

Socioeconomic Inequalities Impact the Ability of Pregnant Women and Women of Childbearing Age to Consume Nutrients Needed for Neurodevelopment; An Analysis of NHANES 2007-2018

Supplementary Material

Supplementary Table S1. Total usual intakes of nutrients important for neurodevelopment (foods + dietary supplements) among nonpregnant nonlactating US women aged 20-44 y in the NHANES Survey by SNAP participation.

Nutrient	Household Recipient of SNAP in Past 12 Months			
	Yes, N=1,617	% <EAR or [AI]	No, N=4,031	% <EAR or [AI]
Vitamin A, RAE/d	688 (32.3)	47.0 (2.80)	975 (40.1) *	28.3 (2.05) *
Vitamin B6, mg/d	3.12 (0.24)	6.96 (1.50)	4.46 (0.25) *	3.41 (0.82) *
Vitamin B12, ug/d	31.4 (5.58)	--	43.5 (5.90) *	--
Vitamin C, mg/d	100 (4.63)	40.1 (2.18)	151 (8.26) *	24.4 (1.48) *
Vitamin D, mg/d	7.46 (0.36)	83.8 (1.04)	13.3 (1.17) *	71.1 (0.97) *
Vitamin E, mg/d	8.11 (0.45)	93.3 (1.10)	13.7 (1.97) *	84.5 (1.75) *
Vitamin K, ug/d	101 (3.19)	[47.6 (2.18)]	131 (4.15) *	[26.0 (2.70)] *
Zinc, mg/d	11.4 (0.20)	40.2 (2.25)	13.4 (0.23) *	30.7 (1.74) *
Iron, mg/d	15.8 (0.43)	6.45 (1.19)	17.8 (0.31) *	4.25 (0.88) *
Choline, mg/d	280 (4.94)	[96.7 (0.88)]	296 (3.65) *	[94.8 (1.04)]
Folate, ug DFE/d	567 (12.8)	12.8 (1.77)	702 (14.0) *	7.49 (1.29) *
Calcium, mg/d	929 (14.8)	37.5 (1.96)	1037 (14.2) *	26.9 (1.57) *
Magnesium, mg/d	253 (3.73)	58.1 (1.91)	300 (3.81) *	37.5 (1.60) *
EPA + DHA, mg/d	46.9 (4.29)	95.0 (0.72)	65.8 (4.81) *	93.6 (0.59)

* indicates p<0.05 relative to those in households that received SNAP. % below for EPA + DHA represents those below recommendations for intake from the Dietary Guidelines for Americans.

Supplementary Table S2. Data on total usual intakes of nutrients important for neurodevelopment (foods alone) among nonpregnant nonlactating US women aged 20-44 in the National Health and Nutrition Examination Survey by PIR.

Nutrient	Low, N=2,763		Medium, N=1,209		High, N=1,336	
	Mean (SE)	% <EAR or [AI]	Mean (SE)	% <EAR or [AI]	Mean (SE)	% <EAR or [AI]
Vitamin A, RAE/d	555 (14.1) ^a	45.1 (2.60) ^d	638 (18.3) ^b	31.3 (3.10) ^e	680 (19.3) ^c	25.4 (3.03) ^f
Vitamin B6, mg/d	1.84 (0.03)	11.0 (1.88)	1.98 (0.05)	7.59 (1.79)	2.03 (0.04)	6.72 (1.54)
Vitamin B12, ug/d	4.55 (0.11)	--	4.73 (0.12)	--	4.78 (0.12)	--
Vitamin C, mg/d	75.6 (2.26) ^a	41.2 (2.34) ^e	81.6 (2.89) ^b	35.5 (2.84) ^f	87.8 (2.46) ^c	30.2 (2.26) ^g
Vitamin D, mg/d	4.13 (0.10) ^a	98.3 (0.40) ^d	4.33 (0.14) ^b	97.9 (0.46) ^e	4.40 (0.14) ^b	97.7 (0.48) ^e
Vitamin E, mg/d	7.57 (0.16) ^a	93.4 (1.13) ^d	8.60 (0.23) ^b	87.2 (2.06) ^e	9.28 (0.22) ^c	81.8 (2.27) ^f
Vitamin K, ug/d	105 (3.53) ^a	[43.1 (3.22)] ^d	121 (4.12) ^b	[30.6 (3.25)] ^e	138 (5.72) ^c	[20.3 (3.55)] ^f
Zinc, mg/d	9.78 (0.13) ^a	46.1 (2.07) ^d	10.2 (0.20) ^a	38.6 (3.21) ^e	10.5 (0.16) ^{ab}	34.3 (2.69) ^e
Iron, mg/d	12.9 (0.16) ^a	3.97 (0.77) ^d	13.3 (0.24) ^{ab}	3.02 (0.69) ^e	13.8 (0.21) ^b	1.94 (0.52) ^f
Choline, mg/d	279 (3.79) ^a	[97.1 (0.70)] ^d	298 (6.14) ^b	[94.9 (1.32)] ^e	300 (5.23) ^b	[94.7 (1.34)] ^e
Folate, ug DFE/d	474 (8.56) ^a	13.5 (1.91) ^d	496 (11.7) ^b	10.6 (1.68) ^e	517 (11.6) ^c	8.22 (1.81) ^f
Calcium, mg/d	875 (12.3) ^a	39.2 (1.57) ^d	930 (15.9) ^b	32.2 (2.50) ^e	954 (15.5) ^c	28.8 (2.48) ^f
Magnesium, mg/d	253 (3.86) ^a	56.2 (2.18) ^d	275 (4.37) ^b	44.4 (2.39) ^e	296 (4.82) ^c	34.0 (2.35) ^f

