

S4 Table: Studies used to calculate the RCT instrumental variable effect of calcium on birth weight

<u>Studies</u>	<u>Number of participants in the study</u>	<u>Mean Difference in birth weight between supplementation and placebo group, in g</u>	<u>Mean Difference in calcium levels between supplementation and placebo group, in mg/dl</u>
Bogges (1997)[1]	18	82 (-97.3 to 261.3)	0.1 (-6.262 to 6.462)
Chan (2006)[2]	41	15 (-89.87 to 119.87)	0.1 (-0.51 to 0.71)
Lopez-Jaramillo (1989)[3]	92	265 (142.5 to 287.5)	0.16 (-0.12 to 0.44)
Lopez-Jaramillo (1997)[4]	260	110 (73.44 to 146.56)	0.28 (0.28 to 0.28)
Belizan (1983) (1g supplement)[5]	16	-354.000 (-751.35 to 43.35)	0.42 (-1.97 to 2.81)
Belizan (1983) (2g supplement)[5]	16	42.000 (-268.82 to 352.82)	0.94 (-2.14 to 4.02)
Wanchu 2001[6]	100	100.000 (-77.48 to 277.48)	0.3 (-0.39 to 0.99)

The RCTs used in the analyses of the effect of gestational circulating 25(OH)D on birth weight were identified from the systematic review by Buppasiri et al 2015[7]

References

1. Bogges KA, Samuel L, Schmucker BC, Waters J, Easterling TR. A randomized controlled trial of the effect of third-trimester calcium supplementation on maternal hemodynamic function. *Obstet Gynecol.* 1997;90(2):157-61. Epub 1997/08/01. doi: 10.1016/s0029-7844(97)00248-2.
2. Chan GM, McElligott K, McNaught T, Gill G. Effects of dietary calcium intervention on adolescent mothers and newborns: A randomized controlled trial. *Obstet Gynecol.* 2006;108(3 Pt 1):565-71. Epub 2006/09/02. doi: 10.1097/01.AOG.0000231721.42823.9e.
3. P. LJ, M. N, M. WR, R. Y. Calcium supplementation reduces the risk of pregnancy-induced hypertension in an Andes population. *BJOG: An International Journal of Obstetrics & Gynaecology.* 1989;96(6):648-55. doi: doi:10.1111/j.1471-0528.1989.tb03278.x.
4. Lopez-Jaramillo P, Delgado F, Jacome P, Teran E, Ruano C, Rivera J. Calcium supplementation and the risk of preeclampsia in Ecuadorian pregnant teenagers. *Obstet Gynecol.* 1997;90(2):162-7. Epub 1997/08/01. doi: 10.1016/s0029-7844(97)00254-8.

5. Belizan JM, Villar J, Zalazar A, Rojas L, Chan D, Bryce GF. Preliminary evidence of the effect of calcium supplementation on blood pressure in normal pregnant women. *American journal of obstetrics and gynecology*. 1983;146(2):175-80. Epub 1983/05/15.
6. Wanchu M, Malhotra S, Khullar M. Calcium supplementation in pre-eclampsia. *The Journal of the Association of Physicians of India*. 2001;49:795-8. Epub 2002/02/12.
7. Buppasiri P, Lumbiganon P, Thinkhamrop J, Ngamjarus C, Laopaiboon M, Medley N. Calcium supplementation (other than for preventing or treating hypertension) for improving pregnancy and infant outcomes. *Cochrane Database of Systematic Reviews*. 2015;(2). doi: 10.1002/14651858.CD007079.pub3.