## **Supplemental Material**

Table S1. Dietary intake of DASH food components by DASH score quartile (n=3,414)\*.

	Total group	DASH quartile 1 score 10-21	DASH quartile 2 score 22-24	DASH quartile 3 score 25-27	DASH quartile 4 score 28-37	
	n=3,414	n=860	n=798	n=836	n=920	p-value
Total grains, g/d	174 (122 – 218)	128 (88 - 177)	168 (117 – 208)	183 (139 – 222)	203 (162 - 246)	< 0.001
Vegetables (excluding potatoes	143 (105 – 186)	104 (76 – 136)	129 (101 – 160)	151 (121 – 190)	188 (151 – 231)	< 0.001
and condiments), g/d						
Fruits, g/d	296 (192 – 441)	202 (121 – 299)	275 (187 – 414)	319 (214 – 454)	389 (281 - 525)	< 0.001
Non-full-fat dairy products, g/d	310 (171 – 462)	191 (94 – 386)	273 (154 - 445)	326 (204 – 473)	409 (266 - 549)	< 0.001
Nuts, seeds, legumes, g/d	13 (6 – 23)	7 (2 – 13)	11 (5 – 18)	14 (7 – 24)	22 (13 – 35)	< 0.001
Red and processed meats, g/d	53 (35 – 75)	74 (54 – 93)	60 (44 – 78)	49 (34 – 65)	36 (21 – 52)	< 0.001
Sugar-sweetened beverages,	65 (33 – 140)	156 (83 – 262)	76 (38 – 148)	57 (31 – 99)	39 (21 – 63)	< 0.001
sweets and added sugars, g/d						
Sodium, mg/d <sup>†</sup>	3317 (937)	3464 (982)	3337 (973)	3311 (957)	3168 (814)	< 0.001

DASH, Dietary Approaches to Stop Hypertension. g/d, daily amount in grams and/or milliliters per day. mg/d, daily amount in milligrams per day. \*Values are median (inter quartile range). <sup>†</sup>Values are mean (sd).

	Participants with	Participants	
	data on dietary	without data on	
	intake <sup>†</sup>	dietary intake <sup>‡</sup>	
	n=3,414	n=512	p-value
Maternal age at enrolment, mean	31.4 (4.4)	30.3 (5.3)	< 0.001
(sd), years			
Parity, n nulliparous (%)	2039 (59.9)	291 (57.3)	0.27
Prepregnancy BMI, mean (sd)	23.1 (3.8)	23.1 (4.1)	0.80
Prepregnancy BMI ≥25	655 (22.2)	98 (23.1)	0.68
Gestational weight gain, mean (sd),	10.8 (4.4)	11.3 (4.8)	0.05
kg			
Gestational age at intake (weeks) <sup>§</sup>	14.7 (10.2, 23.1)	14.1 (10.3, 30.4)	< 0.001
Higher education, n (%)	2000 (59.3)	232 (46.6)	< 0.001
Smoking, n continued (%)	538 (17.0)	116 (25.3)	< 0.001
Alcohol consumption, n continued	1570 (50.0)	202 (44.4)	0.025
(%)			
Folic acid supplement use, n (%)	2493 (89.1)	332 (82.0)	< 0.001
Systolic blood pressure, mean (sd),			
mmHg			
Early-pregnancy	117.3 (11.9)	117.6 (12.3)	0.60
Mid-pregnancy	118.5 (11.7)	118.5 (10.9)	0.92
Late-pregnancy	120.4 (11.4)	119.7 (11.4)	0.20
Diastolic blood pressure, mean (sd),			
mmHg			
Early-pregnancy	68.5 (9.2)	68.1 (9.5)	0.48
Mid-pregnancy	67.2 (9.3)	67.0 (9.5)	0.61
Late-pregnancy	69.4 (9.2)	69.5 (9.3)	0.76
Umbilical artery pulsatility index,			
mean (sd)			
Mid-pregnancy	1.19 (0.18)	1.22 (0.18)	0.008
Late-pregnancy	0.98 (0.17)	0.98 (0.18)	0.37
Uterine artery resistance index,			
mean (sd)			
Mid-pregnancy	0.535 (0.089)	0.545 (0.090)	0.08
Late-pregnancy	0.483 (0.078)	0.481 (0.077)	0.62
Late-pregnancy notching, n (%)	48 (2.2)	2 (0.6)	0.07
Gestational hypertensive disorders,			
n (%)			
Gestational hypertension	173 (5.3)	24 (4.9)	0.74
Preeclampsia	59 (1.9)	8 (1.7)	0.80

Table S2. Non-response analysis: characteristics of participating women with and without data on dietary intake  $^\ast$ 

\*Values are means (sd) or percentages. <sup>†</sup>Women with data on dietary intake as described in Figure S1<sup>‡</sup> Women without data on dietary intake as described in Figure S2 <sup>§</sup>Median (95% range). <sup>§</sup>Median (95% range).

	Difference in systolic blood pressure (mmHg)					
DASH	Intercept	P-value <sup>†</sup>	Slope (mmHg(95%CI))	P-value <sup>†</sup>		
Quartile 1	113.5	0.08	0.01 (-0.06, 0.08)	0.75		
Quartile 2	112.5	0.56	0.04 (-0.03, 0.10)	0.31		
Quartile 3	113.4	0.10	-0.05 (-0.11, 0.02)	0.18		
Quartile 4	111.9	Reference	Reference	Reference		
	Difference in	n diastolic blood pressure	(mmHg)			
DASH	Intercept	P-value <sup>†</sup>	Slope (mmHg(95%CI))	P-value <sup>†</sup>		
Quartile 1	100.1	0.08	0.01 (-0.04, 0.06)	0.70		
Quartile 2	99.6	0.32	0.01 (-0.03, 0.06)	0.64		
Quartile 3	99.7	0.25	-0.02 (-0.07, 0.04)	0.54		
Quartile 4	98.9	Reference	Reference	Reference		

Table S3. Longitudinal associations between DASH score and systolic and diastolic blood pressure  $\!\!\!^*$ 

DASH, Dietary Approaches to Stop Hypertension.

\*Values are based on repeated non-linear regression models and reflect the change in blood pressure in mmHg per DASH quartile compared to women with the highest dietary quality (quartile 4) as reference. Models are adjusted for gestational age at the time of measurements. <sup>†</sup>P-value reflects the significance level of the estimate.

	Difference in systolic blood	pressure (mmHg)	
	Early-pregnancy	Mid-pregnancy	Late-pregnancy
DASH	n=2,831	n=3,299	n=3,321
Quartile 1 <sup>†</sup>	1.14 (-0.09, 2.36)	1.97 (0.87, 3.08)*	1.77 (0.69, 2.85)*
	n=702	n=823	n=825
Quartile 2 <sup>†</sup>	0.70 (-0.54, 1.94)	$1.28 (0.16, 2.41)^{*}$	$1.54 (0.45, 2.64)^*$
	n=664	n=773	n=782
Quartile 3 <sup>†</sup>	0.62 (-0.60, 1.84)	0.49 (-0.62, 1.60)	0.17 (-0.91, 1.25)
	n=704	n=808	n=815
Quartile 4 <sup>†</sup>	Reference	Reference	Reference
	n=761	n=895	n=899
Trend <sup>‡</sup>	-0.40 (-0.83, -0.04)	-0.77 (1.16, -0.37)*	-0.69 (-1.08, -0.30)*
	Difference in diastolic bloo	d pressure (mmHg)	
	Early-pregnancy	Mid-pregnancy	Late-pregnancy
DASH	n=2,831	n=3,298	n=3,320
Quartile 1 <sup>†</sup>	0.69 (-0.25, 1.64)	2.19 (1.32, 3.06)*	1.11 (0.24, 1.97)*
	n=702	n=822	n=825
Quartile 2 <sup>†</sup>	0.38 (-0.58, 1.33)	$1.57 (0.68, 2.45)^*$	0.75 (-0.13, 1.63)
	n=664	n=773	n=781
Quartile 3 <sup>†</sup>	0.23 (-0.71, 1.17)	0.76 (-0.12, 1.64)	0.20 (-0.67, 1.07)
	n=704	n=808	n=815
Quartile 4 <sup>†</sup>	Reference	Reference	Reference
	n=761	n=895	n=899
Trend <sup>‡</sup>	-0.28 (-0.58, 0.09)	-0.79 (-1.10, -0.48)*	-0.46 (-0.77, -0.15)*

Table S4. Basic models: associations of maternal DASH score with systolic and diastolic blood pressure in early-, mid- and late-pregnancy (n=3,414).

DASH, Dietary Approaches to Stop Hypertension.

\* P-value <0.05.<sup>†</sup>Values are regression coefficients (95% confidence interval) and reflect the difference in mmHg blood pressure per DASH quartile. Groups are compared to women with the highest dietary quality (quartile 4) as reference. Models are adjusted for gestational age at the time of intake. Estimates are from multiple imputed data. <sup>‡</sup>Trends were based on multiple linear regression models with DASH as SDS. Models are adjusted for gestational age at the time of intake. Estimates are from multiple imputed data.

