Effects of Milk and Milk Product Consumption on Growth Among Children and Adolescents 6 Through 18 Years of Age: A Meta-Analysis of Randomized Controlled Trials

Kai Kang, MM; Olusola F. Sotunde, PhD; Hope A. Weiler, PhD

Supplemental Table 1. Search Algorithm
Supplemental Figure 1. Forest plot of change of body weight (kg) between intervention and control group: subgroup analysis of (**A**) sex; (**B**) age; (**C**) baseline body weight; (**D)** intervention duration; random-effects model.
Supplemental Figure 2. Forest plot of change of height (cm) between intervention and control group: subgroup analysis of (**A**) sex; (**B**) age; (**C**) baseline body weight; (**D)** intervention duration; random-effects model.
Supplemental Figure 3. Forest plot of change of waist circumference (cm) between intervention and control group: subgroup analysis of (**A**) sex; (**B**) age; (**C**) baseline body weight; (**D)** intervention duration; random-effects model. Supplemental Figure 4. Forest plot of change of lean mass(kg) between intervention and control group: subgroup analysis of (**A**) sex; (**B**) age; (**C**) baseline body weight; (**D)** intervention duration; random-effects model.
Supplemental Figure 5. Forest plot of change of fat mass (kg) between intervention and control group: subgroup analysis of (**A**) sex; (**B**) age; (**C**) baseline body weight; (**D)** intervention duration; random-effects model.
Supplemental Figure 6. Forest plot of change of percentage body fat (%) between intervention and control group: subgroup analysis of (**A**) sex; (**B**) age; (**C**) baseline body weight; (**D)** intervention duration; random-effects model.
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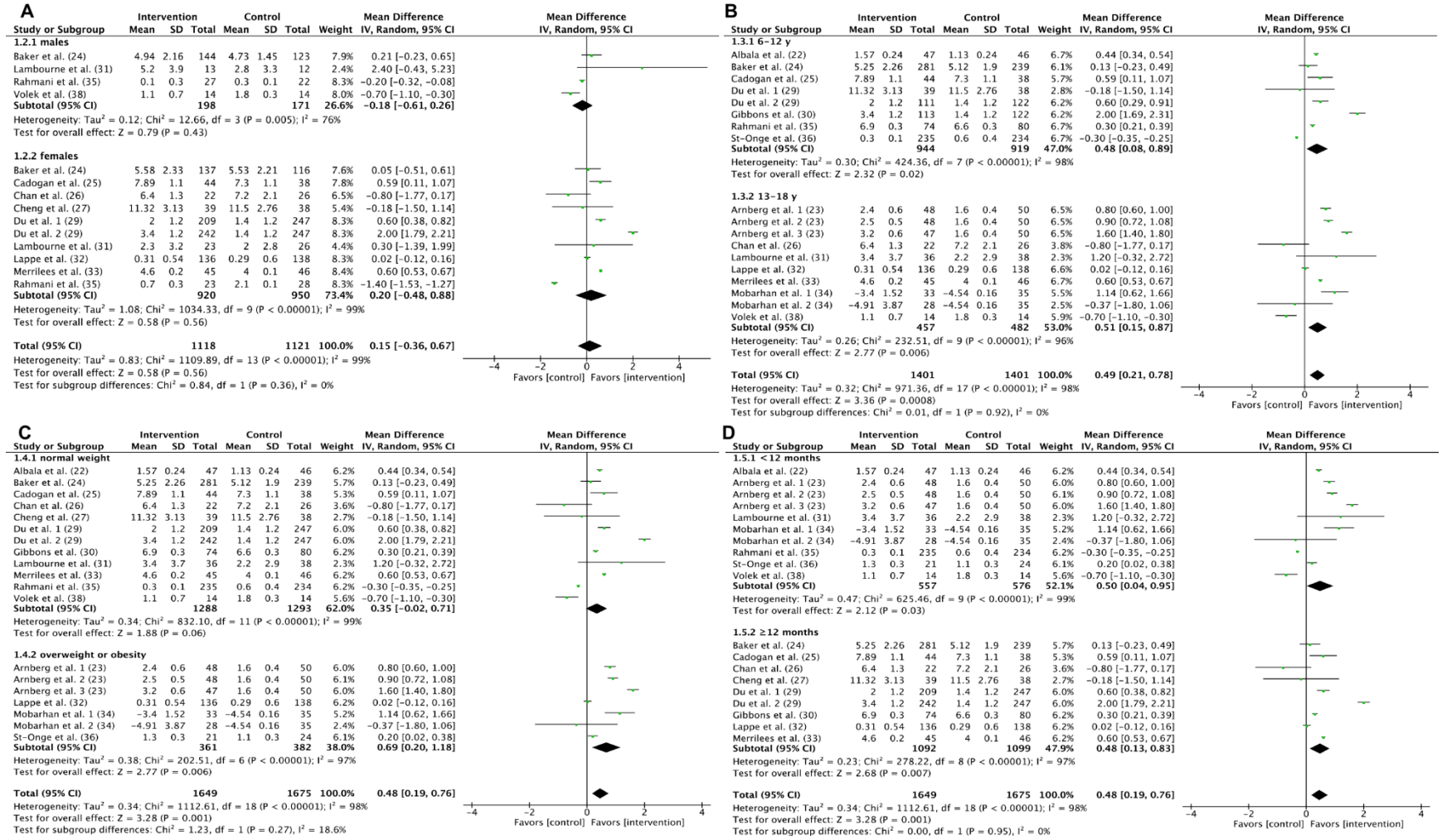
Supplemental Figure 8. Funnel plot for (**A**) body weight (kg); (**B**) body height (cm); (**C**) waist circumference (cm); (**D**) lean mass (kg); (**E**) fat mass (kg); (**F**) percentage body fat (%); SE, standard error; MD, mean weighted difference between intervention and control groups.

