Appendix A: Search Strategy

PubMed Search Strategy (searched in title, abstract and/or keyword searches)

- #1. "Infant"[Mesh]
- #2. "Child, Preschool"[Mesh]
- #3. Infant*
- #4. Toddler*
- #5. Baby OR babies
- #6. Newborn* OR Neonat*
- #7. Preschool* OR Kindergarten* OR Under-5s OR "Under 5s" OR "Under 5"
- #8. #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7
- #9. "Severe Acute Malnutrition" [Mesh]
- #10. "Infant Nutrition Disorders" [Mesh]
- #11. "Nutrition Disorders" [Mesh]
- #12. "Severe Acute Malnutrition" OR SAM
- #13. "Moderate Acute Malnutrition" OR MAM
- #14. "Protein-Energy Malnutrition" [Mesh]
- #15. Undernutrition OR under-nutrition
- #16. Malnourish*
- #17. Malnutrition
- #18. Stunted OR wasted OR wasting OR "Wasting Syndrome" [Mesh]
- #19. Starve* OR Starvat* OR "Starvation" [Mesh]
- #20. "Vitamin A" OR "Vitamin A Deficiency" "Vitamin A" [Mesh]
- #21. "Iron" [Mesh] OR "Iron deficiency" OR "Fe deficiency" OR "Anemia" [Mesh]
- #22. Zinc OR "Zinc deficiency OR "Zn deficiency" OR "Zinc" [Mesh]
- #23. #9 OR #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
- #24. "Food"[Mesh]
- #25. "Infant Food"[Mesh]

- #26. "Food, Fortified"[Mesh]
- #27. "Food, Formulated"[Mesh]
- #28. "Dietary Supplements" [Mesh]
- #29. "Fortified Food*"
- #30. "Diet* Supplement*"
- #31. "Ready to use therapeutic food" OR RUTF
- #32. "Ready to use supplementary food" OR RUSF
- #33. "Ready to use food*" OR RUF
- #34. F100 OR F75
- #35. CTC
- #36. "Vitamin A Supplement*"
- #37. "Micronutrient* Supplement*"
- #38. "Dietary Fats"[Mesh]
- #39. "Dietary Proteins" [Mesh]
- #40. FBF
- #41. "Corn soy*"
- #42. "Wheat soy* blend*"
- #43. "Rice mild blend*"
- #44. "Milk rice blend*"
- #45. "Pea wheat blend*"
- #46. "Cereal pulse blend*"
- #47. "Lipid-based nutrient supplement*"
- #48. Nutributter
- #49. "Milk Proteins" [Mesh]
- #50. "Community based management of malnutrition" OR CMAM
- #51. "Amoxicillin"[Mesh]
- #52. "Cotrimoxazole" [Mesh]
- #53. Bacteraemia*

#54. Gentamicin

- #55. "Penicillin G"[Mesh]
- #56. "Chloramphenicol" [Mesh]
- #57. "Ceftriaxone"[Mesh]
- #58. "Ciprofloxacin"[Mesh]
- #59. "Inpatient management" OR "In-patient management" OR IMCI OR IMNCI
- #60. "Community based management"
- #61. "Facility based management"
- #62. Prophyla* AND antibiotic*

#63. #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43 OR #44 OR #45 OR #46 OR #47 OR #48 OR #49 OR #50 OR #51 OR #52 OR #53 OR #54 OR #55 OR #56 OR #57 OR #58 OR #59 OR #60 OR #61 OR #62

- #64. "Morbidity"[Mesh]
- #65. "Mortality"[Mesh]
- #66. Death*
- #67. Relapse*
- #68. Recovery
- #69. #64 OR #65 OR #66 OR #67 OR #68
- #70. #8 AND #23 AND (#63 OR #69)

#71. Age Filters Applied: Infants 1-23 months; birth-23 months; Preschool child 2-5 years

Appendix B: Reasons for exclusion for excluded studies

Study	Reason for Exclusion
Agha 2004 [1]	This study did not have an appropriate control group.
Aguayo 2018 [2]	The study design was not appropriate.
Ahmed 1999 [3]	The study design was not appropriate.
Ashworth 2004 [4]	The study design was not appropriate.
Bachou 2008 [5]	The study design was not appropriate.
Badaloo 1999 [6]	This study did not assess the intervention of interest; study compared high protein formula with
	low protein formula.
Baker 1978 [7]	The study did not assess the intervention of interest; study compared milk diet with soy-maize-
	porridge diet.
Bhandari 2001 [8]	The study did not assess the intervention of interest; study compared food supplementation with
	counselling with nutritional counselling alone.
Burza 2016 [9]	The study design was not appropriate.
Donnen 2007 [10]	This study included children up to 14 years of age
Dubray 2008 [11]	This study compared two different antibiotics (ceftriaxone vs amoxicillin) in children with SAM
	and did not have an appropriate control group (no antibiotic/placebo).
Javan 2017 [12]	This study was conducted in Upper Middle Income Country.
Linneman 2007 [13]	This study did not have an appropriate control group.
Nagar 2016 [14]	This study did not have an appropriate control group.
Roy 2005 [15]	The study did not assess the intervention of interest; study compared supplementary feeding
	with education to feeding alone.
Simpore 2006 [16]	This study did not have an appropriate control group.
Zongo 2013 [17]	The study did not assess the intervention of interest; the study compared Moringa leaf in
	addition to the usual porridge diet.



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Appendix C: Supplementary Figures

Comparison 1: Community based strategies to screen, identify and manage SAM and MAM compared to no community based strategies

Figure 1: Forest plot for the impact of community based strategies compared to no community based strategies on Recovery

	Community based	protocol	Standard mana	gement		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% Cl	M-H, Random, 95% Cl
Maust 2015	910	1100	682	857	100.0%	1.04 [1.00, 1.09]	
Total (95% CI)		1100		857	100.0%	1.04 [1.00, 1.09]	-
Total events Heterogeneity: Not ap Test for overall effect:			682				0.85 0.9 1 1.1 1.2 Favours standard Favours community

Figure 2: Forest plot for the impact of community based strategies compared to no community based strategies on Weight Gain

	Community	based pro	otocol	Standard	manager	nent		Mean Difference	Mean Difference			
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI			
Maust 2015	3	0.2	1100	3.8	0.2	857	100.0%	-0.80 [-0.82, -0.78]				
Total (95% CI)			1100			857	100.0%	-0.80 [-0.82, -0.78]				
Heterogeneity: Not ap	plicable							-				
Test for overall effect:	Z=87.79 (P ≺	0.00001)							Favours standard Favours community			

Figure 3: Forest plot for the impact of community based strategies compared to no community based strategies on Mortality

	Community based p	rotocol	Standard mana	gement		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% Cl	M-H, Random, 95% Cl
Maust 2015	42	1100	35	857	100.0%	0.93 [0.60, 1.45]	
Total (95% CI)		1100		857	100.0%	0.93 [0.60, 1.45]	+
Total events Heterogeneity: Not ap Test for overall effect:			35				0.01 0.1 1 10 100 Favours community Favours standard