Table S5. Basic models: associations of DASH score with placental vascular function (n=3,414).

	Umbilical artery pulsatility index <sup>†,‡</sup>		Uterine artery resistance index <sup>†,‡</sup>		Bilateral notching <sup>‡,§</sup>	
	Mid-pregnancy	Late-pregnancy	Mid-pregnancy	Late-pregnancy	Late-pregnancy	
DASH	n=2,527	n=2,776	n=1,898	n=2,076	$n_{cases} = 48$	
Quartile 1	$0.027 (0.007, 0.047)^{*}$	$0.038 \left( 0.021, 0.055 \right)^{*}$	0.000 (-0.011, 0.012)	$0.010 (0.001, 0.020)^{*}$	1.09 (0.51, 2.34)	
	n=598	n=672	n=433	n=496	$n_{cases} = 13$	
Quartile 2	0.024 (0.004, 0.044) <sup>*</sup>	0.007 (-0.011, 0.024)	0.000 (-0.011, 0.011)	0.005 (-0.005, 0.014)	0.95 (0.43, 2.11)	
	n=600	n=644	n=448	n=477	$n_{cases} = 11$	
Quartile 3	0.006 (-0.013, 0.026)	0.015 (-0.002, 0.032)	0.000 (-0.011, 0.011)	0.001 (-0.009, 0.010)	0.80 (0.35, 1.82)	
	n=630	n=693	n=468	n=516	$n_{cases} = 10$	
Quartile 4	Reference	Reference	Reference	Reference	Reference	
	n=699	n=767	n=549	n=587	$n_{cases} = 14$	
Trend <sup>∥</sup>	-0.013 (-0.020, -0.005)*	-0.013 (-0.019, -0.007)*	0.000 (-0.004, 0.005)	-0.003 (-0.007, 0.000)	1.02 (0.76, 1.36)	

DASH, Dietary Approaches to Stop Hypertension. UmPI, umbilical artery pulsatility index. UtRI, uterine artery resistance index. \*P-value<0.05. <sup>†</sup>Values are regression coefficients (95% confidence interval) and reflect differences in UmPI and UtRI per DASH quartile. Groups are compared to women with the highest dietary quality according to the DASH score (quartile 4) as reference. Estimates are from multiple imputed data. <sup>‡</sup>Models are adjusted for gestational age at the time of intake. <sup>§</sup>Values are odds ratios (95% confidence interval) that reflect difference in risks of late-pregnancy notching per DASH quartile. Groups are compared to women with a healthy dietary pattern (quartile 4) as reference. Estimates are from multiple imputed data. <sup>II</sup> Trends were based on multiple linear regression models with DASH as SDS for UmPI and UtPI, and on multiple logistic regression models with DASH as SDS for bilateral notching.

Difference in un	nbilical artery pulsatility inde	2X		
Intercept	P-value <sup>†</sup>	Slope (95% CI)	P-value <sup>†</sup>	
1.642	0.39	0.0002 (-0.002, 0.002)	0.86	
1.690	0.01	-0.002 (-0.004, -0.000)	0.04	
1.628	0.66	-0.0001 (-0.002, 0.002)	0.96	
1.615	Reference	Reference	Reference	
Difference in ut	erine artery resistance index			
Intercept	P-value <sup>†</sup>	Slope (95% CI)	P-value <sup>†</sup>	
0.637	0.23	0.001 (-0.0002, 0.002)	0.70	
0.636	0.21	0.001 (-0.0003, 0.002)	0.64	
0.651	0.77	0.0001 (-0.001, 0.001)	0.54	
0.656	Reference	Reference	Reference	
	Difference in un   Intercept   1.642   1.690   1.628   1.615   Difference in ut   Intercept   0.637   0.636   0.651   0.656	Difference in umbilical artery pulsatility inde   Intercept P-value <sup>†</sup> 1.642 0.39   1.690 0.01   1.628 0.66   1.615 Reference   Difference in uterine artery resistance index   Intercept P-value <sup>†</sup> 0.637 0.23   0.636 0.21   0.651 0.77   0.656 Reference	Difference in umbilical artery pulsatility indexInterceptP-value <sup>†</sup> Slope (95% CI) $1.642$ $0.39$ $0.0002$ (- $0.002$ , $0.002$ ) $1.690$ $0.01$ $-0.002$ (- $0.004$ , $-0.000$ ) $1.628$ $0.66$ $-0.0001$ (- $0.002$ , $0.002$ ) $1.615$ ReferenceReferenceDifference in uterine artery resistance indexInterceptP-value <sup>†</sup> $0.637$ $0.23$ $0.001$ (- $0.002$ , $0.002$ ) $0.636$ $0.21$ $0.001$ (- $0.003$ , $0.002$ ) $0.651$ $0.77$ $0.0001$ (- $0.001$ , $0.001$ ) $0.656$ ReferenceReference	Difference in umbilical artery pulsatility index   Intercept P-value <sup>†</sup> Slope (95% CI) P-value <sup>†</sup> 1.642 0.39 0.0002 (-0.002, 0.002) 0.86   1.690 0.01 -0.002 (-0.004, -0.000) 0.04   1.628 0.66 -0.0001 (-0.002, 0.002) 0.96   1.615 Reference Reference Reference   Difference in uterine artery resistance index P-value <sup>†</sup> Slope (95% CI) P-value <sup>†</sup> 0.637 0.23 0.001 (-0.0002, 0.002) 0.70   0.636 0.21 0.001 (-0.0003, 0.002) 0.64   0.651 0.77 0.0001 (-0.001, 0.001) 0.54   0.656 Reference Reference Reference

Table S6. Longitudinal associations between DASH score and umbilical artery pulsatility index and uterine artery resistance index\*

DASH, Dietary Approaches to Stop Hypertension. CI, Confidence interval.

\*Values are based on repeated non-linear regression models and reflect the change in umbilical artery pulsatility index and uterine artery resistance index per DASH quartile compared to women with the highest dietary quality (quartile 4) as reference. Models are adjusted for gestational age at the time of measurement. <sup>†</sup>P-value reflects the significance level of the estimate.

		Absolute values and differences in UtPI		
		Mid-pregnancy	Late-pregnancy	
		n=1,530	<i>n</i> =1,747	
DASH				
Quartile 1	Absolute mean value $(sd)^*$	0.895 (0.275)	0.751 (0.199)	
	Basic model <sup>†,‡</sup>	0.020 (-0.017, 0.057)	0.022 (-0.004, 0.048)	
	Confounder model <sup>†,§</sup>	0.013 (-0.026, 0.053)	0.013 (-0.015, 0.041)	
		n=342	n=417	
Quartile 2	Absolute mean value $(sd)^*$	0.883 (0.261)	0.736 (0.189)	
	Basic model <sup>†,‡</sup>	0.009 (-0.028, 0.045)	0.007 (-0.019, 0.032)	
	Confounder model <sup>†,§</sup>	0.010 (-0.027, 0.046)	0.006 (-0.020, 0.033)	
		n=354	n=408	
Quartile 3	Absolute mean value $(sd)^*$	0.875 (0.252)	0.735 (0.206)	
	Basic model <sup>†,‡</sup>	0.000 (-0.35, 0.036)	0.006 (-0.019, 0.031)	
	Confounder model <sup>†,§</sup>	0.000 (-0.036, 0.035)	0.004 (-0.021, 0.029)	
		n=394	n=438	
Quartile 4	Absolute mean value $(sd)^*$	0.875 (0.256)	0.729 (0.187)	
	Basic model <sup>†,‡</sup>	Reference	Reference	
	Confounder model <sup>†,§</sup>	Reference	Reference	
		n=440	n=484	
$Trend^d$	Basic model <sup>‡,  </sup>	-0.004 (-0.017)	-0.006 (-0.015, 0.003)	
	Confounder model <sup>§,</sup>	-0.001 (-0.015, 0.014)	-0.003 (-0.013, 0.007)	

Table S7. *Secondary outcome:* associations of DASH score with uterine artery pulsatility index (n=3,414).

UtPI, Uterine artery pulsatility index. DASH, Dietary Approaches to Stop Hypertension. Sd, standard deviation. CI, Confidence Interval.

