

The Dysmetabolic Syndrome

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The Dysmetabolic Syndrome: Epidemiology and Etiology

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Abstract

The metabolic syndrome is a common metabolic disorder that results from the increasing prevalence of obesity. It also refers to a clustering of specific cardiovascular disease risk factors whose underlying pathophysiology is thought to be related to insulin resistance with an excessive flux of fatty acids implicated. Opinions have varied as to whether the metabolic syndrome should be defined to indicate mainly insulin resistance, the metabolic consequences of obesity, risk of cardiovascular disease, or simply a collection of statistically related factors. Based on these different viewpoints 4 definition sets of the metabolic syndrome are formulated. The pros and cons of each of them are extensively discussed. A major role in the etiology of the metabolic syndrome is ascribed to the occurrence of insulin resistance. Data are provided that insulin resistance can worsen the expression of this syndrome, but cannot have a primary role. Therefore, insulin resistance is not the main player of the metabolic syndrome, but central obesity is. Free fatty acid induced insulin resistance is found and induced by central obesity. The metabolic syndrome is a cluster of abnormalities in which each of them deserves its own (maximal) treatment to diminish the risk for cardiovascular disease.

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Definition, Epidemiology and Its Problems

The metabolic syndrome is a common metabolic disorder that results from the increasing prevalence of obesity. It also refers to a clustering of specific cardiovascular disease (CVD) risk factors, whose underlying pathophysiology is thought to be related to insulin resistance with excessive flux of fatty acids implicated. A pro-inflammatory state probably contributes to the syndrome