Figure 4: Forest plot for the impact of community based strategies compared to no community based strategies on Length Gain

	Community	based pro	otocol	ol Standard management				Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Maust 2015	0.4	0.02	1100	0.5	0.02	857	100.0%	-0.10 [-0.10, -0.10]	•
Total (95% CI)	nliachla		1100			857	100.0%	-0.10 [-0.10, -0.10]	
Heterogeneity: Not ap Test for overall effect:		< 0.00001)						-1 -0.5 0 0.5 1 Favours standard Favours community

Figure 5: Forest plot for the impact of community based strategies compared to no community based strategies on MUAC Gain

	Community	based pro	tocol	col Standard management				Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Maust 2015	0.52	0.04	1100	0.25	0.02	857	100.0%	0.27 [0.27, 0.27]	
Total (95% CI) Heterogeneity: Not ap Test for overall effect:		< 0.00001)	1100			857	100.0%	0.27 [0.27, 0.27]	-0.5 -0.25 0 0.25 0.5 Favours standard Favours community

Figure 6: Forest plot for the impact of community based strategies compared to no community based strategies on Adverse Events

	Community based p	rotocol	Standard manage	ement		Risk Ratio	Risk F	Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% Cl	M-H, Rando	m, 95% Cl
1.6.1 Diarrhoea								
Maust 2015 Subtotal (95% CI)	198	1100 1100	216	857 <mark>857</mark>	40.8% 40.8%	0.71 [0.60, 0.85] 0.71 [0.60, 0.85]	•	
Total events Heterogeneity: Not app	198 Ilicable		216					
Test for overall effect: 2	(= 3.86 (P = 0.0001)							
1.6.2 Fever								
Maust 2015 Subtotal (95% CI)	495	1100 1100	456	857 857	59.2% 59.2%	0.85 [0.77, 0.93] 0.85 [0.77, 0.93]	•	
Total events Heterogeneity: Not app	495 Ilicable		456					
Test for overall effect: Z	C= 3.62 (P = 0.0003)							
Total (95% CI)		2200		1714	100.0%	0.79 [0.67, 0.93]	•	
Total events Heterogeneity: Tau ² = (Test for overall effect: 2 Test for subgroup diffe	(= 2.79 (P = 0.005)						0.01 0.1 1 Favours community	10 100 Favours standard

Comparison 2: Facility based strategies to screen and manage uncomplicated SAM according to the WHO protocol compared to other standards of care

Figure 7: Forest plot for the impact of facility based strategies according to WHO protocol compared to other protocols on Recovery

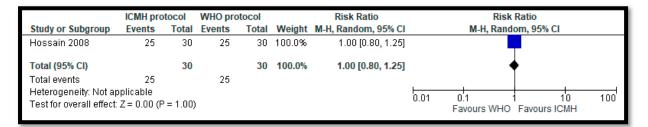
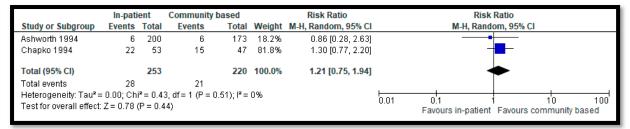


Figure 8: Forest plot for the impact of facility based strategies according to WHO protocol compared to other protocols on Mortality



Comparison 3: Facility based strategies to screen and manage uncomplicated SAM according to the WHO protocol compared to other standards of care (In-patient treatment with RUTF compared to F100)

Figure 9: Forest plot for the impact of facility based treatment with RUTF compared to F100 on Weight Gain

	F	RUTF F100				Mean Difference			Mean Difference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI		IV, Random, 95% Cl	
Mishra 2018	8.85	1.9	60	6.43	1.04	60	34.7%	2.42 [1.87, 2.97]		•	
Thakur 2013	9.59	3.39	49	5.41	1.05	49	33.2%	4.18 [3.19, 5.17]		•	
Versloot 2017	6.5	2.1	23	7.2	2.2	25	32.1%	-0.70 [-1.92, 0.52]		•	
Total (95% CI)			132			134	100.0%	2.00 [-0.23, 4.23]		•	
Heterogeneity: Tau ² =	3.65; CI	hi ² = 31	7.23, di	f= 2 (P -	< 0.000	001); I ^z	= 95%		400		1
Test for overall effect:	Z=1.76	i (P = 0	0.08)						-100	-50 0 50 1 Favours F100 Favours RUTF	00

Figure 10: Forest plot for the impact of facility based treatment with RUTF compared to F100 on Mortality

	RUT	F	F10	0		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% Cl	M-H, Random, 95% Cl
Mishra 2018	4	60	5	60	71.0%	0.80 [0.23, 2.83]	_
Versloot 2017	3	23	1	25	29.0%	3.26 [0.36, 29.17]	
Total (95% CI)		83		85	100.0%	1.20 [0.34, 4.22]	
Total events	7		6				
Heterogeneity: Tau ² =	0.16; Chi	i ^z = 1.1	9, df = 1 (P = 0.2	7); l² = 16	%	
Test for overall effect:	Z = 0.29 ((P = 0.7	7)				0.01 0.1 1 10 100 Favours RUTF Favours F100

Comparison 4: Community based management of children with uncomplicated SAM as outpatients with RUTF compared to standard diet, fortified blended flours (FBFs) or other locally produced foods

Figure 11: Forest plot for the impact of RUTF compared to other foods on Mortality

		Star	ndard RUTF	Other		Risk Ratio	Risk Ratio
Study or Subgroup	log[Risk Ratio]	SE				IV, Random, 95% CI	IV, Random, 95% Cl
4.5.1 Milk/peanut bas	ed RUTF versus	non/reduced	-milk/peanut	based F	RUTF		
Bahwere 2014	-0.8793	0.8326	292	303	4.3%	0.42 [0.08, 2.12]	
Bahwere 2016	-1.4119	1.1142	237	231	2.5%	0.24 [0.03, 2.16]	
Bahwere 2017	-0.6357	0.503	446	433	10.0%	0.53 [0.20, 1.42]	
Irena 2015	-0.0918	0.1182	1103	824	36.6%	0.91 [0.72, 1.15]	
Oakley 2010	0.1081	0.2462	945	929	24.1%	1.11 [0.69, 1.81]	
Subtotal (95% CI)			3023	2720	77.4%	0.90 [0.72, 1.12]	•
Heterogeneity: Tau ² =		• •	.39); I² = 3%				
Test for overall effect:	Z = 0.95 (P = 0.34	4)					
4.5.2 RUTF versus en	erav dense hom	e prepared fo	bod				
Bhandari 2016		1.5469	280	285	1.3%	5.09 [0.25, 105.53]	_
Ciliberto 2005		0.3563	186	992	16.2%	1.78 [0.88, 3.57]	
Subtotal (95% CI)	0.0104	0.0000	466		17.5%	1.87 [0.95, 3.70]	
Heterogeneity: Tau ² =	0.00° Chi ² = 0.44	df = 1 (P = 0)	51): I ² = 0%				-
Test for overall effect:		• •					
		<i>.</i>					
4.5.3 RUTF versus high	gh oleic RUTF						
Hseih 2015	1.6236	1.0824	70	71	2.6%	5.07 [0.61, 42.31]	
Subtotal (95% CI)			70	71	2.6%	5.07 [0.61, 42.31]	
Heterogeneity: Not ap	plicable						
Test for overall effect:	Z = 1.50 (P = 0.13	3)					
4.5.4 RUTF versus el	aveted p2 DUFA F						
					0.500		
Jones 2015 Subtotal (95% CI)	-1.0986	1.1106	20 20	20 20	2.5% 2.5%	0.33 [0.04, 2.94] 0.33 [0.04, 2.94]	
	nliaabla		20	20	2.3%	0.55 [0.04, 2.94]	
Heterogeneity: Not ap Test for overall effect:		1)					
restior overall ellect.	Z = 0.99 (F = 0.52	2)					
Total (95% CI)			3579	4088	100.0%	0.99 [0.69, 1.41]	. ◆
Heterogeneity: Tau ² =	0.08; Chi ² = 11.9	0, df = 8 (P = 1	0.16); P = 33 ⁴	%			
Test for overall effect:							0.01 0.1 1 10 100 Favours standard RUTF Favours others
Test for subgroup diff	erences: Chi ² = 7	. <u>32. df = 3 (P :</u>	<u>= 0.06), l² = 5</u>	9.0%			Favours standard ROTE Favours others