EPA + DHA, mg/d	47.4 (3.30) ^a	95.8 (0.52) ^b	49.5 (4.25) ^{ab}	96.1 (0.65) ^b	57.9 (4.20) ^b	94.9 (0.77) ^b
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Rows with different subscripts differ from each other, p<0.05, low 0-1.85, medium >1.85-3.50, high >3.5. % below for EPA + DHA represents those below recommendations for intake from the Dietary Guidelines for Americans.

Supplementary Table S3. Data on total usual intakes of nutrients important for neurodevelopment (foods + dietary supplements) among *nonpregnant nonlactating* US women aged 20-44 in the National Health and Nutrition Examination Survey by PIR.

Nutrient	Low, N=2,763		Medium, N=1,209		High, N=1,336	
	Mean (SE)	% <EAR or [AI]	Mean (SE)	% <EAR or [AI]	Mean (SE)	% <EAR or [AI]
Vitamin A, RAE/d	803 (46.7) ^a	41.7 (2.42) ^d	937 (64.0) ^b	28.4 (2.81) ^e	1027 (59.2) ^c	22.0 (2.69) ^f
Vitamin B6, mg/d	3.19 (0.22) ^a	5.66 (1.27) ^c	4.41 (0.40) ^a	3.25 (0.96) ^c	5.29 (0.44) ^{ab}	2.46 (0.74) ^{cd}
Vitamin B12, ug/d	48.0 (12.0) ^a	--	38.9 (7.05) ^b	--	37.8 (5.81) ^b	--
Vitamin C, mg/d	112 (5.33) ^a	34.0 (1.96) ^c	156 (19.1) ^a	26.2 (2.18) ^c	165 (14.9) ^b	21.1 (1.59) ^{cd}
Vitamin D, mg/d	8.70 (0.75) ^a	80.3 (1.11) ^d	13.4 (3.21) ^b	73.0 (1.50) ^e	15.6 (1.39) ^c	66.7 (1.54) ^f
Vitamin E, mg/d	9.28 (0.72) ^a	92.1 (1.20) ^d	14.1 (3.15) ^b	85.8 (2.07) ^e	15.9 (4.00) ^c	79.9 (2.43) ^f
Vitamin K, ug/d	108 (3.58) ^a	[41.0 (3.09)] ^d	125 (4.32) ^b	[28.3 (3.03)] ^e	146 (5.80) ^c	[18.0 (3.11)] ^f
Zinc, mg/d	11.8 (0.21) ^b	39.3 (1.87) ^d	13.1 (0.32) ^b	30.3 (2.60) ^e	14.2 (0.33) ^c	25.6 (2.14) ^f
Iron, mg/d	16.3 (0.34) ^a	6.18 (1.12) ^d	17.4 (0.48) ^b	4.96 (1.13) ^e	18.7 (0.45) ^c	3.31 (0.92) ^f
Choline, mg/d	280 (3.79) ^a	[97.0 (0.71)] ^c	303 (6.47) ^b	[94.3 (1.34)] ^d	303 (6.13) ^b	[94.3 (1.42)] ^d
Folate, ug DFE/d	594 (13.0) ^a	11.5 (1.60) ^d	699 (23.5) ^b	8.15 (1.28) ^e	752 (19.2) ^c	5.88 (1.34) ^f
Calcium, mg/d	948 (14.0) ^a	35.1 (1.78) ^d	1038 (19.1) ^b	26.2 (2.13) ^e	1091 (20.0) ^c	22.1 (2.08) ^f
Magnesium, mg/d	266 (4.51) ^a	52.4 (2.12) ^d	291 (5.05) ^b	40.2 (2.30) ^e	324 (5.78) ^c	29.2 (2.09) ^f
EPA + DHA, mg/d	50.2 (4.64) ^a	94.8 (0.68) ^c	54.4 (5.56) ^a	95.0 (0.83) ^c	74.1 (7.80) ^b	92.8 (0.97) ^c

