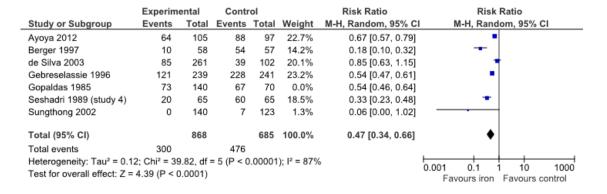
Appendix 5: Hematologic and iron indices

Iron supplementation improved (A) hemoglobin (MD 8.38g/L [6.21 to 10.56g/L], p<0.00001, I²=97%; 28 studies, 6545 children), (B) anemia (RR 0.50 [0.39 to 0.64], p<0.00001, I²=85%; 7 studies, 1763 children), (C) ferritin (MD 28.45μg/L [18.03-38.86], p<0.00001, I²=98%, 12 studies, 3611 children) and (D) iron deficiency (RR 0.21 [0.07 to 0.63], p<0.00001, I²=85%, 4 studies, 1020 children). Forest plot for effect of iron on Funnel plots for effect of daily oral iron on (E) hemoglobin and (F) ferritin both showing no evidence of publication bias. Inverse Variance. M-H: Mantel-Haenszel. Random: Random Effects. 95% CI: 95% Confidence Interval. Df: degrees of freedom.

