

## Appendix 5. Studies included in the systematic review and eligible for inclusion in meta-analyses [posted as supplied by author]

**Table A.** Reference citations for trials included in the systematic review and meta-analysis

First author, year	Citation
Brooke, 1980*	<p>Brooke OG, Brown IR, Bone CD, Carter ND, Cleeve HJ, Maxwell JD, Robinson VP, Winder SM. Vitamin D supplements in pregnant Asian women: effects on calcium status and fetal growth. <i>Br Med J</i>. 1980 Mar 15;280(6216):751-4.</p> <p><b>Follow-up/sub-studies/abstracts:</b></p> <ul style="list-style-type: none"> <li>• Brooke OG, Butters F, Wood C. Intrauterine vitamin D nutrition and postnatal growth in Asian infants. <i>British medical journal (Clinical research ed.)</i>. 1981 Oct 17;283(6298):1024.</li> <li>• Brown IR, Brooke OG, Cleeve HJ. Changes in mineral metabolism in the human foetus and newborns associated with maternal vitamin D supplements. <i>Biochemical Society Transactions</i>. 1980;8(1):136-137.</li> <li>• Maxwell JD, Ang L, Brooke OG, Brown IR. Vitamin D supplements enhance weight gain and nutritional status in pregnant Asians. <i>BJOG: An International Journal of Obstetrics &amp; Gynaecology</i>. 1981 Oct 1;88(10):987-91.</li> </ul>
Delvin, 1986*	<p>Delvin EE, Salle BL, Glorieux FH, Adeleine P, David LS. Vitamin D supplementation during pregnancy: effect on neonatal calcium homeostasis. <i>The Journal of pediatrics</i>. 1986 Aug 1;109(2):328-34.</p>
Mallet, 1986*	<p>Mallet E, Gügi B, Brunelle P, Henocq A, Basuyau JP, Lemeur H. Vitamin D supplementation in pregnancy: a controlled trial of two methods. <i>Obstetrics &amp; Gynecology</i>. 1986 Sep 1;68(3):300-4.</p> <p><b>Follow-up/sub-studies/abstracts:</b></p> <ul style="list-style-type: none"> <li>• de Ménibus CH, Mallet E, Henocq A, Lemeur H. Should vitamin D supplements be given to pregnant women?. <i>Bulletin de l'Academie nationale de medecine</i>. 1983 Dec;168(7-8):909-16.</li> </ul>
Marya, 1988*	<p>Marya RK, Rathee S, Dua V, Sangwan K. Effect of vitamin D supplementation during pregnancy on foetal growth. <i>Indian journal of medical research</i>. 1988;88:488-92.</p>
Kaur, 1991	<p>Kaur J, Marya RK, Rathee S, Lal H, Singh GP. Effect of pharmacological doses of vitamin D during pregnancy on placental protein status and birth weight. <i>Nutrition Research</i>. 1991 Sep 1;11(9):1077-81.</p>
Yu, 2009*	<p>Yu CK, Sykes L, Sethi M, Teoh TG, Robinson S. Vitamin D deficiency and supplementation during pregnancy. <i>Clinical endocrinology</i>. 2009 May 1;70(5):685-90.</p> <p><b>Follow-up/sub-studies/abstracts:</b></p> <ul style="list-style-type: none"> <li>• Goldring ST, Griffiths CJ, Martineau AR, Robinson S, Yu C, Poulton S, Kirkby JC, Stocks J, Hooper R, Shaheen SO, Warner JO. Prenatal vitamin D supplementation and child respiratory health: a randomised controlled trial. <i>PloS one</i>. 2013 Jun 24;8(6):e66627.</li> <li>• Griffiths M, Goldring S, Griffiths C, Shaheen SO, Martineau A, Cross L, Robinson S, Warner JO, Devine A, Boyle RJ. Effects of Pre-Natal Vitamin D Supplementation with Partial Correction of Vitamin D Deficiency on Early Life Healthcare Utilisation: A Randomised Controlled Trial. <i>PloS one</i>. 2015 Dec 23;10(12):e0145303.</li> </ul>

