Supplementary material - Frequency of examined variables

Reference no.	Authors	Year	Title	Journal	Country	State	Region
20	Alwan N, Greenwood D, Simpson N, McArdle H, Cade J.	2010	The relationship between dietary supplement use in late pregnancy and birth outcomes: A cohort study in British women.	BJOG: An International Journal of Obstetrics and Gynaecology	UK		Leeds
21	Brough L, Rees GA, Crawford MA, Morton RH, Dorman EK.	2010	Effect of multiple-micronutrient supplementation on maternal nutrient status, infant birth weight and gestational age at birth in a low-income, multi-ethnic population.	British Journal of Nutrition.	UK		East London
22	Carlson SE, Colombo J, Gajewski BJ, Gustafson KM, Mundy D, Yeast J, et al.	2013	DHA supplementation and pregnancy outcomes.	The American Journal of Clinical Nutrition.	USA	Kansas	
23	Catov JM, Bodnar LM, Olsen J, Olsen S, Nohr EA.	2011	Periconceptional multivitamin use and risk of preterm or small-for-gestational-age births in the Danish National Birth Cohort1–4.	The American Journal of Clinical Nutrition.	Denmark		
24	Catov JM, Nohr EA, Bodnar LM, Knudson VK, Olsen SF, Olsen J.	2009	Association of periconceptional multivitamin use with reduced risk of preeclampsia among normal-weight women in the Danish National Birth Cohort.	American Journal of Epidemiology.	Denmark		
25	Chan KKL, Chan BCP, Lam KF, Tam S, Lao TT.	2009	Iron supplement in pregnancy and development of gestational diabetes—a randomised placebo-controlled trial.	BJOG: An International Journal of Obstetrics and Gynaecology	Hong Kong		
26	Czeizel AE, Puhó EH, Langmar Z, Ács N, Bánhidy F.	2009	Possible association of folic acid supplementation during pregnancy with reduction of preterm birth: a population-based study.	European Journal of Obstetrics & Gynecology and Reproductive Biology.	Hungary		
27	Haugen M, Brantsæter AL, Trogstad L, Alexander J, Roth C, Magnus P, et al.	2009	Vitamin D Supplementation and Reduced Risk of Preeclampsia in Nulliparous Women.	Epidemiology.	Norway		
28	Hauth JC, Clifton RG, Roberts JM, Spong CY, Myatt L, Leveno KJ, et al.	2010	Vitamin C and E supplementation to prevent spontaneous preterm birth: a randomized controlled trial.	Obstetrics And Gynecology.	USA	Connecticut, Massachusetts	
29	Martinussen MP, Bracken MB, Triche EW, Jacobsen GW, Risnes KR.	2015	Folic acid supplementation in early pregnancy and the risk of preeclampsia, small for gestational age offspring and preterm delivery.	European Journal of Obstetrics & Gynecology and Reproductive Biology	USA	Connecticut, Massachusetts	
30	McAlpine JM, Scott R, Scuffham PA, Perkins AV, Vanderlelie JJ.	2015	The association between third trimester multivitamin/mineral supplements and gestational length in uncomplicated pregnancies.	Women and Birth.	Australia	Queensland	South-East
31	Nilsen RM, Vollset SE, Monsen ALB, Ulvik A, Haugen M, Meltzer HM, et al.	2010	Infant birth size is not associated with maternal intake and status of folate during the second trimester in Norwegian pregnant women.	Journal of Nutrition.	Norway		
32	Papadopoulou E, Stratakis N, Roumeliotaki T, Sarri K, Merlo D, Kogevinas M, et al.	2013	The effect of high doses of folic acid and iron supplementation in early-to-mid pregnancy on prematurity and fetal growth retardation: the mother–child cohort study in Crete, Greece (Rhea study).	European Journal of Nutrition.	Greece		Crete
33	Pastor-Valero M, Navarrete-Muñoz EM, Rebagliato M, Iñiguez C, Murcia M, Marco A, et al.	2011	Periconceptional folic acid supplementation and anthropometric measures at birth in a cohort of pregnant women in Valencia, Spain.	British Journal of Nutrition.	Spain		Valencia
34	Roberts JM, Myatt L, Spong CY, Thom EA, Hauth JC, Leveno KJ, et al.	2010	Vitamins C and E to prevent complications of pregnancy-associated hypertension.	The New England Journal of Medicine.	USA	Connecticut, Massachusetts	
35	Timmermans S, Jaddoe VWV, Hofman A, Steegers-Theunissen RPM, Steegers EAP. .	2009	Periconception folic acid supplementation, fetal growth and the risks of low birth weight and preterm birth: the Generation R Study.	British Journal of Nutrition.	Netherlands		
36	Vanderlelie J, Scott R, Shibl R, Lewkowicz J, Perkins A, Scuffham PA.	2016	First trimester multivitamin/mineral use is associated with reduced risk of pre-eclampsia among overweight and obese women.	Maternal & Child Nutrition.	Australia	Queensland	South-East