Rows with different subscripts differ from each other, p<0.05, -- indicates suppression due to relative standard errors >30%, low 0-1.85, medium >1.85-3.50, high >3.5. % below for EPA + DHA represents those below recommendations for intake from the Dietary Guidelines for Americans.

Supplementary Table S4. Data on total usual intakes of nutrients important for neurodevelopment (foods alone) among *nonpregnant nonlactating* US women aged 20-44 in the National Health and Nutrition Examination Survey by household food security .

Nutrient	Very low, N=539		Low, N=945		Marginal, N=805		Full, N=3,374	
	Mean (SE)	% <EAR or [AI]						
Vitamin A, RAE/d	541 (16.0) ^a	47.7 (2.93) ^d	543 (16.7) ^a	47.8 (3.02) ^d	578 (22.8) ^b	41.2 (4.05) ^e	643 (14.6) ^c	31.0 (2.39) ^f
Vitamin B6, mg/d	1.84 (0.04) ^a	12.1 (2.00) ^c	1.84 (0.04) ^a	11.7 (1.89) ^c	1.85 (0.05) ^a	10.8 (2.13) ^d	1.98 (0.03) ^b	7.69 (1.49) ^e
Vitamin B12, ug/d	4.46 (0.11) ^a	--	4.45 (0.12) ^a	--	4.65 (0.70) ^a	--	4.72 (0.10) ^b	--
Vitamin C, mg/d	70.6 (2.46) ^a	46.2 (2.72) ^d	70.9 (2.60) ^a	46.2 (2.83) ^d	76.6 (3.31) ^b	40.1 (3.37) ^e	85.3 (1.94) ^c	32.1 (1.86) ^f
Vitamin D, mg/d	4.00 (0.12) ^a	98.7 (0.38) ^d	4.01 (0.12) ^a	98.6 (0.38) ^d	4.20 (0.17) ^b	98.3 (0.51) ^d	4.36 (0.11) ^c	97.8 (0.41) ^d
Vitamin E, mg/d	7.44 (0.18) ^a	93.9 (1.28) ^d	7.47 (0.19) ^a	93.4 (1.31) ^d	8.14 (0.30) ^b	89.9 (2.07) ^e	8.69 (0.16) ^c	86.2 (1.71) ^f
Vitamin K, ug/d	101 (3.35) ^a	[47.0 (3.01)] ^d	101 (3.51) ^a	[47.0 (3.06)] ^d	116 (5.86) ^b	[34.4 (4.60)] ^e	125 (3.99) ^c	[28.3 (2.96)] ^f
Zinc, mg/d	9.76 (0.18) ^a	46.2 (3.13) ^b	9.76 (0.18) ^a	46.6 (3.12) ^b	9.99 (0.24) ^a	42.3 (4.06) ^b	10.3 (0.12) ^a	38.3 (2.01) ^b
Iron, mg/d	12.8 (0.22) ^a	3.48 (0.81) ^c	12.8 (0.23) ^a	3.63 (0.80) ^c	13.0 (0.33) ^a	3.83 (0.88) ^d	13.5 (0.14) ^b	2.55 (0.54) ^e
Choline, mg/d	280 (5.74) ^a	[96.9 (0.89)] ^c	280 (5.86) ^a	[96.7 (0.92)] ^c	288 (7.16) ^a	[96.0 (1.03)] ^c	294 (3.94) ^b	[95.1 (1.07)] ^c
Folate, ug DFE/d	466 (9.94) ^a	14.5 (2.18) ^c	466 (10.2) ^a	14.4 (2.18) ^c	478 (14.7) ^a	12.4 (2.26) ^{cd}	504 (8.28) ^{ab}	9.21 (1.64) ^d
Calcium, mg/d	858 (15.2) ^a	43.1 (2.37) ^c	861 (15.7) ^a	42.9 (2.41) ^c	896 (11.9) ^b	37.2 (3.72) ^c	929 (10.8) ^b	32.5 (1.85) ^d
Magnesium, mg/d	252 (4.76) ^a	56.8 (2.67) ^c	253 (4.99) ^a	56.8 (2.86) ^c	260 (5.94) ^a	52.5 (3.30) ^c	280 (3.15) ^b	41.9 (1.58) ^d
EPA + DHA, mg/d	47.7 (10.4) ^b	95.6 (1.38) ^b	53.2 (2.65) ^a	95.8 (0.81) ^b	47.8 (5.97) ^b	95.7 (0.88) ^b	49.1 (4.95) ^b	95.3 (0.46) ^b