First author, year	Citation
Sahu, 2009	<p>Sahu M, Das V, Aggarwal A, Rawat V, Saxena P, Bhatia V. Vitamin D replacement in pregnant women in rural north India: a pilot study. <i>European journal of clinical nutrition</i>. 2009 Sep 1;63(9):1157-9.</p> <p><b>Follow-up/sub-studies/abstracts:</b></p> <ul style="list-style-type: none"> <li>• Das V, Agarwal A, Bhatia V, Pandey A, Agarwal S, Saxena P, Sahu M. O205 Evaluation of Vit D status and need for supplementation in pregnant women of a rural area of North India. <i>International Journal of Gynecology &amp; Obstetrics</i>. 2009 Oct 1;107:S151.</li> </ul>
Hollis, 2011	<p>Hollis BW, Johnson D, Hulsey TC, Ebeling M, Wagner CL. Vitamin D supplementation during pregnancy: Double- blind, randomized clinical trial of safety and effectiveness. <i>Journal of bone and mineral research</i>. 2011 Oct 1;26(10):2341-57.</p> <p><b>Follow-up/sub-studies/abstracts:</b></p> <ul style="list-style-type: none"> <li>• Appelgren KE, Nietert PJ, Hulsey TC, Hollis BW, Wagner CL. Analyzing adherence to prenatal supplement: does pill count measure up?. <i>International journal of endocrinology</i>. 2010 Feb 4;2010.</li> <li>• Hollis BW, Wagner CL. Vitamin D and pregnancy: skeletal effects, nonskeletal effects, and birth outcomes. <i>Calcified tissue international</i>. 2013 Feb 1;92(2):128-39.</li> </ul>
Sabet, 2012	<p>Sabet Z, Ghazi AA, Tohidi M, Oladi B. Vitamin D supplementation in pregnant Iranian women: effects on maternal and neonatal vitamin D and parathyroid hormone status. <i>Acta Endocrinologica (1841-0987)</i>. 2012 Jan 1;8(1).</p>
Asemi, 2013a*	<p>Asemi Z, Samimi M, Tabassi Z, Shakeri H, Esmailzadeh A. Vitamin D supplementation affects serum high-sensitivity C-reactive protein, insulin resistance, and biomarkers of oxidative stress in pregnant women. <i>The Journal of nutrition</i>. 2013 Sep 1;143(9):1432-8.</p>
Asemi, 2013b	<p>Asemi Z, Hashemi T, Karamali M, Samimi M, Esmailzadeh A. Effects of vitamin D supplementation on glucose metabolism, lipid concentrations, inflammation, and oxidative stress in gestational diabetes: a double-blind randomized controlled clinical trial. <i>The American journal of clinical nutrition</i>. 2013 Dec 1;98(6):1425-32.</p> <p><b>Follow-up/sub-studies/abstracts:</b></p> <ul style="list-style-type: none"> <li>• Asemi Z, Karamali M, Esmailzadeh A. Favorable effects of vitamin d supplementation on pregnancy outcomes in gestational diabetes: a double blind randomized controlled clinical trial. <i>Hormone and Metabolic Research</i>. 2015 Jul;47(08):565-70.</li> </ul>
Hashemipour, 2013	<p>Hashemipour S, Lalooha F, Mirdamadi SZ, Ziaee A, Ghaleh TD. Effect of vitamin D administration in vitamin D-deficient pregnant women on maternal and neonatal serum calcium and vitamin D concentrations: a randomised clinical trial. <i>British Journal of Nutrition</i>. 2013 Nov 14;110(09):1611-6.</p> <p><b>Follow-up/sub-studies/abstracts:</b></p> <ul style="list-style-type: none"> <li>• Hashemipour S, Ziaee A, Javadi A, Movahed F, Elmizadeh K, Javadi EH, Lalooha F. Effect of treatment of vitamin D deficiency and insufficiency during pregnancy on fetal growth indices and maternal weight gain: a randomized clinical trial. <i>European Journal of Obstetrics &amp; Gynecology and Reproductive Biology</i>. 2014 Jan 31;172:15-9.</li> </ul>

First author, year	Citation
Roth, 2013*	<p>Roth DE, Al Mahmud A, Raqib R, Akhtar E, Perumal N, Pezzack B, Baqui AH. Randomized placebo-controlled trial of high-dose prenatal third-trimester vitamin D3 supplementation in Bangladesh: the AViDD trial. <i>Nutrition journal</i>. 2013 Apr 12;12(1):47.</p> <p><b>Follow-up/sub-studies/abstracts:</b></p> <ul style="list-style-type: none"> <li>• Roth DE, Perumal N, Al Mahmud A, Baqui AH. Maternal vitamin D3 supplementation during the third trimester of pregnancy: effects on infant growth in a longitudinal follow-up study in Bangladesh. <i>The Journal of pediatrics</i>. 2013 Dec 31;163(6):1605-11.</li> <li>• Harrington J, Perumal N, Al Mahmud A, Baqui A, Roth DE. Vitamin D and fetal-neonatal calcium homeostasis: findings from a randomized controlled trial of high-dose antenatal vitamin D supplementation. <i>Pediatric research</i>. 2014 Jun 17;76(3):302-9.</li> <li>• Perumal N, Al Mahmud A, Baqui AH, Roth DE. Prenatal vitamin D supplementation and infant vitamin D status in Bangladesh. <i>The FASEB Journal</i>. 2014;28(no.1 supplement 256.4)</li> <li>• Perumal N, Al Mahmud A, Baqui AH, Roth DE. Prenatal vitamin D supplementation and infant vitamin D status in Bangladesh. <i>Public health nutrition</i>. 2015 Nov 6:1-9.</li> <li>• Akhtar E, Mily A, Haq A, Al-Mahmud A, El-Arifeen S, Baqui AH, Roth DE, Raqib R. Prenatal high-dose vitamin D 3 supplementation has balanced effects on cord blood Th1 and Th2 responses. <i>Nutrition Journal</i>. 2016 Aug 9;15(1):75.</li> <li>• Dimitris MC, Perumal N, Craig-Barnes HA, Leadley M, Mahmud AA, Baqui AH, Roth DE. Effect of weekly high-dose vitamin D3 supplementation on serum cholecalciferol concentrations in pregnant women. <i>The Journal of steroid biochemistry and molecular biology</i>. 2016 Apr 30;158:76-81.</li> </ul>
Dawodu, 2013	<p>Dawodu A, Saadi HF, Bekdache G, Javed Y, Altaye M, Hollis BW. Randomized controlled trial (RCT) of vitamin D supplementation in pregnancy in a population with endemic vitamin D deficiency. <i>The Journal of Clinical Endocrinology &amp; Metabolism</i>. 2013 Apr 4;98(6):2337-46.</p>
Soheilykhah, 2013	<p>Soheilykhah S, Mojibian M, Moghadam MJ, Shojaoddiny-Ardekani A. The effect of different doses of vitamin D supplementation on insulin resistance during pregnancy. <i>Gynecological Endocrinology</i>. 2013 Apr 1;29(4):396-9.</p>
Hossain, 2014	<p>Hossain N, Kanani FH, Ramzan S, Kausar R, Ayaz S, Khanani R, Pal L. Obstetric and neonatal outcomes of maternal vitamin D supplementation: results of an open-label, randomized controlled trial of antenatal vitamin D supplementation in Pakistani women. <i>The Journal of Clinical Endocrinology &amp; Metabolism</i>. 2014 Mar 19;99(7):2448-55.</p> <p><b>Follow-up/sub-studies/abstracts:</b></p> <ul style="list-style-type: none"> <li>• Hossain N, Kanani F, Khanani R, Ayaz S, Pal L. Effect of maternal supplementation with vitamin D during pregnancy on neonatal serum vitamin D levels and anthropometric measurements. <i>International Journal of Gynecology &amp; Obstetrics</i>. 2012 Oct 1;119:S372.</li> </ul>
Yap, 2014	<p>Yap C, Cheung NW, Gunton JE, Athayde N, Munns CF, Duke A, McLean M. Vitamin D supplementation and the effects on glucose metabolism during pregnancy: a randomized controlled trial. <i>Diabetes Care</i>. 2014 Jul 1;37(7):1837-44.</p>

