

**Supplemental Table S1.** Detailed search strategy for ProQuest Dialogue (PQD)

## PQD Search Strategy

**Databases:** BIOSIS Previews®, CAB ABSTRACTS, Embase®, EMCare®, FSTA®, MEDLINE®, ProQuest Dissertations and Theses Professional, ToxFile®

TI,AB("oral nutrition supplement\*" or "oral nutritional supplement\*" or "supplementary oral nutrition" or "supplemented oral nutrition" or "supplementary enteral nutrition" or "supplemented enteral nutrition" or "supplemental enteral nutrition" or ((oral or orally) and ("enteral formula\*" or "enteric formula\*" ) ) or "polymeric formula\*" or "polymeric diet\*" or "oral nutritional intervention\*" or "sip feed\*" or "nutrition\* drink" or "nutrition\* drinks" or "milk drink" or "milk drinks" or "fortified milk\*" or "enriched milk\*" or "fortified beverage\*" or "liquid nutrition\* supplement\*" or "oral enteral nutrition\*" or "oral enteric nutrition\*" or "oral enteral feeding\*" or "protein energy supplement\*" or "protein-energy supplement\*" or "protein and energy supplement\*" or "protein calorie supplement\*" or "protein-calorie supplement\*" or "protein and calorie supplement\*" or "oral nutrition\*" or ((oral or orally) n/10 nutrition\* n/10 supplement\*) or ("oral supplement\*" and (nutrition\* or nutrient\*)) or ((oral or orally) and ("enteral nutrition\*" or "enteral supplement\*" or "enteral feeding\*")) or "nutrition supplement\*" or "nutritional supplement\*" or "growing-up milk" or "growing-up formula\*" or "grow-up milk" or "grow-up formula\*" or "toddler milk" or "toddler formula\*" or "toddler's milk" or "toddler's formula\*" or "toddlers' milk" or "toddlers' formula\*" or "follow-up milk" or "follow-up formula\*" or "follow-on milk" or "follow-on formula\*") OR EMB.EXACT ("artificial milk") OR MESH.EXACT("Milk Substitutes" or "Food, Formulated")

S1 AND TI,AB(child or schoolchild or children or schoolchildren or "school child\*" or kid or kids or toddler\* or adoles\* or preadolescen\* or pre-adolescenc\* or preteen\* or teen\* or boy\* or girl\* or minors or underage\* or "under ag\*" or juvenile\* or youth\* or kindergar\* or puber\* or pubescen\* or prepubescent\* or prepuberty\* or pediatric\* or paediatric\* or peadiatric\* or schools or "nursery school\*" or preschool\* or "pre school\*" or "primary school\*" or "secondary school\*" or "elementary school\*" or "high school\*" or highschool\* or "school age" or schoolage or "school age\*" or schoolage\*)

TI,AB(stunted or stunting or underweight or "under-weight" or wasting or wasted or thinness or "failure to thrive" or "faltering weight" or "weight faltering" or "low weight" or "low height" or "growth retardation" or "growth faltering" or "growth failure" or "failure to grow" or "delayed growth\*" or "restricted growth\*" or "suboptimal growth\*" or "sub-optimal growth\*" or "poor growth\*" or "poor physical growth" or "insufficient weight gain\*" or "slow weight gain\*" or "catch-up growth\*" or "catchup growth\*" or malnutrition or malnourishment or malnourished or "mal-nourished" or "under-nourished" or undernourishment or undernutrition or "under-nutrition" or undernourished or "nutrition\* risk\*" or "risk of nutrition" or "picky eating" or "picky eater\*" or "fussy eating" or "fussy eater\*" or "selective eating" or "selective eater\*" or "restrictive food intake disorder\*" or "avoidant food intake disorder\*" or "food neophobia" or "feeding disorder\*" or "infantile anorexia")

TI,AB(growth\* and (weigh\* or height or heights or length or lengths or anthropometr\* or "body mass index" or BMI or "skinfold thickness\*" or "arm circumference\*" or "muscle circumference\*" or "head circumference\*" or "chest circumference\*" or "muscle area\*" or "body size\*" or "body composition\*" ) ) OR EMB.EXACT.EXPLODE("body weight" or "body height" or "arm circumference\*" or "body mass" or "body fat" or "body size" or "weight height ratio" or "head circumference" or "chest circumference" or "body growth" or "growth rate and growth regulation" or "postnatal growth") OR MESH.EXACT.EXPLODE("Body Weights and Measures" or "body size" or "body weight" or "body height" or "body weight changes" or "Thinness" or "Body Mass Index" or "Skinfold Thickness" or "Body Composition")

S2 AND (S3 OR S4)

S5 NOT TI,AB(cat or cats or feline or dog or dogs or canine\* or rat or rats or mouse or mice or hamster\* or gerbil\* or rodent\* or rabbit\* or bunn\* or fly or insect\* or cattle or calves or Holstein\* or heifer\* or horse or sheep or (fish\* not "fish oil") or avian or murine or swine or pig or pigs or piglet or piglets or goose or geese or monkey or "cell culture" or "cell line")

MESH.EXACT.EXPLODE("Adult" not "Child") or EMB.EXACT.EXPLODE("adult" not "child")

S6 NOT S7

S8 NOT TI((infant or infants or neonat\* or newborn or newborns or prenatal or "pre-natal" or perinatal or "peri-natal" or postnatal or "post-natal" or preemie\* or preterm\* or adult or adults or women or men or elderly or geriatric or geriatrics) not (child or children))

S9 NOT TI(vitamin PRE/2 supplement\* or "calcium supplement\*" or "zinc supplement\*" or "iron supplement\*" or ((("parenteral nutrition\*" or "parenteral alimentation" or tube or tubes) not (enteral or enteric or oral or orally)))

TI,AB(HIV or neoplasm or neoplasms or neoplastic or neoplasia or tumour or tumours or tumor or tumors or oncology or cancer or \*carcinoma\* or chemotherapy or chemotherapeutic or "inflammatory bowel disease\*" or "Crohn's disease" or "Crohn disease" or "celiac disease" or "cystic fibrosis" or "liver disease" or "cirrhosis" or "colitis" or gastroenteritis or "kidney disease" or "renal disease" or "renal failure\*" or "kidney failure" or \*dialysis or "sickle-cell disease" or "sickle-cell an\*mia" or "short bowel syndrome")

