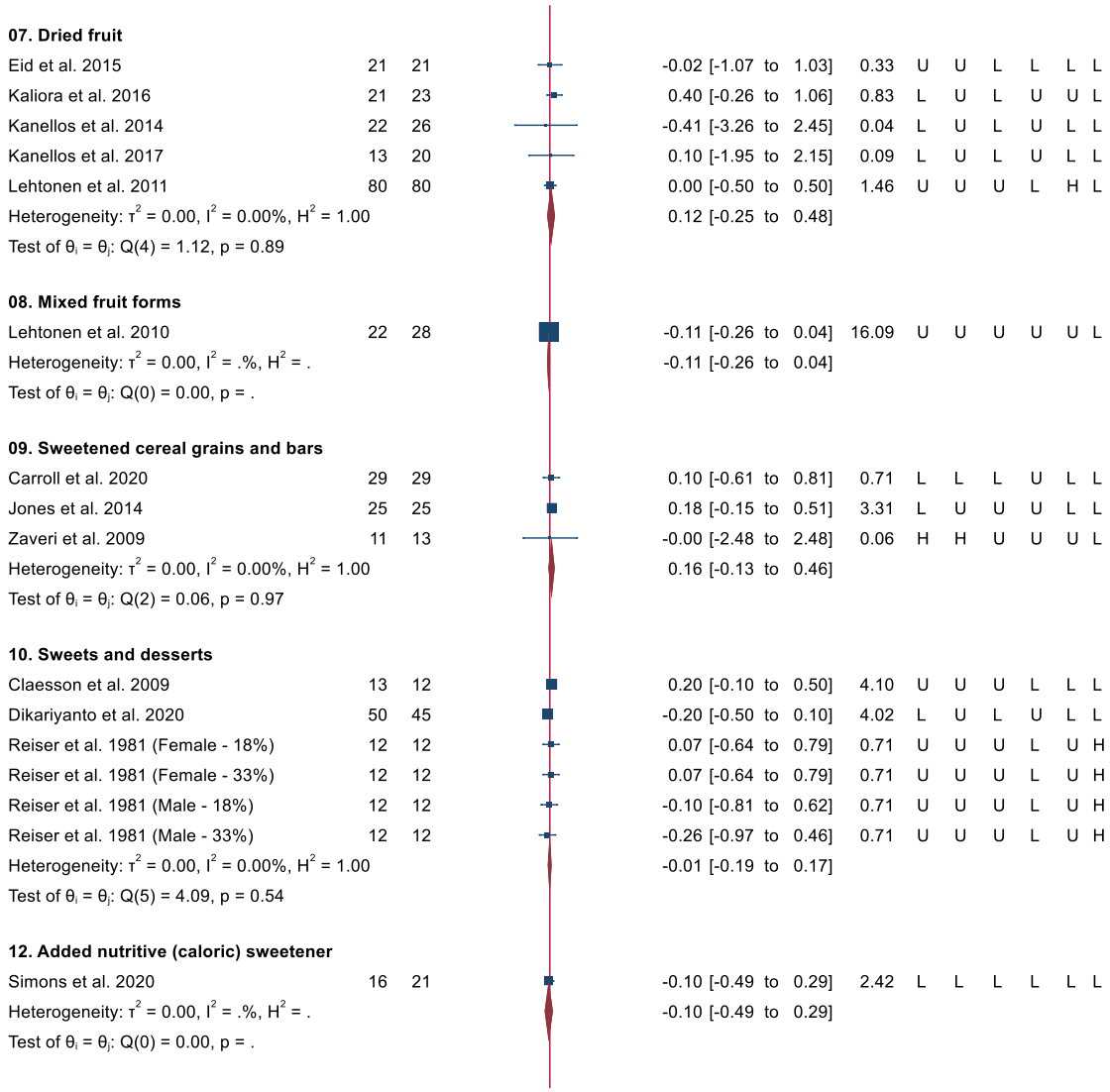
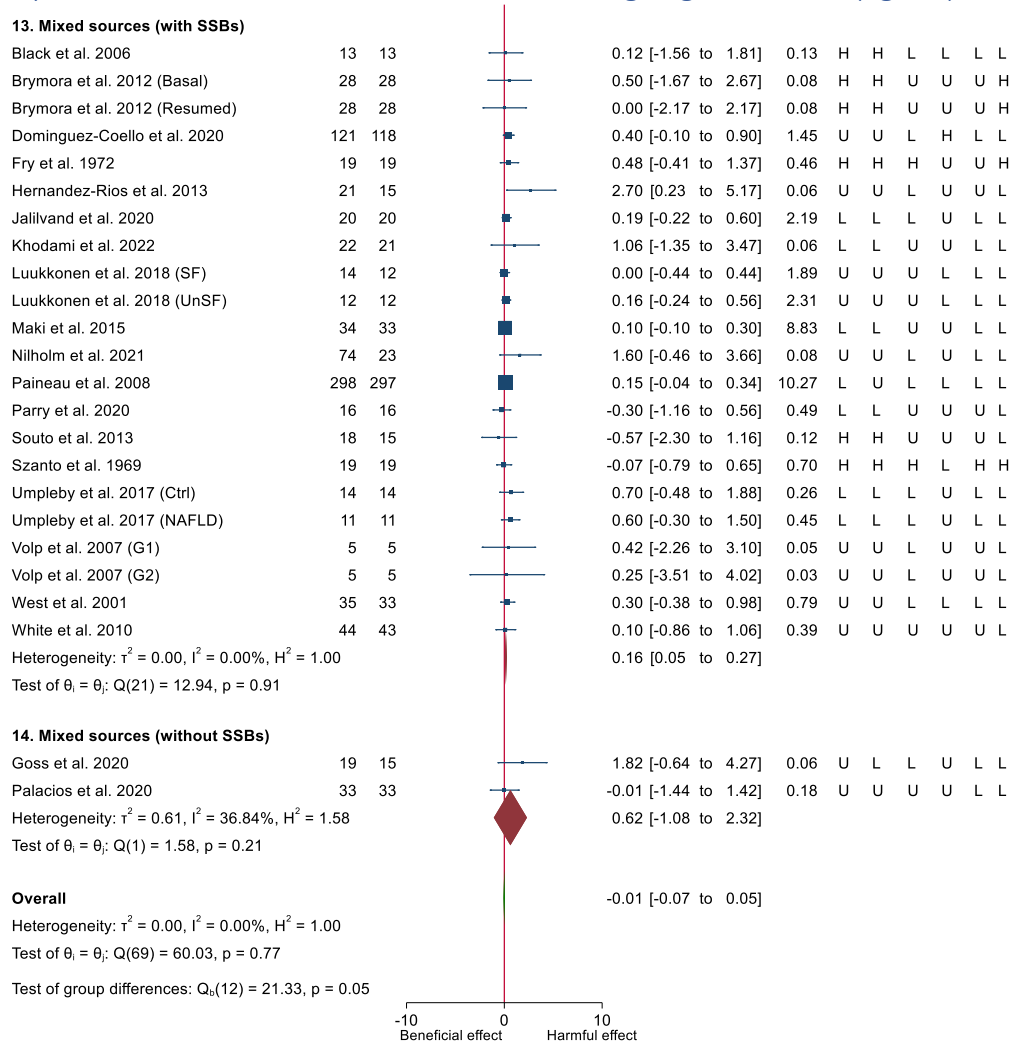
Supplementary Figure 13 (2 of 3): Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on BMI (kg/m^2) in substitution trials



Supplementary Figure 13 (3 of 3): Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on BMI (kg/m^2) in substitution trials



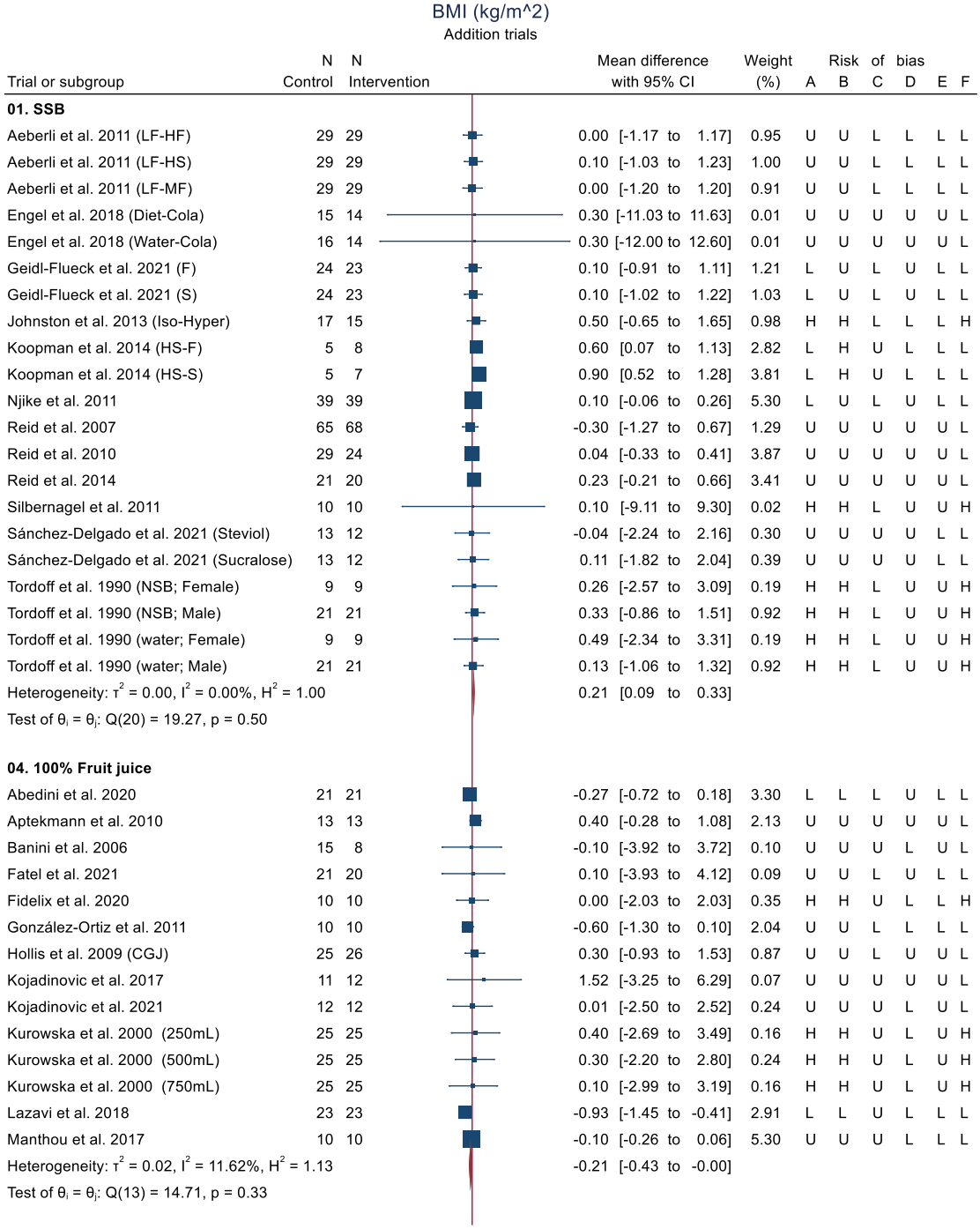
Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.

Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.

Pooled effect summary calculated with the χ^2 test. test for group differences calculated with meta-regression, which uses the Wald test.

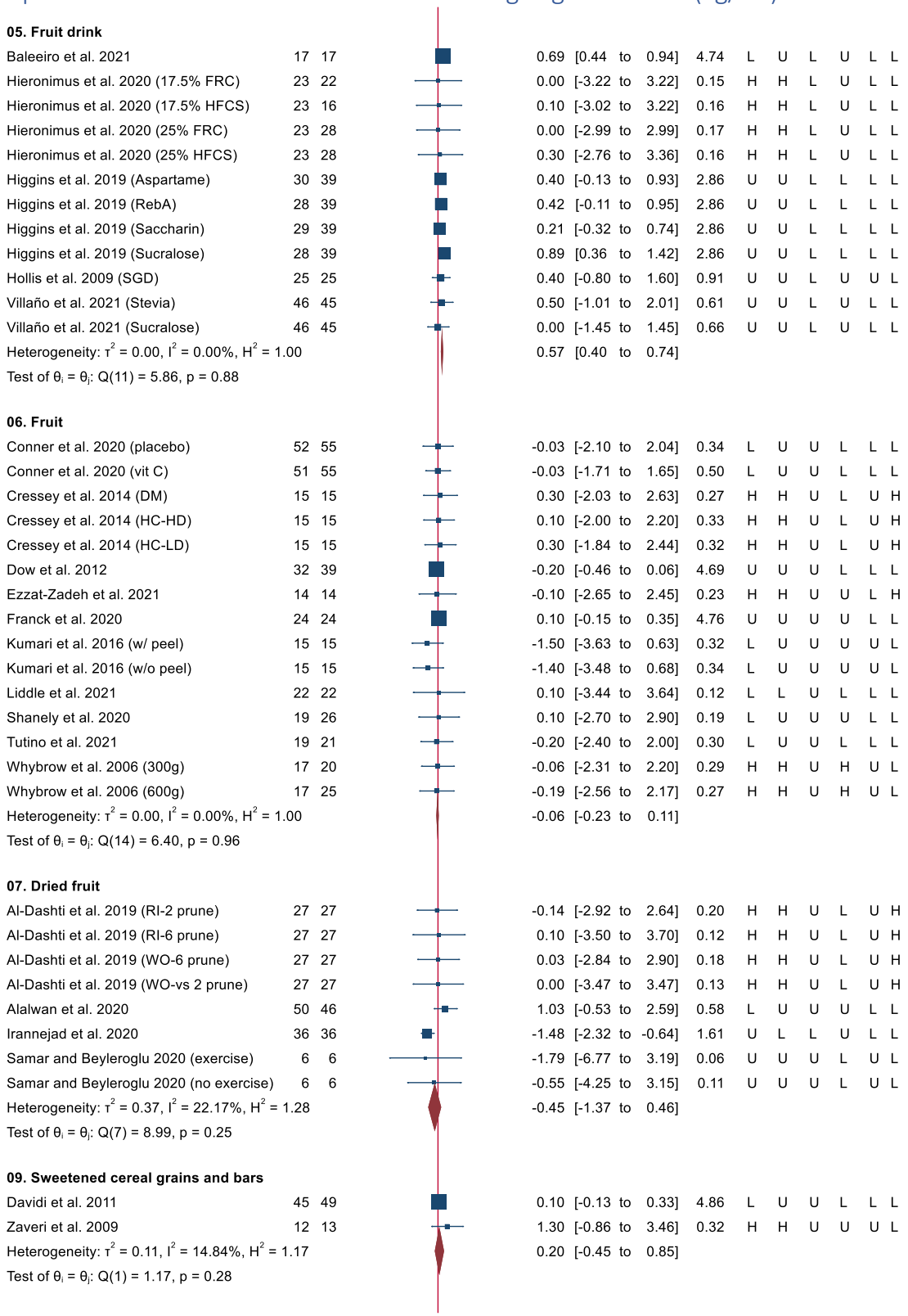
BMI=body mass index; CI=confidence interval; Ctrl=control; F=fructose; FRC=fructose; G=glucose; G1=group 1; G2=group 2; H=high glucose; HF=high fructose; HFCS=high fructose corn syrup; HG=high glucose; HS=high sucrose; Hyper=hypercaloric diet; Iso=isocaloric diet; MD=mean difference; MF=medium fructose; MG=medium glucose; NAFLD=non-alcoholic fatty liver disease; S=sucrose; SF=saturated fat; SSB=sugars-sweetened beverage; UnSF=unsaturated fat.

Supplementary Figure 14 (1 of 3): Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on BMI (kg/m^2) in addition trials

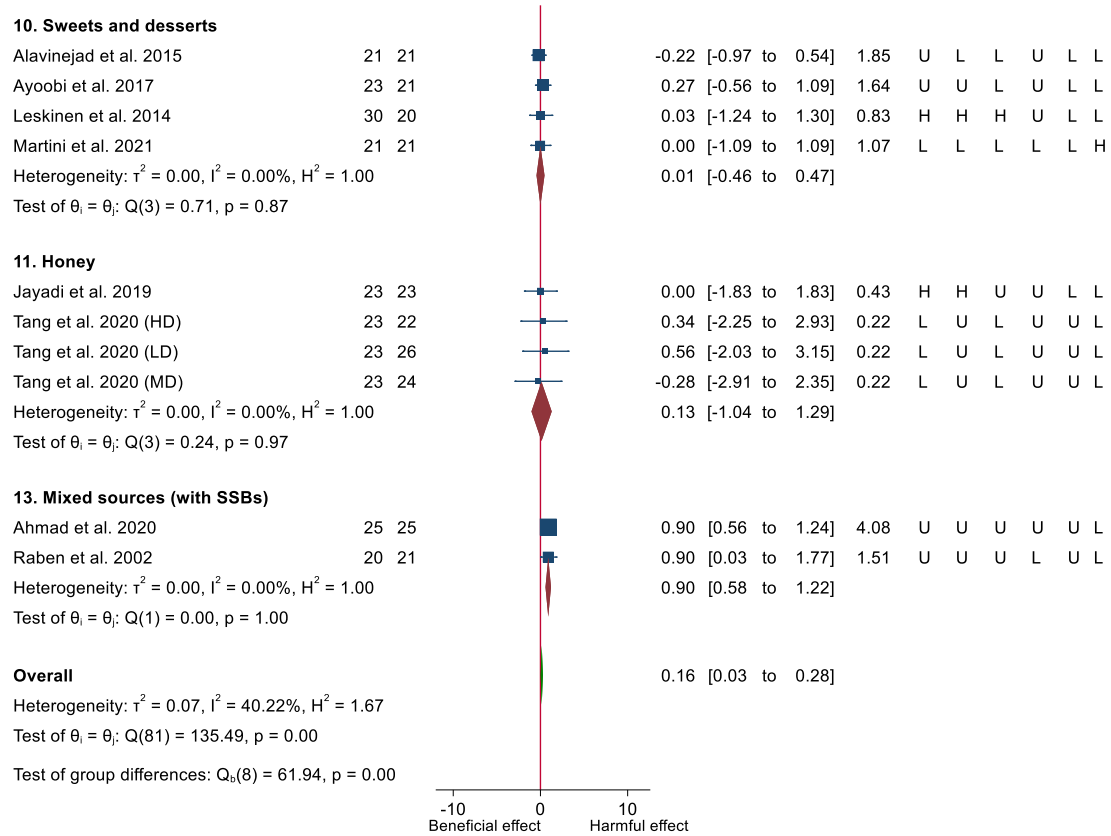


Trial or subgroup	N Control	N Intervention	Mean difference with 95% CI	Weight (%)	Risk of bias A	B	C	D	E	F
01. SSB										
Aeberli et al. 2011 (LF-HF)	29	29	0.00 [-1.17 to 1.17]	0.95	U	U	L	L	L	L
Aeberli et al. 2011 (LF-HS)	29	29	0.10 [-1.03 to 1.23]	1.00	U	U	L	L	L	L
Aeberli et al. 2011 (LF-MF)	29	29	0.00 [-1.20 to 1.20]	0.91	U	U	L	L	L	L
Engel et al. 2018 (Diet-Cola)	15	14	0.30 [-11.03 to 11.63]	0.01	U	U	U	U	U	L
Engel et al. 2018 (Water-Cola)	16	14	0.30 [-12.00 to 12.60]	0.01	U	U	U	U	U	L
Geidl-Flueck et al. 2021 (F)	24	23	0.10 [-0.91 to 1.11]	1.21	L	U	L	U	L	L
Geidl-Flueck et al. 2021 (S)	24	23	0.10 [-1.02 to 1.22]	1.03	L	U	L	U	L	L
Johnston et al. 2013 (Iso-Hyper)	17	15	0.50 [-0.65 to 1.65]	0.98	H	H	L	L	L	H
Koopman et al. 2014 (HS-F)	5	8	0.60 [0.07 to 1.13]	2.82	L	H	U	L	L	L
Koopman et al. 2014 (HS-S)	5	7	0.90 [0.52 to 1.28]	3.81	L	H	U	L	L	L
Njike et al. 2011	39	39	0.10 [-0.06 to 0.26]	5.30	L	U	L	U	L	L
Reid et al. 2007	65	68	-0.30 [-1.27 to 0.67]	1.29	U	U	U	U	U	L
Reid et al. 2010	29	24	0.04 [-0.33 to 0.41]	3.87	U	U	U	U	U	L
Reid et al. 2014	21	20	0.23 [-0.21 to 0.66]	3.41	U	U	U	U	U	L
Silbernagel et al. 2011	10	10	0.10 [-9.11 to 9.30]	0.02	H	H	L	U	U	H
Sánchez-Delgado et al. 2021 (Steviol)	13	12	-0.04 [-2.24 to 2.16]	0.30	U	U	U	U	L	L
Sánchez-Delgado et al. 2021 (Sucralose)	13	12	0.11 [-1.82 to 2.04]	0.39	U	U	U	U	L	L
Tordoff et al. 1990 (NSB; Female)	9	9	0.26 [-2.57 to 3.09]	0.19	H	H	L	U	U	H
Tordoff et al. 1990 (NSB; Male)	21	21	0.33 [-0.86 to 1.51]	0.92	H	H	L	U	U	H
Tordoff et al. 1990 (water; Female)	9	9	0.49 [-2.34 to 3.31]	0.19	H	H	L	U	U	H
Tordoff et al. 1990 (water; Male)	21	21	0.13 [-1.06 to 1.32]	0.92	H	H	L	U	U	H
Heterogeneity: τ^2 = 0.00, I^2 = 0.00%, H^2 = 1.00			0.21 [0.09 to 0.33]							
Test of $\theta_i = \theta_j$: Q(20) = 19.27, p = 0.50										
04. 100% Fruit juice										
Abedini et al. 2020	21	21	-0.27 [-0.72 to 0.18]	3.30	L	L	L	U	L	L
Aptekmann et al. 2010	13	13	0.40 [-0.28 to 1.08]	2.13	U	U	U	U	U	L
Banini et al. 2006	15	8	-0.10 [-3.92 to 3.72]	0.10	U	U	U	L	U	L
Fatel et al. 2021	21	20	0.10 [-3.93 to 4.12]	0.09	U	U	L	U	L	L
Fidelix et al. 2020	10	10	0.00 [-2.03 to 2.03]	0.35	H	H	U	L	L	H
González-Ortiz et al. 2011	10	10	-0.60 [-1.30 to 0.10]	2.04	U	U	L	L	L	L
Hollis et al. 2009 (CGJ)	25	26	0.30 [-0.93 to 1.53]	0.87	U	U	L	U	U	L
Kojadinovic et al. 2017	11	12	1.52 [-3.25 to 6.29]	0.07	U	U	U	U	U	L
Kojadinovic et al. 2021	12	12	0.01 [-2.50 to 2.52]	0.24	U	U	U	L	U	L
Kurowska et al. 2000 (250mL)	25	25	0.40 [-2.69 to 3.49]	0.16	H	H	U	L	U	H
Kurowska et al. 2000 (500mL)	25	25	0.30 [-2.20 to 2.80]	0.24	H	H	U	L	U	H
Kurowska et al. 2000 (750mL)	25	25	0.10 [-2.99 to 3.19]	0.16	H	H	U	L	U	H
Lazavi et al. 2018	23	23	-0.93 [-1.45 to -0.41]	2.91	L	L	U	L	L	L
Manthou et al. 2017	10	10	-0.10 [-0.26 to 0.06]	5.30	U	U	U	L	L	L
Heterogeneity: τ^2 = 0.02, I^2 = 11.62%, H^2 = 1.13			-0.21 [-0.43 to -0.00]							
Test of $\theta_i = \theta_j$: Q(13) = 14.71, p = 0.33										

Supplementary Figure 14 (2 of 3): Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on BMI (kg/m^2) in addition trials



Supplementary Figure 14 (3 of 3): Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on BMI (kg/m^2) in addition trials



Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.

