

Table 1: Characteristics of 1754 sample mother-infant pairs enrolled in SCOPE-Ireland, 2008 to 2011

Variable	n Missing	Proportion (n)	Mean (SD)	Median [IQR]	Range
<i>Infant characteristics</i>					
Sex	0				
<i>Male</i>		0.51(892)			
<i>Female</i>		0.49(862)			
Birth weight (g)	0		3462 (507.5)	3460 [3150 to 3778]	1200 to 5130
Fat mass (g)	512		378 (172.9)	351 [253 to 481]	36 to 1099
Fat free mass (g)	513		2955 (346.8)	2965 [2730 to 3182]	1848 to 3960
Percent fat mass	514		11.1 (4.1)	10.9 [8.2 to 13.8]	1.3 to 30.1
Length (cm)	59		50.2 (2.4)	50.2 [49 to 51.8]	37.5 to 57
Gestational age (wks)	0		40 (1.5)	40.3 [39.3 to 41]	32 to 42.6
<i>Maternal characteristics</i>					
Age	0		29.9 (4.5)	30 [28 to 33]	17 to 45
Height	0		164.6 (5.9)	165 [161 to 168]	147 to 185
Birth weight	60		3360.8 (532.9)	3374 [3062 to 3657]	624 to 6000
Gravidity	0				
1		0.85(1483)			
2+		0.15(271)			
White	0				
<i>White</i>		0.98(1712)			
<i>Nonwhite</i>		0.02(42)			
Has partner	0				
<i>Single</i>		0.11(186)			
<i>Partner</i>		0.89(1568)			
3rd level education	0				
<i>No</i>		0.11(195)			
<i>Yes</i>		0.89(1559)			
SEI †	0		42.7 (16)	45 [29 to 51]	18 to 89
Maternity care	0				
<i>Public</i>		0.75(1318)			
<i>Private</i>		0.25(436)			
Depressed	0				
<i>Unlikely</i>		0.41(711)			
<i>At risk</i>		0.35(622)			
<i>Likely</i>		0.24(421)			
Stress score ††	0		13.7 (6.6)	13 [9 to 18]	0 to 35

IQR interquartile range; SD standard deviation; SEI Socioeconomic index

†Based on the New Zealand socioeconomic index, with higher values reflecting greater social status.

††Out of a maximum score of 40, with higher scores reflecting higher levels of stress.

Table 2: Maternal lifestyle factors in 1754 sample mothers enrolled in SCOPE-Ireland, 2008 to 2011

Variable	N Missing	Proportion(n)
Prepregnancy body size	0	
<i>Obese (BMI ≥ 30 kg/m²)</i>		0.11 (190)
<i>Overweight (BMI 25 to 30 kg/m²)</i>		0.24 (419)
<i>Normal weight (BMI < 25 kg/m²)</i>		0.65 (1145)
IOM defined gestational weight gain level	525	
<i>Excessive</i>		0.79 (977)
<i>Healthy</i>		0.16 (199)
<i>Inadequate</i>		0.04 (53)
Frequency of moderate intensity exercise	0	
<i>None</i>		0.25 (441)
<i>Some</i>		0.55 (965)
<i>Often</i>		0.2 (348)
Amount of daily TV viewing	0	
$\geq 5h$		0.09 (158)
$2-4h$		0.55 (958)
$< 2h$		0.36 (638)
Alcohol use	0	
<i>Still drinks</i>		0.16 (288)
<i>Quit during pregnancy</i>		0.65 (1133)
<i>Quit pre-pregnancy</i>		0.09 (166)
<i>Never drank</i>		0.1 (167)
Any smoking	0	
<i>Still smokes</i>		0.1 (174)
<i>Quit during pregnancy</i>		0.18 (307)
<i>Never smoked</i> †		0.73 (1273)
Takes folate	0	
<i>No</i>		0.32 (560)
<i>Yes</i>		0.68 (1194)
Eats ≥ 5 servings fruit and veg per day	0	
<i>No</i>		0.86 (1508)
<i>Yes</i>		0.14 (246)
Eats ≥ 1 serving oily fish per week	0	
<i>No</i>		0.69 (1205)
<i>Yes</i>		0.31 (549)

BMI body mass index. IOM Institute of Medicine

†Six women who reported quitting prior to pregnancy were classified as Never Smoked.

