HEALTHY EATING & EXERCISE FOR LIFE®

The Gut Microbiome

Consumers, healthcare professionals and scientists want to know more about how the foods and beverages we consume may influence the relationship between our gut microbiome and our overall health.

What is the Gut Microbiome?

The human microbiome is composed of trillions of microorganisms mostly located in the gastrointestinal tract. The microbiota plays a key role in human digestion and metabolism by contributing enzymes not produced by the body to help break down large carbohydrates and other dietary components.

Your Microbiota Impacts Your



Immune System

Digestive System

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Metabolism
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Changes and/or Imbalances in the Gut Microbiome Have Been Linked to

- Gastroenteritis
- Inflammatory Bowel Disease
- Colorectal Cancer
- Obesity
- Type 2 Diabetes

Diet and the Gut Microbiome

Low- and No-Calorie Sweeteners (LNCS) and the Impact on the Gut Microbiome

Studies¹ have shown that diet can affect gut microbiota. High fiber vs. high protein diets have been linked to increased levels of certain bacteria which can result in changes in the gut microbiome.

What Does the Evidence Say?

Evidence is limited, as studies are largely observational or conducted in animals. Thus, challenges related to exposure assessment, lack of strong control groups, and the inability to establish direct causation of meaningful health outcomes persist. However, several human trials² suggest that LNCS, such as aspartame, sucralose, and saccharin, do not effect on the gut microbiome, nor key health outcomes such as metabolic response and glucose tolerance. Further, a comprehensive study³ looking at relevant primary research concluded that there is no clear evidence of adverse effects on the gut microbiome for LNCS consumption.

Factors Affecting the Gut Microbiome



For more information, visit: caloriecontrol.org/the-microbiome

