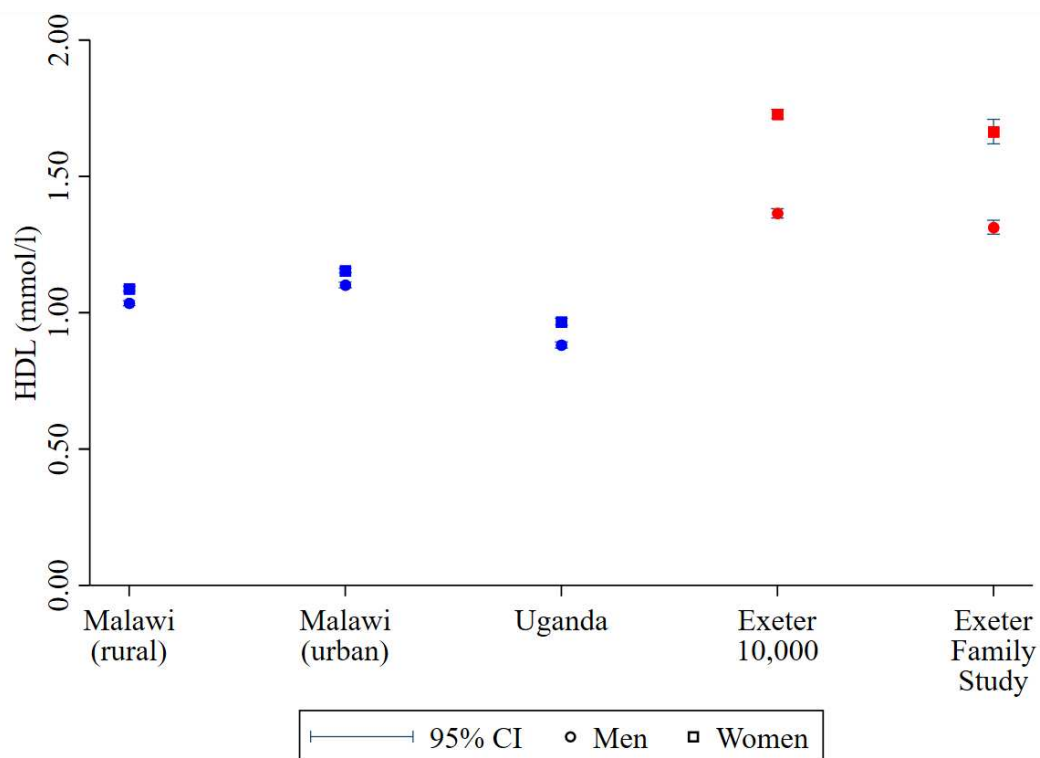
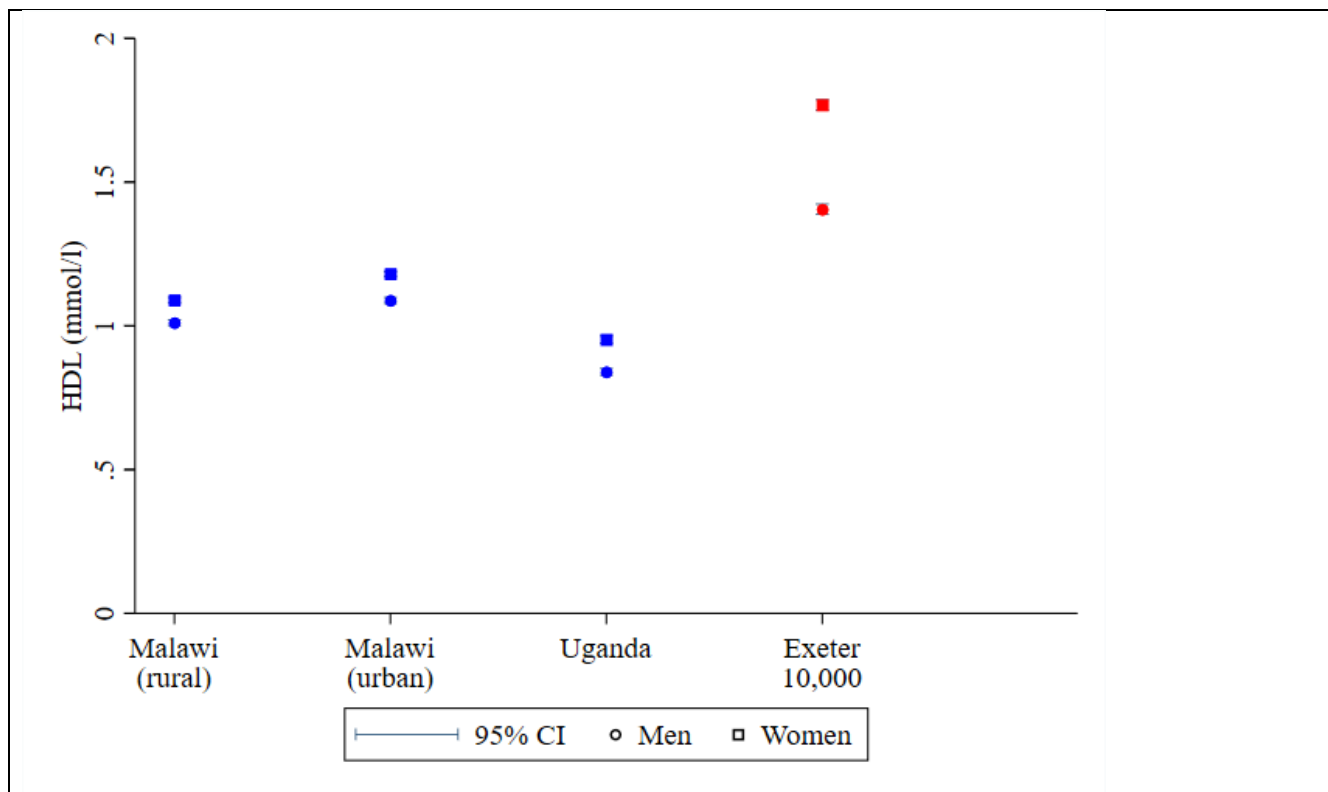