Supplemental Table 1. Search Algorithm

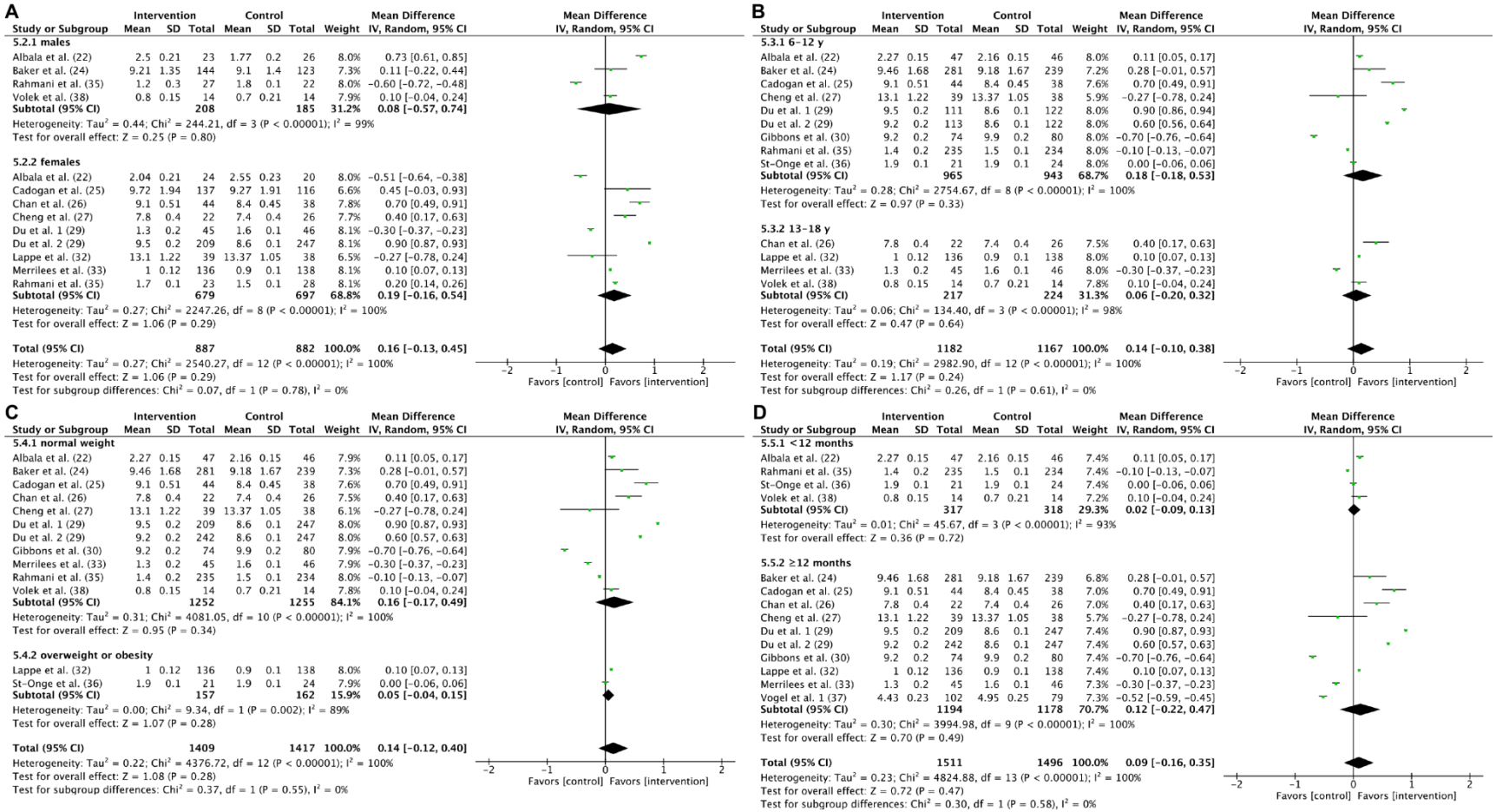
Database	#	Searches	Results
PUBMED	1	Search ((((dairy products[MeSH Terms]) OR dairy[Title/Abstract]) OR milk[Title/Abstract]) OR cheese[Title/Abstract]) OR yogurt[Title/Abstract]	156828
	2	Search ((((((((((((((((growth[MeSH Terms]) OR body height[MeSH Terms]) OR height[Title/Abstract]) OR body weight[MeSH Terms]) OR weight[Title/Abstract]) OR weight loss[Title/Abstract]) OR weight change[Title/Abstract]) OR weight reduce[Title/Abstract]) OR body composition[MeSH Terms]) OR body fat[Title/Abstract]) OR body fat percentage[Title/Abstract]) OR fat mass[Title/Abstract]) OR fat body mass[Title/Abstract]) OR percentage of fat body mass[Title/Abstract]) OR lean mass[Title/Abstract]) OR fat free mass[Title/Abstract]) OR fat-free mass[Title/Abstract]) OR lean body mass[Title/Abstract]) OR percentage of lean body mass[Title/Abstract]	1470070
