

Supplementary Table S1. Adjusted hazard ratios (95% confidence intervals) for the association of trauma exposure and PTSD symptoms with risk of incident hypertension, 1989-2011, presented for different reference groups.

Reference Group: Trauma/No Symptoms											
No trauma			Trauma-exposed								
			No symptoms		1-3 symptoms		4-5 symptoms		6-7 symptoms		
	<u>HR (95% CI)</u>	<u>P</u>	<u>HR</u>	<u>HR (95% CI)</u>	<u>P</u>	<u>HR (95% CI)</u>	<u>P</u>	<u>HR (95% CI)</u>	<u>P</u>	<u>HR (95% CI)</u>	<u>P</u>
<i>Model 1*</i>	0.96 (0.92-0.998)	.038	1 (ref)	1.08 (1.02-1.13)	.003	1.12 (1.06-1.19)	<.0001	1.15 (1.08-1.24)	<.0001		
<i>Model 2⁺</i>	0.98 (0.94-1.02)	.276	1 (ref)	1.07 (1.02-1.12)	.008	1.10 (1.04-1.16)	.001	1.10 (1.03-1.18)	.006		
<i>Model 3[†]</i>	1.00 (0.96-1.04)	.919	1 (ref)	1.07 (1.02-1.12)	.010	1.09 (1.03-1.16)	.003	1.08 (1.005-1.16)	.036		
<i>Model 4[§]</i>	1.00 (0.96-1.04)	.979	1 (ref)	1.06 (1.01-1.11)	.018	1.08 (1.02-1.14)	.012	1.06 (0.99-1.13)	.122		
Reference Group: Trauma/1-3 Symptoms											
No trauma			Trauma-exposed								
			No symptoms		1-3 symptoms		4-5 symptoms		6-7 symptoms		
	<u>HR (95% CI)</u>	<u>P</u>	<u>HR (95% CI)</u>	<u>P</u>	<u>HR</u>	<u>HR (95% CI)</u>	<u>P</u>	<u>HR (95% CI)</u>	<u>P</u>	<u>HR (95% CI)</u>	<u>P</u>
<i>Model 1*</i>	0.89 (0.85-0.94)	<.0001	0.93 (0.89-0.98)	.003	1 (ref)	1.04 (0.98-1.12)	.210	1.07 (0.99-1.16)	.073		
<i>Model 2⁺</i>	0.92 (0.87-0.97)	.002	0.94 (0.89-0.98)	.008	1 (ref)	1.03 (0.96-1.10)	.379	1.03 (0.96-1.12)	.411		
<i>Model 3[†]</i>	0.94 (0.89-0.99)	.018	0.94 (0.89-0.98)	.010	1 (ref)	1.02 (0.96-1.10)	.501	1.01 (0.94-1.09)	.777		
<i>Model 4[§]</i>	0.94 (0.89-0.995)	.034	0.94 (0.90-0.99)	.018	1 (ref)	1.02 (0.95-1.09)	.641	1.00 (0.92-1.08)	.948		
Reference Group: Trauma/4-5 Symptoms											
No trauma			Trauma-exposed								
			No symptoms		1-3 symptoms		4-5 symptoms		6-7 symptoms		
	<u>HR (95% CI)</u>	<u>P</u>	<u>HR (95% CI)</u>	<u>P</u>	<u>HR (95% CI)</u>	<u>P</u>	<u>HR</u>	<u>HR (95% CI)</u>	<u>P</u>	<u>HR (95% CI)</u>	<u>P</u>
<i>Model 1*</i>	0.85 (0.80-0.91)	<.0001	0.89 (0.84-0.94)	<.0001	0.96 (0.90-1.02)	.210	1 (ref)	1.03 (0.95-1.12)	.513		
<i>Model 2⁺</i>	0.89 (0.84-0.95)	.0002	0.91 (0.86-0.96)	.001	0.97 (0.91-1.04)	.379	1 (ref)	1.00 (0.92-1.09)	.955		
<i>Model 3[†]</i>	0.92 (0.86-0.97)	.006	0.92 (0.87-0.97)	.003	0.98 (0.91-1.05)	.501	1 (ref)	0.99 (0.91-1.08)	.781		
<i>Model 4[§]</i>	0.93 (0.87-0.99)	.020	0.93 (0.88-0.98)	.012	0.98 (0.92-1.05)	.641	1 (ref)	0.98 (0.90-1.07)	.663		
Reference Group: Trauma/6-7 Symptoms											
No trauma			Trauma-exposed								
			No symptoms		1-3 symptoms		4-5 symptoms		6-7 symptoms		
	<u>HR (95% CI)</u>	<u>P</u>	<u>HR (95% CI)</u>	<u>P</u>	<u>HR (95% CI)</u>	<u>P</u>	<u>HR (95% CI)</u>	<u>P</u>	<u>HR</u>	<u>HR (95% CI)</u>	<u>P</u>
<i>Model 1*</i>	0.83 (0.77-0.89)	<.0001	0.87 (0.81-0.93)	<.0001	0.93 (0.86-1.01)	.073	0.97 (0.89-1.06)	.513	1 (ref)		
<i>Model 2⁺</i>	0.89 (0.82-0.95)	.001	0.91 (0.85-0.97)	.006	0.97 (0.90-1.05)	.411	1.00 (0.92-1.09)	.955	1 (ref)		
<i>Model 3[†]</i>	0.93 (0.86-0.998)	.043	0.93 (0.87-0.995)	.036	0.99 (0.91-1.07)	.777	1.01 (0.93-1.10)	.781	1 (ref)		
<i>Model 4[§]</i>	0.95 (0.88-1.02)	.142	0.95 (0.88-1.01)	.122	1.00 (0.93-1.08)	.948	1.02 (0.94-1.11)	.663	1 (ref)		

