

Could baby's tummy bacteria help spur colic?

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Balance of good/bad microbes may determine which infants have common condition, study suggests.

(HealthDay)— Colic is a common problem for babies, and new research may finally provide clues to its cause: A small study found that infants with colic seemed to develop certain intestinal bacteria later than those without the condition.

What the researchers aren't clear on yet is why this would make some infants go on long crying jags nightly for months. The study authors suspect that without the right balance of intestinal flora, the [babies](#) may experience more pain and [inflammation](#).

In particular, the study found differences in two types of bacteria. One is proteobacteria. The other is probiotics, which include *bifidobacteria* and *lactobacilli*.

"Already in the first two weeks of life, specific significant differences between both groups were found. Proteobacteria were increased in infants with colic, with a more-than-doubled relative abundance. These included specific species that are known to produce gas," said study author Carolina de Weerth, an associate professor of [developmental psychology](#) at Radboud University in Nijmegen, the Netherlands.

"On the other hand, [bifidobacteria](#) and *lactobacilli* were increased in control infants," she said. "These included species that would induce anti-inflammatory effects. Moreover, samples from infants with colic were found to contain fewer bacteria related to butyrate-producing species. [Butyrate](#) is known to reduce pain in adults. These microbial signatures possibly explain the excessive crying."

Results of the study appeared online Jan. 14 and in the February print issue of *Pediatrics*.

Colic affects up to 25 percent of infants, De Weerth said. It is defined as crying for an average of more than three hours a day, generally between birth and 3 months of age, according to background information in the study.

Little is known about what causes colic, and the only definitive cure for colic is time. The excessive crying usually stops at around 4 months of age, according to the study.

"Newborn crying is quite variable, and between 2 weeks and 8 or 10 weeks you can expect at least an hour of crying in a day. There may be some who cry less; some who cry more. But, babies with colic really do cry for three to four hours a day," said Dr. Michael Hobough, chief of medical staff at La Rabida Children's Hospital, in Chicago.

In the current study, the researchers tested more than 200 fecal samples

from 12 infants with colic and 12 infants with low levels of crying (the control group). Colic was determined at 6 weeks of age.

The fecal samples were tested for more than 1,000 known intestinal microbes. There were four samples taken during the first month and then another five samples were collected between three and five months.

They showed significant differences in the microbial flora between babies with colic and those without. The researchers say these findings might lead to early screening tests for colic, or possibly for a treatment for colic.

De Weerth said it's "possible to make positive changes to the microbiota of babies with colic with the use of probiotics." She also said that the mother's diet in pregnancy and while breast-feeding could have an influence, and that adding probiotics and prebiotics (good bacteria) to infant formula might also positively influence a baby's [intestinal flora](#).

But, not everyone's convinced that anything should be added to infant formula just yet.

"This was an interesting, intriguing study, but it's not definitive," said Dr. Peter Belamarich, medical director of the pediatric ambulatory subspecialty service at the Children's Hospital at Montefiore, in New York City.

Hobaugh also said it is too early to make conclusions.

"I would be very cautious about supplementing [infants](#) with probiotics. [Probiotics](#) are generally safe and don't cause invasive infections generally, but sometimes they do. And, since colic does eventually go away on its own, the risk of potentially doing harm seems too high," he said.

But, Hobaugh said if a mother is breast-feeding, adding yogurt, which contains beneficial bacteria, to her diet would be OK. He added that he wasn't sure if it would help, though.

For his part, Belamarich advised parents to work closely with their babies' pediatrician to come up with a plan for dealing with colic. He said the first thing that needs to be done is to make sure the baby is healthy and thriving. Once you know for sure it's colic, he said the good news is that the condition hasn't been associated with any long-term problems.

He said that before parents give their babies any new foods or medicines, they should check with their child's pediatrician first.

"There are a lot of things that are difficult to treat that are targets for miracle cures. Colic is one of them. Parents should be aware that there's no miracle cure for [colic](#)," Belamarich said.

Hobaugh said that swaddling your baby can help, and suggested that parents sleep when the baby sleeps.

His final piece of advice? "Hang in there. It will get better."

More information: To learn more about colic, read this from the [U.S. National Institutes of Health](#).

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