c continuous variable

u unable to specify due to reporting method

* includes < 18, 18-21, 22-24 yrs age groups

			Method				Ethnicity													Age group																					
Associated study/year of collection	Funding source	Number of participants	Observational	Experimental	Single or multisite	Experimental method	No outcome associations reported	Outcome associations reported	Not specified	Caucasian	Indigenous Australian	African	African American	West Indian	Black	Asian	Hispanic	Greek	Other	No outcome associations reported	Outcome associations reported	Not specified	<20	≤20	≤21	20-25	21-25	≤24*	<25	≤25	20-29	20-30	25-29	25-34	25-30	26-30	<30	>30	30-34
2003-2006	Grant	1274	1		S		1		u											1		c																	
2002-2004	Grant	402		1	S	DBRCT	1			155		111		66		42			28	1		c																	
2006-2011	Grant	350		1	S	DBRCT	1								145		28		527	1		c																	
DNBC 1997-2003	Grant	33288	1		M				1											1										4730						12969			
DNBC 1997-2003	Grant	28601	1		M				1											1					362		3898									12572			
2005-2007	Grant	1164		1	S	SBRCT			1											1		c																	
1980-1996	Pharma	21197	1		M				1											1		c																	
MoBA 2002-2009	Grant	23423	1		M				1											1				888							13610								
Eunice Kennedy Shiver cohort 2003-2008	Grant	9968		1	M	DBRCT	1						2518				2083		4367	1		c																	
Eunice Kennedy Shiver cohort 1996-2000	Grant	3647	1		M		1			2505			290			67	700		79	1				424		897									1117				
EFHL 2006-2011	University	427	1		M			1			18								409		1		39									239						149	
MoBA 2002-2003	Undeclared	2934	1		M				1											1									373					2117					
RHEA 2007-2008	Government	1279	1		S		1											1027	88	1		c																	
Infancia y Medio Ambiente 2004-2005	Undeclared	786	1		M				1											1																	360		301
Eunice Kennedy Shiver cohort 2003-2008	Grants	9969		1	M	DBRCT	1								2563		3168		4421	1		c																	
Generation R 2002-2006	Grants	6353	1		S		1		u											1		c																	
EFHL 2006-2011	University	2261	1		M		1				26								2235	1								586					668						579
			12	5			9	1	7	2660	44	111	2808	66	2708	109	5979	1027	12154	16	1	0	39	1312	362	897	3898	586	373	4730	13610	239	668	2117	1117	25541	360	149	880
								27666		10%	0%	0%	10%	0%	10%	0%	22%	4%	44%		95987																		

