

Probiotic found in breast milk helps alleviate symptoms of digestive disorders

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Here's another reason to breast feed your baby: Canadian researchers have discovered how a probiotic found in breastmilk reduces or eliminates painful cramping in the gut. In a new research report published online in the *FASEB Journal*, these scientists use mice to show that a specific strain of *Lactobacillus reuteri* decreases the force of muscle contractions in the gut within minutes of exposure. This bacterium naturally occurs in the gut of many mammals and can be found in human breast milk. This discovery suggests that increasing the intake of this bacterium may help alleviate symptoms of a wide range of gut disorders, such as irritable bowel syndrome, inflammatory bowel disease, functional bowel disorders, and constipation.

"Scientifically and evidence-based approaches to nutrition to correct potential bacterial imbalance in the intestine and thereby promote better health and possibly restore health in diseases associated with these imbalances," said Wolfgang Kunze, a researcher involved in the work from the McMaster Brain-Body Institute and Department of Psychiatry at St. Joseph's Healthcare in Ontario, Canada.

To make this discovery, Kunze and colleagues, introduced *Lactobacillus reuteri* into isolated pieces of small intestine taken from healthy and previously untreated mice. The [bacterium](#) was added to a warm salt solution flowing through the lumen, or hollow part, of the intestine and the pressure caused by natural contractions was measured before, during and after adding the bacterium. Relaxation of smooth muscle tissue was compared with the action of the bacterium. Researchers also tested the

electrical activity of single intestinal sensory nerve cells.

"It might not be possible for most of us to get [breast milk](#) from the tap," said Gerald Weissmann, M.D., Editor-in-Chief of the [FASEB Journal](#), "but we can still benefit from some of the life-supporting substances it carries. This research shows that the relationship between humans and microbes can be beneficial for both. The *Lactobacillus* finds a new home, and we're no longer up tight."

More information: Bingxian Wang, Yu-Kang Mao, Caroline Diorio, Michael Pasyk, Richard You Wu, John Bienenstock, and Wolfgang A. Kunze. Luminal administration ex vivo of a live *Lactobacillus* species moderates mouse jejunal motility within minutes FASEB J. [doi:10.1096/fj.09-153841](https://doi.org/10.1096/fj.09-153841)

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