Supplementary Materials

Table of Contents

Table S1: Risk of bias of post-only with concurrent control studies assessed with
Methodological Index for Non-randomized Studies (MINORS)
Table S2: Risk of bias of pre-post studies assessed with Methodological Index for Non-
randomized Studies (MINORS)4
Table S3: Composition of three types of YYB
Table S4: Effects of YYB by intervention duration on hemoglobin concentration (g/L), height
(cm), weight (kg) and Z-scores
Table S5: Effects of YYB by intervention duration on prevalence of anemia, stunting,
underweight and wasting8
Table S6: Effects of YYB on hemoglobin concentration (g/L), height (cm), weight (kg) and Z-
scores among studies of high and medium quality ¹ 10
Table S7: Effects of YYB on prevalence of anemia, stunting, underweight and wasting among
studies of high and medium quality ¹ 11
Figure S1: Effects of YYB on hemoglobin level (g/L) among post-only with concurrent control
studies (a) and pre-post studies (b) using mean difference as the effect measure
Figure S2: Effects of YYB on height (cm) among post-only with concurrent control studies (a)
and pre-post studies (b) using mean difference as the effect measure
Figure S3: Effects of YYB on weight (kg) among post-only with concurrent control studies (a)
and pre-post studies (b) using mean difference as the effect measure
Figure S4: Effects of YYB on height-for-age z score (HAZ) among post-only with concurrent
control studies (a) and pre-post studies (b) using mean difference as the effect measure15
Figure S5: Effects of YYB on weight-for-height z score (WHZ) among post-only with concurrent
control studies (a) and pre-post studies (b) using mean difference as the effect measure16
Figure S6: Effects of YYB on weight-for-age z score (WAZ) among post-only with concurrent
control studies (a) and pre-post studies (b) using mean difference as the effect measure17
Figure S7: Effects of YYB on anemia prevalence among post-only with concurrent control
studies (a) and pre-post studies (b) using risk ratio as the effect measure
Figure S8: Effects of YYB on stunting prevalence among post-only with concurrent control
studies (a) and pre-post studies (b) using risk ratio as the effect measure
Figure S9: Effects of YYB on underweight prevalence among post-only with concurrent control
studies (a) and pre-post studies (b) using risk ratio as the effect measure
Figure S10: Effects of YYB on wasting prevalence among post-only with concurrent control
studies (a) and pre-post studies (b) using risk ratio as the effect measure21
Figure S11: Effects of YYB on anemia prevalence among post-only with concurrent control

studies (a) and pre-post studies (b) using risk difference as the effect measure
Figure S12: Effects of YYB on stunting prevalence among post-only with concurrent control
studies (a) and pre-post studies (b) using risk difference as the effect measure
Figure S13: Effects of YYB on underweight prevalence among post-only with concurrent
control studies (a) and pre-post studies (b) using risk difference as the effect measure24
Figure S14: Effects of YYB on wasting prevalence among post-only with concurrent control
studies (a) and pre-post studies (b) using risk difference as the effect measure
Figure S15: Funnel plot of effects of YYB on anemia prevalence among post-only with
concurrent control studies
Figure S16: Funnel plot of effects of YYB on anemia prevalence among pre-post studies27

First Author	Year	Clearly	Consecutive	Prospective	Appropriate	Unbiased	Appropriate	Loss to	Calculation	Control	Contemporary	Baseline	Adapted	SUM	Overall
		stated	inclusion	collection of	endpoints	assessment	follow-up	follow	of study size	group	groups	equivalence	statistical		quality ^a
		aim		data		of study	period	up <5%		with gold		of groups	analyses		
						endpoint				standard					
Shuai Li	2017	7	6	7	7	3	5	6	2	4	7	7	5	66	High
Qin Hu	2016	7	3	7	5	3	5	4	2	3	7	7	4	57	High
Xiaoting Ding	2016	7	3	6	6	3	4	5	2	4	7	4	7	58	High
Yanfeng	2016	7	5	6	6	4	6	3	3	4	7	4	4	59	High
Zhang	2016	7	5	6	0	4	0	3	3	4	/	4	4	39	підп
Lingyun Ren	2014	7	2	6	5	2	5	5	2	2	7	3	4	50	Medium
Shangming Li	2014	7	2	6	4	2	4	4	2	4	7	3	3	48	Low
Songli Fan	2013	7	4	7	5	3	2	3	2	3	7	3	3	49	Low
Wenhao Li	2013	7	6	7	7	3	2	6	2	4	7	7	6	64	High
Wenli Zhao	2012	6	3	6	5	3	4	3	3	4	7	4	5	53	Medium
Zhifeng Fang	2010	6	2	6	5	3	3	3	2	3	7	4	4	48	Low
Yuying Wang	2009	7	3	7	5	3	4	3	2	2	7	4	5	52	Medium
Yuying Wang	2004	7	3	7	5	2	4	4	2	2	7	4	4	51	Medium
Shuhua Ni	1995	7	2	7	5	2	3	3	1	4	7	3	4	48	Low

Table S1: Risk of bias of post-only with concurrent control studies assessed with Methodological Index for Non-randomized Studies (MINORS).

The overall quality is based on total MINORS score. In post-only studies, we defined a paper with a score higher than 53 a high-quality one, 50-53 a moderate-quality one, and lower than 50 a low-quality one.

First Author	Year	Clearly	Consecutive	Prospective	Appropriate	Unbiased	Appropriate	Loss to follow	Prospective	SUM	Overall
		stated aim	inclusion	collection of	endpoints	assessment of	follow-up	up <5%	calculation of		quality ^a
				data		study endpoint	period		study size		
Jie Wang	2017	7	4	7	5	3	5	3	4	38	High
Ping Wu	2017	5	3	5	4	2	4	4	1	28	Low
Qiujing Jiang	2016	7	5	6	4	3	4	4	2	35	Medium
Junsheng Huo	2015	7	5	7	6	4	6	5	4	44	High
Qiannan Zhang	2015	7	4	7	6	3	4	5	7	43	High
Jianhong Qin	2014	6	3	7	3	2	4	4	2	31	Medium
Zuyang Liu	2013	6	3	6	5	2	5	4	2	33	Medium
Zengkang Xu	2012	7	5	7	5	4	6	4	3	41	High
Caixia Dong	2012	7	4	7	6	3	3	4	4	38	High
Lixiang Li	2012	5	3	6	4	3	2	3	2	28	Low
Lijuan Wang	2011	7	3	7	6	3	2	4	2	34	Medium
Jing Sun	2011	5	3	6	5	4	2	3	2	30	Low
Hong Shen	2011	4	2	5	3	2	2	2	1	21	Low

Table S2: Risk of bias of pre-post studies assessed with Methodological Index for Non-randomized Studies (MINORS).

The overall quality is based on total MINORS score. In pre-post studies, papers with scores higher than 35 were of high quality, 31-35 were of moderate quality, and less than 31 were of low quality.

		51	
	А	В	С
	(one sachet per day)	(one sachet per day)	(one sachet per 10 days)
Protein	3 g	3.8 g	17.1 g
Fat	1 g		10 g
Carbohydrates	6 g		63.1 g
Iron	7.5 mg	6.0 mg	6 mg
Zinc	5 mg	4.1 mg	
Calcium	200 mg	385 mg	523 mg
Vitamin A	250 μg		333 µg
Vitamin B1	0.5 mg		0.54 mg
Vitamin B2	0.5 mg	0.2 mg	0.87 mg
Vitamin B3			1.72 mg
Vitamin B12	0.5 µg		
Vitamin D	5 µg	7 µg	2 mg
Folic acid	75 µg		
Phosphorus			325 mg
Number of controlled studies	11	6	1
Number of pre-post studies	14	0	0

 Table S3: Composition of three types of YYB.