Figure 12: Forest plot for the impact of RUTF compared to other foods on Height/Length Gain

	Stand	lard RU	TF	0	thers			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% Cl
4.7.1 Milk/peanut bas	ed RUTF	versu	s non/r	educe	d-milk	peanu	t based R	UTF	
Bahwere 2016	80.55	7.28	90	82.41	7.4	73	0.1%	-1.86 [-4.13, 0.41]	←
Oakley 2010	0.23	0.29	945	0.19	0.25	929	30.2%	0.04 [0.02, 0.06]	
Subtotal (95% CI)			1035			1002		-0.56 [-2.29, 1.17]	
Heterogeneity: Tau ² =				1 (P = 0	0.10); I	~ = 63%	5		
Test for overall effect:	Z = 0.63	(P = 0.9	53)						
4.7.2 RUTF versus en	ergy dei	nse hor	ne pre	pared f	food				
Ciliberto 2005	0.12	0.29	186	0.19	0.59	992	26.9%	-0.07 [-0.13, -0.01]	•
Sandige 2004	0.28	0.25	83	0.34	0.27	99	24.1%		-
Subtotal (95% CI)			269			1091	51.1%	-0.07 [-0.11, -0.02]	•
Heterogeneity: Tau ² =	•			1 (P = 0	D.83); I	² =0%			
Test for overall effect:	Z = 2.91	(P = 0.0	004)						
4.7.3 RUTF versus hig	gh oleic I	RUTF							
Hseih 2015	0.13	0.36	70	0.22	0.34			-0.09 [-0.21, 0.03]	-
Subtotal (95% CI)			70			71	18.6%	-0.09 [-0.21, 0.03]	•
Heterogeneity: Not ap	plicable								
Test for overall effect:	Z=1.53	(P = 0.1	13)						
Total (95% CI)			1374			2164	100.0%	-0.04 [-0.12, 0.04]	•
Heterogeneity: Tau ² =	0.01; Cł	ni ≥ = 22.	48, df=	= 4 (P =	0.000	2); I z =	82%		
Test for overall effect:	Z = 1.00	(P = 0.3)	31)						Favours others Favours standard RUTF
Test for subgroup diff	erences:	:Chi ² =	0.44, d	f= 2 (P	= 0.8)), ² = ()%		Tavous viners Tavous standard (COT

Figure 13: Forest plot for the impact of RUTF compared to other foods on MUAC Gain

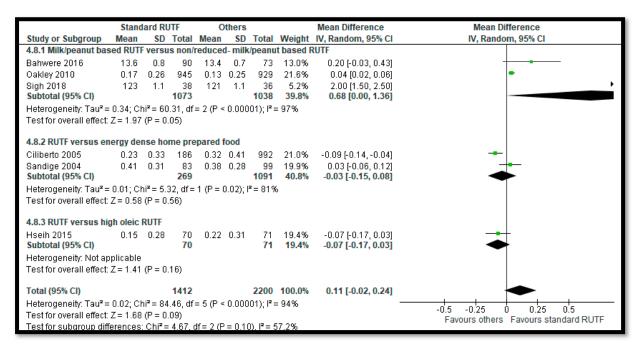


Figure 14: Forest plot for the impact of RUTF compared to other foods on Time to Recovery

	Stand	lard Rl	JTF	0	thers			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
4.9.1 RUTF versus F1	00								
Diop 2003	13.4	3.92	35	17.3	5.12	35	42.7%	-3.90 [-6.04, -1.76]	-
Subtotal (95% CI)			35			35	42.7%	-3.90 [-6.04, -1.76]	◆
Heterogeneity: Not ap	plicable								
Test for overall effect:	Z = 3.58	(P = 0	.0003)						
4.9.2 RUTF versus en	ergy der	nse ho	me pre	pared f	ood				
Bhandari 2016	5.91	4.03	280	7.12	4.54	285	57.3%	-1.21 [-1.92, -0.50]	•
Subtotal (95% CI)			280			285	57.3%	-1.21 [-1.92, -0.50]	•
Heterogeneity: Not ap	plicable								
Test for overall effect:	Z = 3.35	(P = 0	.0008)						
Total (95% CI)			315			320	100.0%	-2.36 [-4.97, 0.25]	•
Heterogeneity: Tau ² =	2.96; Cł	ni² = 5.4	49, df =	1 (P = 0	0.02); F	² = 82%	5		
Test for overall effect:	Z=1.77	(P = 0)	.08)						-20 -10 0 10 20 Favours standard RUTF Favours others
Test for subgroup diff	erences:	Chi ⁼=	5.49, 0	lf = 1 (P	= 0.02	?), 2 = 8	1.8%		Favours standard ROTE Favours others

Figure 15: Forest plot for the impact of RUTF compared to other foods on Adverse Events

