

Fructose diet-associated molecular alterations in hypothalamus of adolescent rats: a proteomic approach

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SUPPLEMENTARY MATERIAL

Table S1. Identification details of differentially represented proteins

Reported are the information on protein false discovery rate (FDR) confidence, protein accession, description, gene name, exp. q-value, sum posterior error probability (PEP) score, sequence coverage (%), number of identified peptides, peptide spectrum matches (PSMs), number of identified unique peptides, number of amino acids, molecular mass, pI, Mascot identification score values, Razor Peptides, Abundance Ratio, Abundance Ratio (log2), Abundance Ratio P-Value, Abundance Ratio Adj. P-Value, Abundances (Grouped), Abundances (Grouped) CV [%].

[illegible]

Figure S1. Proteomic analysis of hypothalamic tissues

Volcano plot representing differentially expressed proteins in hypothalamic tissues isolated from fructose-fed adolescents versus control adolescent rats. Over- and down-represented proteins ($\text{Log}_2\text{FC} > 0.26$, $p < 0.05$) are reported in red and green area, respectively.

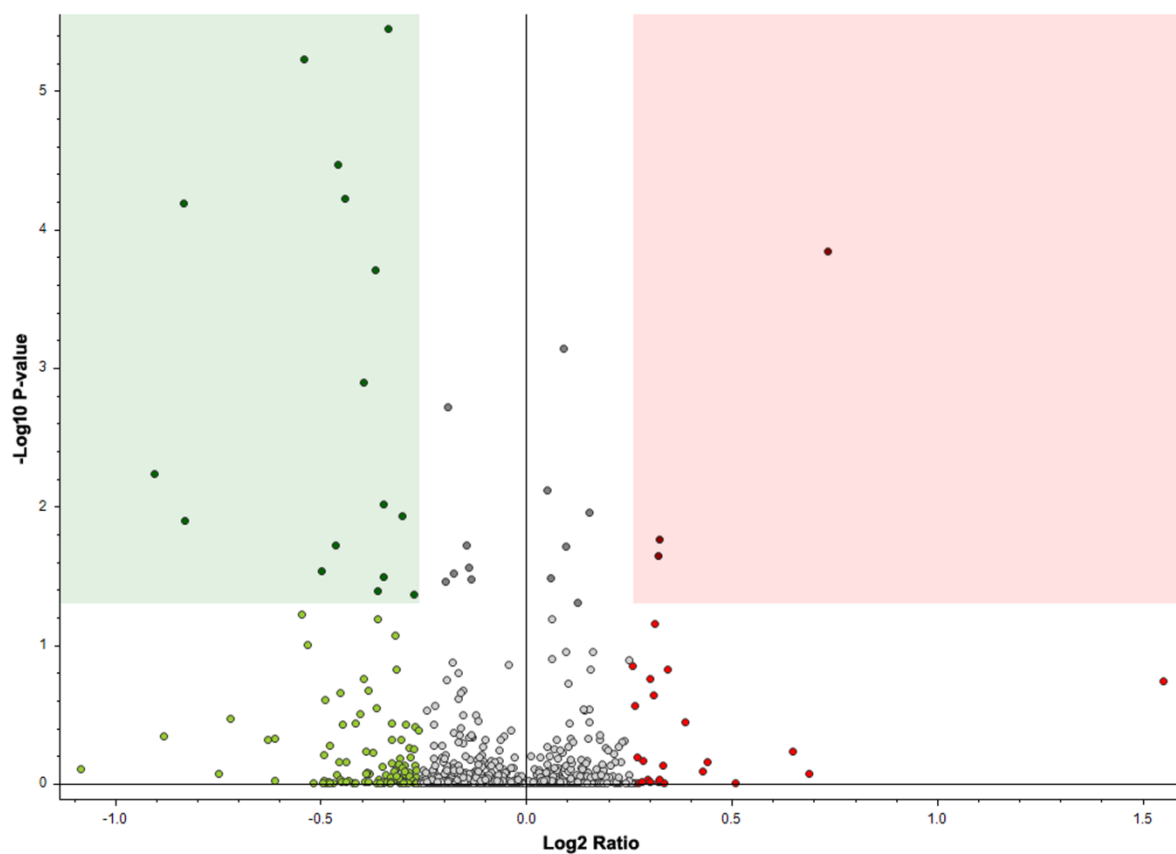


Figure S2. Heat-map hierarchical cluster analysis

Heat-map hierarchical cluster analysis of proteins differentially represented in hypothalamic tissues of fructose-fed adolescent (F, orange) and control adolescent (C, light blue) rats, young-adult fructose-rescued (FR, green) and young-adult control rescued (CR, red) rats. Dendrograms on the left report the protein grouping and distance between protein classes, while dendrograms on the top report the sample grouping. Normalized area ranges and Eculidean distance were used; scaled expression values of each range are plotted in green to red through black color scale.