Post-only with concurrent	Number	Mean difference	P-value for	I ² for
control studies	of studies	(95%CI)	summary	heterogeneity
			effects	(%)
Hemoglobin concentration (g/L)				
>12 months	2	6.17 (-0.09, 12.42)	0.053	92
≤12 months	5	3.78 (-0.57, 8.12)	0.088	97
Height (cm)				
>12 months	2	1.10 (-0.77, 2.96)	0.249	77
≤12 months	4	3.16 (1.41, 4.90)	< 0.001	93
Weight (kg)				
>12 months	2	0.64 (-0.09, 1.38)	0.085	88
≤12 months	4	0.85 (0.12, 1.59)	0.023	98
Height-for-age Z score (SD)				
>12 months	1	-0.57 (-0.97, -0.17)	0.006	\
≤12 months	2	0.22 (-0.50, 0.95)	0.548	96
Weight-for-height Z score (SD)				
>12 months	1	0.58 (0.24, 0.92)	0.001	\
≤12 months	2	0.19 (0.09, 0.30)	< 0.001	22
Weight-for-age Z score (SD)				
>12 months	1	0.54 (0.20, 0.88)	0.002	١
≤12 months	2	0.07 (-0.26, 0.41)	0.669	91
Pre-post studies	Number	Mean difference	P-value for	I ² for
	of studies	(95%CI)	summary	heterogeneity
			effects	(%)

Table S4: Effects of YYB by intervention duration on hemoglobin concentration (g/L), height (cm), weight (kg) and Z-scores.

Hemoglobin concentration (g/L)

4	8.82 (2.02, 15.62)	0.011	99
3	3.59 (0.32, 6.86)	0.031	93
2	3.27 (2.57, 3.97)	< 0.001	0
3	2.01 (0.54, 3.49)	0.007	92
2	0.85 (0.35, 1.35)	0.001	87
3	0.63 (0.09, 1.17)	0.023	96
3	0.35 (0.24, 0.46)	< 0.001	9
2	0.09 (-0.02, 0.20)	0.115	0
2	0.31 (0.03, 0.58)	0.028	80
2	0.25 (-0.44, 0.93)	0.478	98
3	0.23 (-0.21, 0.67)	0.304	95
2	0.29 (-0.32, 0.90)	0.352	98
	2 3 2 3 2 2 2 3	3 3.59 (0.32, 6.86) 2 3.27 (2.57, 3.97) 3 2.01 (0.54, 3.49) 2 0.85 (0.35, 1.35) 3 0.63 (0.09, 1.17) 3 0.35 (0.24, 0.46) 2 0.31 (0.03, 0.58) 2 0.31 (0.03, 0.58) 3 0.25 (-0.44, 0.93)	3 $3.59 (0.32, 6.86)$ 0.031 2 $3.27 (2.57, 3.97)$ <0.001 3 $2.01 (0.54, 3.49)$ 0.007 2 $0.85 (0.35, 1.35)$ 0.001 3 $0.63 (0.09, 1.17)$ 0.023 3 $0.35 (0.24, 0.46)$ <0.001 2 $0.09 (-0.02, 0.20)$ 0.115 2 $0.31 (0.03, 0.58)$ 0.028 2 $0.25 (-0.44, 0.93)$ 0.478 3 $0.23 (-0.21, 0.67)$ 0.304

Post-only with	Number	Risk ratio	P-value for	I ² for	Risk difference	P-value	I ² for
concurrent	of	(95%CI)	summary	heterogeneity	(95%CI)	for	heterogeneity
control studies	studies		effects	(%)		summary	(%)
						effects	
Anemia							
>12 months	3	0.45 (0.27, 0.75)	0.002	87	-0.22 (-0.35, -0.10)	< 0.001	93
≤12 months	8	0.55 (0.41, 0.74)	< 0.001	85	-0.10 (-0.16, -0.05)	< 0.001	89
Underweight							
>12 months	1	0.68 (0.26, 1.83)	0.449	\	-0.04 (-0.13, 0.06)	0.444	\
≤12 months	5	0.50 (0.38, 0.65)	< 0.001	34	-0.04 (-0.06, -0.03)	< 0.001	0
Stunting							
>12 months	2	0.48 (0.38, 0.60)	< 0.001	0	-0.08 (-0.10, -0.05)	< 0.001	0
≤12 months	5	0.63 (0.44, 0.92)	0.016	70	-0.05 (-0.08, -0.02)	0.002	52
Wasting							
>12 months	1	0.77 (0.28, 2.11)	0.612	\	-0.02 (-0.11, 0.07)	0.609	\
≤12 months	4	0.44 (0.29, 0.67)	< 0.001	29	-0.03 (-0.04, -0.01)	< 0.001	63
Pre-post	Number	Risk ratio	P-value for	I ² for	Risk difference	P-value	I ² for
studies	of	(95%CI)	summary	heterogeneity	(95%CI)	for	heterogeneity
	studies		effects	(%)		summary	(%)
						effects	
Anemia							
>12 months	8	0.53 (0.45, 0.64)	< 0.001	84	-0.24 (-0.32, -0.15)	< 0.001	94
≤12 months	5	0.70 (0.58, 0.85)	< 0.001	81	-0.14 (-0.21, -0.06)	< 0.001	82
Underweight							
>12 months	6	0.64 (0.39, 1.04)	0.071	70	-0.03 (-0.06, 0.00)	0.083	81

Table S5: Effects of YYB by intervention duration on prevalence of anemia, stunting, underweight and wasting.

≤12 months	4	0.52 (0.30, 0.90)	0.019	61	-0.03 (-0.05, -0.01)	0.004	51
Stunting							
>12 months	6	0.72 (0.51, 1.03)	0.073	77	-0.04 (-0.08, 0.00)	0.069	78
≤12 months	4	0.81 (0.61, 1.07)	0.131	37	-0.02 (-0.05, 0.00)	0.088	38
Wasting							
>12 months	5	0.71 (0.51, 0.98)	0.035	0	-0.01 (-0.03, 0.00)	0.126	38
≤12 months	2	0.51 (0.05, 5.29)	0.569	89	-0.01 (-0.07, 0.05)	0.741	92

Post-only with concurrent	Number	Mean difference	P-value for	I ² for
control studies	of studies	(95%CI)	summary	heterogeneity
			effects	(%)
Hemoglobin concentration (g/L)	6	5.23 (2.14, 8.31)	0.001	97
Height (cm)	5	2.82 (0.89, 4.75)	0.004	95
Weight (kg)	5	0.85 (0.19, 1.51)	0.011	97
Height-for-age Z score (SD)	3	-0.03 (-0.68, 0.62)	0.938	95
Weight-for-height Z score (SD)	3	0.27 (0.09, 0.45)	0.003	66
Weight-for-age Z score (SD)	3	0.20 (-0.11, 0.51)	0.213	89
Pre-post studies	Number	Mean difference	P-value for	I ² for
	of studies	(95%CI)	summary	heterogeneity
			effects	(%)
Hemoglobin concentration (g/L)	6	6.44 (2.21, 10.67)	0.003	99
Height (cm)	4	2.26 (0.99, 3.52)	< 0.001	90
Weight (kg)	4	0.59 (0.23, 0.96)	0.001	92
Height-for-age Z score (SD)	4	0.28 (0.11, 0.45)	0.001	73
Weight-for-height Z score (SD)	3	0.17 (-0.15, 0.49)	0.304	92
Weight-for-age Z score (SD)	4	0.17 (-0.15, 0.48)	0.301	94

Table S6: Effects of YYB on hemoglobin concentration (g/L), height (cm), weight (kg) and Z-scores among studies of high and medium quality¹.

¹ High and medium quality studies refers to post-only with concurrent control studies with total quality scores \geq 50, and pre-post studies with total quality scores \geq 31.