	Standard	RUTF	Othe	rs		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% Cl	M-H, Random, 95% Cl
4.10.1 Cough/ALRI							
Bhandari 2016	24	280	38	285	11.3%	0.64 [0.40, 1.04]	
Bahwere 2014	43	250	33	278	13.1%	1.45 [0.95, 2.21]	
Subtotal (95% CI)		530		563	24.5%	0.97 [0.44, 2.16]	
Total events	67		71				
Heterogeneity: Tau ² =	•		f=1 (P=	0.01);	²=84%		
Test for overall effect: .	Z = 0.06 (P	= 0.95)					
4.10.2 Diarrhoea							
Bhandari 2016	92	280	101	285	20.2%	0.93 [0.74, 1.17]	
Jones 2015	7	20	7	20	5.2%	1.00 [0.43, 2.33]	
Bahwere 2014	49	258	44	291	14.8%	1.26 [0.87, 1.82]	
Subtotal (95% CI)		558		596	40.2%	1.01 [0.83, 1.22]	•
Total events	148		152				
Heterogeneity: Tau ² =			f=2(P=	0.39);1	²=0%		
Test for overall effect: .	Z = 0.08 (P	= 0.94)					
4.10.3 Fever							
Bhandari 2016	142	280	162	285	23.1%	0.89 [0.77, 1.04]	
Bahwere 2014	43	253	27	278	12.2%	1.75 [1.12, 2.74]	
Subtotal (95% CI)		533		563	35.3%	1.21 [0.61, 2.39]	
Total events	185		189				
Heterogeneity: Tau ² =			f=1 (P=	0.004)	; I ^z = 88%		
Test for overall effect: .	Z = 0.55 (P	= 0.58)					
Total (95% CI)		1621		1722	100.0%	1.06 [0.85, 1.32]	+
Total events	400		412				
Heterogeneity: Tau ² =			dt = 6 (P :	= 0.01)	; If = 63%		.1 0.2 0.5 1 2 5 10
Test for overall effect:		1			-	-	Standard RUTF Others
Test for subgroup diffe	erences: Cr	ז"= 0.27	r, df = 2 (i	P = 0.8	/), I* = 0%		

Figure 16: Forest plot for the impact of RUTF compared to other foods on Hospitalisation

	Standard	RUTF	Cont	Control		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% Cl	M-H, Random, 95% Cl
Bhandari 2016	30	280	30	285	43.0%	1.02 [0.63, 1.64]	
Jones 2015	5	20	4	20	16.9%	1.25 [0.39, 3.99]	
Oakley 2010	20	945	39	929	40.1%	0.50 [0.30, 0.86]	
Total (95% CI)		1245		1234	100.0%	0.80 [0.46, 1.39]	-
Total events	55		73				
Heterogeneity: Tau ² = Test for overall effect:	•		f= 2 (P =	0.11);	I² = 55%		0.01 0.1 1 10 100 Favours standard RUTF Favours others

Comparison 5: RUSF for MAM compared to standard diet, or FBF or other locally produced foods

			RUSF	Others		Risk Ratio	Risk Ratio
Study or Subgroup	log[Risk Ratio]	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
5.1.1 RUSF versus loo	cal/home made f	ood					
Phuka 2009	-0.2136	0.1824	12	14	2.2%	0.81 [0.56, 1.15]	
Scherbaum 2015	-0.3037	0.1593	29	44	2.8%	0.74 [0.54, 1.01]	
Vanelli 2014	0.2034	0.0746	159	177	8.1%	1.23 [1.06, 1.42]	
Subtotal (95% CI)			200	235	13.1%	0.92 [0.64, 1.33]	
Heterogeneity: Tau ² =			P = 0.00	04); I ^z = 8	2%		
Test for overall effect:	Z = 0.43 (P = 0.68	i)					
5.4.2 DUCE							
5.1.2 RUSF versus wi	-	0.04.00	4000		40.00	0.00.00.00.4.00	_
Stobaugh 2016 Subtotal (95% CI)	-0.0418	0.0198	1086 1086	1144 1144	16.0% 16.0%	0.96 [0.92, 1.00] 0.96 [0.92, 1.00]	
Heterogeneity: Not ap	nliaahla		1000	1144	10.0%	0.50 [0.52, 1.00]	•
Test for overall effect:		2					
restion overall ellect.	Z = 2.11 (F = 0.03	"					
5.1.3 RUSF versus CS	SB						
Karakochuk 2012	0.0949	0.043	375	750	12.5%	1.10 [1.01, 1.20]	
LaGrone 2012	0.0228	0.0183	918	888	16.2%	1.02 [0.99, 1.06]	
Matilsky 2009	0.0937	0.0377	465	447	13.4%	1.10 [1.02, 1.18]	
Medoua 2015	0.1499	0.1156	40	41	4.6%	1.16 [0.93, 1.46]	
Nackers 2010	0.2051	0.0598	215	236	10.0%	1.23 [1.09, 1.38]	
Nikiema 2014	-0.0042	0.0317	694	675	14.3%	1.00 [0.94, 1.06]	- + _
Subtotal (95% CI)			2707	3037	71.0%	1.07 [1.02, 1.13]	◆
Heterogeneity: Tau ² =			P = 0.01	1); I ^z = 66	%		
Test for overall effect:	Z = 2.57 (P = 0.01)					
Total (95% CI)			3993	4416	100.0%	1.05 [0.99, 1.11]	•
Heterogeneity: Tau ² =	0.00° Chi ² = 39.8	6 df=9(P < 0 00				
Test for overall effect:			. 0.0.				0.7 0.85 i 1.2 1.5
Test for subgroup diff	· ·	· ·	2 (P = 0	0.004), I²	= 82.1%		Favours Others Favours RUSF

Figure 17: Forest plot for the impact of RUSF for MAM compared to other foods on Recovery

Figure 18: Forest plot for the impact of RUSF for MAM compared to other foods on Weight Gain

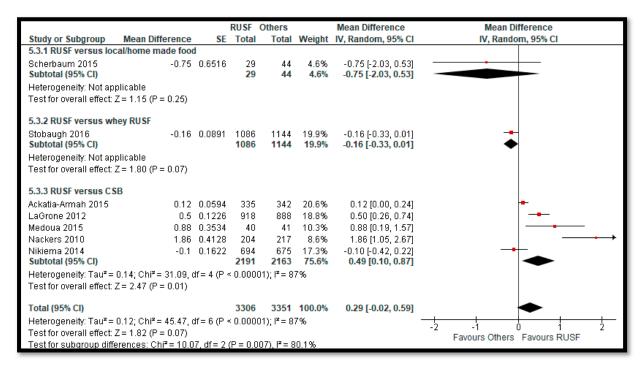


Figure 19: Forest plot for the impact of RUSF for MAM compared to other foods on Mortality

