Supplementary Table 1A. Variables submitted to the model with *P* value <0.10

Variable Name	Variable Type	Comments
Centre	1 Adelaide 2 Cork 3 Auckland	*P*=<0.001
Body mass index groups (kg/m^2)	1 18.5 - 24.9 2 25.0 - 29.9 3 ≥30	Data collected at 14-16 week SCOPE visit. *P*=<0.001
Age group (years)	1 <25 2 25 - 29 3 30 - 34 4 ≥35	Data collected at 14-16 week SCOPE visit. *P*=0.013
Immigrant status	Yes No	Participant migration in the previous five years. *P*=0.076
Education (years)	1 <12 2 12 - 13 3 >13	Data collected at 14-16 week SCOPE visit. *P*=<0.001
Participant born preterm	Yes No	Participant born preterm (<37 weeks). Data was self-reported but women were asked to bring their 'birth record' if kept at home. *P*=0.003; 0.92%; missing, imputed.
Fertility treatment	Yes No	Fertility treatment to conceive current pregnancy. Includes *in vitro* fertilisation, intra-cytoplasmic sperm injection, clomiphene or other hormonal treatment, donor oocyte, donor

		sperm or artificial insemination. *P*= 0.032
Fish or seafood intake (servings per week)	1 <3 2 ≥3	Includes servings of oily fish, other fish and seafood prior to 14 - 16 week SCOPE visit. *P*=0.002
Folate at first visit	Yes No	Any folate at 14 - 16 week SCOPE visit. *P*=0.001
Multivitamin in first trimester	Yes No	Any multivitamin intake in 1st trimester. *P*=0.024
Smoking status	1 non-smoker 2 stopped during pregnancy 3 current smoker	Data collected at 14-16 week SCOPE visit. *P*=0.001
Recreational drug use in first trimester	Yes No	Consumed/inhaled/injected recreational drugs in the first trimester. *P*=0.044
Binge alcohol in first trimester	Yes No	Any binge alcohol in the first trimester. *P*=0.003
Exercise in pregnancy	1 decreased 2 unchanged 3 increased	Change in exercise level in pregnancy. Data collected at 14-16 week SCOPE visit. *P*=0.001; 0.31% missing, imputed.
Excess television viewing	Yes No	Watching ≥5 hours/day. Data collected at 14-16 week SCOPE visit. *P*=0.079

Computer use in pregnancy	Yes No	Any computer usage in past month. Data collected at 14-16 week SCOPE visit. *P*=0.063
Sleep duration on weekday nights (hours)	1 <8 2 8-9 3 ≥10	How many hours of sleeping at night on weekdays on average at 14 - 16 week SCOPE visit. *P*=0.004; 0.31% missing, imputed
Mother's birthweight (per 500g increase)	Continuous	Data was self-reported but women were asked to bring their 'birth record' if kept at home. *P*=<0.001; 4.15% missing, imputed
Limiting behaviour score	Continuous	The Limiting Behaviour score ranges from 0 to 20 with higher values corresponding with greater limiting behaviour. *P*=<0.001; 0.36% missing, imputed.
High leafy vegetable intake	1 <3 serves/day 2 ≥3 serves/day	High (>=3 times per day) green leafy vegetables consumption in pregnancy prior to 14 -16 week SCOPE visit. *P*=0.025
Deep fried hot potato chip intake	Yes No	Any deep fried hot potato chip intake prior to 14 - 16 week SCOPE visit. *P*=0.005; 0.15% missing, not imputed.