Post-only with	Number	Risk ratio	P-value for	I ² for	Risk difference	P-value	I ² for
concurrent	of	(95%CI)	summary	heterogeneity	(95%CI)	for	heterogeneity
control studies	studies		effects	(%)		summary	(%)
						effects	
Anemia	9	0.53 (0.44, 0.64)	< 0.001	75	-0.15 (-0.23, -0.07)	< 0.001	96
Underweight	4	0.42 (0.29, 0.59)	< 0.001	0	-0.04 (-0.05, -0.02)	< 0.001	0
Stunting	5	0.54 (0.38, 0.78)	0.001	76	-0.06 (-0.09, -0.03)	< 0.001	62
Wasting	4	0.45 (0.30, 0.68)	< 0.001	29	-0.03 (-0.05, -0.00)	0.026	57
Pre-post	Number	Risk ratio	P-value for	I ² for	Risk difference	P-value	I ² for
studies	of	(95%CI)	summary	heterogeneity	(95%CI)	for	heterogeneity
	studies		effects	(%)		summary	(%)
						effects	
Anemia	9	0.61 (0.51, 0.73)	< 0.001	91	-0.21 (-0.29, -0.13)	< 0.001	95
Underweight	8	0.69 (0.51, 0.93)	0.017	50	-0.02 (-0.04, -0.00)	0.026	60
Stunting	8	0.79 (0.62, 1.01)	0.057	65	-0.03 (-0.05, -0.00)	0.041	64
Wasting	5	0.93 (0.70, 1.23)	0.599	40	-0.00 (-0.01, 0.01)	0.595	42

Table S7: Effects of YYB on prevalence of anemia, stunting, underweight and wasting among studies of high and medium quality¹.

¹ High and medium quality studies refer to post-only with concurrent control studies with total quality scores \geq 50, and pre-post studies with total quality scores \geq 31.

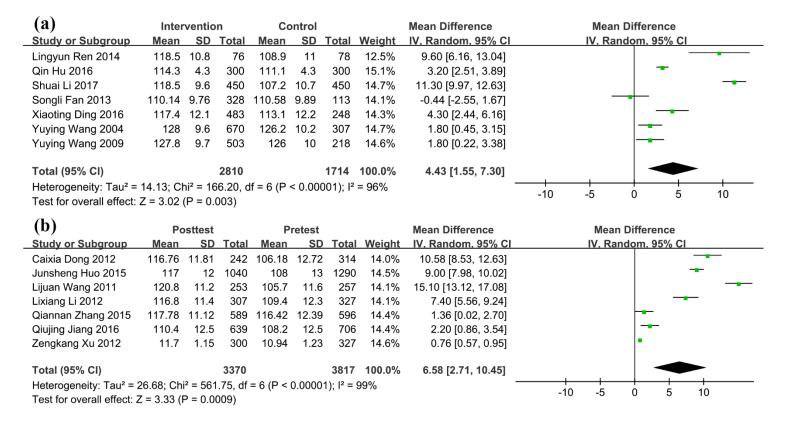


Figure S1: Effects of YYB on hemoglobin level (g/L) among post-only with concurrent control studies (a) and pre-post studies (b) using mean difference as the effect measure.

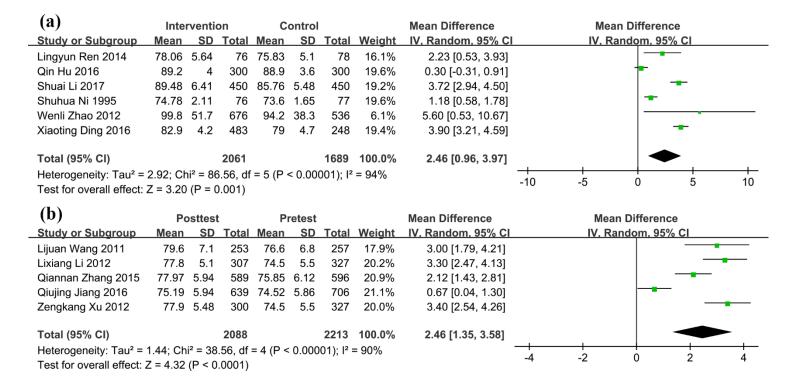


Figure S2: Effects of YYB on height (cm) among post-only with concurrent control studies (a) and pre-post studies (b) using mean difference as the effect measure.

(a)	Inter	ventio	on	С	ontrol			Mean Difference		Mean	Difference	e	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI		IV, Ran	dom, 95%	6 CI	
Lingyun Ren 2014	10.45	1.56	76	9.4	1.45	78	15.4%	1.05 [0.57, 1.53]			-	•	
Qin Hu 2016	11.6	1.3	300	11.3	1.2	300	17.1%	0.30 [0.10, 0.50]					
Shuai Li 2017	13.17	1.57	450	11.45	1.32	450	17.2%	1.72 [1.53, 1.91]					
Shuhua Ni 1995	9.41	0.6	76	8.92	0.8	77	17.0%	0.49 [0.27, 0.71]				-	
Wenli Zhao 2012	14.9	3.2	676	14	3.8	536	16.0%	0.90 [0.50, 1.30]			-	•	_
Xiaoting Ding 2016	10.1	1.2	483	9.8	1.2	248	17.2%	0.30 [0.12, 0.48]					
Total (95% CI)			2061			1689	100.0%	0.79 [0.25, 1.32]					-
Test for overall effect:	Z = 2.88	(P = 0	0.004)	,			- 57 /0	Maan Difference	-2 -	-1	0 Difference	1	2
Test for overall effect: . (b)	Z = 2.88 Po	(P = 0 osttest).004) :	P	retest	,.		Mean Difference	-2 -	Mean	Differenc	-	2
Test for overall effect: . (b) Study or Subgroup	Z = 2.88 Po <u>Mean</u>	(P = 0 osttest SD).004) : <u>Total</u>	P	retest SD	Total	Weight	IV, Random, 95% CI	-2 -	Mean	Ū	-	
Test for overall effect: . (b) <u>Study or Subgroup</u> .ijuan Wang 2011	Z = 2.88 Po <u>Mean</u> 9.95	(P = 0 osttest <u>SD</u> 1.73).004) 	Pr <u>Mean</u> 9.36	retest <u>SD</u> 1.57	<u>Total</u> 257	Weight 19.1%	IV, Random, 95% Cl 0.59 [0.30, 0.88]	-2 -	Mean	Differenc	-	
Test for overall effect: . (b) Lijuan Wang 2011 Lixiang Li 2012	Z = 2.88 Po <u>Mean</u> 9.95 10.3	(P = 0 osttest <u>SD</u> 1.73 1.4	0.004) 	P <u>Mean</u> 9.36 9.1	retest <u>SD</u> 1.57 1.3	Total 257 327	Weight 19.1% 20.1%	IV. Random. 95% Cl 0.59 [0.30, 0.88] 1.20 [0.99, 1.41]	-2 -	Mean	Differenc	-	
Heterogeneity: Tau ² = Test for overall effect: . (b) Study or Subgroup Lijuan Wang 2011 Lixiang Li 2012 Qiannan Zhang 2015 Ojujing Linag 2016	Z = 2.88 Po <u>Mean</u> 9.95 10.3 9.79	(P = 0 sttest <u>SD</u> 1.73 1.4 1.57	0.004) Total 253 307 301	Pr <u>Mean</u> 9.36 9.1 9.43	retest <u>SD</u> 1.57 1.3 1.57	Total 257 327 595	Weight 19.1% 20.1% 20.0%	IV. Random. 95% Cl 0.59 [0.30, 0.88] 1.20 [0.99, 1.41] 0.36 [0.14, 0.58]	-2 -	Mean	Differenc	-	
Test for overall effect: . (b) <u>Study or Subgroup</u> Lijuan Wang 2011 Lixiang Li 2012 Qiannan Zhang 2015 Qiujing Jiang 2016	Z = 2.88 Po <u>Mean</u> 9.95 10.3 9.79 9.74	(P = 0 sttest SD 1.73 1.4 1.57 1.48	0.004) Total 253 307 301 639	Pi <u>Mean</u> 9.36 9.1 9.43 9.43	retest <u>SD</u> 1.57 1.3 1.57 1.44	Total 257 327 595 706	Weight 19.1% 20.1% 20.0% 20.7%	IV. Random. 95% Cl 0.59 [0.30, 0.88] 1.20 [0.99, 1.41] 0.36 [0.14, 0.58] 0.33 [0.17, 0.49]	-2 -	Mean	Differenc	-	2
Test for overall effect: . (b) <u>Study or Subgroup</u> Lijuan Wang 2011 Lixiang Li 2012 Qiannan Zhang 2015	Z = 2.88 Po <u>Mean</u> 9.95 10.3 9.79	(P = 0 sttest SD 1.73 1.4 1.57 1.48	0.004) Total 253 307 301	Pr <u>Mean</u> 9.36 9.1 9.43	retest <u>SD</u> 1.57 1.3 1.57 1.44	Total 257 327 595	Weight 19.1% 20.1% 20.0%	IV. Random. 95% Cl 0.59 [0.30, 0.88] 1.20 [0.99, 1.41] 0.36 [0.14, 0.58]	-2 -	Mean	Differenc	-	
Test for overall effect: . (b) <u>Study or Subgroup</u> Lijuan Wang 2011 Lixiang Li 2012 Qiannan Zhang 2015 Qiujing Jiang 2016	Z = 2.88 Po <u>Mean</u> 9.95 10.3 9.79 9.74	(P = 0 sttest SD 1.73 1.4 1.57 1.48	0.004) Total 253 307 301 639	Pi <u>Mean</u> 9.36 9.1 9.43 9.43	retest <u>SD</u> 1.57 1.3 1.57 1.44	Total 257 327 595 706	Weight 19.1% 20.1% 20.0% 20.7%	IV. Random. 95% Cl 0.59 [0.30, 0.88] 1.20 [0.99, 1.41] 0.36 [0.14, 0.58] 0.33 [0.17, 0.49]	-2 -	Mean	Differenc	-	-
Test for overall effect: . (b) Study or Subgroup Lijuan Wang 2011 Lixiang Li 2012 Qiannan Zhang 2015 Qiujing Jiang 2016 Zengkang Xu 2012	Z = 2.88 Po <u>Mean</u> 9.95 10.3 9.79 9.74 10.22	(P = 0 sttest <u>SD</u> 1.73 1.4 1.57 1.48 1.44	0.004) Total 253 307 301 639 300 1800	Mean 9.36 9.1 9.43 9.41 9.12	retest SD 1.57 1.3 1.57 1.44 1.33	Total 257 327 595 706 327 2212	Weight 19.1% 20.1% 20.0% 20.7% 20.0% 100.0%	IV. Random. 95% Cl 0.59 [0.30, 0.88] 1.20 [0.99, 1.41] 0.36 [0.14, 0.58] 0.33 [0.17, 0.49] 1.10 [0.88, 1.32]	-2 -	Mean	Differenc dom. 95%	-	-