	3	Search (((((((((child[MeSH Terms]) OR children[Title/Abstract]) OR childhood[Title/Abstract]) OR adolescent[MeSH Terms]) OR adolescents[Title/Abstract]) OR Teens[Title/Abstract]) OR teen[Title/Abstract]) OR Teenagers[Title/Abstract]) OR Teenager[Title/Abstract]) OR Youths[Title/Abstract]) OR Youth[Title/Abstract]	3029479
	4	Search Randomized Controlled Trial[Publication Type]	450404
	5	Search #1 AND #2 AND #3	3339
	6	Search #4 AND #5	399
EMBASE	1	exp dairy products/ or (dairy or milk or cheese or yogurt).ab.	181228
	2	exp growth/ or exp body height/ or exp body weight/ or (weight or weight loss or weight change or weight reduce).ab. or exp body composition/ or (body fat or body fat	2201636

		percentage or fat mass or fat body mass or percentage of fat body mass or lean mass or fat free mass or fat-free mass or lean body mass or percentage of lean body mass).ab.	
	3	exp child/ or (children or childhood).ab. or exp adolescent/ or (adolescents or teens or teen or teenagers or teenager or youths or youth).ab.	3694994
	4	randomized controlled trial/	490326
	5	limit 4 to human	474433
	6	1 and 2 and 3	10033
	7	5 and 6	783
