

Special Issue on Natural Products as Therapeutic Alternative for Inflammatory Disease of the Gastrointestinal Tract

CALL FOR PAPERS

Natural Products (NP) have provided considerable value to the pharmaceutical industry over the past half century. NP derived from food and medicinal plants are an interesting therapeutic alternative for acute as well as chronic inflammatory disease of the gastrointestinal tract (e.g., Crohn's disease, ulcerative colitis, celiac disease, irritable bowel syndrome, colon cancer, and drug-induced gut toxicity) since several studies have proven effective treatments in animal models of intestinal inflammation. Several naturally occurring compounds, such as capsaicin and fish oil, are potent anti-inflammatory agents. The interlink between gut microbiota, mucosal immune system, and the development of intestinal inflammation is well-known. Sustaining a balanced intestinal microbial community is critical for maintaining intestinal health and preventing chronic gut inflammation. Also, it is well known that specific commensal bacterias can reverse gut inflammation. Recently, proinflammatory gut microbiota dysbiosis has been shown to be central to the pathogenesis of gut inflammation. Conversely, inflammation, which is caused by abnormal immune responses, influences the balance of the gut microbiome, resulting in intestinal diseases. Environmental and intrinsic factors that alter microbiota structure can trigger aberrant immune responses. The resulting states of dysbiosis take many forms characterized by overrepresentation of proinflammatory organisms and pathobionts and loss of beneficial commensals further aggravating the inflammatory state. The number of research studies, focusing on the alleviating effects of natural compounds on the gut dysbiosis-induced intestinal inflammation and/or intestinal inflammation-induced gut dysbiosis and fixing the immune system dysfunction to prevent gut inflammation, has been increasing in the context of inflammatory disease of the GI tract.

Potential topics include but are not limited to the following:

- ▶ Therapeutic effects of novel natural products on the chronic inflammatory disease of the gastrointestinal tract (e.g., IBD)
- ▶ Therapeutic effects of novel natural products on the acute inflammatory disease of the gastrointestinal tract (e.g., anticancer drug-induced gut toxicity)
- ▶ Prevention and/or reversal of gut microbiota dysbiosis-induced gut inflammation by natural products
- ▶ Prevention and/or reversal of gut inflammation or gut inflammation-induced microbial dysbiosis by natural products
- ▶ Prevention and/or reversal of dysregulated immune system associated with gut inflammation by natural products
- ▶ Natural products effects on host-microbiome interaction to prevent intestinal inflammation
- ▶ Natural products effects on infectious colitis (e.g., *Citrobacter*, *Salmonella*, and *C. difficile*)
- ▶ Natural product against GI tumors, particularly with regard to HPB tract, stomach, and colon

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/grp/npta/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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