

Supplementary Table 1. Baseline characteristics of those included in the analysis* – simple, unadjusted means or proportions by study

	ARIC		CARDIA		Framingham Offspring	
	(N= 7,406)		(N= 1,826)		(N= 1,661)	
	Mean or %	Std	Mean or %	Std	Mean or %	Std
Age (Years)	49.9	3.15	37.7	1.72	47.5	5.00
Incident diabetes (%) [†]	11.00%		4.70%		7.90%	
African American (%)	24.80%		39.20%		0.00%	
Women (%)	57.80%		55.50%		55.00%	
Education < HS (%)	16.20%		4.60%		2.20%	
Systolic BP (mmHg)	116.8	16.84	109.6	12.76	119.7	15.94
Diastolic BP (mmHg)	73.6	11.03	72.5	10.12	74.7	10.08
Hypertension Meds (%)	17.70%		3.30%		8.00%	
Normal BP [‡] (%)	51.70%		71.70%		47.50%	
Prehypertension [‡] (%)	23.00%		20.40%		33.10%	
Hypertension [‡] (%)	25.30%		7.90%		19.40%	
HDL (mg/dL)	52.7	17.12	50.4	14.11	51.1	14.76
Triglycerides (mg/dL) [§]	121	79.60	92.7	72.32	131.4	99.29
Fasting Glucose (mg/dL)	97.9	9.20	90.3	7.91	93.3	8.82
Fasting insulin (uU/mL)	10.6	7.97	12.9	7.11	8.3	7.33
Waist Circumference (cm)	95	13.78	85.5	13.79	90.8	14.37
Body mass index	27.3	5.25	27.1	6.09	26.8	4.89
Alcohol: drinks/week	3.3	7.02	4.6	8.74	5.6	7.79
Current smoker (%)	26.60%		22.10%		22.00%	
Parent with DM (%)	23.90%		22.90%		25.40%	
Physical activity Z score	0.04	0.98	0.03	0.98	0.01	0.99

* Eligibility criteria: At baseline age 35-54, no history of diabetes, and no missing data for core risk factors; and at least one follow-up exam.

[†] Incident Diabetes during follow-up by fasting glucose ≥ 126 mg/dL, on diabetes meds, or casual glucose of ≥ 200 mg/dL.

[‡] Blood Pressure (BP) categories:

- Normal: SBP<120 and DBP<80 mmHg and not using antihypertensive medication
- Prehypertension: Not hypertension, and SBP 120-139 or DBP 80-90 mmHg
- Hypertension: SBP= \geq 140, DBP \geq 90 mmHg, or using antihypertensive medication

[§] Exponent of log transformed Triglycerides and therefore is approximately the median of the untransformed distribution. The standard deviation is from the distribution of log (triglycerides).

^{||} Each study's physical activity measures were normalized to that study's population. A higher Z score means a greater physical activity level of that participant relative to others in the same

SUPPLEMENTARY DATA

study. For example, a Z score of 1.96 means that that participant was more physically active than ~ 95% of the participants in that study.

SUPPLEMENTARY DATA

Supplementary Table 2. Hazard ratios (HR) for the association of baseline prehypertension and hypertension with incident diabetes after further adjustment for additional potential covariates*

	African American				White			
	HR	95% Conf Int		P-value	HR	95% Conf Int		P-value
Model 3 [†] (For comparison)								
N (Events)	2,552	(372)			8,341	(657)		
Prehypertension	0.86	(0.63	, 1.17)	0.3417	1.32	(1.09	, 1.61)	0.0046
Hypertension	0.92	(0.70	, 1.21)	0.5499	1.25	(1.03	, 1.53)	0.0262
Model 4 (Model 3 + Waist Circumference and Fasting Insulin)								
N (Events)	2,552	(372)			8,341	(657)		
Prehypertension	0.87	(0.64	, 1.18)	0.3547	1.31	(1.08	, 1.59)	0.0069
Hypertension	0.90	(0.68	, 1.19)	0.4581	1.23	(1.00	, 1.50)	0.0464
Model 5 (Model 4 + Additional Covariates [‡])								
N (Events)	2,528	(369)			8,223	(651)		
Prehypertension	0.87	(0.64	, 1.18)	0.3629	1.33	(1.09	, 1.62)	0.0046
Hypertension	0.94	(0.68	, 1.31)	0.7253	1.37	(1.07	, 1.75)	0.0111
Model 6 (Model 5 + Educational Level + Parental History of Diabetes)								
N (Events)	2,495	(366)			7,626	(602)		
Prehypertension	0.89	(0.65	, 1.21)	0.4598	1.32	(1.07	, 1.62)	0.0090
Hypertension	0.94	(0.68	, 1.31)	0.7103	1.42	(1.10	, 1.82)	0.0068

*Using normal blood pressure (SBP<120 and DBP<80 mmHg and not using antihypertensive medication) as referent for prehypertension and hypertension. Diabetes during follow-up defined as fasting glucose = or >126 mg/dL, casual glucose = or >200 mg/dL, or use of diabetic drugs.

[†] Model 3 Covariates: Age, sex, body mass index (5 units), HDL (15 mg/dL), fasting glucose (10 mg/dL), and Ln(Triglycerides)

[‡] Additional Covariates include: fasting insulin (8 uU/ml), waist circumference (15 cm), ACEI or ARB, beta blocker, thiazide, other hypertension medication, current Smoking, alcohol drinks/week (8 drinks), and physical activity Z-Score (1 unit)