S10 NOT S11

S10 AND S11

IF,SU("oral nutrition supplement\*" or "oral nutritional supplement\*" or "supplementary oral nutrition" or "supplemented oral nutrition" or "supplementary enteral nutrition" or "supplemented enteral nutrition" or "supplemental enteral nutrition" or ((oral or orally) and ("enteral formula\*" or "enteric formula\*" ) ) or "polymeric formula\*" or "polymeric diet\*" or "oral nutritional intervention\*" or "sip feed\*" or "nutrition\* drink" or "nutrition\* drinks" or "milk drink" or "milk drinks" or "fortified milk\*" or "enriched milk\*" or "fortified beverage\*" or "liquid nutrition\* supplement\*" or "oral enteral nutrition\*" or "oral enteric nutrition\*" or "oral enteral feeding\*" or "protein energy supplement\*" or "protein-energy supplement\*" or "protein and energy supplement\*" or "protein calorie supplement\*" or "protein-calorie supplement\*" or "protein and calorie supplement\*" or "oral nutrition\*" or ((oral or orally) n/10 nutrition\* n/10 supplement\*) or ("oral supplement\*" and (nutrition\* or nutrient\*)) or ((oral or orally) and ("enteral nutrition\*" or "enteral supplement\*" or "enteral feeding\*")) or "nutrition supplement\*" or "nutritional supplement\*" or "growing-up milk" or "growing-up formula\*" or "grow-up milk" or "grow-up formula\*" or "toddler milk" or "toddler formula\*" or "toddler's milk" or "toddler's formula\*" or "toddlers' milk" or "toddlers' formula\*" or "follow-up milk" or "follow-up formula\*" or "follow-on milk" or "follow-on formula\*") OR EMB.EXACT ("artificial milk") OR MESH.EXACT("Milk Substitutes" or "Food, Formulated")

S14 AND IF,SU(child or schoolchild or children or schoolchildren or "school child\*" or kid or kids or toddler\* or adoles\* or preadolescen\* or pre-adolescenc\* or preteen\* or teen\* or boy\* or girl\* or minors or underage\* or "under ag\*" or juvenile\* or youth\* or kindergar\* or puber\* or pubescen\* or prepubescent\* or prepuberty\* or pediatric\* or paediatric\* or peadiatric\* or schools or "nursery school\*" or preschool\* or "pre school\*" or "primary school\*" or "secondary school\*" or "elementary school\*" or "high school\*" or highschool\* or "school age" or schoolage or "school age\*" or schoolage\*)

IF,SU(stunted or stunting or underweight or "under-weight" or wasting or wasted or thinness or "failure to thrive" or "faltering weight" or "weight faltering" or "low weight" or "low height" or "growth retardation" or "growth faltering" or "growth failure" or "failure to grow" or "delayed growth\*" or "restricted growth\*" or "suboptimal growth\*" or "sub-optimal growth\*" or "poor growth\*" or "poor physical growth" or "insufficient weight gain\*" or "slow weight gain\*" or "catch-up growth\*" or "catchup growth\*" or malnutrition or malnourishment or malnourished or "mal-nourished" or "under-nourished" or undernourishment or undernutrition or "under-nutrition" or undernourished or "nutrition\* risk\*" or "risk of nutrition" or "picky eating" or "picky eater\*" or "fussy eating" or "fussy eater\*" or "selective eating" or "selective eater\*" or "restrictive food intake disorder\*" or "avoidant food intake disorder\*" or "food neophobia" or "feeding disorder\*" or "infantile anorexia")

IF,SU(growth\* and (weigh\* or height or heights or length or lengths or anthropometr\* or "body mass index" or BMI or "skinfold thickness\*" or "arm circumference\*" or "muscle circumference\*" or "head circumference\*" or "chest circumference\*" or "muscle area\*" or "body size\*" or "body composition\*" ) ) OR EMB.EXACT.EXPLODE("body weight" or "body height" or "arm circumference\*" or "body mass" or "body fat" or "body size" or "weight height ratio" or "head circumference" or "chest circumference" or "body growth"

or “growth rate and growth regulation” or “postnatal growth”) OR MESH.EXACT.EXPLODE(“Body Weights and Measures” or “body size” or “body weight” or “body height” or “body weight changes” or “Thinness” or “Body Mass Index” or “Skinfold Thickness” or “Body Composition”)

S15 AND (S16 OR S17)

S18 NOT TI,AB,IF,SU(cat or cats or feline or dog or dogs or canine\* or rat or rats or mouse or mice or hamster\* or gerbil\* or rodent\* or rabbit\* or bunn\* or fly or insect\* or cattle or calves or Holstein\* or heifer\* or horse or sheep or (fish\* not “fish oil”) or avian or murine or swine or pig or pigs or piglet or piglets or goose or geese or monkey or "cell culture" or “cell line”)

MESH.EXACT.EXPLODE(“Adult” not “Child”) or EMB.EXACT.EXPLODE(“adult” not “child”)

S19 NOT S20

S21 NOT TI((infant or infants or neonat\* or newborn or newborns or prenatal or “pre-natal” or perinatal or “peri-natal” or postnatal or “post-natal” or premie\* or preterm\* or adult or adults or women or men or elderly or geriatric or geriatrics) not (child or children))

S22 NOT TI(vitamin PRE/2 supplement\* or “calcium supplement\*” or “zinc supplement\*” or “iron supplement\*” or (“parenteral nutrition\*” or “parenteral alimentation” or tube or tubes) not (enteral or enteric or oral or orally))

IF,SU(HIV or neoplasm or neoplasms or neoplastic or neoplasia or tumour or tumours or tumor or tumors or oncology or cancer or \*carcinoma\* or chemotherapy or chemotherapeutic or “inflammatory bowel disease\*” or “Crohn’s disease” or “Crohn disease” or “celiac disease” or “cystic fibrosis” or “liver disease” or “cirrhosis” or "colitis" or gastroenteritis or "kidney disease" or "renal disease" or "renal failure\*" or "kidney failure\*" or \*dialysis or “sickle-cell disease” or “sickle-cell an\*mia” or “short bowel syndrome”)