First author, year	Citation
Grant, 2014*	<p>Grant CC, Stewart AW, Scragg R, Milne T, Rowden J, Ekeroma A, Wall C, Mitchell EA, Crengle S, Trenholme A, Crane J. Vitamin D during pregnancy and infancy and infant serum 25-hydroxyvitamin D concentration. <i>Pediatrics</i>. 2013 Dec 1:peds-2013.</p> <p><b>Follow-up/sub-studies/abstracts:</b></p> <ul style="list-style-type: none"> <li>Grant CC, Kaur S, Waymouth E, Mitchell EA, Scragg R, Ekeroma A, Stewart A, Crane J, Trenholme A, Camargo CA. Reduced primary care respiratory infection visits following pregnancy and infancy vitamin D supplementation: a randomised controlled trial. <i>Acta paediatrica</i>. 2015 Apr 1;104(4):396-404.</li> <li>Grant CC, Crane J, Mitchell EA, Sinclair J, Stewart A, Milne T, Knight J, Gilchrist C, Camargo CA. Vitamin D supplementation during pregnancy and infancy reduces aeroallergen sensitization: a randomized controlled trial. <i>Allergy</i>. 2016 Sep 1;71(9):1325-34.</li> <li>Wall CR, Stewart AW, Camargo CA, Scragg R, Mitchell EA, Ekeroma A, Crane J, Milne T, Rowden J, Horst R, Grant CC. Vitamin D activity of breast milk in women randomly assigned to vitamin D3 supplementation during pregnancy. <i>The American journal of clinical nutrition</i>. 2016 Feb 1;103(2):382-8.</li> </ul>
Mutlu, 2014	<p>Yesiltepe Mutlu G, Ozsu E, Kalaca S, Yuksel A, Pehlevan Y, Cizmecioglu F, Hatun S. Evaluation of vitamin D supplementation doses during pregnancy in a population at high risk for deficiency. <i>Hormone Research in Paediatrics</i>. 2014 Apr 3;81(6):402-8.</p>
Zerofsky, 2016	<p>Zerofsky MS, Jacoby BN, Pedersen TL, Stephensen CB. Daily cholecalciferol supplementation during pregnancy alters markers of regulatory immunity, inflammation, and clinical outcomes in a randomized controlled trial. <i>The Journal of nutrition</i>. 2016 Nov 1;146(11):2388-97.</p> <p><b>Follow-up/sub-studies/abstracts:</b></p> <ul style="list-style-type: none"> <li>Zerofsky M, Jacoby B, Stephensen CB. A randomized controlled trial of vitamin D supplementation in pregnancy: effects on vitamin D status and clinical outcomes. <i>The FASEB journal</i>; 28 (no.1 supplement 1041.5)</li> <li>Zerofsky M, Jacoby B, Pedersen TL, Stephensen CB. Effects of a randomized, controlled trial of daily vitamin D3 supplementation during pregnancy on regulatory immunity and inflammation. <i>The FASEB journal</i>; 30 (no. 1 supplement 296.7)</li> </ul>
Sablok, 2015*	<p>Sablok A, Batra A, Thariani K, Batra A, Bharti R, Aggarwal AR, Kabi BC, Chellani H. Supplementation of vitamin D in pregnancy and its correlation with feto- maternal outcome. <i>Clinical endocrinology</i>. 2015 Oct 1;83(4):536-41.</p>
March, 2015	<p>March KM, Chen NN, Karakochuk CD, Shand AW, Innis SM, von Dadelszen P, Barr SI, Lyon MR, Whiting SJ, Weiler HA, Green TJ. Maternal vitamin D3 supplementation at 50 µg/d protects against low serum 25-hydroxyvitamin D in infants at 8 wk of age: a randomized controlled trial of 3 doses of vitamin D beginning in gestation and continued in lactation. <i>The American journal of clinical nutrition</i>. 2015 Aug 1;102(2):402-10.</p> <p><b>Follow-up/sub-studies/abstracts:</b></p> <ul style="list-style-type: none"> <li>Chen NN, March K, Innis SM, Shand A, von Dadelszen P, Lyon M, Weiler H, Green TJ. The effect of vitamin D supplementation during pregnancy and lactation on maternal and infant 25-hydroxyvitamin D (25OHD) concentration. <i>The FASEB journal</i>. 2013;27(no 1. Supplement 1b259)</li> </ul>
Mojibian, 2015	<p>Mojibian M, Soheilykhah S, Zadeh MA, Moghadam MJ. The effects of vitamin D supplementation on maternal and neonatal outcome: A randomized clinical trial. <i>Iranian journal of reproductive medicine</i>. 2015 Nov;13(11):687.</p>
Etemadifar, 2015	<p>Etemadifar M, Janghorbani M. Efficacy of high-dose vitamin D3 supplementation in vitamin D deficient pregnant women with multiple sclerosis: preliminary findings of a randomized-controlled trial. <i>Iranian journal of neurology</i>. 2015 Apr 4;14(2):67.</p>
Karamali, 2015	<p>Karamali M, Beihaghi E, Mohammadi AA, Asemi Z. Effects of high-dose vitamin D supplementation on metabolic status and pregnancy outcomes in pregnant women at risk for pre-eclampsia. <i>Hormone and Metabolic Research</i>. 2015 Nov;47(12):867-72.</p>