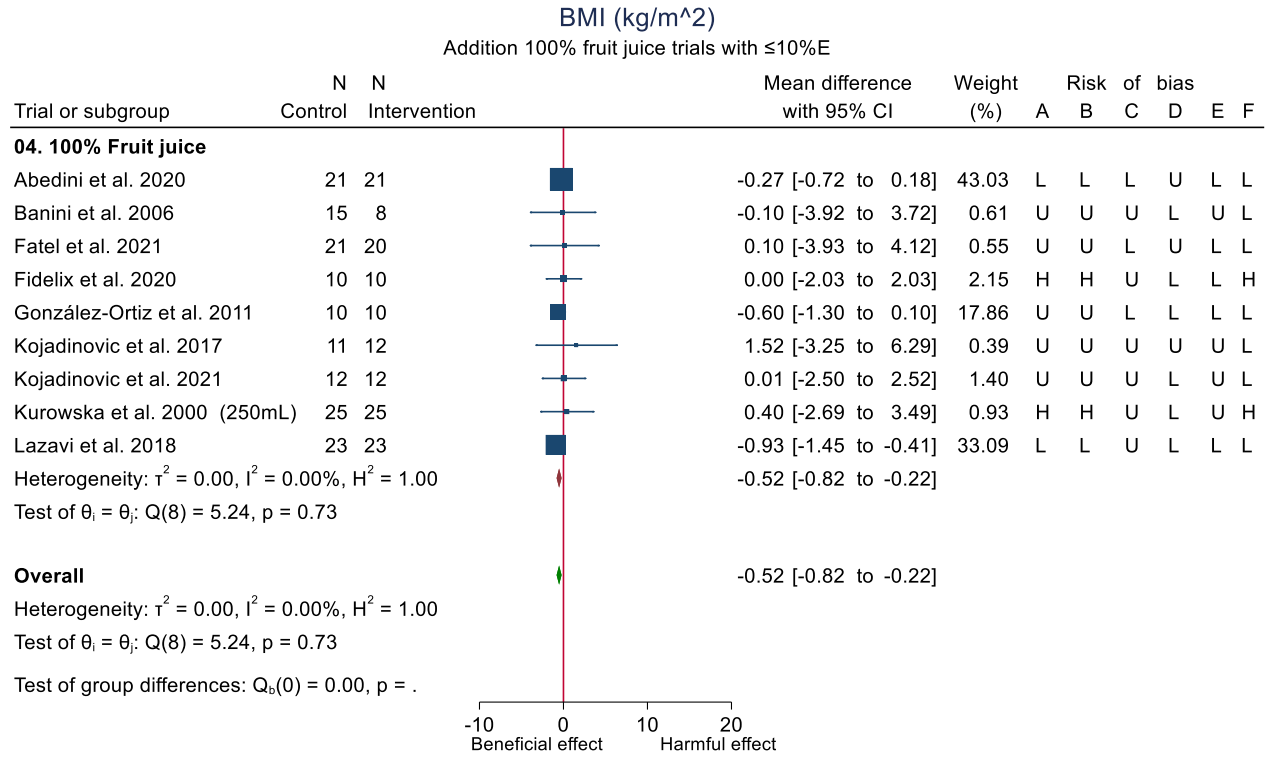
Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.

Pooled effect summary calculated with the χ^2 test. Test for group differences calculated with meta-regression, which uses the Wald test.

BMI=body mass index; CGJ=Concord grape juice; CI=confidence interval; DM=diabetes mellitus; F=fructose; FRC=fructose; HC=hypercholesterolemia; HD=high dose; HF=high fructose; HFCS=high fructose corn syrup; HS-F=high sucrose frequency; HS=high sucrose; HS-S=high sucrose size; Hyper=hypercaloric; Iso=isocaloric; LD=low dose; LF=low fructose; MD=medium dose; MF=medium fructose; NSB=non-nutritive sweetened beverage; RebA=rebaudioside A; RI=run-in; S=sucrose; SGD=standard grape juice; SSB=sugars-sweetened beverage; vit C=vitamin C; w/=with; w/o=without; WO=washout.

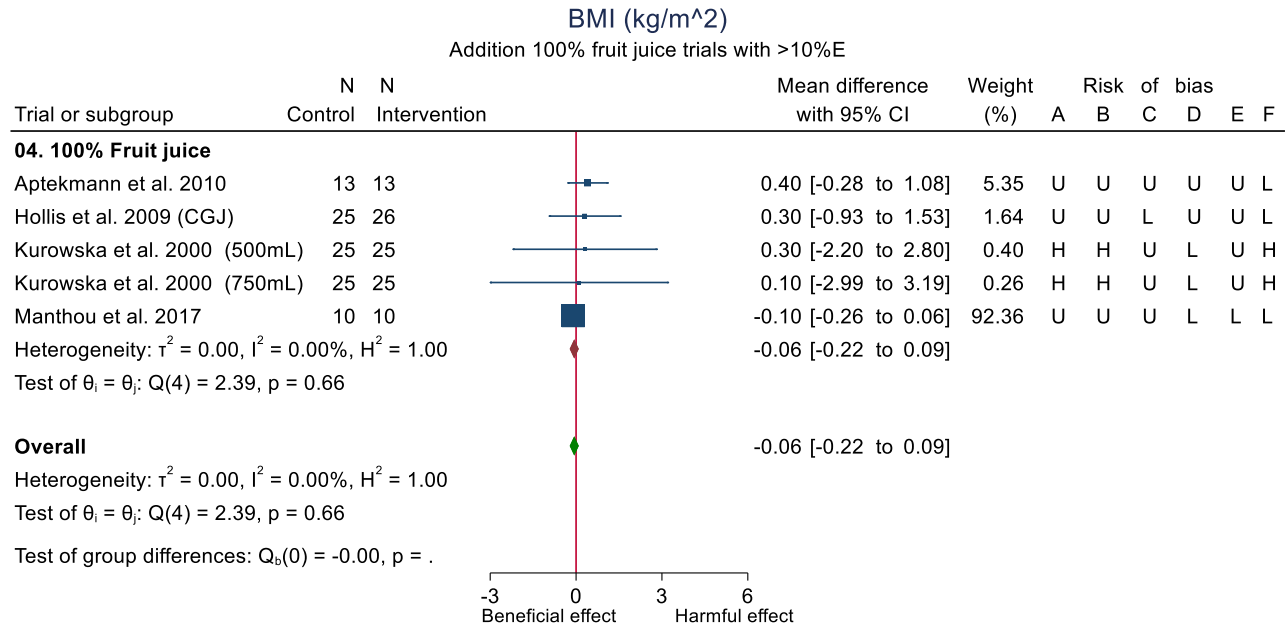
Supplementary Figure 15: Forest plot of controlled trials of the effect of important food sources of 100% fruit juice on BMI (kg/m^2) in addition trials with ≤10%E or >10%E

A



Test of θ = 0: z = -3.436, p = 0.001

B

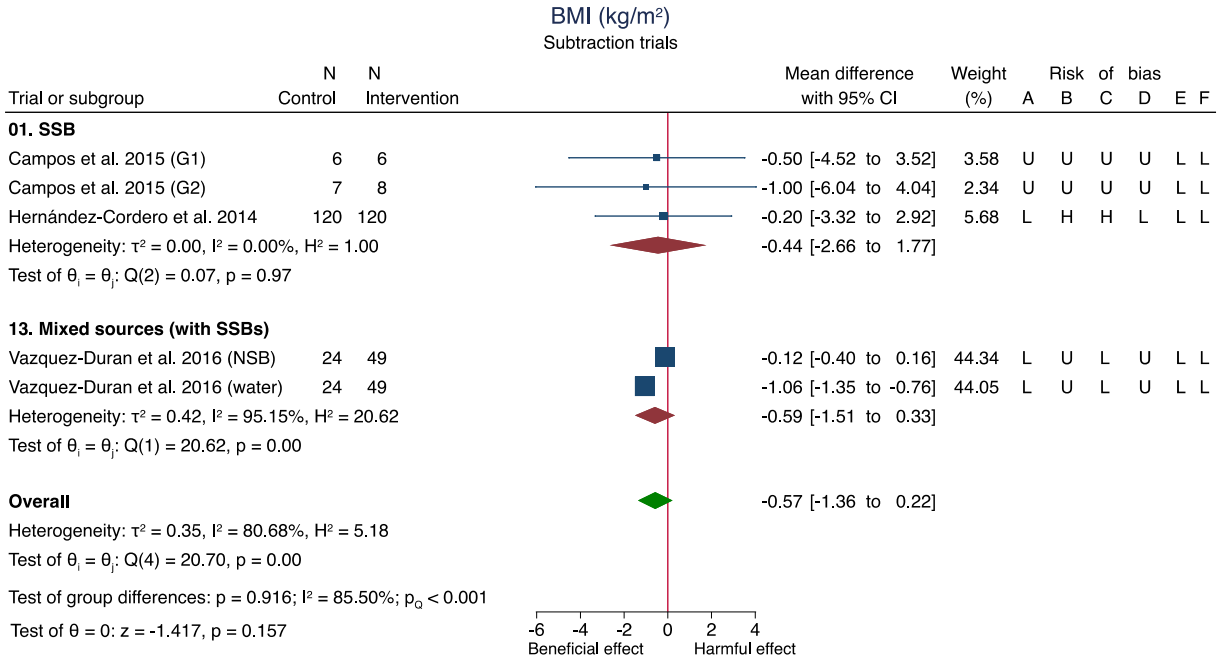


Test of θ = 0: z = -0.803, p = 0.422

Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was

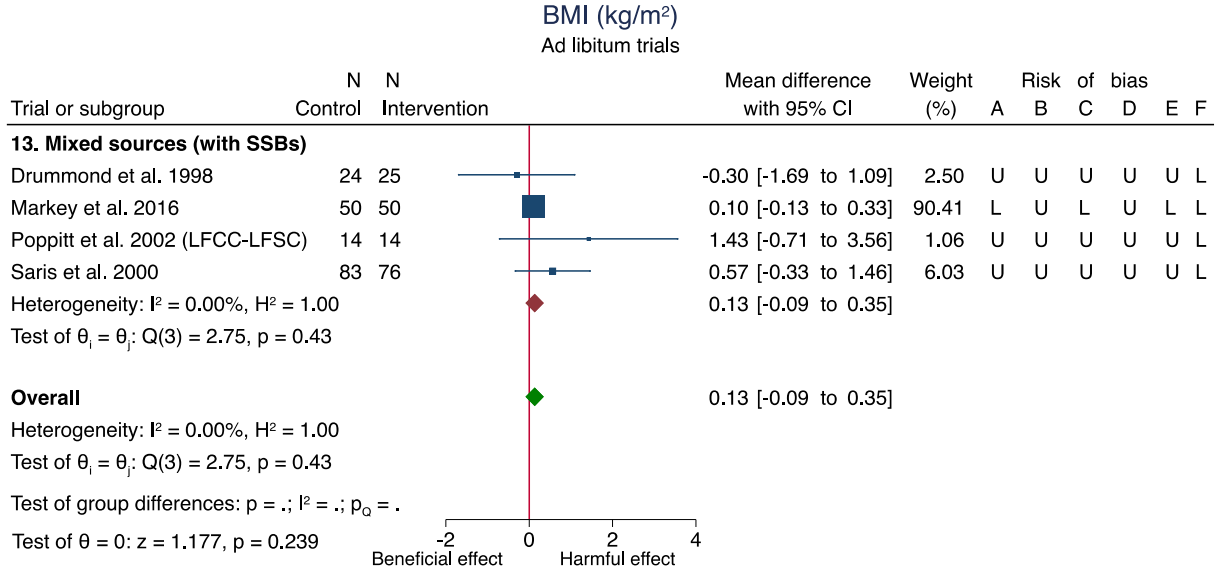
assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.
Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.
Pooled effect summary calculated with the χ^2 test. Test for group differences calculated with meta-regression, which uses the Wald test.
Panel A: addition trials of 100% fruit juice with ≤10%E; B: addition trials of 100% fruit juice with >10%E
BMI=body mass index; CGJ=Concord grape juice; CI=confidence interval.

Supplementary Figure 16: Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on BMI (kg/m^2) in subtraction trials



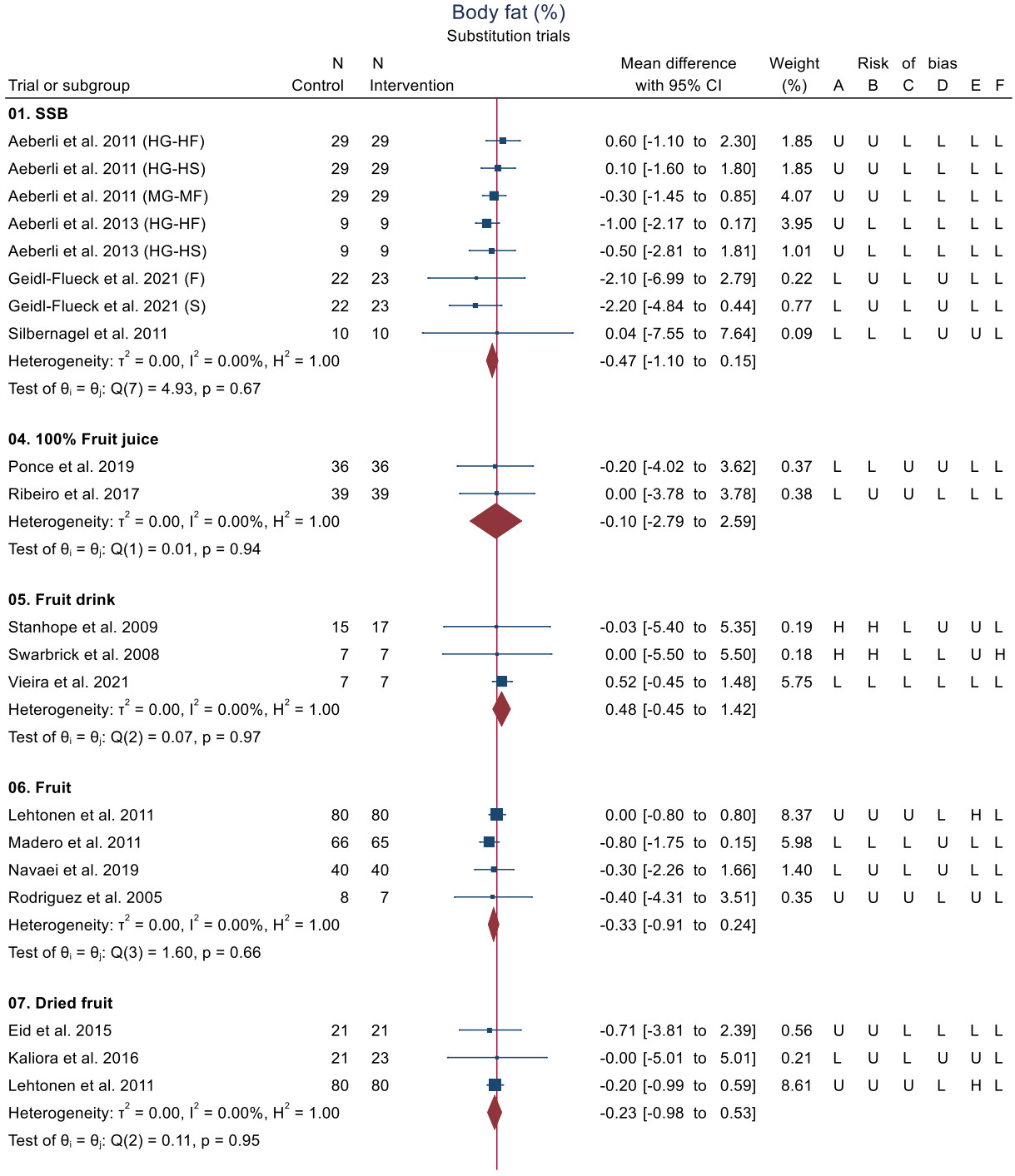
Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.
Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.
Pooled effect summary calculated with the χ^2 test. test for group differences calculated with meta-regression, which uses the Wald test.
BMI=body mass index; CI=confidence interval; G1=group 1; G2=group 2; MD=mean difference; NSB=non-nutritive sweetened beverage; SSB=sugars-sweetened beverages.

Supplementary Figure 17: Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on BMI (kg/m^2) in *ad libitum* trials

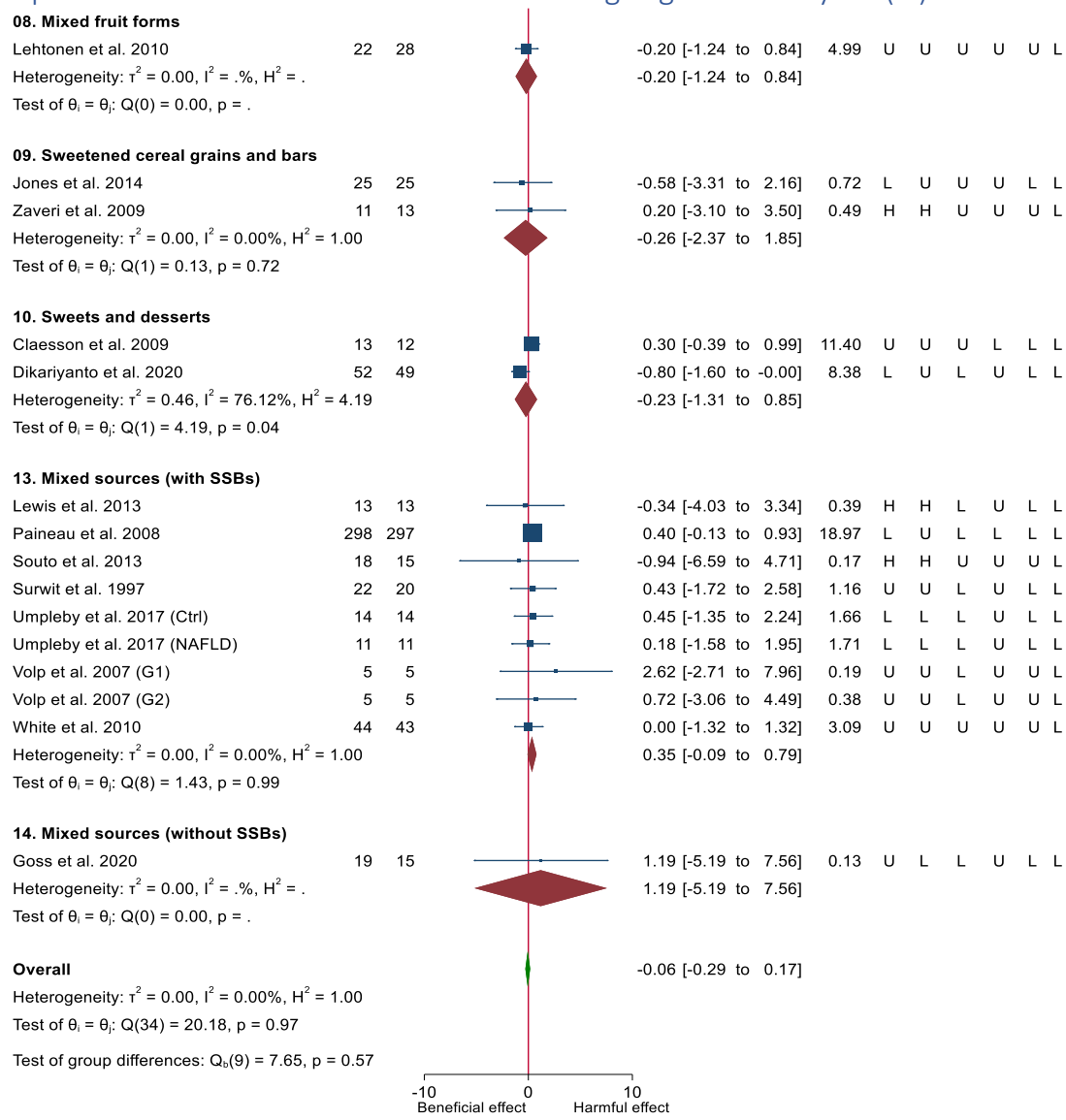


Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity. Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low. Pooled effect summary calculated with the χ^2 test. test for group differences calculated with meta-regression, which uses the Wald test.
BMI=body mass index; CI=confidence interval; LFCC=low-fat, complex carbohydrate; LFSC=low-fat, simple carbohydrate; MD=mean difference; SSB=sugars-sweetened beverage.

