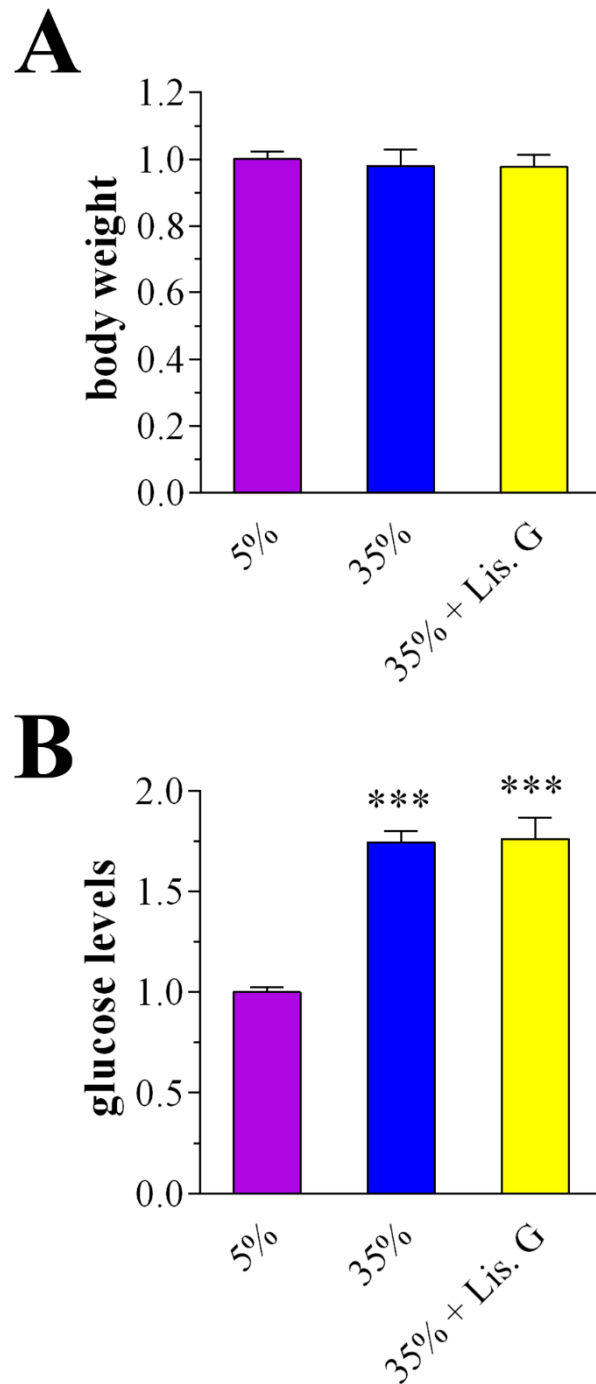
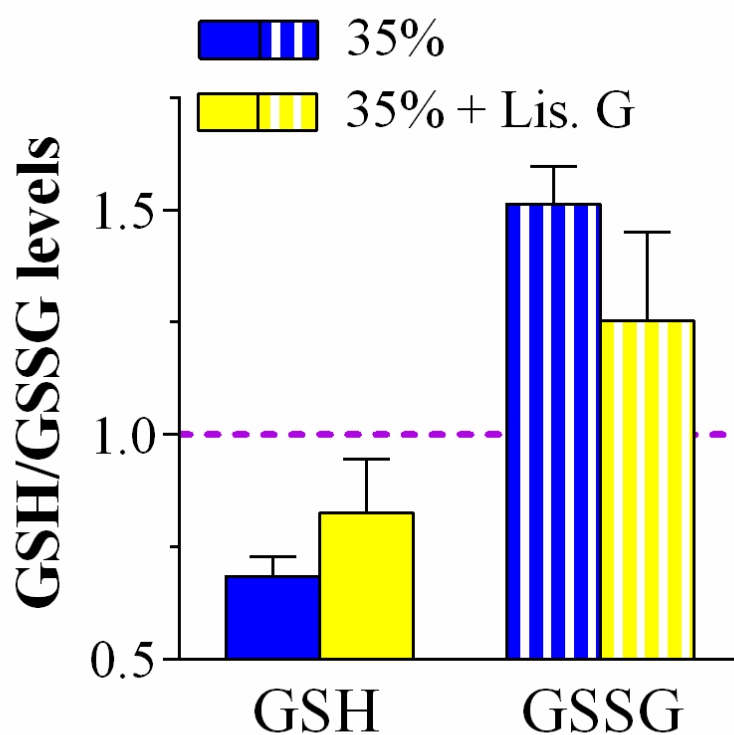


## Supplementary Figure S1



**Figure S1.** Body weight (**A**) and whole-body glucose (**B**) in adult *D. melanogaster* after 10 days feeding with 5% sucrose diet (control, normoglycemic flies) or supplemented with 35% sucrose (hyperglycemic flies), in the absence and in the presence of Lisosan G at 10  $\mu\text{g/ml}$ . Glucose was measured by means of Liquid chromatography-Mass spectrometry and related to the fly weight. Results are expressed by setting the values of 5% sucrose as 1. \*\*\*  $p < 0.0001$  vs 5% control. Data are representative of at least  $n = 60$  animals obtained from 3 independent experiments.

## Supplementary Figure S2



**Figure S2.** Changes of GSH and GSSG levels in adult heads of *D. melanogaster* after 10 days feeding with 35% sucrose diet (hyperglycemic flies), in the absence and in the presence of Lisosan G at 10  $\mu\text{g/ml}$ . Results are expressed by setting the values of 5% sucrose (control, normoglycemic flies) as 1 (purple dotted line). Data are representative of 3 replicate samples from at least  $n = 100$  animals.