

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

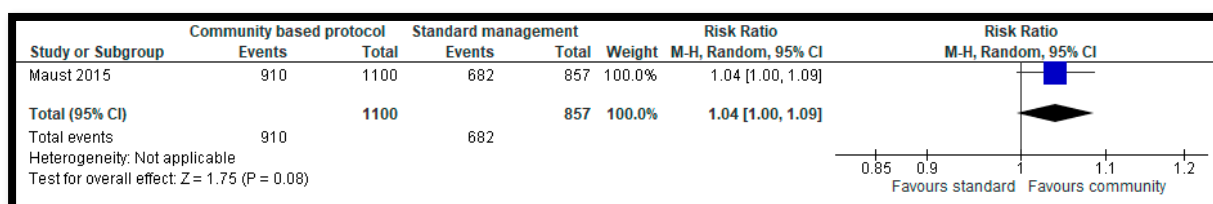


Figure 2: Forest plot for the impact of community based strategies compared to no community based strategies on Weight Gain

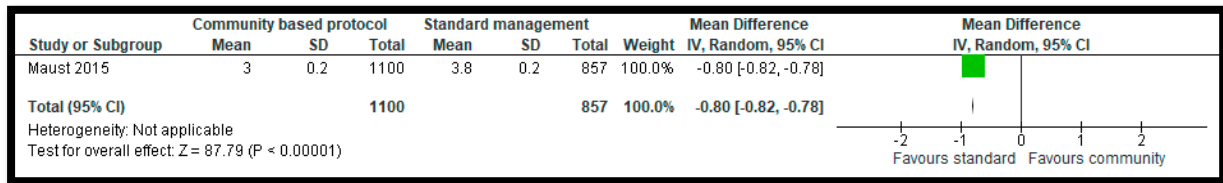


Figure 3: Forest plot for the impact of community based strategies compared to no community based strategies on Mortality

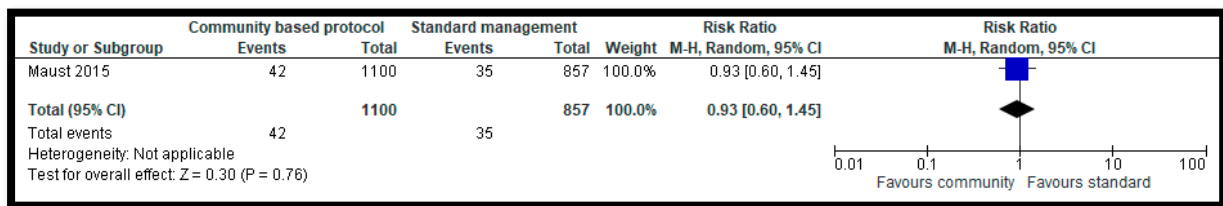


Figure 4: Forest plot for the impact of community based strategies compared to no community based strategies on Length Gain

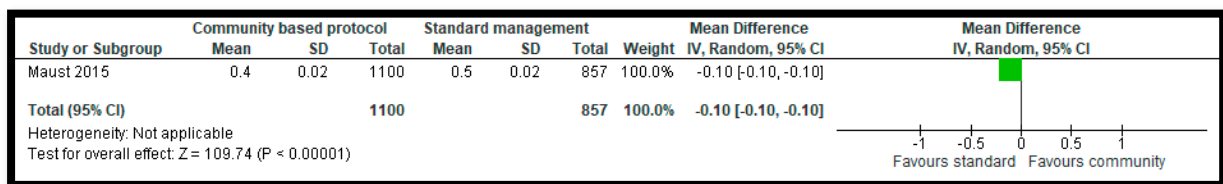


Figure 5: Forest plot for the impact of community based strategies compared to no community based strategies on MUAC Gain

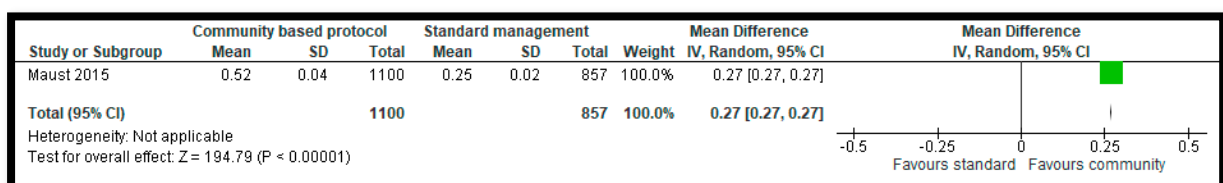
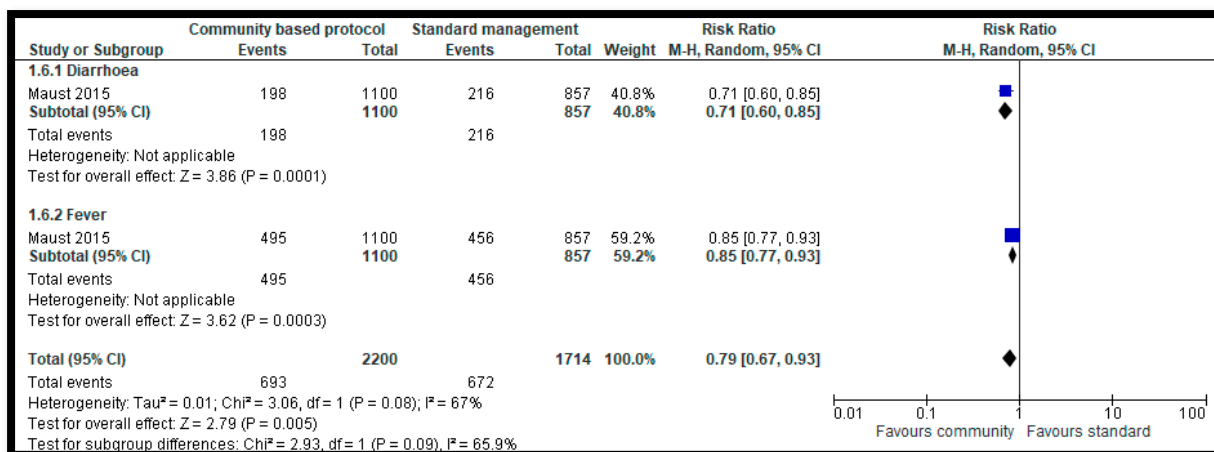


Figure 6: Forest plot for the impact of community based strategies compared to no community based strategies on Adverse Events



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

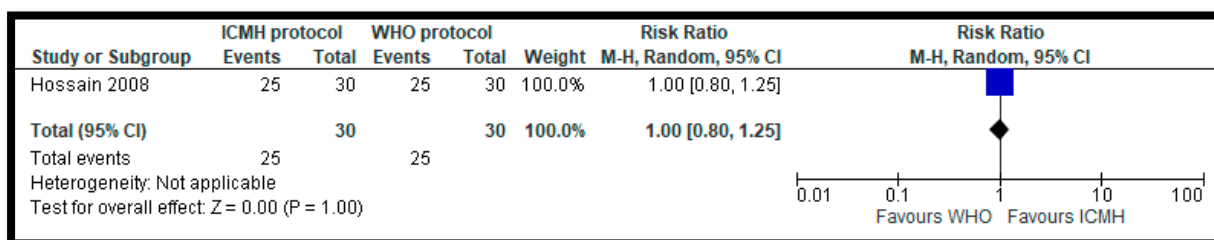
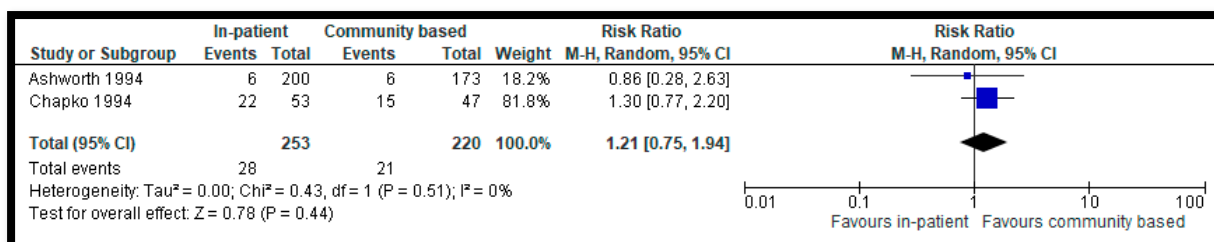


Figure 8: Forest plot for the impact of facility based strategies according to WHO protocol compared to other protocols on Mortality



