Supplementary Table S10a. Stratification by the country where the study was carried out (Asian countries *vs.* all other countries): influence on the effects estimations (SDM, DM) of the impact of ellagitannins (ETs: pomegranate, nuts) and of anthocyanins (ANCs: berries, red grapes, red wine) containing foods and products on a range of cardiovascular risk associated biomarkers.

	ETs				**ANCs**			
Country	East Asian countries		All other countries		East Asian countries		All other countries	
	SDM (S, n, I^2)	DM (S, n, I^2)	SDM (S, n, I^2)	DM (S, n, I^2)	SDM (S, n, I^2)	DM (S, n, I^2)	SDM (S, n, I^2)	DM (S, n, I^2)
BMI (Kg/m^2)*	-0.08 (*NS*, 4, 15.87)	-0.02 (*NS*, 4, 18.12)	-0.07 (*NS*, 13, 0.00)	+0.06 (*NS*, 10, 0.00)	-0.05 (*NS*, 5, 0.00)	-0.05 (*NS*, 5, 0.00)	-0.01 (*NS*, 29, 0.00)	-0.01 (*NS*, 28, 0.00)
WC (cm)	-0.48 (*0.066*, 1, 0.00)	-0.62 (*0.063*, 1, 0.00)	-0.73 (*0.055*, 6, 85.58)	-2.38 (*0.000*, 5, 3.76)	-0.10 (*NS*, 4, 0.00)	-0.78 (*NS*, 4, 0.00)	-0.14 (*NS*, 12, 0.00)	-0.73 (*NS*, 12, 0.00)
T-C (mmol/L)	-0.20 (*NS*, 4, 0.00)	-0.19 (*0.050*, 4, 0.00)	-0.17 (*0.029*, 24, 24.88)	-0.08 (*0.000*, 22, 0.00)	-0.45 (*NS*, 6, 0.00)	-0.05 (*NS*, 6, 0.00)	-0.18 (*0.015*, 75, 62.83)	-0.11 (*NS*, 71, 78.11)
LDL-C (mmol/L)	+0.07 (*NS*, 4, 0.00)	-0.02 (*NS*, 4, 0.00)	-0.23 (*0.021*, 22, 48.52)	-0.11 (*0.000*, 20, 0.00)	-0.45 (*0.003*, 6, 65.23)	-0.30 (*0.000*, 6, 33.84)	-0.01 (*NS*, 64, 66.77)	0.00 (*NS*, 61, 84.76)
HDL-C (mmol/L)	-0.04 (*NS*, 2, 59.46)	-0.01 (*NS*, 2, 60.50)	+0.13 (*NS*, 21, 21.73)	+0.03 (*0.057*, 19, 0.00)	+0.57 (*0.000*, 6, 0.00)	+0.15 (*0.000*, 6, 0.00)	+0.07 (*NS*, 70, 54.03)	+0.01 (*NS*, 65, 66.67)
TAGs (mmol/L)	+0.12 (*NS*, 4, 29.59)	+0.15 (*NS*, 4, 10.79)	-0.32 (*0.006*, 22, 58.96)	-0.11 (*0.000*, 20, 0.00)	-0.11 (*NS*, 6, 0.00)	-0.02 (*NS*, 3, 0.00)	+0.03 (*NS*, 65, 57.75)	+0.02 (*NS*, 61, 76.68)
SBP (mm Hg)	-0.04 (*NS*, 1, 0.00)	-0.43 (*NS*, 1, 0.00)	-0.12 (*NS*, 20, 53.34)	-2.12 (*NS*, 14, 42.33)	-0.22 (*0.004*, 10, 0.00)	-3.08 (*0.008*, 9, 0.00)	-0.23 (*0.000*, 64, 19.15)	-2.02 (*0.000*, 59, 0.00)
DBP (mm Hg)	-	-	-0.14 (*NS*, 20, 38.05)	-1.28 (*NS*, 16, 46.21)	-0.08 (*NS*, 9, 0.00)	-0.66 (*NS*, 9, 0.00)	-0.22 (*0.000*, 69, 26.88)	-1.66 (*0.000*, 62, 9.18)