			RUSF	Others		Risk Ratio	Risk Ratio
Study or Subgroup	log[Risk Ratio]	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
5.4.1 RUSF versus w	hey RUSF						
Stobaugh 2016 Subtotal (95% CI)	0.7452	0.865	1086 1086	1144 1144	10.2% 10.2%	2.11 [0.39, 11.48] 2.11 [0.39, 11.48]	
Heterogeneity: Not ap	plicable						
Test for overall effect:	Z = 0.86 (P = 0.39)					
5.4.2 RUSF versus CS	SB						
Karakochuk 2012	0	0	375	750		Not estimable	
LaGrone 2012	-0.0332	0.4978	918	888	30.9%	0.97 [0.36, 2.57]	
Matilsky 2009	-0.5503	0.7273	465	447	14.5%	0.58 [0.14, 2.40]	
Medoua 2015	0	0	40	41		Not estimable	
Nackers 2010	0.0932	0.5261	215	236	27.7%	1.10 [0.39, 3.08]	
Nikiema 2014	-0.0278	0.8147	694	675	11.5%	0.97 [0.20, 4.80]	
Subtotal (95% CI)			2707	3037	84.6%	0.92 [0.51, 1.67]	•
Heterogeneity: Tau ² =	0.00; Chi ² = 0.54,	df = 3 (P	= 0.91)	; I ^z = 0%			
Test for overall effect:	Z = 0.26 (P = 0.79	0					
5.4.3 RUSF versus fo	od supplement						
Vanelli 2014	-0.5859	1.2199	159	177	5.1%	0.56 [0.05, 6.08]	
Subtotal (95% CI)			159	177	5.1%	0.56 [0.05, 6.08]	
Heterogeneity: Not ap	plicable						
Test for overall effect:	Z = 0.48 (P = 0.63)					
Total (95% CI)			3952	4358	100.0%	0.98 [0.57, 1.68]	•
Heterogeneity: Tau ² =	0.00; Chi² = 1.58,	df = 5 (P	= 0.90)	; I ² = 0%			
Test for overall effect:	Z = 0.08 (P = 0.94	9					Eavours RUSE Favours Others
Test for subgroup diff	erences: Chi ² = 1.	04, df = 2	2 (P = 0	<u>60), I^z = (</u>)%		Favours ROOF Favours Others

Figure 20: Forest plot for the impact of RUSF for MAM compared to other foods on Length/Height Gain

			RUSF (Others		Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Std. Mean Difference	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
5.5.1 RUSF versus loc	al/home made food						
Ackatia-Armah 2015	0.2	0.1275	335	306	0.4%	0.20 [-0.05, 0.45]	
Phuka 2009	-0.15	0.1812	90	86	0.2%	-0.15 [-0.51, 0.21]	• • • • • • • • • • • • • • • • • • • •
Scherbaum 2015	-0.52	0.2612	29	44	0.1%	-0.52 [-1.03, -0.01]	
Subtotal (95% CI)			454	436	0.7%	-0.11 [-0.50, 0.28]	
	0.08; Chi ² = 7.11, df = 2 ((P = 0.03)); I ² = 72'	%			
Test for overall effect: .	Z = 0.54 (P = 0.59)						
5.5.2 RUSF versus wh							
Stobaugh 2016		0.0121	1144	1086	33.5%	-0.01 [-0.03, 0.01]	
Subtotal (95% CI)	-0.01	0.0121	1144	1086	33.5%	-0.01 [-0.03, 0.01]	•
Heterogeneity: Not ap	nlicable						•
Test for overall effect: 2							
5.5.3 RUSF versus CS	B						
Ackatia-Armah 2015	0	0.1082	335	342	0.6%	0.00 [-0.21, 0.21]	
Fabiansen 2017	0.03	0.043	809	800	3.5%	0.03 [-0.05, 0.11]	
LaGrone 2012	0.02	0.0219	918	888	12.5%	0.02 [-0.02, 0.06]	- +
Nackers 2010	-0.01	0.0135	107	93	28.4%	-0.01 [-0.04, 0.02]	
Nikiema 2014		0.0165	694	675	20.5%	-0.01 [-0.04, 0.02]	
Thakwalakwa 2010	-0.1	0.1908	66	67	0.2%	-0.10 [-0.47, 0.27]	
Subtotal (95% CI)			2929	2865	65.7%	-0.00 [-0.02, 0.01]	+
	0.00; Chi ² = 2.40, df = 5 (P = 0.79); I ² = 0%	•			
Test for overall effect: .	Z = 0.33 (P = 0.74)						
Total (95% CI)			4527	4387	100.0%	-0.00 [-0.02, 0.01]	◆
	0.00; Chi ² = 9.72, df = 9 (P = 0.371	: ² = 7%				
Test for overall effect: 2							-0.2 -0.1 0 0.1 0.2
	erences: Chi ² = 0.47, df =	2 (P = 0.	79), I ² =	0%			Favours Others Favours RUSF
		0.		- /*			

Figure 21: Forest plot for the impact of RUSF for MAM compared to other foods on MUAC

			RUSF	Others		Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Std. Mean Difference	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
5.7.1 RUSF versus loc	al/home made food						
Ackatia-Armah 2015	0.3	0.0722	335	306	4.9%	0.30 [0.16, 0.44]	_
Phuka 2009	0.1	0.1206	90	86	2.0%	0.10 [-0.14, 0.34]	
Subtotal (95% CI)			425	392	6.9%	0.22 [0.03, 0.41]	
	0.01; Chi ^z = 2.02, df = 1 ((P = 0.15)	; I ^z = 51	%			
Test for overall effect: Z	Z = 2.30 (P = 0.02)						
5.7.2 RUSF versus wh	ey RUSF						
Stobaugh 2016	0.04	0.0117	1144	1086	21.4%	0.04 [0.02, 0.06]	+
Subtotal (95% CI)			1144	1086	21.4%	0.04 [0.02, 0.06]	•
Heterogeneity: Not app	licable						
Test for overall effect: 2	Z = 3.42 (P = 0.0006)						
5.7.3 RUSF versus CS	в						
Ackatia-Armah 2015	_	0.0722	335	342	4.9%	0.20 [0.06, 0.34]	
LaGrone 2012		0.0198	918	888	18.3%	0.08 [0.04, 0.12]	+
Medoua 2015	0.04	0.0352	40	41	12.4%	0.04 [-0.03, 0.11]	
Nackers 2010	0.05	0.0301	162	150	14.2%	0.05 [-0.01, 0.11]	
Nikiema 2014	0.04	0.0154	694	675	20.0%	0.04 [0.01, 0.07]	-
Thakwalakwa 2010	0.3	0.1228	66	67	2.0%	0.30 [0.06, 0.54]	
Subtotal (95% CI)			2215	2163	71.7%	0.07 [0.03, 0.10]	◆
	0.00; Chi² = 10.68, df = 5	(P = 0.08	6); I² = 6	3%			
Test for overall effect: 2	Z = 3.58 (P = 0.0003)						
Total (95% CI)			3784	3641	100.0%	0.08 [0.04, 0.11]	•
2 /	0.00; Chi² = 24.00, df = 8	(P = 0.00)	02); I ² =	67%			
Test for overall effect: Z	· · ·						Favours Others Favours RUSF
Test for subaroup diffe	rences: Chi² = 4.77, df =	2 (P = 0.	09), ² =	: 58.1%			

Figure 22: Forest plot for the impact of RUSF for MAM compared to other foods on Time to Recovery

