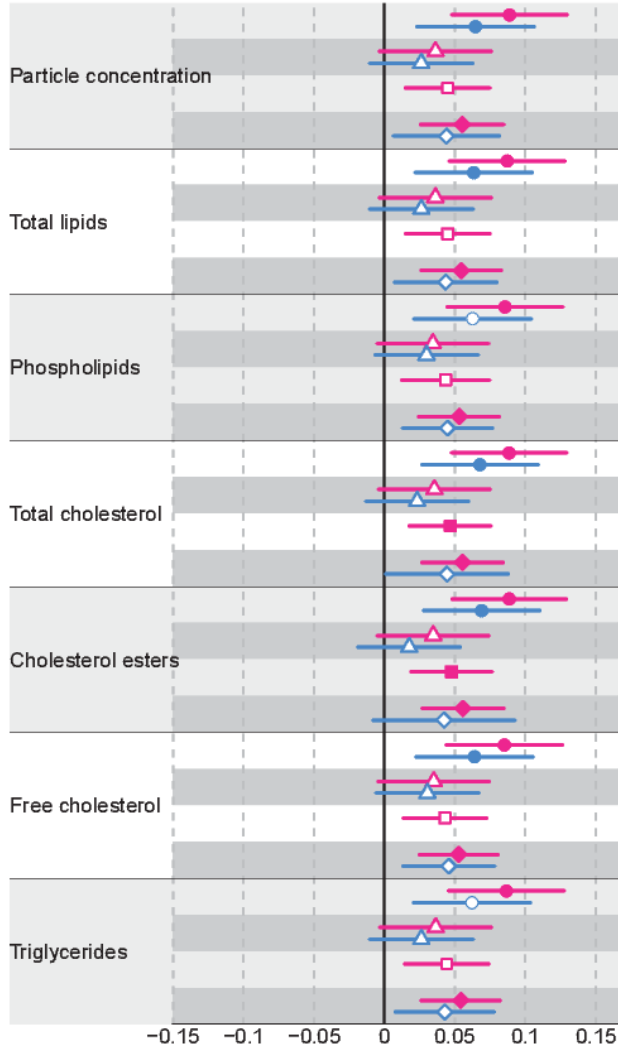
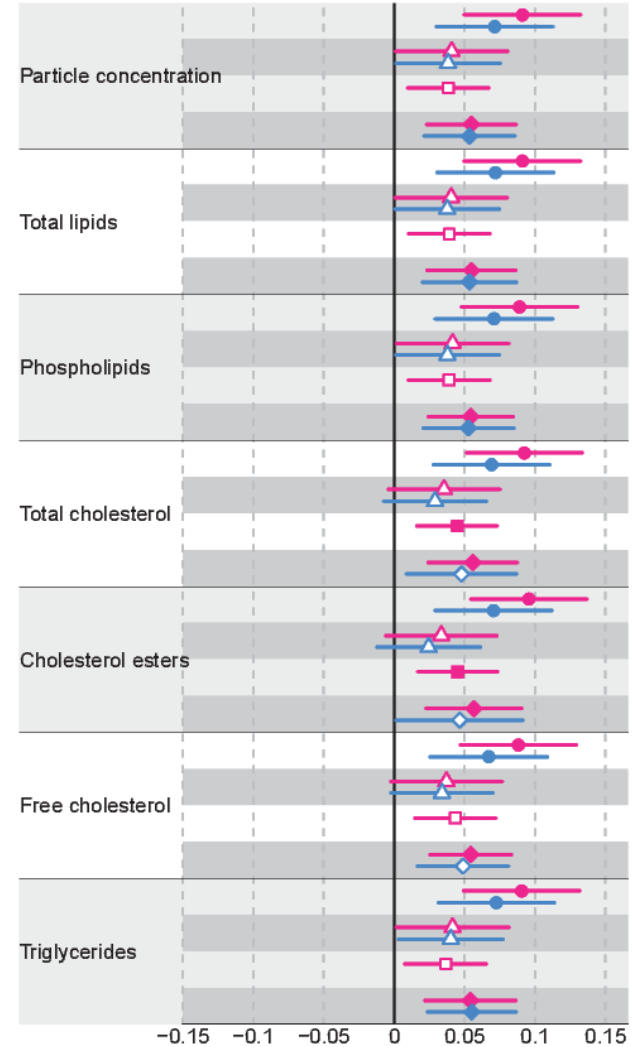


**S3 Fig.** Two-stage IPD meta-analysis and individual cohort associations: offspring lipoprotein, lipids and metabolite differences per 1-SD higher maternal (pink) or paternal (blue) BMI.

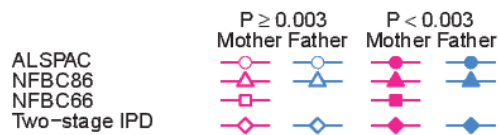
**Lipoprotein subclasses**  
Extremely large VLDL



Very large VLDL



SD difference in offspring metabolite concentration (95%CI) per 1-SD of parental BMI increment