S23 NOT S24

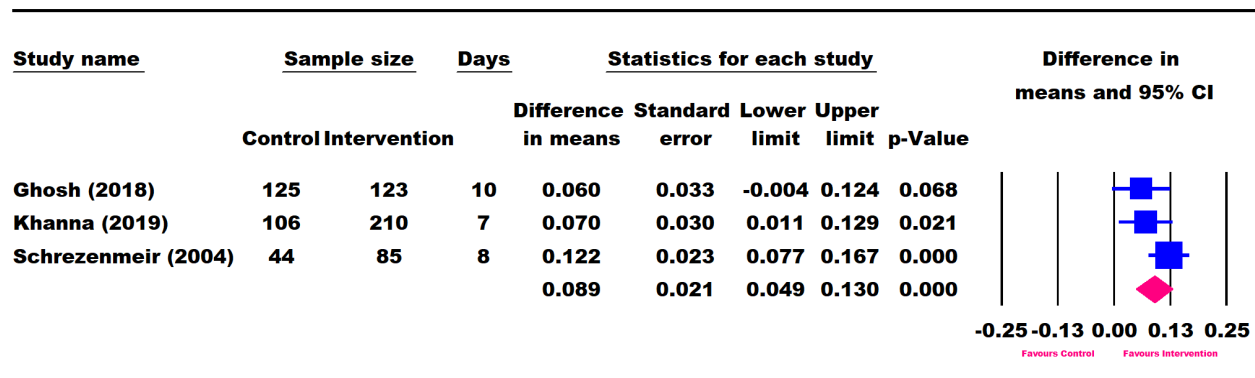
S23 AND S24

**Supplemental Table S2.** Percent difference in height gain between intervention and control.

		<b>Intervention</b>		<b>Control</b>		
<b>Study</b>	<b>Intervention Days</b>	<b>N</b>	<b>Mean (SD) Height Gain (cm)</b>	<b>N</b>	<b>Mean (SD) Height Gain (cm)</b>	<b>% Increase in Height Gain</b>
Alarcon (2003)	90	44	2.66 (1.45)	47	1.72 (1.12)	55%
Khanna (2019)	90	204	1.43 (1.86)	101	1.02 (1.47)	40%
Ghosh (2018)	90	119	1.33 (1.43)	123	0.98 (1.13)	36%
Sheng (2014)	90	69	2.04 (0.73)	62	2.17 (0.71)	-6%

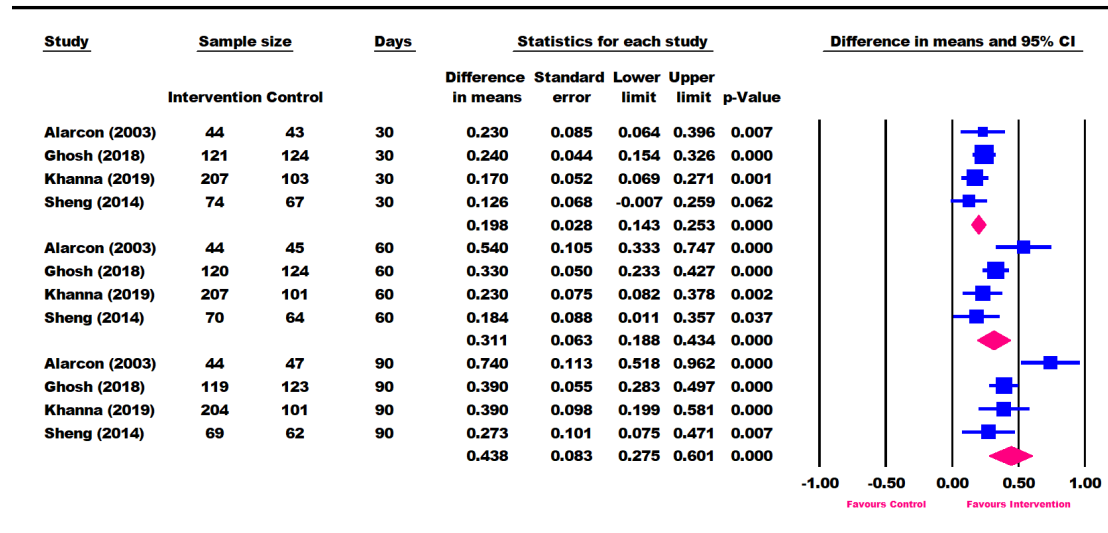
Author, Year	Randomization bias	Selection Bias	Performance Bias	Detection Bias	Attrition Bias	Reporting Bias	Other Biases
Walker, 2011		?					
Alarcon, 2003		?	?				
Schrezenmeir, 2004	?	?					
Han, 2011	?	?					
Khanna, 2019		?			?		
Lebenthal, 2014 and Yackobovitch, 2016	?	?					
Sheng, 2014							
O'Reilley, 2015	?	?		?		?	?
Cervo, 2017	?			?			
Ghosh, 2018				?			
Vijayalakshmi, 2008	?	?		?			

**Supplemental Figure S1.** Risk of Bias for selected studies.

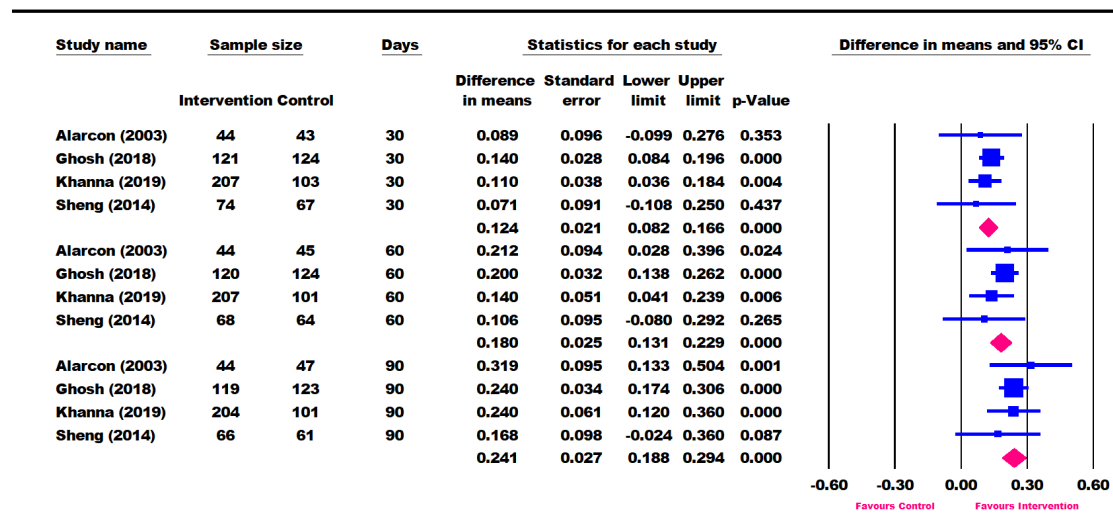


**Supplemental Figure S2.** Meta-analysis results on the difference in weight (kg) gain between intervention and control after 7-10 days of intervention. The forest plot shows the mean difference (squares) and 95% confidence intervals (CIs) (horizontal bars) for intervention vs control. The values were combined using a meta-analysis to obtain a pooled estimate of the effect from all the included studies (diamond).