				~ "			
				Others		Mean Difference	Mean Difference
	Mean Difference		Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% Cl
5.8.1 RUSF versus loc	al/home made foo	d					
Scherbaum 2015	-14.2	6.0597	18	37	8.4%	-14.20 [-26.08, -2.32]	
Subtotal (95% CI)			18	37	8.4%	-14.20 [-26.08, -2.32]	◆
Heterogeneity: Not app	olicable						
Test for overall effect: 2	Z = 2.34 (P = 0.02)						
5.8.2 RUSF versus wh	ey RUSF						
Stobaugh 2016	-	0.8292	1144	1086	22.6%	-1.10 [-2.73, 0.53]	-
Subtotal (95% CI)			1144	1086		-1.10 [-2.73, 0.53]	•
Heterogeneity: Not app	olicable						
Test for overall effect: 2							
5.8.3 RUSF versus CS	в						
LaGrone 2012	-2.3	0.7681	918	888	22.7%	-2.30 [-3.81, -0.79]	-
Medoua 2015	-6.99	0.3724	40	41	23.2%	-6.99 [-7.72, -6.26]	
Nikiema 2014		0.3505	694	675	23.2%	1.00 [0.31, 1.69]	+
Subtotal (95% CI)	·		1652	1604		-2.77 [-8.39, 2.86]	•
Heterogeneity: Tau ² = 3	24 39: Chi² = 244 4	1 df= 2	(P < 0 0	10001) [,] P	= 99%		•
Test for overall effect: 2		1, 31 - 2	ι, · Ο.υ		00,0		
Total (95% CI)			2814	2727	100.0%	-3.35 [-7.68, 0.97]	•
Heterogeneity: Tau ² = 3	20.85; Chi ^z = 251.5	5, df = 4	(P < 0.0	00001); I ^z	= 98%		
Test for overall effect: 2	Z = 1.52 (P = 0.13)						Favours RUSE Favours Others
Test for subaroup diffe	erences: Chi ² = 4.83	2. df = 2 (P = 0.0	<u>9), l² = 58</u>	.5%		

Figure 23: Forest plot for the impact of RUSF for MAM compared to other foods on Moderate Stunting

	RUSF	Othe	rs		Risk Ratio	Risk Ratio
Study or Subgroup	Events To	otal Events	Total	Weight	M-H, Random, 95% Cl	M-H, Random, 95% Cl
5.9.1 RUSF versus lo	cal/home ma	ade food				
Phuka 2009 Subtotal (95% CI)		86 62 86	84 <mark>84</mark>	100.0% 100.0%	0.85 [0.69, 1.05] 0.85 [0.69, 1.05]	•
Total events Heterogeneity: Not ap Test for overall effect:	•	62 : 0.13)				
Total (95% CI)		86	84	100.0%	0.85 [0.69, 1.05]	•
Total events Heterogeneity: Not ap Test for overall effect: Test for subgroup diff	Z = 1.53 (P =	· ·				0.01 0.1 1 10 100 Favours RUSF Favours others

Figure 24: Forest plot for the impact of RUSF for MAM compared to other foods on Moderate Wasting

		RUSF	Others		Risk Ratio	Risk Ratio
Study or Subgroup	log[Risk Ratio]	SE Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
5.10.1 RUSF versus lo	ocal/home made food					
Phuka 2009	0.1996 0.6	653 86	84	5.4%	1.22 [0.34, 4.39]	
Subtotal (95% CI)		86	84	5.4%	1.22 [0.34, 4.39]	
Heterogeneity: Not ap	plicable					
Test for overall effect: 2	Z = 0.31 (P = 0.76)					
5.10.2 RUSF versus C	SB					
Nikiema 2014	-0.0686 0.15	59 694	675	94.6%	0.93 [0.69, 1.27]	
Subtotal (95% CI)		694	675	94.6%	0.93 [0.69, 1.27]	•
Heterogeneity: Not ap	plicable					
Test for overall effect: 2	Z = 0.44 (P = 0.66)					
Total (95% CI)		780	759	100.0%	0.95 [0.70, 1.28]	•
Heterogeneity: Tau ² =	0.00; Chi ² = 0.16, df =	1 (P = 0.69	i); i² = 0%			
Test for overall effect: 2	Z = 0.36 (P = 0.72)					0.01 0.1 1 10 100 Favours RUSE Favours Others
Test for subgroup diffe	erences: Chi² = 0.16, d	lf = 1 (P = 0	1.69), ² = ()%		Favours ROOF Favours Others

Figure 25: Forest plot for the impact of RUSF for MAM compared to other foods on Severe Wasting

Study or Subgroup	log[Risk Ratio]		RUSF Total	Others Total	Weight	Risk Ratio IV, Random, 95% Cl	Risk Ratio IV, Random, 95% CI
5.11.1 RUSF versus	CSB						
LaGrone 2012	-0.4472	0.2009	918	888	41.8%	0.64 [0.43, 0.95]	
Medoua 2015	-0.6685	1.2044	40	41	1.2%	0.51 [0.05, 5.43]	
Nikiema 2014 Subtotal (95% CI)	-0.1894	0.1719	694 1652		57.1% 100.0%	0.83 [0.59, 1.16] 0.74 [0.57, 0.95]	•
Heterogeneity: Tau ² = Test for overall effect:		· ·	9 = 0.59); I² = 0%			
Total (95% CI)			1652	1604	100.0%	0.74 [0.57, 0.95]	•
Heterogeneity: Tau ² =	= 0.00; Chi ² = 1.04,	df = 2 (F	= 0.59); I² = 0%			0.01 0.1 1 10 100
Test for overall effect:	Z = 2.33 (P = 0.02	2)					0.01 0.1 1 10 100 Favours RUSE Favours Others
Test for subaroup dif	ferences: Not appl	licable					

Figure 26: Forest plot for the impact of RUSF for MAM compared to other foods on Moderate Underweight

	RUSF	Othe	rs		Risk Ratio	Risk Ratio
Study or Subgroup	Events Tot	al Events	Total	Weight	M-H, Random, 95% Cl	M-H, Random, 95% Cl
5.12.1 RUSF versus l	ocal/home ma	de food				
Phuka 2009 Subtotal (95% CI)		6 68 6	84 84	100.0% 100.0%	1.06 [0.93, 1.22] 1.06 [0.93, 1.22]	•
Total events Heterogeneity: Not ap Test for overall effect:	•	68).37)				
Total (95% CI)	8	6	84	100.0%	1.06 [0.93, 1.22]	•
Total events Heterogeneity: Not ap Test for overall effect: Test for subgroup diff	Z = 0.89 (P = I	· ·				0.01 0.1 1 10 100 Favours RUSF Favours others

Figure 27: Forest plot for the impact of RUSF for MAM compared to other foods on Adverse Events

