

Figure S1. Maternal high-fat diet during pregnancy did not disturb T-cell homeostasis in thymus and periphery in offspring under the steady state. Flow cytometry (A), proportion and number (B) of thymocytes in NCD and HFD mice. Flow cytometry (C), proportions and numbers (D) of CD4⁺ and CD8⁺ T-cells in the spleens. Proportions and numbers of naïve (CD44^{lo}CD62L^{hi}), effector memory (T_{EM}, CD44^{hi}CD62L^{lo}) and central memory (T_{CM}, CD44^{hi}CD62L^{hi}) cells in CD4⁺ (E,F) and CD8⁺ (G,H) T-cells in spleens. Flow cytometry (I), proportions and numbers (J) of CD25⁺ Foxp3⁺ T_{reg} cells gated from splenic CD4⁺ T-cells. (K) *Il-10* mRNA expression level of splenic naïve CD4⁺ T-cells. *p* values were determined by a Student's *t*-test. Each dot indicates a value acquired from a single mouse. Data are presented as means ± SEM. *n*, Number of mice in each group. *ns*, not significant.

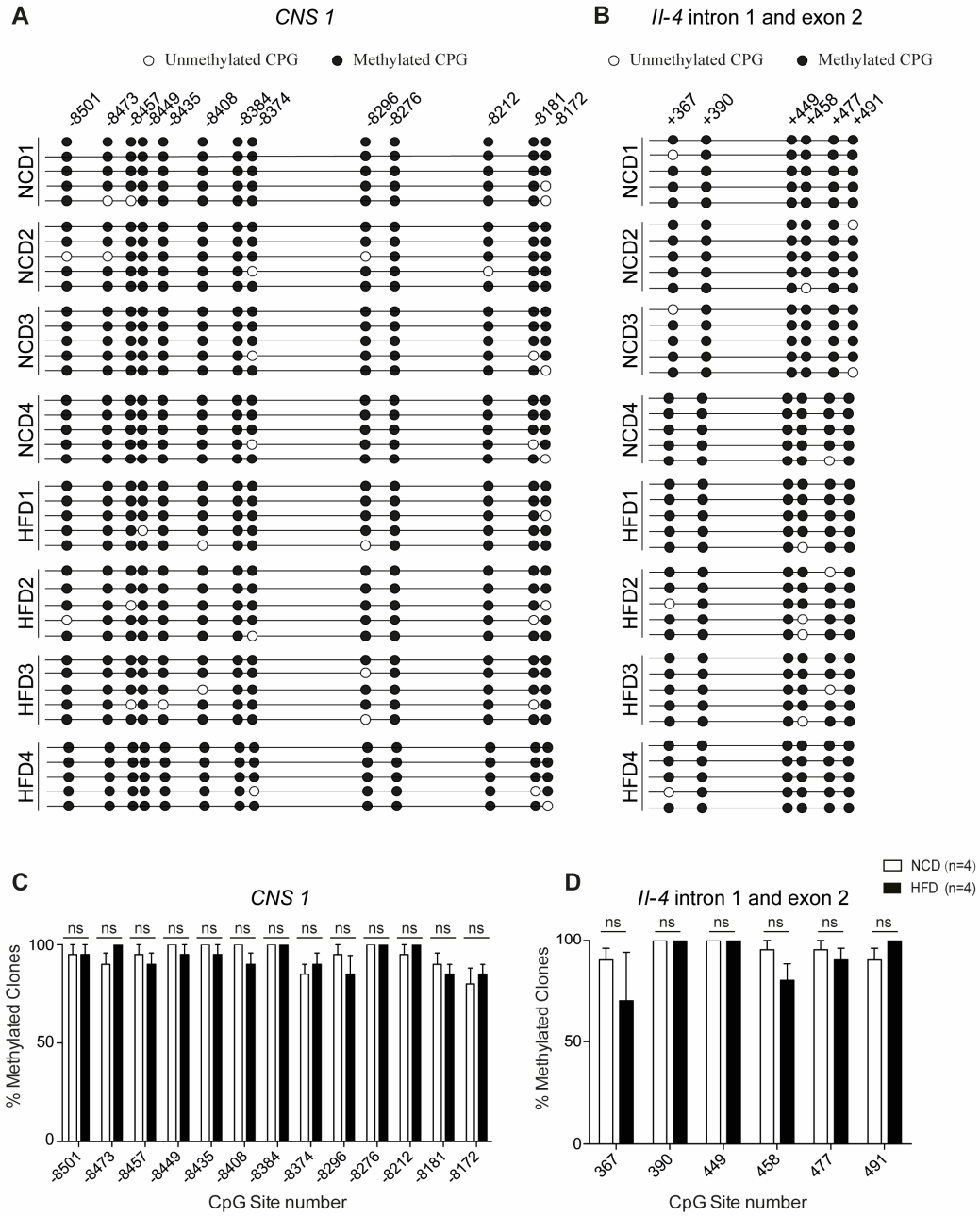


