

Supplemental Table S1 Prevalence odds ratios and 95 % confidence intervals for individual MetS components for each quartile of urinary phthalate metabolite.

n with component/n without component	high Blood Pressure				Low HDL Cholesterol				High Waist Circumference				Hyperglycemia				Elevated Triglycerides							
	Overall		Males		Females		Overall		Males		Females		Overall		Males		Females		Overall		Males			
	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
MEHP	Q1	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
	Q2	0.71 (0.45 , 1.12)	0.72 (0.45 , 1.16)	0.34 (0.04 , 2.78)	1.06 (0.59 , 1.90)	0.82 (0.43 , 1.56)	3.20 (0.53 , 19.23)	0.76 (0.50 , 1.14)	0.72 (0.46 , 1.11)	0.10 (0.74 , 4.56)	0.54 (0.33 , 0.88)*	0.54 (0.32 , 0.91)*	1.41 (0.13 , 14.98)	0.78 (0.49 , 1.24)	0.78 (0.48 , 1.28)	0.98 (0.15 , 6.35)								
	Q3	0.85 (0.50 , 1.43)	0.99 (0.56 , 1.77)	0.43 (0.07 , 2.46)	1.17 (0.64 , 2.17)	1.20 (0.57 , 2.50)	2.64 (0.51 , 13.73)	0.84 (0.53 , 1.33)	0.79 (0.46 , 1.34)	0.07 (0.90 , 4.74)#	0.55 (0.31 , 0.95)*	0.58 (0.30 , 1.11)	1.35 (0.16 , 11.71)	0.89 (0.53 , 1.47)	0.97 (0.54 , 1.74)	1.08 (0.20 , 5.66)								
	Q4	0.83 (0.44 , 1.58)	0.36 (0.10 , 1.35)	0.54 (0.10 , 3.02)	1.07 (0.56 , 2.07)	0.00 (0.00 , .)	2.73 (0.53 , 13.96)	0.62 (0.36 , 1.04)#	0.34 (0.11 , 1.07)#	0.15 (0.65 , 3.40)	0.88 (0.47 , 1.64)	0.49 (0.13 , 1.80)	2.22 (0.26 , 18.56)	0.76 (0.42 , 1.38)	0.32 (0.07 , 1.44)	1.00 (0.20 , 5.18)								
MEOHP	Q1	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
	Q2	0.92 (0.59 , 1.44)	0.94 (0.55 , 1.61)	0.87 (0.37 , 2.06)	0.88 (0.57 , 1.36)	1.18 (0.59 , 2.36)	0.74 (0.42 , 1.30)	0.92 (0.64 , 1.33)	0.91 (0.56 , 1.50)	0.89 (0.50 , 1.58)	0.76 (0.49 , 1.20)	0.69 (0.39 , 1.23)	1.00 (0.46 , 2.15)	0.90 (0.59 , 1.36)	1.20 (0.70 , 2.06)	0.61 (0.32 , 1.18)								
	Q3	1.24 (0.79 , 1.95)	1.24 (0.70 , 2.18)	1.26 (0.58 , 2.76)	0.68 (0.44 , 1.06)#	0.55 (0.23 , 1.30)	0.66 (0.38 , 1.14)	0.93 (0.64 , 1.35)	0.91 (0.54 , 1.54)	0.84 (0.48 , 1.47)	0.88 (0.56 , 1.38)	0.45 (0.23 , 0.90)*	1.68 (0.83 , 3.38)	0.81 (0.53 , 1.24)	0.83 (0.45 , 1.51)	0.71 (0.38 , 1.32)								
