

SUPPLEMENTAL MATERIAL

Table S1. Selected Framingham Heart Study Exam Dates and age ranges for parents and offspring.

Original Cohort					Offspring Cohort				
Exam	Exam Dates	Age Range	Mean Age	Attendees	Exam	Exam Dates	Age Range	Mean Age	Attendees
Exam1	1948-1952	28-74	44	5209	Exam2	1979-1983	17-77	44	3863
Exam3	1953-1956	32-67	48	4416	Exam3	1983-1987	18-77	48	3873
Exam5	1956-1960	37-70	52	4421	Exam4	1987-1991	22-81	52	4019
Exam7	1961-1964	40-74	55	4191	Exam5	1991-1995	26-84	55	3799
Exam9	1965-1968	44-78	59	3893	Exam6	1995-1998	29-86	59	3532
Exam11	1969-1971	49-81	62	2955	Exam7	1998-2001	33-90	62	3539

Table on selected exam pairs of FHS-Original and Offspring Cohorts. Adapted from the “Framingham Heart Study: A Review of Research Design” Interventions Obes Diabetes; 2018: 1, by Urooj T., 2018. Retrieved from <https://crimsonpublishers.com/iod/pdf/IOD.000505.pdf>

Table S2. Ideal Cardiovascular Health Metrics using AHA criteria for adults ≥ 20 years.

Blood Pressure	Ideal [2]	<120/<80 mmHg
	Intermediate [1]	SBP 120–139 or DBP 80–89 mmHg
	Poor [0]	SBP \geq 140 or DBP \geq 90mmHg
Cholesterol	Ideal [2]	<200 mg/dL
	Intermediate [1]	200–239 mg/dL
	Poor [0]	\geq 240 mg/dL
Body Mass Index	Ideal [2]	<25 kg/m ²
	Intermediate [1]	25–29.9 kg/m ²
	Poor [0]	\geq 30 kg/m ²
Smoking Status	Ideal [2]	Never or quit > 12 months
	Intermediate [1]	Former \leq 12 months
	Poor [0]	Current smoker
Fasting/Random Blood Glucose	Ideal [2]	<100 mg/dL OR <140 mg/dL
	Intermediate [1]	100–125 mg/dL OR 140-199 mg/dL
	Poor [0]	\geq 126 mg/dL OR \geq 200 mg/dL

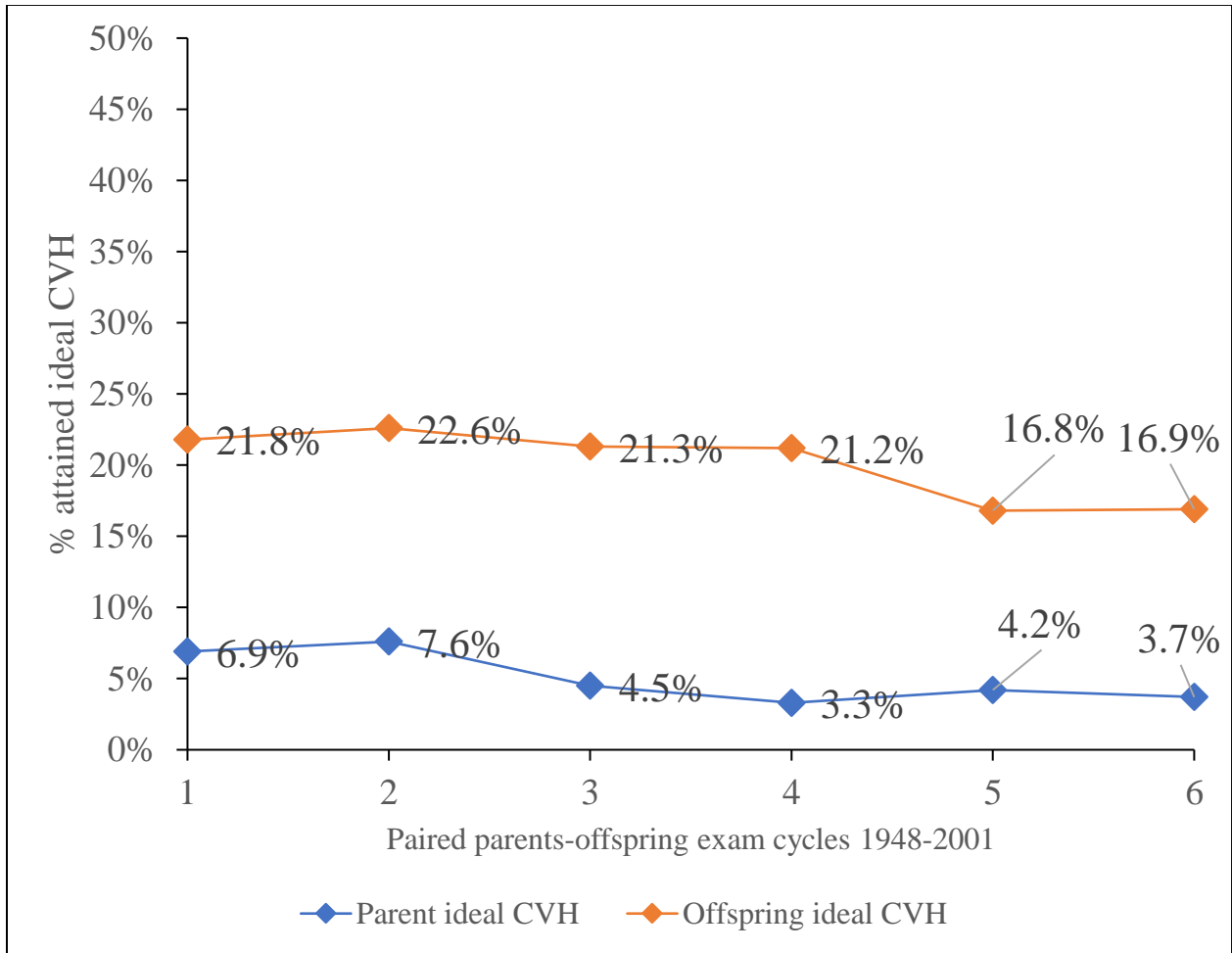
Key: SBP, Systolic blood pressure; DBP, diastolic blood pressure; Adapted from “2017 Statistical Fact Sheet: Cardiovascular health” by AHA, 2017. Retrieved from https://healthmetrics.heart.org/wp-content/uploads/2017/06/2017-Statistical-Fact-Sheet-ucm_492104.pdf

