

Tentative Outline

Special Thematic Issue for the journal "Endocrine, Metabolic & Immune Disorders - Drug Targets"

Title of Thematic Issue: "Modulation of gut microbiota in obesity-associated metabolic diseases"

Guest Editors: Dr. Ramesh Pothuraju and Dr. Asha Nair

• **Scope of the Thematic Issue:** Obesity is a metabolic condition in which excess intake of high calories or less physical activity. It is associated with various metabolic diseases including insulin resistance, diabetes, cardiovascular disease and even cancers. Western style diet, smoking, alcohol, and environmental factors are the major players in altering the gut microflora termed "dysbiosis" which leads to inflammation and disease progression to alter the intestinal homeostasis. Gut microbiota plays a prominent role in ameliorating obesity and its associated disorders. Additionally, modulation of gut microbiota by the diet, functional foods and pre-and probiotics would be beneficial. Therefore, we are pleased to invite you to contribute research and review articles to this special issue.

Keywords: Diet, obesity, intestinal homeostasis, gut microbiota, functional foods, prebiotic, probiotics and postbiotics

Sub-topics:

The sub-topics to be covered within the issue should be provided:

- 1). Amelioration of gut microbiota in obesity by fiber, pre- and probiotics and functional foods.
- 2). Targeting the gut microbiota in obesity associated metabolic diseases.
- 3). Current challenges associated with obesity and its associated disorders.
- 4). Therapeutic approaches to target obesity associated cancer.
- 5) Gut-brain axis to modulate metabolic diseases
- 6). Inflammation, gut microbiota and cancer

Tentative titles of the articles:

- 1). Modulation of gut microbiota by pre and probiotics
- 2). Gut microbial metabolite's role in metabolic disease
- 3). Gut microflora role in human health and disease
- 4). Signaling molecules and their oncogenic role in colorectal cancer
- 5). Modulation of gut microbiota by functional foods or phytosterols
- 6). Current challenges associated in amelioration of obesity associated cancers
- 7). Can we target gut microbiota to prevent neurological diseases?

- 8). Gut microbiota, gut-brain axis in metabolic disorders
- 9). Novel therapeutic approaches for gastrointestinal cancers
- 10). Interaction of diet and microbes on colonic homeostasis
- 11). Understanding the role of dietary fibers in intestinal gut flora modulation
- 12). Role of functional foods in disease management
- 13). The Microbiota-Gut-Brain Axis in Health and Disease
- 14). Role of growth factors in metabolic diseases
- 15). Dietary components and their role in modulation of gut microbiota

Schedule:

Scheduled to be **October 2022**

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