\*  $P < 0.003$  for parental difference

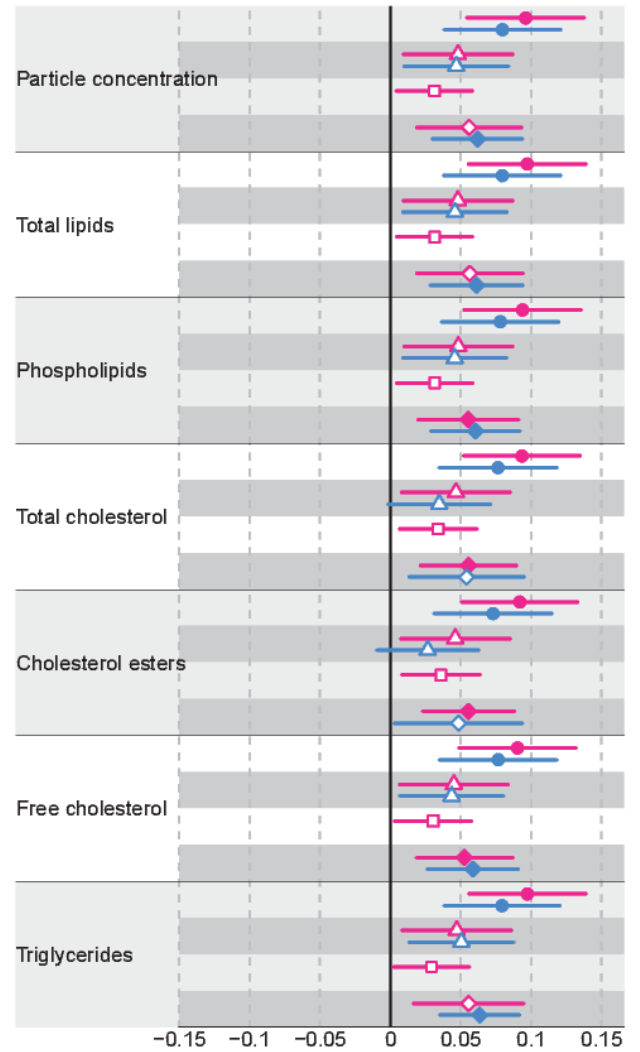
S3 Fig continued.

Lipoprotein subclasses

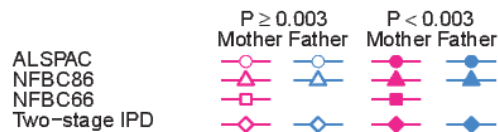
Large VLDL



Medium VLDL



SD difference in offspring metabolite concentration (95%CI) per 1-SD of parental BMI increment



\* P < 0.003 for parental difference

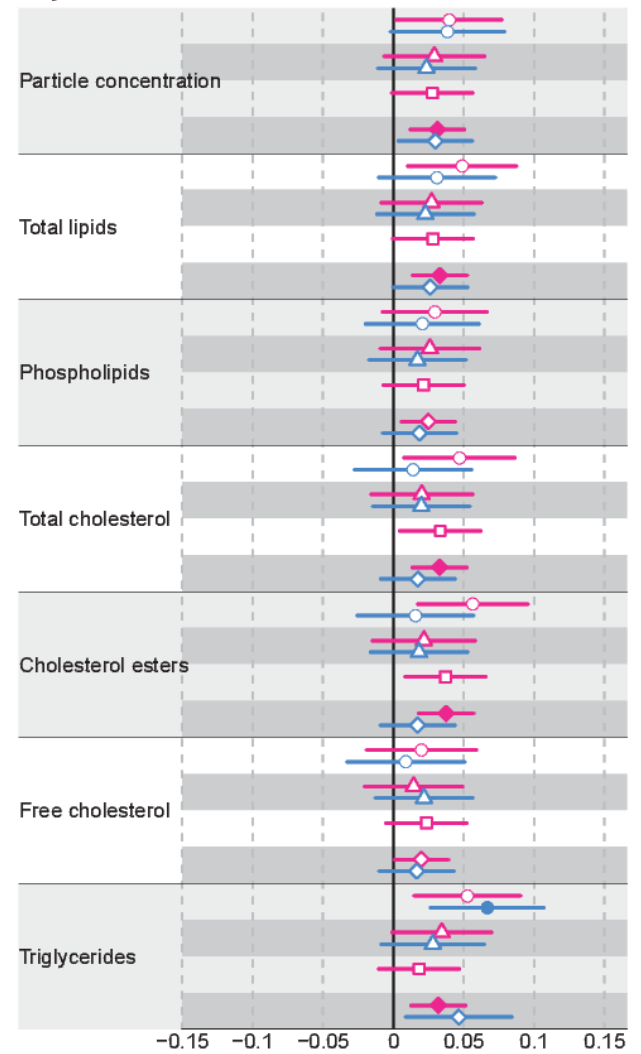
S3 Fig continued.

Lipoprotein subclasses

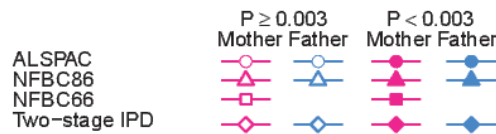
Small VLDL



Very Small VLDL



SD difference in offspring metabolite concentration (95%CI) per 1-SD of parental BMI increment

