参考译文

Funky Cheese Rinds Release an Influential Stench

恶臭的奶酪

Aged cheeses like Camembert or Taleggio produce a powerful stench: the funk of cabbage, mushrooms, sulfur, even smelly feet.

卡门贝尔奶酪或塔莱吉欧奶酪这样的陈年奶酪会产生一种强烈的恶臭味:卷心菜、蘑菇、硫磺的恶臭，甚至还有臭脚的味道。

“And those aromas are chemicals that are being kicked off, being emitted by the cheese, and that’s through the microbes that are living in the rind, as they slowly decompose the cheese.”

“这些味道是由奶酪释放出来的化学物质，味道是通过奶酪皮内的微生物慢慢分解奶酪时散发出来的。”

Benjamin Wolfe is a microbiologist at Tufts University. He says in addition to alerting our noses to the cheese, the aromas produced by certain microbes living in and on the cheese can feed and sculpt other members of the microbial garden living on the cheese.

本杰明·沃尔夫是塔夫斯大学的微生物学家。他说，除了让我们的鼻子闻到奶酪的味道外，居住在奶酪上的某些微生物产生的味道还可以喂养生活在奶酪上的微生物花园中的其他成员。

Wolfe and his colleagues identified the microbial interactions by growing various cheese-dwelling fungi and bacteria in separate but adjacent dishes in the lab. The microbes couldn’t touch—they could interact only via the volatile compounds they released.

沃尔夫和同事们通过在实验室中分开但相邻的培养皿中培养不同的芝士真菌和细菌来识别微生物之间的相互作用。这些微生物无法接触——它们只能通过释放出的挥发性化合物进行相互作用。

“When we did this screen, we quickly noticed there was this one bacterium, a Vibrio species, that really loved living in the aromas produced by the various fungi that you find in a typical wheel of camembert.”

“进行这种筛选时，我们很快注意到有一种细菌，一种弧菌，它非常喜欢生活在由各种真菌产生的香味中，可以在一个典型的卡门贝尔轮状容器中找到它们。”

Wolfe says the Vibrio bacteria may be able to actually eat the aromas—which, after all, consist of chemical compounds. And the odor of the cheese may also switch on certain genetic pathways in the bacteria—pathways that regulate the bacteria’s ability to thrive in harsh conditions.

沃尔夫说，弧菌可能真的能吃香薰——毕竟，香薰是由化合物组成的。奶酪的气味也可能开启细菌的某些基因通路，这些基因可以增强细菌在恶劣环境下的生存能力。

“It’s a backup plan: when things aren’t going well, and you’re starving, you can turn on this other pathway and still make a living but on these less ideal substrates that are around.”

“这是一个后备计划:当事情进展不顺利，你饿了的时候，可以打开另一种途径，仍然可以靠周围这些不太理想的基质谋生。”

The end result is that the stench we perceive may also shape the microbiome of the cheese. The results appear in the journal Environmental Microbiology.

最终的结果是，我们闻到的臭味可能也会塑造奶酪的微生物群。研究结果发表在《环境微生物学》杂志上。

As for the practical outcomes of this research—well, it’s a little early for that.

至于这项研究的实际成果，现在说还为时过早。

“We don’t necessarily do our science to make cheese better. Honestly, a lot of it is to figure out how cheese works.”

“我们没有必要通过科学研究来改善奶酪的质量。老实说，大量研究是为了研究奶酪味道是如何发出的。“

In other words, he says, the tools of modern microbiology allow scientists to finally listen in to the conversations happening in these tiny cheese-rind communities.

他说，换句话说，现代微生物学工具让科学家们终于能够听到发生在这些小小的干酪皮社区里的对话。

听力原文

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