\*Values are mean UtPI values (sd) and reflect the absolute value in uterine artery pulsatility index per DASH Quartile. P-values for comparison of absolute values among the four DASH quartiles were obtained by ANOVA (mid-pregnancy UtPI, p-value=0.693; late-pregnancy UtPI, p-value 0.387). \*Values are regression coefficients (95% confidence interval) and reflect differences in UtPI per DASH Quartile. Groups are compared to women with the highest dietary quality according to the DASH score (Quartile 4) as reference. Estimates are from multiple imputed data. R^2 values for confounder models: mid-pregnancy UtPI, R^2=0.02; late-pregnancy UtPI, R^2=0.02.\*Models are adjusted for gestational age at intake.<sup>§</sup>Models are adjusted for maternal age, educational level, parity, prepregnancy BMI, smoking habits, alcohol use, folic acid use, total energy intake and gestational age at time of the measurements. Trends were based on multiple linear regression models with DASH dietary score as SDS. R^2 values for confounder models: mid-pregnancy UtPI, R^2=0.02; late-pregnancy UtPI, R^2=0.02; late-pregnancy UtPI, R^2=0.02; late-pregnancy UtPI, R^2=0.02; late-pregnancy UtPI, R^2=0.02.\*

	Gestational hypertensive disorders	Gestational hypertension	Preeclampsia
	Odds ratio (95% CI)	Odds ratio (95% CI)	Odds ratio (95% CI)
DASH	$n_{cases} = 232$	$n_{cases} = 173$	$n_{cases} = 59$
Quartile 1	1.31 (0.91, 1.88)	1.22 (0.81, 1.84)	1.62 (0.79, 3.30)
	$n_{\text{cases}}=70$	$n_{cases} = 51$	$n_{cases} = 19$
Quartile 2	0.96 (0.65, 1.42)	1.05 (0.68, 1.61)	0.62 (0.25, 1.57)
	$n_{\text{cases}} = 49$	$n_{cases} = 42$	$n_{\text{cases}} = 7$
Quartile 3	1.00 (0.69, 1.47)	0.81 (0.51, 1.27)	1.70 (0.84, 3.43)
	$n_{cases} = 54$	$n_{cases} = 34$	$n_{\text{cases}}=20$
Quartile 4	Reference	Reference	Reference
	$n_{cases} = 59$	$n_{\text{cases}} = 46$	$n_{cases} = 13$
Trend <sup>†</sup>	0.90 (0.79, 1.03)	0.90 (0.77, 1.05)	0.90 (0.70, 1.16)

Table S8. Basic models: associations of maternal DASH score the risks of gestational hypertensive disorder (3,414)<sup>\*</sup>.

DASH, Dietary Approaches to Stop Hypertension. CI, Confidence Interval.

\*Values are odds ratios (95% confidence interval) that reflect difference in risks of gestational hypertensive disorders, gestational hypertension and preeclampsia per DASH quartile. Groups are compared to women with the highest dietary quality according to the DASH score(quartile 4) as reference. Estimates are from multiple imputed data. Models are adjusted for gestational age at the time of intake. <sup>†</sup>Trends were based on multiple logistic regression models with DASH as SDS.

Table S9. *Sensitivity analysis:* associations of maternal DASH score with systolic and diastolic blood pressure in early-, mid- and late-pregnancy in participants without pre-existent diabetes or gestational diabetes (n=3,378).

	Absolute values and differences in systolic blood pressure (mmHg)					
		Early-pregnancy	Mid-pregnancy	Late-pregnancy		
DASH		n=2,802	n=3,263	n=3,286		
Quartile 1	Absolute mean value (sd) <sup>†</sup>	117.65 (11.79)	119.43 (12.02)	121.14 (12.01)		
	Basic model <sup>‡,§</sup>	0.98 (-0.24, 2.20)	1.91* (0.80, 3.02)	1.66* (0.58, 2.73)		
	Confounder model <sup>‡,  </sup>	-0.53 (-1.77, 0.70)	0.01 (-1.14, 1.15)	-0.26 (-1.38, 0.86)		
		n=692	n=809	n=811		
Quartile 2	Absolute mean value $(sd)^{\dagger}$	117.17 (12.38)	118.77 (12.23)	120.93 (11.68)		
	Basic model <sup>‡,§</sup>	0.48 (-0.76, 1.72)	1.22* (0.09, 2.35)	1.44* (0.35, 2.54)		
	Confounder model <sup>‡,  </sup>	-0.51 (-1.68, 0.67)	0.06 (-1.02, 1.13)	0.38 (-0.67, 1.43)		
		n=657	n=765	n=774		
Quartile 3	Absolute mean value $(sd)^{\dagger}$	117.17 (12.27)	117.94 (11.71)	119.64 (10.92)		
	Basic model <sup>‡,§</sup>	0.53 (-0.69, 1.75)	0.43 (-0.69, 1.54)	0.16 (-0.92, 1.24)		
	Confounder model <sup>‡,  </sup>	-0.06 (-1.20, 1.08)	-0.18 (-1.22, 0.87)	-0.34 (-1.37, 0.68)		
		n=696	n=799	n=806		
Quartile 4	Absolute mean value (sd) <sup>†</sup>	116.63 (10.97)	117.48 (10.89)	119.48 (10.81)		
	Basic model <sup>‡,§</sup>	Reference	Reference	Reference		
	Confounder model <sup>‡,  </sup>	Reference	Reference	Reference		
		n=757	n=890	n=895		
Trend <sup>‡</sup>	Basic model <sup><math>\ddagger</math></sup>	-0.33 (-0.76, 0.11)	-0.75* (-1.15, -0.35)	-0.66* (-1.05, -0.27)		
	Confounder model <sup>§</sup>	0.26(-0.19, 0.71)	-0.01 (-0.43, 0.41)	0.10(-0.31, 0.51)		
	Absolute values and differen	ces in diastolic blood pressure (mmHg				
		Early-pregnancy <sup>†</sup>	Mid-pregnancy <sup>†</sup>	Late-pregnancy <sup>†</sup>		
DASH		n=2,802	n=3,262	n=3,285		
Quartile 1	Absolute mean value (sd) <sup>†</sup>	68.80 (9.14)	68.22 (9.74)	69.86 (9.59)		
	Basic model <sup>‡,§</sup>	0.65 (-0.29, 1.59)	2.16* (1.28, 3.03)	1.03* (0.16, 1.90)		
	Confounder model <sup>‡,  </sup>	0.15 (-0.81, 1.10)	1.34* (0.44, 2.24)	0.04 (-0.84, 0.93)		
		n=692	n=808	n=811		
Quartile 2	Absolute <sup>†</sup>	68.43 (10.00)	67.56 (9.70)	69.47 (9.25)		
	Basic model <sup>‡,§</sup>	0.25 (-0.70, 1.21)	1.49* (0.60, 2.37)	0.63 (-0.25, 1.51)		
	Confounder model <sup>‡,  </sup>	-0.25 (-1.16, 0.66)	0.82 (-0.02, 1.66)	-0.08 (-0.91, 0.75)		

		n=657	n=765	n=773
Quartile 3	Absolute mean value $(sd)^{\dagger}$	68.28 (8.97)	66.77 (8.87)	68.97 (8.73)
	Basic model <sup>‡,§</sup>	0.16 (-0.78, 1.10)	0.71 (-0.17, 1.59)	0.13 (-0.74, 1.00)
	Confounder model <sup>‡,  </sup>	-0.25 (-1.13, 0.63)	0.30 (-0.52, 1.12)	-0.26 (-1.07, 0.55)
		n=696	n=799	n=806
Quartile 4	Absolute mean value $(sd)^{\dagger}$	68.10 (8.54)	66.05 (8.50)	68.83 (8.96)
	Basic model <sup>‡,§</sup>	Reference	Reference	Reference
	Confounder model <sup>‡,  </sup>	Reference	Reference	Reference
		n=757	n=890	n=895
Trend <sup>#</sup>	Basic model <sup><math>\ddagger</math></sup>	-0.23 (-0.57, 0.11)	-0.79* (-1.10, -0.47)	-0.43* (-0.74, -0.12)
	Confounder model <sup>  </sup>	-0.03 (-0.37, 0.32)	-0.47* (-0.80, -0.14)	-0.04 (-0.36, 0.28)

DASH, Dietary Approaches to Stop Hypertension. Sd, standard deviation. SBP, systolic blood pressure. DBP, diastolic blood pressure.

<sup>\*</sup> P-value<0.05. <sup>†</sup>Values are mean blood pressure values (sd) and reflect the absolute value in SBP and DBP per DASH Quartile. P-values for comparison of absolute values among the four DASH quartiles were obtained by ANOVA (early-pregnancy SBP, p-value=0.433; mid-pregnancy SBP, p-value=0.003; late-pregnancy SBP, p-value=0.003; early-pregnancy DBP, p-value=0.522; mid-pregnancy DBP, p-value<0.001; late-pregnancy DBP, p-value=0.081). <sup>‡</sup>Values are regression coefficients (95% confidence interval) and reflect the difference in mmHg blood pressure per DASH Quartile. Groups are compared to women with the lowest DASH dietary score (Quartile 4) as reference. Estimates are from multiple imputed data. R^2 values for confounder models: early-pregnancy SBP, R^2=0.14; mid-pregnancy DBP, R^2=0.15, late-pregnancy SBP, R^2=0.12; early-pregnancy DBP, R^2=0.14; mid-pregnancy DBP, R^2=0.16; late-pregnancy, R^2=0.15. <sup>§</sup>Models are adjusted for gestational age at intake.<sup>[]</sup>Models are adjusted for maternal age, educational level, parity, prepregnancy BMI, smoking habits, alcohol use, folic acid use, total energy intake and gestational age at time of the measurements. <sup>#</sup>Trends were based on multiple linear regression models with DASH dietary score as SDS. R^2 values for confounder models: early-pregnancy SBP, R^2=0.14; mid-pregnancy SBP, R^2=0.15, late-pregnancy DBP, R^2=0.16; late-pregnancy SBP, R^2=0.12; early-pregnancy SBP, R^2=0.14; mid-pregnancy SBP, R^2=0.15, late-pregnancy SBP, R^2=0.12; early-pregnancy DBP, R^2=0.14; mid-pregnancy SBP, R^2=0.15, late-pregnancy SBP, R^2=0.12; early-pregnancy DBP, R^2=0.16; late-pregnancy SBP, R^2=0.15.