-- indicates suppression due to relative standard errors >30%, rows with different subscripts differ from each other, p<0.05. % below for EPA + DHA represents those below recommendations for intake from the Dietary Guidelines for Americans.

Supplementary Table S5. Data on total usual intakes of nutrients important for neurodevelopment (foods + dietary supplements) among *nonpregnant nonlactating* US women aged 20–44 in the National Health and Nutrition Examination Survey by household food security .

Nutrient	Very low, N=539		Low, N=945		Marginal, N=805		Full, N=3,374	
	Mean (SE)	% <EAR or [AI]	Mean (SE)	% <EAR or [AI]	Mean (SE)	% <EAR or [AI]	Mean (SE)	% <EAR or [AI]
Vitamin A, RAE/d	685 (42.7) ^a	48.3 (3.66) ^d	748 (48.7) ^{ab}	32.3 (3.25) ^e	813 (70.5) ^b	38.2 (3.79) ^e	989 (42.3) ^c	27.6 (2.11) ^f
Vitamin B6, mg/d	2.73 (0.21) ^a	7.52 (1.77) ^c	3.30 (0.36) ^a	5.19 (1.23) ^d	2.99 (0.21) ^a	5.62 (1.41) ^d	4.71 (0.29) ^b	3.35 (0.85) ^e
Vitamin B12, ug/d	24.9 (5.67) ^a	3.93 (1.57)	48.7 (10.6) ^b	--	32.2 (8.64) ^{ab}	--	42.6 (6.67) ^b	--
Vitamin C, mg/d	109 (13.7) ^a	44.0 (3.41) ^c	130 (24.9) ^{ab}	34.6 (2.81) ^d	124 (10.1) ^{ab}	32.4 (2.91) ^d	148 (7.76) ^b	23.6 (1.45) ^e
Vitamin D, mg/d	10.8 (3.53) ^a	82.9 (2.15) ^d	8.10 (0.55) ^b	79.9 (1.69) ^d	9.40 (0.79) ^{ab}	79.7 (2.19) ^d	13.4 (1.29) ^c	70.6 (1.08) ^e
Vitamin E, mg/d	8.43 (1.08) ^a	94.2 (1.37) ^d	8.53 (0.53) ^a	91.7 (1.59) ^d	10.2 (1.54) ^b	89.4 (2.09) ^{de}	14.1 (2.27) ^c	83.9 (1.79) ^f
Vitamin K, ug/d	96.0 (3.88) ^a	[51.6 (3.55)] ^d	109 (4.24) ^a	[41.1 (3.36)] ^d	120 (6.07) ^b	[32.5 (4.48)] ^e	131 (4.11) ^c	[25.8 (2.68)] ^f
Zinc, mg/d	11.2 (0.38) ^a	44.9 (4.28) ^c	12.1 (0.37) ^a	37.3 (3.17) ^c	12.2 (0.37) ^a	35.4 (3.34) ^d	13.4 (0.23) ^b	30.0 (1.67) ^e
Iron, mg/d	15.9 (0.86) ^a	8.36 (1.87) ^c	16.8 (0.67) ^a	5.21 (1.27) ^d	16.7 (0.65) ^a	5.40 (1.26) ^d	17.8 (0.29) ^b	4.04 (0.85) ^d
Choline, mg/d	271 (7.32) ^a	[97.7 (0.78)] ^c	288 (7.95) ^a	[95.6 (1.34)] ^c	289 (7.21) ^b	[95.8 (1.06)] ^c	297 (3.92) ^b	[94.8 (1.08)] ^d
Folate, ug DFE/d	562 (27.8) ^a	15.8 (2.71) ^d	605 (18.9) ^b	10.4 (1.86) ^e	609 (22.0) ^b	10.1 (1.85) ^e	709 (14.5) ^c	6.97 (1.27) ^f
Calcium, mg/d	919 (27.4) ^a	39.7 (3.33) ^c	953 (21.9) ^{ab}	35.2 (2.50) ^c	978 (25.5) ^b	32.2 (3.29) ^d	1042 (14.3) ^b	26.3 (1.62) ^e
Magnesium, mg/d	254 (6.50) ^a	58.1 (3.21) ^d	271 (6.82) ^b	50.8 (3.17) ^e	276 (7.66) ^a	48.6 (3.34) ^e	301 (3.65) ^{bc}	37.2 (1.49) ^f
EPA + DHA, mg/d	48.6 (10.3) ^b	95.2 (1.39) ^c	54.0 (9.25) ^{ab}	95.1 (0.84) ^c	46.4 (5.04) ^b	96.0 (0.79) ^c	64.2 (4.31) ^a	93.4 (0.60) ^c