	RUS	F	Othe	re		Risk Ratio	Risk Ratio
Study or Subgroup					Weight	M-H, Random, 95% Cl	M-H, Random, 95% Cl
5.13.1 Fever						, , , ,	, , ,
Phuka 2009	54	1063	36	1020	8.1%	1.44 [0.95, 2.18]	
Subtotal (95% CI)		1063		1020	8.1%	1.44 [0.95, 2.18]	
Total events	54		36				
Heterogeneity: Not ap	•						
Test for overall effect:	Z=1.73 (P = 0.0	8)				
C 42 2 Diserbase							
5.13.2 Diarrhoea					~~~~		
LaGrone 2012	309	918	271	888	28.8% 12.7%	1.10 [0.96, 1.26]	
Phuka 2009 Thakwalakwa 2010	79 9	1063 66	11	1020 67	2.4%	1.02 [0.75, 1.39] 0.83 [0.37, 1.87]	
Subtotal (95% CI)	9	2047		1975	44.0%	1.08 [0.96, 1.22]	•
Total events	397	2011	356		111070	nee [elect, hee]	•
Heterogeneity: Tau ² =		² = 0.61		P = 0.7	4) [,] I ² = 0%		
Test for overall effect:				- 0.1	-7,1 - 0 %	,	
	,		-,				
5.13.3 ALRI							
Phuka 2009	95	1063	93	1020	14.8%	0.98 [0.75, 1.29]	
Subtotal (95% CI)		1063		1020	14.8%	0.98 [0.75, 1.29]	\bullet
Total events	95		93				
Heterogeneity: Not ap	•						
Test for overall effect:	Z = 0.14 (P = 0.8	9)				
5.13.4 Vomiting							
LaGrone 2012	104	010	00	000	10.00	4 35 14 04 4 741	
Thakwalakwa 2010	124 6	918 66	89 2	888 67	16.0% 0.7%	1.35 [1.04, 1.74]	
Subtotal (95% CI)	0	984	2	955	16.7%	3.05 [0.64, 14.55] 1.39 [1.03, 1.86]	
Total events	130		91				
Heterogeneity: Tau ² =		r = 1.02		P = 0.3	1): I ² = 2%	1	
Test for overall effect:	•				-717		
	,		-,				
5.13.5 Other illnesses	s						
Phuka 2009	63	1063	78	1020	11.9%	0.78 [0.56, 1.07]	
Subtotal (95% CI)		1063		1020	11.9%	0.78 [0.56, 1.07]	
Total events	63		78				
Heterogeneity: Not ap	•						
Test for overall effect:	Z = 1.56 (P = 0.10	2)				
5.13.6 Any adverse e	vente						
Thakwalakwa 2010	15	66	13	67	3.6%	1.17 [0.61, 2.27]	
Subtotal (95% CI)	15	66	13	67	3.6%	1.17 [0.61, 2.27]	
Total events	15		13				
Heterogeneity: Not ap			. 5				
Test for overall effect:	•	P = 0.6	4)				
	Ì						
5.13.7 Serious advers	se events	;					
Thakwalakwa 2010	6	66	3	67	0.9%	2.03 [0.53, 7.78]	
Subtotal (95% CI)		66		67	0.9%	2.03 [0.53, 7.78]	
Total events	6		3				
Heterogeneity: Not ap	•	D 0.00					
Test for overall effect:	Z = 1.03 (P = 0.3	U)				
Total (95% CI)		6352		6124	100.0%	1.09 [0.96, 1.25]	A
Total events	760	OUDE	670	V124	1001070	100 [0100] 1120]	•
Heterogeneity: Tau ² =		² =124		$(\mathbf{P} = 0)$	19): I ř = 2:	8%	
Test for overall effect:	•		•	v - 0.	, . = 2		0.5 0.7 1 1.5 2
Test for subgroup diffe				= <u>6 (</u> P =	: 0.12), I ² :	= 40.8%	Favours RUSF Favours others

Figure 28: Forest plot for the impact of RUSF for MAM compared to other foods on Hospitalisation

	RUS	F	Othe	rs -		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% Cl	M-H, Random, 95% Cl
Ackatia-Armah 2015	0	335	1	342	5.8%	0.34 [0.01, 8.32]	
Karakochuk 2012	6	375	8	750	32.2%	1.50 [0.52, 4.29]	
LaGrone 2012	1	918	0	888	5.8%	2.90 [0.12, 71.14]	
Medoua 2015	0	40	0	41		Not estimable	
Nackers 2010	20	215	45	236	56.2%	0.49 [0.30, 0.80]	
Total (95% CI)		1883		2257	100.0%	0.76 [0.34, 1.70]	-
Total events	27		54				
Heterogeneity: Tau ² = (0.24; Chi ≊	= 4.65	, df = 3 (F	P = 0.20	l); l² = 359	6	
Test for overall effect: Z	•						0.01 0.1 1 10 100 Favours RUSF Favours others

Comparison 6: Prophylactic use of antibiotics in children with uncomplicated SAM compared to no antibiotics

Figure 29: Forest plot for the impact of prophylactic antibiotic compared to no antibiotic on Weight Gain

Study or Subgroup	Mean Difference	SE	Antibiotic Total	No antibiotic Total	Weight	Mean Difference IV, Random, 95% Cl	Mean Difference IV, Random, 95% Cl
Isanaka 2016 Manary 2012 (1)	0.9 0.551	0.1634 0.187	1199 1780	1200 873	53.4% 46.6%	0.90 [0.58, 1.22] 0.55 [0.18, 0.92]	+
Total (95% CI) Heterogeneity: Tau ² = Test for overall effect:		•	2979 0.16); I ² = 4		100.0%	0.74 [0.40, 1.08]	-4 -2 0 2 4 Favours no antibiotic Favours antibiotic
Footnotes (1) Cefdinir							

Figure 30: Forest plot for the impact of prophylactic antibiotic compared to no antibiotic on MUAC Gain

			Antibiotic	No antibiotic		Mean Difference	Mean Difference
Study or Subgroup	Mean Difference	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% Cl
Isanaka 2016	0.06	0.0112	1199	1200	70.0%	0.06 [0.04, 0.08]	
Manary 2012	0.055	0.0171	1766	866	30.0%	0.06 [0.02, 0.09]	
Total (95% CI)			2965	2066	100.0%	0.06 [0.04, 0.08]	•
Heterogeneity: Tau ² =	= 0.00; Chi ² = 0.06, d	f=1 (P=	0.81); i² = 0)%		-	
Test for overall effect	Z = 6.24 (P < 0.000	01)					Favours no antibiotic Favours antibiotic

Figure 31: Forest plot for the impact of prophylactic antibiotic compared to no antibiotic on Length Gain

			Antibiotic	No antibiotic		Mean Difference	Mean Difference
Study or Subgroup	Mean Difference	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% Cl
Isanaka 2016	0	0.0063	1199	1200	66.2%	0.00 [-0.01, 0.01]	· · · · · · · · · · · · · · · · · · ·
Manary 2012	0.03	0.0182	1780	873	33.8%	0.03 [-0.01, 0.07]	+
Total (95% CI)			2979	2073	100.0%	0.01 [-0.02, 0.04]	+
Heterogeneity: Tau ² = Test for overall effect:		-	-0.2 -0.1 0 0.1 0.2 Favours no antibiotic Favours antibiotic				

Figure 32: Forest plot for the impact of prophylactic antibiotic compared to no antibiotic on Time to Recovery

			Antibiotic	No antibiotic		Mean Difference		Mea	n Differei	nce	
Study or Subgroup	Mean Difference	SE	Total	Total	Weight	IV, Random, 95% CI		IV, Ra	ndom, 95	5% CI	
Manary 2012	-0.26	0.8166	1659	783	100.0%	-0.26 [-1.86, 1.34]		-			
Total (95% CI)			1659	783	100.0%	-0.26 [-1.86, 1.34]		-			
Heterogeneity: Not ap Test for overall effect:	•						-10	-5 Favours antibi	otic Favo	5 ours no antibio	10 tic