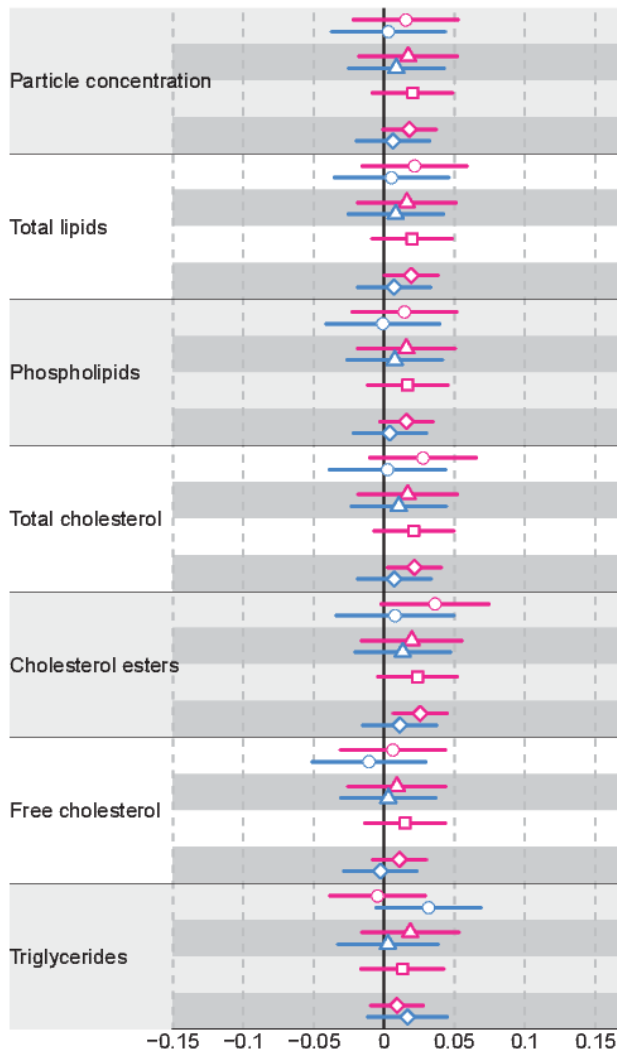


\* P < 0.003 for parental difference

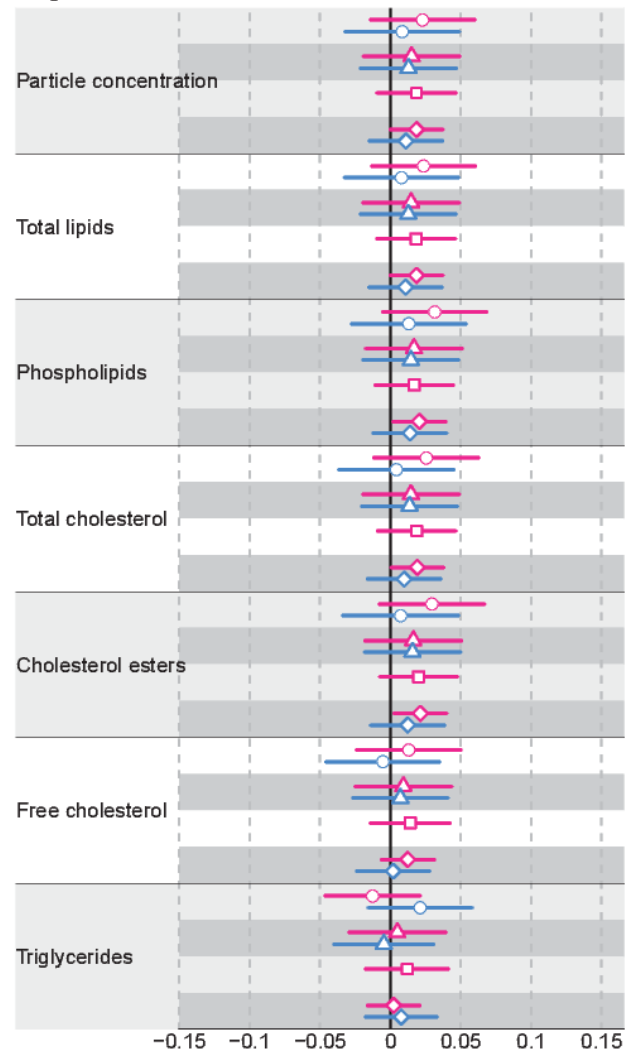
S3 Fig continued.

Lipoprotein subclasses

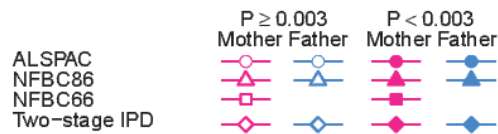
IDL



Large LDL



SD difference in offspring metabolite concentration (95%CI) per 1-SD of parental BMI increment