Supplementary Figure 18 (1 of 2): Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on body fat (%) in substitution trials



Supplementary Figure 18 (2 of 2): Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on body fat (%) in substitution trials



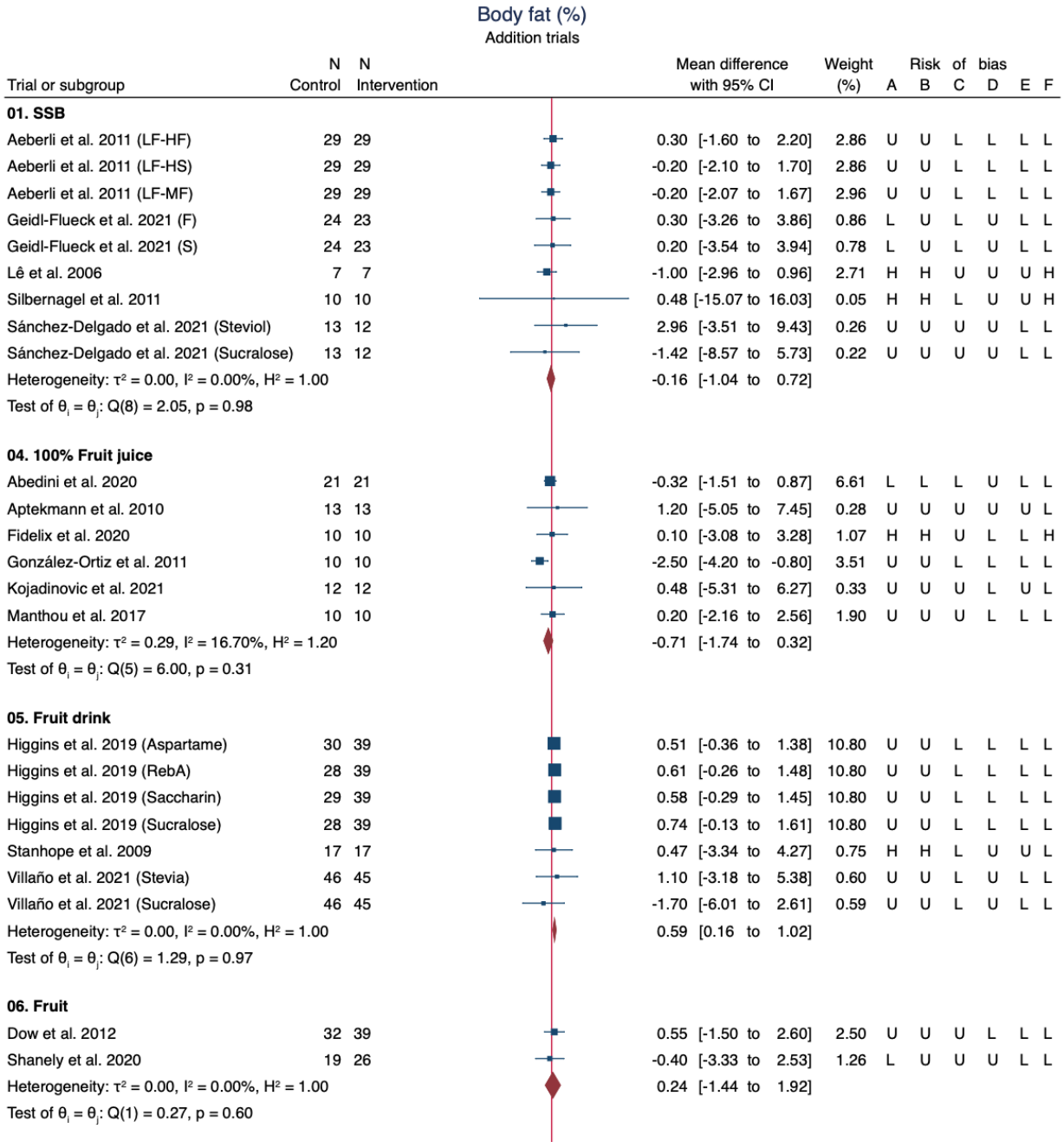
Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.

Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.

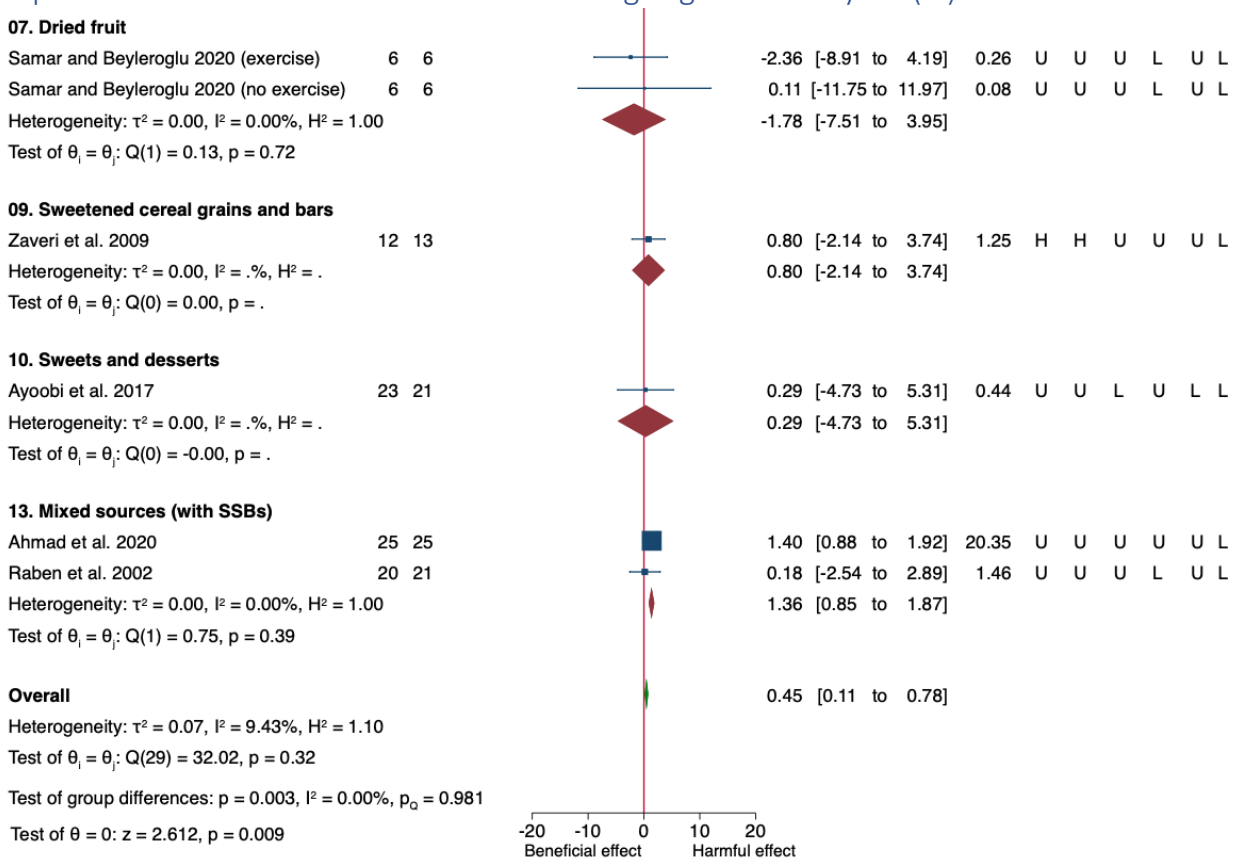
Pooled effect summary calculated with the χ^2 test. test for group differences calculated with meta-regression, which uses the Wald test.

CI=confidence interval; Ctrl=control; F=fructose; G1=group 1; G2=group 2; HF=high fructose; HG=high glucose; HS=high sucrose; MF=medium fructose; MG=medium glucose; NAFLD=non-alcoholic fatty liver disease; S=sucrose

Supplementary Figure 19 (1 of 2): Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on body fat (%) in addition trials



Supplementary Figure 19 (2 of 2): Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on body fat (%) in addition trials



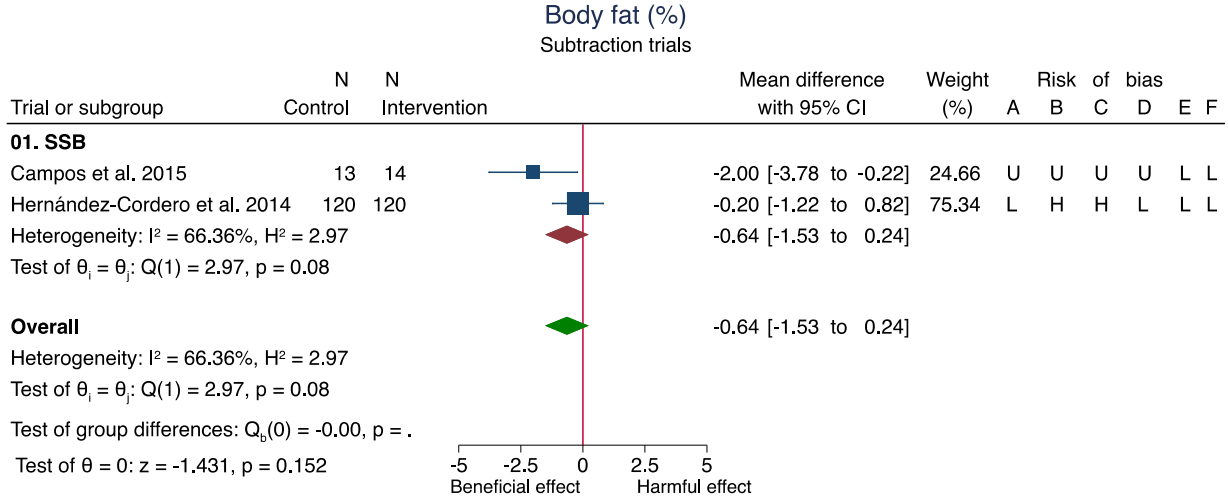
Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.

Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.

Pooled effect summary calculated with the χ^2 test. test for group differences calculated with meta-regression, which uses the Wald test.

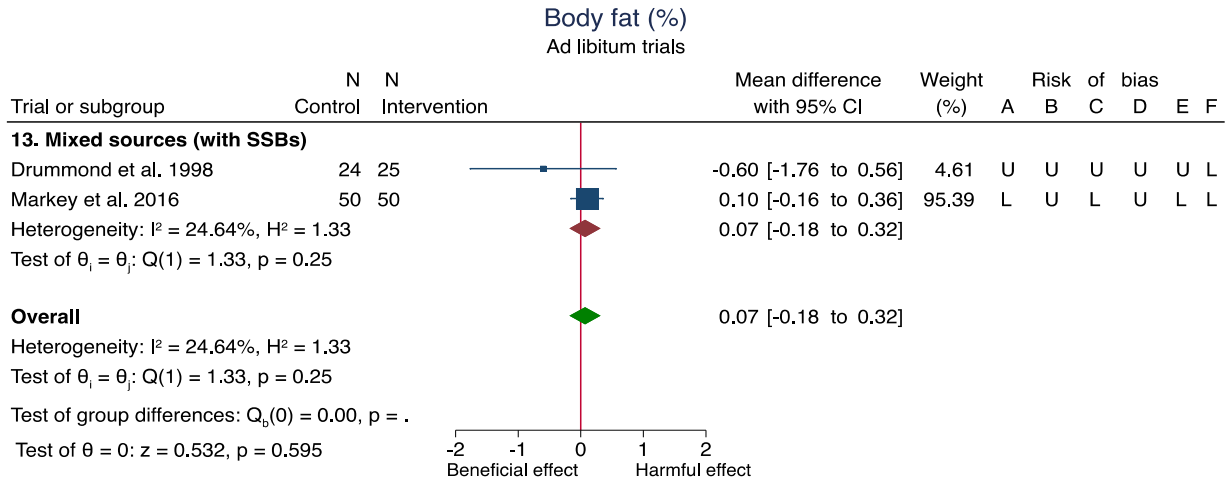
CI=confidence interval; F=fructose; HF=high fructose; HS=high sucrose; LF=low fructose; MF=medium fructose; RebA=rebaudioside A; S=sucrose; SSB=sugars-sweetened beverage.

Supplementary Figure 20: Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on body fat (%) in subtraction trials



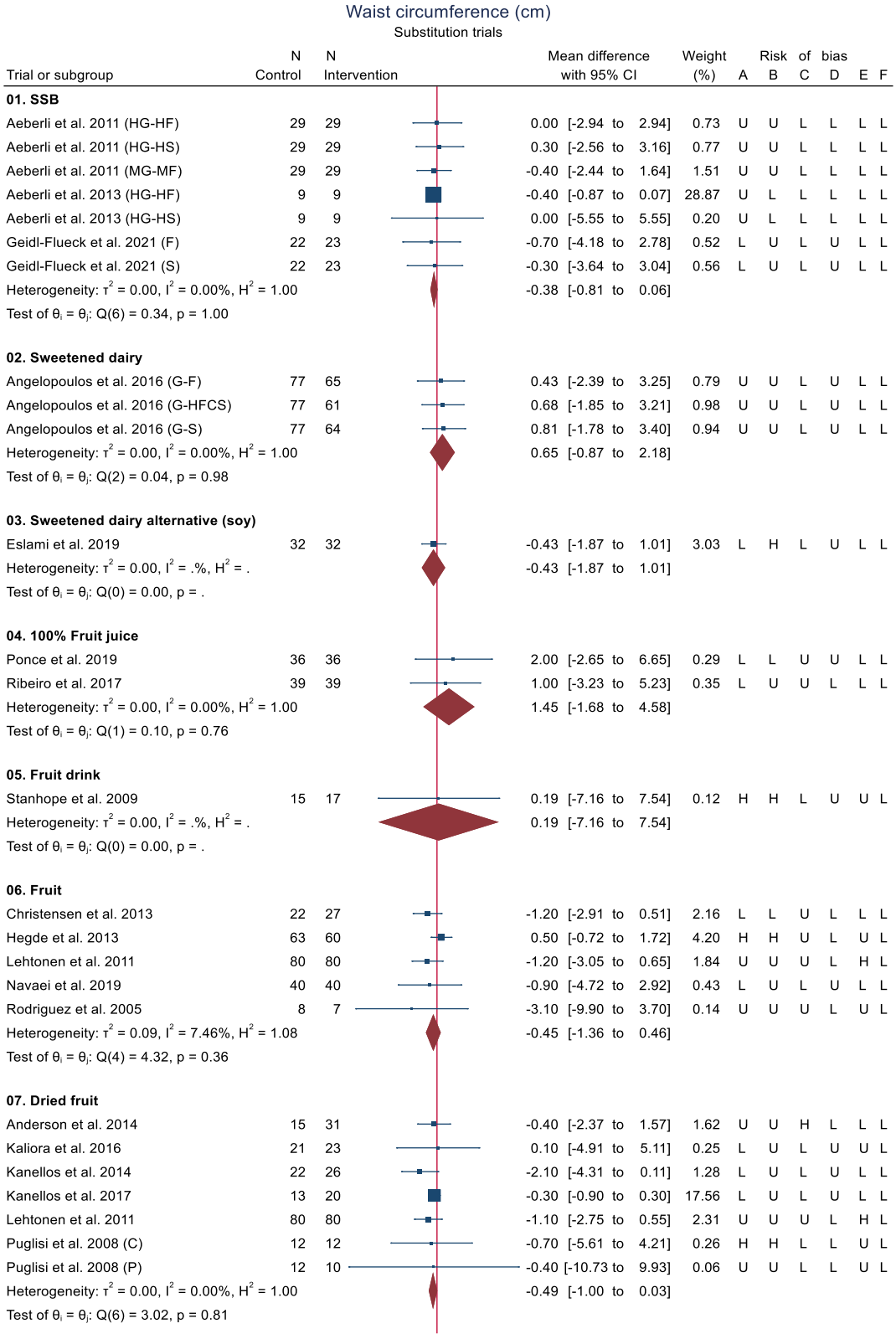
Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.
Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.
Pooled effect summary calculated with the χ^2 test. test for group differences calculated with meta-regression, which uses the Wald test.
CI=confidence interval; SSB=sugars-sweetened beverage.

Supplementary Figure 21: Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on body fat (%) in *ad libitum* trials

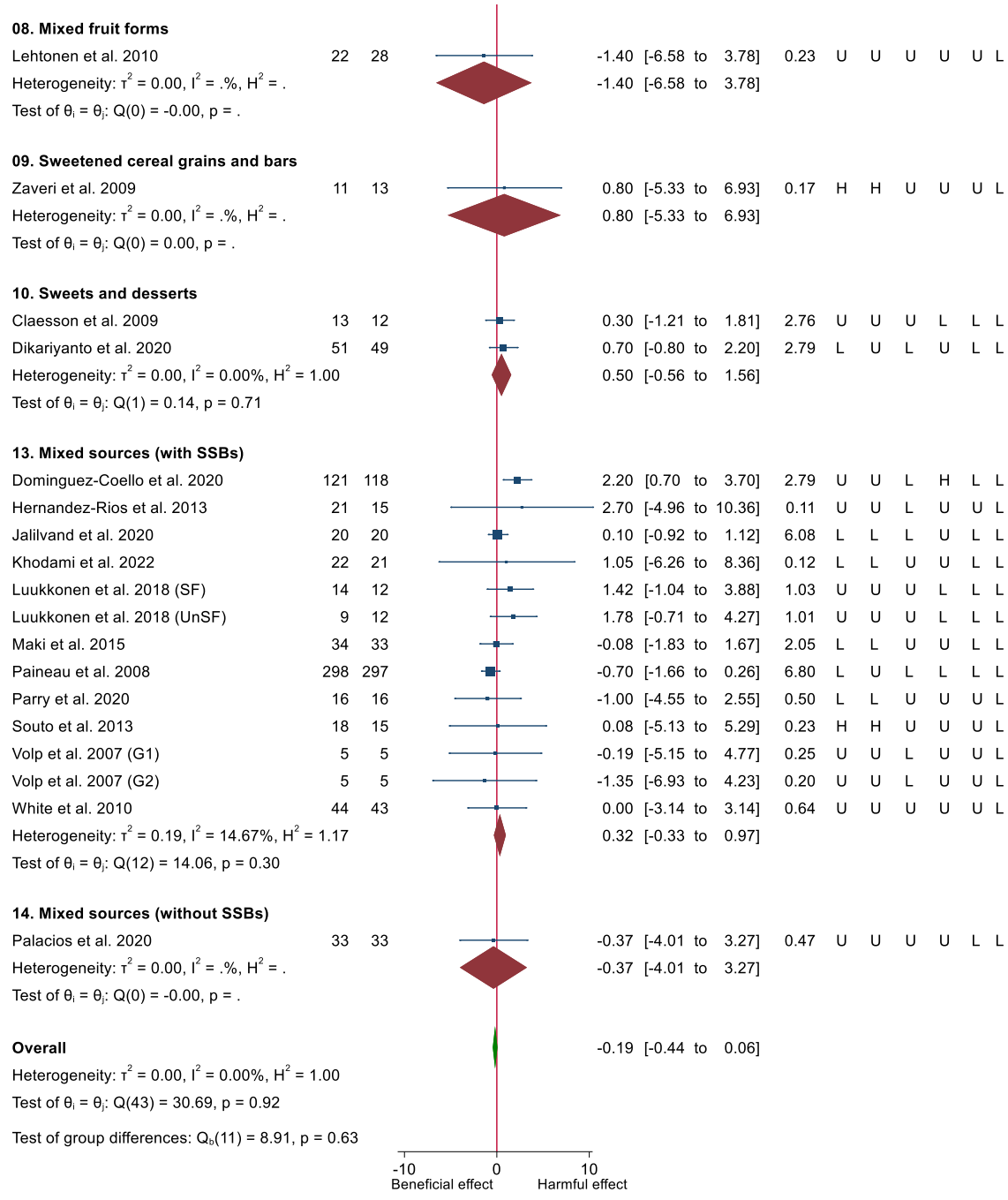


Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.
Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.
Pooled effect summary calculated with the χ^2 test. test for group differences calculated with meta-regression, which uses the Wald test.
CI=confidence interval; SSB=sugars-sweetened beverage.