First author, year	Citation
Charandabi, 2015	<p>Mohammad-Alizadeh-Charandabi S, Mirghafourvand M, Mansouri A, Najafi M, Khodabande F. The effect of vitamin D and calcium plus vitamin D during pregnancy on pregnancy and birth outcomes: a randomized controlled trial. <i>Journal of caring sciences</i>. 2015 Mar;4(1):35.</p> <p><b>Follow-up/sub-studies/abstracts:</b></p> <ul style="list-style-type: none"> <li>• Mirghafourvand M, Mohammad AC, Mansouri A, Najafi M, Khodabande F. The effect of vitamin D and calcium plus vitamin D on sleep quality in pregnant women with leg cramps: a controlled randomized clinical trial. <i>Journal of Isfahan Medical School</i>. 2015; 320.</li> <li>• Mansouri A, Mirghafourvand M, Charandabi SM, Najafi M. The effect of Vitamin D and calcium plus Vitamin D on leg cramps in pregnant women: A randomized controlled trial. <i>Journal of research in medical sciences: the official journal of Isfahan University of Medical Sciences</i>. 2017;22.</li> </ul>
Rodda, 2015	<p>Rodda CP, Benson JE, Vincent AJ, Whitehead CL, Polykov A, Vollenhoven B. Maternal vitamin D supplementation during pregnancy prevents vitamin D deficiency in the newborn: an open- label randomized controlled trial. <i>Clinical endocrinology</i>. 2015 Sep 1;83(3):363-8.</p>
Litonjua, 2016	<p>Litonjua AA, Carey VJ, Laranjo N, Harshfield BJ, McElrath TF, O'Connor GT, Sandel M, Iverson RE, Lee-Paritz A, Strunk RC, Bacharier LB. Effect of prenatal supplementation with vitamin D on asthma or recurrent wheezing in offspring by age 3 years: the VDAART randomized clinical trial. <i>Jama</i>. 2016 Jan 26;315(4):362-70.</p> <p><b>Follow-up/sub-studies/abstracts:</b></p> <ul style="list-style-type: none"> <li>• Al-Garawi A, Carey VJ, Chhabra D, Mirzakhani H, Morrow J, Lasky-Su J, Qiu W, Laranjo N, Litonjua AA, Weiss ST. The Role of Vitamin D in the Transcriptional Program of Human Pregnancy. <i>PloS one</i>. 2016 Oct 6;11(10):e0163832.</li> <li>• Mirzakhani H, Litonjua AA, McElrath TF, O'Connor G, Lee-Parritz A, Iverson R, Macones G, Strunk RC, Bacharier LB, Zeiger R, Hollis BW. Early pregnancy vitamin D status and risk of preeclampsia. <i>The Journal of Clinical Investigation</i>. 2016 Nov 14;126(12).</li> <li>• Hornsby E, Pfeffer PE, Laranjo N, Cruikshank W, Tuzova M, Litonjua AA, Weiss ST, Carey VJ, O'Connor G, Hawrylowicz C. Vitamin D supplementation during pregnancy: Effect on the neonatal immune system in a randomized controlled trial. <i>Journal of Allergy and Clinical Immunology</i>. 2017 May 26.</li> <li>• Wolsk HM, Harshfield BJ, Laranjo N, Carey VJ, O'Connor G, Sandel M, Strunk RC, Bacharier LB, Zeiger RS, Schatz M, Hollis BW. Vitamin D supplementation in pregnancy, prenatal 25 (OH) D levels, race, and subsequent asthma or recurrent wheeze in offspring: Secondary analyses from the Vitamin D Antenatal Asthma Reduction Trial. <i>Journal of Allergy and Clinical Immunology</i>. 2017 Mar 9.</li> </ul>