Rows with different subscripts differ from each other, p<0.05, -- indicates suppression due to relative standard errors >30%. % below for EPA + DHA represents those below recommendations for intake from the Dietary Guidelines for Americans.

Supplementary Table S6. Total usual intakes of nutrients important for neurodevelopment (foods + dietary supplements) among *pregnant nonlactating* US women aged 20–44 y in the NHANES Survey by WIC participation.

Nutrient	Household recipient of WIC in past 12 months	
	Yes, N=124	No, N=191
Vitamin A, RAE/d	1484 (315)	27.1 (7.36)
Vitamin B6, mg/d	4.20 (0.59)	—
Vitamin B12, ug/d	9.24 (0.78)	—
Vitamin C, mg/d	149 (13.8)	22.8 (4.74)
Vitamin D, mg/d	10.7 (1.27)	56.9 (6.33)
Vitamin E, mg/d	9.41 (1.37)	90.7 (3.92)
Vitamin K, ug/d	103 (12.0)	[47.8 (10.3)]
Zinc, mg/d	18.9 (1.40)	19.0 (6.06)
Iron, mg/d	28.8 (2.37)	54.1 (6.57)
Choline, mg/d	298 (16.8)	[97.2 (2.50)]
Folate, ug DFE/d	1191 (107)	23.2 (6.99)
Calcium, mg/d	1234 (90.2)	15.5 (5.04)
Magnesium, mg/d	286 (13.7)	55.0 (7.22)
EPA + DHA, mg/d	52.9 (15.0)	95.0 (2.39)

-- indicates suppression due to relative standard errors >30%, *indicates p<0.05 relative to those in households that received WIC. % below for EPA + DHA represents those below recommendations for intake from the Dietary Guidelines for Americans.

Supplementary Table S7. Total usual intakes of nutrients important for neurodevelopment (foods + dietary supplements) among *pregnant nonlactating* US women aged 20–44 y in the NHANES Survey by SNAP participation.

Household recipient of SNAP in past 12 months

Nutrient	Yes, N=112		No, N=204	
	Mean (SE)	% <EAR or [AI]	Mean (SE)	% <EAR or [AI]
Vitamin A, RAE/d	3.09 (0.33)	—	11.9 (4.46)	—
Vitamin B6, mg/d	7.70 (0.74)	—	—	—
Vitamin B12, ug/d	125 (10.0)	29.6 (5.51)*	186 (12.9)*	10.2 (2.22)*
Vitamin C, mg/d	8.78 (0.98)	67.0 (5.78)	14.4 (1.13)*	39.5 (4.19)*
Vitamin D, mg/d	7.34 (0.64)	96.3 (2.95)	11.1 (0.76)*	79.1 (6.14)*
Vitamin E, mg/d	87.0 (9.99)	[60.6 (9.80)]	149 (13.6)*	—
Vitamin K, ug/d	17.1 (1.43)	—	22.0 (0.99)*	—
Zinc, mg/d	24.8 (2.05)	65.5 (5.68)	36.8 (2.83)*	34.9 (4.27)*
Iron, mg/d	285 (18.9)	[98.4 (2.32)]	315 (13.2)*	96.0 (2.98)*
Choline, mg/d	948 (90.9)	33.7 (8.79)	1556 (74.2)*	—
Folate, ug DFE/d	1169 (73.1)	—	1372 (67.3)*	—
Calcium, mg/d	275 (15.9)	65.7 (7.10)	327 (10.8)*	35.3 (5.38)*
Magnesium, mg/d	47.3 (11.3)	96.4 (1.78)	87.6 (21.9)*	93.3 (2.04)*
EPA + DHA, mg/d				

-- indicates suppression due to relative standard errors >30%, *indicates p<0.05 relative to those in households who received SNAP, % below for EPA + DHA represents those below recommendations for intake from the Dietary Guidelines for Americans.

