

Dietary simple sugars alter microbial ecology in the gut

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Diet Rich in Simple Sugars Promotes Pro-Inflammatory Response via Gut Microbiota Alteration and TLR4 Signaling. <i>Cells</i> , 2020, 9, 2701.	1.8	38
2	If You Eat It or Secrete It, They Will Grow: the Expanding List of Nutrients Utilized by Human Gut Bacteria. <i>Journal of Bacteriology</i> , 2021, 203, .	1.0	20
3	Quantitative Measurement of Mucolytic Enzymes in Fecal Samples. <i>Bio-protocol</i> , 2021, 11, e3956.	0.2	1
4	Excessive Intake of Longan Arillus Alters gut Homeostasis and Aggravates Colitis in Mice. <i>Frontiers in Pharmacology</i> , 2021, 12, 640417.	1.6	17
5	Reframing Nutritional Microbiota Studies To Reflect an Inherent Metabolic Flexibility of the Human Gut: a Narrative Review Focusing on High-Fat Diets. <i>MBio</i> , 2021, 12, .	1.8	11
6	Partners in Leaky Gut Syndrome: Intestinal Dysbiosis and Autoimmunity. <i>Frontiers in Immunology</i> , 2021, 12, 673708.	2.2	123
7	Inflammatory Bowel Diseases: Is There a Role for Nutritional Suggestions?. <i>Nutrients</i> , 2021, 13, 1387.	1.7	20
8	Dietâ€™Microbiota Interactions in Inflammatory Bowel Disease. <i>Nutrients</i> , 2021, 13, 1533.	1.7	46
9	Gut microbiome, prebiotics, intestinal permeability and diabetes complications. <i>Best Practice and Research in Clinical Endocrinology and Metabolism</i> , 2021, 35, 101507.	2.2	63
10	Emerging concepts in intestinal immune control of obesity-related metabolic disease. <i>Nature Communications</i> , 2021, 12, 2598.	5.8	65
11	Foodâ€™grade carrageenans and their implications in health and disease. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2021, 20, 3918-3936.	5.9	46
12	Mediterranean Diet to Prevent the Development of Colon Diseases: A Meta-Analysis of Gut Microbiota Studies. <i>Nutrients</i> , 2021, 13, 2234.	1.7	42
13	Relationship between diarrhea and intestinal lactase activity. <i>World Chinese Journal of Digestology</i> , 2021, 29, 571-576.	0.0	2
14	Nutritional strategies for mucosal health: the interplay between microbes and mucin glycans. <i>Trends in Microbiology</i> , 2022, 30, 13-21.	3.5	35
15	GLUT5 is a determinant of dietary fructose-mediated exacerbation of experimental colitis. <i>American Journal of Physiology - Renal Physiology</i> , 2021, 321, G232-G242.	1.6	10
16	Diet in Intestinal Fibrosis: A Double-Edged Sword. <i>Nutrients</i> , 2021, 13, 3148.	1.7	2
17	Mannose Treatment: A Promising Novel Strategy to Suppress Inflammation. <i>Frontiers in Immunology</i> , 2021, 12, 756920.	2.2	10
18	Alterations in the gut microbiome with hemorrhagic transformation in experimental stroke. <i>CNS Neuroscience and Therapeutics</i> , 2022, 28, 77-91.	1.9	26

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19	Nutritional Regulation of Aging and Longevity. <i>Healthy Ageing and Longevity</i> , 2021, , 439-464.	0.2	1
20	Gut Microbiota Composition and Fecal Metabolic Profiling in Patients With Diabetic Retinopathy. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 732204.	1.8	26
21	Construction of a "Bacteria-Metabolites" Co-Expression Network to Clarify the Anti-Ulcerative Colitis Effect of Flavonoids of <i>Sophora flavescens</i> Aiton by Regulating the "Host-Microbe" Interaction. <i>Frontiers in Pharmacology</i> , 2021, 12, 710052.	1.6	28
23	Probiotics and Their Metabolites Ameliorate Inflammatory Bowel Disease: A Critical Review. <i>Infectious Microbes & Diseases</i> , 2021, 3, 4-13.	0.5	15
24	A common fungicide tebuconazole promotes colitis in mice via regulating gut microbiota. <i>Environmental Pollution</i> , 2022, 292, 118477.	3.7	13
25	Evaluating the reparative effects and the mechanism of action of docosahexaenoic acid on azithromycin-induced lipid metabolism dysfunction. <i>Food and Chemical Toxicology</i> , 2022, 159, 112699.	1.8	3
26	Long-Term Overconsumption of Fat and Sugar Causes a Partially Reversible Pre-inflammatory Bowel Disease State. <i>Frontiers in Nutrition</i> , 2021, 8, 758518.	1.6	12
