Appendix 6: Assessment of risk of bias

| Author | Type of study | Compliance, % | Sequence generation | Allocation concealment | Blinding of assessors, patients | Incomplete outcome data addressed | Free of selective reporting | Free of other bias | Overall |
|--------------------------|------------------------|---------------------------|------------------------|------------------------|---------------------------------------|---|-----------------------------------|-----------------------|---------|
| Christian ¹ | Cluster RCT | 88 | Yes | Yes | Yes | Yes | Yes | Yes | Low |
| Fawzi ² | RCT | 91 | Unclear | Unclear | Yes | Yes | Yes | Yes | Low |
| Fawzi³ | RCT | 88 | Unclear | Unclear | Yes | Yes | Yes | Yes | Low |
| Friis⁴ | RCT | 80 | Yes | Yes | Yes | Yes | Yes | Yes | None |
| Gupta⁵ | RCT | 85–87 | Yes | Yes | Yes | Yes | Yes | Yes | None |
| Hininger⁵ | RCT | > 80 | Yes | Unclear | Yes | Yes | Yes | Yes | Low |
| Kaestal ⁷ | RCT | 76 | Yes | Unclear | Yes | Yes | Yes | Yes | Low |
| Osrin [®] | RCT | 98 | Yes | Yes | Yes | Yes | Yes | Yes | None |
| Ramkrishnan [°] | RCT | 94 | Yes | Yes | Yes | Yes | Yes | Yes | None |
| Roberfroid ¹⁰ | 2 x 2 factorial RCT | Direct observed intake | Yes | Yes | Yes | Yes | Yes | Yes | None |
| Shankar ¹¹ | Cluster RCT | 84–85 | Yes | Yes | Yes | Yes | Yes | Yes | Low |
| Zagre ¹² | Cluster RCT | 78–79 | Yes | Unclear | Yes | Yes | Yes | Yes | Low |
| Zeng ¹³ | Cluster RCT | 92–93 | Yes | Yes | Yes | Yes | Yes | Yes | No |

Note: RCT = randomized controlled trial.

References

- 1. Christian P, Khatry SK, Katz J, et al. Effects of alternative maternal micronutrient supplements on low birth weight in rural Nepal: double blind randomised community trial. *BMJ* 2003;326:571.
- 2. Fawzi WW, Msamanga GI, Spiegelman D, et al. Randomised trial of effects of vitamin supplements on pregnancy outcomes and T cell counts in HIV-1-infected women in Tanzania. *Lancet* 1998;351:1477-82.
- 3. Fawzi WW, Msamanga GI, Urassa W, et al. Vitamins and perinatal outcomes among HIV-negative women in Tanzania. N Engl J Med 2007;356:1423-31.14.
- Friis H, Gomo E, Nyazema N, et al. Effect of multimicronutrient supplementation on gestational length and birth size: a randomized, placebo-controlled, double-blind effectiveness trial in Zimbabwe. Am J Clin Nutr 2004;80:178-84.
- 5. Gupta P, Ray M, Dua T, et al. Multimicronutrient supplementation for undernourished pregnant women and the birth size of their offspring: a double-blind, randomized, placebo-controlled trial. *Arch Pediatr Adolesc Med* 2007;161:58-64.
- 6. Hininger I, Favier M, Arnaud J, et al. Effects of a combined micronutrient supplementation on maternal biological status and newborn anthropometrics measurements: a randomized double-blind, placebo-controlled trial in apparently healthy pregnant women. *Eur J Clin Nutr* 2004;58:52-9.
- 7. Kaestel P, Michaelsen KF, Aaby P, et al. Effects of prenatal multimicronutrient supplements on birth weight and perinatal mortality: a randomised, controlled trial in Guinea-Bissau. *Eur J Clin Nutr* 2005;59:1081-9.
- 8. Osrin D, Vaidya A, Shrestha Y, et al. Effects of antenatal multiple micronutrient supplementation on birthweight and gestational duration in Nepal: double-blind, randomised controlled trial. *Lancet* 2005;365:916-7.
- 9. Ramakrishnan U, Gonzalez-Cossio T, Neufeld LM, et al. Multiple micronutrient supplementation during pregnancy does not lead to greater infant birth size than does iron-only supplementation: a randomized controlled trial in a semirural community in Mexico. *Am J Clin Nutr* 2003;77:720-5.
- 10. Roberfroid D, Huybregts L, Lanou H, et al. Effects of maternal multiple micronutrient supplementation on fetal growth: a double-blind randomized controlled trial in rural Burkina Faso. *Am J Clin Nutr* 2008;88:1330-40.
- 11. Shankar AH, Jahari AB, Sebayang SK, et al. Effect of maternal multiple micronutrient supplementation on fetal loss and infant death in Indonesia: a double-blind cluster-randomised trial. *Lancet* 2008;371:215-27.
- 12. Zagre NM, Desplats G, Adou P, et al. Prenatal multiple micronutrient supplementation has greater impact on birthweight than supplementation with iron and folic acid: a cluster-randomized, double-blind, controlled programmatic study in rural Niger. *Food Nutr Bull* 2007;28:317-27.
- 13. Zeng L, Dibley MJ, Cheng Y, et al. Impact of micronutrient supplementation during pregnancy on birth weight, duration of gestation, and perinatal mortality in rural western China: double blind cluster randomised controlled trial. *BMJ* 2008;337:a2001.