

TABLE 5

Examples of Health Endpoints Studied in Controlled Trials of Prebiotics

This table provides examples of specific prebiotics that have been used in studies testing different health effects.

Health Endpoint	Prebiotic
Irritable bowel syndrome ¹¹²	Galactooligosaccharide (GOS)
Traveler's diarrhea ¹⁴⁰	GOS
Improves stool consistency in children with constipation ¹¹³	Inulin
Bowel habit in infants ¹⁴¹	GOS
Maintain normal defecation frequency ¹¹⁴	Inulin
Slight decrease in fat mass in women with obesity, accompanied by gut microbiota changes ⁵⁵	Inulin-type fructans
Improved satiety and decreased postprandial plasma glucose responses ⁵⁷	Inulin-type fructans
Decreased fecal calprotectin, plasma C-reactive protein, insulin, total cholesterol, triglycerides, and the total cholesterol-to-high density lipoprotein ratio ¹³⁷	Trans-GOS
Reduced body weight and improved glucose regulation in adults with obesity or who are overweight ⁵⁶	Oligofructose
Improved satiety in children who are overweight or with obesity ¹⁴²	Oligofructose
Improved calcium absorption and bone mineralization in young adolescents ¹⁴³	Inulin
Improved calcium and magnesium absorption in postmenopausal women ¹³⁹	Mixture of chicory oligofructose and long-chain inulin
Lower incidence of viral respiratory tract infections ¹³⁴	GOS and polydextrose mixture, 1:1
Improved immune function in elderly individuals, as reflected by increases in phagocytosis, natural killer cell activity, and the production of anti-inflammatory cytokine interleukin-10 and significant reduction in pro-inflammatory cytokines ^{144,145}	B-GOS
Prevention of antibiotic associated diarrhea in children ¹⁰²	Inulin and fructooligosaccharides
Improved gut barrier function in adults with obesity ¹¹⁵	GOS