	Q4	0.73 (0.45 , 1.19)	0.67 (0.36 , 1.26)	0.80 (0.35 , 1.83)	0.71 (0.45 , 1.10)	0.88 (0.40 , 1.94)	0.60 (0.34 , 1.03)#	0.85 (0.58 , 1.25)	0.90 (0.52 , 1.56)	0.79 (0.45 , 1.38)	0.97 (0.62 , 1.53)	1.03 (0.56 , 1.89)	1.20 (0.58 , 2.50)	0.82 (0.53 , 1.27)	0.80 (0.43 , 1.52)	0.75 (0.41 , 1.39)								
MEHHP	Q1	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
	Q2	1.00 (0.64 , 1.56)	1.25 (0.73 , 2.15)	0.62 (0.28 , 1.41)	1.05 (0.69 , 1.61)	1.22 (0.60 , 2.49)	0.99 (0.58 , 1.69)	0.94 (0.65 , 1.35)	1.25 (0.76 , 2.06)	0.63 (0.36 , 1.09)#	0.75 (0.48 , 1.16)	0.61 (0.34 , 1.09)	0.97 (0.49 , 1.93)	1.36 (0.91 , 2.03)	1.14 (0.66 , 1.96)	1.70 (0.93 , 3.12)#								
	Q3	0.97 (0.61 , 1.54)	0.98 (0.54 , 1.50)	0.90 (0.42 , 1.55)	0.87 (0.57 , 1.32)	0.94 (0.42 , 2.09)	0.82 (0.49 , 1.35)	0.86 (0.60 , 1.24)	0.92 (0.53 , 1.59)	0.76 (0.46 , 1.27)	0.62 (0.39 , 0.99)*	0.48 (0.24 , 0.94)*	0.84 (0.43 , 1.62)	0.82 (0.53 , 1.26)	0.85 (0.46 , 1.58)	0.86 (0.47 , 1.59)								
	Q4	0.95 (0.60 , 1.50)	1.04 (0.58 , 1.87)	0.77 (0.36 , 1.65)	0.84 (0.55 , 1.30)	0.78 (0.35 , 1.76)	0.83 (0.49 , 1.39)	0.93 (0.64 , 1.34)	1.08 (0.64 , 1.83)	0.75 (0.44 , 1.28)	0.98 (0.63 , 1.50)	0.77 (0.42 , 1.40)	1.42 (0.75 , 2.70)	0.87 (0.56 , 1.34)	0.81 (0.44 , 1.48)	0.94 (0.50 , 1.75)								
MECPP	Q1	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
	Q2	0.96 (0.61 , 1.50)	0.77 (0.45 , 1.33)	1.57 (0.67 , 3.67)	1.44 (0.92 , 2.26)	1.52 (0.77 , 3.00)	1.47 (0.81 , 2.66)	0.75 (0.51 , 1.09)	0.75 (0.46 , 1.23)	0.80 (0.44 , 1.47)	0.69 (0.43 , 1.10)	0.50 (0.27 , 0.93)*	1.18 (0.54 , 2.57)	1.27 (0.83 , 1.94)	1.07 (0.62 , 1.84)	1.93 (0.91 , 4.11)#								
	Q3	1.05 (0.66 , 1.66)	1.25 (0.72 , 2.19)	0.95 (0.40 , 2.26)	0.93 (0.59 , 1.47)	0.57 (0.24 , 1.37)	1.09 (0.61 , 1.95)	1.15 (0.79 , 1.67)	1.16 (0.69 , 1.94)	1.26 (0.70 , 2.26)	0.78 (0.49 , 1.24)	0.52 (0.27 , 0.99)*	1.34 (0.63 , 2.84)	1.07 (0.69 , 1.67)	0.90 (0.50 , 1.62)	1.61 (0.76 , 3.38)								
	Q4	0.74 (0.46 , 1.19)	0.68 (0.37 , 1.24)	0.87 (0.37 , 2.05)	0.98 (0.62 , 1.55)	0.84 (0.38 , 1.87)	1.06 (0.59 , 1.87)	0.83 (0.57 , 1.21)	0.70 (0.41 , 1.19)	0.96 (0.54 , 1.71)	0.96 (0.61 , 1.49)	0.99 (0.55 , 1.78)	1.28 (0.60 , 2.71)	1.15 (0.74 , 1.78)	0.85 (0.47 , 1.56)	1.88 (0.91 , 3.92)#								
MCMHP	Q1	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