FMD (%)	-	-	+0.62 (*0.014*, 3, 0.00)	+0.39 (*NS*, 3, 40.84)	+1.17 (*0.000*, 2, 35.93)	+2.19 (*0.000*, 2, 64.06)	-0.27 (*NS*, 3, 78.22)	-0.86 (*NS*, 3, 80.08)
Glucose (mmol/L)	+0.02 (*NS*, 2, 0.00)	+0.03 (*NS*, 2, 0.00)	-0.29 (*0.041*, 14, 53.82)	-0.15 (*0.007*, 13, 16.55)	+0.03 (*NS*, 4, 0.00)	+0.09 (*NS*, 4, 0.00)	-0.07 (*NS*, 47, 46.35)	-0.01 (*NS*, 41, 44.10)
Insulin (mIU/L)	-0.21 (*NS*, 2, 0.00)	-1.38 (*NS*, 2, 0.00)	-0.11 (*NS*, 10, 57.61)	+0.01 (*NS*, 8, 57.13)	+0.15 (*NS*, 3, 81.07)	-4.55 (*0.042*, 1, 0.00)	-0.02 (*NS*, 19, 72.16)	-0.23 (*NS*, 13, 52.90)
Hb1Ac	+0.35 (*NS*, 1, 0.00)	+0.08 (*NS*, 1, 0.00)	+0.03 (*NS*, 5, 25.26)	+0.06 (*NS*, 5, 26.70)	-0.02 (*NS*, 1, 0.00)	-0.20 (*NS*, 1, 0.00)	+0.15 (*NS*, 13, 89.44)	+0.04 (*NS*, 12, 95.29)
HOMA-IR	+0.25 (*NS*, 2, 46.82)	+1.00 (*0.054*, 2, 0.00)	-0.31 (*NS*, 5, 58.00)	-0.29 (*NS*, 5, 50.15)	-0.09 (*NS*, 3, 3.24)	-0.46 (*NS*, 1, 0.00)	-0.27 (*NS*, 8, 72.63)	-0.12 (*NS*, 7, 57.80)

Supplementary Table S10b. Stratification by the country where the study was carried out (North America *vs.* all European countries): influence on the effects estimations (SDM, DM) of the impact of ellagitannins (ETs: pomegranate, nuts) and of anthocyanins (ANCs: berries, red grapes, red wine) containing foods and products on a range of cardiovascular risk associated biomarkers.

Country	**ETs**				**ANCs**			
	North America		All European countries		North America		All European countries	
	SDM (S, n, I^2)	DM (S, n, I^2)	SDM (S, n, I^2)	DM (S, n, I^2)	SDM (S, n, I^2)	DM (S, n, I^2)	SDM (S, n, I^2)	DM (S, n, I^2)
BMI (Kg/m²)*	+0.04 (*NS*, 5, 14.24)	+0.27 (*NS*, 5, 0.00)	-0.19 (*NS*, 4, 0.00)	-0.09 (*NS*, 1, 0.00)	+0.01 (*NS*, 11, 0.00)	+0.03 (*NS*, 11, 0.00)	-0.01 (*NS*, 16, 0.00)	-0.01 (*NS*, 16, 0.00)
WC (cm)	-0.59 (*NS*, 5, 85.60)	-1.98 (*0.002*, 4, 20.56)	-	-	-0.23 (*NS*, 7, 26.64)	-1.56 (*NS*, 7, 38.25)	+0.01 (*NS*, 4, 0.00)	+0.14 (*NS*, 4, 0.00)
T-C (mmol/L)	-0.23 (*NS*, 11, 52.24)	-0.08 (*0.000*, 10, 0.00)	-0.23 (*NS*, 6, 0.00)	-0.14 (*0.079*, 6, 0.00)	-0.20 (*0.098*, 24, 57.46)	-0.13 (*NS*, 23, 77.81)	-0.18 (*0.017*, 33, 23.61)	-0.17 (*0.000*, 31, 4.92)
