

Commentary on the role of NDUFAB1

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In the first issue of this journal, four articles are gathered. Among them, the authors of three articles are from China, while the fourth article was written by authors from Italy. They conducted research in the fields of medicine, education and computer science.

The article entitled "NDUFAB1 protects against obesity and insulin resistance by enhancing mitochondrial metabolism" [1], written by four researchers from Peking University, shows the findings that NDUFAB1 could be a novel mitochondrial target to prevent obesity and insulin resistance by enhancing mitochondrial metabolism. This was achieved through animal experiments, in which the male mice were fed an HFD (60% calories from fat) or standard chow diet (11.4% calories from fat) as a control. It has been found that NDUFAB1 effectively protects against metabolic stress by coordinately enhancing activities of PDH and ETC. NDUFAB1 regulates PDH activity through modulation of lipoylation of its E2 subunit in an mtFAS-dependent manner. Meanwhile, it modulates ETC activity through regulation of the assembly of complexes I–III and super complexes. Thus, it leads to the conclusion mentioned above.

We thank these authors for their permission to collect their publications.

Conflict of interest

The author declares no conflict of interest.

References

1. Zhang R, Hou T, Cheng H, Wang X. NDUFAB1 protects against obesity and insulin resistance by enhancing mitochondrial metabolism. *The FASEB Journal* 2019; 33(12): 13310–13322. doi: 10.1096/fj.201901117RR