Supplementary Table S8. Data on total usual intakes of nutrients important for neurodevelopment (foods alone) among pregnant nonlactating US women aged 20-44 in the National Health and Nutrition Examination Survey by PIR.

Nutrient	Low, N=162		Medium, N=60		High, N=70	
	Mean (SE)	% <EAR or [AI]	Mean (SE)	% <EAR or [AI]	Mean (SE)	% <EAR or [AI]
Vitamin A, RAE/d	639 (44.5) ^a	38.4 (9.28) ^c	740 (73.4) ^b	--	765 (73.0) ^b	--
Vitamin B6, mg/d	1.92 (0.10) ^a	31.2 (7.99) ^b	1.99 (0.14) ^a	26.0 (8.38) ^b	2.17 (0.17) ^a	16.8 (5.71) ^c
Vitamin B12, ug/d	4.99 (0.38) ^a	--	4.74 (0.45) ^a	--	5.23 (0.47) ^a	--
Vitamin C, mg/d	101 (7.40) ^a	33.0 (6.24) ^b	114 (16.6) ^a	--	114 (12.0) ^a	23.7 (6.66) ^b
Vitamin D, mg/d	5.49 (0.51) ^a	93.2 (3.25) ^b	5.21 (0.75) ^a	94.5 (3.98) ^b	5.16 (0.54) ^a	94.7 (3.16) ^b
Vitamin E, mg/d	7.15 (0.48) ^a	96.6 (2.43) ^c	9.64 (0.69) ^b	81.3 (8.35) ^d	10.1 (0.77) ^b	75.6 (9.54) ^d
Vitamin K, ug/d	93.7 (9.62) ^a	[54.3 (9.92)]	144 (14.2) ^b	--	156 (18.0) ^b	--
Zinc, mg/d	10.6 (0.59) ^a	--	11.7 (0.91) ^b	--	11.9 (0.65) ^b	--
Iron, mg/d	15.2 (0.92) ^a	96.6 (3.27) ^b	16.4 (1.35) ^a	94.7 (5.61) ^b	16.6 (1.02) ^a	93.0 (6.24) ^b
Choline, mg/d	291 (16.2) ^a	[96.9 (2.49)] ^b	315 (19.6) ^c	[95.2 (3.75)] ^b	315 (21.2) ^c	[94.5 (2.83)] ^b
Folate, ug DFE/d	547 (39.4) ^c	47.3 (10.8) ^c	635 (65.5) ^c	27.2 (14.1) ^d	617 (42.2) ^a	31.8 (10.6) ^d
Calcium, mg/d	1098 (56.5) ^a	--	1164 (97.1) ^a	--	1111 (73.4) ^a	--
Magnesium, mg/d	275 (11.8) ^a	61.2 (6.22) ^c	319 (16.6) ^b	37.3 (8.66) ^d	313 (16.3) ^b	42.7 (8.54) ^d
EPA + DHA, mg/d	47.9 (7.47) ^a	97.3 (0.87) ^{bc}	49.4 (12.9) ^a	94.5 (2.97) ^b	44.1 (13.2) ^a	99.2 (0.84) ^{bc}

-- indicates suppression due to relative standard errors >30%, rows with different subscripts differ from each other, p<0.05, low 0-1.85, medium >1.85-3.50, high >3.5. % below for EPA + DHA represents those below recommendations for intake from the Dietary Guidelines for Americans.

Supplementary Table S9. Data on total usual intakes of nutrients important for neurodevelopment (foods + dietary supplements) among pregnant nonlactating US women aged 20-44 in the National Health and Nutrition Examination Survey by PIR.

