Where does the odor of stinky cheese come from? And why does it smell like sweaty socks?!

Making stinky cheese
The stinkiest cheeses are often what’s called “washed-rind” cheeses. After the cheese is pressed into shape, cheesemakers “wash” the cheese to prepare it for aging. This involves gently using a brush or washcloth to administer a salty brine or alcohol — like brandy — to the cheese’s surface.

Microbial helpers
The surface of washed rind cheeses is perfect for microbes. Several types of bacteria and yeast colonize the cheese rind, imparting flavor, color (usually a pinkish-orange), and a distinctive odor.

That stinky smell comes from the microbial breakdown of proteins in the cheese, a process that releases pungent gases, like the volatile fatty acids propanoic acid and isovaleric acid. Microbes also break down methionine into stinky sulfur compounds (methanethiol, dimethylsulfide, dimethyltrisulfide).

Eau de sock
Why do stinky cheeses smell like sweaty socks? Brevibacterium linens, a bacterium that loves cheese rinds, is closely related to a bacterium that loves the sweaty crevasses of our feet: Brevibacterium epidermidis. The bacteria on our skin also create stinky gases, including propanoic acid, isovaleric acid, and methanethiol — a close match to the gases given off by bacteria living on washed-rind cheeses.

* Is Epoisses — a notoriously stinky cheese — actually banned on public transit in France?

Sources:
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