Supplementary Figure 22 (1 of 2): Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on waist circumference (cm) in substitution trials



Supplementary Figure 22 (2 of 2): Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on waist circumference (cm) in substitution trials



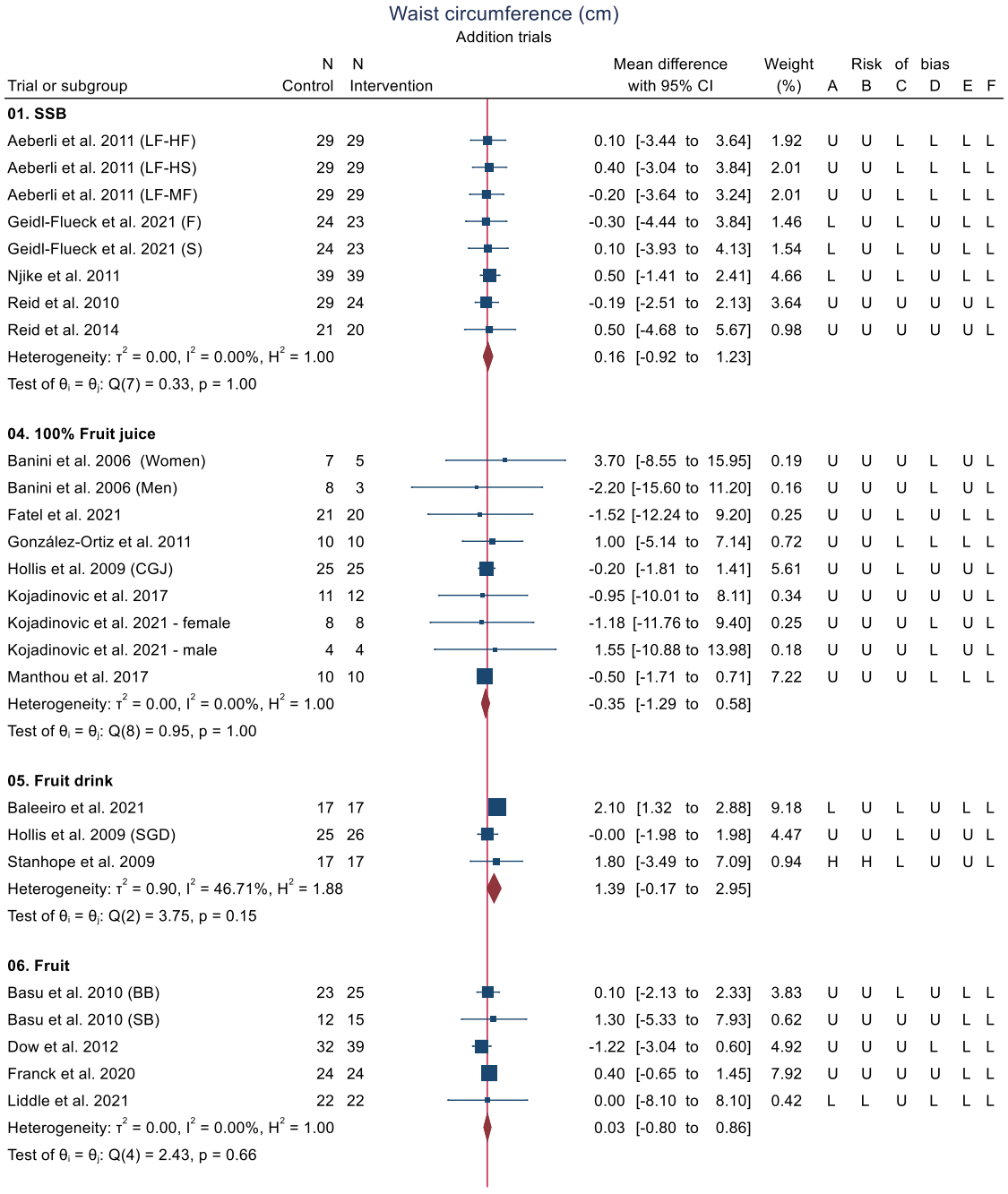
Test of θ = 0: z = -1.468, p = 0.142

Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.

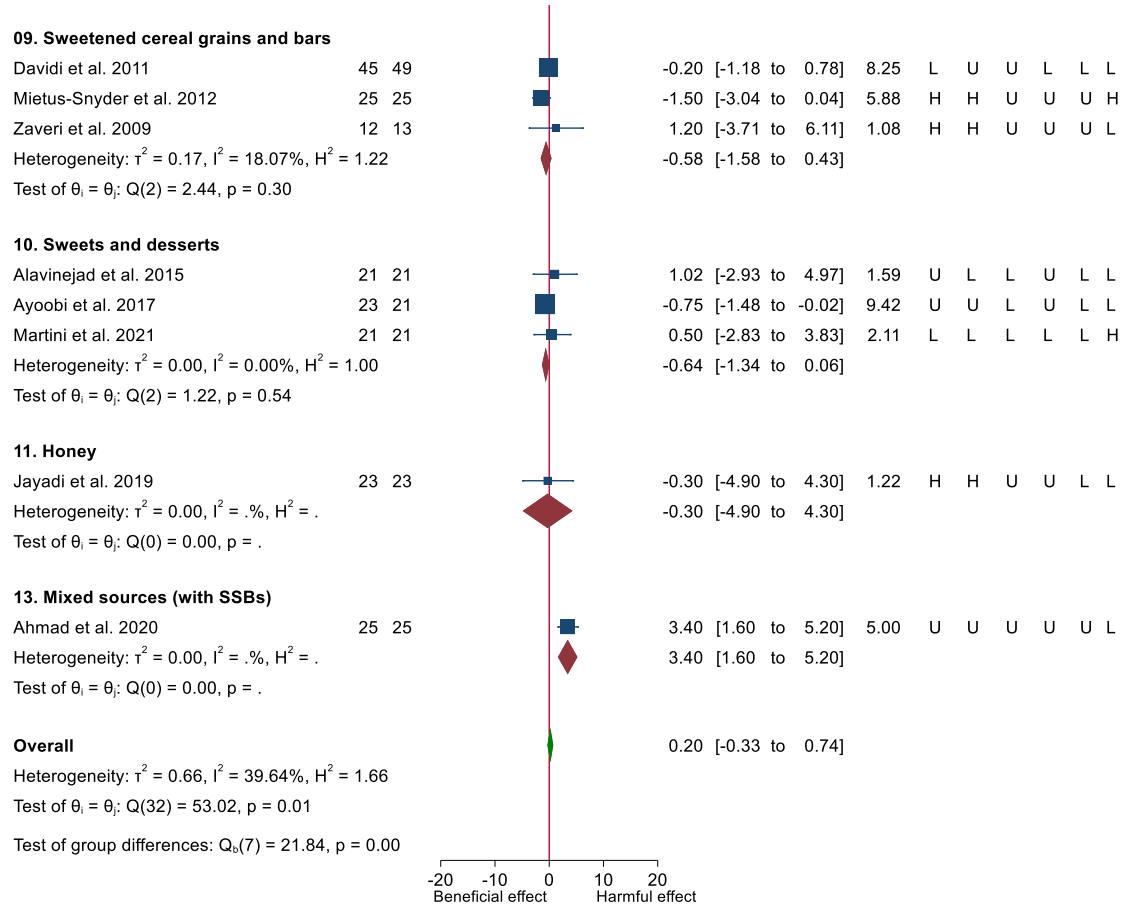
Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of

participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.
Pooled effect summary calculated with the χ^2 test. test for group differences calculated with meta-regression, which uses the Wald test.
C=crossover; CI=confidence interval; F=fructose; G=glucose; G1=group 1; G2=group 2; HF=high fructose; HFCS=high fructose corn syrup; HG=high glucose; HS=high sucrose; MF=medium fructose; MG=medium glucose; P=parallel comparison; S=sucrose; SF=saturated fat; SSB=sugars-sweetened beverage; UnSF=unsaturated fat.

Supplementary Figure 23 (1 of 2): Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on waist circumference (cm) in addition trials



Supplementary Figure 23 (2 of 2): Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on waist circumference (cm) in addition trials



Test of θ = 0: z = 0.748, p = 0.454

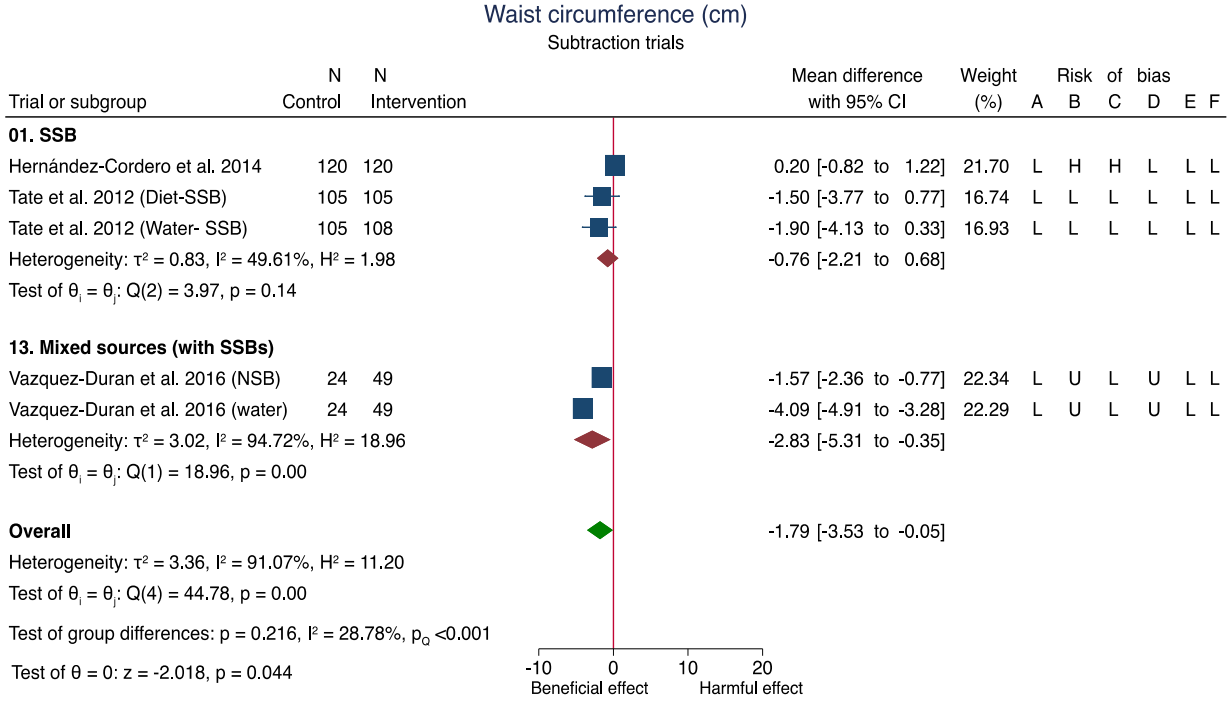
Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.

Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.

Pooled effect summary calculated with the χ^2 test. test for group differences calculated with meta-regression, which uses the Wald test.

BB=blueberry; CGJ=Concord grape juice; CI=confidence interval; F=fructose; LF=low fructose; HF=high fructose; HS=high sucrose; MD=mean difference; MF=medium fructose; S=sucrose; SB=strawberry; SGD=substitute grape-flavored drink; SSB=sugars-sweetened beverage.

Supplementary Figure 24: Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on waist circumference (cm) in subtraction trials



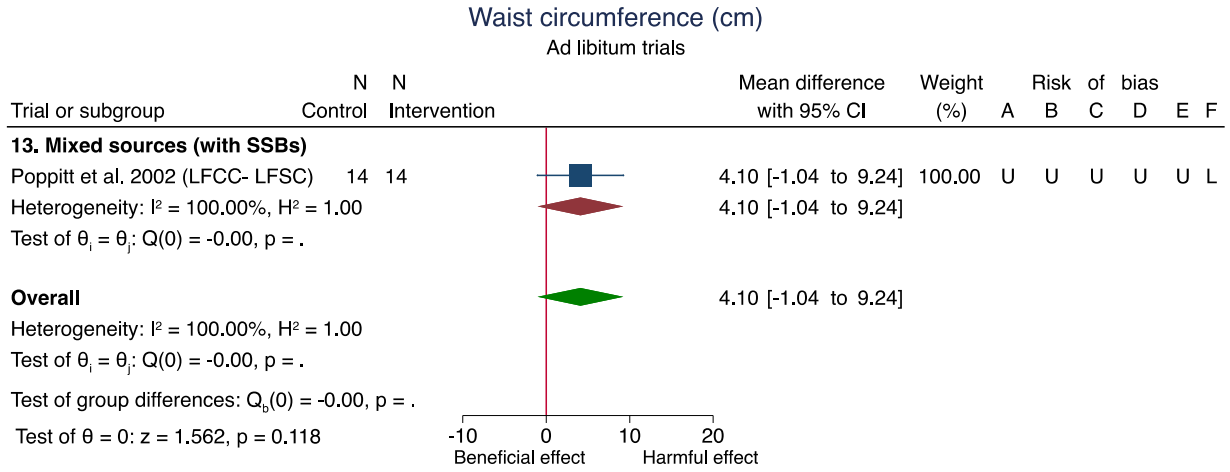
Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.

Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.

Pooled effect summary calculated with the χ^2 test. test for group differences calculated with meta-regression, which uses the Wald test.

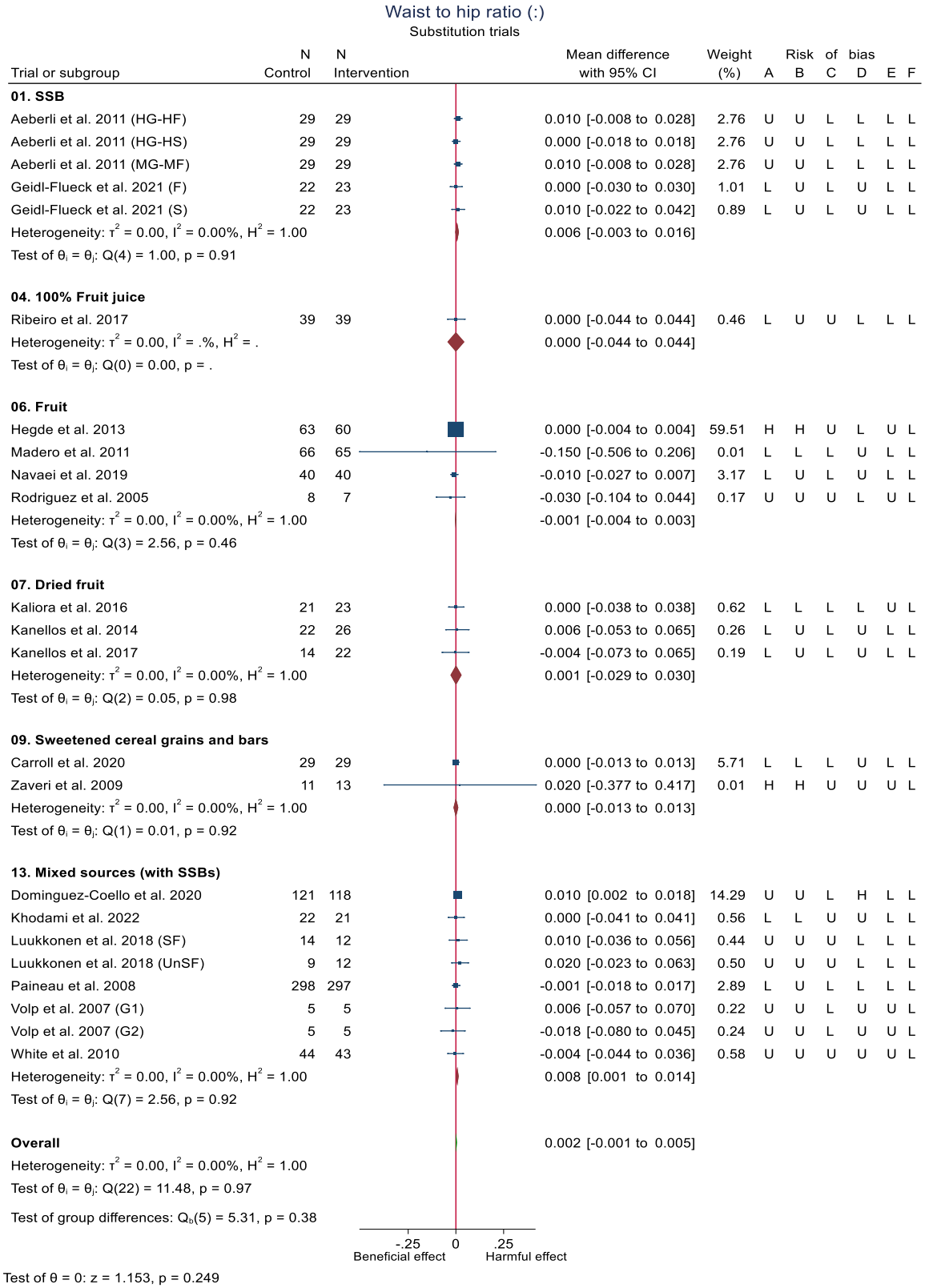
CI=confidence interval; NSB=non-caloric sweetened beverage; SSB=sugars-sweetened beverage.

Supplementary Figure 25: Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on waist circumference (cm) in *ad libitum* trials



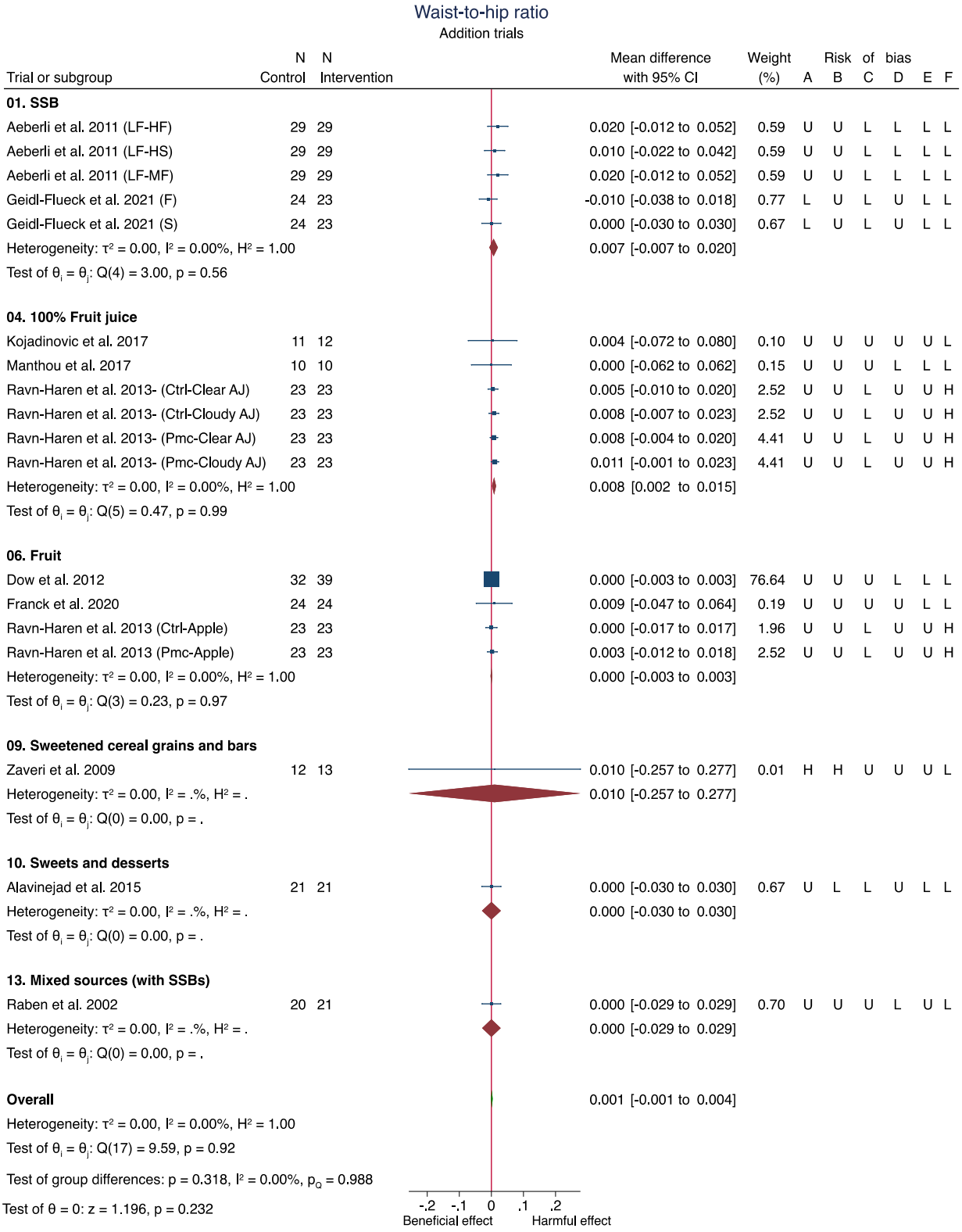
Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.
Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.
Pooled effect summary calculated with the χ^2 test. test for group differences calculated with meta-regression, which uses the Wald test.
CI=confidence interval; LFCC=low-fat complex carbohydrate; LFSC=low-fat simple carbohydrate; SSB=sugars-sweetened beverage.

Supplementary Figure 26: Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on waist-to-hip ratio in substitution trials



Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.
Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.
Pooled effect summary calculated with the χ^2 test. test for group differences calculated with meta-regression, which uses the Wald test.
CI=confidence interval; F=fructose; G1=group 1; G2=group 2; HF=high fructose; HG=high glucose; HS=high sucrose; MF=medium fructose; MG=medium glucose; S=sucrose; SF=saturated fat; SSB=sugars-sweetened beverage; UnSF=unsaturated fat.