Table 3: Quantile regression results from the fully adjusted model for fat-free mass (g), $n = 1754$

Variable	5th		Centile 50th		95th	
	β (g)	95% CI	β (g)	95% CI	β (g)	95% CI
Intercept	2444.4	(2153.9 to 2734.9)	3011.4	(2864.3 to 3158.4)	3587.9	(3387.8 to 3787.9)
Healthy GWG	-38.5	(-173.1 to 96.1)	-111.7	(-176.3 to -47.2)	-109.8	(-186.7 to -32.9)
Inadequate GWG	34.7	(-181.2 to 250.6)	-57	(-165.6 to 51.6)	-83.2	(-240.4 to 73.9)
Overweight (BMI 25 to 30 kg/m ²)	-123.3	(-271.5 to 25)	-8.4	(-81.2 to 64.3)	-90.6	(-223.5 to 42.3)
Normal weight (BMI < 25 kg/m ²)	-166	(-295.8 to -36.2)	-35	(-100.3 to 30.2)	-121.6	(-249.7 to 6.6)
Takes folate (<i>geq</i> 400 <i>mu</i> g)	-1.7	(-110.5 to 107.1)	34.4	(-20.6 to 89.3)	-6	(-76.3 to 64.4)
Some moderate-intensity exercise	75.7	(-58.6 to 210.1)	38.1	(-15.1 to 91.3)	15.3	(-59.3 to 89.8)
Frequent moderate-intensity exercise	16.1	(-127.8 to 159.9)	-5.8	(-74.4 to 62.9)	-12.5	(-103.9 to 79)
2 to 4 hours of television	21.2	(-147 to 189.5)	-24.2	(-103.8 to 55.4)	-75.9	(-176.9 to 25.2)
< 2 hours of television	12.5	(-161 to 186)	-28.2	(-114.4 to 58)	-65.6	(-175.7 to 44.5)
Quit drinking during pregnancy	29.7	(-108.6 to 168.1)	4.1	(-56.5 to 64.7)	5.7	(-88.8 to 100.2)
Quit drinking prepregnancy	26.2	(-168.9 to 221.4)	-44.1	(-130.2 to 42)	-4.6	(-152.4 to 143.3)
Never drank	38.3	(-145.1 to 221.6)	36.2	(-63.8 to 136.2)	-51.7	(-156.8 to 53.4)
Quit smoking during pregnancy	165.5	(-14.8 to 345.8)	47.7	(-45.6 to 141)	60.1	(-57.1 to 177.4)
Never smoked	130.2	(-39.6 to 300)	81	(-5.3 to 167.3)	78.5	(-22.5 to 179.6)
Eats 5 fruit/veg a day	7	(-117.7 to 131.8)	10.8	(-55.2 to 76.9)	54.6	(-30.6 to 139.8)
Eats ≥ 1 serving of oily fish weekly	-52.6	(-164.7 to 59.5)	18.4	(-28.8 to 65.5)	69.8	(-2.7 to 142.3)

BMI body mass index; CI confidence interval; GWG gestational weight gain

Models further adjusted for infant sex, maternal age, maternal height, gravidity, ethnicity, whether the mother has a partner, maternal education, socioeconomic index, risk of depression, and stress score.