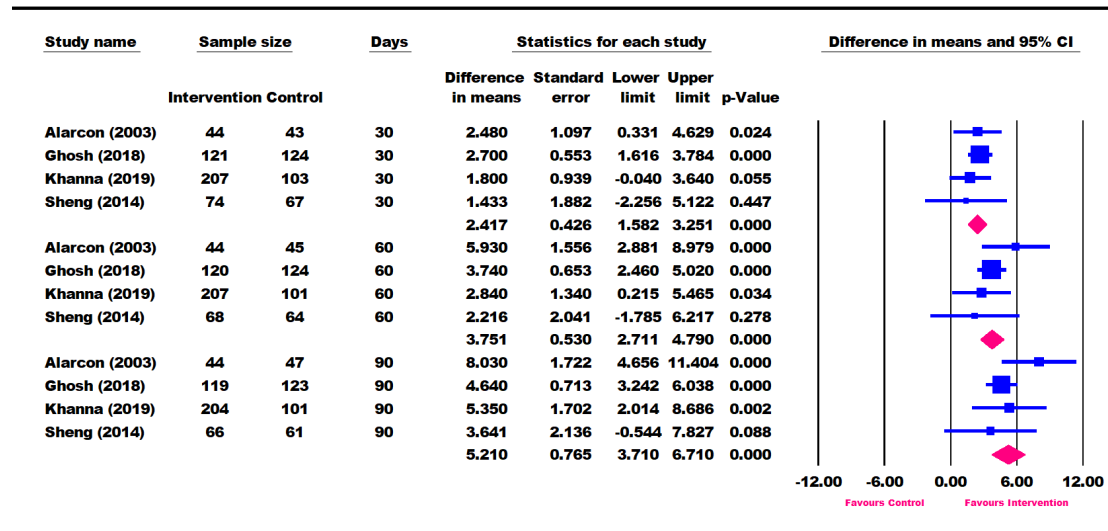
### S3a



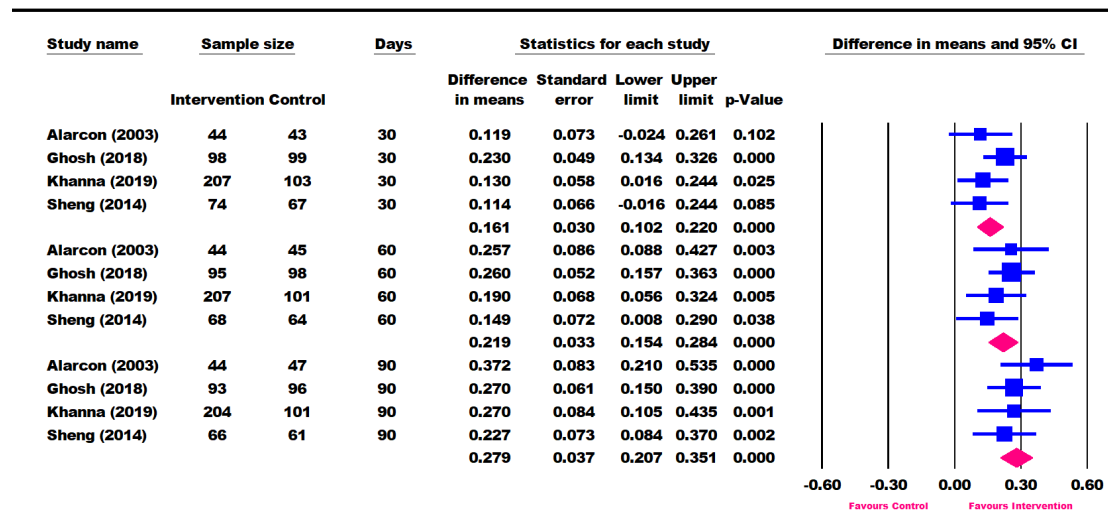
### S3b



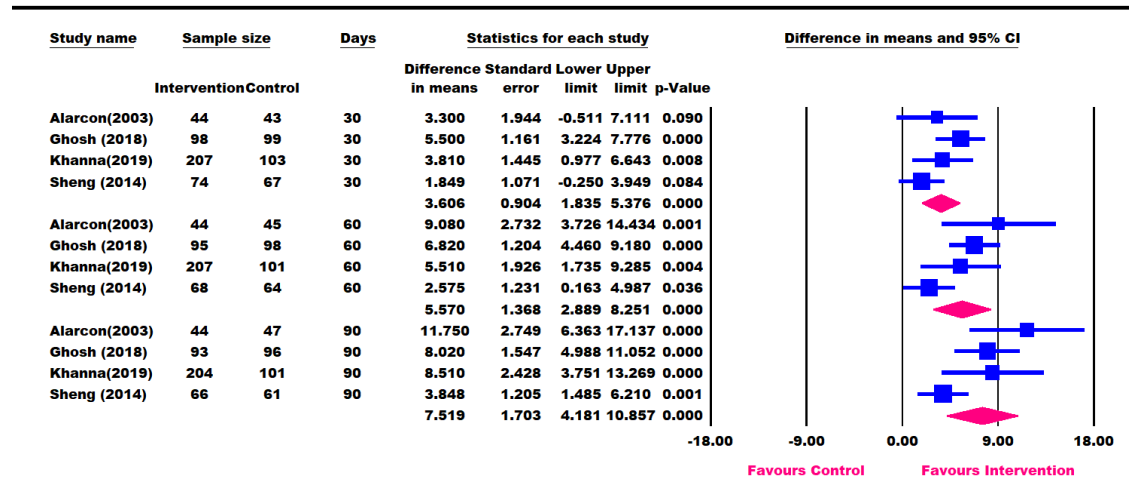
### S3c



### S3d

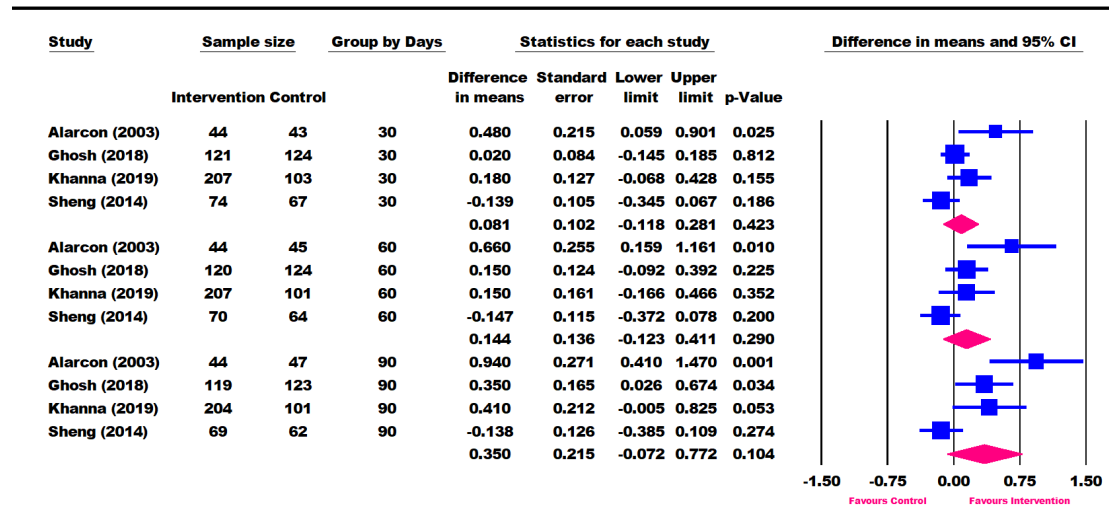




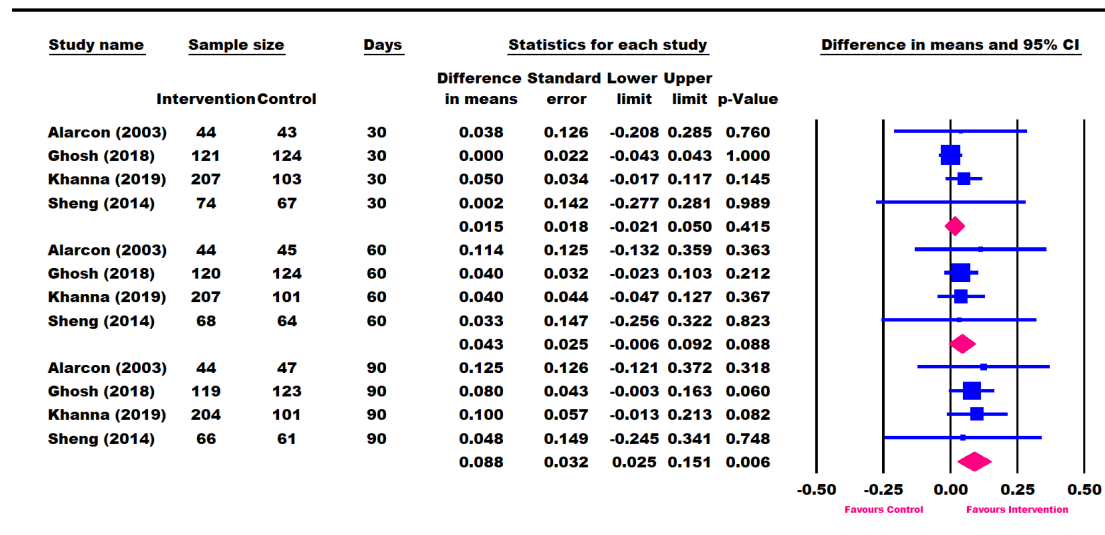


**Supplemental Figure S3.** Meta-analysis results on the difference in mean change in weight parameters between intervention and control based on a subgroup analysis of RCTs comparing ONS+DC versus DC alone with repeated measures at 30, 60, and 90 days of intervention. **S3a.** Weight (kg), **S3b.** Weight-for-age Z-score (WAZ), **S3c.** Weight-for-age percentile (WAP), **S3d.** Weight-for-height Z-score (WHZ), **S3e.** Weight-for-height percentile (WHP). The forest plot shows the mean difference (squares) and 95% confidence intervals (CIs) (horizontal bars) for intervention vs control. The values were combined using a meta-analysis to obtain a pooled estimate of the effect from all the included studies (diamond).