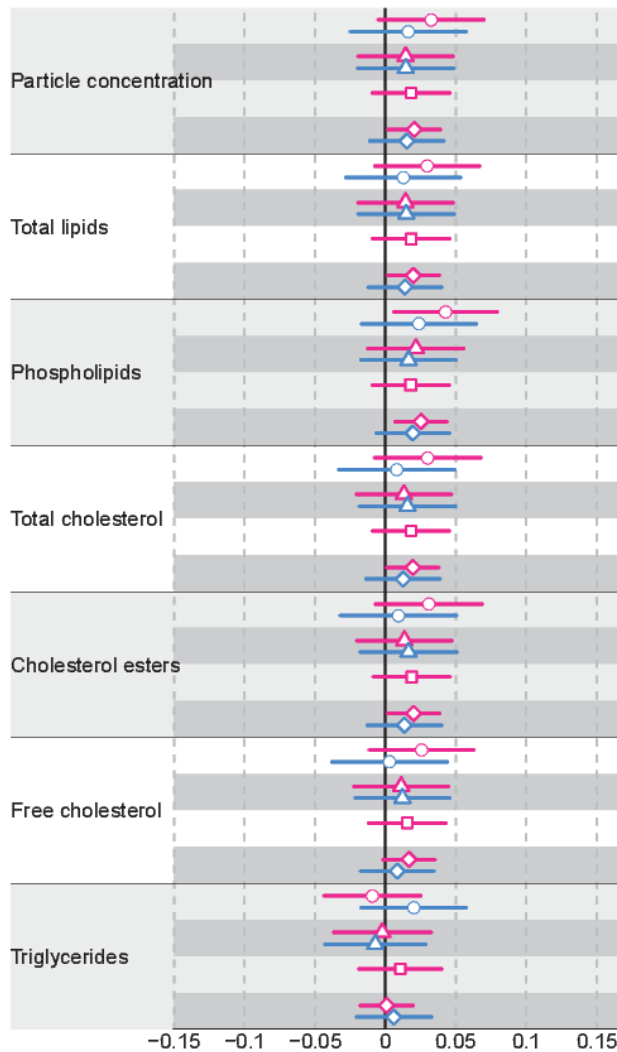


\* P < 0.003 for parental difference

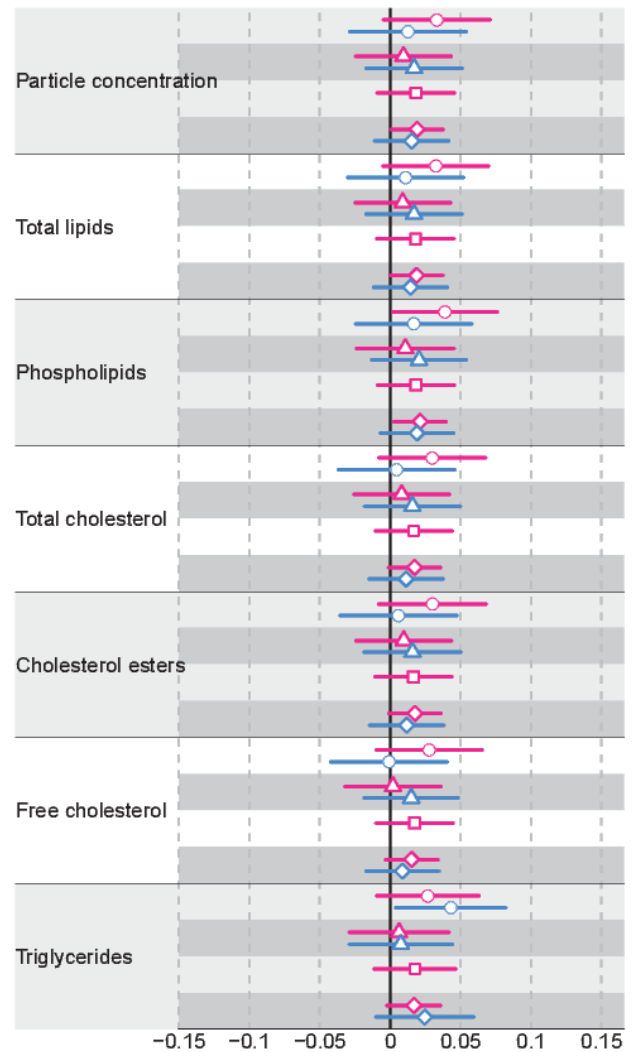
S3 Fig continued.

Lipoprotein subclasses

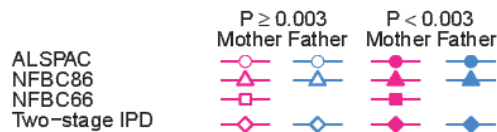
Medium LDL



Small LDL



SD difference in offspring metabolite concentration (95%CI) per 1-SD of parental BMI increment

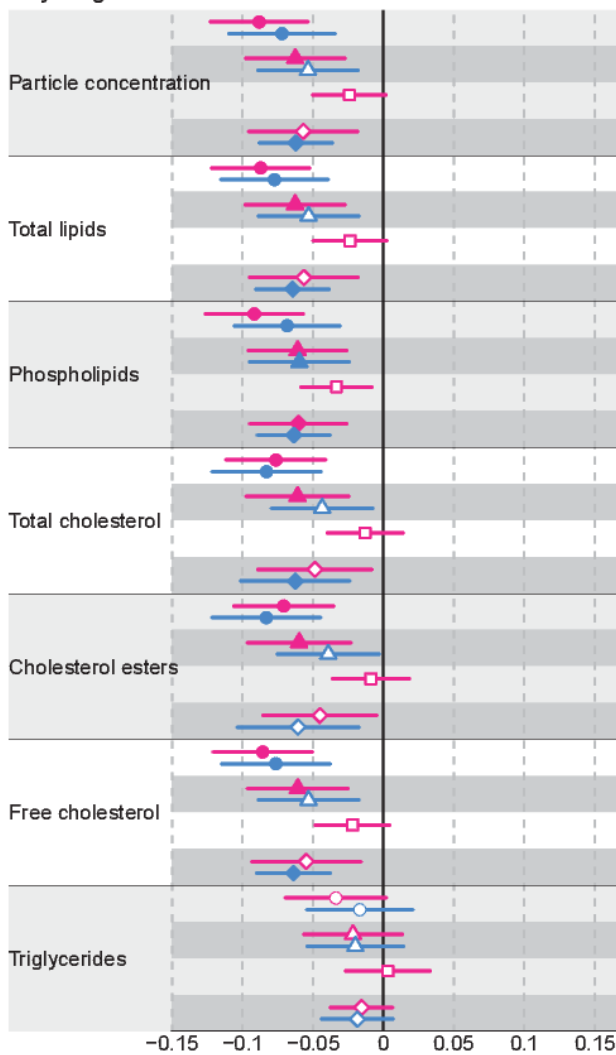


\* P < 0.003 for parental difference

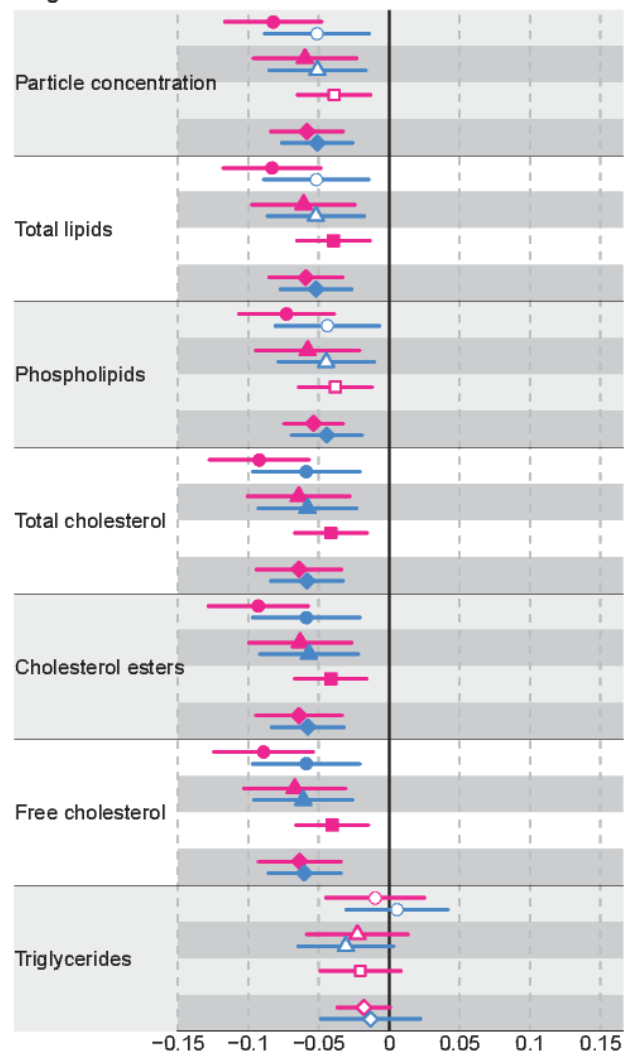
S3 Fig continued.

