

Supplementary Table 2 –The models used for estimation of the effects, adiponectin, inflammatory markers, C-peptide, and free estradiol

	Effect	Natural indirect effect through all the biomarkers	Natural indirect effect through reduced adiponectin and increased inflammation	Natural indirect effect through reduced adiponectin levels	Natural indirect effect through increased inflammation excluding the potential influence of adiponectin	Natural indirect effect through increased C-peptide excluding the potential influences of adiponectin and inflammation	Natural indirect effect through estrogens excluding the potential influences of adiponectin, inflammation, and c-peptide	Natural direct effect not through any of the biomarkers
Mediator models: linear regression limited to the controls, for	Adiponectin, conditional on exposure and confounders	✓	✓	✓	✓	✓	✓	✓
	IL-6, conditional on adiponectin, exposure and confounders	✓	✓		✓	✓	✓	✓
	IL-1RA, conditional on adiponectin, IL-6, exposure and covariates	✓	✓		✓	✓	✓	✓
	TNF-R1, conditional on adiponectin, IL-6, IL-1RA, exposure and confounders	✓	✓		✓	✓	✓	✓
	TNF-R2, conditional on adiponectin, IL-6, IL-1RA, TNF-a, exposure and confounders	✓	✓		✓	✓	✓	✓
	CRP, conditional on adiponectin, IL-6, IL-1RA, TNF-R1, TNF-R2, exposure and confounders	✓	✓		✓	✓	✓	✓
	C-peptide, conditional on adiponectin, IL-6, IL-1RA, TNF-a, TNF-R1, TNF-R2, CRP, exposure and confounders	✓				✓	✓	✓
	Free estradiol, conditional on adiponectin, IL-6, IL-1RA, TNF-R1, TNF-R2, CRP, C-peptide, exposure and confounders	✓					✓	✓
	Estrone, conditional on adiponectin, IL-6, IL-1RA, TNF-R1, TNF-R2, CRP, C-peptide, free estradiol, exposure and confounders	✓					✓	✓
Outcome models: logistic regression conditional on exposure, confounders and	Adiponectin			✓	✓			
	Adiponectin, IL-6, IL-1RA, TNF-R1, TNF-R2, CRP		✓		✓	✓		
	Adiponectin, IL-6, IL-1RA, TNF-R1, TNF-R2, CRP, C-peptide					✓	✓	
	Adiponectin, IL-6, IL-1RA, TNF-R1, TNF-R2, CRP, C-peptide, free estradiol, estrone	✓					✓	✓

Abbreviations: IL-6 interleukin 6; IL-1RA interleukin 1 receptor antagonist; TNF-R1 tumor necrosis factor-receptor 1; TNF-R2 tumor necrosis factor-receptor 2; CRP C-reactive protein