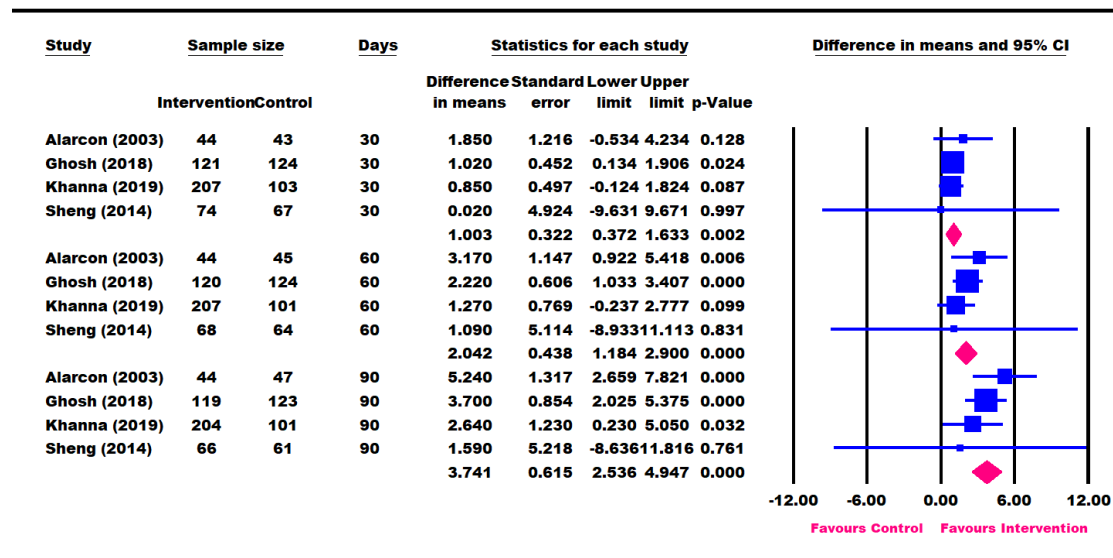
## S4a



## S4b

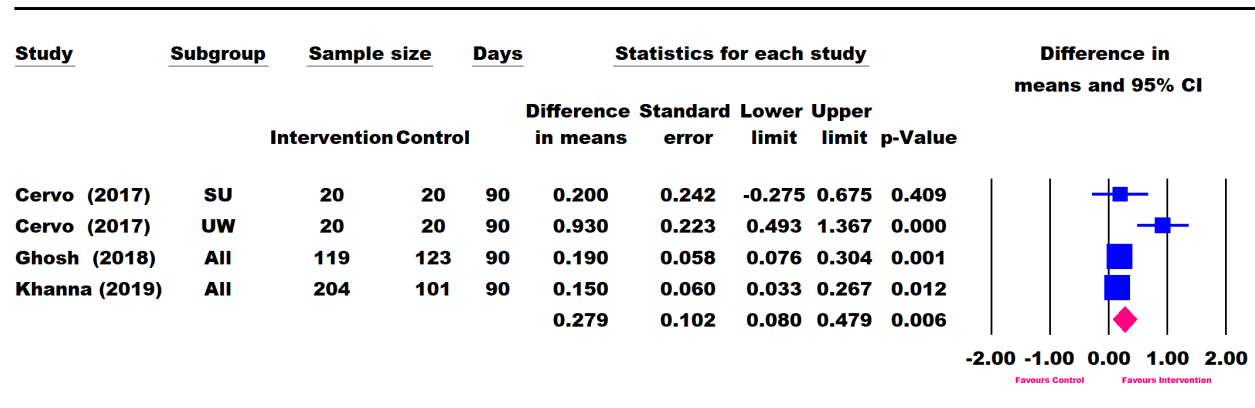


# S4c

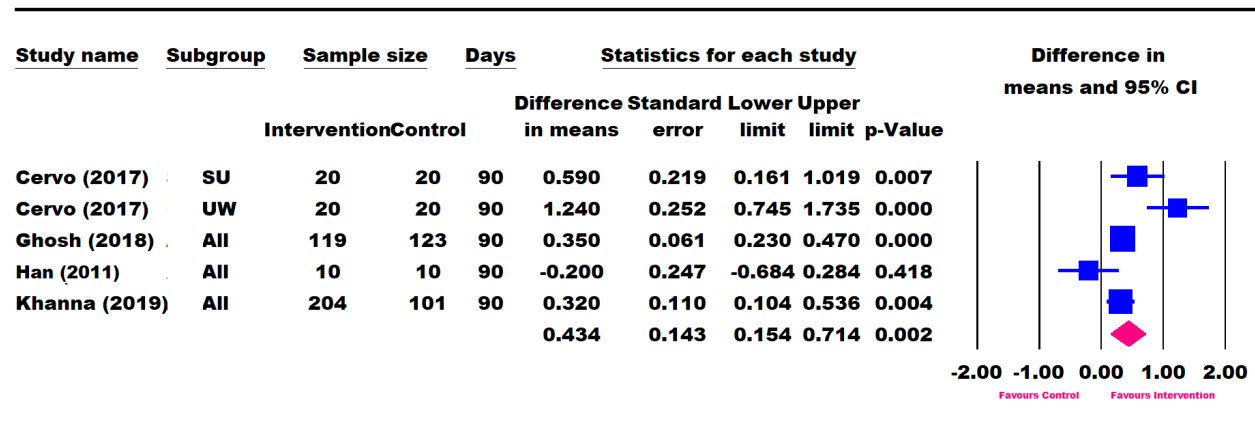


**Supplemental Figure S4.** Meta-analysis results on the difference in mean change in height parameters between intervention and control based on a subgroup analysis of RCTs comparing ONS+DC versus DC alone with repeated measures at 30, 60, and 90 days of ONS intervention. **S4a.** Height (cm), **S4b.** Height-for-age Z-score (HAZ), **S4c.** Height-for-age percentile (HAP). The forest plot shows the mean difference (squares) and 95% confidence intervals (CIs) (horizontal bars) for intervention vs control. The values were combined using a meta-analysis to obtain a pooled estimate of the effect from all the included studies (diamond).