Cochrane Library	1	MeSH descriptor: [Dairy Products] explode all trees or "dairy":ti,ab,kw or "milk":ti,ab,kw or "cheese":ti,ab,kw or "yogurt":ti,ab,kw (Word variations have been searched)	8414
	2	MeSH descriptor: [Growth] explode all trees or MeSH descriptor: [Body height] explode all trees or "height":ti,ab,kw or MeSH descriptor: [Body Weight] explode all trees or "weight":ti,ab,kw or "weight loss":ti,ab,kw or "weight reduction":ti,ab,kw (Word variations have been searched) or MeSH descriptor: [Body Composition] explode all trees or "body fat":ti,ab,kw or "body fat percentage":ti,ab,kw or "fat body mass":ti,ab,kw or "lean body mass":ti,ab,kw or "lean body weight":ti,ab,kw or "percentage body fat":ti,ab,kw or "percentage body-fat":ti,ab,kw or "percent body fat":ti,ab,kw or "fat-free mass":ti,ab,kw or "fat-free body mass":ti,ab,kw (Word variations have been searched)	88139
	3	MeSH descriptor: [Child] explode all trees or "childhood":ti,ab,kw or MeSH descriptor: [Adolescent] explode all trees or "teen":ti,ab,kw or "teen-age":ti,ab,kw or "teen-aged":ti,ab,kw or "teen-ager":ti,ab,kw or "teenager":ti,ab,kw or "teenaged":ti,ab,kw or "youth":ti,ab,kw (Word variations have been searched)	104970