Supplementary Table 1B. Variables removed from the model with *P* value < 0.10

Variable Name	Variable Type	Comments
*Pre-pregnancy body mass index (kg/m^2)	Continuous	Data collected at 14-16 week SCOPE visit and estimated according to IOM guidelines. *P*=<0.001
*Pre-pregnancy body mass index (kg/m^2) (3 group categories)	1 18.5 - 24.9 2 25.0 - 29.9 3 ≥30	Data collected at 14-16 week SCOPE visit. *P* =<0.001
*Body mass index (kg/m^2)	Continuous	Data collected at 14-16 week SCOPE visit. *P* =<0.001
*Pre-pregnancy body mass index (kg/m^2) (4 group categories)	1 <18.5 underweight 2 ≥18.5 and <25 normal weight 3 ≥25 and <30 overweight 4 ≥30 obese	Data collected at 14-16 week SCOPE visit and categorized into 4 groups according to World Health Organization criteria. . *P* =<0.001
*Weight (kg)	Continuous	Data collected at 14-16 week SCOPE visit. *P* =<0.001
*Estimated pre-pregnancy weight (kg)	Continuous	Data collected at 14-16 week SCOPE visit and estimated according to IOM guidelines. *P* =<0.001
*Height (cm)	Continuous	Data collected at 14-16 week SCOPE visit. *P* =<0.001
*Height < 161 cm	Yes	Short stature (< 161 cm).

	No	*P* =<0.001
* †Waist circumference (cm)	Continuous	Data collected at 14-16 week SCOPE visit *P* =<0.001
* †Waist > 94 cm	Yes No	Large waist > 94 cm. Data collected at 14-16 week SCOPE visit. *P* =0.025
*†Waist to height ratio	Continuous	Data collected at 14-16 week SCOPE visit. *P* =0.005
*Arm circumference (cm)	Continuous	Mid upper arm circumference at 14-16 week SCOPE visit. *P* =<0.001
*Participant birthweight group (4 group categories)	1 <1500g 2 1500-2499g 3 2500-3499g 4 >-3500g	Participant's birthweight divided into categories. *P* =<0.001
*In vitro fertilization	Yes No	In vitro fertilization to conceive in current pregnancy. *P* =0.007
*Intracytoplasmic sperm injection	Yes No	Intracytoplasmic sperm injection to conceive in current pregnancy. *P* =0.021
*In vitro fertilization or intracytoplasmic sperm injection	Yes No	Either in vitro fertilization or intracytoplasmic sperm injection to conceive in current pregnancy. *P* =0.019
*Oily fish	1 Often (≥3x per	Frequency consumed oily fish

consumption (2 group categories)	week) 2 Moderate (1-2x per week) or Rarely	(which is high in omega 3 long chain fatty acids) in pregnancy prior to 15w SCOPE visit, 2 severity grades. Deleted as overlapped with similar variable *P* =0.007
*Oily fish consumption (3 group categories)	1 Often (≥3x per week) 2 Moderate (1-2x per week) 3 Rarely (≤3x per month)	Frequency consumed oily fish (which is high in omega 3 long chain fatty acids) in pregnancy prior to 15w SCOPE visit, 3 severity grades. Deleted as overlapped with similar variable *P* =0.030
*High oily fish consumption	Yes No	High consumption oily fish (which is high in omega 3 long chain fatty acids) >3 times a week in pregnancy prior to 15w SCOPE visit. *P* =0.009
*Other fish consumption pre-pregnancy (8 group categories)	1 Never 2 1-3/mth 3 1 or 2/wk 4 3 or 4/wk 5 5 or 6/wk 6 1-2/day 7 3-4/day 8 ≥5/day	Frequency consumed other fish (excludes oily fish) or seafood in the month prior to conception. *P* =0.072
*High other fish consumption pre-pregnancy	Yes No	Consumption of other fish (excludes oily fish) or seafood >3 times a week in the month prior to conception. *P* =0.085
*Green leafy	1 Never	Frequency consumed green