Lipoprotein subclasses

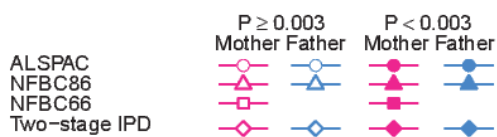
Very large HDL



Large HDL



SD difference in offspring metabolite concentration (95%CI) per 1-SD of parental BMI increment

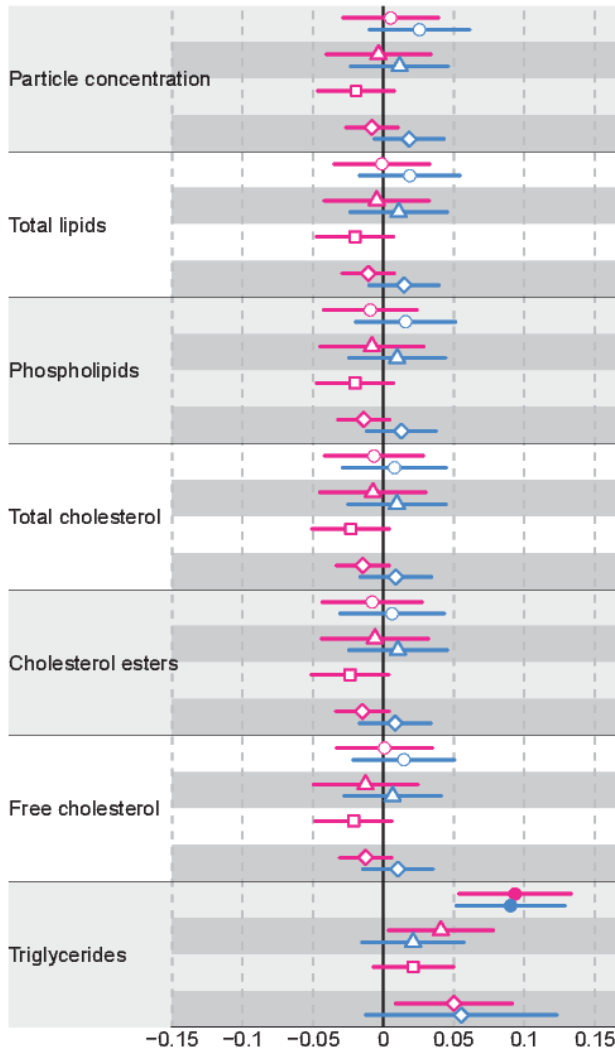


\* P < 0.003 for parental difference

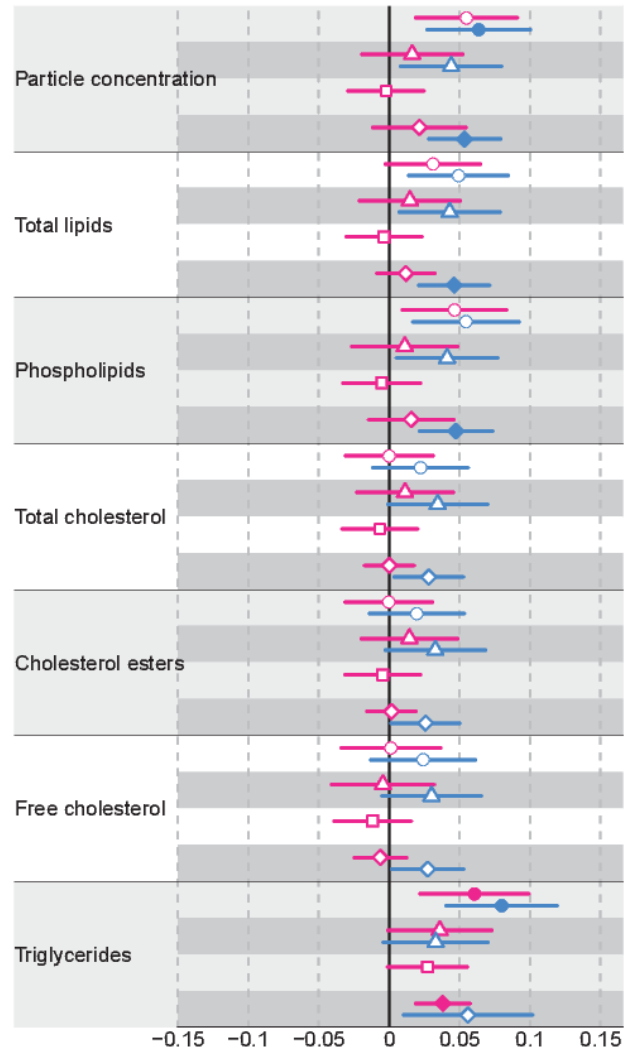
S3 Fig continued.

