

## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1

Description: Histopathologic analyses – Percent of prostatic intraepithelial neoplasia

File Name: Supplementary Data 2

Description: Metabolomics data (VP) – Scaled data and statistics

File Name: Supplementary Data 3

Description: Metabolomics data (VP) – Metabolites and pathways altered by high-fat diet in a MYC context

File Name: Supplementary Data 4

Description: MSEA (VP) – HFD\_MYC vs CTD\_MYC

File Name: Supplementary Data 5

Description: Metabolomics data (VP) – Metabolites and pathways altered by high-fat diet in a WT context

File Name: Supplementary Data 6

Description: Global chromatin profiling – Normalized values

File Name: Supplementary Data 7

Description: GSEA Hallmark – Murine VP

File Name: Supplementary Data 8

Description: GSEA Chemical and genetic perturbations – Murine VP

File Name: Supplementary Data 9

Description: Murine prostatic MYC signature

File Name: Supplementary Data 10

Description: GSEA Hallmark – HPFS/PHS animal fat intake

File Name: Supplementary Data 11

Description: MYC\_targets\_V1 – HPFS/PHS leading edge, non-leading edge and randomly picked genes

File Name: Supplementary Data 12

Description: GSEA Hallmark – HPFS/PHS saturated fat intake

File Name: Supplementary Data 13

Description: GSEA Hallmark – HPFS/PHS monounsaturated fat intake

File Name: Supplementary Data 14

Description: GSEA Hallmark – HPFS/PHS polyunsaturated fat intake

File Name: Supplementary Data 15

Description: Metabolomics data (Serum) – Scaled data and statistics

File Name: Supplementary Data 16

Description: Metabolomics data (VP) – Raw data

File Name: Supplementary Data 17

Description: Metabolomics data (VP) – OrigScale data

File Name: Supplementary Data 18

Description: Metabolomics data (Serum) – Raw data

File Name: Supplementary Data 19

Description: MSEA – Hand-curated metabolite sets

File Name: Supplementary Data 20

Description: Global chromatin profiling – Histone marks and peptides targeted

File Name: Supplementary Data 21

Description: Saturated fat intake by quintile and cohorts