27	Major yolk protein from sea cucumber (<i>Stichopus japonicus</i>) attenuates acute colitis via regulation of microbial dysbiosis and inflammatory responses. <i>Food Research International</i> , 2022, 151, 110841.	2.9	8
28	Alpha-Ketoglutarate Attenuates Colitis in Mice by Increasing <i>Lactobacillus</i> Levels and Regulating Stem Cell Proliferation via Wnt-Hippo Signaling. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
29	Intestinal Taxa Abundance and Diversity in Inflammatory Bowel Disease Patients: An Analysis including Covariates and Confounders. <i>Nutrients</i> , 2022, 14, 260.	1.7	21
30	Editorial: Hexose Uptake and Metabolism in Immune Homeostasis and Inflammation. <i>Frontiers in Immunology</i> , 2021, 12, 832293.	2.2	1
31	Bubble tea consumption and its association with mental health symptoms: An observational cross-sectional study on Chinese young adults. <i>Journal of Affective Disorders</i> , 2022, 299, 620-627.	2.0	6
32	Synergistic effect of ZnO NPs and imidacloprid on liver injury in male ICR mice: Increase the bioavailability of IMI by targeting the gut microbiota. <i>Environmental Pollution</i> , 2022, 294, 118676.	3.7	10
33	High Sugar-Sweetened Beverage Consumption Is Associated with Increased Health Care Utilization in Patients with Inflammatory Bowel Disease: A Multiyear, Prospective Analysis. <i>Journal of the Academy of Nutrition and Dietetics</i> , 2022, 122, 1488-1498.e1.	0.4	8
34	<i>Saccharomyces boulardii</i> alleviates DSS-induced intestinal barrier dysfunction and inflammation in humanized mice. <i>Food and Function</i> , 2022, 13, 102-112.	2.1	20
35	<i>Bifidobacterium lactis</i> BL-99 protects mice with osteoporosis caused by colitis via gut inflammation and gut microbiota regulation. <i>Food and Function</i> , 2022, 13, 1482-1494.	2.1	19
37	Integrated Analysis of the Cecal Microbiome and Plasma Metabolomics to Explore NaoMaiTong and Its Potential Role in Changing the Intestinal Flora and Their Metabolites in Ischemic Stroke. <i>Frontiers in Pharmacology</i> , 2021, 12, 773722.	1.6	13
38	Attractylenolide-1 targets SPHK1 and B4GALT2 to regulate intestinal metabolism and flora composition to improve inflammation in mice with colitis. <i>Phytomedicine</i> , 2022, 98, 153945.	2.3	28

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39	Pattern Recognition Receptor Signaling and Cytokine Networks in Microbial Defenses and Regulation of Intestinal Barriers: Implications for Inflammatory Bowel Disease. <i>Gastroenterology</i> , 2022, 162, 1602-1616.e6.	0.6	38
40	Gut barrier disruption and chronic disease. <i>Trends in Endocrinology and Metabolism</i> , 2022, 33, 247-265.	3.1	153
41	<i>Bifidobacterium lactis</i> BL-99 modulates intestinal inflammation and functions in zebrafish models. <i>PLoS ONE</i> , 2022, 17, e0262942.	1.1	7
42	Alpha-Ketoglutarate Attenuates Colitis in Mice by Increasing <i>Lactobacillus</i> Abundance and Regulating Stem Cell Proliferation via Wnt/Hippo Signaling. <i>Molecular Nutrition and Food Research</i> , 2022, 66, e2100955.	1.5	11
43	Gut microbiota imbalance mediates intestinal barrier damage in high-altitude exposed mice. <i>FEBS Journal</i> , 2022, 289, 4850-4868.	2.2	13
44	The Role of Diet and Gut Microbiota in Regulating Gastrointestinal and Inflammatory Disease. <i>Frontiers in Immunology</i> , 2022, 13, 866059.	2.2	32
46	Glucose but Not Fructose Alters the Intestinal Paracellular Permeability in Association With Gut Inflammation and Dysbiosis in Mice. <i>Frontiers in Immunology</i> , 2021, 12, 742584.	2.2	20
47	Sweeteners Maintain Epithelial Barrier Function Through the miR-15b/RECK/MMP-9 Axis, Remodel Microbial Homeostasis, and Attenuate Dextran Sodium Sulfate-Induced Colitis in Mice. <i>Journal of Agricultural and Food Chemistry</i> , 2022, 70, 171-183.	2.4	7
48	Sugars and Gastrointestinal Health. <i>Clinical Gastroenterology and Hepatology</i> , 2022, 20, 1912-1924.e7.	2.4	15