Table S10. Sensitivity analysis: associations of DASH score with placental vascular function in participants without pre-existent or gestational	
diabetes (n=3,378).	

		Absolute values and differences in UmPI <sup>*,†</sup>		Absolute values and	differences in UtRI <sup>*,†</sup>	Bilateral
						notching <sup>‡,†</sup>
		Mid-pregnancy	Late-pregnancy	Mid-pregnancy	Late-pregnancy	Late-pregnancy
DASH		n=2,060	n=2,751	n=1,884	n=2,505	n <sub>cases</sub> =48
Quartile 1	Absolute mean value $(sd)^{\dagger}$	1.201 (0.181)	0.999 (0.177)	0.536 (0.091)	0.490 (0.076)	n.a.
	Basic model <sup>‡,§</sup>	$0.026^{*}(0.006, 0.046)$	$0.036^{*}(0.019, 0.053)$	0.000 (-0.11, 0.012)	0.010* (0.001, 0.020)	1.05 (0.52, 2.37)
	Confounder model <sup>‡,  </sup>	0.011 (-0.010, 0.032)	0.024* (0.006, 0.043)	-0.003 (-0.015,	0.009 (-0.001, 0.019)	1.12 (0.51, 2.45)
		n=489	n=661	0.010)	n=589	$n_{cases} = 13$
				n=428		
Quartile 2	Absolute mean value $(sd)^{\dagger}$	1.199 (0.184)	0.969 (0.160)	0.535 (0.090)	0.484 (0.076)	n.a.
	Basic model <sup>‡,§</sup>	0.024* (0.004, 0.044)	0.007 (010, 0.024)	0.000 (-0.011, 0.012)	0.005 (-0.005, 0.014)	0.96 (0.43, 2.13)
	Confounder model <sup>‡,  </sup>	0.019 (-0.001, 0.039)	0.002 (-0.016, 0.019)	0.000 (-0.011, 0.011)	0.005 (-0.004, 0.014)	0.95 (0.43, 2.11)
		n=473	n=637	n=446	n=596	$n_{cases} = 11$
Quartile 3	Absolute mean value $(sd)^{\dagger}$	1.180 (0.186)	0.978 (0.163)	0.535 (0.089)	0.480 (0.081)	n.a.
	Basic model <sup>‡,§</sup>	0.005 (-0.014, 0.025)	0.015 (-0.002, 0.032)	0.000 (-0.011, 0.012)	0.000 (-0.009, 0.010)	0.81 (0.36, 1.84)
	Confounder model <sup>‡,  </sup>	0.008 (-0.011, 0.27)	0.015 (-0.002, 0.032)	0.000 (-0.012, 0.011)	0.000 (-0.010, 0.009)	0.83 (0.37, 1.89)
		n=511	n=686	n=463	n=623	$n_{cases} = 10$
Quartile 4	Absolute mean value $(sd)^{\dagger}$	1.174 (0.182)	0.962 (0.162)	0.535 (0.088)	0.479 (0.077)	n.a.
	Basic model <sup>‡,§</sup>	Reference	Reference	Reference	Reference	Reference
	Confounder model <sup>‡,  </sup>	Reference	Reference	Reference	Reference	Reference
		n=587	n=767	n=547	n=697	$n_{cases} = 14$
Trend <sup>#</sup>	Basic model <sup><math>\ddagger</math></sup>	-0.012* (-0.019, -	-0.013 <sup>*</sup> (-0.019, -	0.001 (-0.004, 0.005)	-0.003 (-0.007,	1.01 (0.76, 1.35)
		0.005)	0.006)		0.000)	
	Confounder model <sup>§</sup>	-0.006 (-0.014,	-0.008* (-0.015, -	0.002 (-0.003, 0.006)	-0.003 (-0.006,	1.01 (0.76, 1.36)
		0.001)	0.001)		0.001)	

UmPI, umbilical artery pulsatility index. UtRI, umbilical artery resistance index. DASH, Dietary Approaches to Stop Hypertension. Sd, standard deviation. \* P-value<0.05. †Values are mean values (sd) and reflect the absolute value in UmPI and UtRI per DASH Quartile. P-values for comparison of absolute values among the four DASH quartiles were obtained by ANOVA (mid-pregnancy UmPI, p-value=0.016; late-pregnancy UmPI, p-value<0.001; mid-pregnancy UtRI, p-value=1.000; late-pregnancy UtRI, p-value=0.108).<sup>‡</sup>Values for UmPI and UtRI are regression coefficients (95% confidence interval) and reflect the difference in UmPI and UtRI per DASH Quartile. Values for bilateral notching are odds ratios (95% confidence interval) that reflect difference in risks of bilateral notching per DASH Quartile. Groups are compared to women with the lowest DASH dietary score (Quartile 4) as reference. Estimates are from multiple imputed data. R^2 values for confounder models: mid-pregnancy UmPI, R^2=0.07; late-pregnancy UmPI, R^2=0.04; mid-pregnancy UtRI, R^2=0.02; late-pregnancy UtRI, R^2=0.03; bilateral notching R^2=0.01.<sup>§</sup>Models are adjusted for gestational age at intake. <sup>||</sup> Models for UmPI and UtRI are adjusted for maternal age, educational level, parity, prepregnancy BMI, smoking habits, alcohol use, folic acid use, total energy intake and gestational age at time of the measurements. Models for bilateral notching are adjusted for parity, prepregnancy BMI, folic acid use and gestational age at time of measurement. <sup>#</sup>Trends were based on multiple linear regression models with DASH dietary score as SDS for UmPI and UtRI; and on multiple logistic regression models with DASH dietary score as SDS for UmPI and UtRI; and on multiple logistic regression models R^2=0.04; mid-pregnancy UtRI, R^2=0.02; late-pregnancy UtRI, R^2=0.03; bilateral notching R^2=0.03; bilateral notching R^2=0.01.

Table S11. *Sensitivity analysis:* associations of maternal DASH score the risks of gestational hypertensive disorder in participants without preexistent or gestational diabetes (n=3,378)<sup>\*</sup>.

		Gestational hypertensive	Gestational hypertension	Preeclampsia
		disorders		
		Odds ratio (95% CI)	Odds ratio (95% CI)	Odds ratio (95% CI)
DASH		$n_{\text{cases}}=224$	n <sub>cases</sub> =166	$n_{\text{cases}} = 224$
Quartile 1	Basic model <sup>†</sup>	1.31 (0.91, 1.88)	1.21 (0.80, 1.84)	1.63 (0.80, 3.33)
	Confounder model <sup>‡</sup>	1.15 (0.79, 1.69)	1.04 (0.67, 1.61)	1.50 (0.72, 3.16)
		$n_{\text{cases}} = 68$	$n_{\text{cases}}=49$	$n_{cases} = 19$
Quartile 2	Basic model <sup>†</sup>	0.89 (0.60, 1.34)	1.00 (0.64, 1.55)	0.54 (0.20, 1.41)
	Confounder model <sup>‡</sup>	0.79 (0.53, 1.20)	0.87 (0.55, 1.37)	0.50 (0.19, 1.33)
		$n_{\text{cases}} = 45$	$n_{cases}=39$	$n_{\text{cases}} = 6$
Quartile 3	Basic model <sup>†</sup>	1.01 (0.69, 1.48)	0.81 (0.51, 1.28)	1.71 (0.84, 3.45)
	Confounder model <sup>‡</sup>	0.96 (0.65, 1.43)	0.74 (0.46, 1.18)	1.78 (0.87, 3.62)
		$n_{\text{cases}} = 53$	$n_{\text{cases}}=33$	$n_{\text{cases}}=20$
Quartile 4	Basic model <sup>†</sup>	Reference	Reference	Reference
	Confounder model <sup>‡</sup>	Reference	Reference	Reference
		$n_{cases} = 58$	$n_{cases} = 45$	$n_{\text{cases}} = 13$
Trend <sup>§</sup>	Basic model <sup>†</sup>	0.91 (0.79, 1.04)	0.91 (0.78, 1.06)	0.90 (0.69, 1.16)
	Confounder model <sup>‡</sup>	0.96 (0.83, 1.11)	0.96 (0.82, 1.14)	0.93 (0.71, 1.22)

DASH, Dietary Approaches to Stop Hypertension. CI, Confidence Interval. GHD, Gestational hypertensive disorders. GH, Gestational Hypertension. PE, Preeclampsia.

