

Special Issue

High-Fat Diet, Obesity and Related Inflammation

Message from the Guest Editor

Diet-induced obesity is associated with inflammation not only in the peripheral tissues but also in the brain, by which energy balance is primarily regulated. Energy balance is regulated by not only the homeostatic system, but also the reward system in the brain. It has been previously reported that a high-fat diet (HFD) causes inflammation in various places in the brain. The inflammation induced by HFD has been well studied in the arcuate nucleus region in the hypothalamus that regulates the homeostatic system, and it has been reported that inflammation occurs through the activation of both microglia and astrocytes, a state called gliosis. In addition, several lines of evidence indicate that inflammation occurs in reward-related brain regions by HFD. However, the detailed molecular mechanisms of the pathology underlying the dysregulation of the homeostatic and reward system caused by HFD-induced inflammation with gliosis remain unclear. Therefore, this Special Issue solicits submissions of original research on high-fat diets, obesity, and related inflammation, with a particular focus on the central nervous system.

Guest Editor

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Deadline for manuscript submissions

closed (5 May 2024)



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Nutrients is an on-line open access journal that was first published in 2009. *Nutrients* adheres to rigorous peer-review and editorial processes and publishes only high quality manuscripts that address important issues related to the impacts of nutrients on human health. The Impact Factor of *Nutrients* has risen rapidly since its establishment and it is now ranked in the first quartile of journals publishing in the field of nutrition and dietetics research.

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