Supplementary table 1: Age and BMI of participants with complete and missing lipid and sex data					
	Malawi (rural)	Malawi (urban)	Uganda	EXTEND	EFS
Complete lipids and sex data					
n	10,428	11,180	4,601	7,288	1,458
Age (years)	34 (25, 47)	29 (22, 37)	40 (27, 54)	56 (43, 66)	32 (29, 35)
BMI (kg/m ²)	22 (22, 23)	24 (24, 24)	22 (22, 22)	26 (26, 26)	26 (25, 26)
Missing lipids data					
n	1,586	3,407	25	1,639	100
Age (years)	33 (24, 52)	28 (22, 36)	45 (36, 72)	52 (41, 65)	32 (29, 36)
BMI (kg/m ²)	22 (22, 22)	23 (23, 23)	21 (19, 22)	26 (26, 26)	27 (26, 28)
Missing sex data					
n	0	0	40	0	0
Age (years)	-	-	37 (28, 53)	-	-
BMI (kg/m ²)	-	-	21 (20, 22)	-	-
Age is median (IQR) and BMI is geometric mean (95% CI)					



Supplementary figure 2: Geometric mean HDL for each cohort, adjusted to the median age of the participants in the Malawian cohort.



Supplementary figure 3: Geometric mean HDL for each cohort, adjusted to the median age of the participants in the Malawian cohort, and for smoking status and alcohol consumption.