First author, year	Citation
Cooper, 2016	<p>Cooper C, Harvey NC, Bishop NJ, Kennedy S, Papageorghiou AT, Schoenmakers I, Fraser R, Gandhi SV, Carr A, D'Angelo S, Crozier SR. Maternal gestational vitamin D supplementation and offspring bone health (MAVIDOS): a multicentre, double-blind, randomised placebo-controlled trial. <i>The lancet Diabetes &amp; endocrinology</i>. 2016 May 31;4(5):393-402.</p> <p><b>Follow-up/sub-studies/abstracts:</b></p> <ul style="list-style-type: none"> <li>• Cooper C, Harvey NC, Javaid MK, Bishop NJ, Kennedy S, Papageorghiou AT, Fraser R, Gandhi SV, D'angelo S, Crozier SR, Moon RJ. Effectiveness of maternal vitamin D supplementation: a multicenter randomised, double-blind, placebo controlled trial (MAVIDOS). <i>Osteoporosis International</i>. 2015; 26(no. 1 supplement S40).</li> <li>• Moon RJ, Harvey NC, Cooper C, D'Angelo S, Crozier SR, Inskip HM, Schoenmakers I, Prentice A, Arden NK, Bishop NJ, Carr A. Determinants of the maternal 25-hydroxyvitamin D response to vitamin D supplementation during pregnancy. <i>The Journal of Clinical Endocrinology &amp; Metabolism</i>. 2016 Oct 28;101(12):5012-20.</li> <li>• Curtis E, Cook E, Krstic N, D'Angelo S, Crozier S, Moon R, Murray R, Garratt E, Costello P, Bishop NJ, Kennedy S, Papageorghiou A, Schoenmakers I, Fraser R, Gandhi S, Prentice A, Javaid K, Inskip H, Godfrey K, Bell C, Cooper C, Lillycrop K, Harvey N. DNA methylation at the RXRA promoter at birth is associated with gestational vitamin D supplementation. Results from the MAVIDOS trial. <i>Osteoporosis International</i>. 2017; 28(no. 1 Supplement): S72-S73.</li> </ul>
Chawes, 2016	<p>Chawes BL, Bønnelykke K, Stokholm J, Vissing NH, Bjarnadóttir E, Schoos AM, Wolsk HM, Pedersen TM, Vinding RK, Thorsteinsdóttir S, Arianto L. Effect of vitamin D3 supplementation during pregnancy on risk of persistent wheeze in the offspring: a randomized clinical trial. <i>Jama</i>. 2016 Jan 26;315(4):353-61.</p>
Naghshineh, 2016	<p>Naghshineh E, Sheikhaliyan S. Effect of vitamin D supplementation in the reduce risk of preeclampsia in nulliparous women. <i>Advanced biomedical research</i>. 2016;5.</p>
Thiele, 2016	<p>Thiele DK, Ralph J, El-Masri M, Anderson CM. Vitamin D3 Supplementation During Pregnancy and Lactation Improves Vitamin D Status of the Mother–Infant Dyad. <i>Journal of Obstetric, Gynecologic &amp; Neonatal Nursing</i>. 2017 Feb 28;46(1):135-47.</p> <p><b>Follow-up/sub-studies/abstracts:</b></p> <ul style="list-style-type: none"> <li>• Anderson CM, Thiele DK, Ralph JL, Perley D, Ohm JE. Vitamin D Supplementation and DNA Methylation Patterns during Pregnancy and Lactation in Mothers and Infants. <i>The FASEB Journal</i>. 2016 Apr 1;30(1 Supplement):1028-3.</li> </ul>
Khan, 2016	<p>Khan FR, Ahmad T, Hussain R, Bhutta ZA. A Randomized Controlled Trial of Oral Vitamin D Supplementation in Pregnancy to Improve Maternal Periodontal Health and Birth Weight. <i>Journal of International Oral Health</i>. 2016 Jun 1;8(6):657.</p>
Shahgheibi, 2016	<p>Shahgheibi S, Farhadifar F, Pouya B. The effect of vitamin D supplementation on gestational diabetes in high-risk women: Results from a randomized placebo-controlled trial. <i>Journal of Research in Medical Sciences: The Official Journal of Isfahan University of Medical Sciences</i>. 2016;21.</p>
Sahoo, 2016	<p>Sahoo SK, Katam KK, Das V, Agarwal A, Bhatia V. Maternal vitamin D supplementation in pregnancy and offspring outcomes: a double-blind randomized placebo-controlled trial. <i>Journal of Bone and Mineral Metabolism</i>. 2016 Sep 14:1-8.</p>
Vaziri, 2016	<p>Vaziri F, Dabbaghmanesh MH, Samsami A, Nasiri S, Shirazi PT. Vitamin D supplementation during pregnancy on infant anthropometric measurements and bone mass of mother-infant pairs: A randomized placebo clinical trial. <i>Early Human Development</i>. 2016 Dec 31;103:61-8.</p> <p><b>Follow-up/sub-studies/abstracts:</b></p> <ul style="list-style-type: none"> <li>• Vaziri F, Nasiri S, Tavana Z, Dabbaghmanesh MH, Sharif F, Jafari P. A randomized controlled trial of vitamin D supplementation on perinatal depression: in Iranian pregnant mothers. <i>BMC Pregnancy and Childbirth</i>. 2016 Aug 20;16(1):239.</li> </ul>