<sup>\*</sup>Values are odds ratios (95% confidence interval) that reflect difference in risks of gestational hypertensive disorders, gestational hypertension and preeclampsia per DASH Quartile. Groups are compared to women with the lowest DASH dietary score (Quartile 1) as reference. Estimates are from multiple imputed data. R^2 values for confounder models: GHD, R^2=0.09; GH, R^2=0.09; PE, R^2=0.08. <sup>†</sup>Models are adjusted for gestational age at intake. <sup>‡</sup> Models are adjusted for parity, prepregnancy BMI, folic acid use and gestational age at time of intake. <sup>§</sup>Trends were based on multiple logistic regression models with DASH dietary score as SDS. R^2 values for confounder models: GHD, R^2=0.08; GH, R^2=0.09; PE, R^2=0.09; PE,

Table S12. *Sensitivity analysis:* associations of maternal DASH score with systolic and diastolic blood pressure in early-, mid- and late-pregnancy in participants without heart condition or hypercholesterolemia (n=3,356)<sup>\*</sup>.

	Absolute values and differences in systolic blood pressure (mmHg)				
		Early-pregnancy <sup>†</sup>	Mid-pregnancy <sup>†</sup>	Late-pregnancy <sup>†</sup>	
DASH		n=2,789	<i>n</i> =3,246	<i>n</i> =3,265	
Quartile 1	Absolute mean value (sd) <sup>†</sup>	117.77 (11.84)	119.56 (12.05)	121.25 (12.17)	
	Basic model <sup>‡,§</sup>	1.09 (-0.14, 2.33)	2.07* (0.95, 3.18)	1.73* (0.64, 2.82)	
	Confounder model <sup>‡,  </sup>	-0.44 (-1.68, 0.81)	0.12 (-1.03, 1.26)	-0.20 (-1.33, 0.93)	
		n=688	n=809	n=808	
Quartile 2	Absolute mean value (sd) <sup>†</sup>	117.44 (12.61)	118.82 (12.21)	121.04 (11.75)	
	Basic model <sup>‡,§</sup>	0.75 (-0.50, 2.00)	$1.30^{*}(0.17, 2.43)$	1.51* (0.41, 2.61)	
	Confounder model <sup>‡,  </sup>	-0.35 (-1.54, 0.83)	0.06 (-1.02, 1.14)	0.39 (-0.67, 1.45)	
		n=655	n=762	n=771	
Quartile 3	Absolute mean value (sd) <sup>†</sup>	117.26 (12.29)	118.02 (11.68)	119.68 (10.95)	
	Basic model <sup>‡,§</sup>	0.61 (-0.62, 1.84)	0.52 (-0.60, 1.64)	0.15 (-0.94, 1.25)	
	Confounder model <sup>‡,  </sup>	-0.01 (-1.16, 1.15)	-0.11 (-1.17, 0.94)	-0.36 (1.40, 0.68)	
		n=696	n=795	n=802	
Quartile 4	Absolute mean value (sd) <sup>†</sup>	116.63 (11.02)	117.45 (10.93)	119.51 (10.87)	
	Basic model <sup>‡,§</sup>	Reference	Reference	Reference	
	Confounder model <sup>‡,  </sup>	Reference	Reference	Reference	
		n=750	n=880	n=884	
Trend <sup>#</sup>	Basic model <sup><math>\ddagger</math></sup>	-0.38 (-0.82, 0.06)	-0.79* (-1.19, -0.39)	-0.67* (-1.07, -0.28)	
	Confounder model <sup>§</sup>	0.23 (-0.23, 0.68)	-0.03 (-0.45, 0.39)	0.10 (-0.31, 0.51)	
	Absolute values and difference	ces in diastolic blood pressure (m	mHg)		
		Early-pregnancy <sup>†</sup>	Mid-pregnancy <sup>†</sup>	Late-pregnancy <sup>†</sup>	
DASH		n=2,789	n=3,245	n=3,264	
Quartile 1	Absolute mean value $(sd)^{\dagger}$	68.70 (9.01)	68.27 (9.80)	69.88 (9.62)	
	Basic model <sup>‡,§</sup>	0.56 (-0.39, 1.50)	2.20* (1.32, 3.09)	1.03* (0.15, 1.90)	
	Confounder model <sup>‡,  </sup>	0.02 (-0.94, 0.97)	1.28* (0.37, 2.18)	0.01 (-0.88, 0.90)	
		n=688	n=808	n=808	
Quartile 2	Absolute mean value $(sd)^{\dagger}$	68.61 (10.08)	67.67 (9.76)	69.53 (9.26)	
	Basic model <sup>‡,§</sup>	0.45 (-0.51, 1.41)	1.60* (0.70, 2.50)	0.67 (-0.21, 1.56)	
	Confounder model <sup>‡,  </sup>	-0.15 (-1.06, 0.76)	0.84* (-0.01, 1.69)	-0.10 (-0.94, 0.73)	

		n=655	n=762	n=770
Quartile 3	Absolute mean value (sd) <sup>†</sup>	68.32 (9.03)	66.80 (8.90)	69.03 (8.75)
	Basic model <sup>‡,§</sup>	0.20 (-0.74, 1.15)	0.73 (-0.16, 1.62)	1.18 (-0.70, 1.05)
	Confounder model <sup>‡,  </sup>	-0.23 (-1.11, 0.66)	0.29 (-0.54, 1.11)	-0.22 (-1.03, 0.59)
		n=696	n=795	n=802
Quartile 4	Absolute mean value $(sd)^{\dagger}$	68.10 (8.57)	66.06 (8.55)	68.85 (9.01)
	Basic model <sup>‡,§</sup>	Reference	Reference	Reference
	Confounder model <sup>‡,  </sup>	Reference	Reference	Reference
		n=750	n=880	n=884
Trend <sup>#</sup>	Basic model <sup><math>\ddagger</math></sup>	-0.21 (-0.54, 0.13)	-0.80* (-1.11, -0.48)	-0.43* (-0.74, -0.12)
	Confounder model <sup>§</sup>	0.01 (-0.34, 0.36)	-0.43* (-0.77, -0.10)	-0.02 (-0.35, 0.30)

DASH, Dietary Approaches to Stop Hypertension. Sd, standard deviation. SBP, systolic blood pressure. DBP, diastolic blood pressure. \* P-value<0.05. <sup>†</sup>Values are mean blood pressure values (sd) and reflect the absolute value in SBP and DBP per DASH Quartile. P-values for comparison of absolute values among the four DASH quartiles were obtained by ANOVA (early-pregnancy SBP, p-value=0.324; mid-pregnancy SBP, p-value=0.001; latepregnancy SBP, p-value=0.002; early-pregnancy DBP, p-value=0.324; mid-pregnancy DBP, p-value=0.001; late-pregnancy DBP, p-value=0.002). <sup>‡</sup>Values are regression coefficients (95% confidence interval) and reflect the difference in mmHg blood pressure per DASH Quartile. Groups are compared to women with the lowest DASH dietary score (Quartile 4) as reference. Estimates are from multiple imputed data. R^2 values for confounder models: earlypregnancy SBP, R^2=0.14; mid-pregnancy SBP, R^2=0.15, late-pregnancy SBP, R^2=0.12; early-pregnancy DBP, R^2=0.14; mid-pregnancy DBP, R^2=0.16; late-pregnancy, R^2=0.15. <sup>§</sup>Models are adjusted for gestational age at intake.<sup>II</sup>Models are adjusted for maternal age, educational level, parity, prepregnancy BMI, smoking habits, alcohol use, folic acid use, total energy intake and gestational age at time of the measurements. <sup>#</sup>Trends were based on multiple linear regression models with DASH dietary score as SDS. R^2 values for confounder models: early-pregnancy SBP, R^2=0.14; mid-pregnancy SBP, R^2=0.15, late-pregnancy SBP, R^2=0.12; early-pregnancy DBP, R^2=0.16; late-pregnancy SBP, R^2=0.15. Table S13. *Sensitivity analysis:* associations of DASH score with placental vascular function in participants heart condition or hypercholesterolemia (n=3,356).

