Supplementary Material for

**Influence of prenatal stress on metabolic abnormalities induced by postnatal intake of a high-fat diet in female and male BALB/c mice**

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Table S1: Detailed composition of the diets used. Briefly, fat and butter are weighed and melted. Then, the standard food pellets are cut to the middle and soaked into the mixture until it is completely absorbed.

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| --- | --- | --- |
|  | **Standard Diet** | **High-fat diet** |
|  | **Grams** | **% Kcal** | **Grams** | **% Kcal** |
| **Total protein** | 25,12 | 33,93 | 17,06 | 14,82 |
| **Carbohydrates** | 32,05 | 43,28 | 21,53 | 18,71 |
| **Lard** | 7,5 | 22,79 | 34,00 | 66,47 |
| **\*saturated** | 32,45% |   | 52,90% |   |
| **\*Monounsaturated** | 27,86% |   | 35,20% |   |
| **\*Polyunsaturated** | 39,69% |   | 11,91% |   |

Table S2: List of primer sequences for quantitative assessment of mRNA expression.

|  |  |  |  |
| --- | --- | --- | --- |
| **Gene** | **Sequence** | **Amplicon length (bp)** | **T° annealing** |
| **Adiponectin** | Fw: 5'-GATGGCAGAGATGGCACTCC-3' | 173 | 60 |
| Rv: 5'-GAGCGATACACATAAGCGGC-3' |
| **Resistin** | Fw: 5'-TGTCCTGCTAAGTCCTCTGC-3' | 256 | 60 |
| Rv: 5'-CAAGACTGCTGTGCCTTCTG-3' |
| **Leptin** | Fw: 5'-AGCTGCAAGGTGCAAGAAGA-3' | 193 | 60 |
| Rv: 5'-GGATACCGACGTGTGTGAAATG-3' |
| **IL-1β** | Fw: 5'-GCCACCTTTTGACAGTGATG-3' | 165 | 58 |
| Rv: 5'-AGTGATACTGCCTGCCTGAA-3' |
| **SIRT1** | Fw: 5'-GCAGGTTGCAGGAATCCAAA-3' | 176 | 62 |
| Rv: 5'-CTGGCTTCATGATGGCAAGTG-3' |
| **GAPDH** | Fw: 5'-CGTCCCGTAGACAAAATGGT-3' | 177 | 60 |
| Rv: 5'-GAATTTGCCGTGAGTGGAGT-3' |

Figure S1: Body weight at 28 weeks old. Body weight was recorded at the time of the sacrifice, after 24 week of diet. A three-way ANOVA was performed to analyze the effect of diet, sex and prenatal treatment on body weight. No significant interaction was detected. We observed significant differences due to diet (F(1,34)=35.30 p<0.0001), sex (F(1,34)=18.57 p<0.001) and prenatal treatment (F(1,34)=14.22 p<0.001). All values are presented as mean ± standard error (n=5-6 mice in each group). Results of post-hoc analysis are shown as:\* p<0.05, \*\* p<0.001.



Figure S2: Visceral adipose tissue weight at 28 weeks old. Visceral adipose tissue weight was recorded at sacrifice, after 24 weeks of diet. A three-way ANOVA was performed to analyze the effect of diet, sex and prenatal treatment on visceral adipose tissue weight. We found a significant interaction between prenatal treatment and diet (F(1,34)=5.5187 p<0.05. All values are presented as mean ± standard error (n=5-6 mice in each group). Results of planned comparisons for visceral adipose tissue are shown as: \* p<0.05, \*\* p<0.001 and \*\*\* p<0.001.