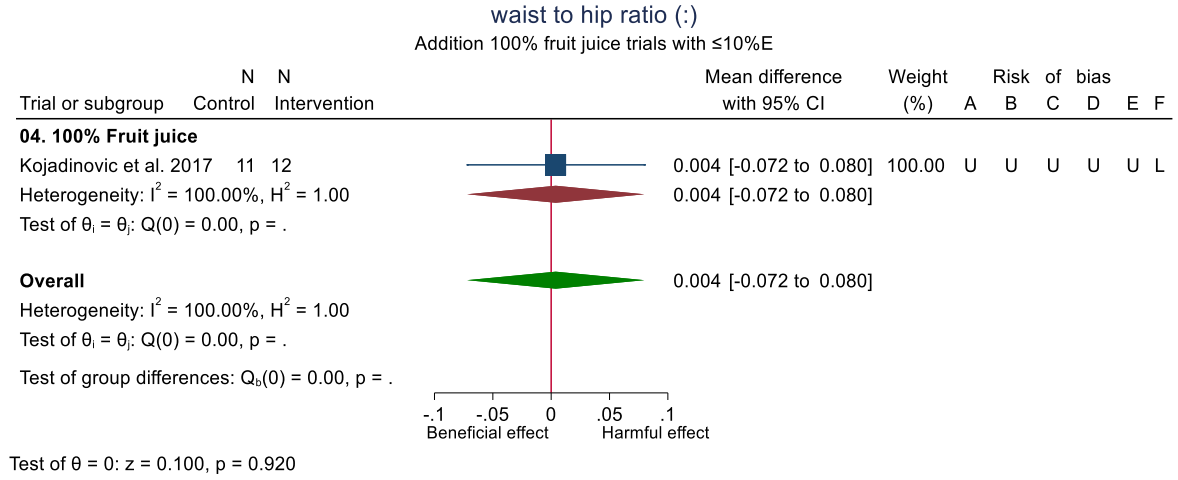
Supplementary Figure 27: Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on waist-to-hip ratio in addition trials



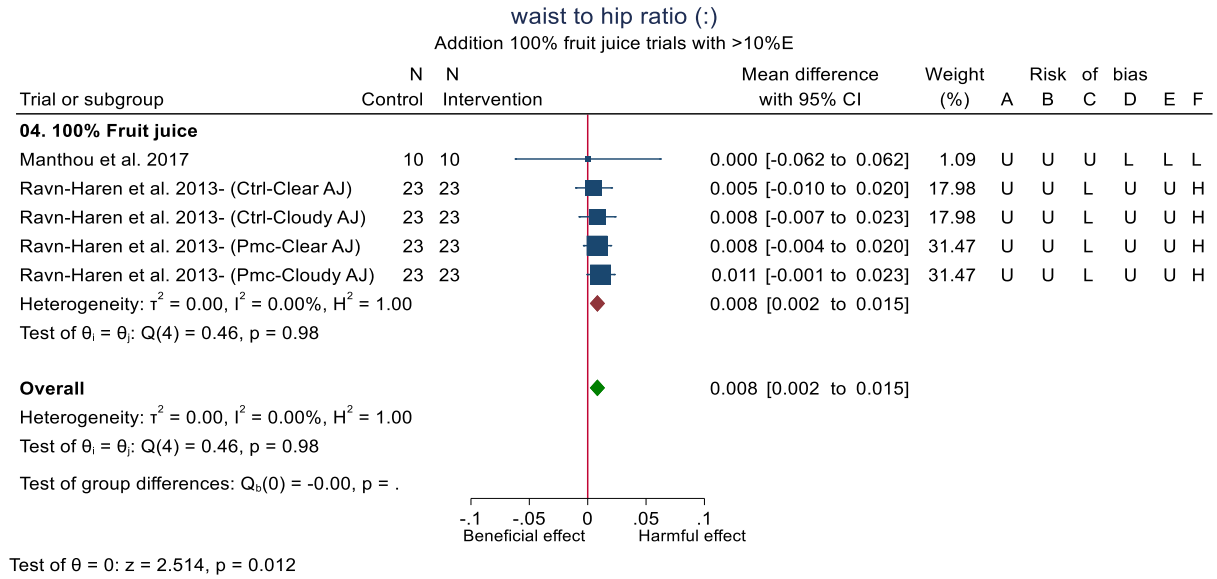
Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.
Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.
Pooled effect summary calculated with the χ^2 test. test for group differences calculated with meta-regression, which uses the Wald test.
AJ=apple juice; CI=confidence interval; Ctrl=control; F=fructose; HF=high fructose; HS=high sucrose; LF=low fructose; MF=medium fructose; S=sucrose; SSB=sugars-sweetened beverage; Pmc=pomace.

Supplementary Figure 28 : Forest plot of controlled trials of the effect of important food sources of 100% fruit juice trials by dose on waist-to-hip ratio in addition trials with ≤10%E or >10%E

A



B



Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.

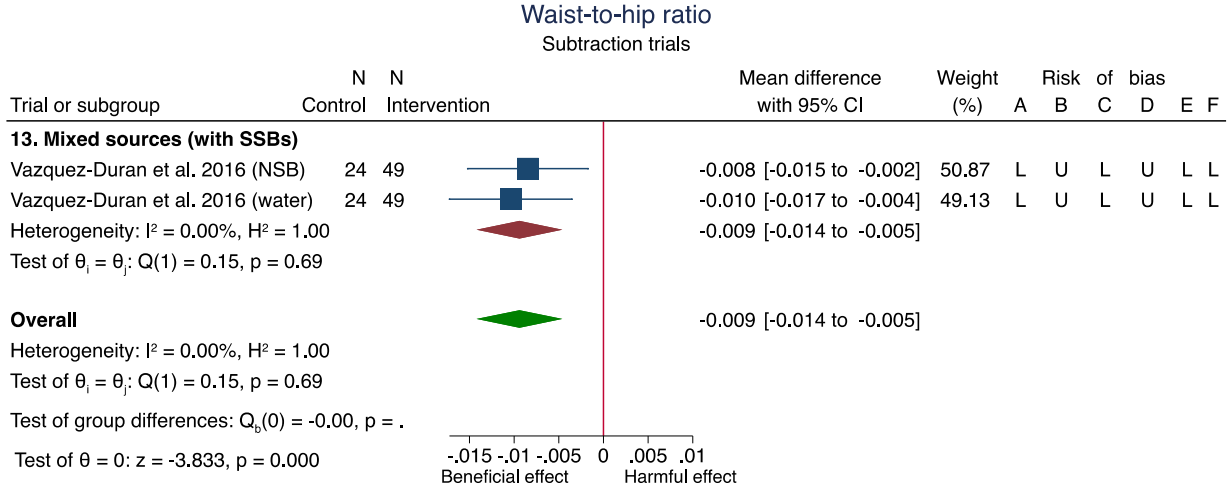
Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.

Pooled effect summary calculated with the χ^2 test. test for group differences calculated with meta-regression, which uses the Wald test.

Panel A: 100% fruit juice trials with ≤10%E; B: 100% fruit juice trials with >10%E

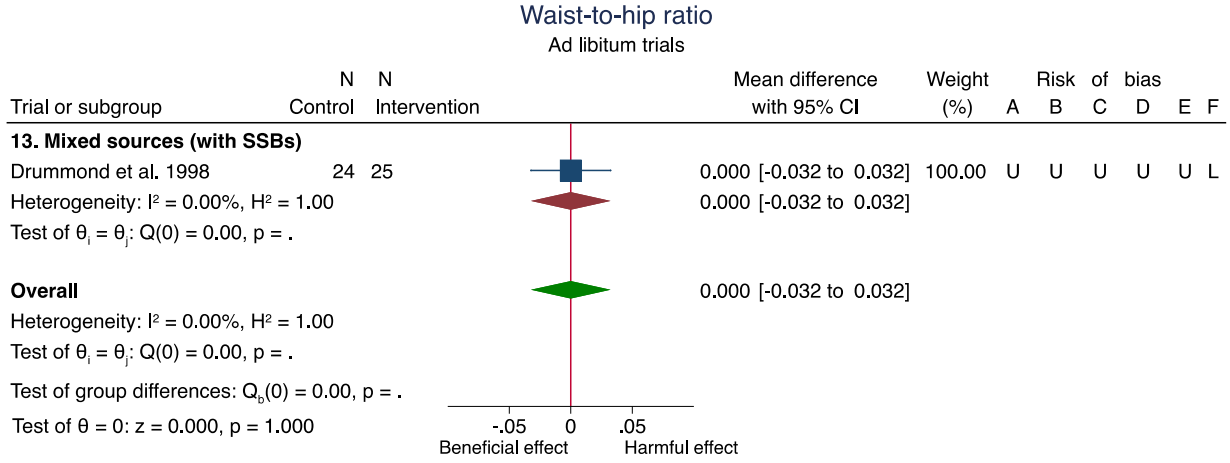
AJ=apple juice; CI=confidence interval; Ctrl=control; %E=percentage of total energy intake; Pmc=pomace.

Supplementary Figure 29: Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on waist-to-hip ratio in subtraction trials



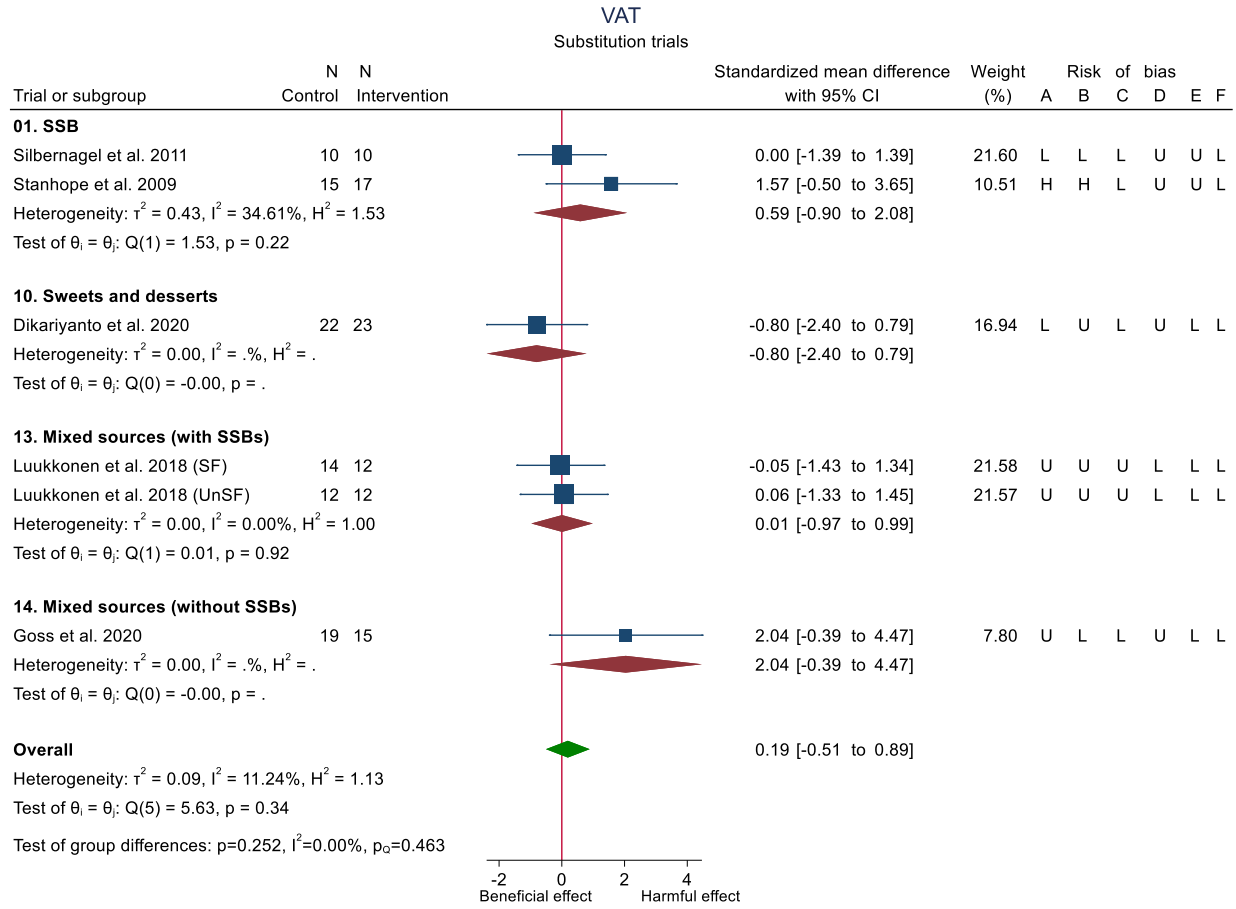
Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.
Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.
Pooled effect summary calculated with the χ^2 test. test for group differences calculated with meta-regression, which uses the Wald test.
CI=confidence interval; NSB=non-caloric sweetened beverage; SSB=sugars-sweetened beverage.

Supplementary Figure 30: Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on waist-to-hip ratio in *ad libitum* trials



Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.
Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.
Pooled effect summary calculated with the χ^2 test. test for group differences calculated with meta-regression, which uses the Wald test.
CI=confidence interval; SSB=sugars-sweetened beverage.

Supplementary Figure 31: Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on VAT in substitution trials



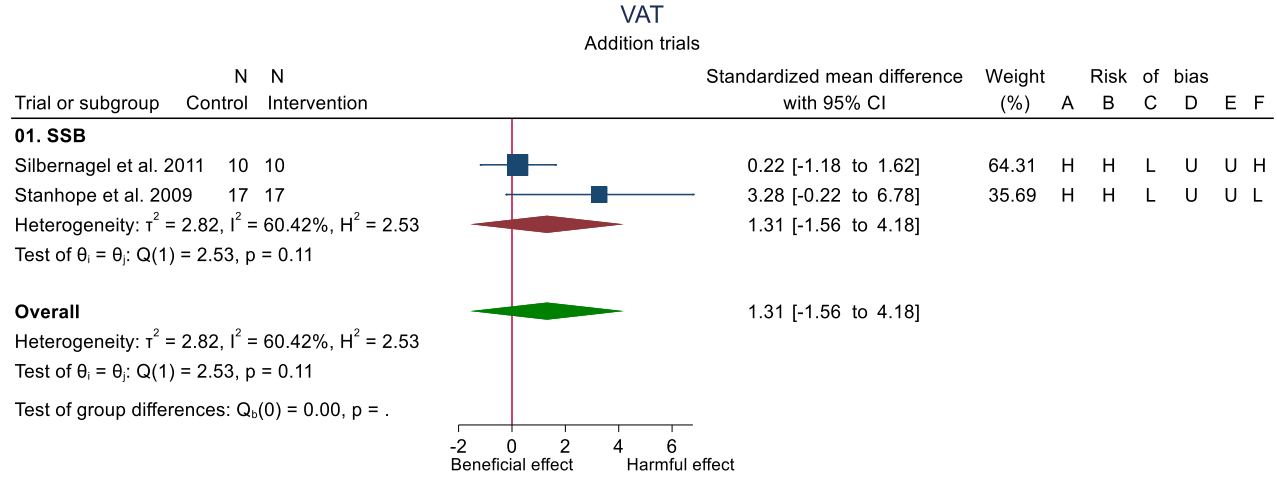
Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.

Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.

Pooled effect summary calculated with the χ^2 test. Test for group differences calculated with meta-regression, which uses the Wald test.

CI=confidence interval; SF=saturated fat; SSB=sugars-sweetened beverage; UnSF=unsaturated fat; VAT=visceral adipose tissue.

Supplementary Figure 32: Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on VAT in addition trials



Test of θ = 0: z = 0.896, p = 0.370

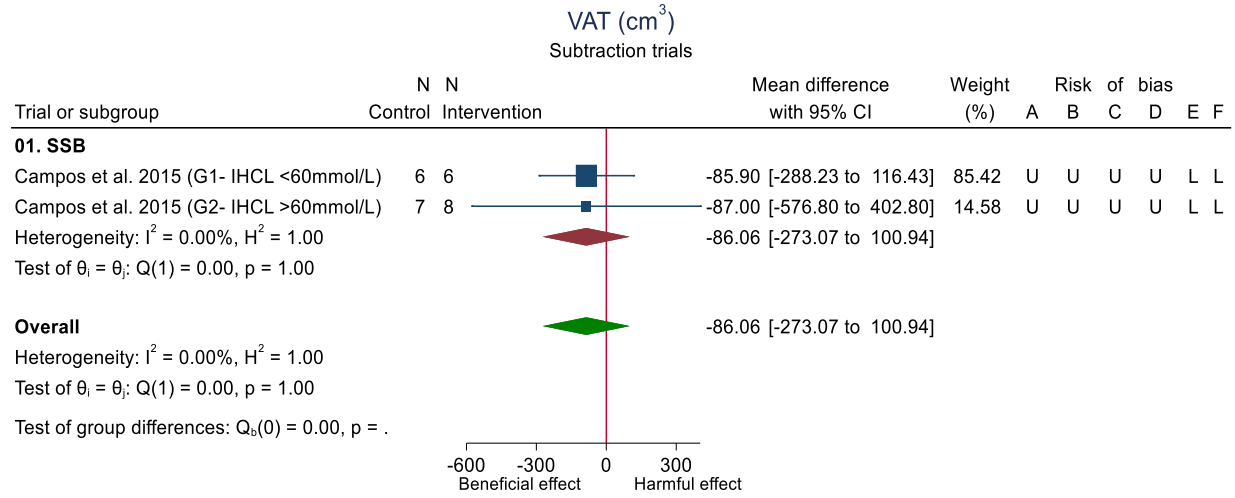
Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and random effects DerSimonian-Laird model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.

Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.

Pooled effect summary calculated with the χ^2 test. Test for group differences calculated with meta-regression, which uses the Wald test.

CI=confidence interval; SSB=sugars-sweetened beverage; VAT=visceral adipose tissue.

Supplementary Figure 33: Forest plot of controlled trials of the effect of important food sources of fructose-containing sugars on VAT in subtraction trials



Test of θ = 0: z = -0.902, p = 0.367

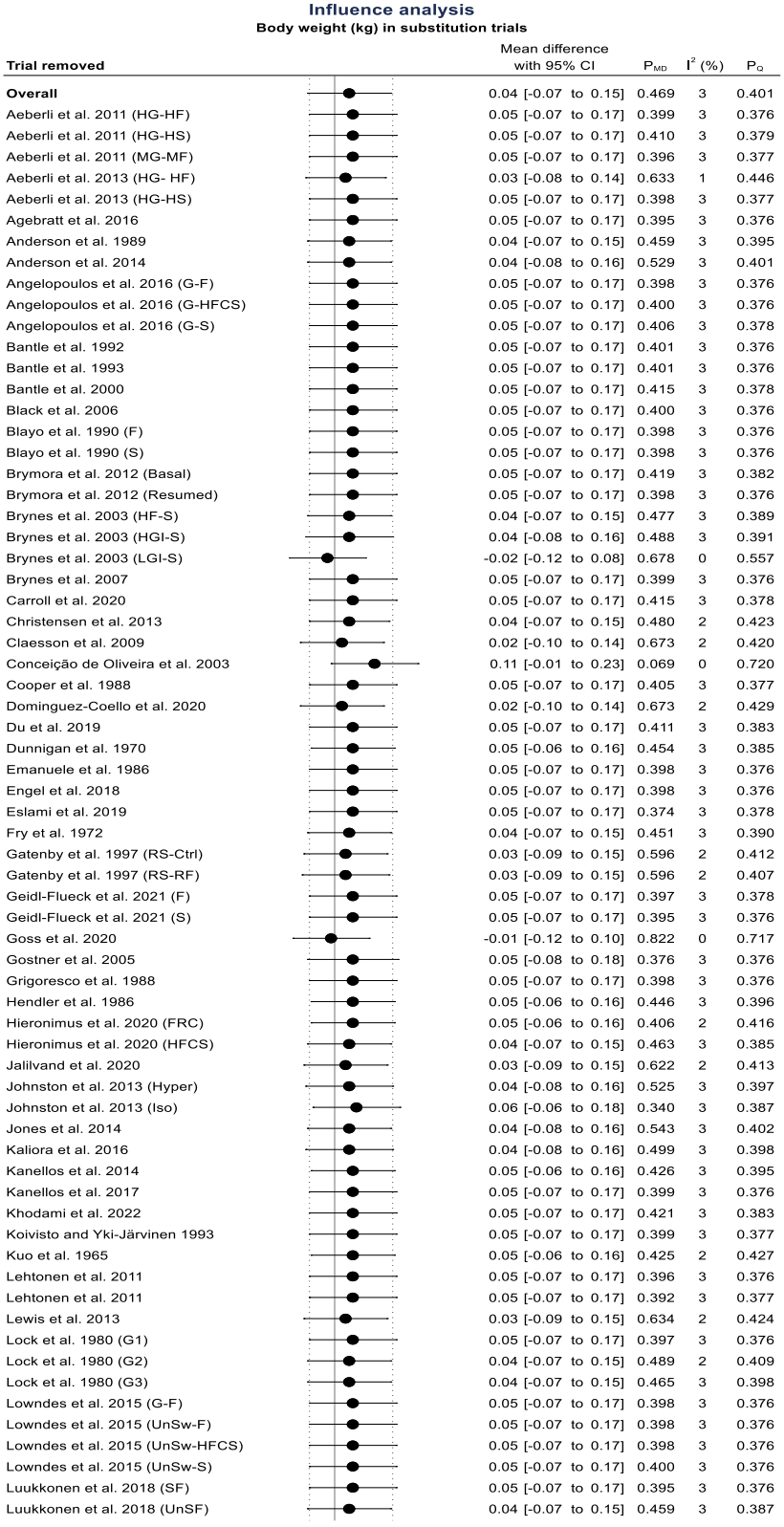
Pooled effect estimates for each subgroup and overall effect are represented by the diamonds. Data are expressed as weighted mean differences with 95% confidence intervals using the generic inverse-variance method and fixed effects model. Paired analyses were applied to all crossover trials. Inter-study heterogeneity was assessed using the Cochrane Q statistic and quantified using the I^2 statistic, with significance set at $p<0.100$ and $I^2 \geq 50\%$ considered to be evidence of substantial heterogeneity.

Risk of Bias Legend: (H) High Risk; (L) Low Risk; (U) Unclear. The letters represent the following risk of bias domains: A, random sequence generation (selection bias); B, allocation concealment (selection bias); C, blinding of participants and personnel and outcome assessors (performance bias); D, incomplete outcome data (attrition bias); E, selective reporting (reporting bias); and F, other bias. High other risk of bias was given to crossover trials which had no washout between interventions. Trials which did not have this characteristic were rated as Low.