First author, year	Citation
Zhang, 2016	Zhang Q, Cheng Y, He M, Li T, Ma Z, Cheng H. Effect of various doses of vitamin D supplementation on pregnant women with gestational diabetes mellitus: A randomized controlled trial. <i>Experimental and Therapeutic Medicine</i> . 2016 Sep 1;12(3):1889-95.
Valizadeh, 2016	Valizadeh M, Piri Z, Mohammadian F, Kamali K, Moghadami HR. The Impact of Vitamin D Supplementation on Post-Partum Glucose Tolerance and Insulin Resistance in Gestational Diabetes: A Randomized Controlled Trial. <i>International Journal of Endocrinology and Metabolism</i> . 2016 Apr;14(2).
Yazdchi, 2016	Yazdchi R, Gargari BP, Asghari-Jafarabadi M, Sakhaf F. Effects of vitamin D supplementation on metabolic indices and hs-CRP levels in gestational diabetes mellitus patients: a randomized, double-blinded, placebo-controlled clinical trial. <i>Nutrition research and practice</i> . 2016 Jun 1;10(3):328-35.
Abotorabi, 2017	Abotorabi S, Hashemi Poor S, Esmailzadehha N, Ziaee A, Khoeiniha MH. Effect of Treatment with Vitamin D on Maternal and Neonatal Indices in Pregnant Women with Hypocalcemia: A Randomized Controlled Trial. <i>International Journal of Pediatrics</i> . 2017;5(9):5733-9.
Samimi, 2017	Samimi M, Foroozanfard F, Amini F, Sehat M. Effect of vitamin D supplementation on unexplained recurrent spontaneous abortion: a double-blind randomized controlled trial. <i>Global Journal of Health Science</i> . 2017 Mar; 9(3):95.
Sasan, 2017	Behjat Sasan S, Zandvakili F, Soufizadeh N, Baybordi E. The Effects of Vitamin D Supplement on Prevention of Recurrence of Preeclampsia in Pregnant Women with a History of Preeclampsia. <i>Obstetrics and Gynecology International</i> . 2017;2017. Article ID 8249264.
Tehrani, 2017	Tehrani HG, Mostajeran F, Banihashemi B. Effect of Vitamin D Supplementation on the Incidence of Gestational Diabetes. <i>Advanced Biomedical Research</i> . 2017;6:79

\*Included in the Cochrane Review (2016)

**Table B.** Characteristics of the 43 prenatal vitamin D trials included in the systematic review and eligible for inclusion in meta-analyses