49	Dietary soybeans worsen dextran sodium sulfate-induced colitis by disrupting intestinal ecology. <i>Food and Function</i> , 2022, , .	2.1	4
50	The risk of carrageenan-induced colitis is exacerbated under high-sucrose/high-salt diet. <i>International Journal of Biological Macromolecules</i> , 2022, 210, 475-482.	3.6	7
51	Fuzhuan brick tea polysaccharides serve as a promising candidate for remodeling the gut microbiota from colitis subjects in vitro: Fermentation characteristic and anti-inflammatory activity. <i>Food Chemistry</i> , 2022, 391, 133203.	4.2	18
52	High-fructose corn syrup promotes proinflammatory Macrophage activation via ROS-mediated NF- κ B signaling and exacerbates colitis in mice. <i>International Immunopharmacology</i> , 2022, 109, 108814.	1.7	8
53	GelNB molecular coating as a biophysical barrier to isolate intestinal irritating metabolites and regulate intestinal microbial homeostasis in the treatment of inflammatory bowel disease. <i>Bioactive Materials</i> , 2023, 19, 251-267.	8.6	10
54	The role of γ T cells in the interaction between commensal and pathogenic bacteria in the intestinal mucosa. <i>International Reviews of Immunology</i> , 2023, 42, 379-392.	1.5	3
55	O Uter Membrane Protein Amuc_1100 of <i>Akkermansia muciniphila</i> Alleviates Antibiotic-Induced Anxiety and Depression-Like Behavior in Mice. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
57	The intestinal immune system and gut barrier function in obesity and ageing. <i>FEBS Journal</i> , 2023, 290, 4163-4186.	2.2	12
58	Mineralocorticoid receptor deficiency in Treg cells ameliorates DSS-induced colitis in a gut microbiota-dependent manner. <i>Immunology</i> , 2022, 167, 94-104.	2.0	2

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59	Insights into diet-associated oxidative pathomechanisms in inflammatory bowel disease and protective effects of functional amino acids. <i>Nutrition Reviews</i> , 2022, 81, 95-113.	2.6	12
60	Dysregulation of intestinal flora: excess prepackaged soluble fibers damage the mucus layer and induce intestinal inflammation. <i>Food and Function</i> , 2022, 13, 8558-8571.	2.1	2
61	Different Dose of Sucrose Consumption Divergently Influences Gut Microbiota and PPAR- β /MAPK/NF- κ B Pathway in DSS-Induced Colitis Mice. <i>Nutrients</i> , 2022, 14, 2765.	1.7	8
62	Sugar-sweetened beverages, artificially sweetened beverages and natural juices and risk of inflammatory bowel disease: a cohort study of 121,490 participants. <i>Alimentary Pharmacology and Therapeutics</i> , 2022, 56, 1018-1029.	1.9	20
63	The microbiome and gut homeostasis. <i>Science</i> , 2022, 377, .	6.0	127
64	CD4+ T cell metabolism, gut microbiota, and autoimmune diseases: implication in precision medicine of autoimmune diseases. <i>Precision Clinical Medicine</i> , 2022, 5, .	1.3	12
65	The metabolic nature of inflammatory bowel diseases. <i>Nature Reviews Gastroenterology and Hepatology</i> , 2022, 19, 753-767.	8.2	76
66	<i>Akkermansia muciniphila</i> Colonization Alleviating High Fructose and Restraint Stress-Induced Jejunal Mucosal Barrier Disruption. <i>Nutrients</i> , 2022, 14, 3164.	1.7	5
67	Effect of a reduced fat and sugar maternal dietary intervention during lactation on the infant gut microbiome. <i>Frontiers in Microbiology</i> , 0, 13, .	1.5	6
68	<i>Rhinacanthus nasutus</i> and okara polysaccharides attenuate colitis via inhibiting inflammation and modulating the gut microbiota. <i>Phytotherapy Research</i> , 2022, 36, 4631-4645.	2.8	5
69	Influence of Foods and Nutrition on the Gut Microbiome and Implications for Intestinal Health. <i>International Journal of Molecular Sciences</i> , 2022, 23, 9588.	1.8	36
70	The association between dietary patterns and the risk of developing ulcerative colitis. <i>Clinical Nutrition ESPEN</i> , 2022, 51, 307-312.	0.5	3
71	Selenium-enriched <i>Bifidobacterium longum</i> DD98 effectively ameliorates dextran sulfate sodium-induced ulcerative colitis in mice. <i>Frontiers in Microbiology</i> , 0, 13, .	1.5	9
