Individual Anteaox Phenols and Gut Health

EGCG, Resveratrol, Curcumin, Quercetin, Catechin, Gallic, Caffeic, p-Coumaric

"Moreover, the protective effects of numerous polyphenols and their metabolites against various gastrointestinal disorders/diseases including gastritis, gastric cancer, colorectal cancer, inflammatory bowel disease (IBD) like ulcerative colitis (UC), Crohn's disease (CD), and irritable bowel syndrome (IBS) like celiac disease (CED) are discussed....Hence, the authors recommend these polyphenols along with modified lifestyle patterns and standard gastroprotective drugs for better gut health." 134. Molecules, 2021

Curcumin

"Other studies confirmed that oral curcumin administration was able to remarkably shift the ratio between beneficial and harmful bacteria in gut microbiota community in favour of beneficial bacteria strains, such as Bifidobacteria, Lactobacilli, and butyrate-producing bacteria, and reduces the abundance of the pathogenic ones, such as Prevotellaceae, Coriobacterales, Enterobacteria, and Rikenellaceae, often associated to the onset of systemic diseases." <u>135. Nutrients, 2020</u>

Ellagic Acid

"In this review, we summarize how intake of EA regulates lipid metabolism in vitro and in vivo, and delineate the potential mechanisms of action of EA on obesity-mediated metabolic complications. We also discuss EA as an epigenetic effector, as well as a modulator of the gut microbiome, suggesting that EA may exert a broader spectrum of health benefits than has been demonstrated to date." 136. American Society for Nutrition, 2016

Ferulic Acid, Caffeic Acid, Caffeic Acid Phenethyl Ester

"This review primarily highlighted the interactions between HCA and gut microbiota, along with the effect of HCA supplementation on common gut-related diseases, such as ulcerative colitis and colorectal cancer." <u>137. COMPREHENSIVE REVIEWS IN FOOD SCIENCE AND FOOD SAFETY, 2020</u>

Kaempferol

"The present review mainly summarizes the application of kaempferol in treating diseases and the underlying mechanisms that are currently being studied. Due to its anti-inflammatory properties, it may be used to treat numerous acute and chronic inflammation-induced diseases, including intervertebral disc degeneration and colitis.."

138. EXPERIMENTAL AND THERAPEUTIC MEDICINE, 2019

Quercetin

"This finding suggests that dietary quercetin can directly stimulate the immune system to reduce inflammation and restore gut microbial balance." <u>139. Frontiers in Microbiology, 2019</u>

Resveratrol

"Resveratrol treatment is a potentially beneficial therapeutic intervention against the progression of DN, by improving the gut environment and reducing the inflammation response, and that these changes may be an important mechanism by which resveratrol mediates its beneficial renal function effects. These findings provide supporting evidence for the gut–kidney axis in DN." 140. Frontiers in Pharmacology, 2020

Protocatechuic Acid

"Analysis on gut microbiota revealed that PCA down-regulated Prevotella 9, Prevotella 2, Holdemanella and Ruminococcus torques group which promote the production of inflammatory cytokines as well as up-regulated Roseburia and Desulfovibrio which inhibit the inflammatory cytokines." <u>141. Journal of Animal Science and Biotechnology</u>, 2020