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

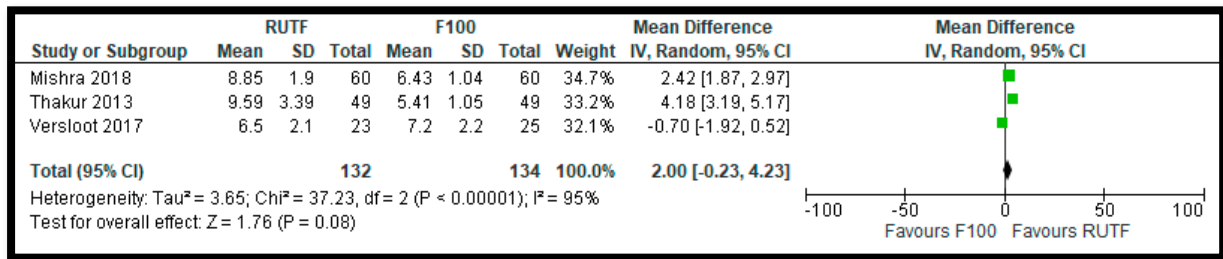
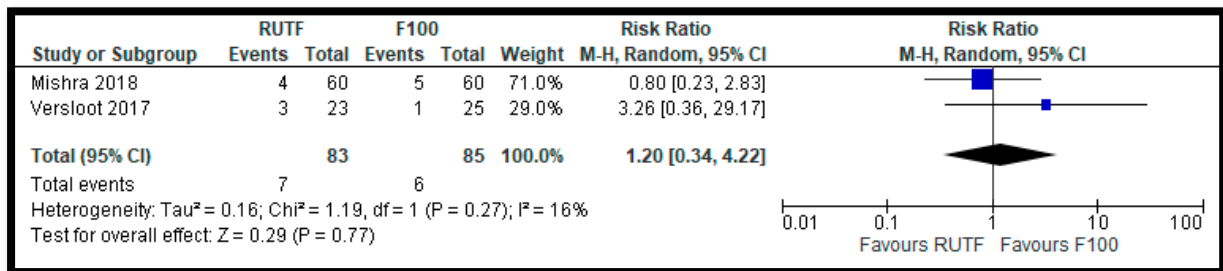


Figure 10: Forest plot for the impact of facility based treatment with RUTF compared to F100 on Mortality



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

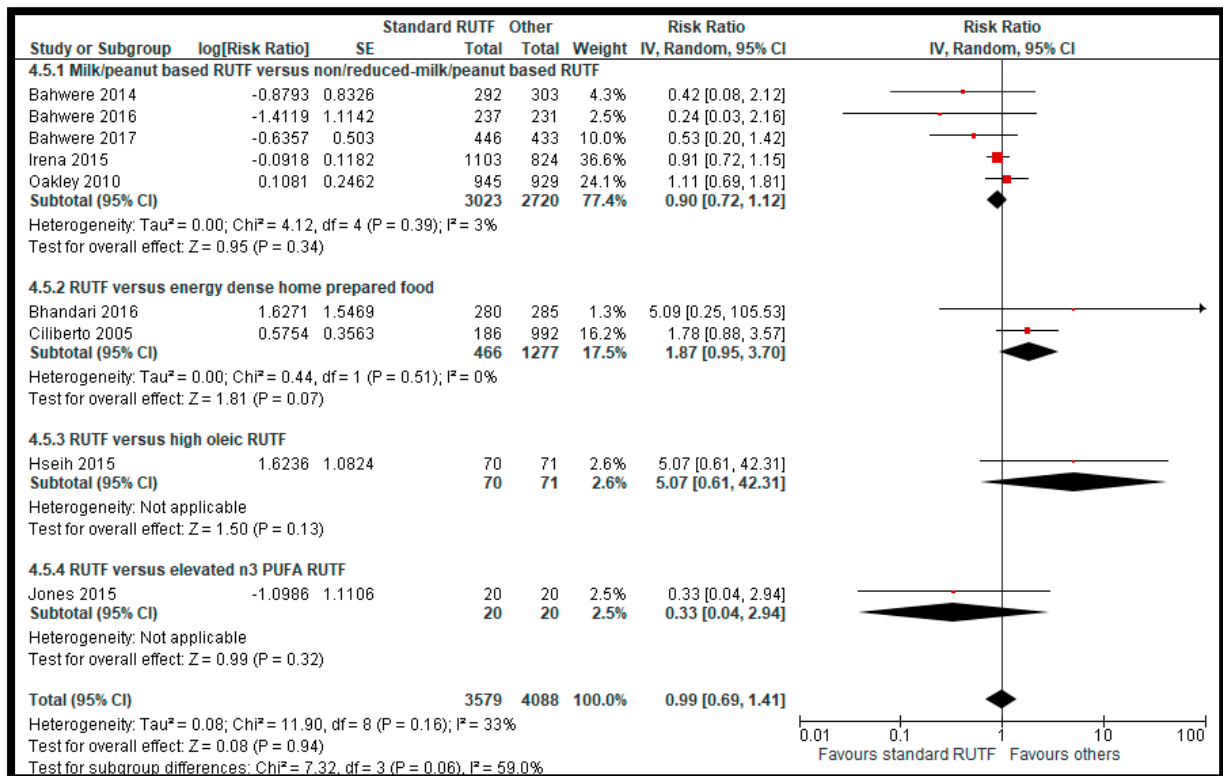


Figure 12: Forest plot for the impact of RUTF compared to other foods on Height/Length Gain

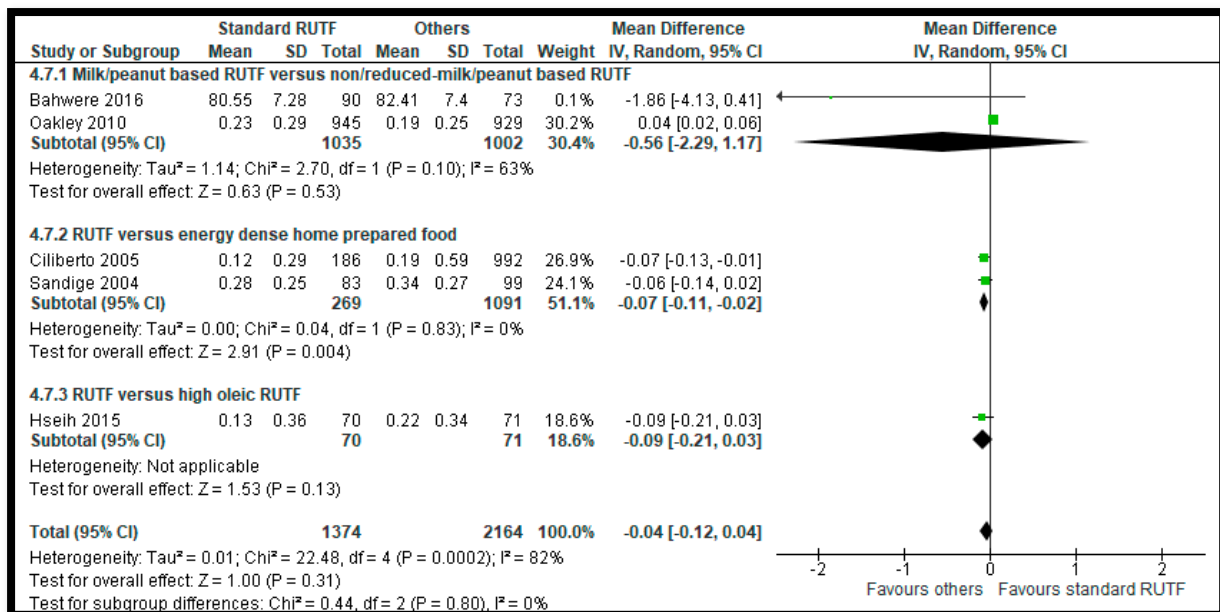


Figure 13: Forest plot for the impact of RUTF compared to other foods on MUAC Gain