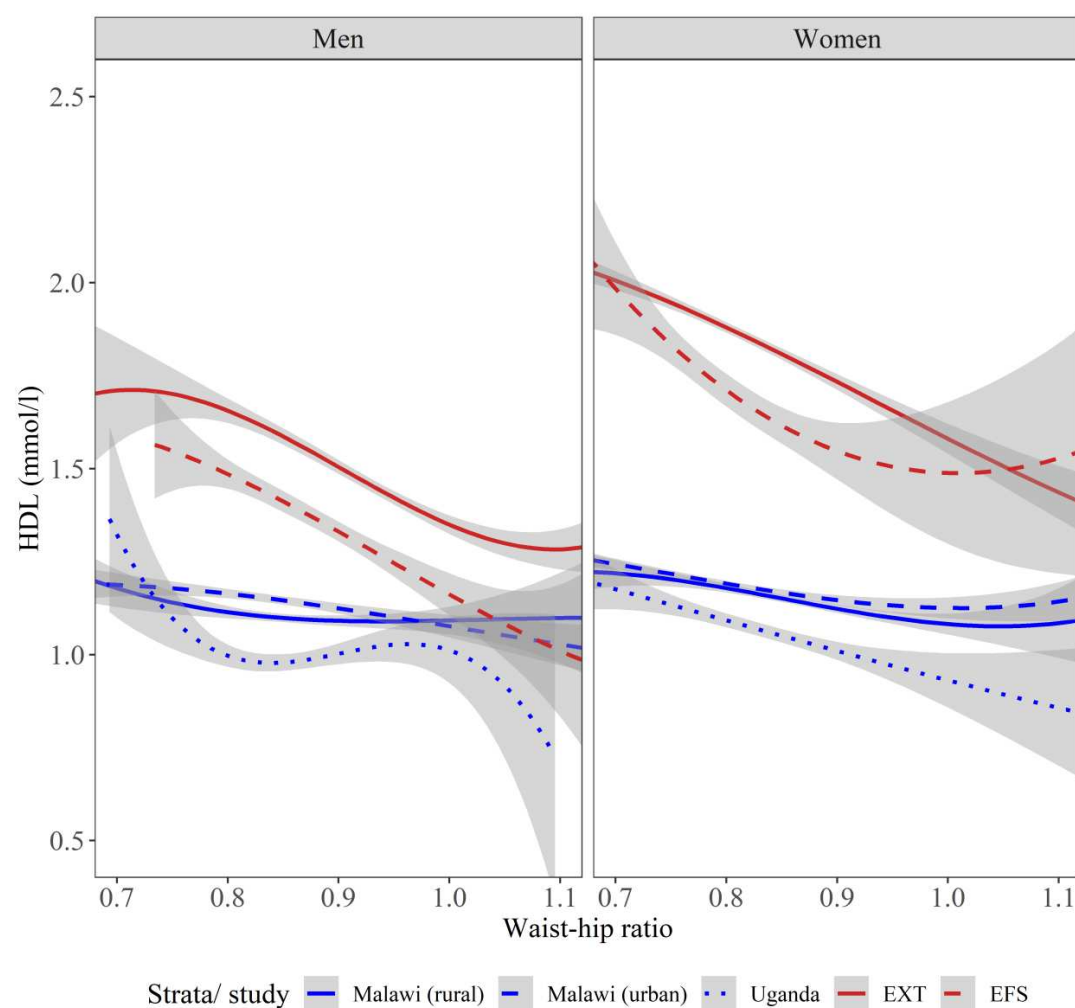
Supplementary table 2: Linear regression with HDL as the dependent variable and measures of socioeconomic status as independent variables.

Relationship between socio-economic status and HDL	Men	Women
Malawi (rural): Household possession score	0.00 (-0.00, 0.00) p=0.789	0.00 (-0.00, 0.01) p=0.117
Malawi (urban): Household possession score	-0.00 (-0.01, -0.00) p=0.039	0.01 (0.01, 0.01) p<0.0001
Uganda: Socio-economic score	0.00 (-0.01, 0.02) p=0.774	0.03 (0.01, 0.04) p<0.0001
Exeter 10,000: Index of multiple deprivation	0.00 (-0.00, 0.00) p=0.475	0.00 (0.00, 0.00) p=0.001
Exeter Family Study: Index of multiple deprivation	-0.00 (-0.00, 0.00) p=0.163	-0.00 (-0.01, 0.00) p=0.124

