Diet, the gut microbiome, and colorectal cancer: are they linked?

9 December 2016

Recent evidence from animal models suggests a role for specific types of intestinal bacteria in the development of colorectal cancer (CRC). If a microbial imbalance in the gut could actively contribute to CRC in humans, dietary-based therapeutic interventions may be able to modify the composition of the gut microbiome to reduce CRC risk, as discussed in a review article published in BioResearch Open Access.

Olivia Coleman and Tiago Nunes, Technical University of Munich (Freising-Weihenstephan, Germany), discuss the significance and therapeutic implications of the latest evidence linking the intestinal microbiota to CRC development and progression. In the article entitled "Role of the Microbiota in Colorectal Cancer: Updates on Microbial Associations with CRC and Therapeutic Implications," the authors highlight the protective effects that probiotics and prebiotics can have against CRC through their ability to modulate the gut microbiome and, specifically, to expand the population of lactic acid-producing bacteria.

"This review provides an excellent overview of the relationship between the intestinal microbiota and colorectal cancer development. Potential therapies and preventative strategies are also discussed," says BioResearch Open Access Editor Jane Taylor, PhD, Edinburgh Medical School: Biomedical Sciences, University of Edinburgh, Scotland.

DOI: 10.1089/biores.2016.0028

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