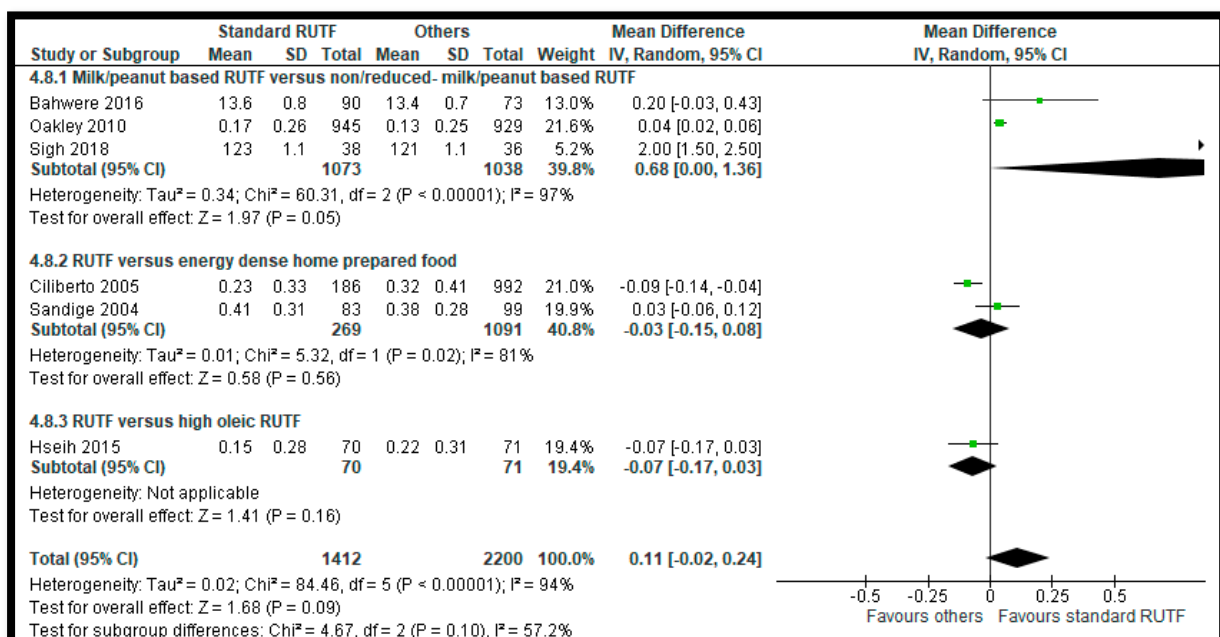


Figure 14: Forest plot for the impact of RUTF compared to other foods on Time to Recovery

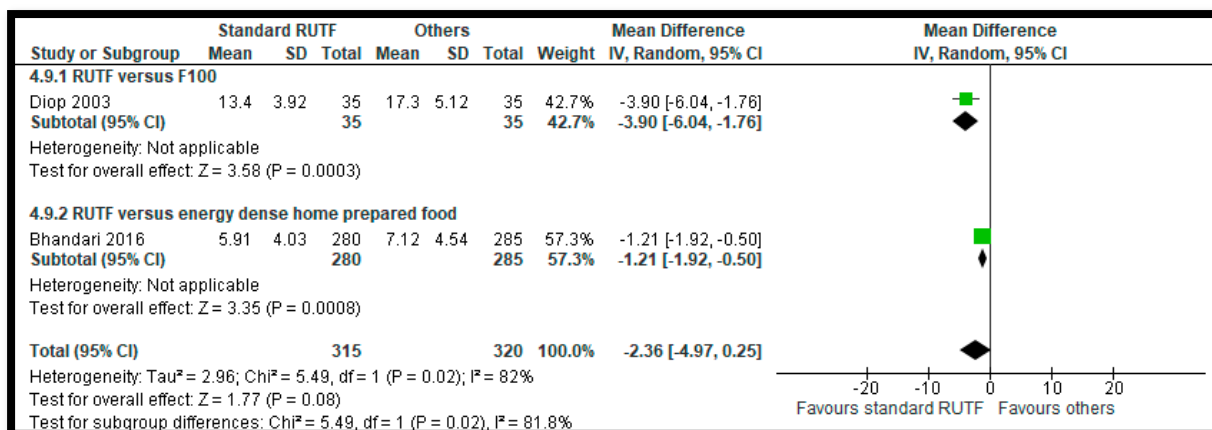


Figure 15: Forest plot for the impact of RUTF compared to other foods on Adverse Events

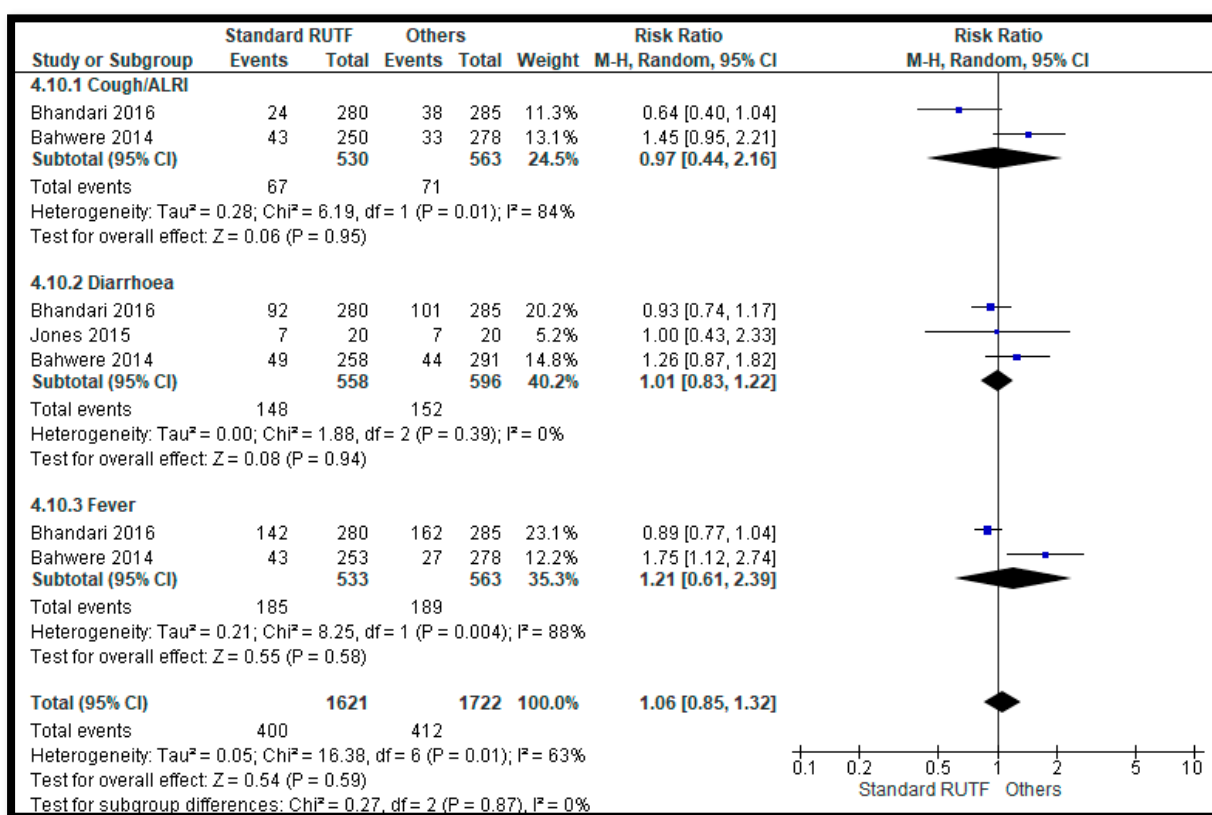
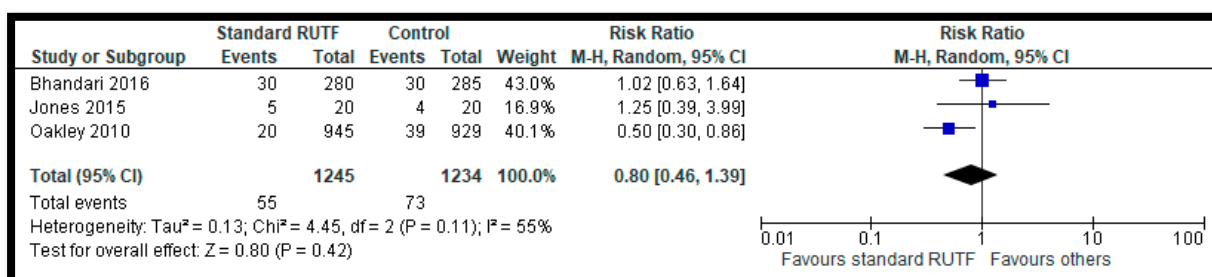


Figure 16: Forest plot for the impact of RUTF compared to other foods on Hospitalisation