Note. HR=hazard ratio. 95% CI=95% confidence interval.

*Adjusted for age at baseline, race/ethnicity, parental education, maternal and paternal history of hypertension, and age 5 somatotype.

⁺Additionally adjusted for use of oral contraceptives, acetaminophen, aspirin, and other nonsteroidal anti-inflammatory drugs, menopausal status and hormone therapy use, and hypercholesterolemia.

[†]Additionally adjusted for body mass index, physical activity, diet quality, sugar-sweetened beverage consumption, artificially-sweetened beverage consumption, cigarette smoking, and alcohol consumption.

[§]Additionally adjusted for antidepressant use.

Supplementary Table S2. Adjusted hazard ratios (95% confidence intervals) for the variables in Model 2 with risk of incident hypertension, 1989-2011

Predictor	Hazard Ratio (95% Confidence Interval)	P
Trauma/PTSD symptom status		
No trauma	1 (ref)	---
Trauma/no symptoms	1.02 (0.98-1.06)	.283
Trauma/1-3 symptoms	1.09 (1.03-1.15)	.002
Trauma/4-5 symptoms	1.13 (1.06-1.20)	.0002
Trauma/6-7 symptoms	1.13 (1.05-1.21)	.002
Parents' education at birth		
High school or less	1 (ref)	---
Some college	0.96 (0.92-1.00)	.029
College or more	0.85 (0.81-0.88)	<.0001
Missing	1.00 (0.94-1.06)	.973
Maternal history of hypertension	1.57 (1.52-1.62)	<.0001
Paternal history of hypertension	1.45 (1.41-1.50)	<.0001
Race/ethnicity		
White	1 (ref)	---
African American	1.69 (1.48-1.94)	<.0001
Latina	0.92 (0.80-1.07)	.271
Asian	1.21 (1.06-1.38)	.005
Other	0.97 (0.85-1.11)	.646
Missing	0.88 (0.75-1.02)	.080
Somatotype at age 5		
Category 1 (smallest)	1.03 (0.99-1.07)	.195
Category 2	1 (ref)	---
Category 3	1.08 (1.03-1.12)	.001
Category 4	1.17 (1.11-1.23)	<.0001
Category 5 (largest)	1.31 (1.23-1.39)	<.0001
Oral contraceptive use		
Never	1 (ref)	---
Former	1.00 (0.95-1.05)	.895
Current	1.55 (1.44-1.67)	<.0001
Missing	0.66 (0.55-0.81)	<.0001
Menopausal status and HT use		
Pre-menopausal	1 (ref)	---
Post-menopausal/never HT	0.93 (0.87-0.99)	.022
Post-menopausal/past HT	0.93 (0.86-1.00)	.050
Post-menopausal/current HT	1.04 (0.99-1.10)	.129
Post-menopausal/missing HT	0.85 (0.68-1.05)	.125
Unknown menopausal status	1.14 (1.05-1.24)	.002
Missing	1.02 (0.94-1.10)	.676
Acetaminophen use		
No	1 (ref)	---
Yes	1.24 (1.20-1.29)	<.0001
Missing	1.29 (1.10-1.51)	.002
Aspirin use		
No	1 (ref)	---
Yes	1.18 (1.13-1.23)	<.0001
Missing	1.03 (0.90-1.19)	.637
Other NSAID use		
No	1 (ref)	---
Yes	1.27 (1.23-1.31)	<.0001
Missing	1.62 (1.39-1.89)	<.0001
Hypercholesterolemia		
No	1 (ref)	---
Yes	1.45 (1.40-1.50)	<.0001

Note. PTSD=posttraumatic stress disorder. HT=hormone therapy. NSAID=nonsteroidal anti-inflammatory drug.