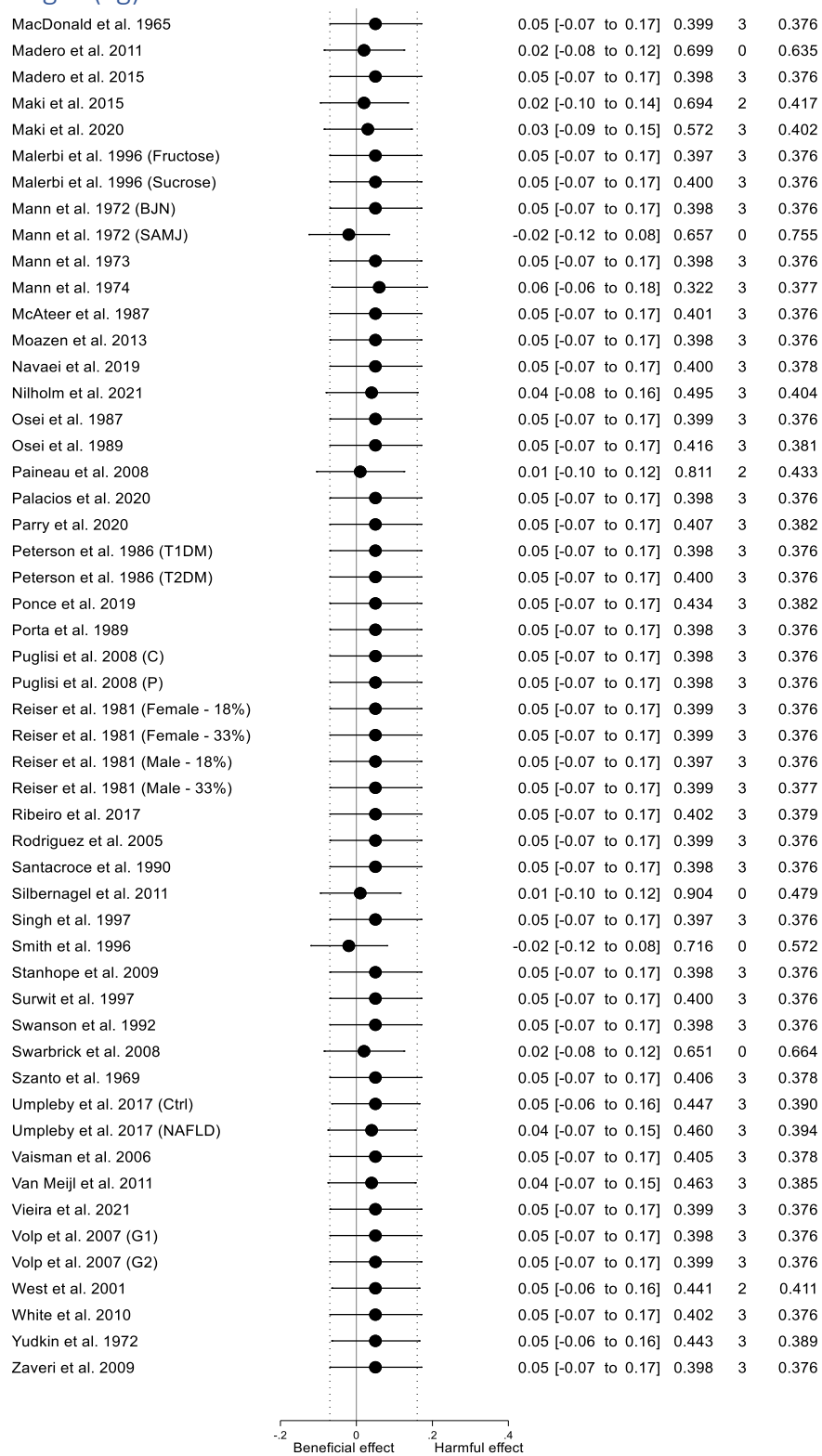
Pooled effect summary calculated with the χ^2 test. Test for group differences calculated with meta-regression, which uses the Wald test.

CI=confidence interval; G1=group 1; G2=group 2; IHCL=intrahepatocellular lipid; SSB=sugars-sweetened beverage; VAT=visceral adipose tissue.

Supplementary Figure 34 (1 of 2): Sensitivity analysis of the systematic removal of each trial for the effect of important food sources of fructose-containing sugars on body weight (kg) in substitution trials



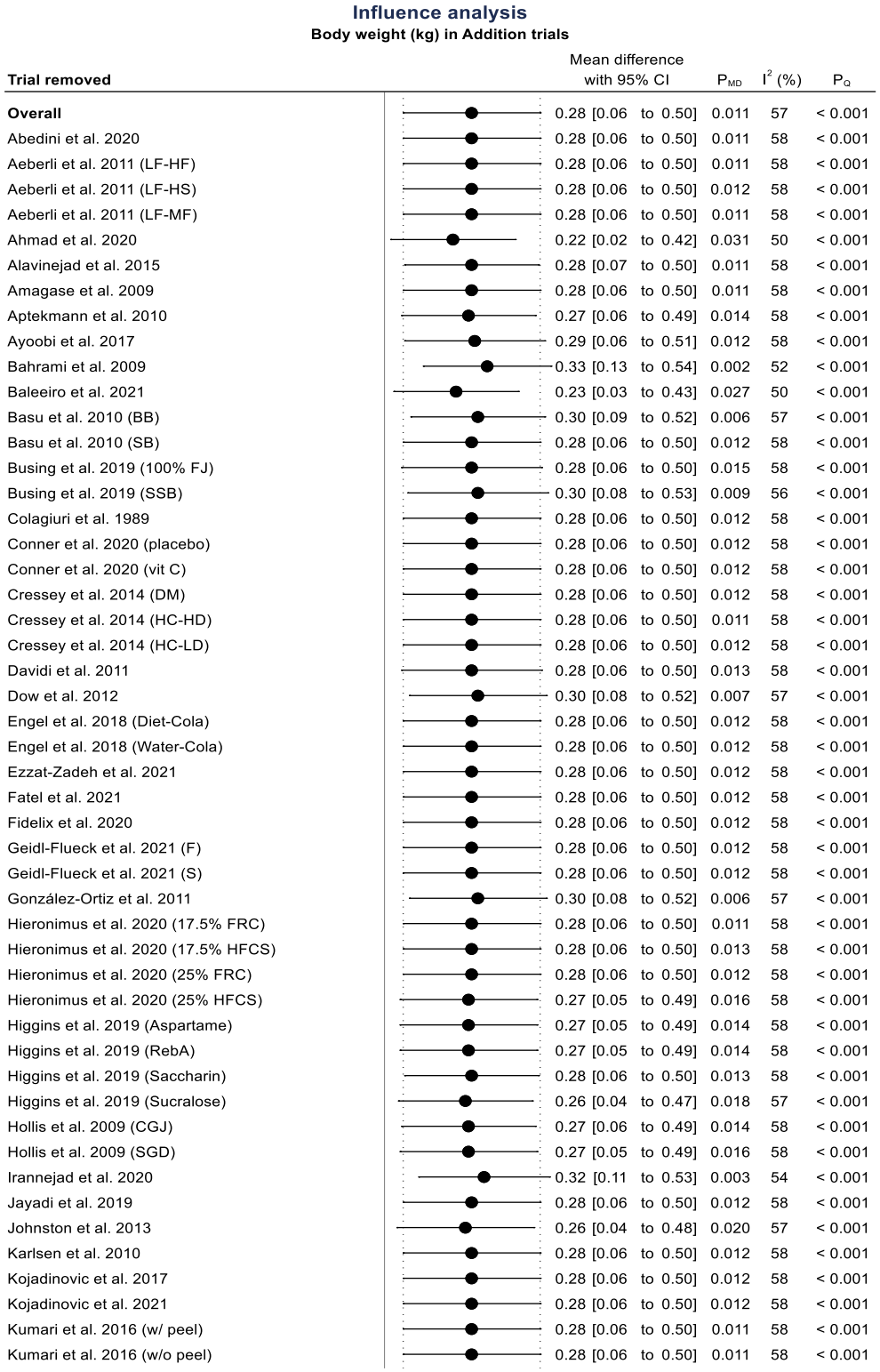
Supplementary Figure 34 (2 of 2): Sensitivity analysis of the systematic removal of each trial for the effect of important food sources of fructose-containing sugars on body weight (kg) in substitution trials



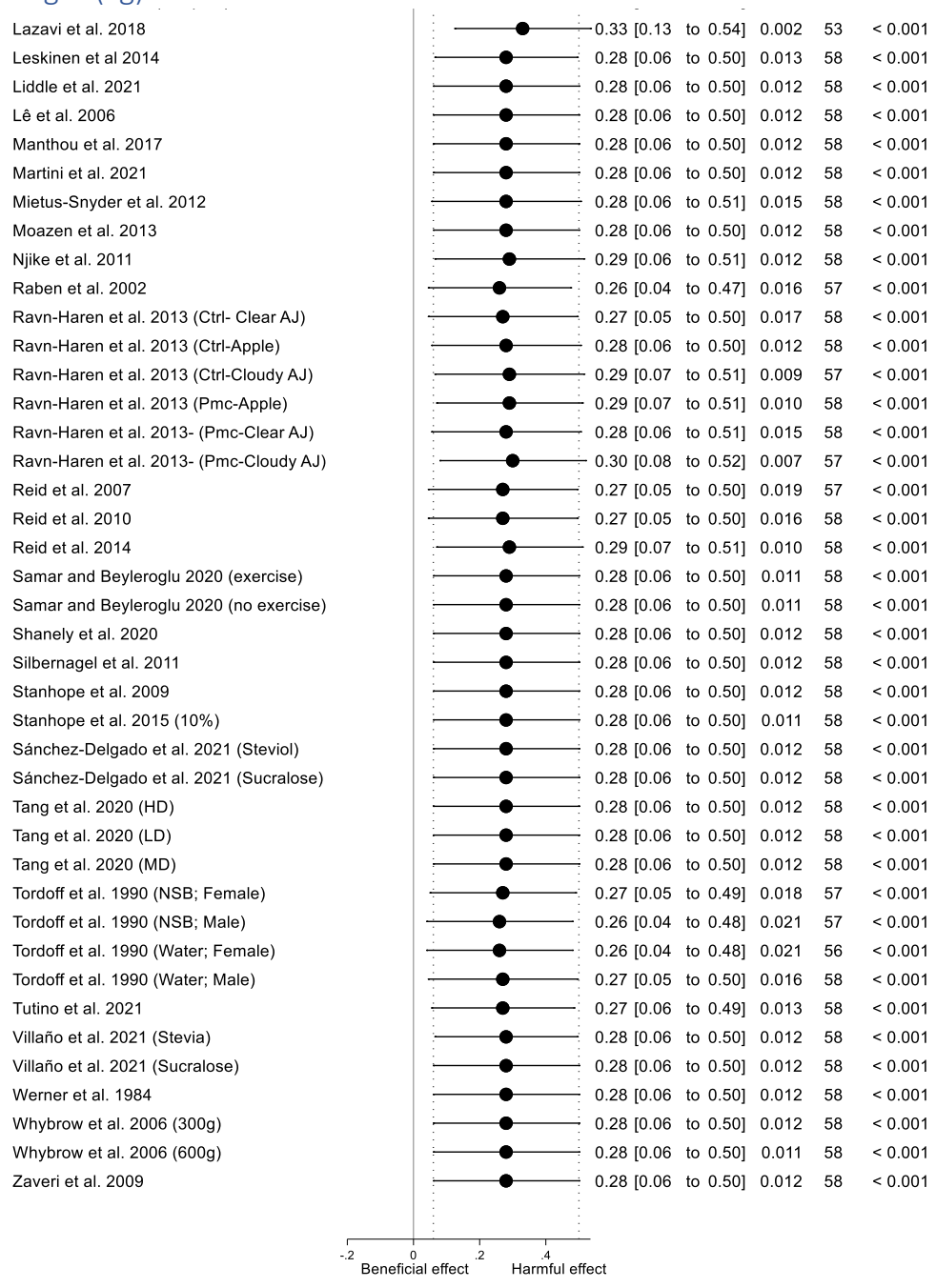
Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

BJN=British Journal of Nutrition; C=crossover; CI=confidence interval; Ctrl=control; F=fructose; FRC=fructose; G=glucose; G1=group 1; G2=group 2; G3=group 3; HF=high fructose; HFCS=high fructose corn syrup; HG=high glucose; HGI=high glycemic index; HS=high sucrose; Hyper=hypercaloric; Iso=isocaloric; LGI=low glycemic index; MD=mean difference; MF=medium fructose; MG=medium glucose; NAFLD=non-alcoholic fatty liver disease; P=parallel; RF=reduced fat; RS=reduced sugar; S=sucrose; SAMJ=South African Medical Journal; SF=saturated fat; SSB=sugars-sweetened beverage; T1DM=type 1 diabetes mellitus; T2DM=type 2 diabetes mellitus; UnSF=unsaturated fat; UnSw=unsweetened.

Supplementary Figure 35 (1 of 2): Sensitivity analysis of the systematic removal of each trial for the effect of important food sources of fructose-containing sugars on body weight (kg) in addition trials

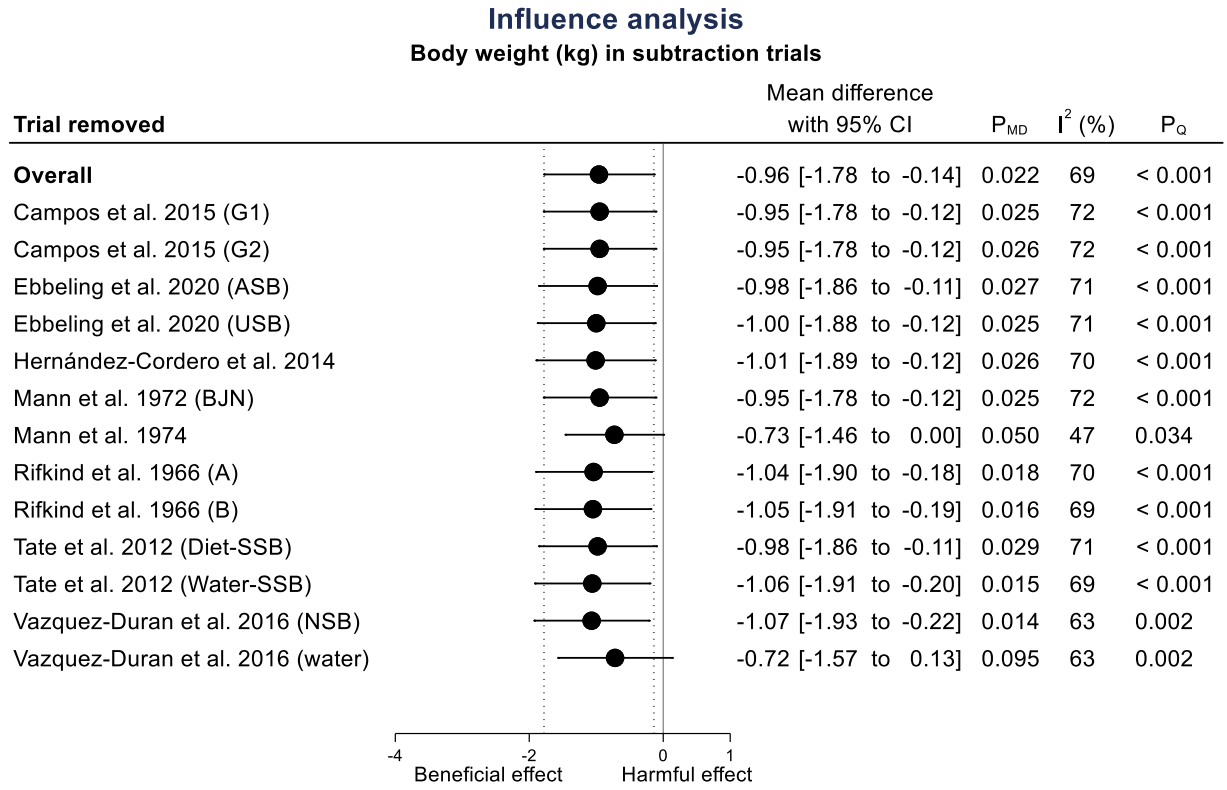


Supplementary Figure 35 (2 of 2): Sensitivity analysis of the systematic removal of each trial for the effect of important food sources of fructose-containing sugars on body weight (kg) in addition trials



AJ=apple juice; BB=blueberries; CGJ=Concord grape juice; CI=confidence interval; Ctrl=control; DM=diabetes mellitus; F=fructose; FJ=fruit juice; FRC=fructose; HC=hypercholesterolemia; HD=high dose; HF=high fructose; HFCS=high fructose corn syrup; HS=high sucrose; LD=low dose; LF=low fructose; MD=mean difference; MD=medium dose; MF=medium fructose; NSB=non-nutritive sweetened beverage; Pmc=apple pomace; RebA=rebaudioside A; S=sucrose; SB=strawberries; SGD=standard grape juice; SSB=sugars-sweetened beverage; vit C=vitamin C; w/=with; w/o=without.

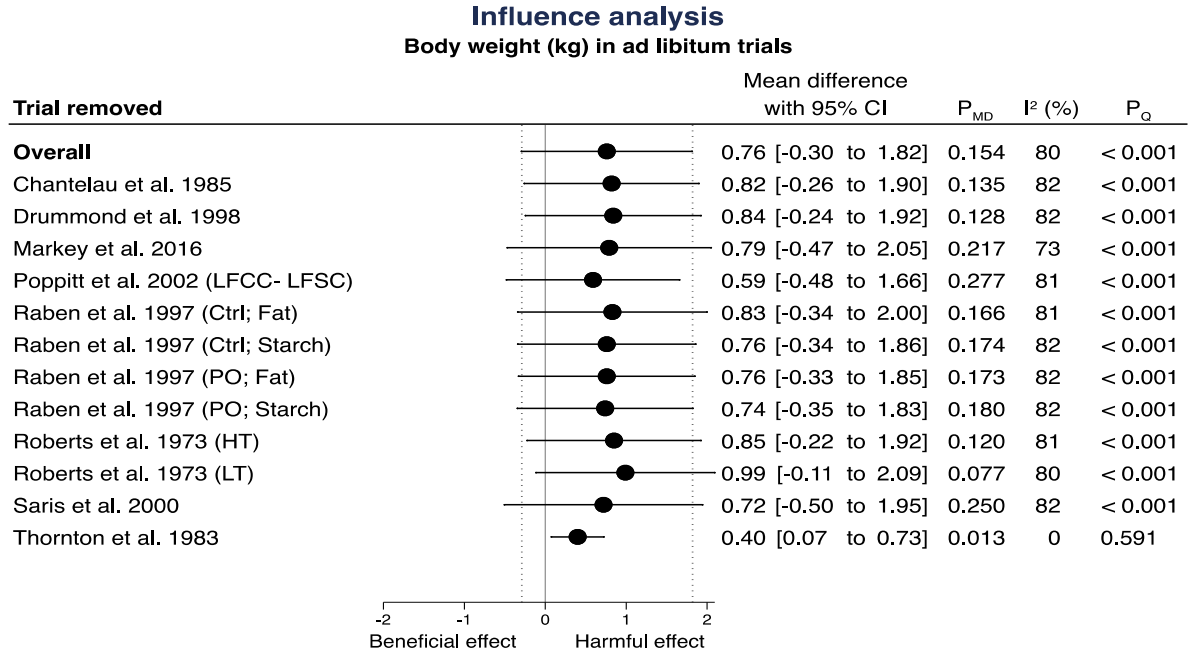
Supplementary Figure 36: Sensitivity analysis of the systematic removal of each trial for the effect of important food sources of fructose-containing sugars on body weight (kg) in subtraction trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

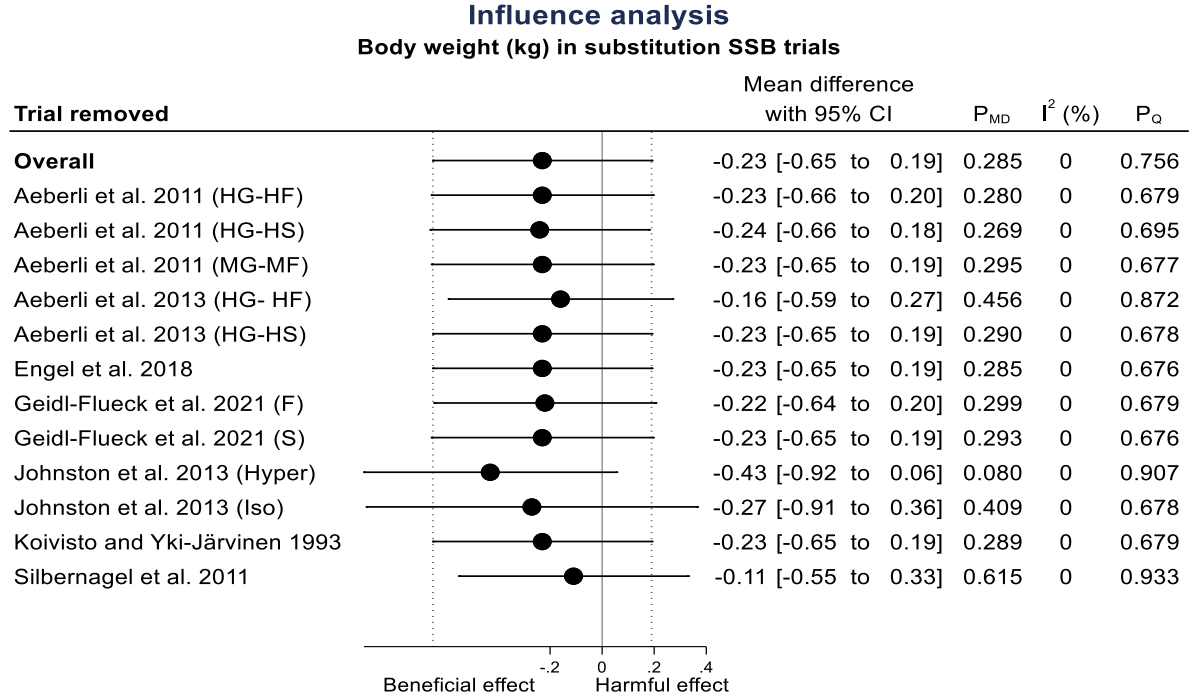
A=group A; ASB=artificially sweetened beverage; B=group B; BJN=British Journal of Nutrition; CI=confidence interval; G1=group 1; G2=group 2; MD=mean difference; NSB=non-nutritive sweetened beverage; SSB=sugars-sweetened beverage; USB=unsweetened beverage.