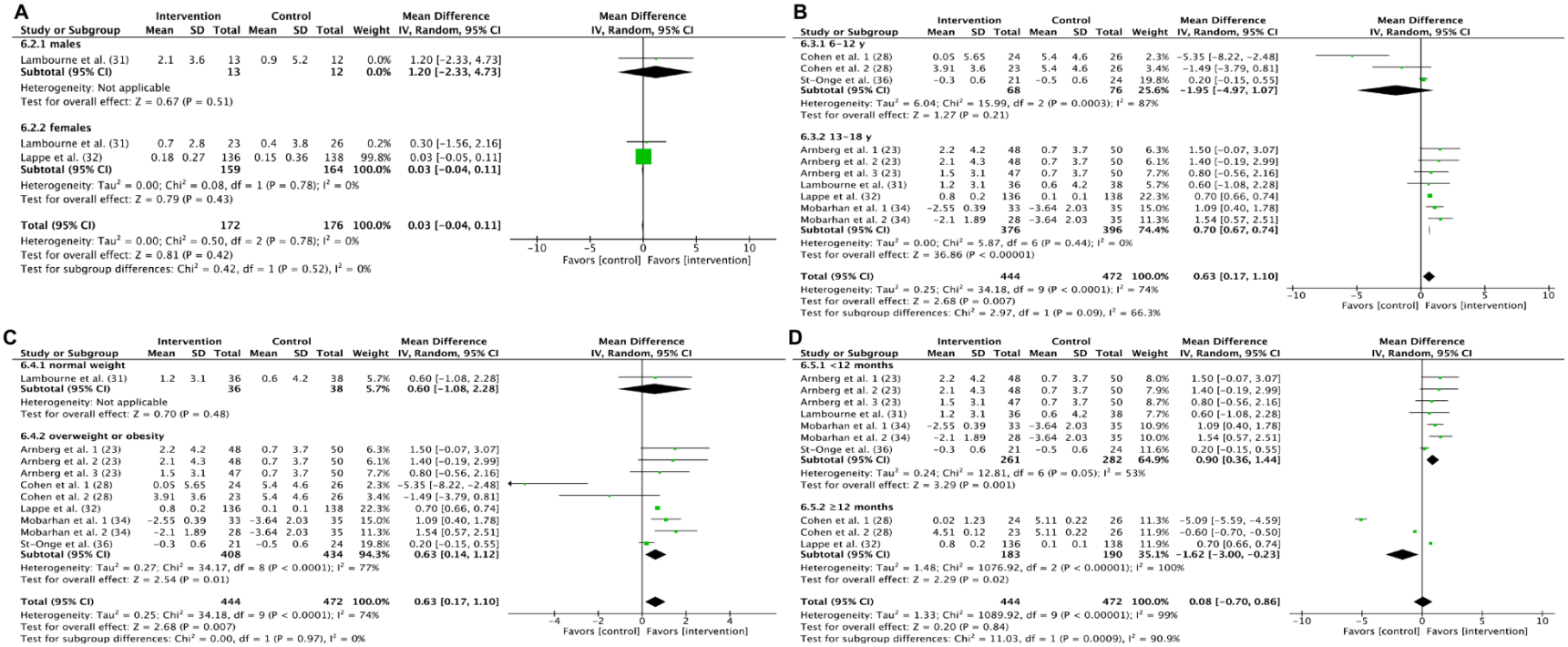
	4	"randomized controlled trial":pt (Word variations have been searched)	438081
	5	1 and 2 and 3	270
	6	4 and 5	215
Web of Science	1	TOPIC: (dairy products OR dairy OR milk OR cheese OR yogurt) Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI Timespan=All years	292034
	2	TOPIC: (growth OR body height OR height OR body weight OR weight OR weight loss OR weight change OR weight reduce) OR TOPIC: (body composition OR body fat OR body fat percentage OR fat mass OR fat body mass OR percentage of fat body mass OR lean mass OR fat free mass OR fat-free mass OR lean body mass OR percentage of lean body mass) Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI Timespan=All years	4484928
	3	TOPIC: (child OR children OR childhood) OR TOPIC: (adolescent OR adolescents OR Teens OR teen OR Teenagers OR Teenager OR Youths OR Youth) Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI Timespan=All years	1852423
	4	TOPIC: (Randomized Controlled Trial) Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI Timespan=All years	390583