Figure 33: Forest plot for the impact of prophylactic antibiotic compared to no antibiotic on Adverse Events

			Antibiotics N	lo antibiotics		Risk Ratio	Risk Ratio
Study or Subgroup	log[Risk Ratio]	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
6.7.1 Diarrhoea							
Berkley 2016	0.116	0.0434	887	891	17.7%	1.12 [1.03, 1.22]	-
Isanaka 2016	0.1276	0.1606	1151	1140	5.6%	1.14 [0.83, 1.56]	
Manary 2012	-0.1675	0.0527	1767	871	16.3%	0.85 [0.76, 0.94]	-
Subtotal (95% CI)			3805	2902	39.6%	1.01 [0.81, 1.27]	•
Heterogeneity: Tau ² =	0.03; Chi ² = 17.84	4, df = 2 (P = 0.0001); P	²= 89%			
Test for overall effect:	Z = 0.09 (P = 0.92)					
6.7.2 Respiratory syn							
Berkley 2016	-0.0701		887	891	19.6%	0.93 [0.88, 0.99]	-
Isanaka 2016	-0.1527	0.137	1151	1140	7.0%	0.86 [0.66, 1.12]	
Manary 2012	-0.1603	0.0594	1763	871	15.4%	0.85 [0.76, 0.96]	
Subtotal (95% CI)			3801	2902	41.9%	0.91 [0.86, 0.96]	•
Heterogeneity: Tau ² =	0.00; Chi ² = 2.11,	df = 2 (P	= 0.35); I ^z = 5	%			
Test for overall effect:	Z = 3.34 (P = 0.00	08)					
6.7.3 Fever							
Isanaka 2016	0.2316		1151	1140	2.2%	1.26 [0.73, 2.19]	
Manary 2012	-0.0536	0.0529	1765	870	16.3%	0.95 [0.85, 1.05]	
Subtotal (95% CI)			2916	2010	18.5%	0.96 [0.86, 1.06]	•
Heterogeneity: Tau ² =			= 0.32); l ² = 0	%			
Test for overall effect:	Z = 0.84 (P = 0.40)					
			40522	7044	400.00	0.05 10.07 4.021	
Total (95% CI)			10522		100.0%	0.95 [0.87, 1.03]	🖣
Heterogeneity: Tau ² =			P = 0.0004); P	°= 73%			0.5 0.7 1 1.5 2
Test for overall effect:	,	*					Favours antibiotic Favours no antibiotic
Test for subgroup diff	erences: Chi ² = 1.	26. df = 2	? (P = 0.53), I ²	= 0%			

Figure 34: Forest plot for the impact of prophylactic antibiotic compared to no antibiotic on Hospitalisation

	ExperimentalAn	tibiotic	No antibioticC	ontrol		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% Cl	M-H, Random, 95% Cl
Berkley 2016	296	887	320	891	48.3%	0.93 [0.82, 1.06]	•
Isanaka 2016	316	1199	368	1200	48.7%	0.86 [0.76, 0.98]	
Manary 2012	41	1847	22	920	3.0%	0.93 [0.56, 1.55]	
Total (95% CI)		3933		3011	100.0%	0.89 [0.82, 0.98]	*
Total events	653		710				
Heterogeneity: Tau ² = Test for overall effect:			= 0.69); I ² = 0%				0.01 0.1 1 10 100 Favours antibiotic Favours no antibiotic

Comparison 7: Vitamin A supplementation in the management of SAM and MAM with various doses and frequency of administration

Figure 35: Forest plot for the impact of vitamin A supplementation on Weight Change

	High dose			Low dose				Mean Difference	Mean Difference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% Cl		
Sattar 2012	0.74	0.43	103	0.69	0.51	104	100.0%	0.05 [-0.08, 0.18]			
Total (95% CI)			103			104	100.0%	0.05 [-0.08, 0.18]	•		
Heterogeneity: Not ap Test for overall effect:	•).45)					-	-0.5 -0.25 0 0.25 0.5 Favours low dose Favours high dose		

Figure 36: Forest plot for the impact of vitamin A supplementation on Mortality

	High do	ose	Low dose			Risk Ratio		Risk Ratio	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% Cl		M-H, Random, 95% Cl	
Sattar 2012	3	103	0	104	100.0%	7.07 [0.37, 135.13]			>
Total (95% CI)		103		104	100.0%	7.07 [0.37, 135.13]			
Total events	3		0						
Heterogeneity: Not ap Test for overall effect:		(P = 0.1	9)				0.01	0.1 1 10 Favours high dose Favours low dose	100

Figure 37: Forest plot for the impact of vitamin A supplementation on Height Change

	High dose Low dose			Mean Difference	Mean Difference				
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Sattar 2012	0.2	0.3	103	0.1	0.3	104	100.0%	0.10 [0.02, 0.18]	• • ••
Total (95% CI)			103			104	100.0%	0.10 [0.02, 0.18]	
Heterogeneity: Not ap Test for overall effect:	•		0.02)					_	-0.5 -0.25 0 0.25 0.5 Favours low dose Favours high dose

Figure 38: Forest plot for the impact of vitamin A supplementation on MUAC Change

	High dose Low dose				е		Mean Difference	Mean Difference	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Sattar 2012	6	4.2	103	5.2	5	104	100.0%	0.80 [-0.46, 2.06]	
Total (95% CI)			103			104	100.0%	0.80 [-0.46, 2.06]	· · · · · · · · · · · · · · · · · · ·
Heterogeneity: Not ap Test for overall effect:	•		0.21)						-10 -5 0 5 10 Favours low dose Favours high dose

Figure 39: Forest plot for the impact of vitamin A supplementation on Adverse Events

	Experim	ental	Contr	ol		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% Cl	M-H, Random, 95% Cl
7.5.1 Fever							
Donnen 1998	6	61	4	61	82.4%	1.50 [0.45, 5.05]	
Subtotal (95% CI)		61		61	82.4%	1.50 [0.45, 5.05]	
Total events	6		4				
Heterogeneity: Not ap	plicable						
Test for overall effect:	Z = 0.65 (P	P = 0.51))				
7.5.2 ALRI							
Donnen 1998	1	10	1	10	17.6%	1.00 [0.07, 13.87]	
Subtotal (95% CI)		10		10	17.6%	1.00 [0.07, 13.87]	
Total events	1		1				
Heterogeneity: Not ap	•						
Test for overall effect:	Z = 0.00 (F	P = 1.00)				
Total (95% CI)		71		71	100.0%	1.40 [0.46, 4.21]	-
Total events	7		5				
Heterogeneity: Tau ² =	0.00; Chi ^z	= 0.08,	df = 1 (P	= 0.78)	; I² = 0%		
Test for overall effect:	Z = 0.59 (F	P = 0.55)				Favours intervention Favours control
Test for subgroup diff	erences: C	>hi² = 0.I	08, df = 1	(P = 0.	78), i² = 0	%	

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