Supplementary Figure 37: Sensitivity analysis of the systematic removal of each trial for the effect of important food sources of fructose-containing sugars on body weight (kg) in *ad libitum* trials



CI=confidence interval; Ctrl=control; HT=high triglyceride group; LFCC=low-fat, complex carbohydrate diet; LFSC=low-fat, simple carbohydrate diet; LT=low triglyceride group; MD=mean difference; PO=post-obese.

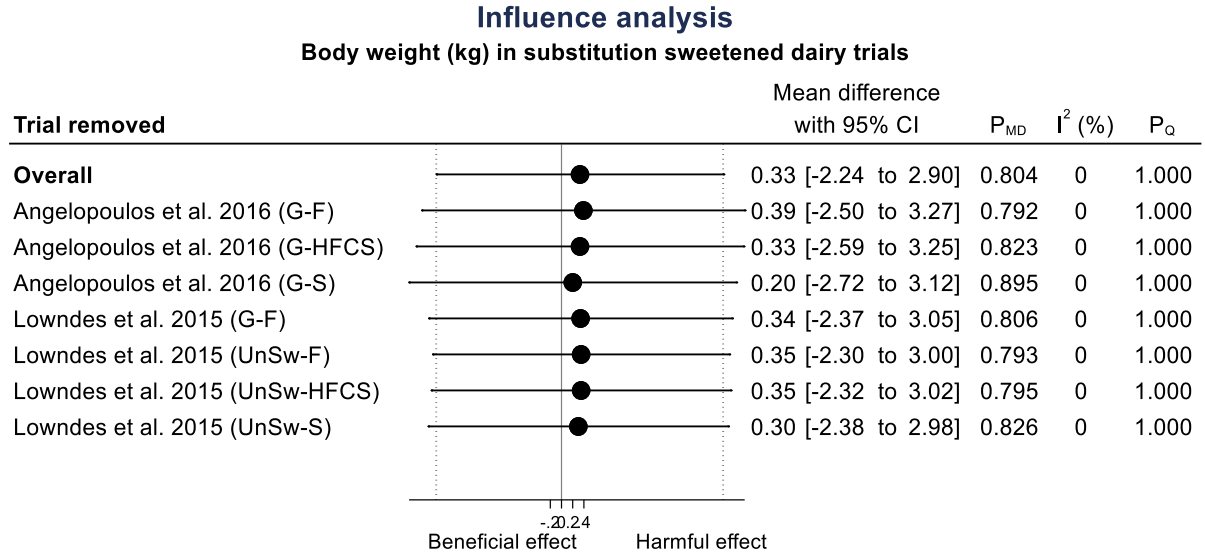
Supplementary Figure 38: Sensitivity analysis of the systematic removal of each trial for the effect of SSBs on body weight (kg) in substitution trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

CI=confidence interval; F=fructose; HF=high fructose; HG=high glucose; HS=high sucrose; Hyper=hypercaloric; Iso=isocaloric; MD=mean difference; MF=medium fructose; MG=medium glucose; S=sucrose; SSB=sugars-sweetened beverage.

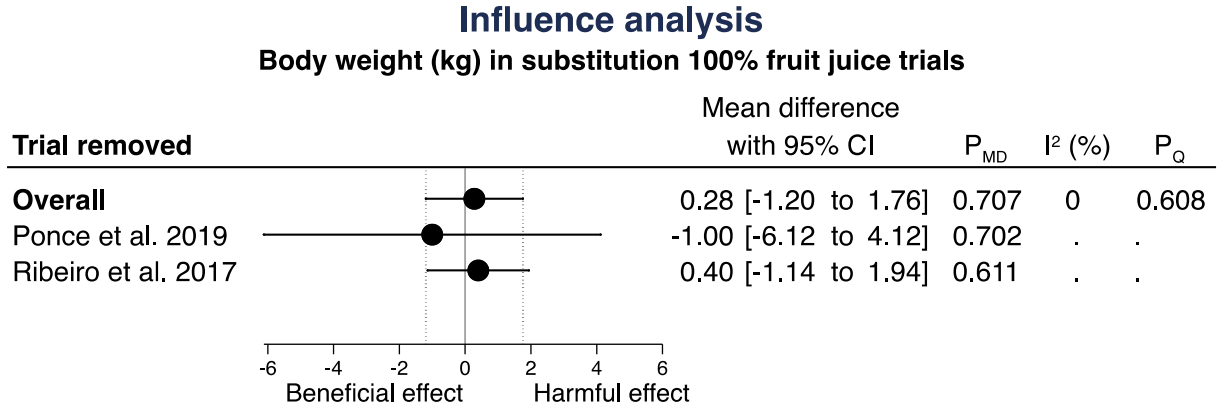
Supplementary Figure 39: Sensitivity analysis of the systematic removal of each trial for the effect of sweetened dairy on body weight (kg) in substitution trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

CI=confidence interval; F=fructose; G=glucose; HFCS=high fructose corn syrup; MD=mean difference; S=sucrose; UnSw=unsweetened.

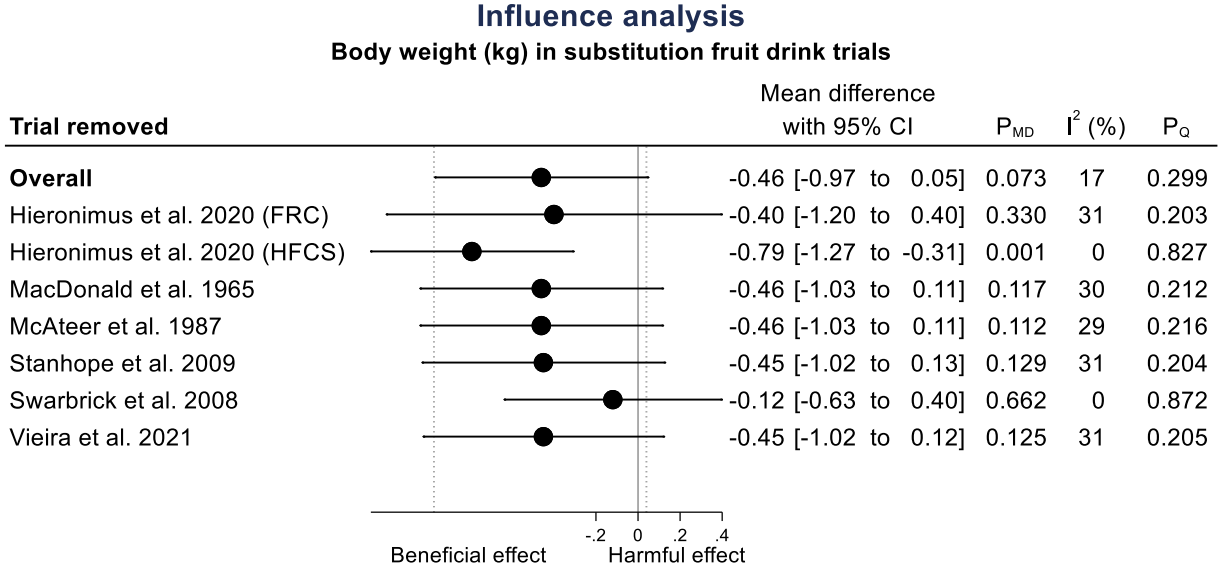
Supplementary Figure 40: Sensitivity analysis of the systematic removal of each trial for the effect of 100% fruit juice on body weight (kg) in substitution trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

CI=confidence interval; MD=mean difference.

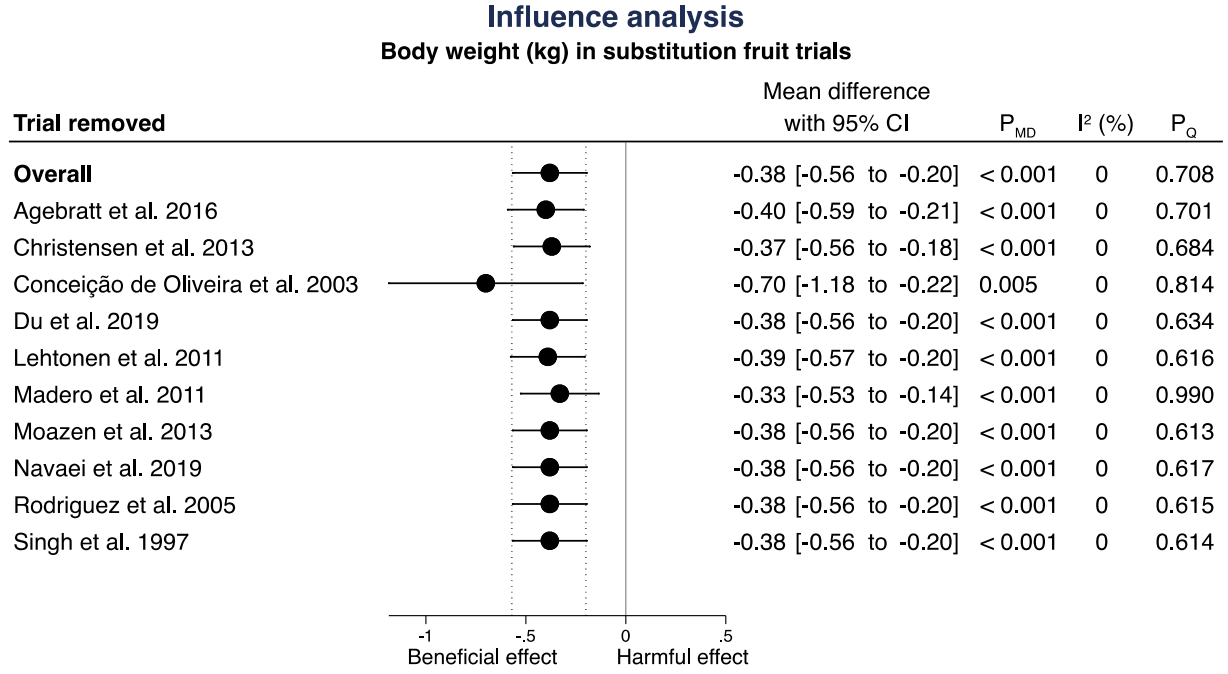
Supplementary Figure 41: Sensitivity analysis of the systematic removal of each trial for the effect of fruit drink on body weight (kg) in substitution trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

CI=confidence interval; FRC=fructose; HFCS=high fructose corn syrup; MD=mean difference.

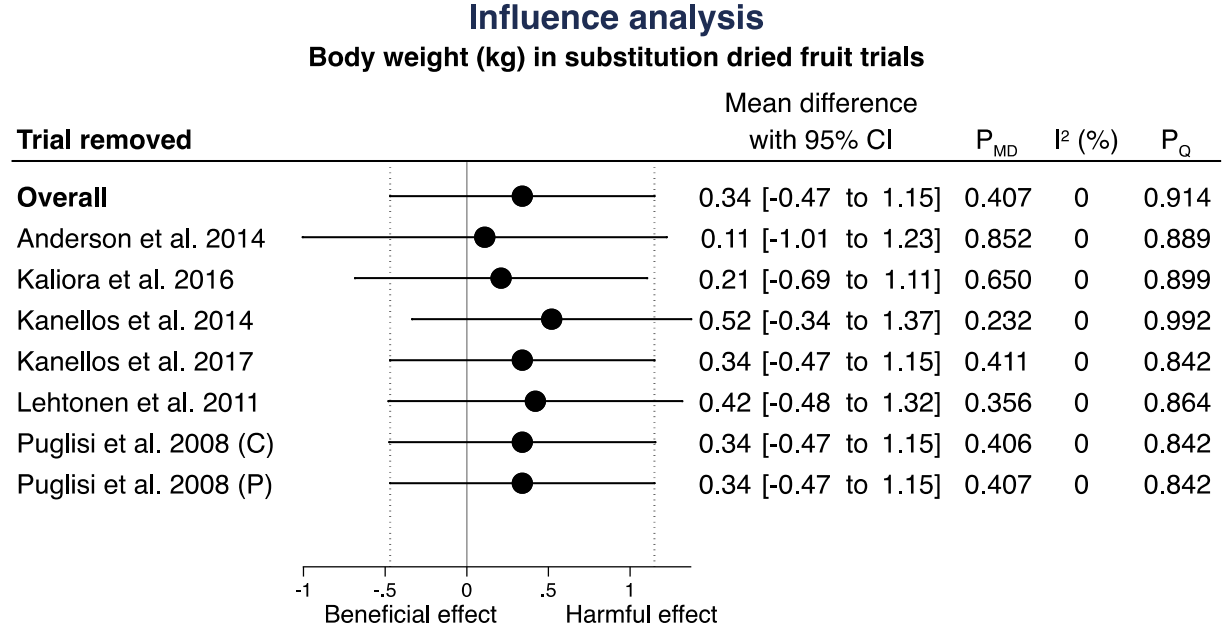
Supplementary Figure 42: Sensitivity analysis of the systematic removal of each trial for the effect of fruit on body weight (kg) in substitution trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

CI=confidence interval; MD=mean difference.

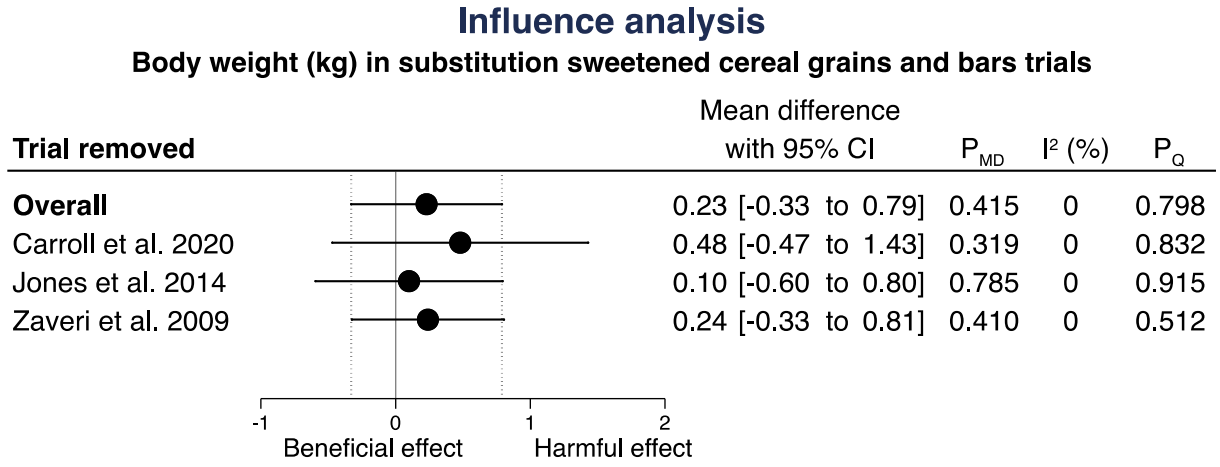
Supplementary Figure 43: Sensitivity analysis of the systematic removal of each trial for the effect of dried fruit on body weight (kg) in substitution trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

C=crossover; CI=confidence interval; MD=mean difference; P=parallel.

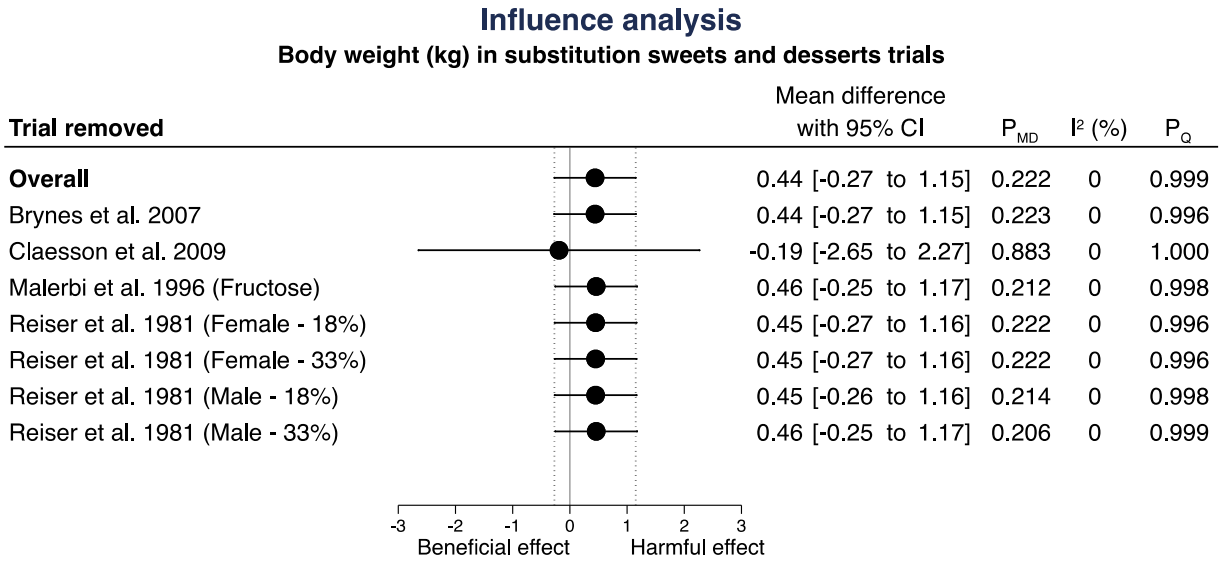
Supplementary Figure 44: Sensitivity analysis of the systematic removal of each trial for the effect of sweetened cereal grains and bars on body weight (kg) in substitution trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

CI=confidence interval; MD=mean difference.

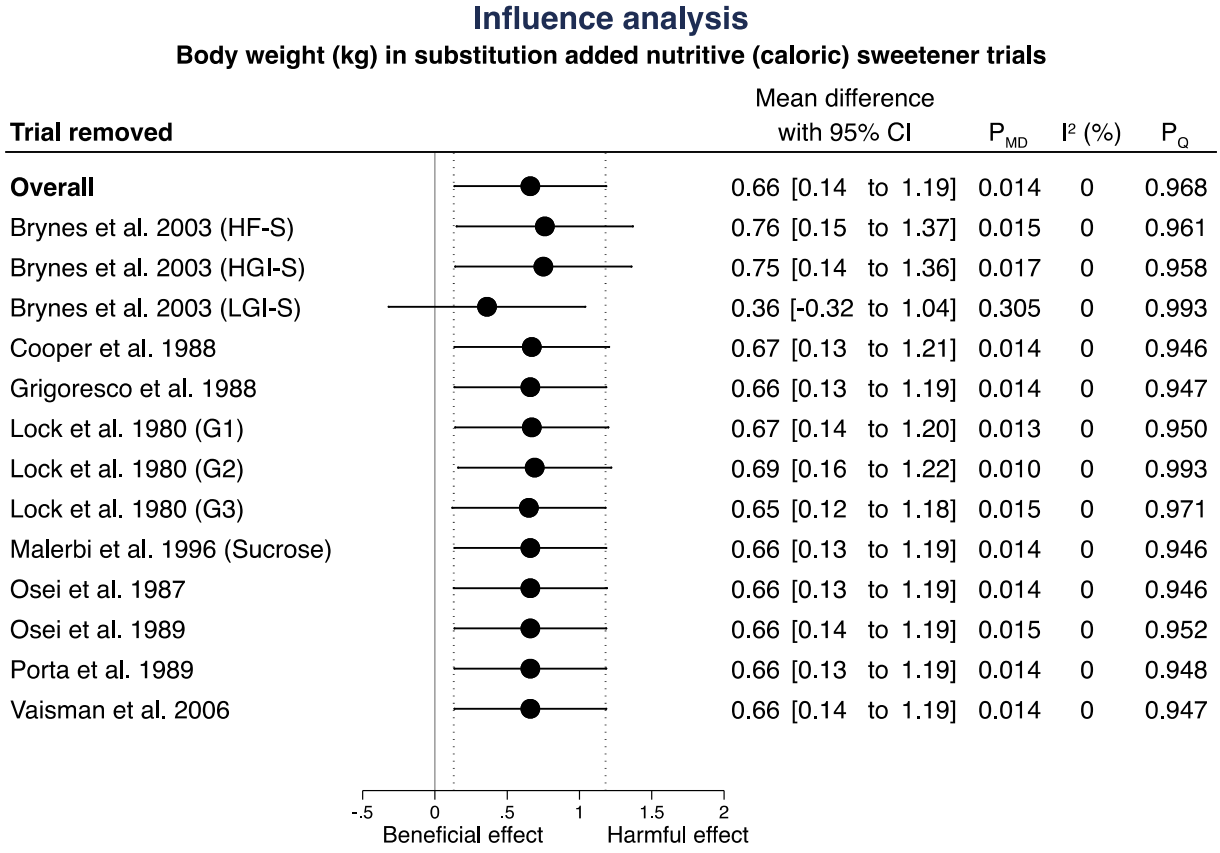
Supplementary Figure 45: Sensitivity analysis of the systematic removal of each trial for the effect of sweets and desserts on body weight (kg) in substitution trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

CI=confidence interval; MD=mean difference.