		Absolute values and differences in UmPI <sup>*,†</sup> Absolute values and differences in UtRI <sup>*,†</sup>		Bilateral		
						notching <sup>‡,†</sup>
		Mid-pregnancy	Late-pregnancy	Mid-pregnancy	Late-pregnancy	Late-pregnancy
DASH		n=2,482	n=2,729	n=1,864	n=2,042	n <sub>cases</sub> =47
Quartile 1	Absolute mean value $(sd)^{\dagger}$	1.201 (0.182)	1.000 (0.178)	0.535 (0.091)	0.490 (0.076)	n.a.
	Basic model <sup>‡,§</sup>	$0.026^{*} (0.006, 0.047)$	0.037* (0.020, 0.054)	0.001 (-0.011, 0.012)	0.010* (0.001, 0.020)	1.17 (0.54, 2.56)
	Confounder model <sup>‡,  </sup>	0.011(-0.010, 0.033)	0.025* (0.007, 0.044)	-0.002 (-0.014,	0.010 (0.000, 0.020)	1.2 (0.454, 2.67)
		n=587	n=659	0.010)	n=487	n <sub>cases</sub> =13
				n=423		
Quartile 2	Absolute mean value $(sd)^{\dagger}$	1.198 (0.184)	0.970 (0.160)	0.535 (0.089)	0.484 (0.076)	n.a.
	Basic model <sup>‡,§</sup>	0.024* (0.004, 0.044)	0.006 (-0.011, 0.024)	0.001 (-0.011, 0.012)	0.005 (-0.005, 0.014)	1.01 (0.45, 2.28)
	Confounder model <sup>‡,  </sup>	0.019 (-0.001, 0.039)	0.002(-0.016, 0.019)	0.001 (-0.011, 0.012)	0.006 (-0.004, 0.015)	0.88 (0.39, 2.03)
		n=589	n=634	n=440	n=471	$n_{cases} = 11$
Quartile 3	Absolute mean value $(sd)^{\dagger}$	1.180 (0.186)	0.975 (0.163)	0.534 (0.089)	0.480 (0.081)	n.a.
	Basic model <sup>‡,§</sup>	0.006 (-0.014, 0.026)	0.012 (-0.005, 0.029)	0.000 (-0.011, 0.011)	0.000 (-0.009, 0.010)	0.86 (0.37, 1.98)
	Confounder model <sup>‡,  </sup>	0.009 (-0.011, 0.028)	0.012(-0.005, 0.029)	-0.001 (-0.012,	0.000 (-0.009, 0.009)	0.87 (0.38, 2.01)
		n=621	n=681	0.010)	n=508	$n_{cases} = 10$
				n=461		
Quartile 4	Absolute mean value $(sd)^{\dagger}$	1.174 (0.182)	0.963 (0.162)	0.535 (0.088)	0.479 (0.077)	n.a.
	Basic model <sup>‡,§</sup>	Reference	Reference	Reference	Reference	Reference
	Confounder model <sup>‡,  </sup>	Reference	Reference	Reference	Reference	Reference
		n=685	n=755	n=540	n=576	$n_{cases} = 13$
Trend <sup>#</sup>	Basic model $^{\ddagger}$	-0.012* (-0.019, -	-0.013* (-0.019, -	0.000 (-0.004, 0.004)	-0.003 (-0.007,	0.97 (0.74, 1.33)
		0.005)	0.007)		0.000)	
	Confounder model <sup>§</sup>	-0.007 (-0.014,	-0.008 * (-0.015, -	0.001 (-0.003, 0.006)	-0.003 (-0.007,	0.99 (0.74, 1.33)
		0.001)	0.001)		0.001)	

UmPI, umbilical artery pulsatility index. UtRI, umbilical artery resistance index. DASH, Dietary Approaches to Stop Hypertension. Sd, standard deviation. \* P-value<0.05. <sup>†</sup>Values are mean values (sd) and reflect the absolute value in UmPI and UtRI per DASH Quartile. P-values for comparison of absolute values among the four DASH quartiles were obtained by ANOVA (mid-pregnancy UmPI, p-value=0.019; late-pregnancy UmPI, p-value<0.001; mid-pregnancy UtRI, p-value=0.998; late-pregnancy UtRI, p-value=0.101). <sup>‡</sup>Values for UmPI and UtRI are regression coefficients (95% confidence interval) and reflect the difference in UmPI and UtRI per DASH Quartile. Values for bilateral notching are odds ratios (95% confidence interval) that reflect difference in risks of bilateral notching per DASH Quartile. Groups are compared to women with the lowest DASH dietary score (Quartile 4) as reference. Estimates are from multiple imputed data. R-squared values for confounder models: mid-pregnancy UmPI, R^2=0.07; late-pregnancy UmPI, R^2=0.04; mid-pregnancy UtRI, R^2=0.02; late-pregnancy UtRI, R^2=0.03; bilateral notching R^2=0.01). <sup>§</sup>Models are adjusted for gestational age at intake.<sup>||</sup> Models for UmPI and UtRI are adjusted for maternal age, educational level, parity, prepregnancy BMI, smoking habits, alcohol use, folic acid use, total energy intake and gestational age at time of the measurements. Models for bilateral notching are adjusted for parity, prepregnancy BMI, folic acid use and gestational age at time of measurement. <sup>#</sup>Trends were based on multiple linear regression models with DASH dietary score as SDS for UmPI and UtRI; and on multiple logistic regression models with DASH dietary score as SDS for bilateral notching. R-squared values for confounder models: mid-pregnancy UmPI, R^2=0.07; late-pregnancy UmPI, R^2=0.04; mid-pregnancy UtRI, R^2=0.02; late-pregnancy UtRI, R^2=0.03; bilateral notching R^2=0.03; bilateral notching R^2=0.03; bilateral notching R^2=0.03; bilateral notching R^2=0.03; bilateral notching.

Table S14. *Sensitivity analysis:* associations of maternal DASH score the risks of gestational hypertensive disorder in participants without heart condition or hypercholesterolemia (n=3,356)<sup>\*</sup>.

		Gestational hypertensive disorders	Gestational hypertension	Preeclampsia
		Odds ratio (95% CI)	Odds ratio (95% CI)	Odds ratio (95% CI)
DASH		$n_{cases} = 227$	$n_{\text{cases}} = 167$	$n_{cases} = 59$
Quartile 1	Basic model <sup>†</sup>	1.32 (0.92, 1.90)	1.23 (0.81, 1.86)	1.63 (0.80, 3.32)
	Confounder model <sup>‡</sup>	1.17 (0.80, 1.71)	1.06 (0.69, 1.64)	1.49 (0.71, 3.12)
		$n_{cases} = 69$	$n_{\text{cases}} = 50$	$n_{\text{cases}} = 19$
Quartile 2	Basic model <sup><math>\dagger</math></sup>	0.95 (0.64, 1.41)	1.04 (0.68, 1.61)	0.62 (0.25, 1.57)
	Confounder model <sup>‡</sup>	0.83 (0.55, 1.25)	0.90 (0.58, 1.41)	0.57 (0.22, 1.44)
		$n_{cases} = 48$	$n_{\text{cases}} = 41$	$n_{cases} = 7$
Quartile 3	Basic model <sup>†</sup>	0.98 (0.67, 1.45)	0.78 (0.49, 1.24)	1.70 (0.84, 3.44)
	Confounder model <sup>‡</sup>	0.93 (0.63, 1.38)	0.70 (0.44, 1.13)	1.74 (0.85, 3.55)
		$n_{\text{cases}} = 52$	$n_{\text{cases}}=32$	$n_{\text{cases}} = 20$
Quartile 4	Basic model <sup>†</sup>	Reference	Reference	Reference
	Confounder model <sup>‡</sup>	Reference	Reference	Reference
		$n_{\text{cases}} = 58$	$n_{\text{cases}} = 45$	$n_{\text{cases}} = 13$
Trend <sup>§</sup>	Basic model $^{\dagger}$	0.89 (0.78, 1.02)	0.89 (0.77, 1.04)	0.90 (0.69, 1.15)
	Confounder model <sup>‡</sup>	0.94 (0.82, 1.09)	0.94 (0.80, 1.11)	0.93 (0.71, 1.22)

DASH, Dietary Approaches to Stop Hypertension. GHD, Gestational hypertensive disorders. GH, Gestational Hypertension. PE, Preeclampsia. \*Values are odds ratios (95% confidence interval) that reflect difference in risks of gestational hypertensive disorders, gestational hypertension and preeclampsia per DASH Quartile. Groups are compared to women with the lowest DASH dietary score (Quartile 1) as reference. Estimates are from multiple imputed data. R^2 values for confounder models: GHD, R^2=0.09; GH, R^2=0.09; PE, R^2=0.09). †Models are adjusted for gestational age at intake. ‡ Models are adjusted for parity, prepregnancy BMI, folic acid use and gestational age at time of intake. \$ Trends were based on multiple logistic regression models with DASH dietary score as SDS. R^2 values for confounder models: GHD, R^2=0.09; GH, R^2=0.09; GH, R^2=0.09; FE, R^2=0.09; PE, R^2=0.07). Table S15. *Sensitivity analysis:* associations of maternal DASH score with systolic and diastolic blood pressure in early-, mid- and late-pregnancy in participants enrolled in the first trimester of pregnancy (n=1,888).