	5	#1 AND #2 AND #3 Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI Timespan=All years	5193
	6	#4 AND #5 Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI Timespan=All years	520



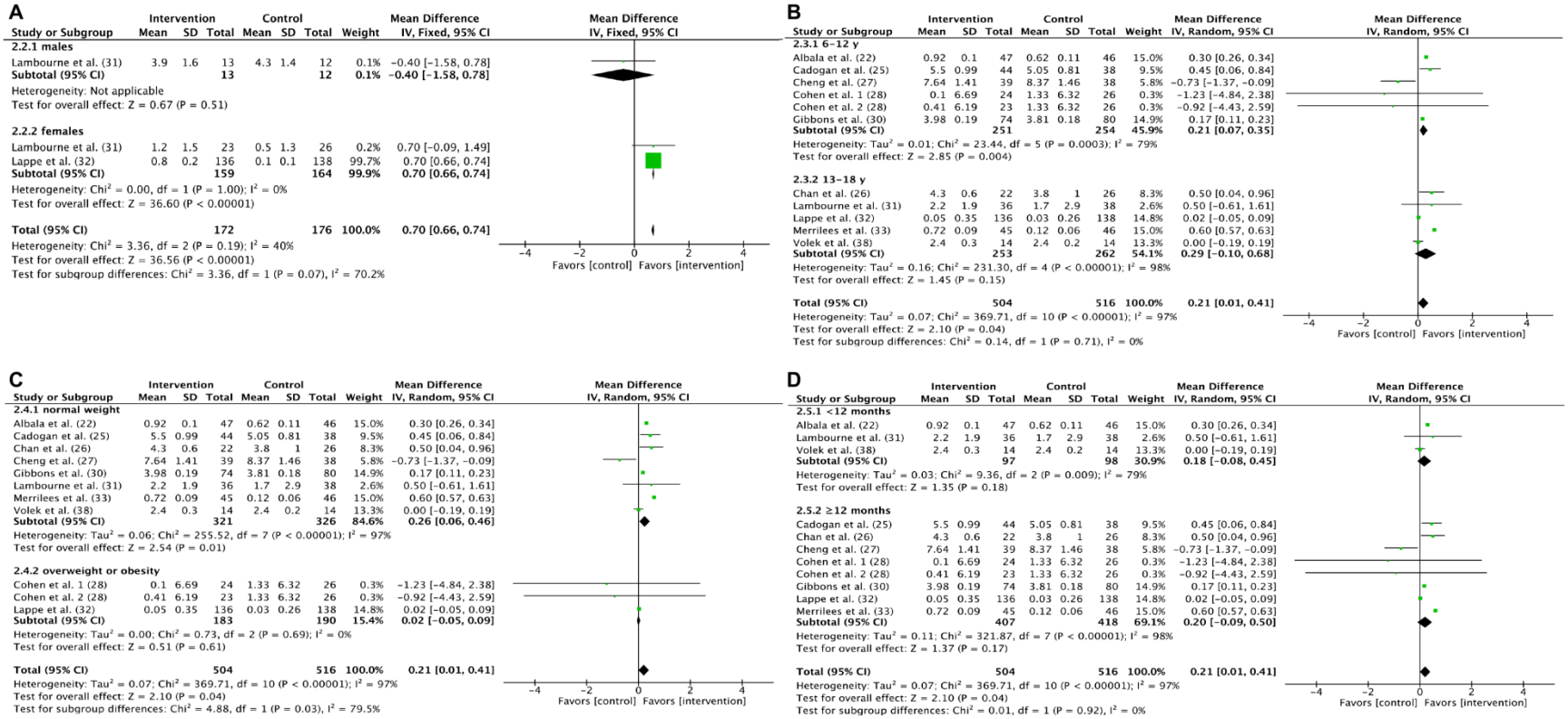
Supplemental Figure 1. Forest plot of change of body weight (kg) between intervention and control group: subgroup analysis of (**A**) sex; (**B**) age; (**C**) baseline body weight; (**D**) intervention duration; random-effects model.



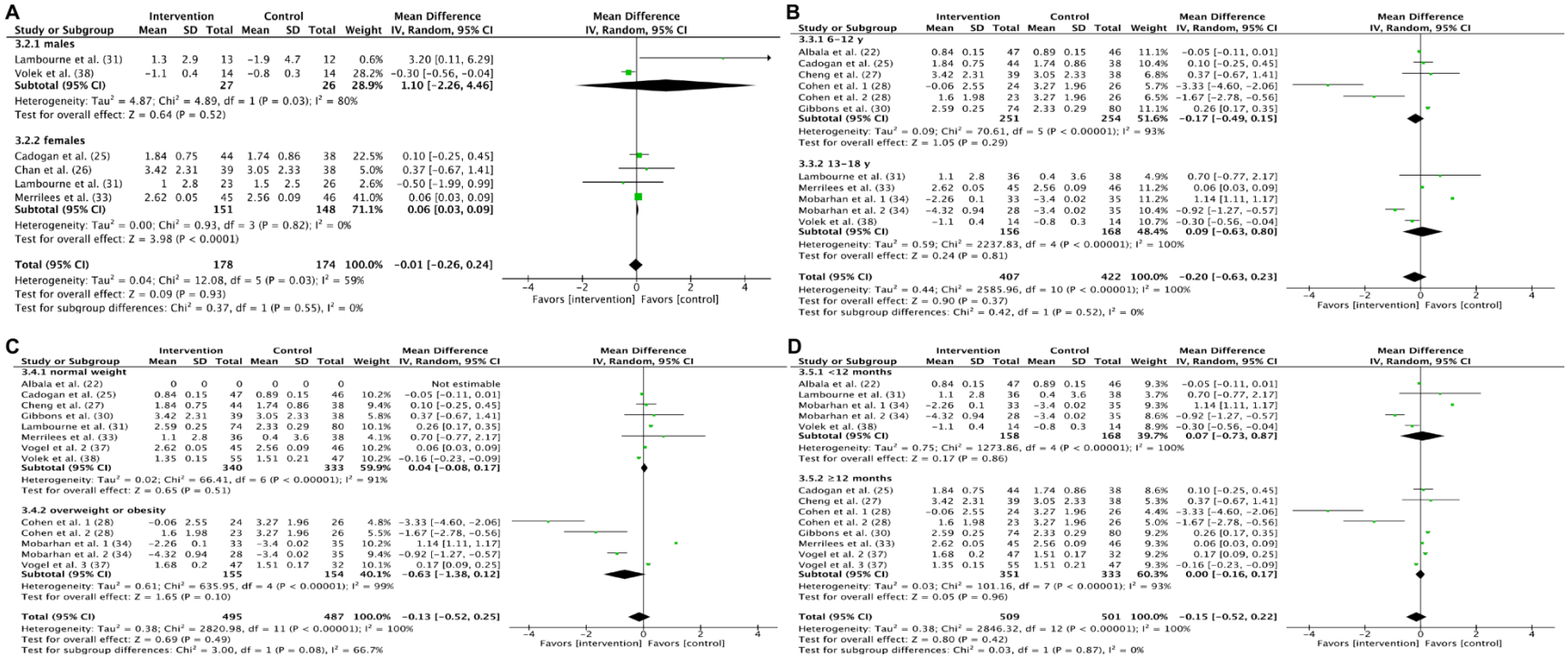
Supplemental Figure 2. Forest plot of change of height (cm) between intervention and control group: subgroup analysis of (**A**) sex; (**B**) age; (**C**) baseline body weight; (**D**) intervention duration; random-effects model.



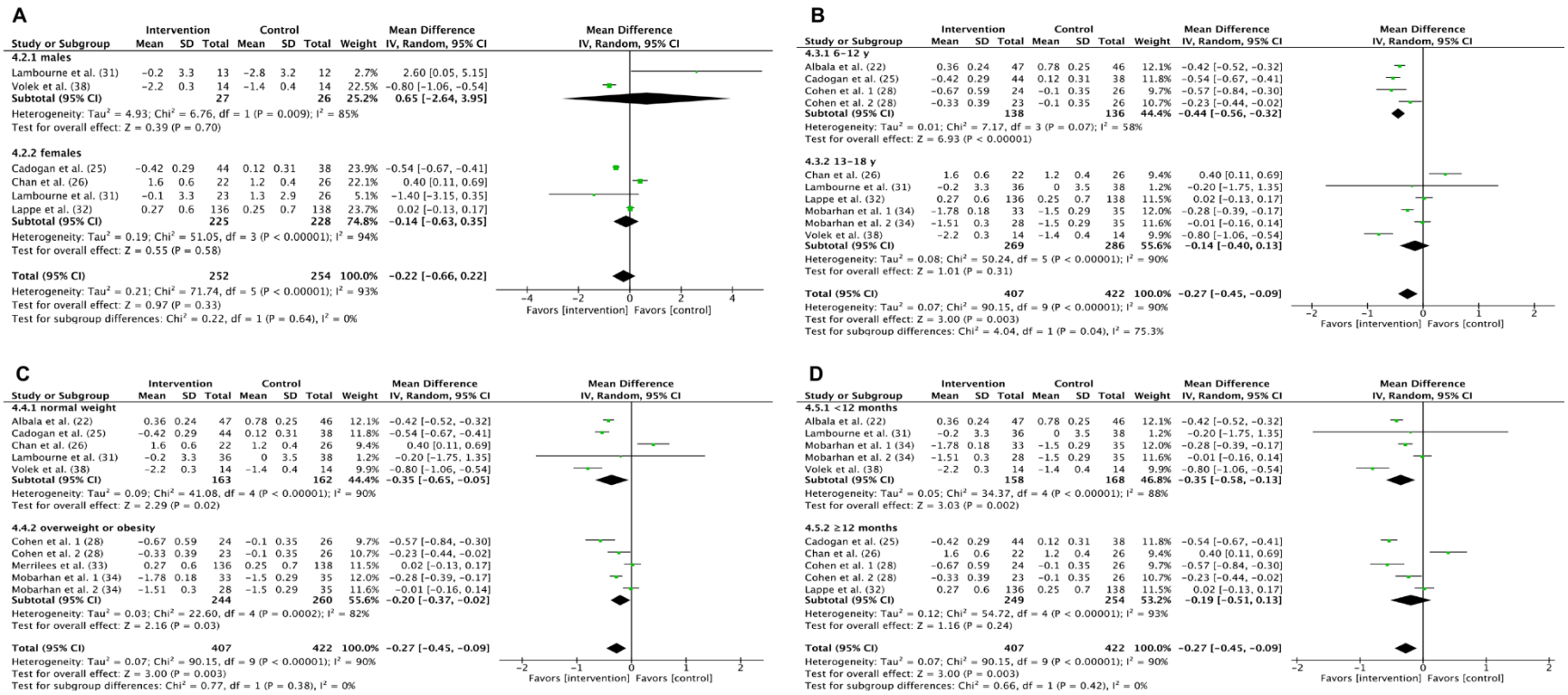
Supplemental Figure 3. Forest plot of change of waist circumference (cm) between intervention and control group: subgroup analysis of (**A**) sex; (**B**) age; (**C**) baseline body weight; (**D**) intervention duration; random-effects model.