72	Gut microbiota and derived metabolomic profiling in glaucoma with progressive neurodegeneration. <i>Frontiers in Cellular and Infection Microbiology</i> , 0, 12, .	1.8	10
73	Dietary Fructose and Fructose-Induced Pathologies. <i>Annual Review of Nutrition</i> , 2022, 42, 45-66.	4.3	21
74	Glucose promotes regulatory T cell differentiation to maintain intestinal homeostasis. <i>IScience</i> , 2022, 25, 105004.	1.9	6
75	<i>Rabdosia serra</i> alleviates dextran sulfate sodium salt-induced colitis in mice through anti-inflammation, regulating Th17/Treg balance, maintaining intestinal barrier integrity, and modulating gut microbiota. <i>Journal of Pharmaceutical Analysis</i> , 2022, 12, 824-838.	2.4	15
76	Excessive intake of sugar: An accomplice of inflammation. <i>Frontiers in Immunology</i> , 0, 13, .	2.2	40

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77	Bacteroides fragilis ameliorates Cronobacter malonaticus lipopolysaccharide-induced pathological injury through modulation of the intestinal microbiota. <i>Frontiers in Immunology</i> , 0, 13, .	2.2	2
78	Diet fuelling inflammatory bowel diseases: preclinical and clinical concepts. <i>Gut</i> , 2022, 71, 2574-2586.	6.1	35
79	Dietary Patterns and Gut Microbiota Changes in Inflammatory Bowel Disease: Current Insights and Future Challenges. <i>Nutrients</i> , 2022, 14, 4003.	1.7	23
80	Dietary Oxidized Cholesterol Aggravates Chemically Induced Murine Colon Inflammation and Alters Gut Microbial Ecology. <i>Journal of Agricultural and Food Chemistry</i> , 2022, 70, 13289-13301.	2.4	9
81	Getting the guts to expand stroke treatment: The potential for microbiome targeted therapies. <i>CNS Neuroscience and Therapeutics</i> , 0, , .	1.9	6
82	Polysaccharide from <i>Atractylodes macrocephala</i> Koidz. ameliorates DSS-induced colitis in mice by regulating the Th17/Treg cell balance. <i>Frontiers in Immunology</i> , 0, 13, .	2.2	5
83	The negative effect of <i>Akkermansia muciniphila</i> -mediated post-antibiotic reconstitution of the gut microbiota on the development of colitis-associated colorectal cancer in mice. <i>Frontiers in Microbiology</i> , 0, 13, .	1.5	21
84	Lead exposure exacerbates adverse effects of HFD on metabolic function via disruption of gut microbiome, leading to compromised barrier function and inflammation. <i>European Journal of Nutrition</i> , 0, , .	1.8	0
85	Outer membrane protein Amuc_1100 of <i>Akkermansia muciniphila</i> alleviates antibiotic-induced anxiety and depression-like behavior in mice. <i>Physiology and Behavior</i> , 2023, 258, 114023.	1.0	11
86	Masticadienonic acid from Chios mastic gum mitigates colitis in mice via modulating inflammatory response, gut barrier integrity and microbiota. <i>Phytomedicine</i> , 2023, 108, 154518.	2.3	3
87	A high-fiber diet synergizes with <i>Prevotella copri</i> and exacerbates rheumatoid arthritis. , 2022, 19, 1414-1424.		22
88	Olive oil ameliorates allergic response in murine ovalbumin-induced food allergy by promoting intestinal mucosal immunity. <i>Food Science and Human Wellness</i> , 2023, 12, 801-808.	2.2	10
89	Ultra-processed foods as a possible culprit for the rising prevalence of inflammatory bowel diseases. <i>Frontiers in Medicine</i> , 0, 9, .	1.2	4
90	Self-Assembled Integrative Nutrient Carrier Platform Containing Green Tea Catechin for Short Bowel Syndrome Treatment. <i>Advanced Healthcare Materials</i> , 2023, 12, .	3.9	2
91	<i>Lactobacillus plantarum</i> GMNL-662 and <i>Lactobacillus plantarum</i> 299v prevent osteoporosis in mice with colitis by down-regulating <i>Akkermansia</i> in the gut microbiome. <i>Journal of Functional Foods</i> , 2022, 99, 105328.	1.6	1
92	Self-assembled micelle derived from pterostilbene ameliorate acute inflammatory bowel disease. <i>International Journal of Pharmaceutics</i> , 2023, 630, 122420.	2.6	3
93	Selected Aspects of Nutrition in the Prevention and Treatment of Inflammatory Bowel Disease. <i>Nutrients</i> , 2022, 14, 4965.	1.7	1