	Q2	1.05 (0.67 , 1.65)	1.02 (0.60 , 1.74)	1.02 (0.33 , 3.14)	0.99 (0.61 , 1.63)	0.92 (0.45 , 1.86)	1.35 (0.59 , 3.10)	1.12 (0.76 , 1.65)	1.24 (0.77 , 2.01)	0.89 (0.39 , 2.06)	1.45 (0.90 , 2.34)	1.45 (0.82 , 2.55)	1.93 (0.54 , 6.89)	0.92 (0.59 , 1.44)	0.95 (0.54 , 1.65)	0.92 (0.35 , 2.40)								
	Q3	1.04 (0.65 , 1.68)	0.89 (0.49 , 1.62)	1.08 (0.36 , 3.32)	0.91 (0.55 , 1.51)	0.65 (0.27 , 1.55)	1.32 (0.58 , 3.00)	1.39 (0.93 , 2.08)	1.71 (1.00 , 2.92)*	1.14 (0.50 , 2.61)	1.42 (0.86 , 2.34)	1.20 (0.63 , 2.29)	2.04 (0.57 , 7.24)	1.21 (0.77 , 1.90)	1.14 (0.63 , 2.08)	1.22 (0.48 , 3.15)								
	Q4	0.88 (0.53 , 1.47)	1.28 (0.70 , 2.36)	0.53 (0.16 , 1.79)	1.12 (0.67 , 1.87)	0.99 (0.45 , 2.16)	1.57 (0.68 , 3.62)	1.15 (0.76 , 1.74)	0.96 (0.54 , 1.69)	1.05 (0.45 , 2.45)	1.72 (1.04 , 2.84)*	1.64 (0.85 , 3.13)	2.40 (0.67 , 8.60)	1.14 (0.71 , 1.82)	1.27 (0.69 , 2.34)	1.08 (0.41 , 2.85)								
MBP	Q1	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
	Q2	0.80 (0.52 , 1.23)	0.67 (0.40 , 1.14)	1.22 (0.56 , 2.63)	0.73 (0.49 , 1.10)	0.67 (0.33 , 1.36)	0.71 (0.43 , 1.19)	1.04 (0.74 , 1.47)	1.12 (0.69 , 1.82)	0.96 (0.57 , 1.62)	0.56 (0.36 , 0.86)	0.61 (0.34 , 1.10)#	0.50 (0.26 , 0.96)*	0.74 (0.50 , 1.09)	0.74 (0.44 , 1.26)	0.72 (0.40 , 1.29)								
	Q3	0.94 (0.59 , 1.49)	0.79 (0.44 , 1.41)	1.31 (0.59 , 2.93)	0.68 (0.44 , 1.05)#	0.67 (0.31 , 1.46)	0.65 (0.38 , 1.11)	1.03 (0.71 , 1.49)	1.32 (0.78 , 2.22)	0.77 (0.45 , 1.34)	0.86 (0.56 , 1.33)	0.73 (0.39 , 1.37)	0.96 (0.51 , 1.80)	0.73 (0.48 , 1.12)	0.65 (0.36 , 1.19)	0.79 (0.43 , 1.45)								
	Q4	0.96 (0.59 , 1.55)	0.95 (0.52 , 1.76)	1.05 (0.46 , 2.42)	0.65 (0.41 , 1.01)#	0.71 (0.31 , 1.64)	0.60 (0.35 , 1.04)#	1.09 (0.74 , 1.60)	1.16 (0.66 , 2.06)	0.95 (0.55 , 1.64)	0.60 (0.37 , 0.97)*	0.88 (0.46 , 1.70)	0.43 (0.21 , 0.89)*	0.59 (0.37 , 0.92)*	0.71 (0.37 , 1.37)	0.50 (0.26 , 0.96)*								
MEP	Q1	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
	Q2	0.94 (0.58 , 1.52)	0.78 (0.43 , 1.39)	1.74 (0.66 , 4.58)	0.96 (0.60 , 1.53)	1.35 (0.60 , 3.04)	0.82 (0.46 , 1.47)	0.92 (0.62 , 1.35)	0.86 (0.51 , 1.47)	1.00 (0.55 , 1.79)	1.74 (1.06 , 2.85)*	2.23 (1.19 , 4.16)*	1.40 (0.61 , 3.18)	1.20 (0.77 , 1.86)	2.04 (1.13 , 3.71)*	0.60 (0.31 , 1.17)								