	Absolute values and differences in systolic blood pressure (mmHg)				
		Early-pregnancy <sup>†</sup>	Mid-pregnancy <sup>†</sup>	Late-pregnancy <sup>†</sup>	
DASH		n=1,869	n=1,854	n=1,842	
Quartile 1	Absolute mean value (sd) <sup>†</sup>	118.03 (11.97)	120.14 (11.80)	120.96 (12.16)	
	Basic model <sup>‡,§</sup>	1.03 (-0.48, 2.55)	2.02* (0.52, 3.51)	0.73 (-0.74, 2.19)	
	Confounder model <sup>‡,  </sup>	-0.10 (-1.64, 1.43)	0.81 (-0.71, 2.32)	-0.52 (-2.02, 0.97)	
		n=464	n=462	n=457	
Quartile 2	Absolute mean value $(sd)^{\dagger}$	117.66 (12.59)	119.47 (12.10)	120.71 (11.95)	
	Basic model <sup>‡,§</sup>	0.67 (-0.86, 2.19)	1.35 (-0.16, 2.85)	0.47 (-1.00, 1.95)	
	Confounder model <sup>‡,  </sup>	-0.12 (-1.56, 1.32)	0.48 (-0.95, 1.90)	-0.28 (-1.68, 1.13)	
		n=450	n=447	n=445	
Quartile 3	Absolute mean value $(sd)^{\dagger}$	117.67 (12.10)	118.89 (12.12)	119.82 (11.06)	
	Basic model <sup>‡,§</sup>	0.70 (-0.81, 2.21)	0.75 (-0.74, 2.25)	-0.40 (-1.86, 1.06)	
	Confounder model <sup>‡,  </sup>	-0.07 (-1.45, 1.39)	0.01 (-1.39, 1.42)	-1.06 (-2.44, 0.32)	
		n=462	n=457	n=456	
Quartile 4	Absolute mean value $(sd)^{\dagger}$	116.95 (11.03)	118.15 (10.83)	120.21 (10.56)	
	Basic model <sup>‡,§</sup>	Reference	Reference	Reference	
	Confounder model <sup>‡,  </sup>	Reference	Reference	Reference	
		n=493	n=488	n=484	
Trend <sup>#</sup>	Basic model <sup><math>\ddagger</math></sup>	-0.36 (-0.90, 0.18)	-0.78* (-1.32, -0.25)	-0.35 (-0.87, 0.18)	
	Confounder model <sup>§</sup>	0.04 (-0.52, 0.60)	-0.35 (-0.90, 0.21)	0.11 (-0.44, 0.65)	
	Absolute values and differen	ces in diastolic blood pressure (mml	Hg)		
		Early-pregnancy <sup>†</sup>	Mid-pregnancy <sup>†</sup>	Late-pregnancy <sup>†</sup>	
DASH		n=1,869	n=1,853	n=1,841	
Quartile 1	Absolute mean value $(sd)^{\dagger}$	69.43 (9.31)	68.60 (9.75)	69.89 (9.53)	
	Basic model <sup>‡,§</sup>	1.03 (-0.15, 2.21)	2.36* (1.17, 3.54)	0.44 (-0.73, 1.60)	
	Confounder model <sup>‡,  </sup>	0.80 (-0.38, 1.97)	1.87* (0.68, 3.07)	-0.20 (-1.35, 0.95)	
		n=464	n=461	=457	
Quartile 2	Absolute mean value (sd) <sup>†</sup>	69.15 (10.06)	68.06 (9.90)	69.59 (9.27)	
	Basic model <sup>‡,§</sup>	0.76 (-0.43, 1.94)	1.81* (0.62, 3.01)	0.14 (-1.04, 1.31)	
	Confounder model <sup>‡,∥</sup>	0.35 (-0.76, 1.45)	1.28* (0.16, 2.40)	-0.47 (-1.55, 0.62)	

		n=450	n=447	n=444
Quartile 3	Absolute mean value $(sd)^{\dagger}$	68.88 (9.23)	67.15 (9.17)	69.20 (8.98)
	Basic model <sup>‡,§</sup>	0.48 (-0.69, 1.66)	0.88 (-0.31, 2.07)	-0.24 (-1.41, 0.93)
	Confounder model <sup>‡,  </sup>	-0.08 (-1.17, 1.01)	0.30 (-0.81, 1.40)	-0.86 (-1.92, 0.21)
		n=462	n=457	n=456
Quartile 4	Absolute mean value $(sd)^{\dagger}$	68.40 (8.42)	66.29 (8.39)	69.43 (8.74)
	Basic model <sup>‡,§</sup>	Reference	Reference	Reference
	Confounder model <sup>‡,  </sup>	Reference	Reference	Reference
		n=493	n=488	n=484
Trend <sup>#</sup>	Basic model <sup><math>\ddagger</math></sup>	-0.39 (-0.81, 0.03)	-0.80* (-1.23, -0.38)	-0.24 (-0.66, 0.18)
	Confounder model <sup>§</sup>	-0.32 (-0.75, 0.11)	-0.63* (-1.07, -0.19)	-0.01 (-0.43, 0.41)

DASH, Dietary Approaches to Stop Hypertension. Sd, standard deviation. SBP, systolic blood pressure. DBP, diastolic blood pressure. \* P-value<0.05. <sup>†</sup>Values are mean blood pressure values (sd) and reflect the absolute value in SBP and DBP per DASH Quartile. P-values for comparison of absolute values among the four DASH quartiles were obtained by ANOVA (early-pregnancy SBP, p-value=0.553; mid-pregnancy SBP, p-value=0.059; latepregnancy SBP, p-value=0.435; early-pregnancy DBP, p-value=0.359; mid-pregnancy DBP, p-value=0.001; late-pregnancy DBP, p-value=0.716). <sup>‡</sup>Values are regression coefficients (95% confidence interval) and reflect the difference in mmHg blood pressure per DASH Quartile. Groups are compared to women with the lowest DASH dietary score (Quartile 4) as reference. Estimates are from multiple imputed data. R^2 values for confounder models: earlypregnancy SBP, R^2=0.14; mid-pregnancy SBP, R^2=0.14, late-pregnancy SBP, R^2=0.13; early-pregnancy DBP, R^2=0.16; mid-pregnancy DBP, R^2=0.16; late-pregnancy, R^2=0.18. <sup>§</sup>Models are adjusted for gestational age at intake.<sup>§</sup>Models are adjusted for maternal age, educational level, parity, prepregnancy BMI, smoking habits, alcohol use, folic acid use, total energy intake and gestational age at time of the measurements. <sup>#</sup>Trends were based on multiple linear regression models with DASH dietary score as SDS. R^2 values for confounder models: early-pregnancy SBP, R^2=0.14; mid-pregnancy SBP, R^2=0.14, late-pregnancy SBP, R^2=0.13; early-pregnancy DBP, R^2=0.16; late-pregnancy SBP, R^2=0.14; mid-pregnancy SBP, R^2=0.14, late-pregnancy SBP, R^2=0.13; early-pregnancy DBP, R^2=0.16; late-pregnancy SBP, R^2=0.14; mid-pregnancy SBP, R^2=0.14, late-pregnancy SBP, R^2=0.13; early-pregnancy DBP, R^2=0.16; mid-pregnancy DBP, R^2=0.16; late-pregnancy, R^2=0.18.

		Absolute values and o	lifferences in UmPI <sup>*,†</sup>	Absolute values and di	Absolute values and differences in UtRI <sup>*,†</sup>		
		Mid-pregnancy	Late-pregnancy	Mid-pregnancy	Late-pregnancy	Late-pregnancy	
DASH		n=1,518	n=1,618	n=1,231	n=1,164	$n_{\text{cases}}=30$	
Quartile 1	Absolute mean value $(sd)^{\dagger}$	1.209 (0.180)	1.002 (0.173)	0.536 (0.089)	0.490 (0.075)	n.a.	
	Basic model <sup>‡,§</sup>	0.022 (-0.004, 0.048)	0.035§ (0.013, 0.057)	0.000 (-0.014, 0.015)	0.012 (0.000, 0.024)	0.50 (0.17, 1.47)	
	Confounder model <sup>‡,  </sup>	0.001 (-0.026, 0.028) n=361	0.017 (-0.006, 0.041) n=397	0.002 (-0.014, 0.017) n=271	0.013 (0.000, 0.026) n=297	0.53 (0.18, 1.56) n <sub>cases</sub> =5	
Quartile 2	Absolute mean value (sd) <sup>†</sup>	1.196 (0.188)	0.960 (0.156)	0.536 (0.092)	0.486 (0.077)	n.a.	
	Basic model <sup>‡,§</sup>	0.010 (-0.016, 0.036)	-0.007 (-0.029, 0.016)	0.000 (-0.014, 0.015)	0.008 (-0.005, 0.020)	0.55 (0.19, 1.60)	
	Confounder model <sup>‡,  </sup>	0.005 (-0.020, 0.031) n=371	-0.015 (-0.037, 0.008) n=382	0.002 (-0.012, 0.017) n=282	0.008 (-0.004, 0.021) n=276	0.54 (0.18, 1.57) n <sub>cases</sub> =5	
Quartile 3	Absolute mean value (sd) <sup>†</sup>	1.190 (0.176)	0.973 (0.159)	0.532 (0.089)	0.478 (0.081)	n.a.	
	Basic model <sup>‡,§</sup>	0.005 (-0.021, 0.030)	0.007 (-0.015, 0.029)	-0.004 (-0.018, 0.010)	-0.001 (-0.013, 0.011)	0.86 (0.35, 2.10)	
	Confounder model <sup>‡,  </sup>	0.008 (-0.017, 0.033) n=383	0.005 (-0.017, 0.027) n=412	-0.002 (-0.016, 0.013) n=291	-0.000 (-0.012, 0.011) n=321	0.85 (0.35, 2.08) $n_{cases}=9$	
Quartile 4	Absolute mean value (sd) <sup>†</sup>	1.185 (0.183)	0.965 (0.164)	0.536 (0.090)	0.478 (0.074)	n.a.	
	Basic model <sup>‡,§</sup>	Reference	Reference	Reference	Reference	Reference	
	Confounder model <sup>‡,  </sup>	Reference n=403	Reference n=427	Reference n=320	Reference n=337	Reference n <sub>cases</sub> =11	
Trend <sup>#</sup>	Basic model <sup><math>\ddagger</math></sup>	-0.008 (-0.017, 0.002)	-0.009 <sup>§</sup> (-0.018, - 0.001)	0.000 (-0.005, 0.005)	0.000 (-0.008, 0.000)	1.45 (0.99, 2.14)	
	Confounder model <sup>§</sup>	0.000 (-0.009. 0.010)	-0.002(-0.010, 0.007)	-0.001 (-0.006, 0.005)	-0.004 (-0.009, 0.000)	1.45 (0.98, 2.16)	

