



## High-Fat Diet, Obesity and Related Inflammation

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Deadline for manuscript  
submissions:

**closed (5 May 2024)**

### Message from the Guest Editor

Dear Colleagues,

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.

Dr. Ryoichi Banno  
*Guest Editor*





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