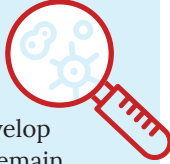


CANADIAN MEDICAL RESEARCH BREAKTHROUGH

Gut bacteria combination shows risk for Crohn's disease

The discovery

- For the first time, researchers have discovered a combination of gut bacteria that is different in those who go on to develop Crohn's disease compared to those who remain healthy. These differences are present years before they develop Crohn's.



- This combination may be one of the triggers of Crohn's.
- This discovery opens the way to

predict a person's risk of developing Crohn's,

find ways to prevent Crohn's before symptoms appear, and

develop new treatments for those who already have the disease

What's next

- More studies needed to uncover the mechanisms related to the changes in the gut bacteria.



Dr. Ken Croitoru of Mount Sinai Hospital in Toronto, part of Sinai Health, GEM Project Architect and Lead Investigator, said:

// This is going to move us a step forward in understanding how to better treat patients or prevent Crohn's disease because now we know what bacteria may be contributing to, or triggering it. I'm hopeful that within five years, we'll see patients benefiting, specifically through more evidence-based treatments focused on the gut bacteria or diet. //

The Genetic, Environmental, Microbial (GEM) Project

In 2007, Crohn's and Colitis Canada challenged its medical research partners to propose a study to accelerate the discovery of a cure for Crohn's and colitis. The partners came back with a proposal for the unique, global GEM Project.

By the numbers



2008 start



107 participant tracking international sites in 7 countries – Canada, USA, United Kingdom, Israel, Australia, New Zealand, Sweden

5,000

healthy first-degree relatives (children, siblings) of people with Crohn's being followed

More than **100** have developed Crohn's

\$22 million invested to date. A major funding partner is The Leona M. and Harry B. Helmsley Charitable Trust

17 scientific publications since 2015



Crohn's disease

Crohn's disease and ulcerative colitis are the two main forms of inflammatory bowel disease. These are lifelong diseases that inflame the lining of the gastrointestinal tract and lead to severe diarrhea, constipation, rectal bleeding and blood in the stool, unrelenting abdominal pain and cramps, fatigue – and more. **There is no cure.**

Want to help continue the GEM project?

Donate at crohnsandcolitis.ca/hope

crohn's  **colitis**

Visit crohnsandcolitis.ca

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