Table S3. Proportional odds regression model predicting offspring CVH from mother's and father's CVH at each paired exam cycle.

Offspring-mother association				Offspring-father association			
Offspring Exam	Mother's CVH	OR	95% CI	Offspring Exam	Father's CVH	OR	95% CI
Exam 1 n= 2,050	<i>Referent: Ideal CVH</i>			Exam 1 n= 1,944	<i>Referent: Ideal CVH</i>		
	Intermediate CVH	1.59*	1.18-2.14		Intermediate CVH	1.57	0.88-2.78
	Poor CVH	2.65*	1.71-4.11		Poor CVH	3.07*	1.71-5.50
Exam 2 n=1,545	<i>Referent: Ideal CVH</i>			Exam 2 n=1,410	<i>Referent: Ideal CVH</i>		
	Intermediate CVH	1.61*	1.09-2.40		Intermediate CVH	1.33	0.80-2.23
	Poor CVH	2.42*	1.43-4.11		Poor CVH	1.95*	1.12-1.92
Exam 3 n=1,609	<i>Referent: Ideal CVH</i>			Exam 3 n=1,493	<i>Referent: Ideal CVH</i>		
	Intermediate CVH	1.48*	1.07-2.04		Intermediate CVH	0.84	0.41-1.72
	Poor CVH	2.15*	1.25-3.69		Poor CVH	1.52	0.72-3.18
Exam 4 n=1,548	<i>Referent: Ideal CVH</i>			Exam 4 n=1,402	<i>Referent: Ideal CVH</i>		
	Intermediate CVH	2.19*	1.65-2.89		Intermediate CVH	2.19	0.70-6.77
	Poor CVH	3.07*	1.87-5.04		Poor CVH	3.68*	1.18-11.49
Exam 5 n=1,389	<i>Referent: Ideal CVH</i>			Exam 5 n=1,248	<i>Referent: Ideal CVH</i>		
	Intermediate CVH	1.95*	1.44-2.64		Intermediate CVH	1.96*	1.07-3.58
	Poor CVH	2.99*	1.82-4.93		Poor CVH	3.71*	1.92-7.14
Exam 6 n=1,173	<i>Referent: Ideal CVH</i>			Exam 6 n=978	<i>Referent: Ideal CVH</i>		
	Intermediate CVH	1.52*	1.10-2.09		Intermediate CVH	1.32	0.76-2.28
	Poor CVH	2.14*	1.09-4.19		Poor CVH	2.43*	1.31-4.50
Pooled model (All six exams)	<i>Referent: Ideal CVH</i>			Pooled model (All six exams)	<i>Referent: Ideal CVH</i>		
	Intermediate CVH	1.46*	1.18-1.79		Intermediate CVH	1.31	0.84-2.07
	Poor CVH	2.77*	2.00-3.84		Poor CVH	2.12*	1.32-3.43

This table shows results from a proportional-odds cumulative logit model, estimating the odds of predicting offspring CVH status using their mothers or fathers CVH status. Dependent variable is offspring CVH (three-level ordinal variable, coded 0, 1, 2: ideal, intermediate and poor CVH, respectively), independent variable is parents' CVH, coded 0, 1, 2 as well. All models were adjusted for offspring age, sex and education. *Statistically significant at $p < 0.05$. CI=confidence interval

Figure S1. Distribution and trends of ideal CVH for parents and offspring at similar age-periods along the life course.



Ideal CVH in this case means having more than 4 CVH metrics at ideal/recommended levels; For exam cycles 1-6 time periods, refer to paired exam cycles “Table S1”.