vegetables pre-pregnancy (8 group categories)	2 1-3/mth 3 1 or 2/wk 4 3 or 4/wk 5 5 or 6/wk 6 1-2/day 7 3-4/day 8 ≥5/day	leafy vegetables in the month prior to conception. P =0.079
*High folate intake in 1st trimester	1 Not taking folate 2 Yes <=800 3 Yes >800	Folate dose by <=800µg and >800µg per day in 1st trimester. P =0.084
*High folate intake at 14-16 weeks visit (3 group categories)	1 Not taking folate 2 Yes ≤800 3 Yes >800	Folate dose by <=800µg and >800µg per day at 15w SCOPE visit. P =0.001
*Multivitamin intake in 1st trimester (3 group categories)	1 No 2 Less than daily 3 Daily	Frequency of multivitamin intake in 1st trimester. P =0.015
*Any multivitamin intake at 14-16 weeks visit	Yes No	Any multivitamin intake at 15w SCOPE visit. P =0.041
*Smoking status at 14-16 week visit (4 group categories)	1 Never smoked 2 Smoked pre-preg, but quit smoking before pregnant 3 Smoked in preg, but quit smoking before 1st visit 4 Smoking at 1st visit	Smoking status at 15w SCOPE visit in 4 groups (pre-pregnancy and pregnancy smoking status). P =0.004
*Cigarettes per day 1st trimester	Continuous	Number of cigarettes per day in the 1st trimester. P =0.097
*Cigarette exposure prior to 14-16 week	1 No smoking 2 1-12wk	Number of weeks of cigarette exposure in pregnancy prior to

visit (3 group categories)	3 >12wk	15w SCOPE visit (categories). P=0.005
*Cigarettes per day at 14-16 week visit	Continuous	Number of cigarettes per day at 14-16 week SCOPE visit. $P = 0.064$
*Smoked in 1st trimester	Yes No	Smoked during the 1st trimester. P=0.056
*Alcohol intake pre-pregnancy (5 group categories)	1 No alcohol 2 1-2 3 3-7 4 8-14 5 >14	Units of alcohol per week in the 3 months pre-pregnancy (5 categories). $P = 0.004$
*Alcohol intake pre-pregnancy (3 group categories)	1 No Alcohol 2 Low Alcohol consumption (≤2units/day or ≥14units/week) 3 High Alcohol consumption (>2 units/day or >14 units/wk)	Units of alcohol per week in the 3 months pre-pregnancy divided into 3 grades of severity. $P = 0.052$
*Alcohol intake 1st trimester (5 group categories)	0 No alcohol 1 1-2 2 3-7 3 8-14 4 >14	Units of alcohol per week in the 1st trimester (5 categories). $P = 0.065$
*Any recreational drug use in 1st trimester	Yes No	Consumed/inhaled/injected other recreational drugs in the 1st trimester combining 'unknown' (n=0) with No. $P = 0.042$
*Gestation ceased recreational drug use	1 No other drugs taken 2 1-12 weeks	Gestation ceased other recreational drugs

(3 group categories)	3 >12 weeks	(categories). P=0.019
*Any marijuana use 1st trimester	Yes No	Used any marijuana in the 1st trimester. *P* =0.098
*Any marijuana use at 14-16 week visit	Yes No	Any use of marijuana during pregnancy at 14-16 week visit. *P* =0.098
*Exercise/gardening at14-16 week visit	Continuous	Hours exercising/gardening per week evaluated at 14-16 week visit. *P* =0.018
*Exercise/gardening at 14-16 week visit (7 group categories)	0 No exercise/gardening 1 1 hour 2 2 hours 3 3 hours 4 4 hours 5 5 hours 6 6≥ hours	Hours exercising/gardening per week evaluated at 14-16 week visit by 7 categories. *P*=0.009
*Climbing stairs per day (3 group categories)	1 Never 2 <10x/day 3 ≥10x/day	Number of times climbed stairs in the last month, evaluated at 15w SCOPE visit. *P* =0.028
*Limiting behaviour >90th centile	Yes No	Behavioural response to pregnancy: Limiting Behaviour Score evaluated at 15w SCOPE visit >90th Centile. *P* =0.003
*All or None Behaviour Score	Continuous	Behavioural response to pregnancy: All or None Behaviour Score evaluated at 15w SCOPE visit: All or None

		Behaviour Score. *P* =0.049
*Sleep duration on weekday nights (hours)	Continuous	How many hours of sleeping at night on weekdays on average at 14-16 week SCOPE visit. *P* =0.002

* Deleted as overlapped with similar variable already in the model.

† Deleted as difficult to replicate in future clinical practice.