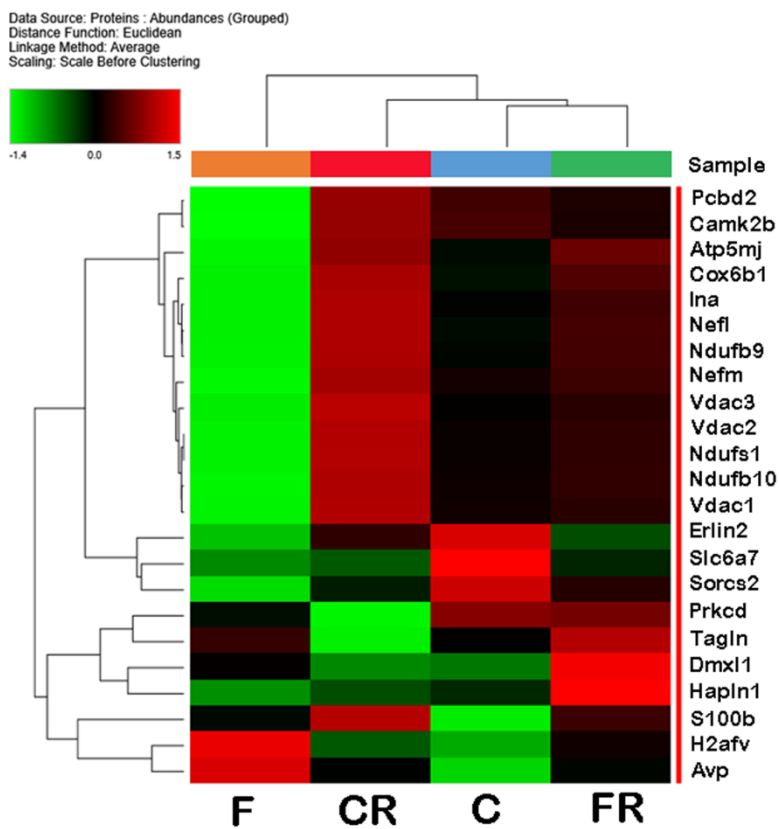


Figure S3. Adiponectin level in plasma

Adiponectin concentration was measured in plasma samples of control adolescent (C), fructose-fed adolescent (F), young-adult control rescued (CR), and young-adult fructose-rescued (FR) rats.

All the plasma samples were adjusted to protein concentration of 10 $\mu\text{g}/\mu\text{L}$ and 5 μL of each sample were analyzed by 12.5 % SDS PAGE and western blotting. Immunocomplexes were detected by rabbit anti-adiponectin and GAR-HRP IgGs. Densitometric data are reported as means \pm SEM of 6 different rats from each experimental group. ** $p < 0.01$ vs C; # $p < 0.05$ vs CR (one-way Anova followed by Bonferroni post-test).

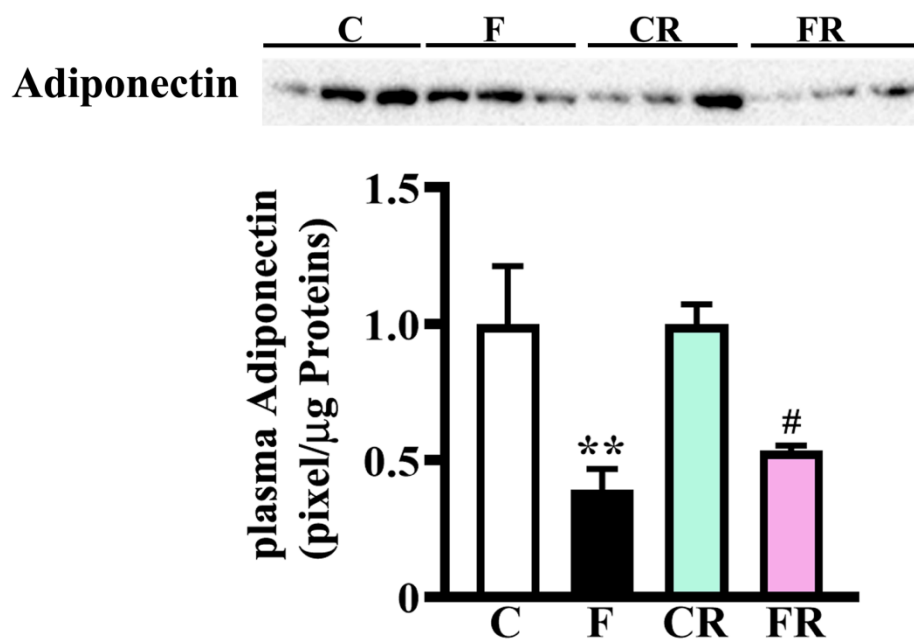


Figure S3