94	Different Effects of Different <i>Lactobacillus acidophilus</i> Strains on DSS-Induced Colitis. <i>International Journal of Molecular Sciences</i> , 2022, 23, 14841.	1.8	4

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95	Effects of dietary irritants on intestinal homeostasis and the intervention strategies. <i>Food Chemistry</i> , 2023, 409, 135280.	4.2	4
96	Sugar-sweetened beverages exacerbate high-fat diet-induced inflammatory bowel disease by altering the gut microbiome. <i>Journal of Nutritional Biochemistry</i> , 2023, 113, 109254.	1.9	4
97	An Elemental Diet Enriched in Amino Acids Alters the Gut Microbial Community and Prevents Colonic Mucus Degradation in Mice with Colitis. <i>MSystems</i> , 2022, 7, .	1.7	1
98	Microbiome and Metabolome Variation as Indicator of Social Stress in Female Prairie Voles. <i>International Journal of Molecular Sciences</i> , 2023, 24, 1677.	1.8	2
99	Comparison and recommendation of dietary patterns based on nutrients for Eastern and Western patients with inflammatory bowel disease. <i>Frontiers in Nutrition</i> , 0, 9, .	1.6	3
100	Disruption of the Intestinal Mucosal Barrier Induced by High Fructose and Restraint Stress Is Regulated by the Intestinal Microbiota and Microbiota Metabolites. <i>Microbiology Spectrum</i> , 2023, 11, .	1.2	8
101	Orchestration of MUC2 – The key regulatory target of gut barrier and homeostasis: A review. <i>International Journal of Biological Macromolecules</i> , 2023, 236, 123862.	3.6	8
102	Stachyose modulates gut microbiota and alleviates DSS-induced ulcerative colitis in mice. <i>Food Science and Human Wellness</i> , 2023, 12, 2211-2220.	2.2	9
103	Microbiota: A potential orchestrator of antidiabetic therapy. <i>Frontiers in Endocrinology</i> , 0, 14, .	1.5	3
104	Fructose Stimulated Colonic Arginine and Proline Metabolism Dysbiosis, Altered Microbiota and Aggravated Intestinal Barrier Dysfunction in DSS-Induced Colitis Rats. <i>Nutrients</i> , 2023, 15, 782.	1.7	6
105	Gut microbiota remodeling improves natural aging-related disorders through <i>Akkermansia muciniphila</i> and its derived acetic acid. <i>Pharmacological Research</i> , 2023, 189, 106687.	3.1	22
106	Tannins amount determines whether tannase-containing bacteria are probiotic or pathogenic in IBD. <i>Life Science Alliance</i> , 2023, 6, e202201702.	1.3	0
107	The role of diet in shaping human gut microbiota. <i>Bailliere's Best Practice and Research in Clinical Gastroenterology</i> , 2023, 62-63, 101828.	1.0	14
108	A high-sucrose diet causes microbiota composition shift and promotes the susceptibility of mice to <i>Salmonella</i> Typhimurium infection. <i>Food and Function</i> , 2023, 14, 2836-2846.	2.1	0
110	Apigenin-7-O-glucoside alleviates DSS-induced colitis by improving intestinal barrier function and modulating gut microbiota. <i>Journal of Functional Foods</i> , 2023, 104, 105499.	1.6	5
111	Effects of ultra-processed foods on the microbiota-gut-brain axis: The bread-and-butter issue. <i>Food Research International</i> , 2023, 167, 112730.	2.9	11
112	Microbiome-Induced Autoimmunity and Novel Therapeutic Intervention. <i>Advances in Experimental Medicine and Biology</i> , 2023, , 71-90.	0.8	2
113	Impaired Intestinal Permeability Assessed by Confocal Laser Endomicroscopy – A New Potential Therapeutic Target in Inflammatory Bowel Disease. <i>Diagnostics</i> , 2023, 13, 1230.	1.3	2

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121	Immune response to intestinal microbial dysbiosis. , 2023, , 125-136.		0
155	Systemic Inflammation as the Health-Related Communication Tool Between the Human Host and Gut Microbiota in the Framework of Predictive, Preventive, and Personalized Medicine. Advances in Predictive, Preventive and Personalised Medicine, 2024, , 203-241.	0.6	1
159	Probiotics and Metabolic Syndrome: A bibliometric analysis and overview of dietary interventions. , 0, , .		0