

Supplemental data

Table S1. Prediabetes and diabetes in adulthood, by gender and birth weight category [n (%)]

	Females			Males		
	LBW	NBW	HBW	LBW	NBW	HBW
Normal	436 (73.6)	3396 (81.6)	414 (84.4)	308 (70.8)	2618 (75.2)	526 (77.5)
Pre-diabetes	95 (15.8)	606 (12.9)	58 (10.8)	120 (22.7)	732 (19.2)	116 (17.5)
Diabetes	53 (10.6)	272 (5.6)	29 (4.8)	38 (6.5)	209 (5.6)	41 (5.0)

¹National Longitudinal Study for Adolescent and Adult Health: 5,359 females and 4,708 males with nonmissing birth weight and diabetes data, ≥ 2 BMI measures; non-Hispanic white, non-Hispanic black, or Hispanic race/ethnicity; 12 years of age or older at Wave I.

Table S2: Crude associations between birth weight, BMI trajectory, and pre/diabetes in adulthood: females

	Outcome: pre/diabetes ²	Outcome: BMI intercept ³	Outcome: BMI slope ³
Model 1			
Birth weight	-0.28 (-0.43, -0.13)	--	--
Model 2			
Birth weight	--	-2.54 (-4.68, -0.40)	1.10 (-0.54, 2.73)
Birth weight ²	--	0.48 (0.12, 0.83)	-0.15 (-0.42, 0.11)
Model 3			
Birth weight	-0.36 (-0.51, -0.20)	-2.39 (-4.47, -0.32)	0.96 (-0.59, 2.51)
Birth weight ²	--	0.45 (0.11, 0.79)	-0.13 (-0.38, 0.12)
BMI intercept	0.10 (0.07, 0.12)	--	--
BMI slope	0.11 (0.08, 0.14)	--	--

¹National Longitudinal Study for Adolescent and Adult Health (n=7,011 females in Model 3). Associations estimated from gender-stratified path analysis models.

²Log-odds estimates (95% confidence interval); Odds Ratios are calculated as $\exp(\text{coefficient})$

³Unstandardized linear regression coefficients

Table S3: Crude associations between birth weight, BMI trajectory, and pre/diabetes in adulthood: males

		Outcome: pre/diabetes²	Outcome: BMI intercept³	Outcome: BMI slope³
Model 1				
	Birth weight	-0.18 (-0.33, -0.03)	--	--
Model 2				
	Birth weight	--	-0.95 (-2.66, 0.76)	0.97 (-0.36, 2.31)
	Birth weight ²	--	0.24 (-0.02, 0.50)	-0.16 (-0.37, 0.05)
Model 3				
	Birth weight	-0.19 (-0.36, -0.03)	-0.88 (-2.55, 0.78)	0.75 (-0.56, 2.07)
	Birth weight ²	--	0.22 (-0.03, 0.47)	-0.12 (-0.32, 0.09)
	BMI intercept	0.04 (0.00, 0.07)	--	--
	BMI slope	0.22 (0.14, 0.30)	--	--

¹National Longitudinal Study for Adolescent and Adult Health (n=6,399 males in Model 3). Associations estimated from gender-stratified path analysis models.

²Log-odds estimates (95% confidence interval); Odds Ratios are calculated as exp(coefficient)

³Unstandardized linear regression coefficients

Table S4: Associations between birth weight, BMI trajectory, and pre-diabetes in adulthood¹

		Outcome: pre/diabetes²	Outcome: BMI intercept³	Outcome: BMI slope³
Females: Model 3				
	Birth weight	-0.13 (-0.32, 0.07)	-1.78 (-3.90, 0.33)	1.19 (-0.45, 2.82)
	Birth weight ²	--	0.39 (0.04, 0.73)	-0.14 (-0.40, 0.12)
	BMI intercept	0.06 (0.03, 0.09)	--	--
	BMI slope	0.12 (0.07, 0.17)	--	--
Males: Model 3				
	Birth weight	-0.07 (-0.26, 0.13)	-1.57 (-3.45, 0.31)	0.68 (-0.68, 2.04)
	Birth weight ²	--	0.32 (0.04, 0.60)	-0.10 (-0.31, 0.11)
	BMI intercept	0.01 (-0.03, 0.05)	--	--
	BMI slope	0.28 (0.18, 0.37)	--	--

¹National Longitudinal Study for Adolescent and Adult Health (n=6,087 females and 5,387 males, excluding participants with diabetes). Associations estimated from gender-stratified path analysis models predicting latent BMI trajectories from adolescence (age 12-19) to adulthood (age 25-32). Models adjusted for race/ethnicity, parental education, parental income at Wave I; and time-varying smoking, participant income, and participant education.

²Log-odds estimates (95% confidence interval); Odds Ratios are calculated as exp(coefficient)

³Unstandardized linear regression coefficients