Table S16. *Sensitivity analysis:* associations of DASH score with placental vascular function in participants enrolled in the first trimester of pregnancy (n=1,888).

UmPI, umbilical artery pulsatility index. UtRI, umbilical artery resistance index. DASH, Dietary Approaches to Stop Hypertension. Sd, standard deviation. \* P-value<0.05. †Values are mean values (sd) and reflect the absolute value in UmPI and UtRI per DASH Quartile. P-values for comparison of absolute values among the four DASH quartiles were obtained by ANOVA (mid-pregnancy UmPI, p-value=0.308; late-pregnancy UmPI, p-value=0.002; mid-pregnancy UtRI, p-value=0.927; late-pregnancy UtRI, p-value=0.123). ‡Values for UmPI and UtRI are regression coefficients (95% confidence interval) and reflect the difference in UmPI and UtRI per DASH Quartile. Values for bilateral notching are odds ratios (95% confidence interval) that reflect difference in risks of bilateral notching per DASH Quartile. Groups are compared to women with the lowest DASH dietary score (Quartile 4) as reference. Estimates are from multiple imputed data. R^2 values for confounder models: mid-pregnancy UmPI, R^2=0.07; late-pregnancy UmPI, R^2=0.05; mid-pregnancy UtRI, R^2=0.02; late-pregnancy UtRI, R^2=0.04; bilateral notching R^2=0.02. <sup>§</sup>Models are adjusted for gestational age at intake. <sup>II</sup>Models for UmPI and UtRI are adjusted for maternal age, educational level, parity, prepregnancy BMI, smoking habits, alcohol use, folic acid use, total energy intake and gestational age at time of the measurements. Models for bilateral notching are adjusted for parity, prepregnancy BMI, folic acid use and gestational age at time of measurement. <sup>#</sup>Trends were based on multiple linear regression models with DASH dietary score as SDS for UmPI and UtRI; and on multiple logistic regression models with DASH dietary score as SDS for bilateral notching. R^2 values for confounder models: mid-pregnancy UmPI, R^2=0.07; late-pregnancy UmPI, R^2=0.05; mid-pregnancy UtRI, R^2=0.02; late-pregnancy UtRI, R^2=0.04; bilateral notching R^2=0.04

Table S17. *Sensitivity analysis*: associations of maternal DASH score the risks of gestational hypertensive disorder in participants enrolled in the first trimester of pregnancy (n=1,888)<sup>\*</sup>.

		Gestational hypertensive	Gestational hypertension	Preeclampsia
		disorders		-
		Odds ratio (95% CI)	Odds ratio (95% CI)	Odds ratio (95% CI)
DASH		$n_{\text{cases}} = 124$	$n_{\text{cases}} = 96$	$n_{\text{cases}}=28$
Quartile 1	Basic model <sup>†</sup>	1.22 (0.75, 1.99)	1.03 (0.60, 1.78)	2.29 (0.79, 6.66)
	Confounder model <sup>‡</sup>	1.10 (0.66, 1.82)	0.91 (0.51, 1.61)	2.04 (0.68, 6.11)
		$n_{\text{cases}}=39$	$n_{cases}=28$	$n_{\text{cases}} = 11$
Quartile 2	Basic model <sup>†</sup>	0.75 (0.44, 1.30)	0.85 (0.48, 1.50)	0.21 (0.02, 1.80)
	Confounder model <sup>‡</sup>	0.65 (0.37, 1.14)	0.72 (0.40, 1.30)	0.19 (0.02, 1.65)
		$n_{cases}=24$	$n_{cases}=23$	$n_{cases} = 1$
Quartile 3	Basic model <sup>†</sup>	0.88 (0.52, 1.48)	0.63 (0.34, 1.16)	2.28 (0.78, 6.61)
	Confounder model <sup>‡</sup>	0.76 (0.44, 1.29)	0.51 (0.27, 0.98)*	2.16 (0.74, 6.30)
		$n_{cases}=28$	$n_{cases} = 17$	$n_{\text{cases}} = 11$
Quartile 4	Basic model <sup>†</sup>	Reference	Reference	Reference
	Confounder model <sup>‡</sup>	Reference	Reference	Reference
		$n_{\text{cases}}=33$	$n_{cases}=28$	$n_{\text{cases}}=5$
Trend <sup>§</sup>	Basic model <sup>†</sup>	0.93 (0.77, 1.12)	0.96 (0.78, 1.18)	0.82 (0.57, 1.20)
	Confounder model <sup>‡</sup>	0.96 (0.79, 1.17)	1.00 (0.80, 1.25)	0.86 (0.58, 1.27)

DASH, Dietary Approaches to Stop Hypertension. CI, Confidence Interval. GHD, Gestational hypertensive disorders. GH, Gestational Hypertension. PE, Preeclampsia.

<sup>\*</sup>Values are odds ratios (95% confidence interval) that reflect difference in risks of gestational hypertensive disorders, gestational hypertension and preeclampsia per DASH Quartile. Groups are compared to women with the lowest DASH dietary score (Quartile 1) as reference. Estimates are from multiple imputed data. R^2 values for confounder models: GHD, R^2=0.11; GH, R^2=0.12; PE, R^2=0.09. <sup>†</sup>Models are adjusted for gestational age at intake. <sup>‡</sup>Models are adjusted for parity, prepregnancy BMI, folic acid use, and gestational age at time of intake. <sup>§</sup>Trends were based on multiple logistic regression models with DASH dietary score as SDS. R^2 values for confounder models: GHD, R^2=0.10; GH, R^2=0.10; GH, R^2=0.05.

Table S18. Associations of maternal DASH score with the risks of gestational hypertensive disorder with adjustment for propensity score (1,780)\*.

	Bilateral notching	Gestational hypertensive disorders	Gestational hypertension	Preeclampsia
	Late-pregnancy	Odds ratio (95% CI)	Odds ratio (95% CI)	Odds ratio (95% CI)
DASH	$n_{cases} = 48$	n <sub>cases</sub> =232	$n_{cases} = 173$	$n_{cases} = 59$
Quartile 1	1.18 (0.49, 2.83)	1.15 (0.75, 1.75)	0.96 (0.59, 1.57)	1.89 (0.84, 4.23)
	$n_{cases} = 13$	$n_{cases} = 70$	$n_{cases} = 51$	n <sub>cases</sub> =19
Quartile 4	Reference	Reference	Reference	Reference
	$n_{cases} = 14$	$n_{cases} = 59$	n <sub>cases</sub> =46	$n_{cases} = 13$
Propensity score	1.46 (0.25, 8.49)	0.61 (0.27, 1.36)	0.42 (0.17, 1.05)	1.85 (0.39, 8.68)

DASH, Dietary Approaches to Stop Hypertension. CI, Confidence Interval. GHD, Gestational hypertensive disorders. GH, Gestational Hypertension. PE, Preeclampsia.

\* Values are odds ratios (95% confidence interval) that reflect difference in risks of bilateral uterine artery notching, gestational hypertensive disorders, gestational hypertension and preeclampsia per DASH quartile. DASH score quartile 1 is compared to DASH score quartile 4 as a reference category. Estimates are from multiple imputed data. Models are adjusted for propensity scores that were calculated using a logistic regression model to predict the likelihood of having a DASH score in quartile 1 rather than quartile 4. R^2 values for confounder models: bilateral notching R^2=0.001, GHD, R^2=0.01; GH, R^2=0.002; PE, R^2=0.01.

## Figure S1. Flow chart of the study population.



## Figure S2. Flow chart of the non-responders.