Lipoprotein subclasses

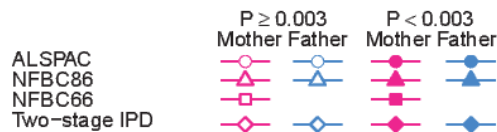
Medium HDL



Small HDL



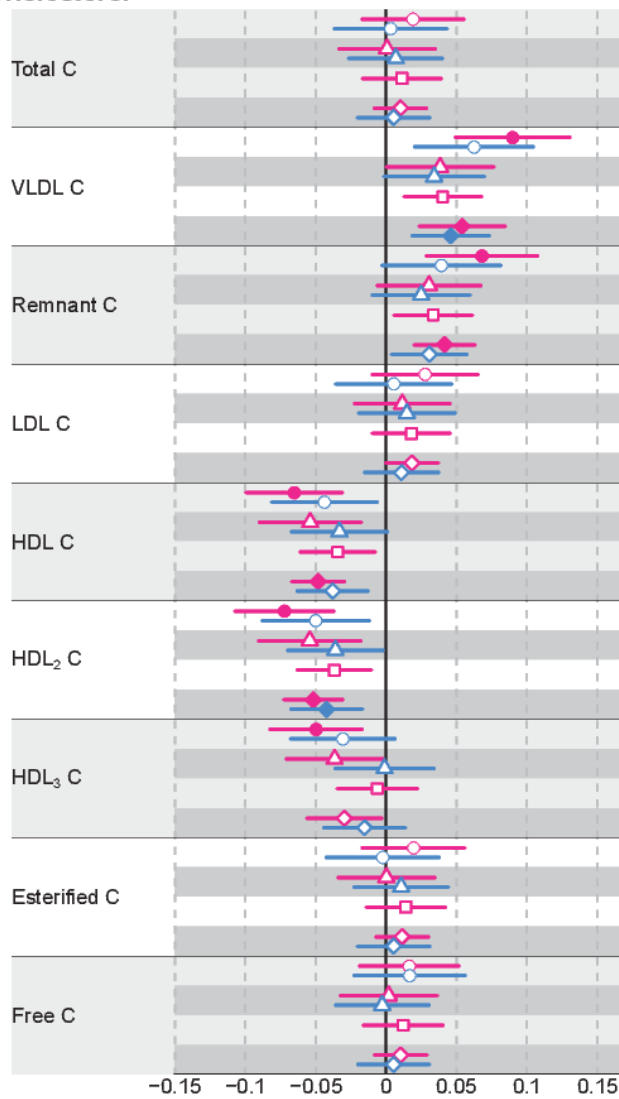
SD difference in offspring metabolite concentration (95%CI) per 1-SD of parental BMI increment



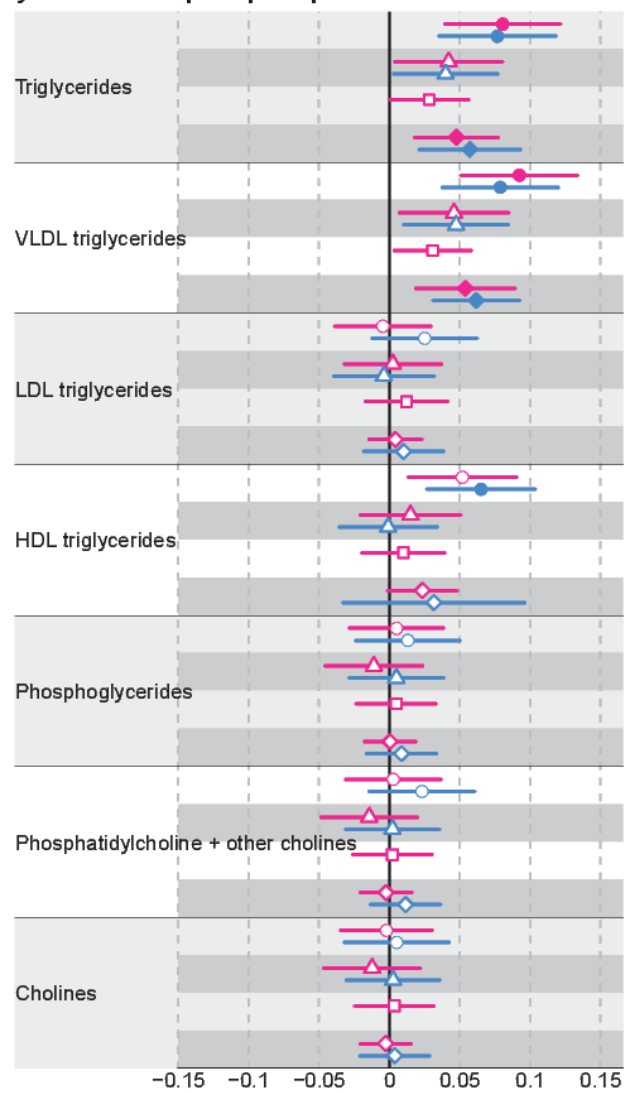
\*  $P < 0.003$  for parental difference

S3 Fig continued.

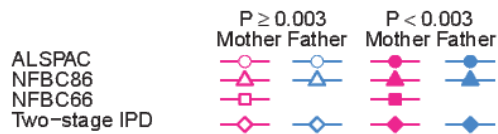
**Cholesterol**



**Glycerides and phospholipids**



SD difference in offspring metabolite concentration (95%CI) per 1-SD of parental BMI increment

