

Description of Additional Supplementary Files

File name: Supplementary Data 1

Description: Circulating metabolites included as the outcomes in this study

File name: Supplementary Data 2

Description: Genetic instruments selected for each exposure

File name: Supplementary Data 3

Description: Effect of genetically predicted fasting glucose (FG, mmol/L) on 167 circulating metabolites (SD)

File name: Supplementary Data 4

Description: Effect of genetically predicted 2-hour glucose (2hGlu, mmol/L) on 167 circulating metabolites (SD)

File name: Supplementary Data 5

Description: Effect of genetically predicted glycated hemoglobin (HbA1c, %) on 167 circulating metabolites (SD)

File name: Supplementary Data 6

Description: Effect of genetically predicted glycated hemoglobin (HbA1c, %) on 167 circulating metabolites (SD) after adjusted for hemoglobin level

File name: Supplementary Data 7

Description: Effect of genetically predicted fasting insulin (FI, log transformed pmol/L) on 167 circulating metabolites (SD)

File name: Supplementary Data 8

Description: Effect of genetic liability to type 2 diabetes (log odds) on 167 circulating metabolites (SD)

File name: Supplementary Data 9

Description: Effect of genetically predicted circulating metabolites (SD) on fasting glucose (FG, mmol/L)

File name: Supplementary Data 10

Description: Effect of genetically predicted circulating metabolites (SD) on 2-hour glucose (2hGlu, mmol/L)

File name: Supplementary Data 11

Description: Effect of genetically predicted circulating metabolites (SD) on glycated hemoglobin (HbA1c, %)

File name: Supplementary Data 12

Description: Effect of genetically predicted circulating metabolites (SD) on fasting insulin (FI, log transformed pmol/L)

File name: Supplementary Data 13

Description: Effect of genetically predicted circulating metabolites (SD) on type 2 diabetes risk (log odds, DIAMANTE, Mahajan 2018, no UKB)