Table 4: Quantile regression results from the fully adjusted model for fat mass (g), $n = 1754$

Variable	Centile			
	5th		50th	
	β (%)	95% CI	β (%)	95% CI
Intercept	121.7	(33.7 to 209.8)	371.5	(298.3 to 444.8)
Healthy GWG	-4.5	(-41.3 to 32.2)	-33.4	(-65.6 to -1.3)
Inadequate GWG	27	(-33.7 to 87.8)	-17.1	(-66.7 to 32.4)
Overweight (BMI 25 to 30 kg/m ²)	-36.1	(-87.5 to 15.2)	-25.6	(-64.5 to 13.3)
Normal weight (BMI < 25 kg/m ²)	-42.2	(-86 to 1.6)	-47.7	(-83.6 to -11.7)
Takes folate (<i>geq</i> 400 <i>mu</i> g)	-8.4	(-38.8 to 22)	8.6	(-18.1 to 35.4)
Some moderate-intensity exercise	9.8	(-23.1 to 42.8)	4.8	(-21.7 to 31.3)
Frequent moderate-intensity exercise	-4.1	(-46.5 to 38.2)	-0.6	(-33.2 to 32)
2 to 4 hours of television	-4.3	(-48.3 to 39.7)	12.6	(-27.8 to 53.1)
< 2 hours of television	-25	(-67.8 to 17.9)	-6.8	(-50.9 to 37.2)
Quit drinking during pregnancy	2.2	(-38.3 to 42.6)	-26.8	(-58.5 to 5)
Quit drinking prepregnancy	-3.3	(-69.1 to 62.5)	-22.4	(-67.5 to 22.6)
Never drank	18.2	(-40.1 to 76.4)	-14.3	(-60.1 to 31.4)
Quit smoking during pregnancy	17.1	(-33.6 to 67.7)	1.9	(-43.1 to 46.8)
Never smoked	28.8	(-17 to 74.6)	29.1	(-11.8 to 69.9)
Eats 5 fruit/veg a day	5.4	(-34.1 to 44.9)	6.9	(-26.1 to 39.9)
Eats ≥ 1 serving of oily fish weekly	-1.7	(-30.6 to 27.2)	-4	(-27.3 to 19.3)

BMI body mass index; CI confidence interval; GWG gestational weight gain

Models further adjusted for infant sex, maternal age, maternal height, gravidity, ethnicity, whether the mother has a partner, maternal education, socioeconomic index, risk of depression, and stress score.

Table 5: Quantile regression results from the fully adjusted model for birth length (cm), $n = 1754$

Variable	5th		Centile 50th		95th	
	β (cm)	95% CI	β (cm)	95% CI		
Intercept	44.9	(42.7 to 47)	50.5	(49.6 to 51.5)	53.7	(52.5 to 55)
Healthy GWG	-0.5	(-1.5 to 0.5)	-0.4	(-0.8 to 0)	-0.8	(-1.3 to -0.3)
Inadequate GWG	0.1	(-2.8 to 3)	-0.3	(-1 to 0.4)	-0.1	(-1.1 to 0.9)
Overweight (BMI 25 to 30 kg/m2)	-0.8	(-1.7 to 0)	-0.3	(-0.8 to 0.3)	-0.4	(-1 to 0.3)
Normal weight (BMI < 25 kg/m2)	-1.2	(-1.9 to -0.5)	-0.4	(-0.8 to 0.1)	-0.5	(-1 to 0.1)
Takes folate (<i>geq</i> 400 <i>mu</i> g)	0.4	(-0.5 to 1.2)	0	(-0.3 to 0.3)	0.2	(-0.2 to 0.6)
Some moderate-intensity exercise	0.7	(-0.1 to 1.5)	0.1	(-0.2 to 0.5)	0	(-0.4 to 0.5)
Frequent moderate-intensity exercise	-0.2	(-1.3 to 0.8)	-0.3	(-0.7 to 0.1)	-0.2	(-0.8 to 0.4)
2 to 4 hours of television	2.2	(0.3 to 4.1)	0	(-0.6 to 0.5)	-0.6	(-1.2 to 0.1)
< 2 hours of television	1.6	(-0.3 to 3.5)	0	(-0.6 to 0.5)	-0.5	(-1.2 to 0.2)
Quit drinking during pregnancy	0	(-0.8 to 0.9)	0.1	(-0.3 to 0.5)	0.2	(-0.3 to 0.6)
Quit drinking prepregnancy	-0.2	(-1.3 to 0.9)	-0.3	(-0.8 to 0.3)	-0.3	(-1 to 0.5)
Never drank	-0.9	(-3 to 1.1)	0	(-0.5 to 0.6)	-0.3	(-0.9 to 0.3)
Quit smoking during pregnancy	1.1	(0.2 to 2.1)	0.5	(0 to 1)	0.5	(-0.2 to 1.3)
Never smoked	0.6	(-0.3 to 1.6)	0.6	(0.2 to 1.1)	0.7	(0 to 1.4)
Eats 5 fruit/veg a day	0.2	(-0.6 to 1.1)	0.2	(-0.2 to 0.5)	0.3	(-0.2 to 0.9)
Eats \geq 1 serving of oily fish weekly	-1.1	(-1.8 to -0.4)	0.1	(-0.2 to 0.4)	0	(-0.3 to 0.4)