Descriptive group							Parity					BMI							Smoker					Education							Socio-economic status						Trimester							
30-35	30-39	31-35	>35	≥35	≥36	≥40	No outcome associations reported	Outcome associations reported	Not specified	Nulliparous	Multiparous	No outcome associations reported	Outcome associations reported	Not specified	Underweight	Healthy weight	Overweight	Obese	Lean	Overweight	No outcome associations reported	Outcome associations reported	Not specified	Yes	No	No outcome associations reported	Outcome associations reported	Not specificed	Did not finish high school	Finished high school	TAFE	University	No outcome associations reported	Outcome associations reported	Not specified	Low	Middle	High	Prepregnancy	Trimester 1	Trimester 2	Trimester 3	Combination	MuMS	Folic acid	Vitamin C
							1		u					1							1		u			1		u					1		u					1	1	1		1		
							1			208	194	1		c									1					1						1		402				1	1		1		
							1		c			1			4	145	106	97			1			130	220	1		c					1		u					1	1				
		11670			4542		1			17867	18030	1			1537	23724	7254	3381			1			5644	30253			1					1			1481	10395	24083	1	1				1		
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		8729			3040		1			14499	14102	1			1231	19030	5688	2652			1			4374	24227			1					1			1207	u	u	1	1				1		
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	8713					212		1		23423	0	1			3113	12906	4653	1988			1			2174	21249	1		c							1					1	1	1				
							1			7681	2287	1		c							1			1551	8417	1		c							1					1	1	1	1			1
906					302		1			1514	2133		1						1	1	1			596	3048	1		c							1					1	1			1		
								1		60	236		1		31	195	160					1		116	310		1		97	137	129	63	1		u								1	1			
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					444		1			1269	1665	1			79	1840	593	306					1			1		c							1							1		1		
							1			447	636	1		c							1			251	855	1		u					1									1	1			
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			125				1			434	352			1							1			194	592	1			267	335		184			1					1	1			1		
							1			7821	2331	1		c							1			1593	8559	1		c							1							1	1			1
							1			1933	4420	1		c							1			1593	4760	1		u							1					1	1			1		
					426		1			621	1639		1		179	1125	485	416		1	1			514	1747			1					1		u					1			1		
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906	8713	20399	125	1172	7582	212	15	2	0	78520	48446	11	3	3	6174	58965	18939	8840	1	2	12	1	4	18730	104237	10	1	6	364	472	129	247	8	1	8	8516	17136	33113	5	13	10	9	5	7	10	2
							126966			62%	38%	92918			7%	63%	20%	10%			122967			15%	85%	1212			30%	39%	11%	20%	58765			14%	29%	56%								

Supplement									Outcomes																															
									Pre-eclampsia				Gestational Diabetes				Induction of labour				Birth < 37 weeks				Birth > 41 weeks				Gestation at birth				Low birthweight/SGA				Birthweight			
Vitamin D	Vitamin E	Iodine	Zinc	Selenium	Iron	Calcium	Magnesium	DHA	Primary/secondary[1]	Decrease	No effect	Increase	Primary/secondary[1]	Decrease	No effect	Increase	Primary/secondary[1]	Decrease	No effect	Increase	Primary/secondary[1]	Decrease	No effect	Increase	Primary/secondary[1]	Decrease	No effect	Increase	Primary/secondary[1]	Decrease	No effect	Increase	Primary/secondary[1]	Decrease	No effect	Increase	Primary/secondary[1]	Decrease	No effect	Increase
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										1																														
1	2	0	1	0	3	1	0	1	6	5	3	0	2	0	2	0	2	0	6	1	10	6	8	1	1	0	5	1	8	2	7	5	12	3	13	1	8	0	5	5

Notes
Third trimester signfiance only
No differences between CALD groups
Reduced risk of PTB for lean women only, SGA reduction in T1 MuMS use
Reduced risk of pre-eclampsia for lean women only, associated with T1 MuMS use
Correlation btw Vit D and DHA
Combined with asthma dataset. Findings in lean mother only preconception
Combined effect PMV+ Ca OR folic acid OR Fe OR ZN. Gst length correlation with ATSI, parity, onset, T3 supplement use
0