

SUPPLEMENTARY INFORMATION

Table S2 Association between transferrin and transferrin saturation tertiles and cardiometabolic parameters (with logarithmic transformation) in children aged 9–10 years

Transferrin (mg/dL)	Model 1 ^a			Model 2 ^b		
	Tertile 1	Tertile 2	Tertile 3	Tertile 1	Tertile 2	Tertile 3
	Exp(β) ^c (IC 95%)					
<i>Lipid profile (n = 1954)</i>						
Total cholesterol (mg/dL)	1 (ref)	1.04 (1.02; 1.06)^{††}	1.06 (1.04; 1.06) ^{††}	1 (ref)	1.04 (1.02; 1.06)^{††}	1.06 (1.04; 1.08)^{††}
HDL cholesterol (mg/dL)	1 (ref)	1.02 (1.00; 1.05)	1.02 (1.00; 1.05)	1 (ref)	1.03 (1.01; 1.05)[†]	1.05 (1.03; 1.07)^{††}
LDL cholesterol (mg/dL)	1 (ref)	1.04 (1.01; 1.07)[†]	1.06 (1.03; 1.09) ^{††}	1 (ref)	1.04 (1.01; 1.07)[†]	1.05 (1.02; 0.08)[†]
Triglycerides (mg/dL)	1 (ref)	1.08 (1.03; 1.12)[†]	1.20 (1.15; 1.25) ^{††}	1 (ref)	1.06 (1.02; 1.11)[†]	1.15 (1.10; 1.20)^{††}
<i>Glycemic profile</i>						
Fasting glucose (mg/dL) (n = 1951)	1 (ref)	1.01 (1.00; 1.02)[†]	1.02 (1.00; 1.02)^{††}	1 (ref)	1.01 (1.00; 1.02)[†]	1.02 (1.01; 1.03)[†]
Glycated haemoglobin (%) (n = 1946)	1 (ref)	1.01 (1.00; 1.01)	1.01 (1.00; 1.01)[†]	1 (ref)	1.01 (1.00; 1.01)	1.01 (1.00; 1.01)[†]
Insulin (μU/mL) (n = 1913)	1 (ref)	1.14 (1.06; 1.22)[†]	1.29 (1.20; 1.39)^{††}	1 (ref)	1.09 (1.02; 1.16)[†]	1.14 (1.07; 1.21)^{††}
HOMA-IRc (μU/dL) ^d (n = 1910)	1 (ref)	1.15 (1.07; 1.25)^{††}	1.32 (1.22; 1.43)^{††}	1 (ref)	1.11 (1.03; 1.18)[†]	1.16 (1.08; 1.24)^{††}
<i>Blood pressure (N = 1952)</i>						
Systolic pressure (mmHg)	1 (ref)	1.00 (0.99; 1.02)	1.03 (1.01; 1.04)[†]	1 (ref)	1.00 (0.99; 1.01)	1.01 (1.00; 1.02)
Diastolic pressure (mmHg)	1 (ref)	1.01 (0.99; 1.03)	1.03 (1.01; 1.04)	1 (ref)	1.00 (0.99; 1.02)	1.01 (0.99; 1.02)
Transferrin saturation (%)	Modelo 1			Modelo 2		
	Tertile 1	Tertile 2	Tertile 3	Tertile 1	Tertile 2	Tertile 3
<i>Lipid profile (n = 1954)</i>						
Total cholesterol (mg/dL)	1 (ref)	1.02 (1.00; 1.03)[†]	1.01 (1.00; 1.03)	1 (ref)	1.01 (0.99; 1.03)	1.01 (0.99; 1.02)
HDL cholesterol (mg/dL)	1 (ref)	1.02 (1.00; 1.05)[†]	1.06 (1.03; 1.08)^{††}	1 (ref)	1.00 (0.98; 1.02)	1.01 (0.99; 1.04)
LDL cholesterol (mg/dL)	1 (ref)	1.03 (1.00; 1.06)[†]	1.00 (0.98; 1.03)	1 (ref)	1.03 (1.00; 1.06)[†]	1.01 (0.98; 1.04)
Triglycerides (mg/dL)	1 (ref)	0.95 (0.91; 0.99)[†]	0.92 (0.88; 0.96)^{††}	1 (ref)	0.98 (0.94; 1.02)	0.98 (0.93; 1.02)
<i>Glycemic profile</i>						
Fasting glucose (mg/dL) (n = 1951)	1 (ref)	0.98 (0.98; 0.99)[†]	0.97 (0.96; 0.98)^{††}	1 (ref)	0.98 (0.97; 0.99)^{††}	0.97 (0.96; 0.98)^{††}
Glycated haemoglobin (%) (n = 1946)	1 (ref)	1.00 (0.99; 1.00)	0.99 (0.98; 0.99)^{††}	1 (ref)	1.00 (0.99; 1.00)	0.99 (0.98; 0.99)^{††}
Insulin (μU/mL) (n = 1913)	1 (ref)	0.85 (0.79; 0.91)^{††}	0.73 (0.68; 0.79)^{††}	1 (ref)	0.89 (0.84; 0.95)[†]	0.84 (0.79; 0.90)^{††}
HOMA-IRc (μU/dL) (n = 1910)	1 (ref)	0.83 (0.77; 0.90)^{††}	0.71 (0.66; 0.77)^{††}	1 (ref)	0.88 (0.82; 0.94)^{††}	0.82 (0.76; 0.87)^{††}
<i>Blood pressure (N = 1952)</i>						
Systolic pressure (mmHg)	1 (ref)	0.99 (0.98; 1.00)	0.98 (0.96; 0.99)^{††}	1 (ref)	1.00 (0.99; 1.01)	1.00 (0.98; 1.01)
Diastolic pressure (mmHg)	1 (ref)	0.99 (0.97; 1.00)	0.99 (0.97; 1.00)	1 (ref)	0.99 (0.98; 1.01)	1.00 (0.99; 1.02)

^aModel 1: coefficient of the generalized linear multivariate model adjusted for sex, age, family purchasing power, diet quality index (Med-DQI), dietary iron intake and Physical Activity (PAQ-C)

^bModel 2: Model 1+ body mass index and C-reactive protein

^cExponentiated β coefficient: represents the relative change in geometric means with respect to Tertile 1. Expressed as a percentage and interpreted as the percentage change in the geometric mean.

^dHomeostatic Model Assessment–Insulin Resistance

[†] p value <0.05; ^{††} p value <0.001