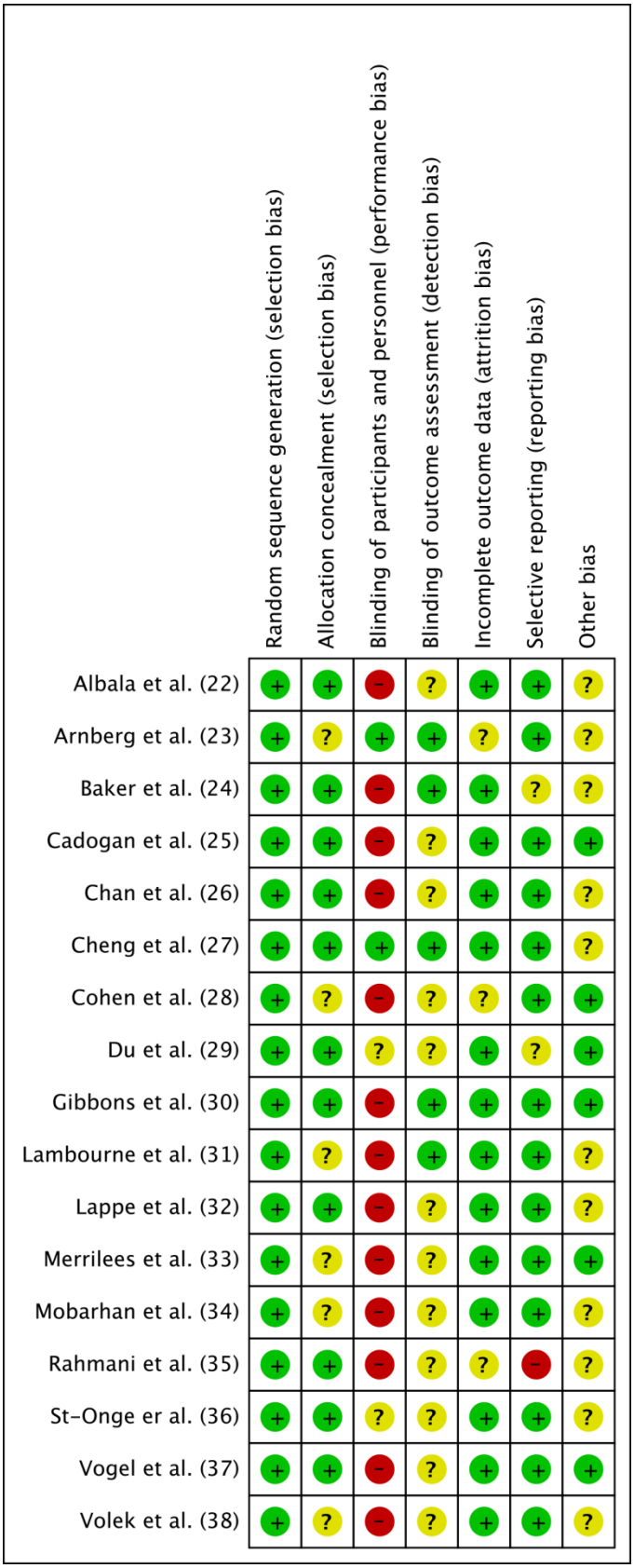
Supplemental Figure 4. Forest plot of change of lean mass(kg) between intervention and control group: subgroup analysis of (**A**) sex; (**B**) age; (**C**) baseline body weight; (**D**) intervention duration; random-effects model.