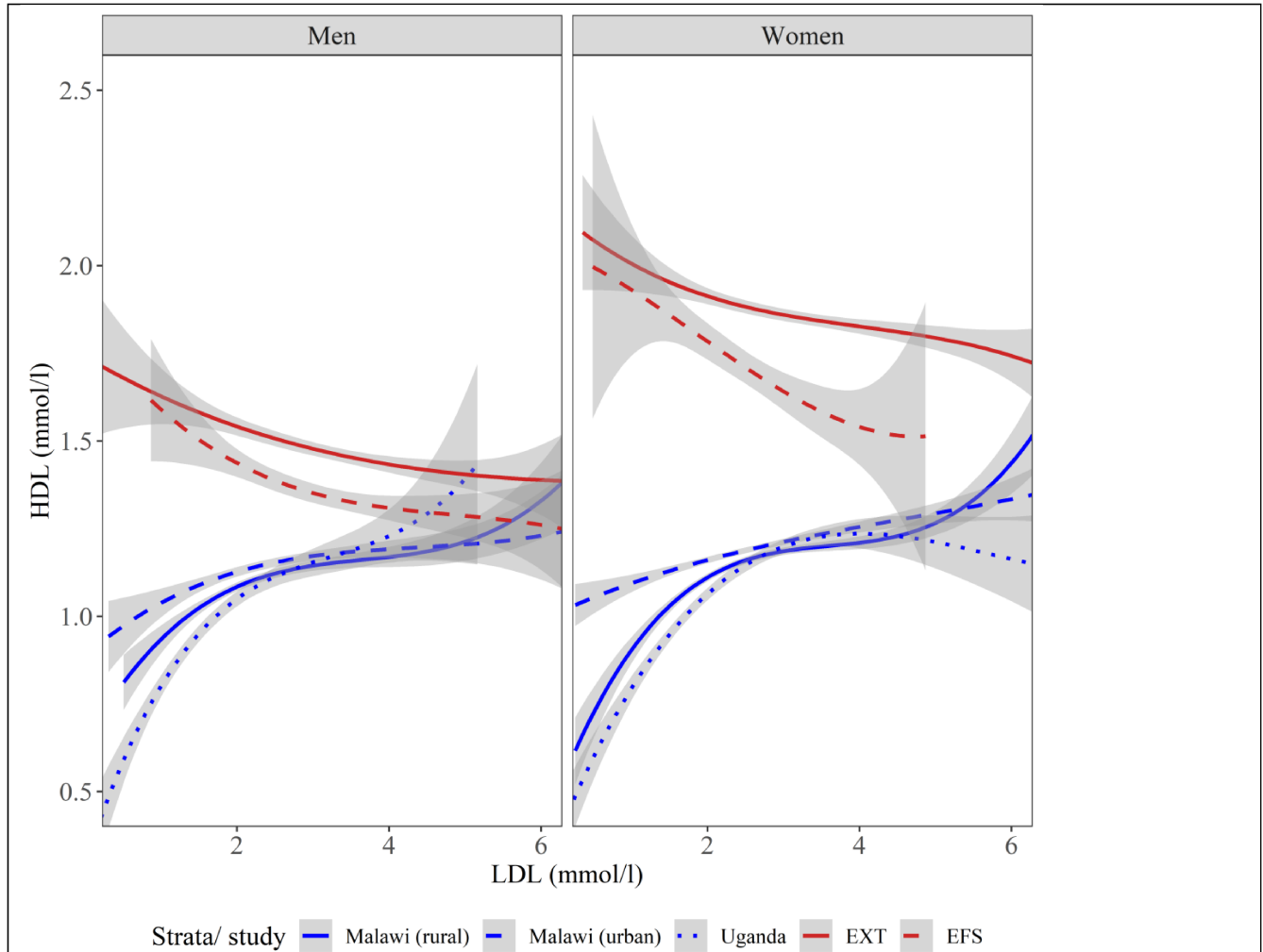
Supplementary table 3: β -coefficients (95% CI) for linear regression analysis of the relationships between HDL and CVD risk factors, among men and women in the UK and sub-Saharan Africa.

	UK		Sub-Saharan Africa	
	Men	Women	Men	Women
n	3,598	5,148	10,701	15,515
BMI	n=3,591	n=5,145	n=10,667	n=15,454
Unadjusted	-0.034 (-0.037, -0.031)	-0.031 (-0.034, -0.029)	-0.007 (-0.009, -0.005)	-0.004 (-0.005, -0.003)
Adjusted for age and smoking status	-0.036 (-0.039, -0.033)	-0.034 (-0.036, -0.031)	-0.007 (-0.009, -0.004)	-0.004 (-0.005, -0.003)
Adjusted for age, smoking status and alcohol consumption	-0.038 (-0.042, -0.034)	-0.034 (-0.036, -0.031)	-0.006 (-0.008, -0.003)	-0.004 (-0.005, -0.003)
Non-HDL	n=3,598	n=5,148	n=10,701	n=15,515
Unadjusted	-0.089	-0.069	0.046	0.041