Nutrient	Low, N=162		Medium, N=60		High, N=70	
	Mean (SE)	% <EAR or [AI]	Mean (SE)	% <EAR or [AI]	Mean (SE)	% <EAR or [AI]
Vitamin A, RAE/d	1059 (111) ^a	34.4 (7.52)	1168 (144) ^{ab}	--	2211 (511) ^b	--
Vitamin B6, mg/d	5.56 (1.45) ^a	--	--	--	7.52 (1.24) ^b	--
Vitamin B12, ug/d	--	--	15.3 (3.81)	--	--	--
Vitamin C, mg/d	162 (15.9) ^a	23.6 (4.63)	175 (19.8) ^a	--	179 (16.7) ^a	--

Vitamin D, mg/d	10.3 (1.07) ^a	61.5 (5.05) ^c	18.7 (2.68) ^b	29.4 (7.22) ^d	12.6 (1.28) ^a	43.8 (6.66) ^e
Vitamin E, mg/d	8.30 (1.12) ^a	95.4 (2.54) ^c	10.3 (0.78) ^b	78.8 (8.20) ^c	12.0 (1.03) ^b	71.2 (8.76) ^d
Vitamin K, ug/d	96.1 (9.81) ^a	[52.7 (9.66)]	158 (15.6) ^b	—	160 (18.2) ^b	—
Zinc, mg/d	96.1 (9.81) ^a	52.7 (9.66)	158 (15.6) ^b	—	160 (18.2) ^b	—
Iron, mg/d	26.2 (2.31) ^a	64.9 (5.03) ^c	36.0 (3.12) ^b	26.1 (6.33) ^f	38.8 (5.47) ^b	32.4 (6.65) ^e
Choline, mg/d	291 (16.1) ^a	[96.8 (2.50)] ^b	316 (19.5) ^a	[96.8 (2.50) ^b	317 (21.2) ^a	[94.4 (3.97)] ^b
Folate, ug DFE/d	1038 (82.9) ^a	30.7 (7.24) ^c	1567 (117) ^b	—	1647 (121) ^b	10.4 (3.46) ^d
Calcium, mg/d	1200 (58.6) ^a	—	1389 (133) ^a	—	1312 (85.3) ^a	—
Magnesium, mg/d	282 (12.5) ^a	58.3 (6.21) ^c	338 (18.5) ^b	29.8 (8.46) ^d	326 (16.7) ^{ab}	38.1 (7.83) ^{cd}
EPA + DHA, mg/d	57.3 (10.4) ^a	95.2 (1.72) ^c	50.6 (10.9) ^a	95.5 (2.29) ^c	104 (35.3) ^b	93.6 (2.86) ^c

Rows with different subscripts differ from each other, p<0.05, -- indicates suppression due to relative standard errors >30%. % below for EPA + DHA represents those below recommendations for intake from the Dietary Guidelines for Americans.

Supplementary Table S10. Data on total usual intakes of nutrients important for neurodevelopment (foods alone) among pregnant nonlactating US women aged 20-44 in the National Health and Nutrition Examination Survey by household food security .

Nutrient	Very low to low, N=99		Marginal, N=41		Full, N=176	
	Mean (SE)	% <EAR or [AI]	Mean (SE)	% <EAR or [AI]	Mean (SE)	% <EAR or [AI]
Vitamin A, RAE/d	648 (64.8) ^a	--	567 (63.4) ^b	50.7 (12.5)	796 (57.1) ^a	--
Vitamin B6, mg/d	1.87 (0.12) ^{ab}	--	1.67 (0.16) ^a	47.8 (14.4) ^c	2.18 (0.12) ^b	12.5 (5.98) ^d
Vitamin B12, ug/d	4.93 (0.56) ^{ab}	--	4.10 (0.54) ^b	--	5.56 (0.38) ^a	--
Vitamin C, mg/d	81.3 (9.24) ^a	48.4 (9.05) ^d	99.1 (13.8) ^b	34.9 (9.97) ^d	120 (9.61) ^c	20.4 (4.62) ^e
Vitamin D, mg/d	4.95 (0.55) ^{ab}	96.1 (2.38) ^{cd}	4.40 (0.72) ^a	97.6 (2.36) ^c	5.61 (0.43) ^b	93.5 (3.21) ^d
Vitamin E, mg/d	8.26 (0.69) ^{ab}	90.9 (4.49) ^{cd}	7.97 (0.89) ^b	92.6 (5.96) ^d	9.34 (0.57) ^a	83.1 (6.64) ^c
Vitamin K, ug/d	104 (13.0) ^a	--	115 (23.1) ^{ab}	--	139 (13.5) ^b	--
Zinc, mg/d	10.8 (0.74) ^{ab}	--	9.10 (0.94) ^a	60.3 (22.5)	12.2 (0.48) ^b	--
Iron, mg/d	14.8 (1.11) ^c	99.1 (1.77) ^{de}	12.2 (1.40) ^b	100 (0.37) ^e	17.4 (0.75) ^a	94.2 (6.19) ^d
Choline, mg/d	283 (19.0) ^{ab}	[98.4 (2.05)] ^{cd}	274 (32.1) ^a	[98.6 (2.33)] ^d	321 (14.8) ^b	[95.7 (3.37)] ^c
Folate, ug DFE/d	564 (54.9) ^a	42.2 (18.6) ^d	464 (58.2) ^b	68.4 (18.2) ^e	636 (32.0) ^c	25.3 (11.5) ^f
Calcium, mg/d	1074 (74.8) ^{ab}	--	987 (112) ^b	--	1169 (51.4) ^a	51.4 (11.0)
Magnesium, mg/d	271 (10.3) ^{ab}	63.6 (6.05) ^{cd}	266 (18.9) ^b	68.2 (11.0) ^d	317 (12.4) ^a	38.4 (7.43) ^c
EPA + DHA, mg/d	30.9 (8.45) ^a	98.9 (0.79) ^b	--	91.8 (5.86) ^b	47.7 (13.3) ^a	98.2 (0.78) ^b