	Q3	1.11 (0.70 , 1.75)	0.84 (0.48 , 1.46)	2.34 (0.92 , 5.98)#	1.09 (0.69 , 1.72)	1.77 (0.83 , 3.78)	0.85 (0.48 , 1.52)	1.19 (0.81 , 1.73)	0.82 (0.49 , 1.37)	1.78 (0.98 , 3.21)#	1.35 (0.82 , 2.22)	1.22 (0.64 , 2.34)	1.55 (0.69 , 3.49)	1.07 (0.69 , 1.65)	1.46 (0.81 , 2.65)	0.69 (0.36 , 1.33)								
	Q4	0.97 (0.61 , 1.54)	0.72 (0.41 , 1.28)	2.18 (0.85 , 5.56)	1.47 (0.94 , 2.30)#	1.17 (0.51 , 2.65)	1.64 (0.93 , 2.91)#	0.93 (0.64 , 1.35)	1.04 (0.62 , 1.73)	0.91 (0.51 , 1.61)	1.73 (1.07 , 2.80)*	1.34 (0.70 , 2.56)	2.14 (0.98 , 4.67)#	1.08 (0.70 , 1.68)	1.07 (0.57 , 1.98)	0.89 (0.48 , 1.68)								
MIBP	Q1	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
	Q2	0.68 (0.44 , 1.06)#	0.62 (0.35 , 1.08)#	0.82 (0.39 , 1.73)	0.75 (0.49 , 1.14)	1.02 (0.48 , 2.15)	0.64 (0.38 , 1.07)#	0.82 (0.58 , 1.16)	0.78 (0.48 , 1.28)	0.89 (0.53 , 1.49)	0.66 (0.42 , 1.03)#	0.58 (0.31 , 1.10)	0.73 (0.38 , 1.42)	0.92 (0.61 , 1.38)	1.14 (0.66 , 1.98)	0.67 (0.37 , 1.23)								
	Q3	0.87 (0.56 , 1.36)	0.75 (0.42 , 1.33)	1.08 (0.53 , 2.21)	0.96 (0.63 , 1.46)	1.26 (0.59 , 2.68)	0.82 (0.49 , 1.37)	0.96 (0.67 , 1.38)	0.75 (0.45 , 1.26)	1.18 (0.69 , 2.00)	1.00 (0.65 , 1.54)	1.22 (0.68 , 2.19)	0.87 (0.45 , 1.66)	1.05 (0.69 , 1.59)	1.33 (0.75 , 2.37)	0.76 (0.42 , 1.39)								

Supplemental Table 1 (continued)

	high Blood Pressure				Low HDL Cholesterol				High Waist Circumference				Hyperglycemia				Elevated Triglycerides				
	Overall		Males	Females	Overall		Males	Females	Overall		Males	Females	Overall		Males	Females	Overall		Males	Females	
	n with component/a	n without component	308/1029	212/481	96/548	381/956	88/605	293/351	601/736	271/422	314/330	267/1070	140/553	127/517	313/1024	159/534	154/490				
MinBP	Q1	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
	Q2	1.57 (1.01 , 2.42)*	1.38 (0.80 , 2.38)	1.99 (0.93 , 4.27)#	1.11 (0.73 , 1.69)	1.53 (0.68 , 3.40)	0.95 (0.57 , 1.59)	0.93 (0.65 , 1.33)	1.00 (0.61 , 1.65)	0.85 (0.50 , 1.43)	1.13 (0.73 , 1.74)	1.04 (0.57 , 1.88)	1.26 (0.67 , 2.39)	1.25 (0.83 , 1.90)	1.26 (0.70 , 2.25)	1.26 (0.69 , 2.30)					
	Q3	1.05 (0.65 , 1.71)	0.88 (0.47 , 1.63)	1.35 (0.59 , 3.08)	1.21 (0.78 , 1.86)	2.04 (0.91 , 4.53)#	0.93 (0.55 , 1.57)	0.79 (0.54 , 1.14)	0.85 (0.50 , 1.45)	0.72 (0.42 , 1.22)	1.04 (0.66 , 1.64)	1.25 (0.67 , 2.35)	0.97 (0.49 , 1.92)	1.54 (1.01 , 3.03)#	1.67 (0.92 , 3.03)#	1.36 (0.73 , 2.51)					