A

	Experimental			Control		Mean Difference		Mean Difference	
Study or Subgroup	Mean		Total	Mean	SD		Weight	IV, Random, 95% CI	IV, Random, 95% CI
Ayoya 2012	115.4	9.3	105	108.1	8	97	3.5%	7.30 [4.91, 9.69]	_
Berger 1997	150.1	6.7	58	132.2	8.1	57	3.5%	17.90 [15.18, 20.62]	_
Bradfield 1968	123	11	16	119	12	10	2.2%	4.00 [-5.19, 13.19]	
Bradfield 1968 (iron)	109	16	51	99	16	10	1.9%	10.00 [-0.85, 20.85]	
Charonloep 1980	4.8	7.4	33	-1.2	6.8	39	3.4%	6.00 [2.69, 9.31]	_
Chwang 1988	133	8	59	110	20	60	3.0%	23.00 [17.54, 28.46]	
de Silva 2003	6.22	9.54	261	1.41	8.46	102	3.6%	4.81 [2.80, 6.82]	-
Fallahi 2007	135	8.6	26	135.5	6.7	28	3.2%	-0.50 [-4.63, 3.63]	
Gebreselassie 1996	116	14	239	90	21	241	3.4%	26.00 [22.81, 29.19]	_
Gopaldas 1985	120.2	1.6	140	108.1	1.09	70	3.7%	12.10 [11.73, 12.47]	
Greisen 1986	130.2	0.87	218	127.2	10.8	212	3.6%	3.00 [1.54, 4.46]	-
Harvey 1989	111	8.6	144	105	11	144	3.5%	6.00 [3.72, 8.28]	-
Kashyap 1987	123.3	7.3	65	106.8	8.9	65	3.5%	16.50 [13.70, 19.30]	_
Konofal 2008	2.5	5.1	17	-3.6	2.7	5	3.4%	6.10 [2.71, 9.49]	-
Latham 1990	4.3	11.42	29	-5.2	8.31	26	3.0%	9.50 [4.26, 14.74]	
Lawless 1994	113.6	10.7	42	109.8	11.6	44	3.1%	3.80 [-0.91, 8.51]	
Paracha 1993	11.2	29.1	61	-1	8.78	58	2.5%	12.20 [4.56, 19.84]	
Pollitt 1989	129.66	8.33	679	125.71	8.88	679	3.7%	3.95 [3.03, 4.87]	
Powers 1983	14.5	24.5	25	0.6	15.5	25	1.8%	13.90 [2.54, 25.26]	
Richard 2006	119.09	10.49	210	116.61	11.88	209	3.5%	2.48 [0.33, 4.63]	-
Richard 2006 (iron)	119.02	10.9	208	116.91	12.48	209	3.5%	2.11 [-0.14, 4.36]	-
Rico 2006	2	8	152	1	7	146	3.6%	1.00 [-0.70, 2.70]	+
Rico 2006 (iron)	4	7	141	1	7	151	3.6%	3.00 [1.39, 4.61]	-
Rosales 2004	145.2	13.1	19	153.3	10.1	15	2.5%	-8.10 [-15.90, -0.30]	
Rosales 2004 (Iron)	156.1	17.6	15	154.3	14.8	15	1.8%	1.80 [-9.84, 13.44]	
Sen 2009	9	13.8	59	0.3	2.4	41	3.3%	8.70 [5.10, 12.30]	
Sen 2012	121.8	5.5	59	115.4	6.3	41	3.5%	6.40 [4.01, 8.79]	
Seshadri 1982 (study 1)	116.78	6.88	63	104.06	13.74	34	3.1%	12.72 [7.80, 17.64]	
Seshadri 1982 (study 2)	120.4	10.48	14	97.4	14.22	14	2.2%	23.00 [13.75, 32.25]	
Seshadri 1989 (study 4)	121.17	9.05	46	104.64	15.64	55	3.1%	16.53 [11.64, 21.42]	
Soemantri 1989	133.41	6	71	117.72	19.72	59	3.0%	15.69 [10.47, 20.91]	
Sungthong 2002	127.8	9.2	138	125.3	9.3	121	3.5%	2.50 [0.24, 4.76]	_
Total (95% CI)			3463			3082	100.0%	8.38 [6.21, 10.56]	•
Heterogeneity: Tau ² = 33.	51; Chi ² =	996.94	l, df = 3	1 (P < 0.	00001)	l ² = 97	'%		-20 -10 0 10 20
Test for overall effect: Z = 7.55 (P < 0.00001)									-20 -10 0 10 20 Favours control Favours iron
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	Experimental			Control				Mean Difference	Mean Difference	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% C	I IV, Random, 95% CI	
Ayoya 2012	93.33	60.72	105	30.2	32.16	97	7.2%	63.13 [49.87, 76.39]	-	
de Silva 2003	17.28	40.26	261	-5.59	57.96	102	7.3%	22.87 [10.61, 35.13]		
Fallahi 2007	41.6	24.2	26	25.1	11.6	28	7.6%	16.50 [6.25, 26.75]		
Gebreselassie 1996	31.2	16.6	239	10.2	12.8	241	8.1%	21.00 [18.35, 23.65]		
Konofal 2008	55.7	20.4	17	21	8.9	5	7.3%	34.70 [22.25, 47.15]		
Lawless 1994	39.1	20.6	42	25.1	18.9	44	7.7%	14.00 [5.63, 22.37]	-	
Paracha 1993	14.17	10.26	61	0.77	9.35	58	8.1%	13.40 [9.88, 16.92]	-	
Perrone 1999	18	4	8	12	1	8	8.1%	6.00 [3.14, 8.86]	•	
Pollitt 1989	103.54	41.35	679	41.34	39.85	679	8.0%	62.20 [57.88, 66.52]	-	
Rico 2006	41.4	29.5	152	14.7	18.8	146	8.0%	26.70 [21.11, 32.29]	-	
Rico 2006 (iron)	56	41.8	141	16.2	28.3	151	7.8%	39.80 [31.56, 48.04]	_	
Rosales 2004	44	72.09	18	38.1	43.2	16	3.8%	5.90 [-33.56, 45.36]		
Rosales 2004 (Iron)	46	82.22	15	32.7	34.965	14	3.2%	13.30 [-32.16, 58.76]		
Sungthong 2002	39.8	30.3	138	-1.1	17.1	121	7.9%	40.90 [35.00, 46.80]		
Total (95% CI)			1902			1710	100.0%	28.45 [18.03, 38.86]	•	
Heterogeneity: Tau ² = 346.60; Chi ² = 581.46, df = 13 (P < 0.00001); i ² = 98%										
Test for overall effect: Z = 5.35 (P < 0.00001) Test for overall effect: Z = 5.35 (P < 0.00001) Favours control Favours iron										

D

	Experimental		Contr	Control		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% C	M-H, Random, 95% CI
de Silva 2003	14	249	21	98	23.8%	0.26 [0.14, 0.49]	-
Gebreselassie 1996	10	239	210	241	24.0%	0.05 [0.03, 0.09]	
Rosales 2004	3	18	4	16	18.7%	0.67 [0.18, 2.54]	
Rosales 2004 (Iron)	1	15	2	14	12.2%	0.47 [0.05, 4.60]	
Seshadri 1989 (study 4)	4	65	20	65	21.2%	0.20 [0.07, 0.55]	
Total (95% CI)		586		434	100.0%	0.21 [0.07, 0.63]	•
Total events	32		257				
Heterogeneity: Tau ² = 1.2	0.01 0.1 1 10 100						
Test for overall effect: Z =	Favours iron Favours control						