BMI body mass index; CI confidence interval; GWG gestational weight gain

Models further adjusted for infant sex, maternal age, maternal height, gravidity, ethnicity, whether the mother has a partner, maternal education, socioeconomic index, risk of depression, and stress score.

Table 6: Quantile regression results from the fully adjusted model for gestational age (weeks), $n = 1754$

Variable	5th		Centile 50th		95th	
	β (weeks)	95% CI	β (weeks)	95% CI	β (weeks)	95% CI
Intercept	36	(34.2 to 37.7)	40.7	(40.2 to 41.3)	41.6	(41.3 to 41.9)
Healthy GWG	0.1	(-1 to 1.3)	0	(-0.2 to 0.2)	0	(-0.1 to 0.2)
Inadequate GWG	0.8	(-0.4 to 2)	-0.1	(-0.6 to 0.5)	0	(-0.3 to 0.2)
Overweight (BMI 25 to 30 kg/m2)	0.2	(-0.8 to 1.2)	0.1	(-0.2 to 0.4)	0	(-0.2 to 0.2)
Normal weight (BMI < 25 kg/m2)	0	(-0.9 to 1)	0	(-0.3 to 0.2)	0	(-0.2 to 0.1)
Takes folate (<i>geq</i> 400 <i>mu</i> g)	-0.2	(-0.9 to 0.5)	0	(-0.2 to 0.2)	0	(-0.1 to 0.1)
Some moderate-intensity exercise	0.8	(0 to 1.6)	0.2	(0 to 0.4)	0	(-0.2 to 0.1)
Frequent moderate-intensity exercise	-0.1	(-1.5 to 1.3)	0.1	(-0.1 to 0.4)	0	(-0.2 to 0.2)
2 to 4 hours of television	0.5	(-0.6 to 1.6)	0	(-0.3 to 0.2)	0.1	(-0.1 to 0.3)
< 2 hours of television	0.3	(-0.8 to 1.4)	0	(-0.3 to 0.3)	0.1	(-0.1 to 0.3)
Quit drinking during pregnancy	-0.4	(-1.1 to 0.3)	-0.2	(-0.4 to 0.1)	0.1	(0 to 0.2)
Quit drinking prepregnancy	-0.8	(-2.4 to 0.9)	-0.4	(-0.7 to 0)	0	(-0.3 to 0.2)
Never drank	0	(-0.8 to 0.9)	-0.1	(-0.5 to 0.2)	0.2	(-0.1 to 0.4)
Quit smoking during pregnancy	0.5	(-0.6 to 1.5)	0	(-0.3 to 0.3)	0	(-0.3 to 0.2)
Never smoked	0.3	(-0.6 to 1.2)	0.1	(-0.2 to 0.4)	0	(-0.2 to 0.2)
Eats 5 fruit/veg a day	0	(-0.7 to 0.6)	-0.1	(-0.3 to 0.2)	0	(-0.1 to 0.2)
Eats \geq 1 serving of oily fish weekly	-0.1	(-0.8 to 0.5)	0	(-0.2 to 0.1)	0	(-0.1 to 0.2)

BMI body mass index; CI confidence interval; GWG gestational weight gain

Models further adjusted for infant sex, maternal age, maternal height, gravidity, ethnicity, whether the mother has a partner, maternal education, socioeconomic index, risk of depression, and stress score.