Figure S3: Effects of YYB on weight (kg) among post-only with concurrent control studies (a) and pre-post studies (b) using mean difference as the effect measure.

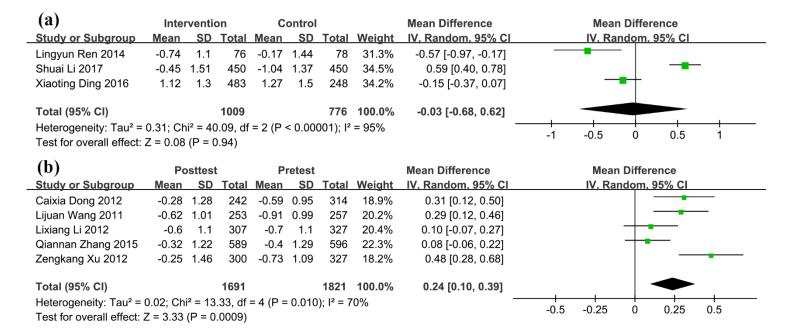


Figure S4: Effects of YYB on height-for-age z score (HAZ) among post-only with concurrent control studies (a) and pre-post studies (b) using mean difference as the effect measure.

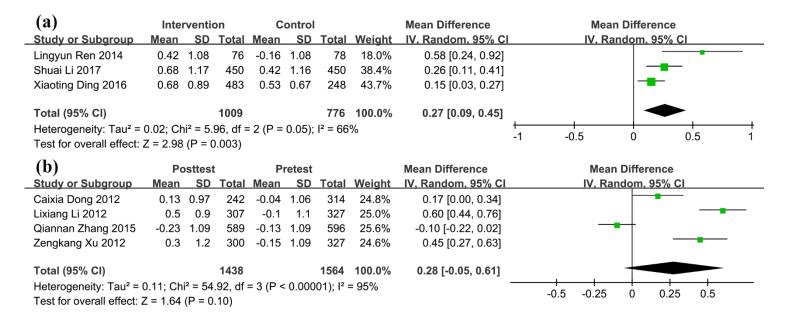


Figure S5: Effects of YYB on weight-for-height z score (WHZ) among post-only with concurrent control studies (a) and pre-post studies (b) using mean difference as the effect measure.

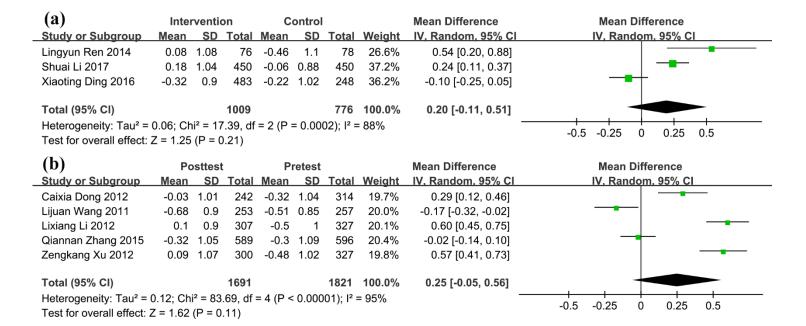


Figure S6: Effects of YYB on weight-for-age z score (WAZ) among post-only with concurrent control studies (a) and pre-post studies (b) using mean difference as the effect measure.