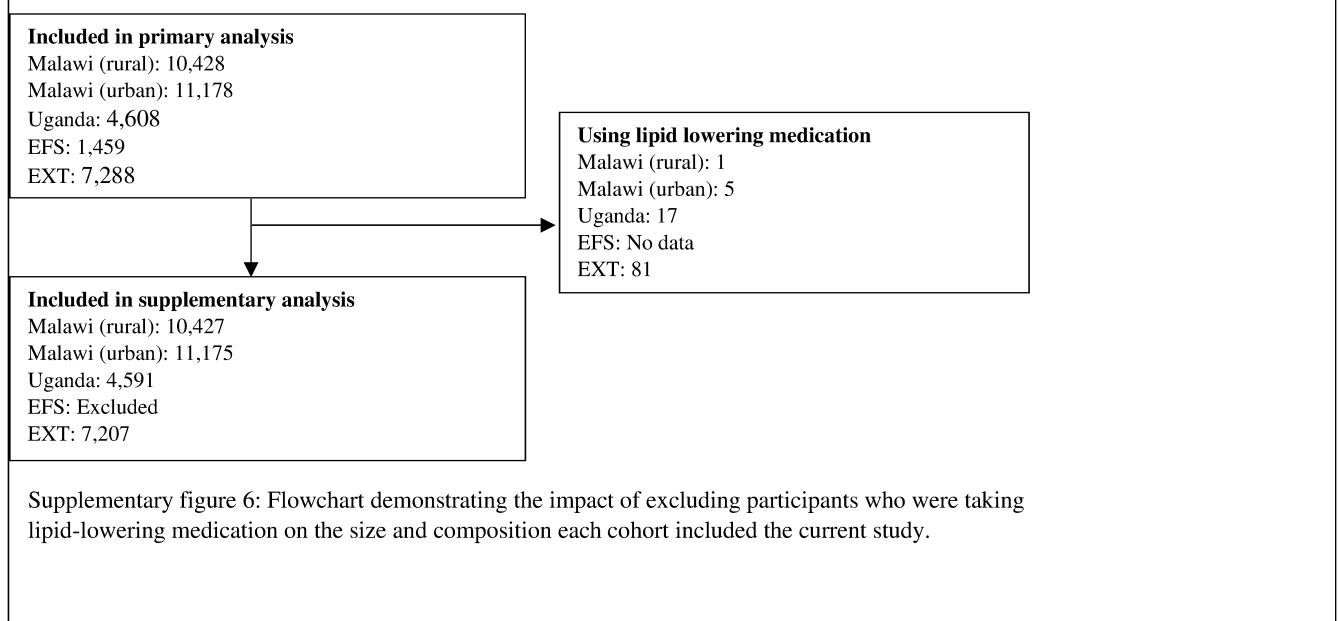
	(-0.100, -0.078)	(-0.081, -0.057)	(0.038, 0.054)	(0.036, 0.047)
Adjusted for age and smoking status	n= 3,545 -0.088	n= 4,641 -0.116	n=10,699 0.041	n=15,510 0.046
Adjusted for age, smoking status and alcohol consumption	n=2,646 -0.089	n=4,641 -0.116	n=10,699 0.043	n=15,510 0.046
	(-0.103, -0.076)	(-0.128, -0.103)	(0.035, 0.051)	(0.040, 0.052)
Triglycerides	n=3,598	n=5,148	n=10,701	n=15,515
Unadjusted	-0.243	-0.327	-0.075	-0.119
Adjusted for age and smoking status	n=3,545 -0.241	n=4,641 -0.381	n=10,699 -0.090	n=15,510 -0.148
	(-0.257, -0.226)	(-0.404, -0.358)	(-0.101, -0.080)	(-0.158, -0.137)
Adjusted for age, smoking status and alcohol consumption	n=2,646 -0.269	n=4,641 -0.381	n=10,699 -0.096	n=15,510 -0.149
	(-0.288, -0.250)	(-0.404, -0.358)	(-0.107, -0.086)	(-0.159, -0.138)