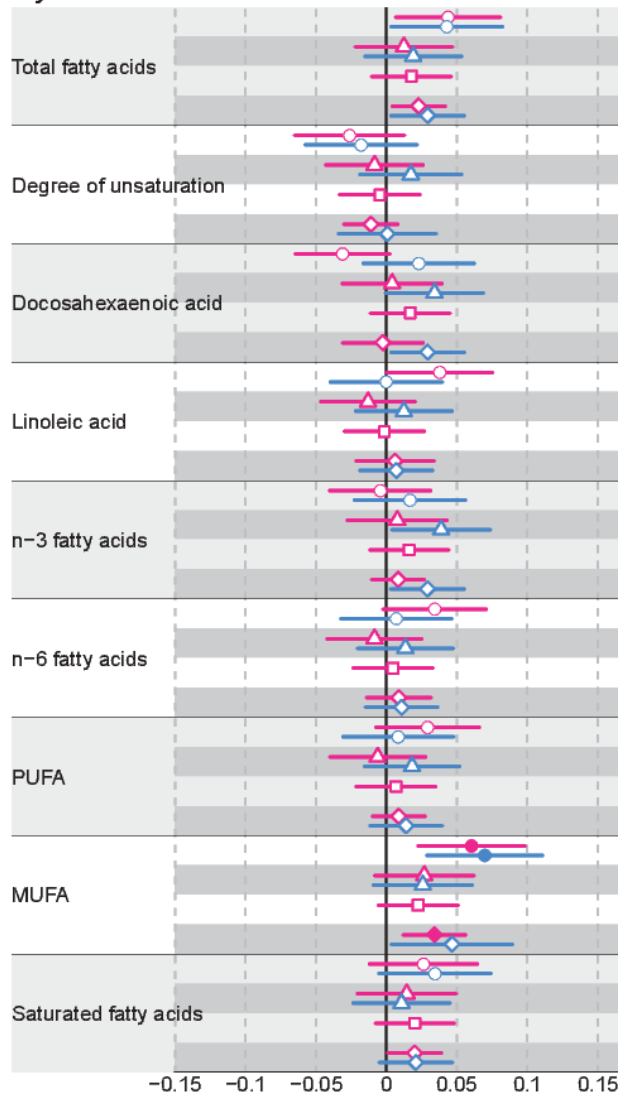


\* P < 0.003 for parental difference

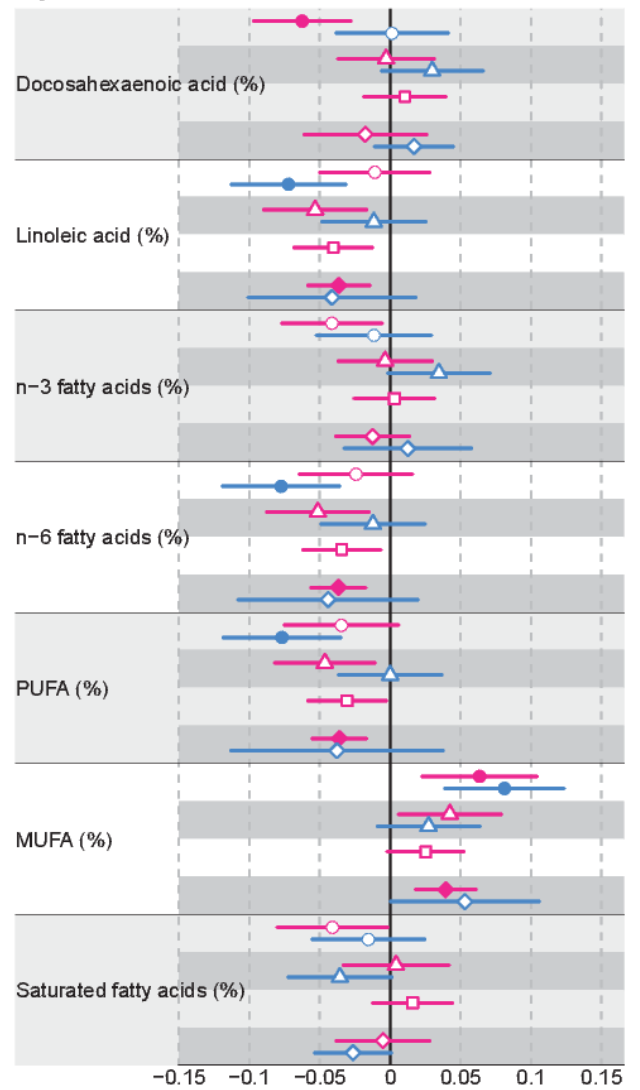


S3 Fig continued.

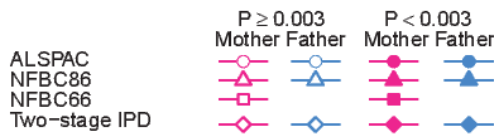
**Fatty acids**



**Fatty acids ratios**



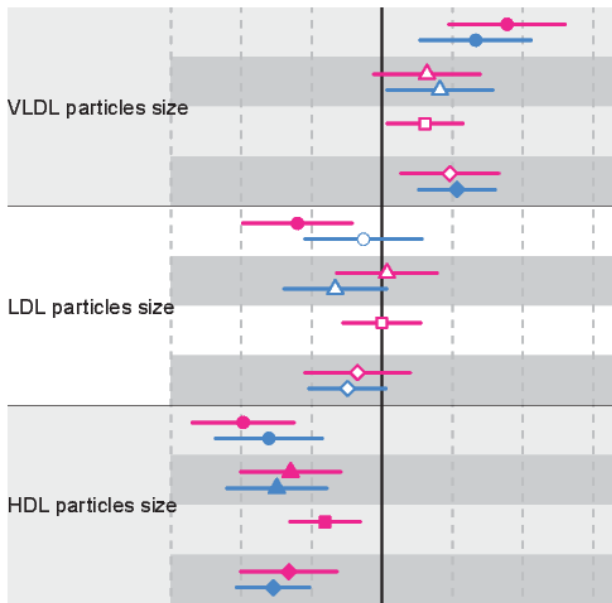
SD difference in offspring metabolite concentration (95%CI) per 1-SD of parental BMI increment



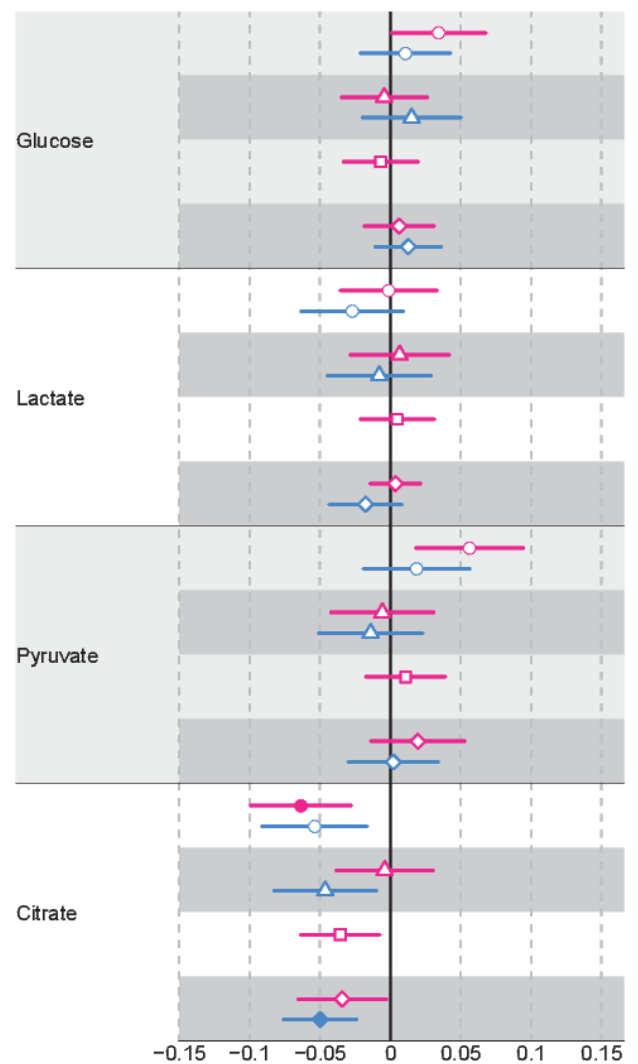
\*  $P < 0.003$  for parental difference

S3 Fig continued.

