Special Issue

Adipose Tissue Dysfunction and the Therapeutic Role of Exercise

Message from the Guest Editor

Adipose tissue is a central metabolic organ regulating the whole-body energy homeostasis. Adipose tissue dysfunction is a predictor of metabolic and cardiovascular events. Emerging evidence indicates that regular exercise could be the most important non-pharmacological strategy for the prevention and treatment of obesity and its related cardiovascular/metabolic diseases. However, recently, there has been growing consensus for assigning exercise a therapeutic role to combat adipose tissue-derived metabolic dysfunction, even in the absence of weight loss. In adipose tissue, exercise training reduces lipid content and inflammation, regulates browning and thermogenesis, and modulates the production of adipokines. The aim of this Special Issue is to increase knowledge on: the molecular and cellular biology and pathophysiology of adipose dysfunction; the role of adipose tissue as a metabolically active, "exercise-responsive" organ, as well as elucidating a methodology for advanced exercise effectiveness; exercise interventions that will specifically target adipose tissue metabolic health; molecular signatures of exercise-induced adipose adaptations to achieve health-promoting therapies.

Guest Editor

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Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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