LDL-C (mmol/L)	-0.30 (*NS*, 10, 70.09)	-0.11 (*0.000*, 9, 0.00)	-0.23 (*NS*, 4, 0.00)	-0.12 (*0.069*, 4, 0.00)	+0.10 (*NS*, 21, 61.22)	+0.04 (*NS*, 20, 74.28)	-0.13 (*NS*, 28, 25.07)	-0.07 (*NS*, 27, 26.98)
HDL-C (mmol/L)	+0.08 (*NS*, 10, 43.99)	-0.01 (*NS*, 9, 0.00)	+0.08 (*NS*, 4, 0.00)	+0.02 (*NS*, 4, 0.00)	-0.05 (*NS*, 23, 12.64)	-0.03 (*0.036*, 21, 0.00)	+0.06 (*NS*, 29, 38.94)	+0.01 (*NS*, 27, 23.14)
TAGs (mmol/L)	-0.39 (*0.070*, 11, 74.64)	-0.11 (*0.000*, 10, 0.00)	-0.83 (*NS*, 4, 0.00)	-0.06 (*NS*, 4, 0.00)	-0.02 (*NS*, 23, 56.34)	-0.03 (*NS*, 22, 18.69)	-0.07 (*NS*, 22, 41.08)	0.00 (*NS*, 20, 45.60)
SBP (mm Hg)	0.00 (*NS*, 7, 62.81)	+0.56 (*NS*, 6, 41.52)	-0.06 (*NS*, 7, 58.91)	-2.40 (*NS*, 3, 58.60)	-0.36 (*0.002*, 21, 54.97)	-2.97 (*0.001*, 19, 14.43)	-0.19 (*0.007*, 29, 0.00)	-1.57 (*0.083*, 27, 0.00)
DBP (mm Hg)	-0.09 (*NS*, 7, 63.71)	-1.00 (*NS*, 6, 63.86)	-0.33 (*0.097*, 6, 26.57)	-5.21 (*0.048*, 5, 11.51)	-0.36 (*0.005*, 21, 64.62)	-2.23 (*0.001*, 20, 55.38)	-0.18 (*0.004*, 36, 0.00)	-1.33 (*0.014*, 31, 0.00)
FMD (%)	+0.56 (*0.058*, 2, 0.00)	+1.04 (*0.053*, 2, 0.00)	-	-	-0.13 (*NS*, 1, 0.00)	-0.65 (*NS*, 1, 0.00)	-0.06 (*NS*, 9, 75.81)	-0.06 (*NS*, 8, 75.81)
Glucose (mmol/L)	-0.15 (*NS*, 8, 33.13)	-0.13 (*NS*, 7, 40.93)	-0.66 (*NS*, 3, 83.00)	-0.11 (*0.000*, 3, 0.00)	-0.12 (*NS*, 15, 48.47)	-0.02 (*NS*, 13, 22.74)	-0.12 (*NS*, 16, 48.47)	-0.11 (*NS*, 12, 46.88)
Insulin (mIU/L)	-0.38 (*0.065*, 6, 47.63)	-1.28 (*NS*, 4, 34.76)	+0.50 (*NS*, 2, 71.35)	3.04 (*0.027*, 2, 0.00)	+0.21 (*0.086*, 10, 8.58)	+0.59 (*NS*, 7, 0.00)	-0.75 (*0.050*, 5, 84.85)	-0.87 (*NS*, 4, 81.40)
Hb1Ac	-0.11 (*NS*, 4, 0.00)	-0.04 (*NS*, 4, 0.00)	-	-	-0.63 (*NS*, 4, 91.41)	-0.09 (*NS*, 4, 80.35)	+1.48 (*0.099*, 4, 93.76)	+0.50 (*0.000*, 3, 0.00)
HOMA-IR	+0.20 (*NS*, 2, 0.00)	+0.37 (*NS*, 2, 0.00)	-0.47 (*NS*, 1, 0.00)	-0.37 (*NS*, 1, 0.00)	-0.33 (*NS*, 5, 82.17)	-0.16 (*NS*, 5, 67.86)	-0.76 (*0.056*, 1, 0.00)	-

Supplementary Table S10c. Stratification by the country where the study was carried out (Mediterranean countries *vs.* Non-Mediterranean countries): influence on the effects estimations (SDM, DM) of the impact of ellagitannins (ETs: pomegranate, nuts) and of anthocyanins (ANCs: berries, red grapes, red wine) containing foods and products on a range of cardiovascular risk associated biomarkers.

