Impact of Bioflavonoids from Berryfruits on Biomarkers of Metabolic Syndrome

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Abstract
The phytochemical constituents which comprise many edible berry fruits have increasingly been linked to modulation of biomarkers associated with conditions of diabetes, overweight/obesity, and cardiovascular disease (CVD), all components of metabolic syndrome. While many wild berries have long been valued in traditional medicine as health protective, it is only recently that the ability of berry bioactives to affect particular clinical targets has been demonstrated. In addition to the widely recognized antioxidant power of berry extracts, both commercial berry varieties and wild species have been linked to hypoglycemic activity, inhibition of adipogenesis, amelioration of CVD risk factors, anti-inflammatory capacity, and ability to induce satiety/counteract overweight. In some cases, proanthocyanidin constituents or anthocyanin pigments have been shown to be the active agents, but in many other cases, interactions between co-occurring phytochemical constituents potentiate bioactivity of berry extracts.