	Q4	1.10 (0.69 , 1.75)	1.09 (0.63 , 1.91)	1.13 (0.47 , 2.71)	1.13 (0.73 , 1.75)	1.94 (0.90 , 4.21)#	0.86 (0.50 , 1.48)	0.78 (0.54 , 1.13)	0.88 (0.53 , 1.47)	0.72 (0.41 , 1.25)	0.96 (0.61 , 1.52)	0.86 (0.46 , 1.59)	1.15 (0.57 , 2.30)	1.07 (0.69 , 1.66)	1.18 (0.66 , 2.12)	0.96 (0.49 , 1.88)					
MAP	Q1	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
	Q2	0.85 (0.53 , 1.36)	0.77 (0.44 , 1.34)	0.91 (0.30 , 2.77)	1.01 (0.62 , 1.67)	1.48 (0.71 , 3.08)	0.61 (0.29 , 1.31)	0.93 (0.63 , 1.38)	0.94 (0.57 , 1.55)	0.61 (0.28 , 1.34)	1.12 (0.69 , 1.83)	1.14 (0.63 , 2.06)	2.13 (0.59 , 7.68)	0.89 (0.57 , 1.39)	1.09 (0.62 , 1.91)	0.47 (0.21 , 1.05)#					
	Q3	0.92 (0.57 , 1.49)	0.96 (0.55 , 1.68)	0.89 (0.28 , 2.77)	1.17 (0.71 , 1.93)	1.37 (0.64 , 2.94)	0.81 (0.38 , 1.73)	1.00 (0.68 , 1.48)	1.14 (0.69 , 1.89)	0.60 (0.27 , 1.32)	1.43 (0.88 , 2.32)	1.10 (0.60 , 2.01)	3.11 (0.88 , 11.04)#	1.00 (0.65 , 1.56)	1.45 (0.84 , 2.53)	0.47 (0.21 , 1.04)#					
	Q4	1.25 (0.77 , 2.04)	1.15 (0.63 , 2.09)	1.42 (0.46 , 4.38)	1.02 (0.61 , 1.73)	1.49 (0.66 , 3.34)	0.64 (0.30 , 1.40)	0.98 (0.65 , 1.49)	1.21 (0.70 , 2.10)	0.53 (0.24 , 1.20)	1.42 (0.85 , 2.37)	1.32 (0.69 , 2.52)	2.73 (0.76 , 9.83)	0.75 (0.46 , 1.21)	0.81 (0.42 , 1.55)	0.38 (0.17 , 0.88)*					
MINP	Q1	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
	Q2	0.76 (0.35 , 1.65)	0.65 (0.15 , 2.84)	0.90 (0.35 , 2.29)	1.00 (0.54 , 1.85)	0.34 (0.05 , 2.19)	1.15 (0.59 , 2.22)	0.98 (0.55 , 1.77)	0.84 (0.22 , 3.21)	0.98 (0.50 , 1.90)	0.67 (0.32 , 1.40)	0.87 (0.16 , 4.83)	0.64 (0.28 , 1.50)	1.74 (0.85 , 3.56)	0.57 (0.11 , 2.85)	2.20 (0.96 , 5.01)#					
	Q3	0.91 (0.33 , 2.54)	0.89 (0.12 , 6.48)	1.03 (0.30 , 3.51)	1.22 (0.53 , 2.81)	0.30 (0.02 , 3.82)	1.44 (0.59 , 3.51)	0.98 (0.45 , 2.16)	0.63 (0.10 , 4.08)	1.01 (0.41 , 2.48)	0.77 (0.29 , 2.06)	2.00 (0.22 , 18.82)	0.62 (0.20 , 1.96)	3.68 (1.45 , 9.35)*	0.75 (0.08 , 6.95)	5.05 (1.75 , 14.58)*					
	Q4	0.97 (0.26 , 3.77)	1.00 (0.07 , 18.07)	1.11 (0.22 , 5.82)	1.44 (0.47 , 4.35)	0.12 (0.00 , 4.74)	1.90 (0.58 , 6.20)	1.10 (0.38 , 3.17)	0.60 (0.05 , 7.92)	1.18 (0.36 , 3.56)	0.71 (0.19 , 2.66)	1.81 (0.09 , 36.90)	0.55 (0.12 , 2.61)	2.80 (0.81 , 9.70)	0.33 (0.01 , 7.82)	4.14 (1.03 , 16.69)*					