First author, year	Country	Health status at enrollment	Number enrolled	Baseline vitamin D status (nmol/L) <sup>a</sup>	Micronutrient co-intervention(s) <sup>b</sup>	Control dose <sup>b,c</sup> , IU/day <sup>d</sup>	Type of vitamin D supplement	Type of regimen	Supplement frequency <sup>e</sup>	Intervention dose(s) <sup>e</sup> , IU/day <sup>d</sup> ; total IU	Timing and duration of supplementation
Brooke, 1980*	United Kingdom	Healthy	130	20	-	0	Vitamin D2	Regular	Daily	1,000 <sup>f</sup>	28 weeks gestation until delivery
Delvin, 1986*	France	Healthy	40	-	-	0	Vitamin D3	Regular	Daily	1,000	6 months gestation until delivery
Mallet, 1986*	France	Healthy	77	-	-	0	Vitamin D2 Vitamin D2	Regular Bolus	Daily -	1,000 200,000	3 <sup>rd</sup> trimester until delivery 7 <sup>th</sup> month gestation
Marya, 1988*	India	Healthy	200	-	-	0	Vitamin D3	Bolus	-	1,200,000 (600,000 x2)	7 <sup>th</sup> and 8 <sup>th</sup> month gestation
Kaur, 1991	India	Healthy	50	-	-	0	Vitamin D3	Bolus	-	120,000 (60,000 x2)	6 <sup>th</sup> and 7 <sup>th</sup> month gestation
Yu, 2009*	United Kingdom	Healthy	235	28	-	0	Vitamin D2 Vitamin D3	Regular Bolus	Daily -	800 200,000	27 weeks gestation until delivery 27 weeks gestation
Sahu, 2009	India	Healthy	139	25.1	Calcium, iron	0	Vitamin D3 Vitamin D3	Bolus Bolus	- -	60,000 240,000 (120,000 x2)	5 <sup>th</sup> month gestation 5 <sup>th</sup> and 7 <sup>th</sup> month gestation
Hollis, 2011	United States	Healthy	506	61.6	-	400	Vitamin D3 Vitamin D3	Regular Regular	Daily Daily	2,000 4,000	12-16 weeks gestation until delivery 12-16 weeks gestation until delivery
Sabet, 2012	Iran	Healthy	50	95.6	-	0	Vitamin D3	Regular	Monthly	3,289	27-28 weeks gestation until delivery
Asemi, 2013a*	Iran	Healthy	54	36.2	Folic acid, iron	0	Vitamin D3	Regular	Daily	400	25 weeks gestation for 9 weeks
Asemi, 2013b	Iran	Gestational diabetes	54	50.9	Folic acid, iron	0	Vitamin D3	Bolus	-	100,000 (50,000 x2)	24-28 and 27-31 weeks gestation
Hashemipour, 2013	Iran	Healthy	160	43.7	Calcium	400	Vitamin D3	Regular	Weekly	7,143	26-28 weeks gestation until delivery
Roth, 2013*	Bangladesh	Healthy	160	44	-	0	Vitamin D3	Regular	Weekly	5,000	26-30 weeks gestation until delivery
Dawodu, 2013		Healthy	192	21.5	-	400	Vitamin D3	Regular	Daily	2,000	12-16 weeks gestation until delivery



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First author, year	Country	Health status at enrollment	Number enrolled	Baseline vitamin D status (nmol/L) <sup>a</sup>	Micronutrient co-intervention(s) <sup>b</sup>	Control dose <sup>b,c</sup> , IU/day <sup>d</sup>	Type of vitamin D supplement	Type of regimen	Supplement frequency <sup>e</sup>	Intervention dose(s) <sup>e</sup> , IU/day <sup>d</sup> ; total IU	Timing and duration of supplementation
	United Arab Emirates						Vitamin D3	Regular	Daily	4,000	12-16 weeks gestation until delivery
Soheilykhah, 2013	Iran	Healthy	120	20.7	-	200	Not reported	Regular	Monthly	1,645	12 weeks gestation until delivery
							Not reported	Regular	Every 2 weeks	3,571	12 weeks gestation until delivery
Hossain, 2014	Pakistan	Healthy	200	13.7	Iron, calcium	0	Vitamin D3	Regular	Daily	4,000	20 weeks gestation until delivery
Yap, 2014	Australia	Healthy	209	44.9	-	400	Vitamin D3	Regular	Daily	5,000	20 weeks gestation until delivery
Grant, 2014*	New Zealand	Healthy	260	55.7	-	0	Vitamin D3	Regular	Daily	1,000	27 weeks gestation until delivery
							Vitamin D3	Regular	Daily	2,000	27 weeks gestation until delivery
Mutlu, 2014	Turkey	Healthy	91	24.7	-	600	Vitamin D3	Regular	Daily	1,200	13-32 weeks gestation until delivery
							Vitamin D3	Regular	Daily	2,000	13-32 weeks gestation until delivery
Zerofsky, 2014	United States	Healthy	57	69.6	-	400	Vitamin D3	Regular	Daily	2,000	20 weeks gestation until delivery
Sablok, 2015*	India	Healthy	180	-	-	0	Vitamin D3	Bolus <sup>g</sup>	-	>50 nmol/L: 60,000 x1 25-50 nmol/L: 120,000 x 2 <25 nmol/L: 120,000 x 4	20 weeks gestation if >50 nmol/L 20 and 24 weeks gestation if 25-50 nmol/L 20, 24, 28 and 32 weeks if <25 nmol/L
March, 2015	Canada	Healthy	226	68	Calcium, folic acid, iron, multivitamin	400	Vitamin D3	Regular	Daily	1,000	13-24 weeks gestation until 8 weeks postpartum
							Vitamin D3	Regular	Daily	2,000	13-24 weeks gestation until 8 weeks postpartum
Mojibian, 2015	Iran	Healthy	500	38.2	-	400	Vitamin D3	Regular	Every 2 weeks	3,571	12-16 weeks gestation until delivery
Etemadifar, 2015	Iran	Multiple sclerosis	43	45.7	-	0	Vitamin D3	Regular	Weekly	7,143	12-16 weeks gestation until delivery

