a year.

你的身体变化。宇航员在太空上工作后，报告了他们的视力问题。他们在执行任务后经历了背部疼痛和肌肉衰弱。在太空中比在地球上接受更多的辐射，增加了他们患癌症的风险。这是一次为期半年的旅行。

NASA astronaut Scott Kelly spent almost twice that amount in orbit.

NASA宇航员斯科特·凯利在太空上的花费几乎是这个数字的两倍。

Preliminary results indicate that there were some changes in Scott’s genetic expression, how his genes do their work within cells and even in after two years on Earth, they still haven’t returned to where they were before he took off. That’s just one lesson learned in NASA’s "Twins Study", which allowed the organization to compare Scott Kelly’s health with that of his identical twin brother Mark who stayed on Earth.

初步结果表明,有一些斯科特的基因表达的变化,他的基因如何在细胞内工作甚至在地球上的两年之后,基因仍然没恢复原来的状态。这是美国宇航局的“双胞胎研究”得出的一个教训,这使得该机构可以将斯科特凯利的健康与他在地球上的的双胞胎哥哥马克的健康进行比较。

听力原文

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