EHMW	Q1	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
	Q2	1.14 (0.72 , 1.80)	1.07 (0.65 , 1.78)	2.54 (0.52 , 12.39)	0.98 (0.59 , 1.63)	1.00 (0.52 , 1.92)	0.89 (0.36 , 2.17)	0.93 (0.63 , 1.38)	0.81 (0.51 , 1.29)	1.76 (0.71 , 4.38)	0.54 (0.33 , 0.88)*	0.47 (0.26 , 0.85)*	0.86 (0.28 , 2.65)	1.00 (0.65 , 1.55)	0.99 (0.59 , 1.65)	1.09 (0.40 , 2.95)					
	Q3	1.16 (0.71 , 1.87)	1.15 (0.65 , 2.05)	2.36 (0.50 , 11.09)	0.72 (0.43 , 1.22)	0.53 (0.22 , 1.28)	0.72 (0.31 , 1.69)	1.01 (0.67 , 1.52)	0.95 (0.56 , 1.61)	1.71 (0.71 , 4.10)	0.55 (0.33 , 0.91)*	0.49 (0.25 , 0.97)*	0.77 (0.26 , 2.28)	0.76 (0.48 , 1.21)	0.82 (0.45 , 1.50)	0.77 (0.29 , 2.02)					
	Q4	0.81 (0.48 , 1.38)	0.60 (0.29 , 1.25)	1.94 (0.41 , 9.10)	0.72 (0.43 , 1.23)	0.83 (0.34 , 2.04)	0.68 (0.29 , 1.59)	0.85 (0.56 , 1.30)	0.77 (0.42 , 1.43)	1.43 (0.60 , 3.40)	0.92 (0.56 , 1.50)	1.07 (0.55 , 2.08)	1.14 (0.40 , 3.27)	0.78 (0.48 , 1.27)	0.74 (0.36 , 1.52)	0.84 (0.32 , 2.18)					
ELMW	Q1	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
	Q2	1.22 (0.78 , 1.92)	1.07 (0.60 , 1.88)	1.60 (0.72 , 3.56)	1.37 (0.88 , 2.11)	1.52 (0.70 , 3.28)	1.26 (0.74 , 2.14)	0.85 (0.59 , 1.22)	0.90 (0.54 , 1.51)	0.75 (0.44 , 1.28)	1.23 (0.79 , 1.92)	1.36 (0.75 , 2.48)	1.24 (0.62 , 2.45)	1.24 (0.82 , 1.89)	1.71 (0.97 , 3.02)#	0.89 (0.48 , 1.65)					
	Q3	1.11 (0.70 , 1.77)	0.99 (0.56 , 1.77)	1.41 (0.62 , 3.21)	1.28 (0.83 , 2.00)	1.20 (0.53 , 2.69)	1.30 (0.76 , 2.23)	0.94 (0.65 , 1.36)	0.88 (0.52 , 1.49)	0.94 (0.54 , 1.63)	0.94 (0.59 , 1.50)	0.87 (0.45 , 1.67)	1.08 (0.53 , 2.18)	1.06 (0.69 , 1.63)	1.23 (0.68 , 2.23)	0.86 (0.45 , 1.61)					
	Q4	0.98 (0.62 , 1.55)	0.89 (0.51 , 1.55)	1.20 (0.51 , 2.80)	1.48 (0.96 , 2.29)#	1.63 (0.77 , 3.44)	1.44 (0.84 , 2.47)	0.71 (0.50 , 1.03)#	0.86 (0.52 , 1.43)	0.58 (0.34 , 1.01)#	1.19 (0.76 , 1.85)	1.02 (0.56 , 1.86)	1.47 (0.74 , 2.91)	1.03 (0.68 , 1.58)	0.84 (0.46 , 1.54)	1.16 (0.63 , 2.15)					
EDDEHP	Q1	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
	Q2	0.90 (0.57 , 1.43)	0.84 (0.49 , 1.42)	1.47 (0.44 , 4.89)	0.82 (0.50 , 1.34)	0.83 (0.42 , 1.66)	0.82 (0.37 , 1.80)	0.90 (0.61 , 1.33)	0.89 (0.55 , 1.43)	1.23 (0.55 , 2.73)	0.81 (0.51 , 1.30)	0.67 (0.37 , 1.20)	1.77 (0.56 , 5.63)	1.11 (0.72 , 1.72)	1.25 (0.74 , 2.11)	1.05 (0.42 , 2.64)					