(a)	Interver		Cont			Risk Ratio		Risk		
Study or Subgroup	Events	Total			Weight			M-H, Rand	om, 95% Cl	
Lingyun Ren 2014	30	76	52		10.6%	0.59 [0.43, 0.82]				
Qin Hu 2016	6	300	46		4.1%	0.13 [0.06, 0.30]			_	
Shangming Li 2014	179	387	114		13.1%	0.97 [0.82, 1.16]				
Shuai Li 2017	112	450	226		12.9%	0.50 [0.41, 0.60]				
Wenhao Li 2013	23	144	46		8.5%	0.49 [0.31, 0.76]				
Wenli Zhao 2012	9	536	48		5.2%	0.24 [0.12, 0.48]				
Xiaoting Ding 2016	120	483	98		12.4%	0.63 [0.51, 0.78]		-		
Yanfeng Zhang 2016	1039	2174	568		14.3%	0.63 [0.60, 0.67]		•		
Yuying Wang 2004	51	670	37		9.1%	0.63 [0.42, 0.94]				
Yuying Wang 2009	41	503	27		8.2%	0.66 [0.42, 1.04]			•	
Zhifeng Fang 2010	2	146	13	107	1.6%	0.11 [0.03, 0.49]	•			
Total (95% CI)		5869		3518	100.0%	0.55 [0.45, 0.67]		•		
Total events	1612		1275							
	07. Chi2.	= 61 75	df = 10.0	P<00	$0001) \cdot I^2 =$	- 84%	+	+ +	I	
Heterogeneity: $Iau^2 = 0$.07. Chi-									
0 ,	,	,	,	1 40.0	0001),1		0.05	0.2 1	5	2
0 ,	,	,	,	(1 - 0.0	0001), 1		0.05	0.2 1	5	2
0 ,	: = 5.92 (P	< 0.000	001)	× ·	0001), 1		0.05			20
Test for overall effect: Z	2 = 5.92 (P Postte	< 0.000	001) Pretes	st	,.	Risk Ratio	0.05	Risk F	Ratio	2
Test for overall effect: Z (b) Study or Subgroup	= 5.92 (P Postte Events	< 0.000 st Total	D01) Pretes Events	st Total	Weight	Risk Ratio M-H, Random, 95% CI	0.05		Ratio	
Test for overall effect: Z (b) <u>Study or Subgroup</u> Caixia Dong 2012	E = 5.92 (P Postte Events 91	st <u>Total</u> 242	D01) Pretes Events 233	st <u>Total</u> 314	<u>Weight</u> 8.5%	Risk Ratio <u>M-H. Random, 95% CI</u> 0.51 [0.43, 0.60]	0.05	Risk F	Ratio	
Test for overall effect: Z (b) <u>Study or Subgroup</u> Caixia Dong 2012 Hong Shen 2011	E = 5.92 (P Postte Events 91 13	st <u>Total</u> 242 148	D01) Pretes Events 233 26	st <u>Total</u> 314 143	Weight 8.5% 3.8%	Risk Ratio <u>M-H. Random. 95% CI</u> 0.51 [0.43, 0.60] 0.48 [0.26, 0.90]	0.05	Risk F	Ratio	
Test for overall effect: Z (b) Study or Subgroup Caixia Dong 2012 Hong Shen 2011 Jianhong Qin 2014	= 5.92 (P Postte Events 91 13 108	st <u>Total</u> 242 148 206	001) Pretes Events 233 26 137	st <u>Total</u> 314 143 195	Weight 8.5% 3.8% 8.6%	Risk Ratio <u>M-H. Random. 95% CI</u> 0.51 [0.43, 0.60] 0.48 [0.26, 0.90] 0.75 [0.64, 0.87]	0.05	Risk F	Ratio	
Test for overall effect: Z (b) <u>Study or Subgroup</u> Caixia Dong 2012 Hong Shen 2011 Jianhong Qin 2014 Jie Wang 2017	E = 5.92 (P Postte Events 91 13 108 138	st <u>Total</u> 242 148 206 693	001) Pretes 233 26 137 230	st <u>Total</u> 314 143 195 823	Weight 8.5% 3.8% 8.6% 8.3%	Risk Ratio <u>M-H. Random, 95% Cl</u> 0.51 [0.43, 0.60] 0.48 [0.26, 0.90] 0.75 [0.64, 0.87] 0.71 [0.59, 0.86]	0.05	Risk F	Ratio	
Test for overall effect: Z (b) Study or Subgroup Caixia Dong 2012 Hong Shen 2011 Jianhong Qin 2014 Jie Wang 2017 Jing Sun 2011	E = 5.92 (P Postte Events 91 13 108 138 64	 < 0.000 st 242 148 206 693 221 	D01) Pretes Events 233 26 137 230 82	st <u>Total</u> 314 143 195 823 226	Weight 8.5% 3.8% 8.6% 8.3% 7.4%	Risk Ratio <u>M-H. Random, 95% CI</u> 0.51 [0.43, 0.60] 0.48 [0.26, 0.90] 0.75 [0.64, 0.87] 0.71 [0.59, 0.86] 0.80 [0.61, 1.04]	0.05	Risk F	Ratio	
Test for overall effect: Z (b) Study or Subgroup Caixia Dong 2012 Hong Shen 2011 Jianhong Qin 2014 Jie Wang 2017 Jing Sun 2011 Junsheng Huo 2015	E = 5.92 (P Postte Events 91 13 108 138 64 257	 < 0.000 st 242 148 206 693 221 1040 	D01) Pretes Events 233 26 137 230 82 657	st Total 314 143 195 823 226 1290	Weight 8.5% 3.8% 8.6% 8.3% 7.4% 9.0%	Risk Ratio <u>M-H. Random, 95% CI</u> 0.51 [0.43, 0.60] 0.48 [0.26, 0.90] 0.75 [0.64, 0.87] 0.71 [0.59, 0.86] 0.80 [0.61, 1.04] 0.49 [0.43, 0.55]	0.05	Risk F	Ratio	2
Test for overall effect: Z (b) Study or Subgroup Caixia Dong 2012 Hong Shen 2011 Jianhong Qin 2014 Jie Wang 2017 Jing Sun 2011 Junsheng Huo 2015 Lijuan Wang 2011	E = 5.92 (P Postte Events 91 13 108 138 64 257 78	 < 0.000 st 242 148 206 693 221 1040 253 	D01) Pretes Events 233 26 137 230 82 657 199	st Total 314 143 195 823 226 1290 257	Weight 8.5% 3.8% 8.6% 8.3% 7.4% 9.0% 8.2%	Risk Ratio <u>M-H. Random. 95% CI</u> 0.51 [0.43, 0.60] 0.48 [0.26, 0.90] 0.75 [0.64, 0.87] 0.71 [0.59, 0.86] 0.80 [0.61, 1.04] 0.49 [0.43, 0.55] 0.40 [0.33, 0.48]	0.05	Risk F	Ratio	
Test for overall effect: Z (b) Study or Subgroup Caixia Dong 2012 Hong Shen 2011 Jianhong Qin 2014 Jie Wang 2017 Jing Sun 2011 Junsheng Huo 2015 Lijuan Wang 2011 Lixiang Li 2012	E = 5.92 (P Postte Events 91 13 108 138 64 257 78 76	 < 0.000 st Total 242 148 206 693 221 1040 253 307 	D01) Pretess 233 26 137 230 82 657 199 163	st Total 314 143 195 823 226 1290 257 327	Weight 8.5% 3.8% 8.6% 8.3% 7.4% 9.0% 8.2% 7.9%	Risk Ratio 0.51 [0.43, 0.60] 0.48 [0.26, 0.90] 0.75 [0.64, 0.87] 0.71 [0.59, 0.86] 0.80 [0.61, 1.04] 0.49 [0.43, 0.55] 0.40 [0.33, 0.48] 0.50 [0.40, 0.62]	0.05	Risk F	Ratio	
Test for overall effect: Z (b) Study or Subgroup Caixia Dong 2012 Hong Shen 2011 Jianhong Qin 2014 Jie Wang 2017 Jing Sun 2011 Junsheng Huo 2015 Lijuan Wang 2011 Lixiang Li 2012 Ping Wu 2017	Postte Events 91 13 108 138 64 257 78 76 13	 < 0.000 st 242 148 206 693 221 1040 253 307 156 	D01) Pretes 233 266 137 230 82 657 199 163 51	st Total 314 143 195 823 226 1290 257 327 156	Weight 8.5% 3.8% 8.6% 8.3% 7.4% 9.0% 8.2% 7.9% 4.2%	Risk Ratio 0.51 [0.43, 0.60] 0.48 [0.26, 0.90] 0.75 [0.64, 0.87] 0.71 [0.59, 0.86] 0.80 [0.61, 1.04] 0.49 [0.43, 0.55] 0.40 [0.33, 0.48] 0.50 [0.40, 0.62] 0.25 [0.14, 0.45]	0.05	Risk F	Ratio	
Test for overall effect: Z (b) Study or Subgroup Caixia Dong 2012 Hong Shen 2011 Jianhong Qin 2014 Jie Wang 2017 Jing Sun 2011 Junsheng Huo 2015 Lijuan Wang 2011 Lixiang Li 2012 Ping Wu 2017 Qiannan Zhang 2015	Postte Events 91 13 108 138 64 257 78 76 13 212	 < 0.000 st 242 148 206 693 221 1040 253 307 156 589 	D01) Pretes 233 26 137 230 82 657 199 163 51 238	st Total 314 143 195 823 226 1290 257 327 156 596	Weight 8.5% 3.8% 8.6% 8.3% 7.4% 9.0% 8.2% 7.9% 4.2% 8.7%	Risk Ratio M-H. Random. 95% Cl 0.51 [0.43, 0.60] 0.48 [0.26, 0.90] 0.75 [0.64, 0.87] 0.71 [0.59, 0.86] 0.80 [0.61, 1.04] 0.49 [0.43, 0.55] 0.40 [0.33, 0.48] 0.50 [0.40, 0.62] 0.25 [0.14, 0.45] 0.90 [0.78, 1.04]	0.05	Risk F	Ratio	
Test for overall effect: Z (b) Study or Subgroup Caixia Dong 2012 Hong Shen 2011 Jianhong Qin 2014 Jie Wang 2017 Jing Sun 2011 Junsheng Huo 2015 Lijuan Wang 2011 Lixiang Li 2012 Ping Wu 2017 Qiannan Zhang 2015 Qiujing Jiang 2016	Postte Events 91 13 108 64 257 78 76 13 212 247	 < 0.000 st 242 148 206 693 221 1040 253 307 156 589 639 	D01) Pretes 233 26 137 230 82 657 199 163 51 238 365	st Total 314 143 195 823 226 1290 257 327 156 596 706	Weight 8.5% 3.8% 8.6% 8.3% 7.4% 9.0% 8.2% 7.9% 4.2% 8.7% 8.9%	Risk Ratio 0.51 [0.43, 0.60] 0.48 [0.26, 0.90] 0.75 [0.64, 0.87] 0.71 [0.59, 0.86] 0.80 [0.61, 1.04] 0.49 [0.43, 0.55] 0.40 [0.33, 0.48] 0.50 [0.40, 0.62] 0.25 [0.14, 0.45] 0.90 [0.78, 1.04] 0.75 [0.66, 0.84]	0.05	Risk F	Ratio	2
Study or Subgroup Caixia Dong 2012 Hong Shen 2011 Jianhong Qin 2014 Jie Wang 2017 Jing Sun 2011 Junsheng Huo 2015 Lijuan Wang 2011 Lixiang Li 2012 Ping Wu 2017 Qiannan Zhang 2015 Qiujing Jiang 2016 Zengkang Xu 2012	E = 5.92 (P Postte Events 91 13 108 64 257 78 76 13 212 247 71	 < 0.000 st 242 148 206 693 221 1040 253 307 156 589 639 300 	D01) Pretes 233 26 137 230 82 657 199 163 51 238 365 162	st Total 314 143 195 823 226 1290 257 327 156 596 706 327	Weight 8.5% 3.8% 8.6% 8.3% 7.4% 9.0% 8.2% 7.9% 4.2% 8.7% 8.9% 7.8%	Risk Ratio 0.51 [0.43, 0.60] 0.48 [0.26, 0.90] 0.75 [0.64, 0.87] 0.71 [0.59, 0.86] 0.80 [0.61, 1.04] 0.49 [0.43, 0.55] 0.40 [0.33, 0.48] 0.50 [0.40, 0.62] 0.25 [0.14, 0.45] 0.90 [0.78, 1.04] 0.75 [0.66, 0.84] 0.48 [0.38, 0.60]	0.05	Risk F	Ratio	2
Test for overall effect: Z (b) Study or Subgroup Caixia Dong 2012 Hong Shen 2011 Jianhong Qin 2014 Jie Wang 2017 Jing Sun 2011 Junsheng Huo 2015 Lijuan Wang 2011 Lixiang Li 2012 Ping Wu 2017 Qiannan Zhang 2015 Qiujing Jiang 2016 Zengkang Xu 2012	Postte Events 91 13 108 64 257 78 76 13 212 247	 < 0.000 st 242 148 206 693 221 1040 253 307 156 589 639 	D01) Pretes 233 26 137 230 82 657 199 163 51 238 365	st Total 314 143 195 823 226 1290 257 327 156 596 706	Weight 8.5% 3.8% 8.6% 8.3% 7.4% 9.0% 8.2% 7.9% 4.2% 8.7% 8.9%	Risk Ratio 0.51 [0.43, 0.60] 0.48 [0.26, 0.90] 0.75 [0.64, 0.87] 0.71 [0.59, 0.86] 0.80 [0.61, 1.04] 0.49 [0.43, 0.55] 0.40 [0.33, 0.48] 0.50 [0.40, 0.62] 0.25 [0.14, 0.45] 0.90 [0.78, 1.04] 0.75 [0.66, 0.84]	0.05	Risk F	Ratio	2
Test for overall effect: Z (b) <u>Study or Subgroup</u> Caixia Dong 2012 Hong Shen 2011 Jianhong Qin 2014 Jie Wang 2017 Jing Sun 2011 Junsheng Huo 2015 Lijuan Wang 2011 Lixiang Li 2012 Ping Wu 2017 Qiannan Zhang 2015 Qiujing Jiang 2016	E = 5.92 (P Postte Events 91 13 108 64 257 78 76 13 212 247 71	 < 0.000 st 242 148 206 693 221 1040 253 307 156 589 639 300 	D01) Pretes 233 26 137 230 82 657 199 163 51 238 365 162	st Total 314 143 195 823 226 1290 257 327 156 596 706 327 659	Weight 8.5% 3.8% 8.6% 8.3% 7.4% 9.0% 8.2% 7.9% 4.2% 8.7% 8.9% 7.8%	Risk Ratio 0.51 [0.43, 0.60] 0.48 [0.26, 0.90] 0.75 [0.64, 0.87] 0.71 [0.59, 0.86] 0.80 [0.61, 1.04] 0.49 [0.43, 0.55] 0.40 [0.33, 0.48] 0.50 [0.40, 0.62] 0.25 [0.14, 0.45] 0.90 [0.78, 1.04] 0.75 [0.66, 0.84] 0.48 [0.38, 0.60]	0.05	Risk F	Ratio	

Figure S7: Effects of YYB on anemia prevalence among post-only with concurrent control studies (a) and pre-post studies (b) using risk ratio as the effect measure.

(a)	Intervention Control					Risk Ratio	Risk Ratio					
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% Cl		<u>M-H, Ra</u>	andom.	95% CI		
Lingyun Ren 2014	5	76	8	78	5.9%	0.64 [0.22, 1.87]		•				
Shangming Li 2014	29	387	32	240	14.8%	0.56 [0.35, 0.90]		-	-			
Shuai Li 2017	25	450	65	450	15.6%	0.38 [0.25, 0.60]		•				
Wenli Zhao 2012	130	676	125	536	21.1%	0.82 [0.66, 1.03]		_	•			
Xiaoting Ding 2016	11	483	12	248	8.8%	0.47 [0.21, 1.05]		-	-			
Yanfeng Zhang 2016	152	2150	112	746	20.9%	0.47 [0.37, 0.59]						
Zhifeng Fang 2010	25	146	17	107	12.9%	1.08 [0.61, 1.89]						
Total (95% CI)		4368		2405	100.0%	0.60 [0.44, 0.81]		-	.			
Total events	377		371									
Heterogeneity: Tau ² =	0.10; Chi² :	= 20.90,	df = 6 (P	= 0.00	2); l² = 71%	6		0.5				
Test for overall effect: 2	Z = 3.37 (P	9 = 0.000)7)				0.2	0.5	1	Z	5	

