1. Searching strategies:

Pubmed

	Search Strategy	Result
#1	pregnant [MeSH Terms]	1129
#2	mother [MeSH Terms]	43121
#3	pregnancy [MeSH Terms]	839325
#4	child bearing age [MeSH Terms]	0
#5	women [MeSH Terms]	35467
#6	#1 OR #2 OR #3 OR #4 OR #5	903651
#7	*Helicobacter pylori* [MeSH Terms]	33011
#8	*H. pylori* [MeSH Terms]	33011
#9	#7 OR #8	33011
#10	nutrition [MeSH Terms]	55419
#11	malnutrition [MeSH Terms]	115425
#12	micronutrients [MeSH Terms]	54378
#13	nutrients [MeSH Terms]	51177
#14	undernutrition [MeSH Terms]	117903
#15	nutritional deficiency [MeSH Terms]	118534
#16	vitamin [MeSH Terms]	36768
#17	mineral [MeSH Terms]	162554
#18	trace element [MeSH Terms]	16323
#19	iron [MeSH Terms]	94290
#20	folate [MeSH Terms]	36431
#21	homocysteine [MeSH Terms]	15204
#22	zinc [MeSH Terms]	59148
#23	copper [MeSH Terms]	67963
#24	iodine [MeSH Terms]	88513

(Table continue)

#25	manganese [MeSH Terms]	24096
#26	calcium [MeSH Terms]	261704
#27	magnesium [MeSH Terms]	66129
#28	#10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR # 20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27	819342
#29	#6 AND #9 AND #28	149

Web of Science

	Search strategy	Result
#1	(TS= (*Helicobacter pylori* OR *H. pylori*))	65347
#2	(TS= ((pregnant OR mother OR pregnancy OR women OR gestation))	422811
#3	(TS= (nutrition OR malnutrition OR micronutrients OR nutrients OR undernutrition OR *nutritional deficiency* OR vitamin OR mineral OR *trace element* OR iron OR folate OR homocysteine OR zinc OR copper OR iodine OR manganese OR calcium OR magnesium))	244482
#4	#1 AND #2 AND #3	249

Scopus

ALL(pregnant OR mother OR pregnancy OR women OR gestation) AND ALL(helicobacter AND pylori OR h. AND pylori) AND ALL(nutrition OR malnutrition OR micronutrients OR nutrients OR undernutrition OR nutritional AND deficiency OR vitamin OR mineral OR trace AND element OR iron OR folate OR homocysteine OR zinc OR copper OR iodine OR manganese OR calcium OR magnesium). Total article found = 1978

2. Supplementary table 1: List of excluded articles with reason.

Number	Year	References	Reason for Exclusion
1	2014	Mubarak N, Gasim GI, Khalafalla KE, Ali NI, Adam I. *Helicobacter pylori*, anemia, iron deficiency and thrombocytopenia among pregnant women at Khartoum, Sudan. *Trans R Soc Trop Med Hyg*. 2014;108(6):380-384. doi:10.1093/trstmh/tru044	No control Group
2	2018	Alshareef SA, Rayis DA, Adam I, Gasim GI. *Helicobacter pylori* infection, gestational diabetes mellitus and insulin resistance among pregnant Sudanese women. *BMC Res Notes*. 2018;11(1):517. Published 2018 Jul 28. doi:10.1186/s13104-018-3642-9	Not related to our aim
3	2005	Weyermann M, Rothenbacher D, Gayer L, et al. Role of *Helicobacter pylori* infection in iron deficiency during pregnancy. *Am J Obstet Gynecol*. 2005;192(2):548-553. doi:10.1016/j.ajog.2004.08.028	Only hemoglobin data is provided
4	2011	Malik R, Guleria K, Kaur I, Sikka M, Radhakrishnan G. Effect of *Helicobacter pylori* eradication therapy in iron deficiency anaemia of pregnancy - a pilot study. *Indian J Med Res*. 2011;134(2):224-231.	No proper control group; all patients were treated with antibiotics
5	2014	Baingana RK, Kiboko Enyaru J, Davidsson L. *Helicobacter pylori* infection in pregnant women in four districts of Uganda: role of geographic location, education and water sources. BMC Public Health. 2014;14:915. Published 2014 Sep 4. doi:10.1186/1471-2458-14-915	Article highlights *h. pylori* infection and environmental health
6	2018	Mustafa A, Bilal NE, Abass AE, Elhassan EM, Adam I. The association between *Helicobacter pylori* seropositivity and low birthweight in a Sudanese maternity hospital. *Int J Gynaecol Obstet*. 2018;143(2):191-194. doi:10.1002/ijgo.12641	Data focused on low birthweight child
7	2017	Wanyama R, Obai G, Odongo P, Kagawa M, Baingana R. Effect of maternal *Helicobacter pylori* infection on gestational weight gain in an urban community of Uganda. Pan Afr Med J. 2017;28:145. Published 2017 Oct 16. doi:10.11604/pamj.2017.28.145.9989	Unrelated with micronutrients status

3. Supplementary table 2: Risk of bias assessment of case-control studies using the Newcastle-Ottawa

Study	Selection				Comparability	Exposure			ROB score
	Is the case definition adequate	Representativeness of the cases?	Selection of controls?	Definition of controls?	Comparability of cases and controls of design or analysis?	Ascertainment of Exposure?	Same method of ascertainment for cases?	Non-response rate?	
Ali et al (2018)	a	b	b	b	a/b	b	a	a	6
Felkner et al (2007)	a	b	a	b	a/b	b	a	a	7
Golalipour et al	a	a	a	a	a/b	a	a	a	9
Mulayim et al.	a	b	b	b	a/b	a	a	a	6