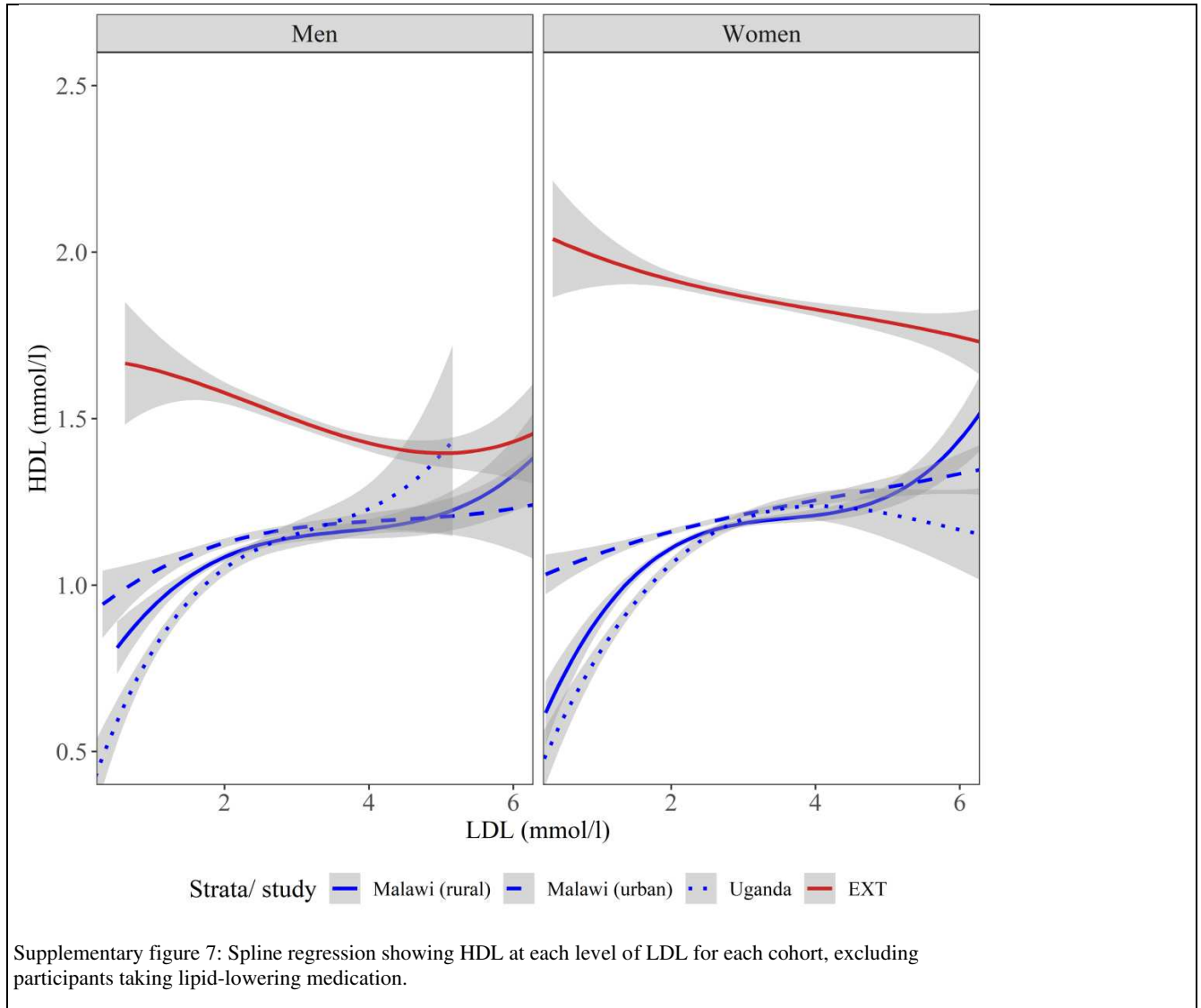
Supplementary figure 4: HDL at each level of waist-hip ratio for each cohort.