Country	**ETs**				**ANCs**			
	Mediterranean countries		Non-Mediterranean countries		Mediterranean countries		Non-Mediterranean countries	
	SDM (S, n, I^2)	DM (S, n, I^2)	SDM (S, n, I^2)	DM (S, n, I^2)	SDM (S, n, I^2)	DM (S, n, I^2)	SDM (S, n, I^2)	DM (S, n, I^2)
BMI (Kg/m²)*	-0.26 (*NS*, 1, 0.00)	-	-0.16 (*NS*, 3, 0.00)	-0.09 (*NS*, 1, 0.00)	0.00 (*NS*, 12, 0.00)	-0.01 (*NS*, 12, 0.00)	-0.02 (*NS*, 4, 0.00)	-0.11 (*NS*, 4, 0.00)
WC (cm)	-	-	-	-	+0.01 (*NS*, 4, 0.00)	+0.14 (*NS*, 4, 0.00)	-	-
T-C (mmol/L)	-0.07 (*NS*, 2, 0.00)	-0.07 (*NS*, 2, 0.00)	-0.29 (*0.085*, 4, 0.00)	-0.15 (*0.079*, 4, 0.00)	-0.24 (*NS*, 15, 51.26)	-0.20 (*0.030*, 15, 22.26)	-0.13 (*NS*, 18, 0.00)	-0.10 (*0.088*, 16, 0.00)
LDL-C (mmol/L)	+0.11 (*NS*, 1, 0.00)	+0.09 (*NS*, 1, 0.00)	-0.33 (*NS*, 3, 0.00)	-0.13 (*0.054*, 3, 0.00)	-0.35 (*0.002*, 14, 13.18)	-0.19 (*0.003*, 14, 16.55)	+0.09 (*NS*, 14, 0.00)	+0.07 (*NS*, 13, 0.00)
HDL-C (mmol/L)	-0.14 (*NS*, 1, 0.00)	-0.06 (*NS*, 1, 0.00)	+0.14 (*NS*, 3, 0.00)	+0.02 (*NS*, 3, 0.00)	-0.01 (*NS*, 14, 0.00)	+0.01 (*NS*, 14, 0.00)	+0.14 (*NS*, 15, 66.09)	+0.01 (*NS*, 13, 60.13)
TAGs (mmol/L)	+0.04 (*NS*, 1, 0.00)	+0.03 (*NS*, 1, 0.00)	-0.12 (*NS*, 3, 0.00)	-0.07 (*NS*, 3, 0.00)	-0.13 (*NS*, 14, 46.53)	-0.08 (*NS*, 14, 56.28)	+0.02 (*NS*, 8, 33.33)	+0.10 (*NS*, 6, 0.00)
SBP (mm Hg)	+0.04 (*NS*, 5, 68.16)	-1.89 (*NS*, 2, 77.04)	-0.31 (*NS*, 2, 0.00)	-5.30 (*NS*, 1, 0.00)	-0.20 (*0.072*, 14, 0.00)	-2.34 (*NS*, 13, 0.00)	-0.19 (*0.025*, 18, 0.00)	-1.48 (*NS*, 17, 0.00)
DBP (mm Hg)	-0.18 (*NS*, 2, 0.00)	-2.13 (*NS*, 2, 0.00)	-0.44 (*NS*, 4, 54.18)	-7.93 (*0.084*, 3, 58.05)	-0.19 (*0.054*, 13, 0.00)	-1.86 (*0.019*, 12, 0.00)	-0.17 (*0.028*, 23, 0.00)	-0.87 (*NS*, 19, 0.00)
FMD (%)	-	-	-	-	-0.67 (*NS*, 5, 79.16)	-0.54 (*NS*, 4, 71.16)	+0.54 (*0.006*, 13, 54.55)	+1.21 (*0.002*, 13, 61.87)
Glucose (mmol/L)	+0.11 (*NS*, 2, 0.00)	+0.14 (*NS*, 2, 0.00)	-1.03 (*0.097*, 2, 81.81)	-0.11 (*0.000*, 2, 0.00)	-0.44 (*NS*, 7, 76.46)	-0.71 (*0.092*, 3, 85.38)	+0.02 (*NS*, 9, 0.00)	-0.01 (*NS*, 9, 0.00)
Insulin (mIU/L)	-0.04 (*NS*, 1, 0.00)	+0.90 (*NS*, 1, 0.00)	+0.50 (*NS*, 2, 71.35)	+3.04 (*0.027*, 2, 0.00)	-2.30 (*0.000*, 1, 0.00)	-3.80 (*0.000*, 1, 0.00)	-0.40 (*NS*, 4, 69.96)	-0.20 (*NS*, 3, 33.41)
Hb1Ac	-	-	-	-	+2.06 (*NS*, 3, 94.64)	+0.50 (*0.000*, 3, 0.00)	-0.13 (*NS*, 1, 0.00)	-
HOMA-IR	-	-	-0.47 (*NS*, 1, 0.00)	-0.37 (*NS*, 1, 0.00)	-	-	-0.76 (*0.056*, 1, 0.00)	-

BMI: Body Mass Index; WC: Waist Circumference; T-C: Total Cholesterol; LDL-C: Low density Lipoprotein Cholesterol; HDL-C: High Density Lipoprotein Cholesterol; TAGs: Triacylglycerols; SBP: Systolic Blood Pressure; DBP: Diastolic Blood Pressure; FMD: Flow Mediated Dilation; Hb1Ac: Glycated Haemoglobin; HOMA-IR: Homeostatic Model Assessment of Insulin Resistance; SDM: standardized difference in means; DM: Difference in means; n: total number of studies included in the analysis; I^2: heterogeneity index; Q-value: between-categories Q statistic. *: Units refer to the size effect estimation (DM); S: Significance of the analysis; *NS*: not significant, *P*-values < 0.05 were significant and indicated. *P*-values: 0.05 ≤ *P*-value < 0.1 were considered marginally significant and are also indicated.