	Q3	1.25 (0.79 , 1.98)	1.27 (0.74 , 2.19)	1.81 (0.57 , 5.79)	0.74 (0.45 , 1.21)	0.56 (0.25 , 1.25)	0.79 (0.37 , 1.70)	1.06 (0.72 , 1.57)	0.89 (0.53 , 1.48)	1.67 (0.76 , 3.65)	0.71 (0.43 , 1.15)	0.54 (0.28 , 1.04)#	1.82 (0.49 , 4.76)	0.96 (0.61 , 1.50)	0.88 (0.49 , 1.58)	1.13 (0.46 , 2.76)					
	Q4	0.69 (0.41 , 1.15)	0.60 (0.30 , 1.20)	1.05 (0.32 , 3.42)	0.66 (0.40 , 1.09)	0.68 (0.29 , 1.60)	0.67 (0.32 , 1.44)	0.86 (0.57 , 1.30)	0.78 (0.44 , 1.40)	1.21 (0.56 , 2.61)	1.11 (0.69 , 1.80)	1.15 (0.61 , 2.19)	2.04 (0.67 , 6.23)	0.88 (0.55 , 1.42)	0.78 (0.39 , 1.54)	1.00 (0.42 , 2.43)					
EDBP	Q1	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
	Q2	0.94 (0.60 , 1.47)	0.83 (0.47 , 1.47)	1.06 (0.51 , 2.21)	1.21 (0.80 , 1.84)	2.11 (0.95 , 4.69)#	0.93 (0.56 , 1.54)	1.01 (0.71 , 1.43)	0.90 (0.55 , 1.50)	1.06 (0.63 , 1.79)	1.05 (0.68 , 1.62)	0.94 (0.51 , 1.73)	1.20 (0.64 , 2.28)	1.32 (0.87 , 1.99)	1.88 (1.06 , 3.34)*	0.89 (0.49 , 1.64)					
	Q3	1.14 (0.73 , 1.78)	1.21 (0.69 , 2.13)	1.05 (0.49 , 2.23)	1.29 (0.84 , 1.98)	2.12 (0.93 , 4.83)#	1.02 (0.60 , 1.72)	0.74 (0.51 , 1.06)	0.93 (0.55 , 1.57)	0.62 (0.36 , 1.06)#	1.01 (0.65 , 1.58)	1.13 (0.62 , 2.07)	0.98 (0.50 , 1.93)	1.28 (0.83 , 1.95)	1.34 (0.73 , 2.47)	1.06 (0.58 , 1.95)					
	Q4	0.85 (0.53 , 1.35)	0.96 (0.55 , 1.67)	0.62 (0.26 , 1.48)	1.28 (0.82 , 1.99)	2.31 (1.05 , 5.08)*	0.94 (0.54 , 1.64)	0.77 (0.53 , 1.12)	0.74 (0.44 , 1.23)	0.82 (0.47 , 1.44)	0.89 (0.56 , 1.41)	0.78 (0.42 , 1.44)	1.12 (0.55 , 2.26)	1.27 (0.82 , 1.95)	1.39 (0.77 , 2.50)	1.11 (0.59 , 2.12)					

Abbreviations: MEHP (Mono-ethylhexyl phthalate); MEOHP (Mono-2-ethyl-5-oxohexyl phthalate); MEHHP (Mono-2-ethyl-5-hydroxylhexyl phthalate); MECPP (methylerythritol cyclodiphosphate); MCMHP (Mono(2-carboxymethylhexyl) phthalate); MBzP (monobenzyl phthalate); MEP (monoethyl phthalate); MiBP (monoisobutyl phthalate); MnBP (mono-n-butyl phthalate); MMP (Mono-methyl phthalate); MiNP (Mono-isoctyl phthalate); Σ HMW (high molecular weight) = (Mono-ethylhexyl phthalate (MEHP) + Mono-2-ethyl-5-oxohexyl phthalate (MEOHP) + Mono-2-ethyl-5-hydroxylhexyl phthalate (MEHHP) + Mono-benzyl phthalate (MBzP) + Mono-isooctyl phthalate (MiNP). Σ LMW (low molecular weight) = Mono-ethyl phthalate (MEP) + Mono-isobutyl phthalate (MiBP) + Mono-n-butyl phthalate (MnBP) + Mono-methyl phthalate (MMP). Σ DEHP (di(2-ethylhexyl) phthalate [molar sum of mono-(2-ethylhexyl) phthalate (MEHP), mono-(2-ethyl-5-oxohexyl) phthalate (MEOHP), and mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP), and mono-(2-ethyl-5-carboxypentyl) phthalate (MECPP), and Mono(2-carboxymethylhexyl) phthalate (MCMHP)]. Σ DBP (dibutyl phthalate) = Mono-isobutyl phthalate (MiBP) + Mono-n-butyl phthalate (MnBP).

$P < 0.10$ * $P < 0.05$.

Adjusted for urinary creatinine, age, sex, education, and working status.

Supplemental Table 2 Prevalence odds ratios for the association between urinary metabolites concentrations and metabolic syndrome stratified by menopausal status in females.

Metabolites	Phthalate	Females (n=644)			
		premenopausal (n=354)		postmenopausal (n=290)	
MEOHP					
	Q1	Ref		Ref	
	Q2	0.35	(0.12, 1.06) [#]	1.06	(0.38, 2.96)
	Q3	0.73	(0.29, 1.86)	1.49	(0.58, 3.86)
	Q4	0.48	(0.18, 1.29)	0.60	(0.21, 1.72)
MEHHP					
	Q1	Ref		Ref	
	Q2	0.51	(0.18, 1.42)	2.09	(0.80, 5.50)
	Q3	0.45	(0.17, 1.16) [#]	1.34	(0.52, 3.46)
	Q4	0.82	(0.32, 2.06)	1.05	(0.39, 2.79)
MBzP					
	Q1	Ref		Ref	
	Q2	0.09	(0.02, 0.39)*	1.28	(0.52, 3.13)
	Q3	0.47	(0.19, 1.13) [#]	1.53	(0.58, 4.05)
	Q4	0.43	(0.17, 1.09) [#]	0.78	(0.27, 2.23)
MiNP					
	Q1	Ref		Ref	
	Q2	2.44	(0.65, 9.25)	1.58	(0.47, 5.38)
	Q3	4.10	(0.78, 21.65) [#]	1.90	(0.36, 10.05)
	Q4	4.11	(0.50 34.06)	1.92	(0.20, 18.39)
ΣDEHP					
	Q1	Ref		Ref	
	Q2	0.71	(0.17, 2.88)	4.67	(0.55, 40.10)
	Q3	0.49	(0.12, 1.96)	9.58	(1.18, 77.75)*
	Q4	0.63	(0.16, 2.43)	5.06	(0.62, 41.34)

Abbreviations: MEOHP (Mono-2-ethyl-5-oxohexyl phthalate); MEHHP (Mono-2-ethyl-5-hydroxylhexyl phthalate); MBzP (monobenzyl phthalate); MiNP (Mono-isooctyl phthalate); ΣDEHP (di(2-ethylhexyl) phthalate [molar sum of mono-(2-ethylhexyl) phthalate (MEHP), mono-(2-ethyl-5-oxohexyl) phthalate (MEOHP), and mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP), and mono-(2-ethyl-5-carboxypentyl) phthalate (MECPP) , and Mono(2-carboxymethylhexyl) phthalate (MCMHP)].

[#]P < 0.10 *P < 0.05.

Adjusted for urinary creatinine, age, education, and working status