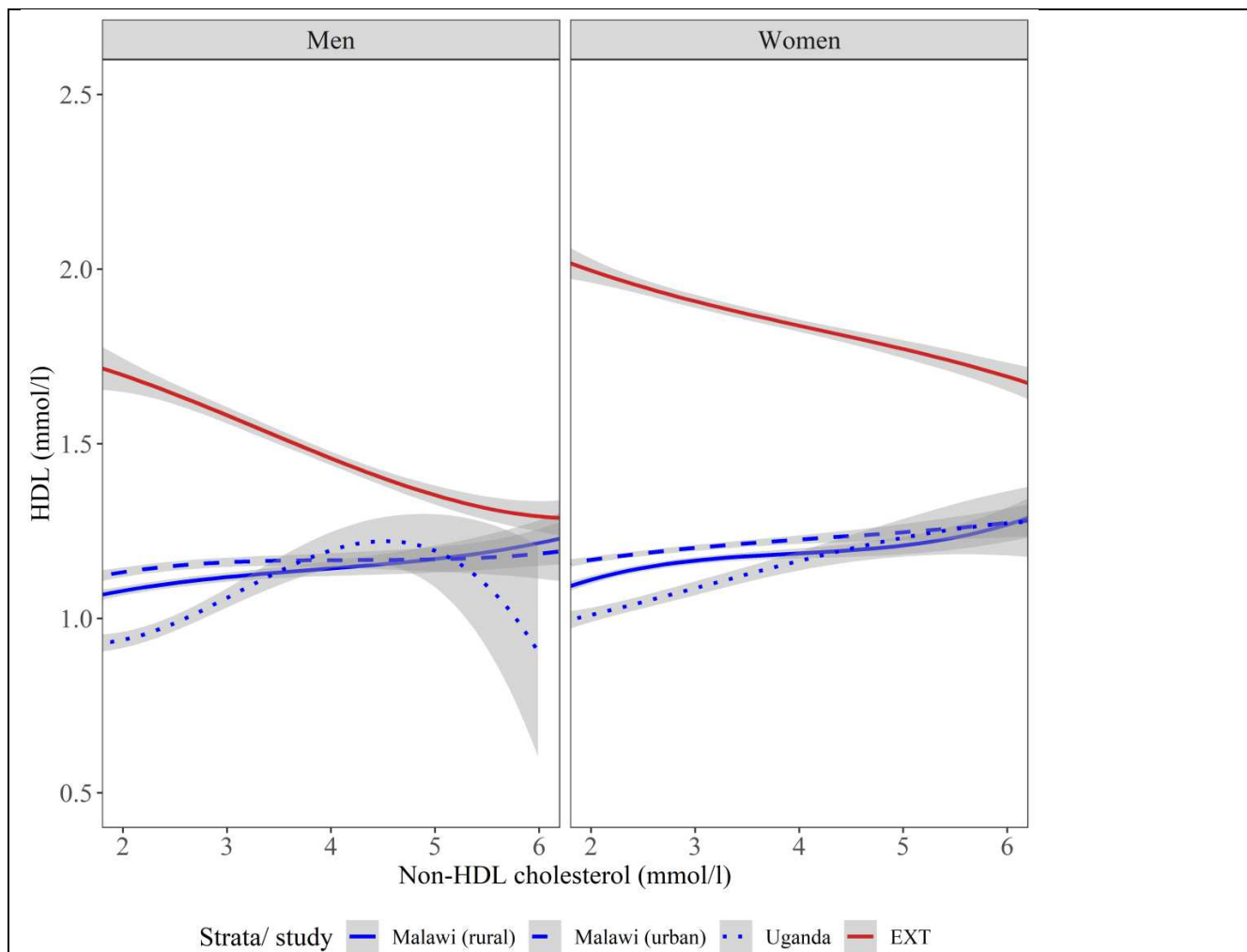


Supplementary Figure 5: Spline regression showing HDL at each level of LDL for each cohort.



Supplementary figure 6: Flowchart demonstrating the impact of excluding participants who were taking lipid-lowering medication on the size and composition each cohort included the current study.





Supplementary figure 8: HDL at each level of non-HDL for each cohort, excluding those using lipid lowering medication.

Supplementary table 4: β -coefficients (95% CI) for linear regression analysis of the relationships between HDL and CVD risk factors, among men and women in the UK and sub-Saharan Africa, excluding individuals who were using lipid lowering medication

	UK		Sub-Saharan Africa	
	Men	Women	Men	Women
n	3,558	5,107	10,692	15,501
Non-HDL	n=3,209	n=4,806	n=10,692	n=15,501
Unadjusted	-0.904 (-0.107, -0.082)	-0.067 (-0.079, -0.055)	0.046 (0.038, 0.054)	0.041 (0.036, 0.047)
Adjusted	n=2,257 -0.110 (-0.125, -0.095)	n=4,353 -0.130 (-0.143, -0.116)	n=10,690 0.043 (0.035, 0.051)	n=15,496 0.046 (0.040, 0.052)

Adjusted analyses are adjusted for age, smoking status and alcohol consumption.