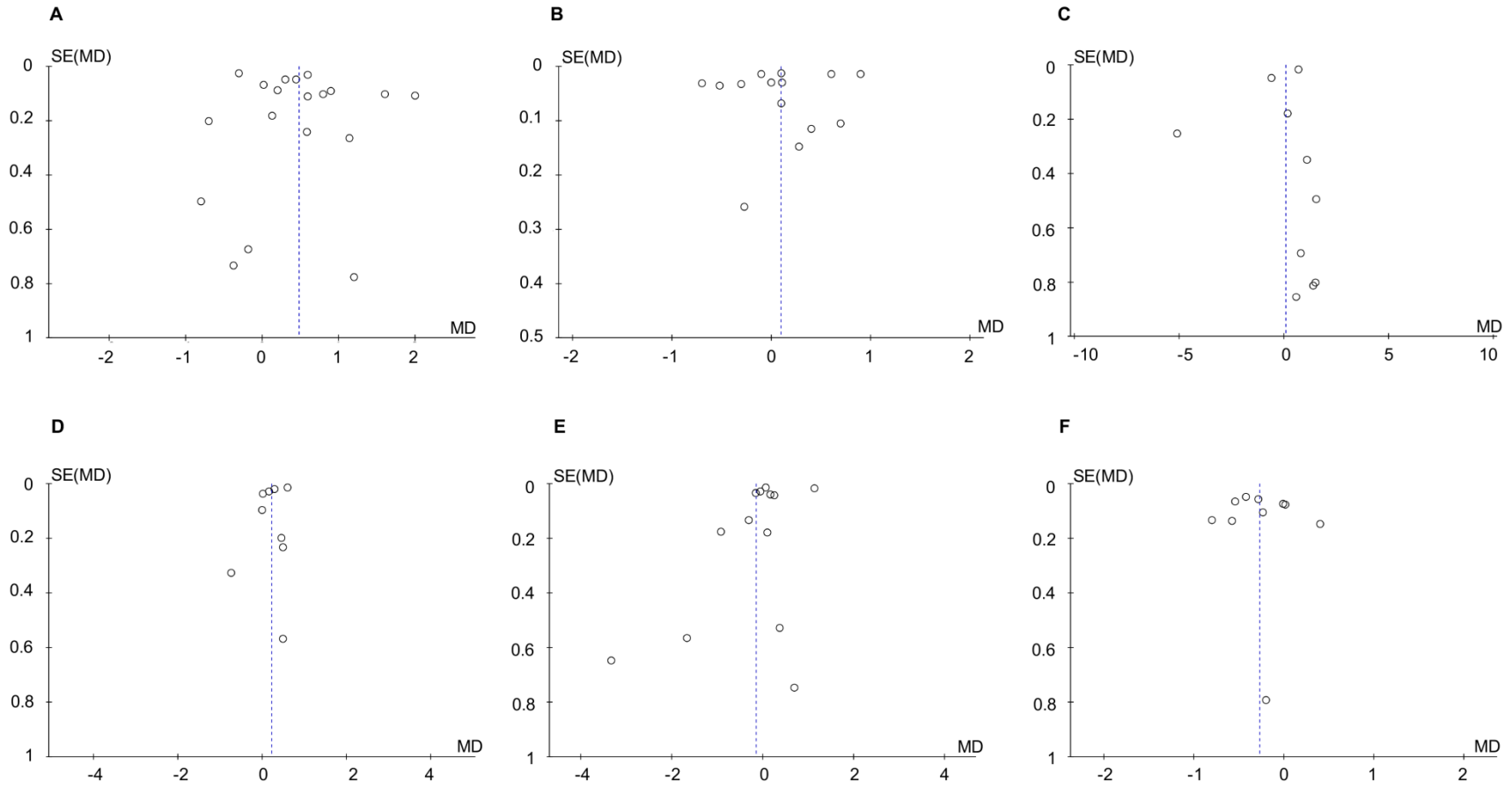
Supplemental Figure 5. Forest plot of change of fat mass (kg) between intervention and control group: subgroup analysis of (**A**) sex; (**B**) age; (**C**) baseline body weight; (**D**) intervention duration; random-effects model.



Supplemental Figure 6. Forest plot of change of percentage body fat (%) between intervention and control group: subgroup analysis of (**A**) sex; (**B**) age; (**C**) baseline body weight; (**D**) intervention duration; random-effects model.



Supplemental Figure 7. Assessment of risk of bias summary.



Supplemental Figure 8. Funnel plot for (**A**) body weight (kg); (**B**) body height (cm); (**C**) waist circumference (cm); (**D**) lean mass (kg); (**E**) fat mass (kg); (**F**) percentage body fat (%); SE, standard error; MD, mean weighted difference between intervention and control groups.