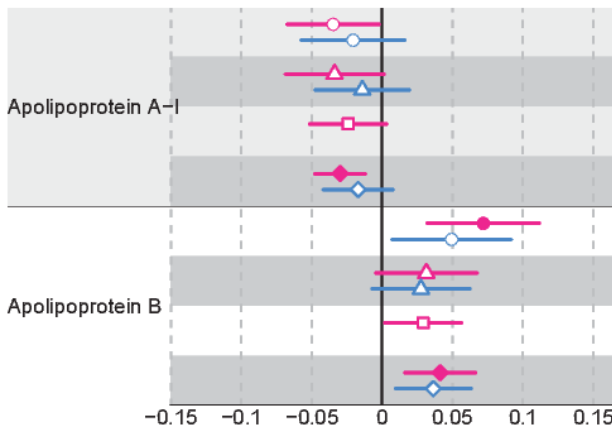
**Lipoprotein particle size**



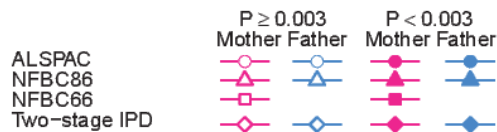
**Glycolysis related metabolites**



**Apolipoproteins**

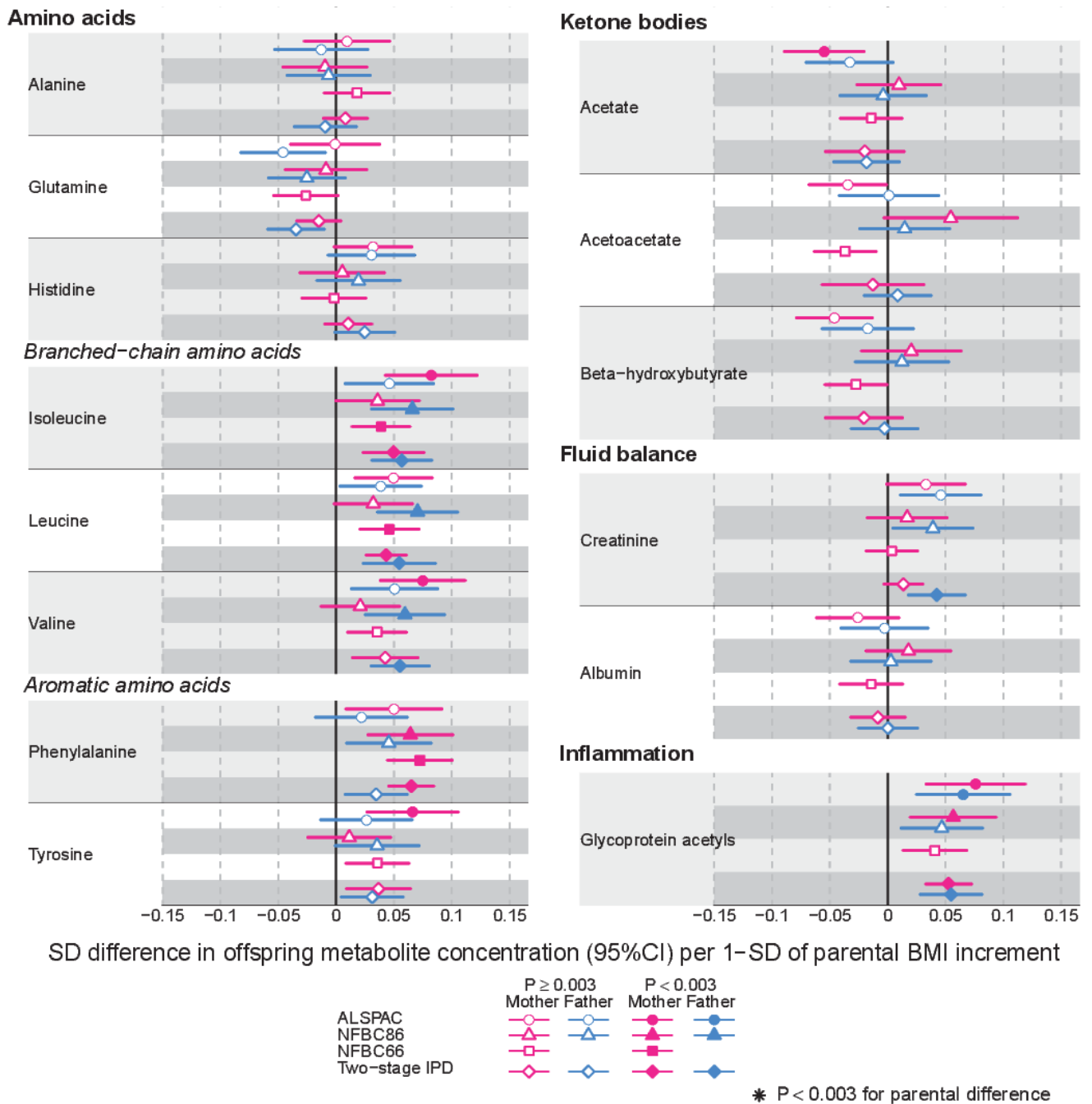


SD difference in offspring metabolite concentration (95%CI) per 1-SD of parental BMI increment



\* P < 0.003 for parental difference

S3 Fig continued.



Associations were adjusted for parental age, smoking status, education, head of household social class, maternal parity, offspring's age at blood collection and sex. Results are shown in SD-scaled concentration units of outcome, changes in absolute concentration units are listed in S4-S6 Tables. Error bars= 95% confidence intervals (CI). VLDL=very-low-density lipoprotein; IDL=intermediate-density lipoprotein; LDL=low-density lipoprotein; HDL=high-density lipoprotein; C= cholesterol; MUFA=monounsaturated fatty acids; PUFA=polyunsaturated fatty acids.