Supplementary Table S3. Associations of potential mediator variables with trauma/PTSD symptom status and risk of incident hypertension

Proposed Mediator	Association with Trauma/PTSD Symptom Status ^a		Association with Hypertension Risk ^b	
	Wald Statistic (df)	P	Hazard Ratio (95% Confidence Interval)	P
Body mass index, kg/m ²	χ^2 (4)=254.26	<.0001	1 (ref)	---
<18.5			0.92 (0.76-1.12)	.395
18.5-<21			1.30 (1.07-1.57)	.007
21-<23			1.77 (1.47-2.14)	<.0001
23-<25			2.36 (1.95-2.84)	<.0001
25-<27			3.44 (2.85-4.14)	<.0001
27-<30			5.64 (4.69-6.79)	<.0001
30+				
Cigarette smoking	χ^2 (4)=375.90	<.0001	1 (ref)	---
Never			1.06 (1.02-1.10)	.001
Former smoker			1.02 (0.94-1.11)	.559
Current, 1-14 cigs/day			1.08 (0.98-1.18)	.123
Current, 15-24 cigs/day			1.23 (1.07-1.41)	.003
Current, 25+ cigs/day			1.12 (0.82-1.53)	.489
Missing				
Alcohol consumption, grams/day	χ^2 (4)=39.22	<.0001	1 (ref)	---
0			0.86 (0.83-0.89)	<.0001
1-<5			0.73 (0.69-0.77)	<.0001
5-<10			0.86 (0.81-0.91)	<.0001
10-<20			1.14 (1.06-1.23)	.0004
20+			1.08 (1.02-1.15)	.011
Missing				
Physical activity, MET hrs/wk	χ^2 (4)=11.93	.018	1 (ref)	---
<3			0.83 (0.79-0.87)	<.0001
3-<9			0.74 (0.70-0.77)	<.0001
9-<18			0.69 (0.65-0.73)	<.0001
18-<27			0.60 (0.57-0.63)	<.0001
27+				
Alternative Healthy Eating Index	χ^2 (4)=163.10	<.0001	1 (ref)	---
1 st quintile (worst diet)			0.89 (0.84-0.93)	<.0001
2 nd quintile			0.84 (0.81-0.88)	<.0001
3 rd quintile			0.74 (0.71-0.78)	<.0001
4 th quintile			0.62 (0.58-0.65)	<.0001
5 th quintile (best diet)			1.05 (0.84-1.32)	.669
Missing				
Sugar-sweetened beverage consumption	χ^2 (4)=46.57	<.0001	1 (ref)	---
<1/month			1.03 (0.98-1.07)	.231
1-4/month			1.03 (0.98-1.08)	.200
2-6/week			1.20 (1.14-1.26)	<.0001
1+/day			1.19 (1.11-1.27)	<.0001
Missing				
Artificially-sweetened beverage consumption	χ^2 (4)=25.41	<.0001	1 (ref)	---
<1/month			1.08 (1.02-1.14)	.009
1-4/month			1.15 (1.10-1.20)	<.0001
2-6/week			1.38 (1.33-1.44)	<.0001
1+/day			1.33 (1.24-1.43)	<.0001
Missing				
Antidepressant use	χ^2 (4)=3470.33	<.0001	1 (ref)	---
No			1.32 (1.27-1.38)	<.0001
Yes				

Note. PTSD=posttraumatic stress disorder. MET hrs/wk=metabolic equivalent hours/week.

^aResults of generalized estimating equations examining trauma/PTSD symptom status as a predictor of each potential mediator (trauma/PTSD symptom status and potential mediators were time-varying variables that were updated over the course of the study period). The Wald statistic indicates whether there were significant differences in a given mediator among the different trauma/PTSD

symptom status groups. Compared to no trauma exposure, elevated PTSD symptoms were associated with greater likelihood of having higher body mass index, smoking cigarettes, and using antidepressants. Elevated PTSD symptoms were also associated with lower alcohol, sugar-sweetened beverage, and artificially-sweetened beverage consumption, lower physical activity, and lower likelihood of having poor diet quality compared to no trauma exposure.

^bResults of Cox proportional hazards models examining each potential mediator as a predictor of incident hypertension (adjusted for demographics, family history, and childhood adiposity).