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

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

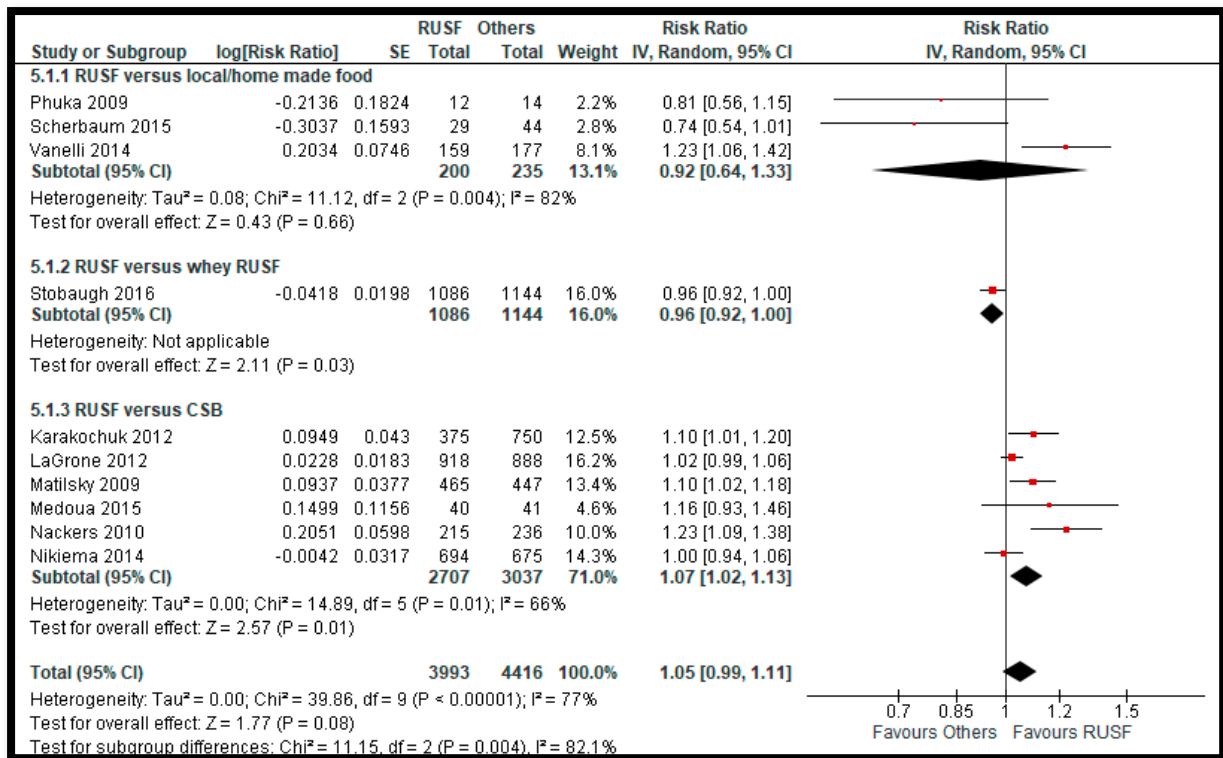


Figure 18: Forest plot for the impact of RUSF for MAM compared to other foods on Weight Gain

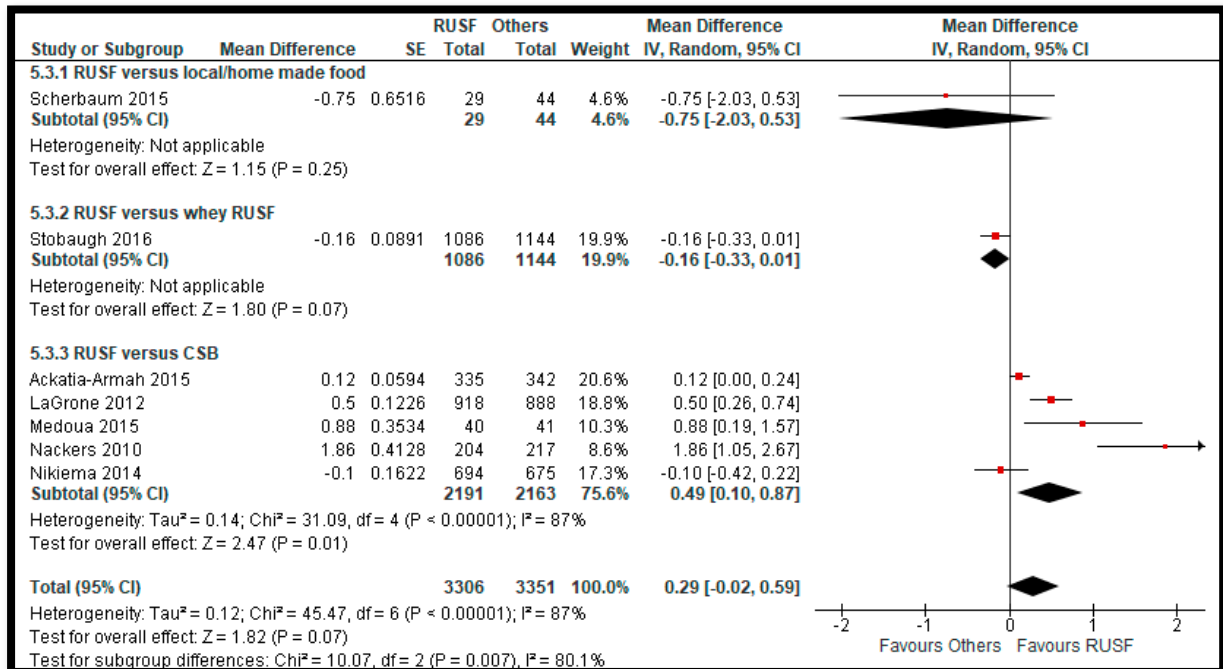


Figure 19: Forest plot for the impact of RUSF for MAM compared to other foods on Mortality

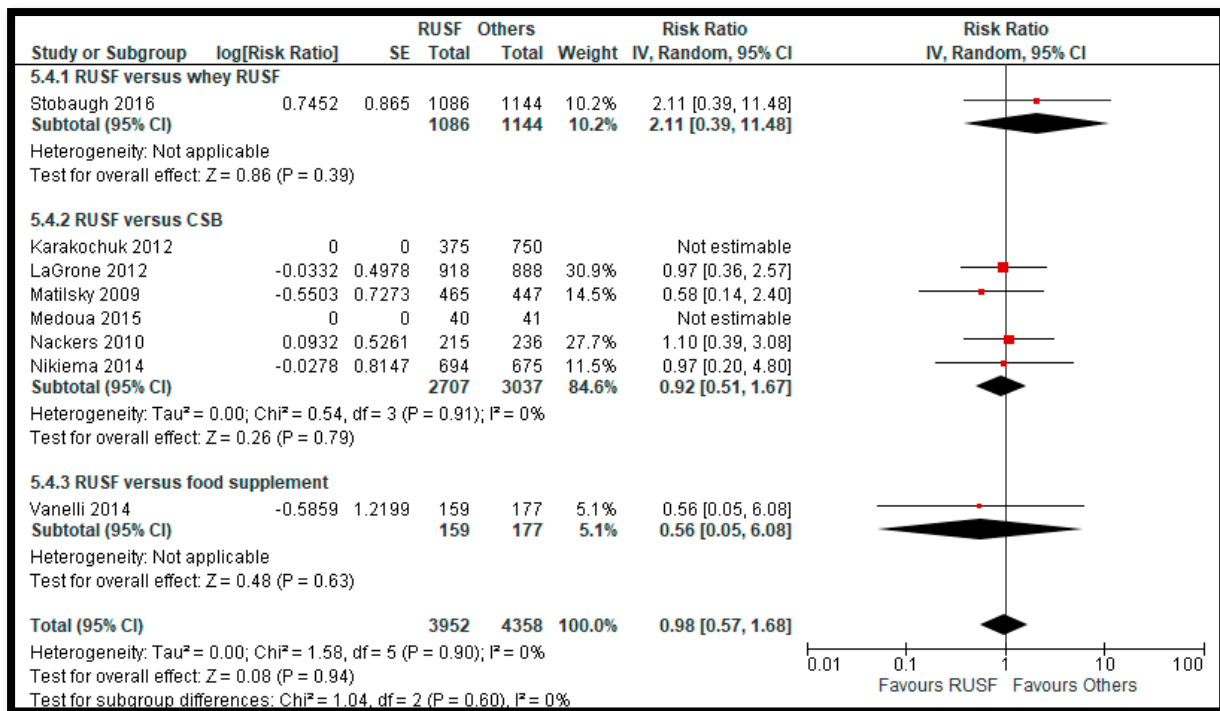


Figure 20: Forest plot for the impact of RUSF for MAM compared to other foods on Length/Height Gain

