



## Bioactive Compounds in Metabolic Syndrome

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### Message from the Guest Editors

Metabolic syndrome is a manifestation characterized by a variety of comorbidities, including hyperglycemia, abdominal obesity, arterial hypertension, and dyslipidemia, which pose a significant risk for the occurrence of cardiovascular diseases and premature death. The obesity starts with a defects in energy balance. The increase of free fatty acids and lipid accumulation in certain organs are mediators of insulin resistance. The fat-derived adipokines, including TNF $\alpha$  and adiponectin, are considered pathogenic contributors or protectors, being involved in the pathways from adiposity to the genesis of dyslipidemia and hypertension. This special issue addresses the potential beneficial role of natural bioactive compounds in the prevention and treatment of metabolic syndromes and described the molecular mechanisms involved.

### Keywords:

- metabolic syndrome
- bioactive compounds
- arterial hypertension
- diabetes mellitus
- dyslipidemia
- inflammation
- functional foods





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