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Australian scientists provide insights into colon cancer prevention

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About one in five people whose disease affects their colon, develops colorectal cancer Ã¢â?¬â?? which is double the rate in the general population



Scientists in Australia have isolated five strains of gut bacteria that could pave the way for new inflammatory bowel disease treatments and potentially help prevent some forms of bowel cancer.

The study by University of Queensland and Mater researchers identified gut bacterial strains that suppress inappropriate gut inflammation and debilitating inflammatory bowel disease (IBD) symptoms.

IBD is a chronic condition characterised by relapsing gut inflammation believed to be caused by an abnormal gut bacterial composition which produces an immune response in genetically susceptible people resulting in severe symptoms.

University of Queensland researcher and Inflammatory Bowel Disease Research Group Leader, Associate Professor Jake Begun, said his team isolated bacteria found in the healthy gut and identified several species that produced a range of anti-inflammatory substances.

“While the gut microbiome is made up of trillions of bacteria that have co-evolved with humans over time, our lab tests identified five strains that were able to suppress inflammation in blood and tissue samples from IBD patients,” Dr Begun said.

“Furthermore, one of these healthy gut bacterial strains produced anti-inflammatory substances that were able to reduce disease severity in a pre-clinical model by inhibiting one of the master molecular regulators of inflammation called NF-kB, without causing any side-effects”, Dr Begun added.