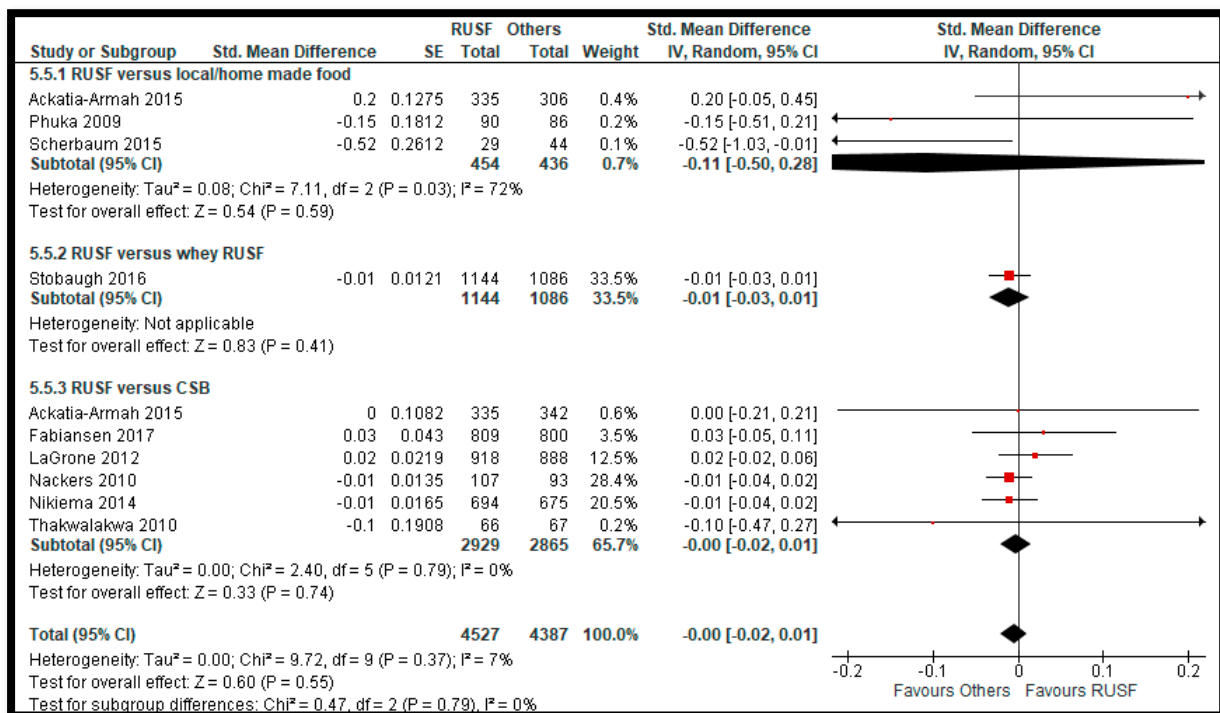


Figure 21: Forest plot for the impact of RUSF for MAM compared to other foods on MUAC

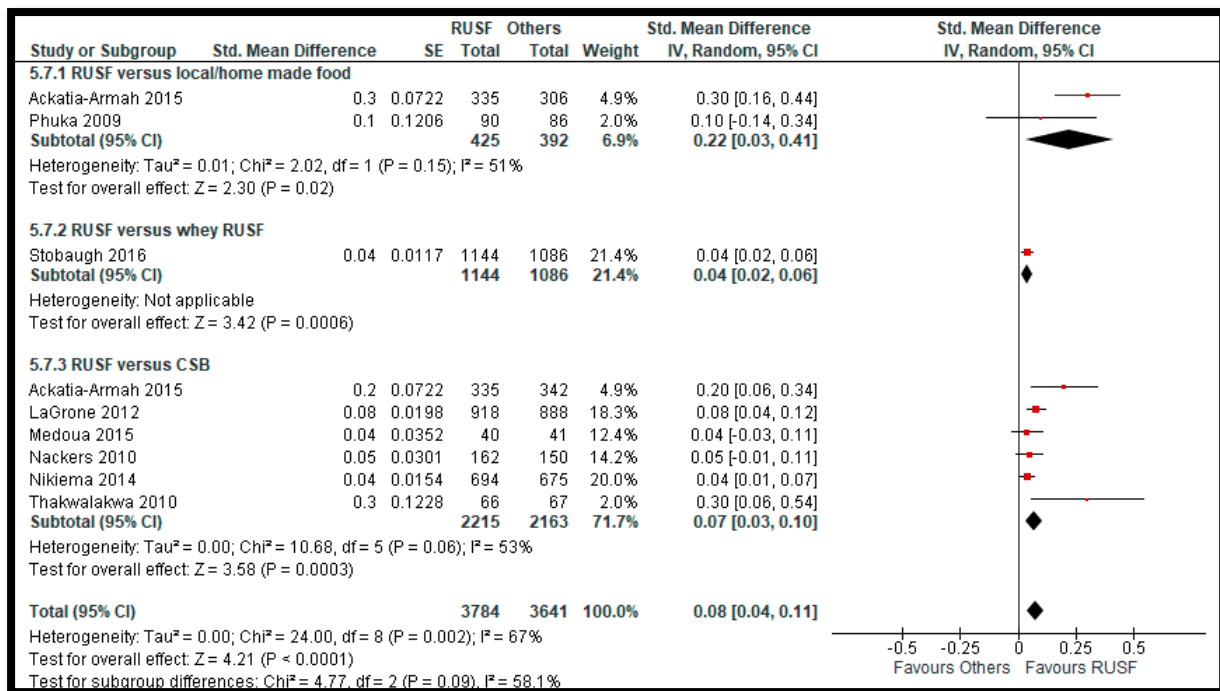


Figure 22: Forest plot for the impact of RUSF for MAM compared to other foods on Time to Recovery

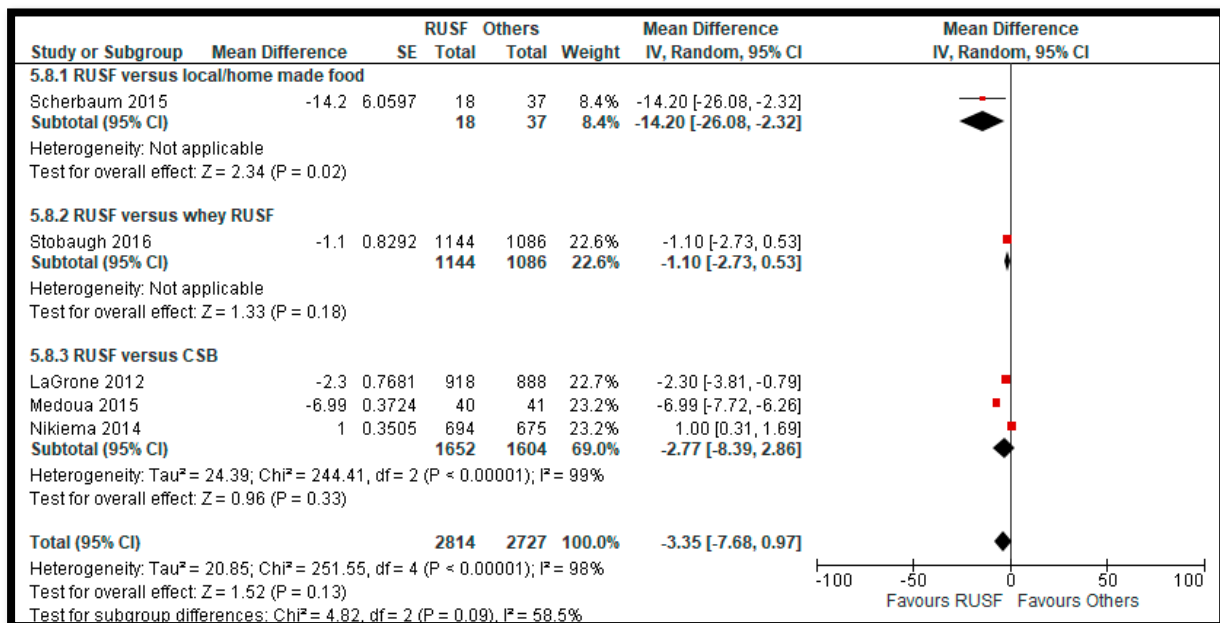


Figure 23: Forest plot for the impact of RUSF for MAM compared to other foods on Moderate Stunting

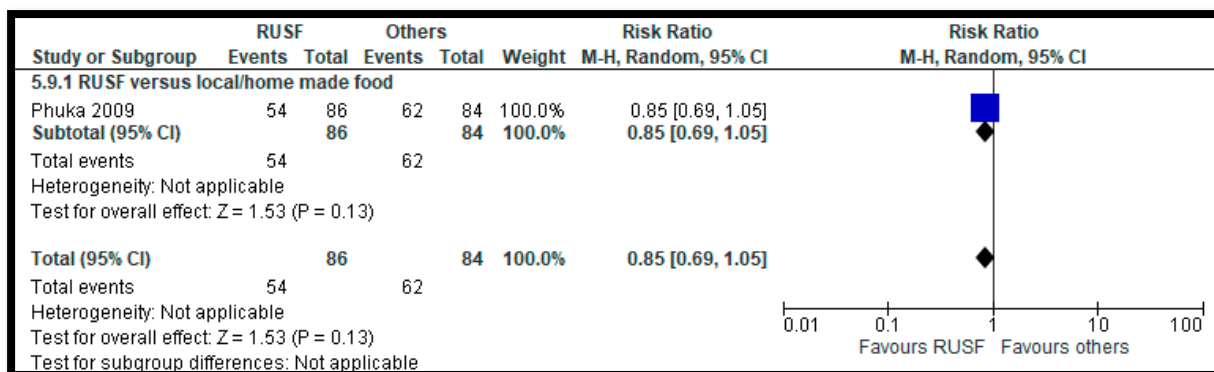


Figure 24: Forest plot for the impact of RUSF for MAM compared to other foods on Moderate Wasting