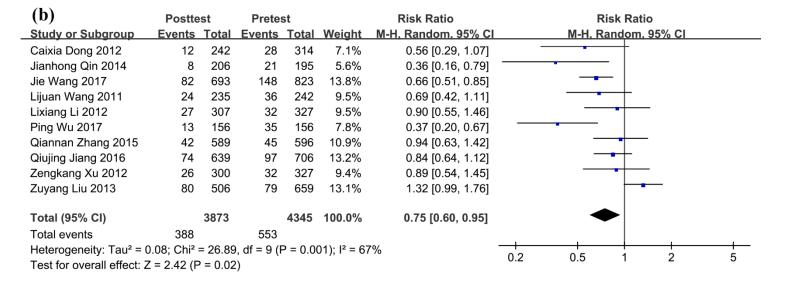
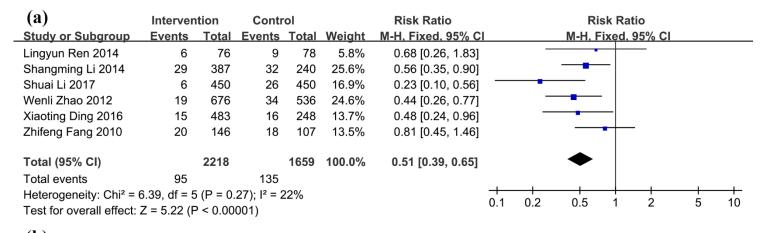
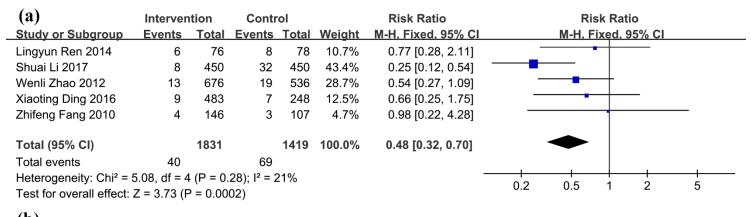


Figure S8: Effects of YYB on stunting prevalence among post-only with concurrent control studies (a) and pre-post studies (b) using risk ratio as the effect measure.



(b)	Postte	est	Prete	st		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% Cl
Caixia Dong 2012	8	242	14	314	8.2%	0.74 [0.32, 1.74]	
Jianhong Qin 2014	14	206	21	195	10.5%	0.63 [0.33, 1.21]	
Jie Wang 2017	26	693	77	823	13.2%	0.40 [0.26, 0.62]	
Lijuan Wang 2011	14	235	10	242	8.8%	1.44 [0.65, 3.18]	
Lixiang Li 2012	3	307	21	327	5.5%	0.15 [0.05, 0.51]	
Ping Wu 2017	7	156	27	156	8.7%	0.26 [0.12, 0.58]	
Qiannan Zhang 2015	26	589	31	596	12.2%	0.85 [0.51, 1.41]	
Qiujing Jiang 2016	14	639	34	706	10.9%	0.45 [0.25, 0.84]	_ _
Zengkang Xu 2012	12	300	21	327	10.0%	0.62 [0.31, 1.24]	
Zuyang Liu 2013	23	506	29	659	11.9%	1.03 [0.61, 1.76]	
Total (95% CI)		3873		4345	100.0%	0.59 [0.42, 0.83]	•
Total events	147		285				
Heterogeneity: Tau ² = ().18; Chi²	= 24.28	8, df = 9 (I	P = 0.0	04); l² = 63°	%	
Test for overall effect: Z							0.05 0.2 1 5 20

Figure S9: Effects of YYB on underweight prevalence among post-only with concurrent control studies (a) and pre-post studies (b) using risk ratio as the effect measure.



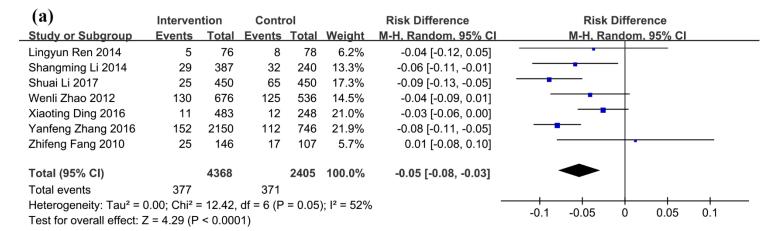
(b)	Posttest			st		Risk Ratio	Risk Ratio				
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% Cl		M-H, F	<u>Random, 9</u>	5% CI	
Caixia Dong 2012	4	242	11	314	10.3%	0.47 [0.15, 1.46]					
Jie Wang 2017	25	693	45	823	20.5%	0.66 [0.41, 1.06]		-			
Lixiang Li 2012	2	307	15	327	7.3%	0.14 [0.03, 0.62]			-		
Ping Wu 2017	6	156	14	156	12.8%	0.43 [0.17, 1.09]					
Qiannan Zhang 2015	35	589	24	596	20.0%	1.48 [0.89, 2.45]			+		
Zengkang Xu 2012	14	300	15	327	16.2%	1.02 [0.50, 2.07]			-+		
Zuyang Liu 2013	8	506	10	659	12.9%	1.04 [0.41, 2.62]		_	-	-	
Total (95% CI)		2793		3202	100.0%	0.72 [0.45, 1.15]					
Total events	94		134								
Heterogeneity: Tau ² = 0	Heterogeneity: Tau ² = 0.22; Chi ² = 14.98, df				2); l ² = 609	%	0.05	0.2			20
Test for overall effect: Z	<u>z</u> = 1.38 (F	P = 0.17	')				0.05	0.2	I	5	20

Figure S10: Effects of YYB on wasting prevalence among post-only with concurrent control studies (a) and pre-post studies (b) using risk ratio as the effect measure.

(a)	Intervention 0		Contr	ol		Risk Difference	Risk Difference
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% Cl
Lingyun Ren 2014	30	76	52	78	6.6%	-0.27 [-0.42, -0.12] —	
Qin Hu 2016	6	300	46	300	9.7%	-0.13 [-0.18, -0.09]	
Shangming Li 2014	179	387	114	240	8.8%	-0.01 [-0.09, 0.07]	
Shuai Li 2017	112	450	226	450	9.3%	-0.25 [-0.31, -0.19]	_ _
Wenhao Li 2013	23	144	46	140	8.3%	-0.17 [-0.27, -0.07]	
Wenli Zhao 2012	9	536	48	676	10.0%	-0.05 [-0.08, -0.03]	-
Xiaoting Ding 2016	120	483	98	248	9.0%	-0.15 [-0.22, -0.07]	
Yanfeng Zhang 2016	1039	2174	568	754	9.8%	-0.28 [-0.31, -0.24]	
Yuying Wang 2004	51	670	37	307	9.7%	-0.04 [-0.09, -0.00]	
Yuying Wang 2009	41	503	27	218	9.6%	-0.04 [-0.09, 0.01]	
Zhifeng Fang 2010	2	146	13	107	9.2%	-0.11 [-0.17, -0.04]	
Total (95% CI)		5869		3518	100.0%	-0.13 [-0.20, -0.07]	•
Total events	1612		1275				
Heterogeneity: Tau² = (Test for overall effect: 2	-		= 95%	-0.2 -0.1 0 0.1 0.2			

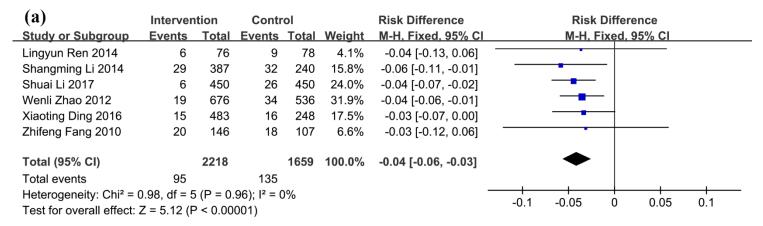
(b)	Postte	st	Pretes	st		Risk Difference	Risk Difference
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% Cl
Caixia Dong 2012	91	242	233	314	7.5%	-0.37 [-0.44, -0.29]	_ - _
Hong Shen 2011	13	148	26	143	7.5%	-0.09 [-0.17, -0.02]	
lianhong Qin 2014	108	206	137	195	7.2%	-0.18 [-0.27, -0.08]	_ .
Jie Wang 2017	138	693	230	823	8.2%	-0.08 [-0.12, -0.04]	
ling Sun 2011	64	221	82	226	7.3%	-0.07 [-0.16, 0.01]	
Junsheng Huo 2015	257	1040	657	1290	8.2%	-0.26 [-0.30, -0.22]	
ijuan Wang 2011	78	253	199	257	7.5%	-0.47 [-0.54, -0.39]	
ixiang Li 2012	76	307	163	327	7.6%	-0.25 [-0.32, -0.18]	_ _
Ping Wu 2017	13	156	51	156	7.4%	-0.24 [-0.33, -0.16]	_ -
Qiannan Zhang 2015	212	589	238	596	8.0%	-0.04 [-0.09, 0.02]	+
Qiujing Jiang 2016	247	639	365	706	8.0%	-0.13 [-0.18, -0.08]	
Zengkang Xu 2012	71	300	162	327	7.6%	-0.26 [-0.33, -0.19]	_ _
Zuyang Liu 2013	149	506	292	659	8.0%	-0.15 [-0.20, -0.09]	
otal (95% Cl)		5300		6019	100.0%	-0.20 [-0.26, -0.13]	◆
Total events	1517		2835				
Heterogeneity: Tau² = 0 Fest for overall effect: Z	,		² = 93%	-0.5 -0.25 0 0.25 0.5			

