参考译文

Whitening Strips Alter Proteins in Teeth

美白牙条会改变牙齿中的蛋白质

Of all the stuff you can buy on eBay - here's a new one: human teeth. "I think I probably averaged maybe $5 a tooth." Kelly Keenan, a biochemist at Stockton University in New Jersey. Keenan chased down the chompers to investigate what whitening strips do to a tooth's chemical composition. So she stuck the teeth in styrofoam, applied the whitening strips per manufacturer instructions, and added some artificial saliva: a liquid mixture at the pH and with salts you'd find in regular spit.

你能在eBay上买到的所有东西中，有一件是新的:人类的牙齿。“我想平均一颗牙大概5美元。”凯利·基南是新泽西州斯托克顿大学的生物化学家。基南追踪这些牙齿，研究美白牙条对牙齿化学成分的影响。所以她把牙齿放在泡沫塑料里，按照制造商的说明涂上美白贴片，并添加了一些人工唾液:pH值为液体的混合物，含有你在普通唾液中可以找到的盐分。

Treatments complete, she extracted proteins from the teeth. And found that the more rounds of whitening the teeth experienced, the fewer proteins she could recover—because hydrogen peroxide in the whitening strips was snipping chemical bonds."The bigger picture is that hydrogen peroxide can penetrate the enamel and dentin and it can cause your proteins to break down. And smaller pieces are removed from those proteins."

治疗结束后，她从牙齿中提取蛋白质。发现，牙齿美白的次数越多，能恢复的蛋白质就越少——因为美白牙条中的过氧化氢会切断化学键。“更重要的是过氧化氢可以穿透牙釉质和牙本质，导致蛋白质分解。更小的片段从这些蛋白质中移除。”

She and her undergraduate students presented on that research at the 2019 Experimental Biology meeting in Orlando. This is just a preliminary study for now. And the pulp of your teeth can replenish proteins in the dentin, though not the enamel—so it's unclear whether these effects would cause permanent damage in real, living teeth. One thing’s for sure: supplies of teeth for experiments seem to be plentiful.

她和大学生在2019年奥兰多实验生物学会议上展示了这项研究。这只是目前的初步研究。牙齿的牙髓可以补充牙本质中的蛋白质，但不能补充牙釉质——所以目前还不清楚这些影响是否会对真实的牙齿造成永久性损伤。但有一件事是肯定的:用于实验的牙齿蛋白质含量似乎是充足的。

"I think I bought a set of 15. And the person's like, let me know if you need more. This person also claimed the teeth were from his mouth, which, you don't have that many more to go!"

“我想我买了一套15张的。如果你需要更多，告诉我。有的人声称牙齿来自自己的嘴巴，但是你已经没有那么多牙齿了!”

听力原文

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