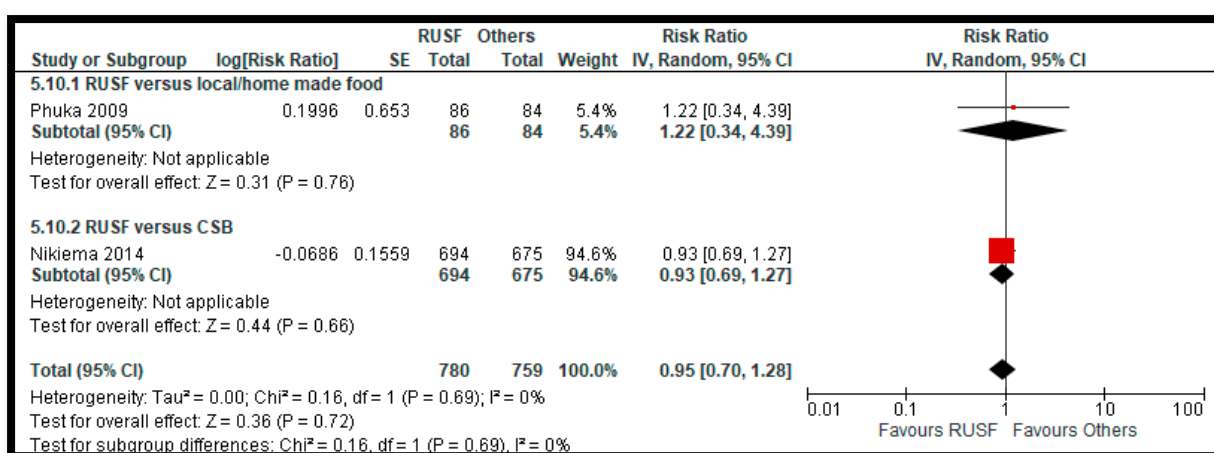


Figure 25: Forest plot for the impact of RUSF for MAM compared to other foods on Severe Wasting

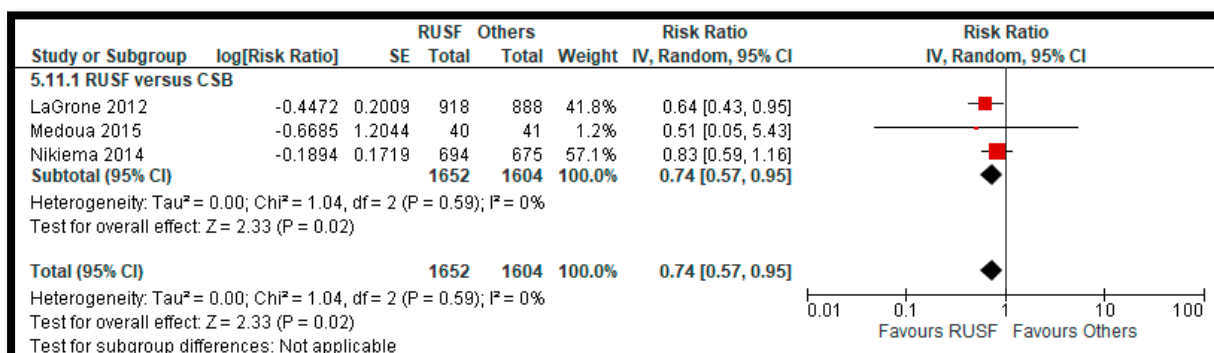


Figure 26: Forest plot for the impact of RUSF for MAM compared to other foods on Moderate Underweight

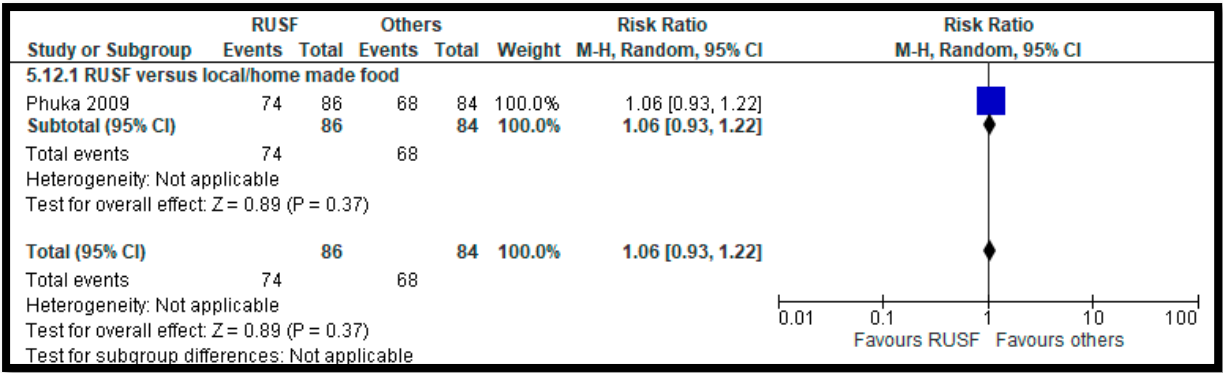


Figure 27: Forest plot for the impact of RUSF for MAM compared to other foods on Adverse Events

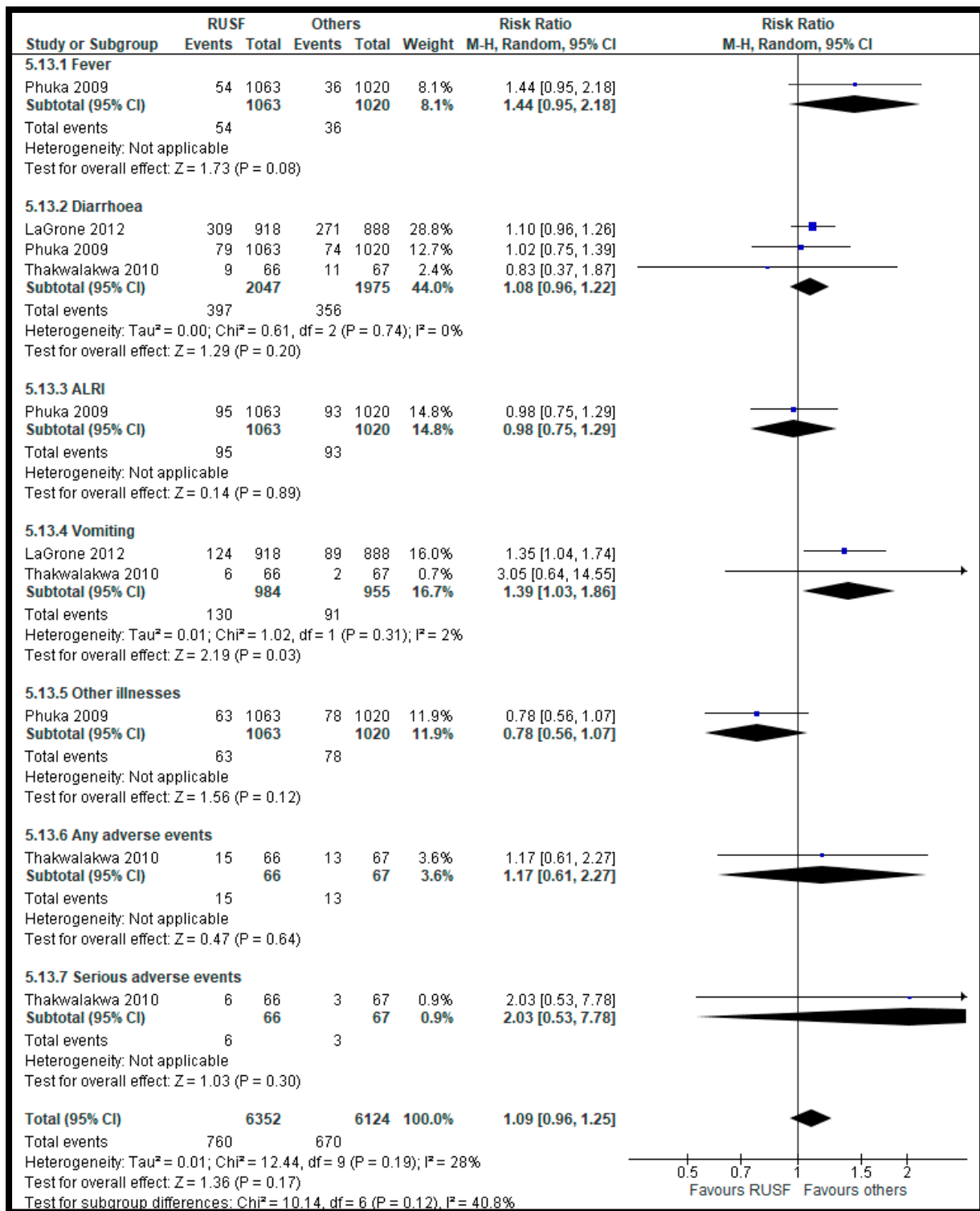
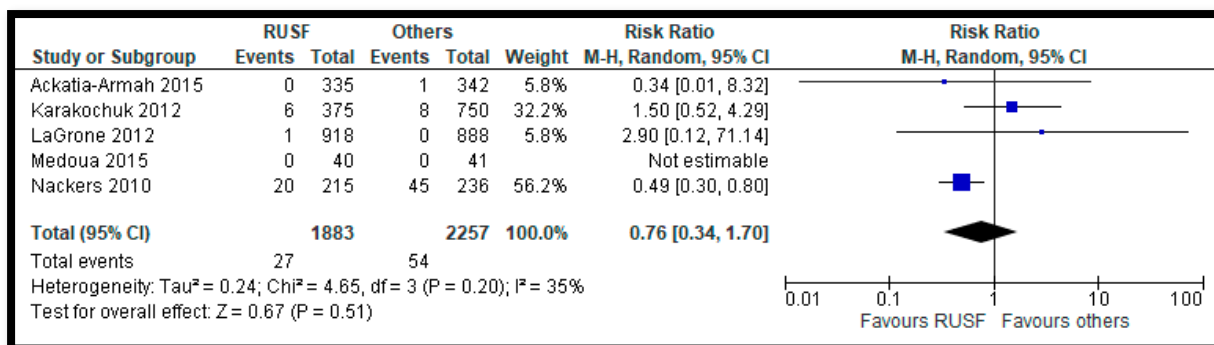