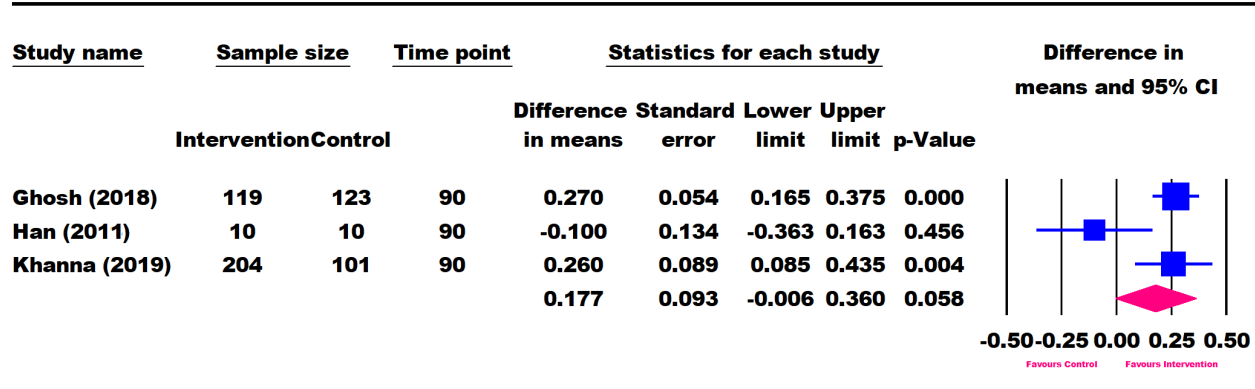
## S5a



## S5b

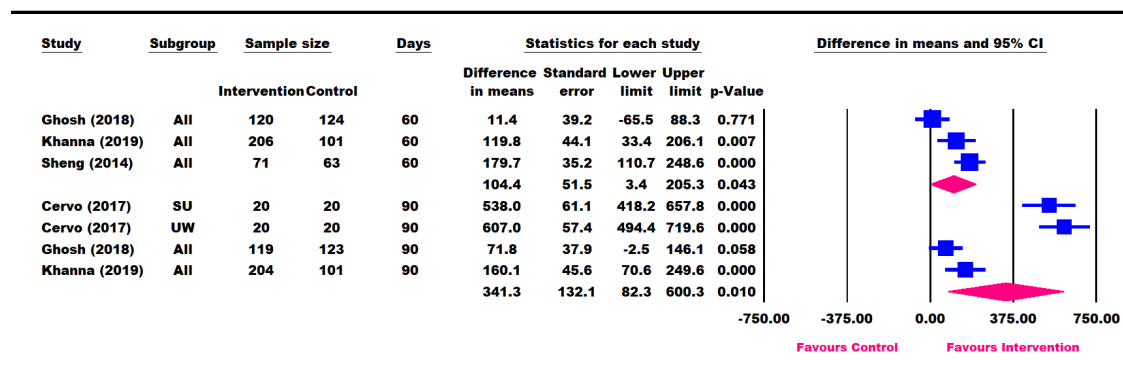


## S5c



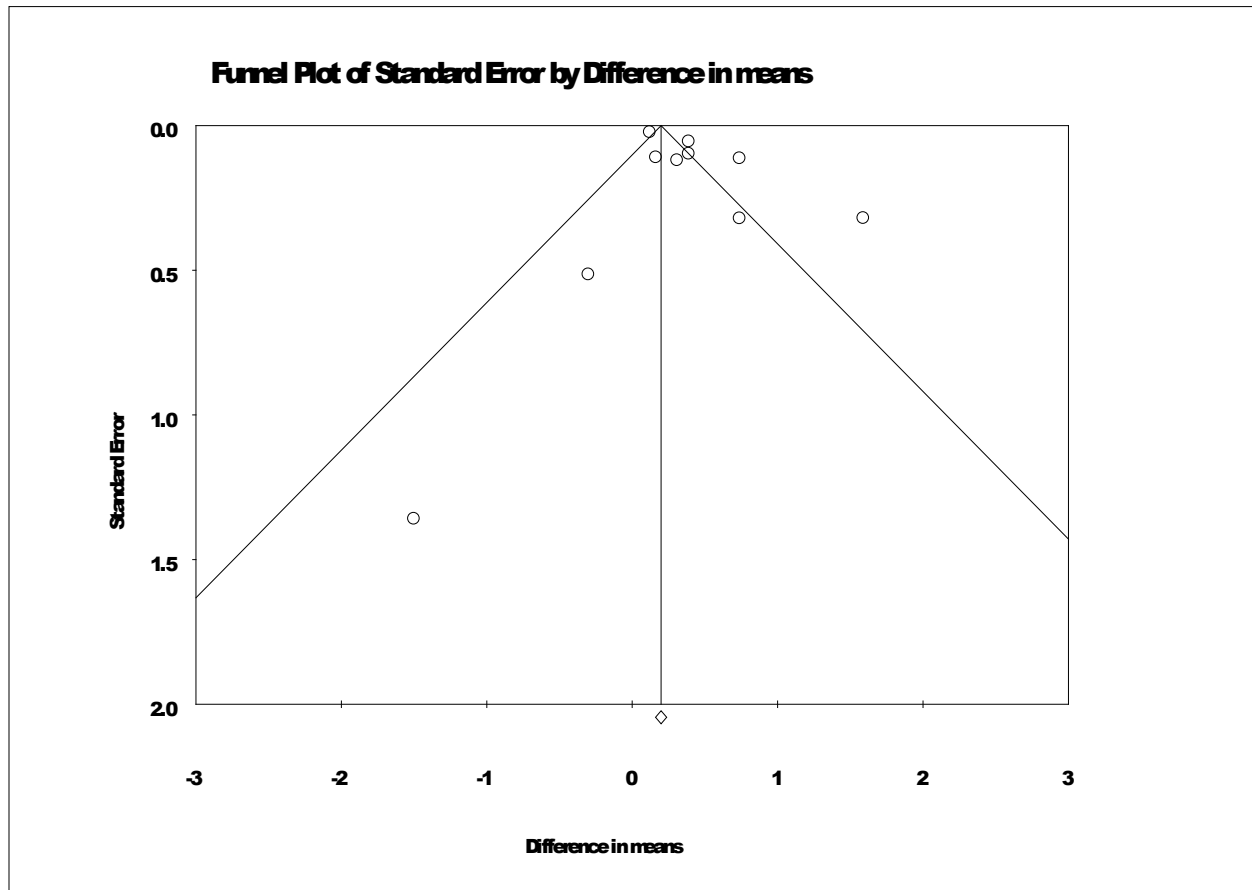
**Supplemental Figure S5:** Meta-analysis results on the difference in mean change in other anthropometric measures between intervention and control after 90 days of intervention. **S5a.** Mid-arm circumference (MAC), **S5b.** Body mass index (BMI), **S5c.** BMI for age Z-score (BMIAZ). The forest plot shows the mean difference (squares) and 95% confidence intervals

(CIs) (horizontal bars) for intervention vs control. The values were combined using a meta-analysis to obtain a pooled estimate of the effect from all the included studies (diamond).

