Probiotics associated with fewer respiratory symptoms in overweight and older people

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Daily probiotic use was associated with fewer upper respiratory symptoms in overweight and older people, according to a study that suggests a potential role for probiotics in preventing respiratory infections. The study was selected for presentation at Digestive Disease Week (DDW) 2021.

"This is not necessarily the most intuitive idea, that putting bacteria into your gut might reduce your risk of respiratory infection," said Benjamin Mullish, MD, a lead researcher on the study and clinical lecturer in the Division of Digestive Diseases, Imperial College London, England, "but it's further evidence that the gut microbiome has a complex relationship with our various organ systems. It doesn't just affect how our gut works or how our liver works, it affects aspects of how our whole body works."

Researchers re-analyzed detailed daily diaries of 220 patients who participated in an earlier double-blind placebo-controlled study on probiotics and weight loss. Reviewing the entries for common symptoms of upper respiratory infection, including cough, sore throat and wheezing, researchers found that participants who took probiotics during the six-month study had a 27 percent lower overall incidence of upper respiratory tract symptoms compared to the placebo group. The effect was largest among participants who were aged 45 years or older, as well as those with obesity.

People with obesity are at higher risk for respiratory infections. Previous research has shown that probiotics reduce upper respiratory infections in

healthy adults and children, but little data exists on this vulnerable population of older, overweight and people with obesity.

"These findings add to growing interest in the gut-lung axis—how the gut and the lungs communicate with each other," Dr. Mullish said. "It's not just the gut sending out signals that affect how the lungs work. It works in both directions. It adds to the story that changes in the gut microbiome can affect large aspects of our health."

The researchers did not measure immune response, only respiratory symptoms. Future randomized clinical trials could help identify the mechanisms related to the reduction in respiratory symptoms and explore the possible impact of probiotics on the immune system, Dr. Mullish said.

Provided by Digestive Disease Week

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