Figure 28: Forest plot for the impact of RUSF for MAM compared to other foods on Hospitalisation



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

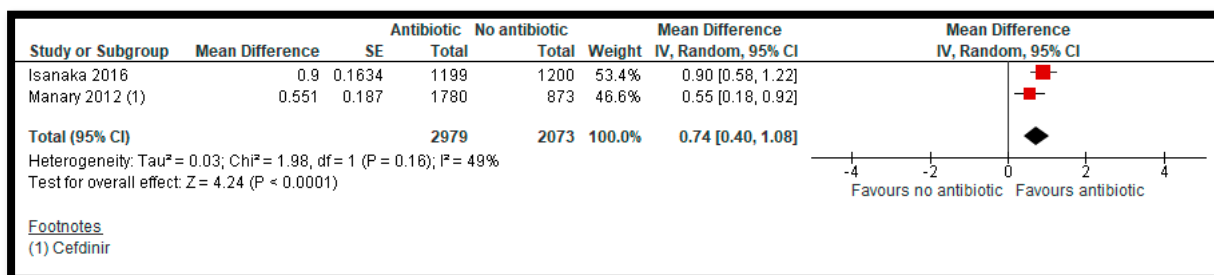


Figure 30: Forest plot for the impact of prophylactic antibiotic compared to no antibiotic on MUAC Gain

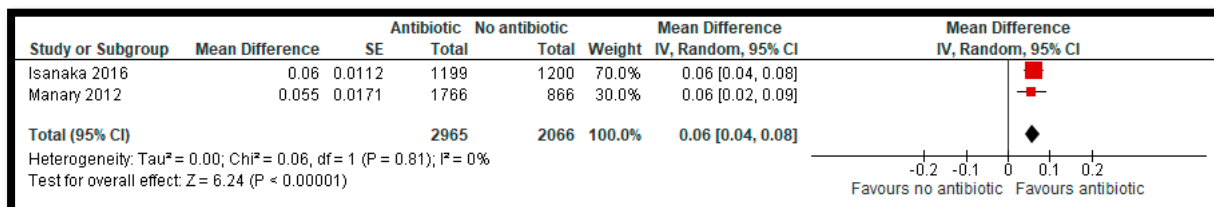


Figure 31: Forest plot for the impact of prophylactic antibiotic compared to no antibiotic on Length Gain

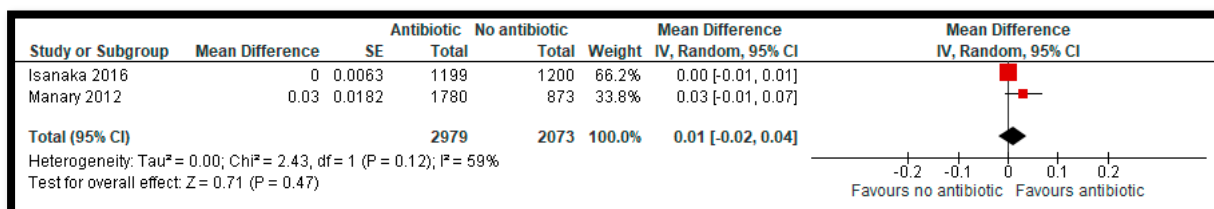


Figure 32: Forest plot for the impact of prophylactic antibiotic compared to no antibiotic on Time to Recovery

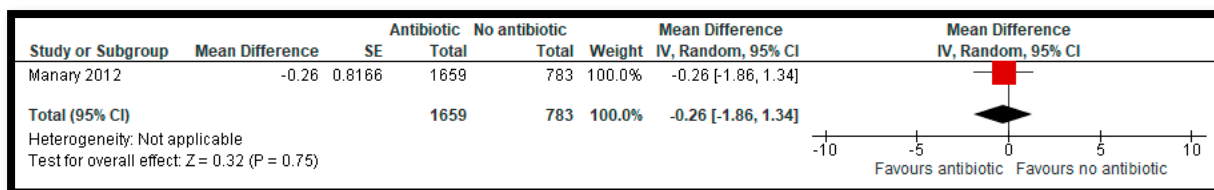


Figure 33: Forest plot for the impact of prophylactic antibiotic compared to no antibiotic on Adverse Events

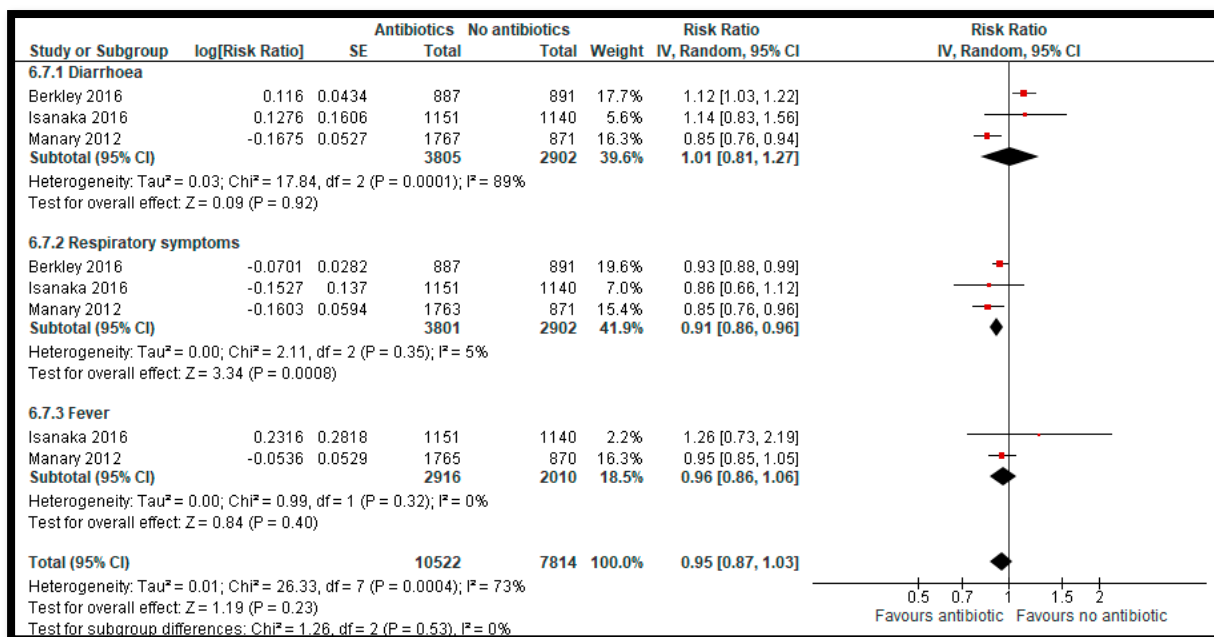
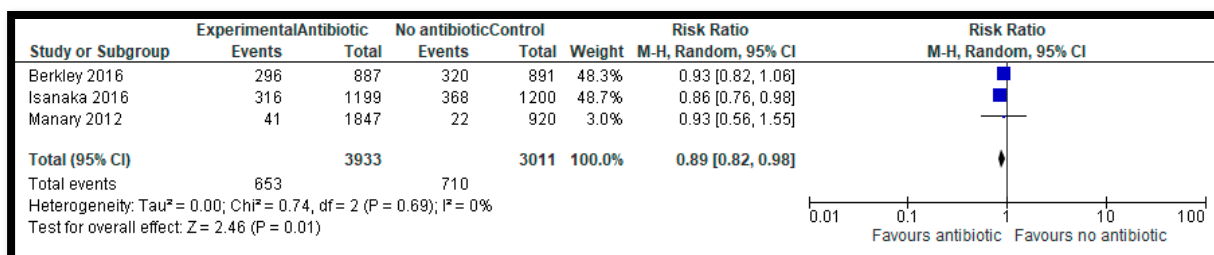