Figure S2. Regulatory regions of Th2 cytokine locus *CNS 1*, *Il-4* intron 1 and exon 2 were not differentially methylated in NCD and HFD naïve CD4⁺ T-cells. Naïve CD4⁺ T-cells were assessed for *Il-4* promoter region methylation via bisulfite sequencing (A-D). Representative data and quantifications of methylation at CpG sites of the *CNS 1* (A,C) and *Il-4* intron 1 and exon 2 locus (B,D) in naïve CD4⁺ T cells were shown. *p* values were determined by Student's *t*-test. Data are shown as means ± SEM. *n*, Number of mice in each group. *ns*, not significant.

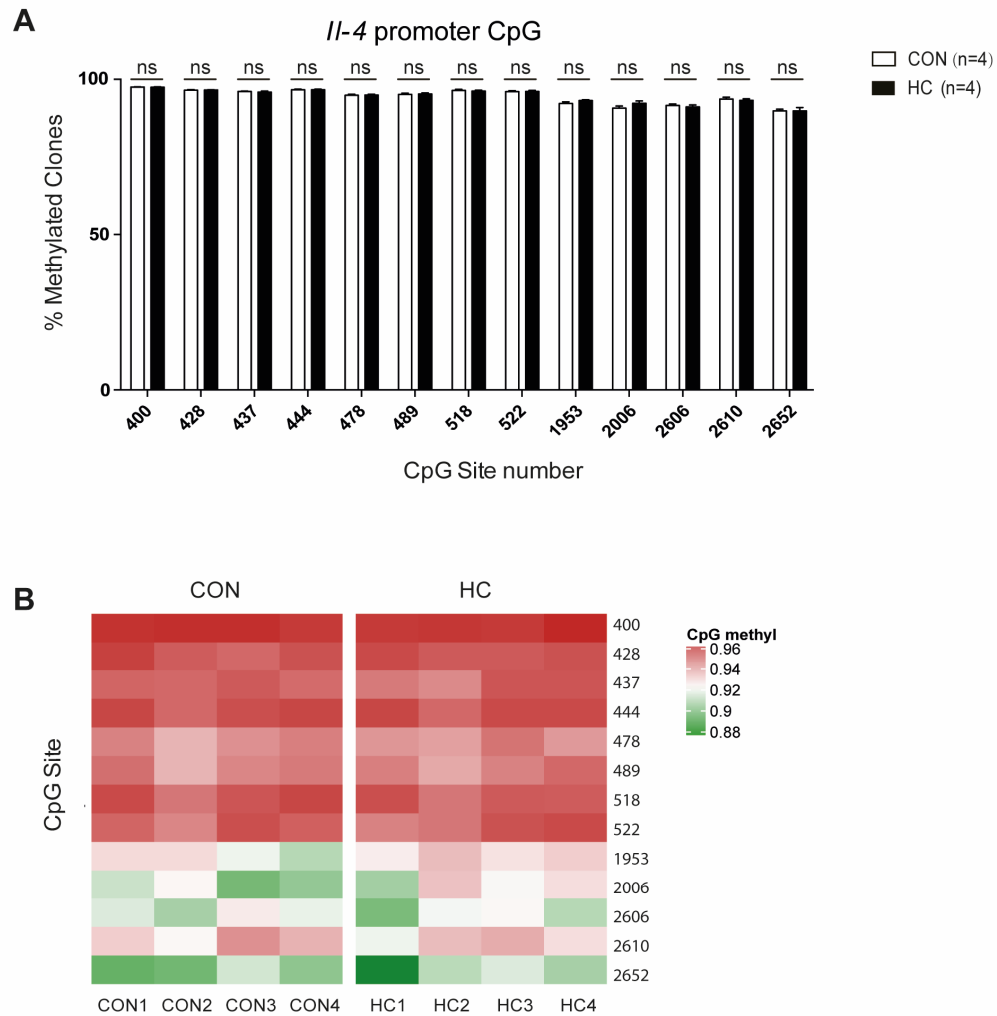


Figure S3. Methylation level of *Il-4* promoter region were comparable in cord blood CD4⁺ T-cells between CON and HC. CD4⁺ T-cells were isolated from cord blood and assessed for methylation status in *Il-4* promoter locus via targeted bisulfite sequencing. **(A,B)** Quantifications of methylation at CpG sites of the *Il-4* promoter region. *ns*, not significant.