

## 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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