

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Differential expressed genes (LD vs CD) from DEseq2.

File Name: Supplementary Data 2

Description: a - Overlap of H3K27ac peaks between each replicate

b - H3K27ac differentially enriched regions(LD vs CD) from Diffbind

File Name: Supplementary Data 3

Description: a - Metrics of Hi-C and CHI-C sequencing and processing by HiCUP.

b - Genomic coordinates of topological domains(TAD) mapped in LD and CDHi-C libraries.

c - Rewired promoter interactions by Diet

File Name: Supplementary Data 4

Description: a - Hnf4a differentially enriched regions (LD vs CD) from Diffbind

b C/EBPa differentially enriched regions (LD vs CD) from Diffbind

File Name: Supplementary Data 5

Description: a - Primers for qPCR

b - Primers for CHIP-qPCR

File Name: Supplementary Data 6

Description: Metrics of ChIP-seq data in current study

File Name: Supplementary Data 7

Description: The caloric breakdown of the three diets employed in this study are presented along with details of the formulation for each specific regimen.