Figure S11: Effects of YYB on anemia prevalence among post-only with concurrent control studies (a) and pre-post studies (b) using risk difference as the effect measure.



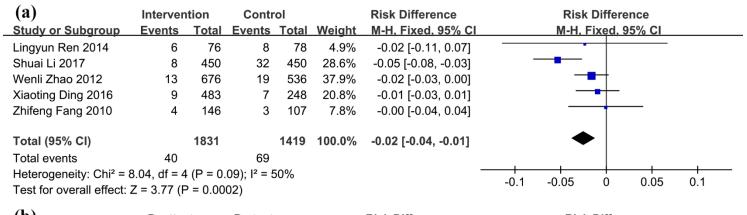
(b)	Posttest		Pretest			Risk Difference	Risk Difference
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Caixia Dong 2012	12	242	28	314	10.6%	-0.04 [-0.08, 0.00]	
Jianhong Qin 2014	8	206	21	195	9.2%	-0.07 [-0.12, -0.02]	
Jie Wang 2017	82	693	148	823	11.5%	-0.06 [-0.10, -0.03]	_ _
Lijuan Wang 2011	24	235	36	242	8.0%	-0.05 [-0.11, 0.01]	
Lixiang Li 2012	27	307	32	327	10.0%	-0.01 [-0.06, 0.04]	
Ping Wu 2017	13	156	35	156	5.9%	-0.14 [-0.22, -0.06]	
Qiannan Zhang 2015	42	589	45	596	12.5%	-0.00 [-0.03, 0.03]	
Qiujing Jiang 2016	74	639	97	706	11.5%	-0.02 [-0.06, 0.01]	
Zengkang Xu 2012	26	300	32	327	10.0%	-0.01 [-0.06, 0.03]	
Zuyang Liu 2013	80	506	79	659	10.8%	0.04 [-0.00, 0.08]	
Total (95% CI)		3873		4345	100.0%	-0.03 [-0.05, -0.01]	•
Total events	388		553				
Heterogeneity: Tau ² = 0	0.00; Chi ² :	= 28.43	, df = 9 (I	P = 0.0	008); l² = 6	68%	
Test for overall effect: Z				-0.2 -0.1 0 0.1 0.2			

Figure S12: Effects of YYB on stunting prevalence among post-only with concurrent control studies (a) and pre-post studies (b) using risk difference as the effect measure.



(b)	est	Prete	st		Risk Difference	Risk Difference	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% C	M-H, Random, 95% Cl
Caixia Dong 2012	8	242	14	314	10.3%	-0.01 [-0.04, 0.02]	
Jianhong Qin 2014	14	206	21	195	6.3%	-0.04 [-0.10, 0.02]	
Jie Wang 2017	26	693	77	823	11.9%	-0.06 [-0.08, -0.03]	_ _
Lijuan Wang 2011	14	235	10	242	8.9%	0.02 [-0.02, 0.06]	
Lixiang Li 2012	3	307	21	327	11.0%	-0.05 [-0.08, -0.03]	
Ping Wu 2017	7	156	27	156	4.9%	-0.13 [-0.20, -0.06]	
Qiannan Zhang 2015	26	589	31	596	11.9%	-0.01 [-0.03, 0.02]	
Qiujing Jiang 2016	14	639	34	706	12.9%	-0.03 [-0.05, -0.01]	
Zengkang Xu 2012	12	300	21	327	9.8%	-0.02 [-0.06, 0.01]	
Zuyang Liu 2013	23	506	29	659	12.0%	0.00 [-0.02, 0.03]	
Total (95% CI)		3873		4345	100.0%	-0.03 [-0.05, -0.01]	•
Total events	147		285				
Heterogeneity: Tau ² = 0 Test for overall effect: 2			-0.2 -0.1 0 0.1 0.2				

Figure S13: Effects of YYB on underweight prevalence among post-only with concurrent control studies (a) and pre-post studies (b) using risk difference as the effect measure.



(b)	Postte	Prete	st		Risk Difference	Risk Difference				
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% Cl	M-I	<u>I. Random, 95</u>	% CI	
Caixia Dong 2012	4	242	11	314	14.6%	-0.02 [-0.04, 0.01]	-			
Jie Wang 2017	25	693	45	823	17.0%	-0.02 [-0.04, 0.00]	-			
Lixiang Li 2012	2	307	15	327	15.3%	-0.04 [-0.06, -0.01]		—		
Ping Wu 2017	6	156	14	156	6.3%	-0.05 [-0.11, 0.00]				
Qiannan Zhang 2015	35	589	24	596	15.1%	0.02 [-0.01, 0.04]		+	_	
Zengkang Xu 2012	14	300	15	327	11.7%	0.00 [-0.03, 0.03]				
Zuyang Liu 2013	8	506	10	659	20.1%	0.00 [-0.01, 0.01]		-		
Total (95% CI)		2793		3202	100.0%	-0.01 [-0.03, 0.00]				
Total events	94		134							
Heterogeneity: Tau ² = 0	0.00; Chi²	= 16.67	′, df = 6 (l	P = 0.0	1); l² = 649	%			0.05	
Test for overall effect: Z	Z = 1.49 (F	P = 0.14)				-0.1 -0.05	0	0.05	0.1

Figure S14: Effects of YYB on wasting prevalence among post-only with concurrent control studies (a) and pre-post studies (b) using risk difference as the effect measure.

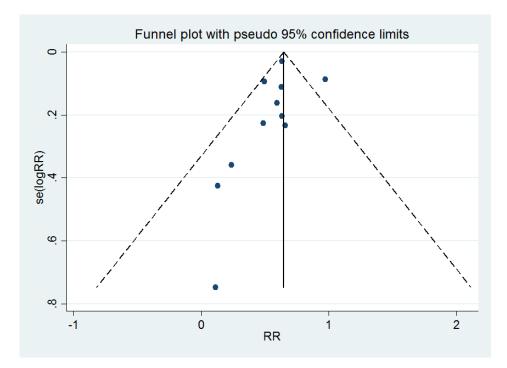


Figure S15: Funnel plot of effects of YYB on anemia prevalence among post-only with concurrent control studies.

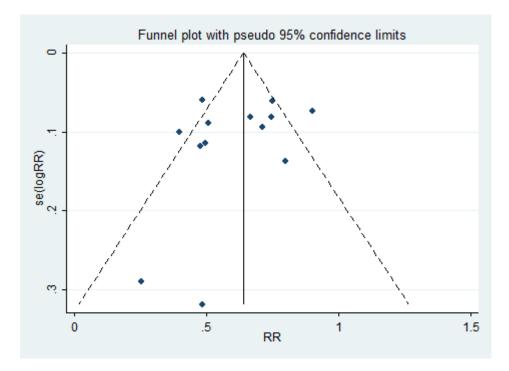


Figure S16: Funnel plot of effects of YYB on anemia prevalence among pre-post studies.