The gut balance revolution

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The pathophysiology of obesity is still unknown but there is mounting evidence that the gut microbiome, intestinal permeability and systemic inflammation may play an important role in disease pathogenesis and possibly treatment. Alterations in diet have been shown to shift the gut microbiome’s effects on metabolism and regulation of body weight. This session will provide a focused overview of the scientific literature regarding the potential role of gut microbiome as a therapeutic target of weight management. The lecture will first review the pathophysiology of obesity from a functional medicine perspective and discuss how a functional medicine evidence based approach can achieve optimal weight management by 3 steps and those are Remove, Restore and Renew. Learning objectives from the presentation are; to discuss the influence of the gut microbiome on energy metabolism, to understand how disruption of the gut microbiome can lead to obesity and to know how prebiotic and probiotic foods and supplements may influence weight by favorably altering the gut microbiome.

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Healthy foods: The case of Salvia officinalis L flowers

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The genus Salvia belongs to the Lamiaceae family and comprises numerous species that have been used since ancient times for the treatment of several disorders. Edible flowers are receiving renewed interest as rich sources of bioactive compounds. Salvia officinalis flowers were extracted by and investigated for their phytochemical content and in vitro bioactivity. Rutin, quercetin, luteolin, kaempferol and myricetin were selected as standards and quantified by HPLC. DPPH, ABTS and β-carotene bleaching test were applied to screen the antioxidant potential. The hypoglycemic effects were investigated via the inhibition of α-amylase. S. officinalis showed a promising protection of lipids peroxidation with IC50 values 2.3 and 4.2 µg per mL after 30 and 60 minutes of incubation, respectively. The extract is able also to scavenge both DPPH and ABTS radicals with IC50 values 19.7 and 26.4 µg/mL, respectively. In type-2 diabetic patients, oxidative stress is closely associated with chronic inflammation that may play a role in the development of complications. The α-Amylase enzyme breaks down large insoluble starch molecules into absorbable molecules. This enzyme is found in the pancreatic juice and saliva. S. officinalis showed a percentage of inhibition of 28.2% at maximum concentration tested (1 mg/mL). These findings support the consumption of edible flowers as functional food.

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