Figure 34: Forest plot for the impact of prophylactic antibiotic compared to no antibiotic on Hospitalisation



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

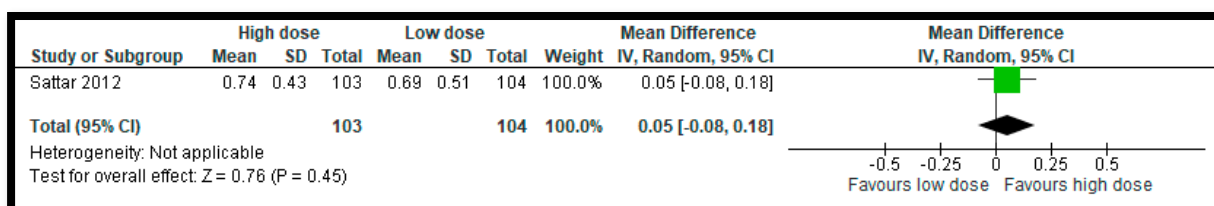


Figure 36: Forest plot for the impact of vitamin A supplementation on Mortality

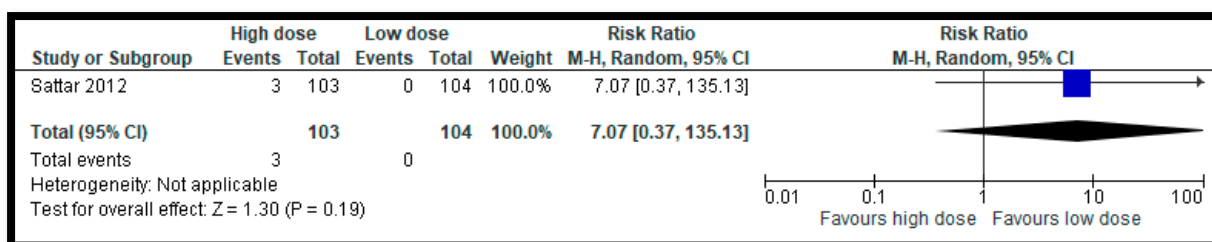


Figure 37: Forest plot for the impact of vitamin A supplementation on Height Change

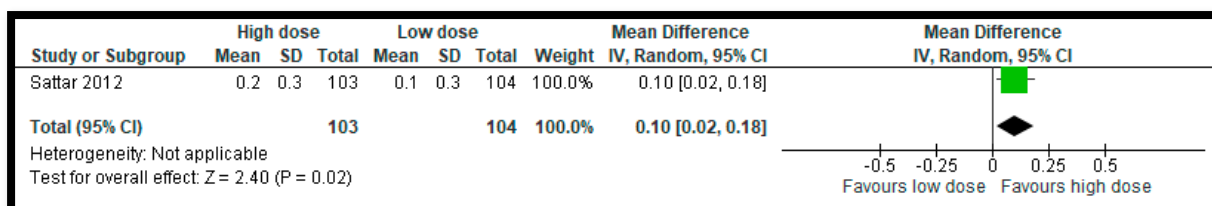


Figure 38: Forest plot for the impact of vitamin A supplementation on MUAC Change

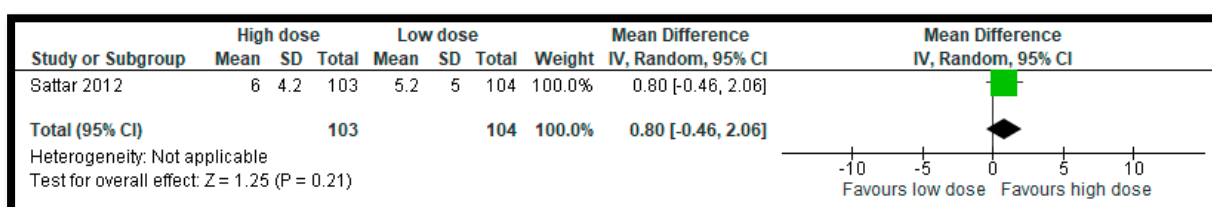
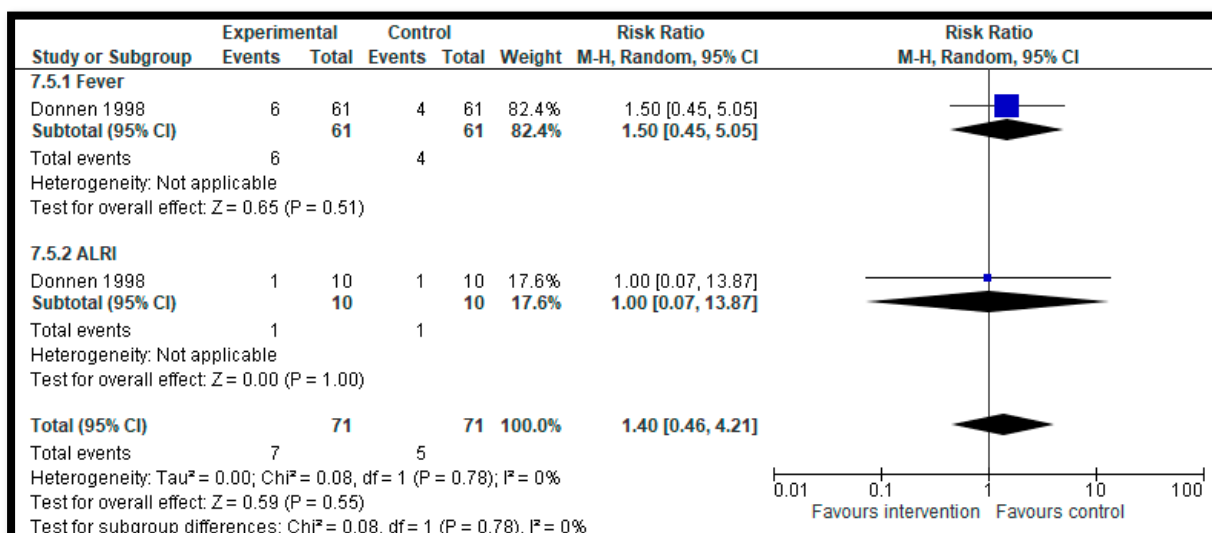


Figure 39: Forest plot for the impact of vitamin A supplementation on Adverse Events



1. Agha, S., *Supplementary feeding of malnourished children in northern Iraq*. 2004.

2. Aguayo, V.M., et al., *Community management of acute malnutrition (CMAM) programme in Pakistan effectively treats children with uncomplicated severe wasting*. Maternal & child nutrition, 2018. **14**: p. e12623.
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6. Badaloo, A., et al., *Dietary protein, growth and urea kinetics in severely malnourished children and during recovery*. The Journal of nutrition, 1999. **129**(5): p. 969-979.
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9. Burza, S., et al., *Seasonal effect and long-term nutritional status following exit from a community-based management of severe acute malnutrition program in Bihar, India*. European journal of clinical nutrition, 2016. **70**(4): p. 437.
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15. Roy, S.K., et al., *Intensive nutrition education with or without supplementary feeding improves the nutritional status of moderately-malnourished children in Bangladesh*. Journal of Health, Population and Nutrition, 2005: p. 320-330.
16. Simpore, J., et al., *Nutrition rehabilitation of undernourished children utilizing Spiruline and Misola*. Nutrition journal, 2006. **5**(1): p. 3.
17. Zongo, U., et al., *Nutritional and clinical rehabilitation of severely malnourished children with Moringa oleifera Lam. leaf powder in Ouagadougou (Burkina Faso)*. Food and nutrition sciences, 2013. **4**(09): p. 991.