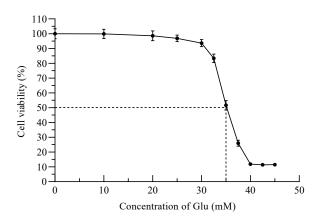
Electronic Supplementary Material (ESI) for Food & Function. This journal is © The Royal Society of Chemistry 2022

## Supplementary data

Fig.S1 Cell viability of HT22 cells treated by glutamate (Glu) in vitro.



**Fig.S2** Pearson Correlation Analysis among different indicators. The level of blood sugar, C-reactive protein (CRP), interleukin-6 (IL-6), tumor necrosis factor-α (TNF-α) in serum; inducible nitric oxide synthase (iNOS), ROS in the hypothalamus; 5-hydroxy trptamine (5-HT), 5-hydroxy indole-3-acetic acid (5-HIAA) in the hypothalamus; γ-aminobutyric acid (GABA), glutamate (Glu), dopamine (DA) in striatum neurons. Significant correlations are indicated by  ${}^*(P < 0.05)$ ,  ${}^{**}(P < 0.01)$ ,  ${}^{***}(P < 0.001)$ .

