

Bacteria enter via mucus-making gut cells

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Cells making slippery mucus provide a sticking point for disease-causing bacteria in the gut, according to a study published on October 3 in the *Journal of Experimental Medicine*.

A foodborne bacterium called *Listeria monocytogenes* (sometimes found in stinky cheeses) invades the body by binding to a protein called E-cadherin. However, as E-cadherin is normally buried within the junctions between gut cells, and is thus hidden from the [cell surface](#), it's not clear how the bug gains traction.

In response to *Listeria* invasion, specialized gut cells called goblet cells produce [mucus](#) in an attempt to flush the bacteria away. Scientists in France now find that the reorganization required for goblet cells to expel their slippery product also exposes E-cadherin on their surface, allowing *Listeria* to grab hold and cause systemic infection.

More information: Nikitas, G., et al. 2011. J. Exp. Med.
[doi:10.1084/jem.20110560](https://doi.org/10.1084/jem.20110560)

Provided by Rockefeller University

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