

SUPPLEMENTAL MATERIAL Canepa M et al.

Supplemental Table S1. Pearson correlations between age, adiposity and LV diastolic function by gender.

	Women (n=462)	Men (n=381)
Age		
TBF	-0.01	-0.03
VAT	0.39*	0.31*
SAT	0.04	-0.09
E/A ratio		
Age	-0.51*	-0.60*
TBF §	-0.18*	-0.18†
VAT §	-0.14†	-0.22*
SAT §	-0.14†	-0.13†
Em		
Age	-0.67*	-0.66*
TBF §	-0.20*	-0.20*
VAT §	-0.22*	-0.20*
SAT §	-0.15†	-0.14†
E/Em ratio		
Age	0.41*	0.35*
TBF §	0.03	0.11‡
VAT §	0.04	0.10‡
SAT §	0.04	0.13†
Em/Am ratio		
Age	-0.54*	-0.58*
TBF §	-0.21*	-0.25*
VAT §	-0.19*	-0.30*
SAT §	-0.16†	-0.19†

*P<.0001, † P<.001, ‡ P<.005. § represent age-adjusted Pearson correlation coefficients. See Table 1 for abbreviations.

Supplemental Table S2. Age- and gender-adjusted Pearson correlations between potential mediators, adiposity and LV diastolic function.

	TBF	VAT	SAT	E/A ratio	Em	Em/Am ratio
Triglycerides	0.30*	0.47*	0.25*	-0.16*	-0.20*	-0.17*
SHBG	-0.31*	-0.39*	-0.25 [†]	0.17*	0.15 [†]	0.19*
Adiponectin	-0.21*	-0.26*	-0.19 [†]	0.07 [‡]	0.18*	0.12 [†]
Leptin	0.71*	0.50*	0.62*	-0.15*	-0.15*	-0.15*

*P<.0001, [†] P<.001, [‡] P<.05. See Table 1 for abbreviations

Supplemental Table S3. Multivariate analysis showing the mediators of the relationship between visceral adiposity and LV diastolic function.

	E/A ratio			Em			Em/Am ratio		
	β	SE	<i>P</i>	β	SE	<i>P</i>	β	SE	<i>P</i>
From previous Model 2									
VAT	-0.035	0.010	<.001	-0.245	0.066	<.001	-0.053	0.011	<.0001
Model 2a									
VAT	-0.028	0.011	0.01	-0.178	0.072	0.01	-0.048	0.012	<.0001
TG	-0.037	0.021	0.08	-0.322	0.143	0.02	-0.028	0.024	0.24
Model 2b									
VAT	-0.021	0.010	0.04	-0.203	0.071	0.004	-0.041	0.012	<.001
SHBG	0.063	0.019	0.001	0.201	0.130	0.12	0.055	0.022	0.01
Model 2c									
VAT	-0.034	0.010	<.001	-0.213	0.069	0.002	-0.050	0.011	<.0001
ADIPONECTIN	-0.08	0.012	0.51	0.131	0.082	0.11	0.013	0.013	0.33
Model 2d									
VAT	-0.033	0.011	0.003	-0.250	0.075	<.001	-0.056	0.012	<.0001
LEPTIN	-0.005	0.011	0.67	0.011	0.075	0.89	0.005	0.012	0.70
Model 2e									
VAT	-0.019	0.011	0.10	-0.147	0.075	0.05	-0.038	0.013	0.003
TG	-0.017	0.022	0.44	-0.317	0.147	0.03	-0.018	0.025	0.47
SHBG	0.061	0.020	0.002	0.147	0.132	0.27	0.051	0.022	0.02
Model 2f									
VAT	-0.033	0.011	0.004	-0.218	0.078	0.005	-0.052	0.013	<.0001
ADIPONECTIN	-0.008	0.012	0.50	0.131	0.082	0.11	0.013	0.013	0.32
LEPTIN	-0.003	0.011	0.77	0.008	0.076	0.91	0.004	0.013	0.76

Models were adjusted for age, race, gender, smoking, diabetes, hypercholesterolemia, systolic blood pressure, antihypertensive medications, physical activity, heart rate and LV mass index. Variance inflation factor was < 2 in all models. See Table 1 for abbreviations.

Supplemental Figure S1.

Mediators are conceptualized as being within the causal pathway of the predictor and the outcome of interest (**A & B** above: visceral adiposity affects triglycerides, SHBG, adiponectin and leptin and they affect diastolic function). If one ignores the mediators (in this example, triglycerides, SHBG, adiponectin and leptin), one will observe a relationship between the predictor, visceral adiposity, and the outcome variable, diastolic function (**C**). Adjusting for mediators results in an attenuation or elimination of the relationship between the predictor and the outcome variable (**C***). Although such findings lend support to a hypothesis, the findings do not confirm mediation, either partial or complete.