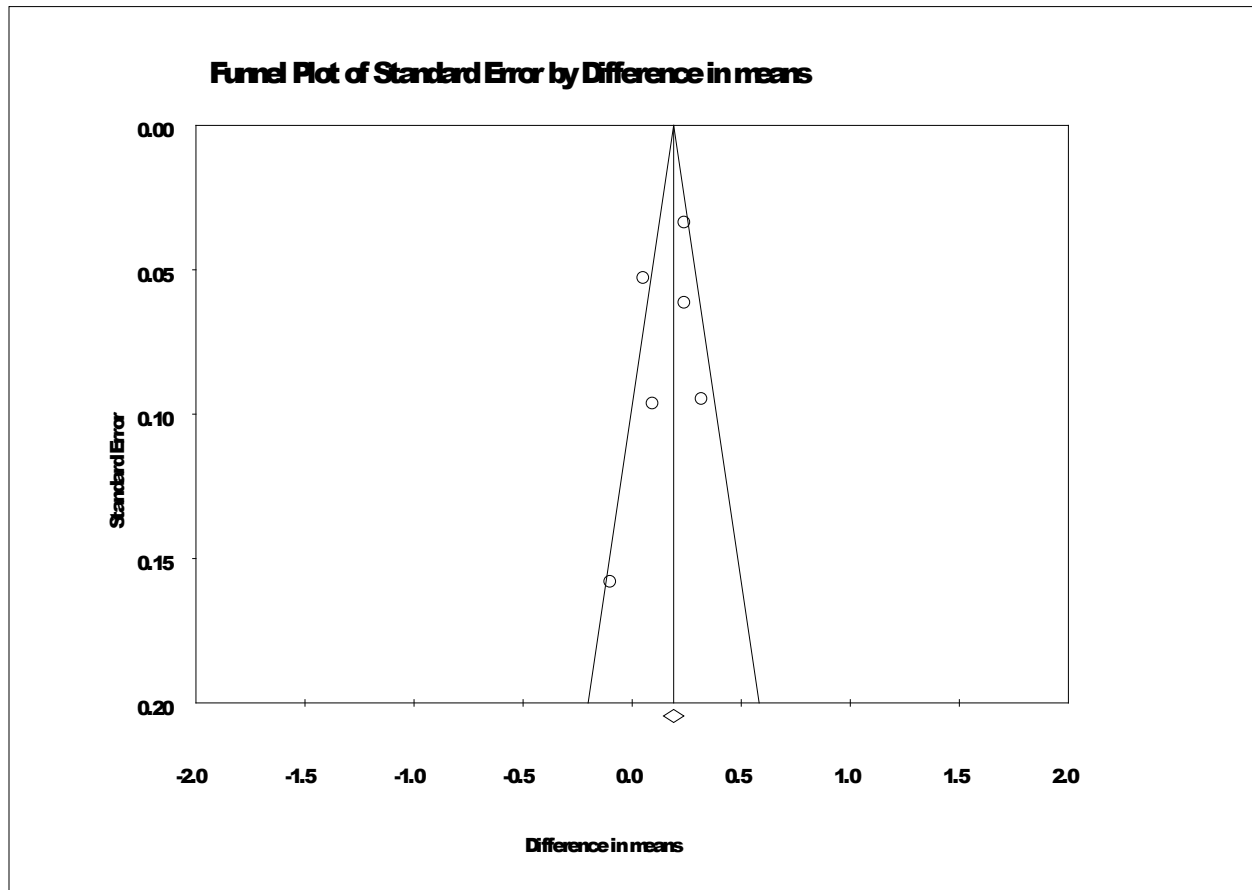


**Supplemental Figure S6.** Meta-analysis results on the difference in mean change in total energy intake between intervention and control after 60 and 90 days of intervention. SU: severely underweight; UW: underweight. The forest plot shows the mean difference (squares) and 95% confidence intervals (CIs) (horizontal bars) for intervention vs control. The values were combined using a meta-analysis to obtain a pooled estimate of the effect from all the included studies (diamond).