-- indicates suppression due to relative standard errors >30%, rows with different subscripts differ from each other, p<0.05. % below for EPA + DHA represents those below recommendations for intake from the Dietary Guidelines for Americans.

Supplementary Table S11. Data on total usual intakes of nutrients important for neurodevelopment (foods + dietary supplements) among pregnant nonlactating US women aged 20-44 in the National Health and Nutrition Examination Survey by household food security .

Nutrient	Very low to low, N=70		Marginal, N=60		Full, N=162	
	Mean (SE)	% <EAR or [AI]	Mean (SE)	% <EAR or [AI]	Mean (SE)	% <EAR or [AI]
Vitamin A, RAE/d	1382 (353) ^{ab}	31.5 (10.7) ^c	1004 (261) ^b	46.1 (11.5) ^d	1916 (308) ^b	12.1 (5.26) ^e
Vitamin B6, mg/d	3.58 (0.51) ^a	—	5.57 (1.07) ^b	—	12.8 (5.31) ^c	—
Vitamin B12, ug/d	10.1 (1.77) ^a	—	9.42 (1.12) ^a	—	—	—
Vitamin C, mg/d	136 (16.5) ^a	30.1 (4.95) ^d	149 (16.1) ^b	15.3 (6.07) ^e	188 (14.0) ^c	8.76 (2.53) ^e
Vitamin D, mg/d	9.31 (0.99) ^a	62.8 (6.99) ^c	12.4 (1.99) ^a	44.1 (10.7) ^c	14.6 (1.29) ^b	40.4 (4.86) ^d
Vitamin E, mg/d	8.30 (0.69) ^{ab}	90.6 (4.47) ^d	11.3 (3.59) ^a	90.3 (6.34) ^c	10.7 (0.72) ^a	79.2 (6.30) ^c
Vitamin K, ug/d	105 (13.2) ^b	[45.6 (10.5)] ^d	129 (25.8) ^a	[34.3 (14.7)] ^c	145 (13.6) ^a	[21.9 (8.08)] ^c
Zinc, mg/d	18.1 (1.74) ^a	—	16.9 (2.12) ^a	26.5 (8.15)	22.5 (1.08) ^b	—
Iron, mg/d	27.5 (3.02) ^a	60.4 (8.41) ^c	24.9 (3.14) ^a	52.6 (10.5) ^d	37.7 (3.37) ^b	34.9 (4.66) ^e
Choline, mg/d	283 (19.1) ^a	[98.4 (2.05)] ^b	275 (32.0) ^a	[98.6 (2.39)] ^b	322 (14.9) ^a	[95.5 (3.44)] ^b

Folate, ug DFE/d	982 (172) ^a	—	1189 (119) ^a	26.2 (8.14)	1565 (90.3) ^b	—
Calcium, mg/d	1275 (124) ^{ab}	—	1096 (135) ^a	—	1377 (63.0) ^b	—
Magnesium, mg/d	287 (14.9) ^a	59.4 (6.26) ^c	276 (20.9) ^a	64.7 (11.4) ^c	332 (13.3) ^b	32.5 (6.91) ^d
EPA +DHA, mg/d	87.4 (22.0) ^a	97.1 (1.85) ^c	73.5 (31.3) ^{ab}	93.9 (4.44) ^{cd}	40.4 (11.4) ^b	93.3 (2.02) ^d

Rows with different subscripts differ from each other, p<0.05, -- indicates suppression due to relative standard errors >30%. % below for EPA + DHA represents those below recommendations for intake from the Dietary Guidelines for Americans.