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Karamali, 2015	Iran	Healthy	60	42.7	Folic acid, iron, multivitamin	0	Vitamin D3	Regular	Every 2 weeks	3,571	20 weeks gestation for 12 weeks
Charandabi, 2015	Iran	Healthy	126	-	-	0	Vitamin D3	Regular	Daily	1,000	25-30 weeks gestation for 60 days
Rodda, 2015	Australia	Healthy	78	33	-	0	Vitamin D3	Regular	Daily	2,000	12-16 weeks gestation until 28 weeks gestation
Litonjua, 2016	United States	Healthy	881	56.2	Multivitamin	400	Vitamin D3	Regular	Daily	4,400	10-18 weeks gestation until delivery
Cooper, 2016	United Kingdom	Healthy	1,134	45.9	-	0	Vitamin D3	Regular	Daily	1,000	14 weeks gestation until delivery
Chawes, 2016	Denmark	Healthy	623	77.4	-	400	Vitamin D3	Regular	Daily	2,800	24 weeks gestation until 1 week postpartum
Naghshineh, 2016	Iran	Healthy	140	-	-	0	Vitamin D3	Regular	Daily	600	16 weeks gestation until delivery
Thiele, 2016	United States	Healthy	16	-	-	400	Vitamin D3	Regular	Daily	3,800	28 weeks gestation until 4 weeks postpartum
Khan, 2016	Pakistan	Healthy	85	31.8	-	0	Vitamin D3	Regular	Daily	4,000	12 weeks gestation until delivery
Shahgheibi, 2016	Iran	Healthy	100	17.4	-	0	Not reported	Regular	Weekly	714	12 weeks gestation until 26 weeks gestation
Sahoo, 2016	India	Healthy	300	33	Calcium	400	Vitamin D3	Regular	Every 8 weeks	1,071	14-20 weeks gestation until delivery
							Vitamin D3	Regular	Every 4 weeks	2,143	14-20 weeks gestation until delivery
Vaziri, 2016	Iran	Healthy	153	31.7	-	0	Vitamin D3	Regular	Daily	2000	26-28 weeks gestation until delivery
Zhang, 2016	China	Gestational diabetes	133	-	-	0	Vitamin D3	Regular	Daily	200	24-28 weeks gestation until delivery
							Vitamin D3	Regular	Daily	2000	24-28 weeks for 25 days
							Vitamin D3	Regular	Daily	4000	25-28 weeks for 12.5 days
Valizadeh, 2016	Iran	Gestational diabetes	96	44.2	-	0	Vitamin D3	Bolus	-	If <28 weeks gestation: 200,000 x2 + 50,000 x6	12-32 weeks

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										If ≥28 weeks gestation: 200,000 x2 + 100,000 x3	
Yazdchi, 2016	Iran	Gestational diabetes	76	25.8	Folic acid, iron	0	Vitamin D3	Regular	Every 2 weeks	3,571	24-28 weeks gestation for 2 months
Abotorabi, 2017	Iran	Hypocalcemia	110	45	Micronutrient capsule	400	Vitamin D3	Regular	Weekly	7543	22-26 weeks gestation for 8 weeks
Samimi, 2017	Iran	Healthy	80	29	-	0	Vitamin D3	Regular	Daily	400	<10 weeks gestation until 20 weeks gestation
Tehrani, 2017	Iran	Healthy	140	-	-	0	Vitamin D3	Regular	Every 2 weeks	3571	14-16 weeks gestation for 10 weeks
Sasan, 2017	Iran	Healthy	142	-	-	0	Vitamin D3	Regular	Every 2 weeks	3571	Until 36 weeks of gestation

<sup>a</sup> Mean baseline maternal serum 25-hydroxyvitamin D (25(OH)D) concentration in the control group (i.e., at enrolment)

<sup>b</sup> Same across the trial arms

<sup>c</sup> For regular dosing regimen, dose administered is calculated as IU/day, and for bolus regimens, it represents the full bolus dose (IU) unless otherwise stated

<sup>d</sup> Doses given regularly at intervals less frequently than daily were converted to equivalent daily doses for ease of comparisons

<sup>e</sup> Applies only to regular dosing regimens

<sup>f</sup> The accuracy of this dose as reported has been previously questioned based on the dramatic increase in 25-hydroxyvitamin D concentration in the intervention group

<sup>g</sup> Dosing regimen for maternal baseline 25-hydroxyvitamin D <25 nmol/L is a regular dosing regimen, but was included as bolus as results for were not reported separately for this group

\* Included in the Cochrane Review (2016)



**Table C.** Trials included in the systematic review in which the listed outcomes were reported but did not meet the case definition or method of ascertainment criteria

<b>Outcome</b>	<b>Study</b>
Preeclampsia	Hollis 2011
	Asemi 2013a
	Asemi 2013b
	Yap 2014
	Zerofsky 2014
	Sablok 2015
	Karamali 2015
	Litonjua 2016
	Chawes 2016
	Naghshineh 2016
	Valizadeh 2016
Yazdchi 2016	
Gestational hypertension	Hollis 2011
	Yap 2014
	Zerofsky 2014
	Sablok 2015
	Cooper 2016
Gestational diabetes	Hollis 2011
	Asemi 2013a
	Grant 2014
	Zerofsky 2014
	Sablok 2015
	Chawes 2016
Hashemipour 2013	
Maternal hypercalcemia	March 2015
Maternal hypercalciuria	March 2015
Maternal hypocalcemia	Hashemipour 2013
Neonatal hypocalcemia	Hashemipour 2013
Asthma, recurrent wheeze or persistent wheeze	Yu 2009
	Grant 2014
	Sahoo 2016