S7a

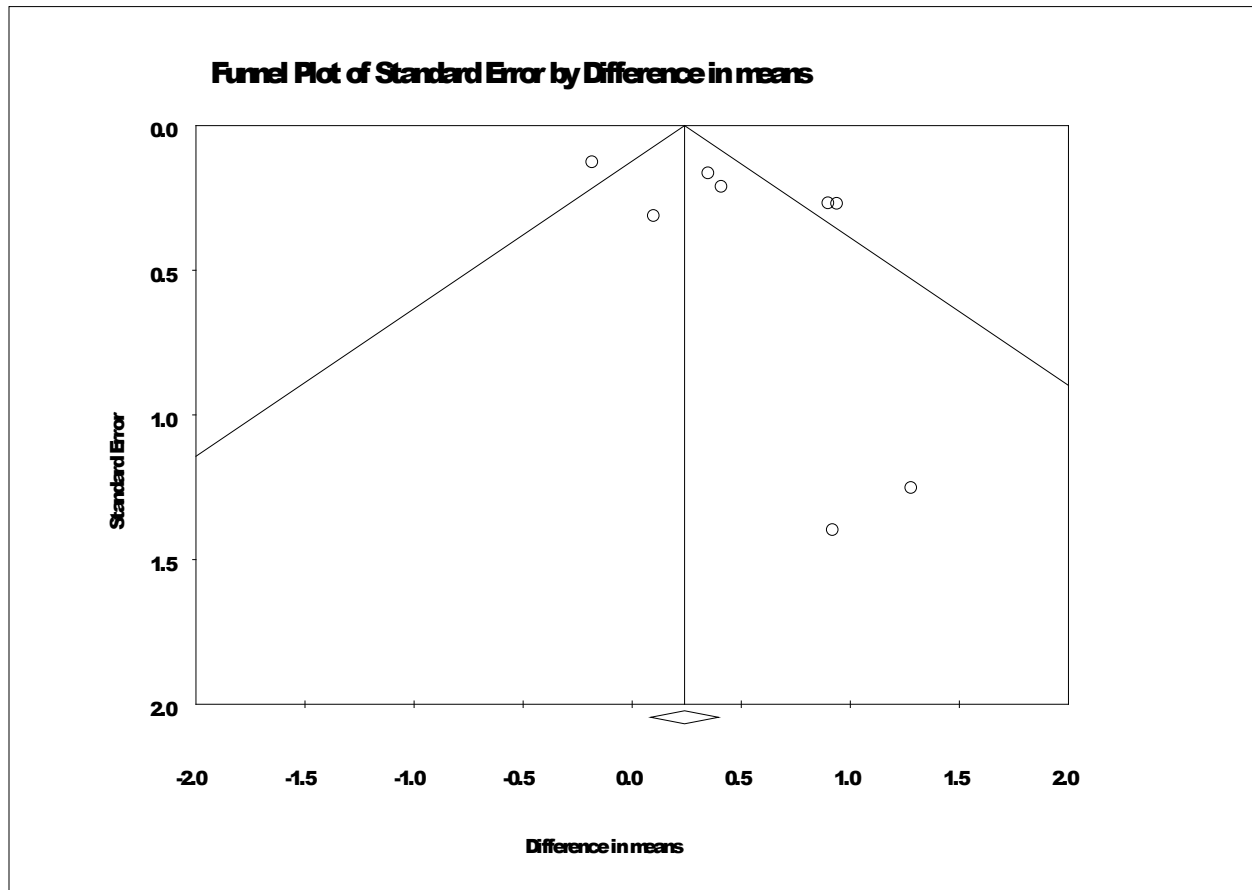


S7b

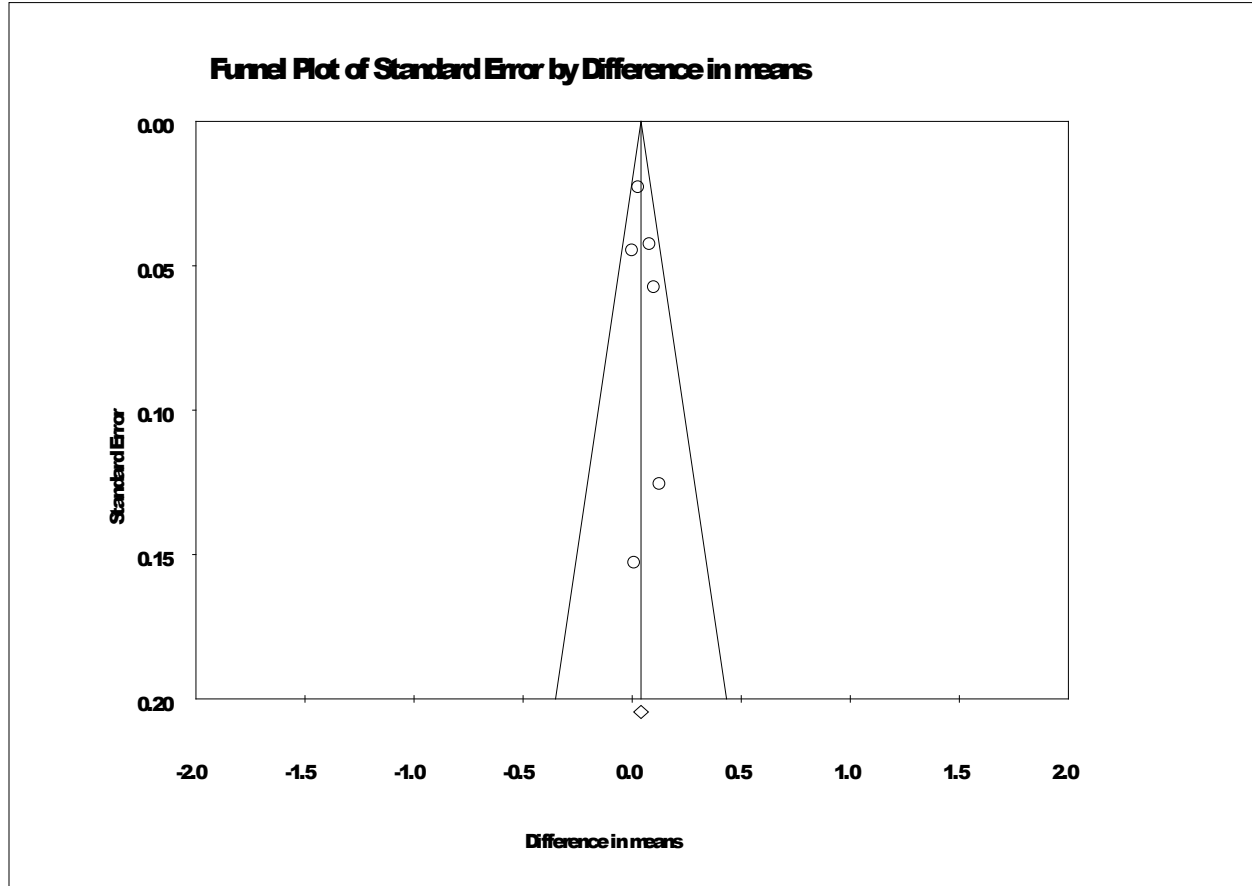




S7c



S7d



**Supplemental Figure S7.** Funnel plots for the difference in mean change in weight and height parameters between intervention and control based on the longest follow-up time point. **S7a.** Weight (kg), **S7b.** Weight-for-age Z-score (WAZ), **S7c.** Height (cm), **S7d.** Height-for-age Z-score (HAZ).