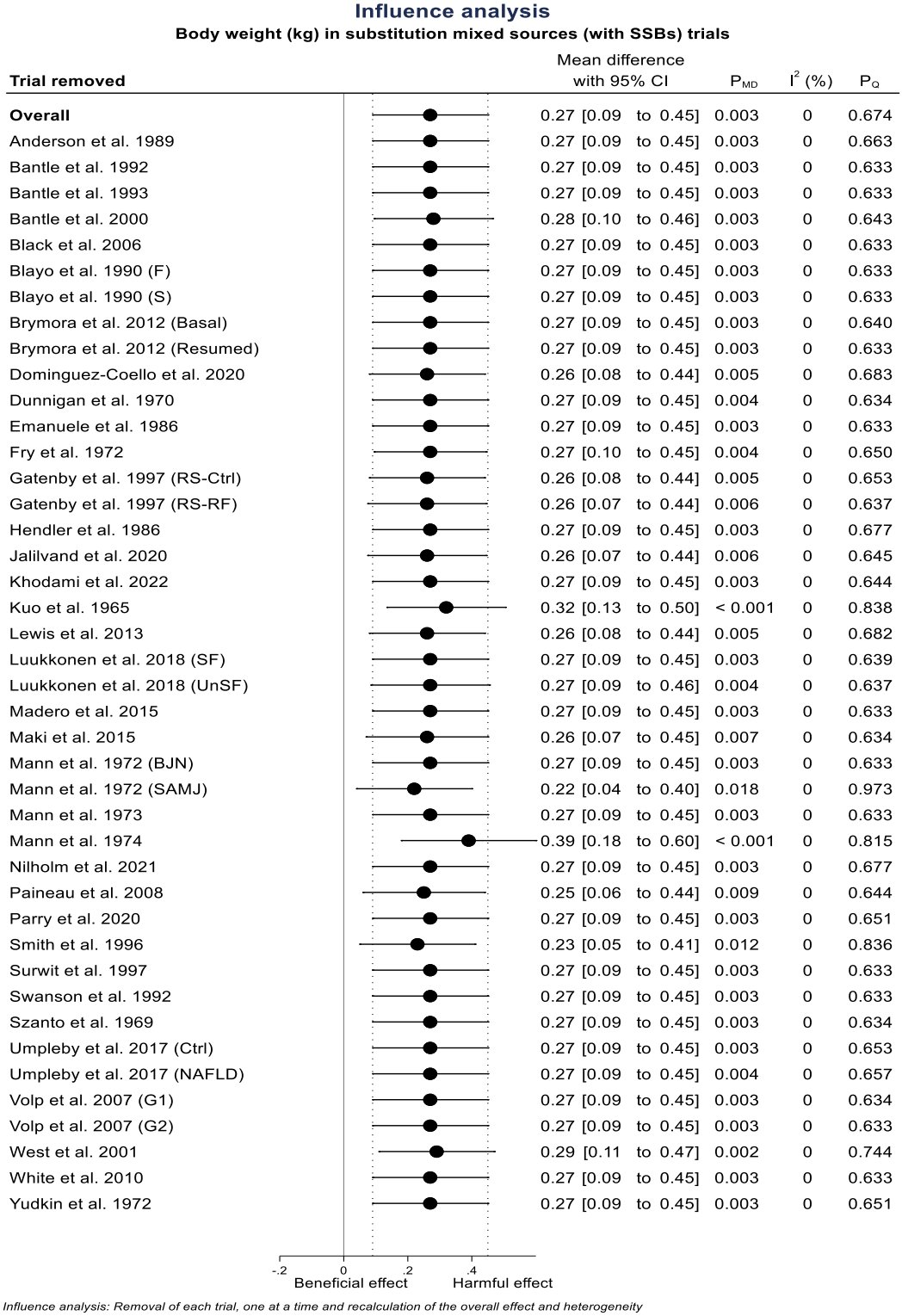
Supplementary Figure 46: Sensitivity analysis of the systematic removal of each trial for the effect of added nutritive sweetener on body weight (kg) in substitution trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

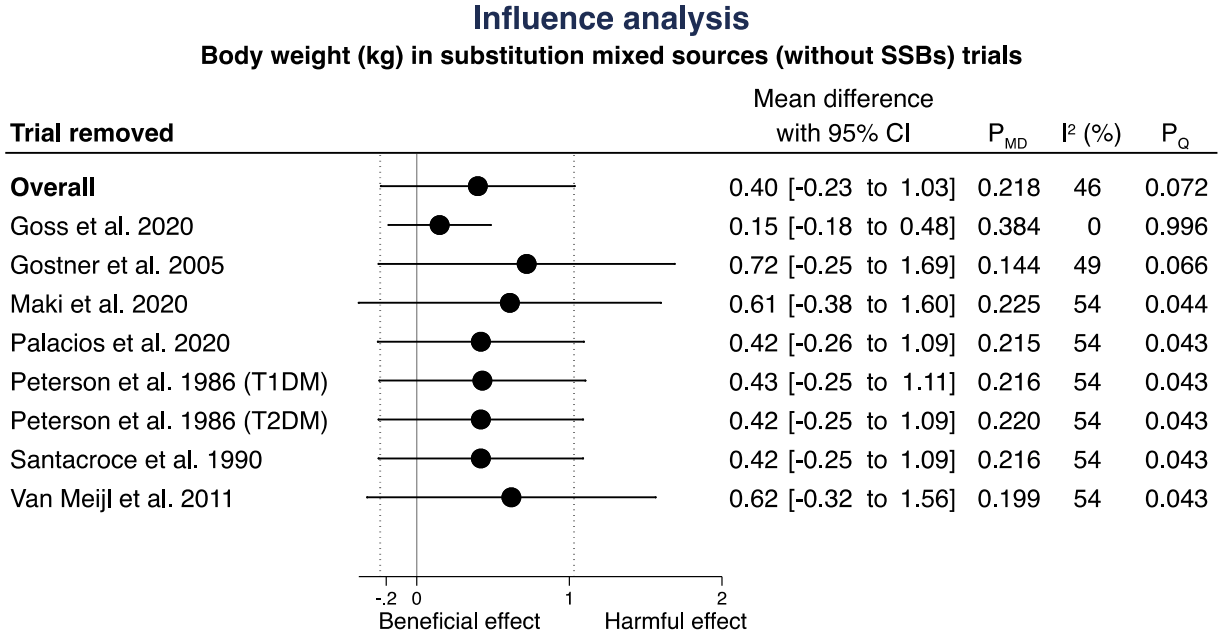
CI=confidence interval; G1=group 1; G2=group 2; G3=group 3; HF=high fructose; HGI=high glycemic index; LGI=low glycemic index; MD=mean difference; S=sucrose.

Supplementary Figure 47: Sensitivity analysis of the systematic removal of each trial for the effect of mixed sources (with SSBs) on body weight (kg) in substitution trials



CI=confidence interval; BJN=British Journal of Nutrition; Ctrl=control; F=fructose; G1=group 1; G2=group 2; MD=mean difference; NAFLD=non-alcoholic fatty liver disease; RF=reduced fat; RS=reduced sugar; S=sucrose; SAMJ=South African Medical Journal; SF=saturated fat; SSB=sugars-sweetened beverage; UnSF=unsaturated fat.

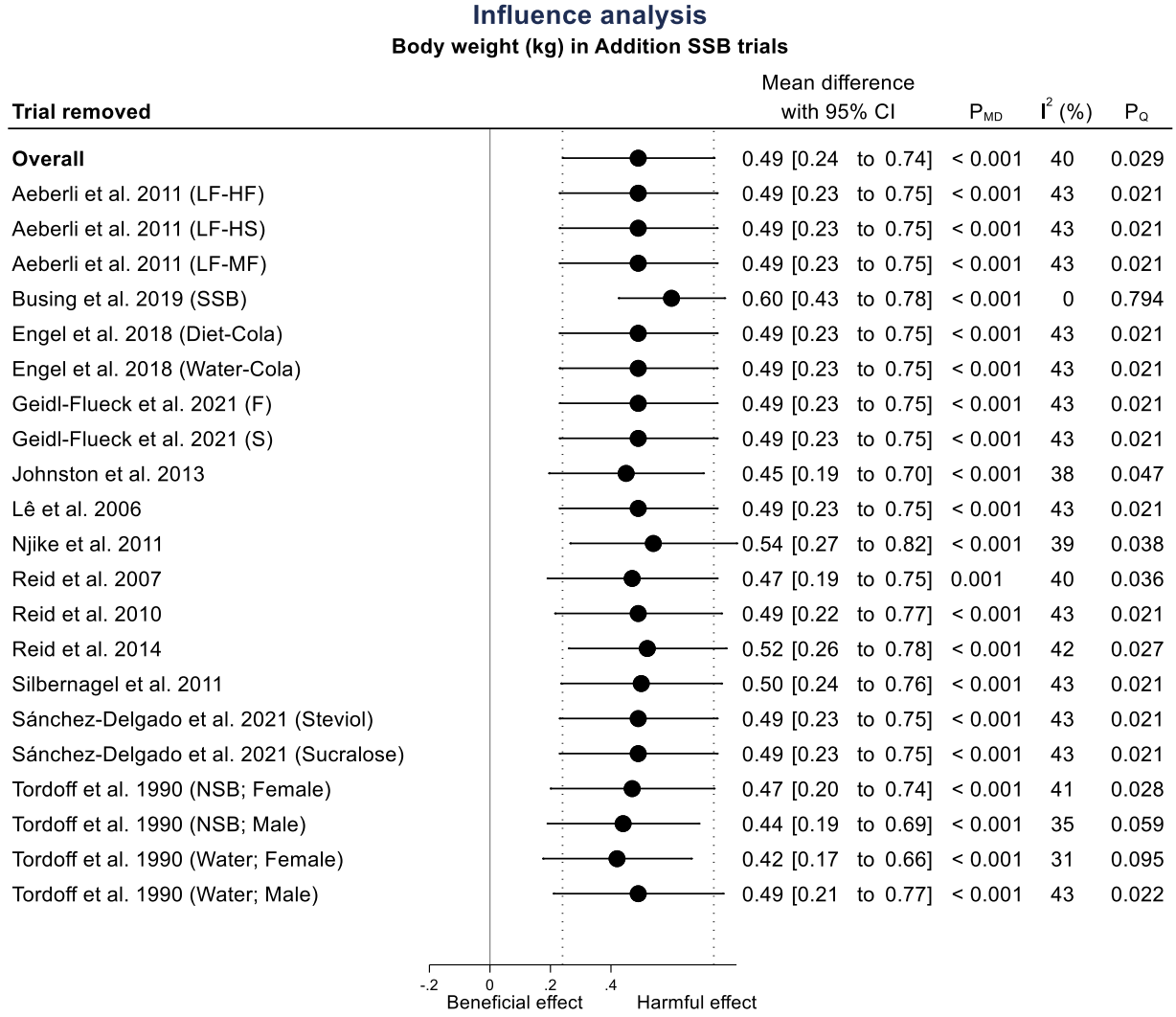
Supplementary Figure 48: Sensitivity analysis of the systematic removal of each trial for the effect of mixed sources (without SSBs) on body weight (kg) in substitution trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

CI=confidence interval; MD=mean difference; SSB=sugars-sweetened beverage; T1DM=type 1 diabetes mellitus; T2DM=type 2 diabetes mellitus.

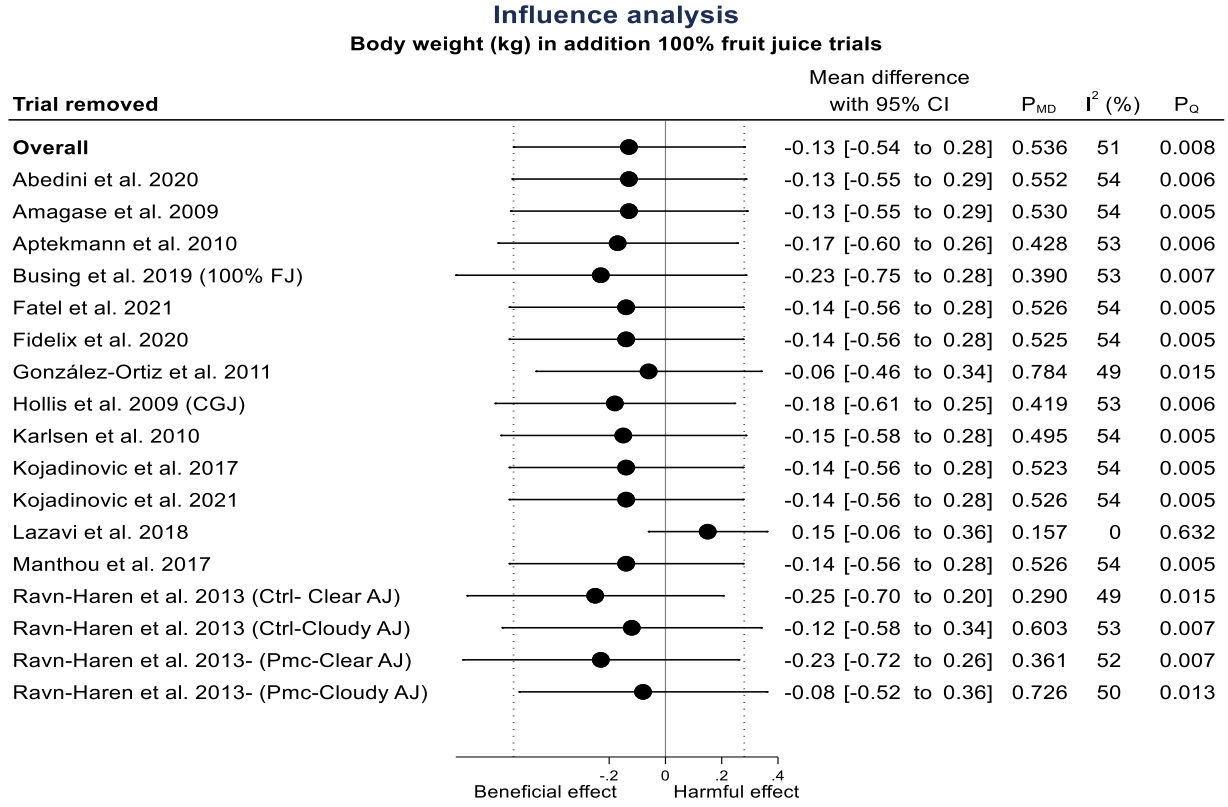
Supplementary Figure 49: Sensitivity analysis of the systematic removal of each trial for the effect of SSBs on body weight (kg) in addition trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

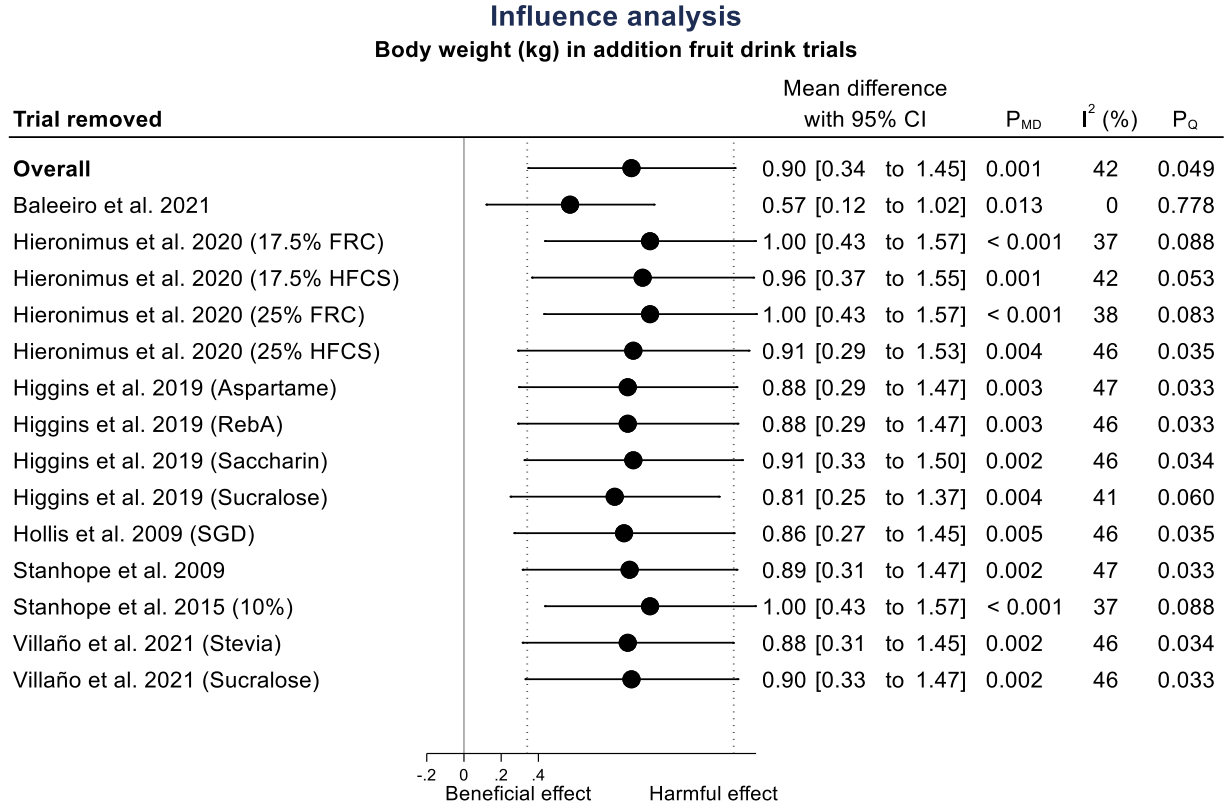
CI=confidence interval; F=fructose; FRC=fructose; HF=high fructose; HFCS=high fructose corn syrup; HS=high sucrose; LF=low fructose; MD=mean difference; MF=medium fructose; NSB=non-nutritive sweetened beverage; S=sucrose; SSB=sugars-sweetened beverage.

Supplementary Figure 50: Sensitivity analysis of the systematic removal of each trial for the effect of 100% fruit juice on body weight (kg) in addition trials



AJ=apple juice; CGJ=Concord grape juice; CI=confidence interval; Ctrl=control; FJ=fruit juice; MD=mean difference; Pmc=apple pomace.

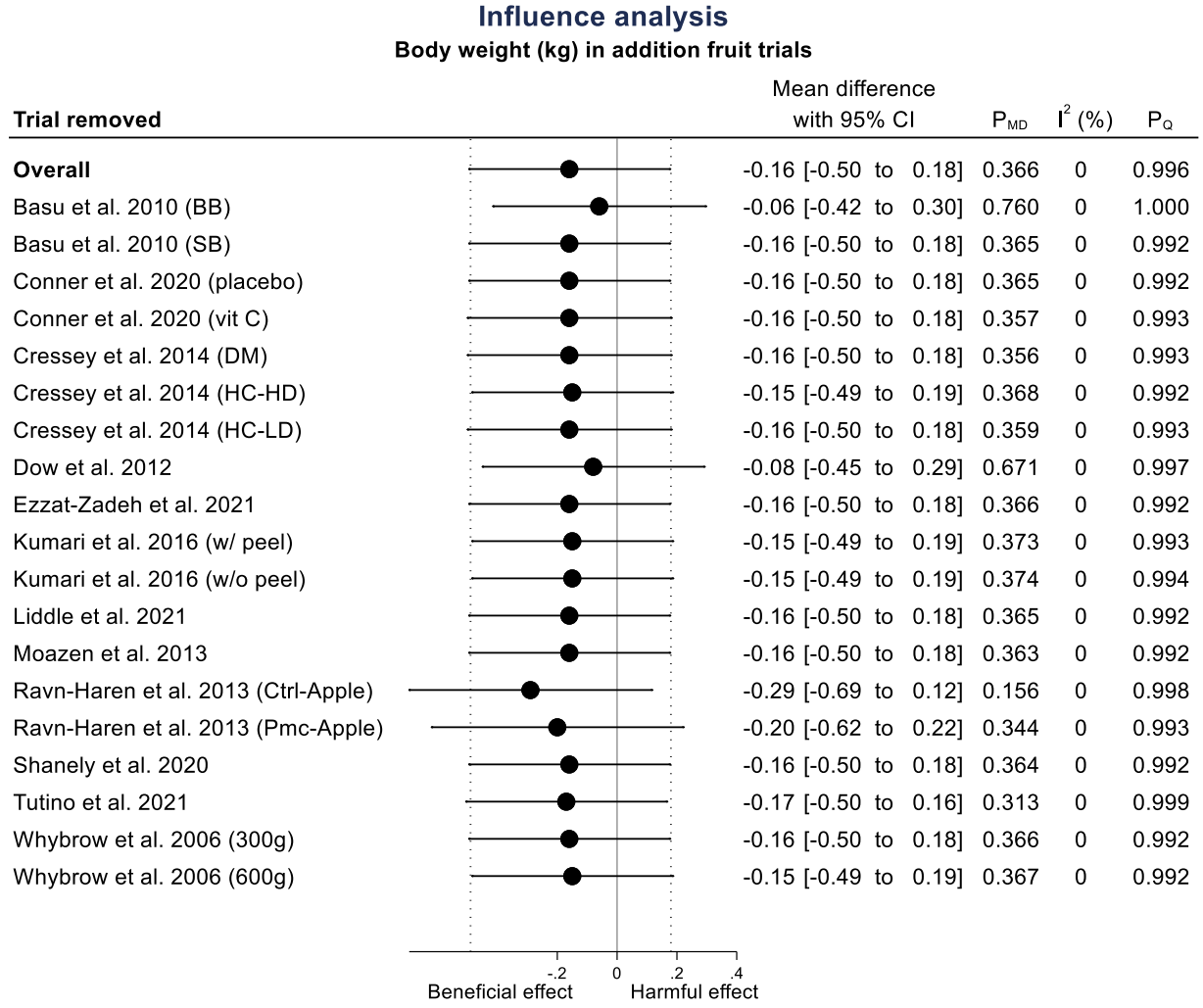
Supplementary Figure 51: Sensitivity analysis of the systematic removal of each trial for the effect of fruit drink on body weight (kg) in addition trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

CI=confidence interval; FRC=fructose; HFCS=high fructose corn syrup; MD=mean difference; RebA=rebaudioside A; SGD=standard grape juice; SSB=sugars-sweetened beverage.

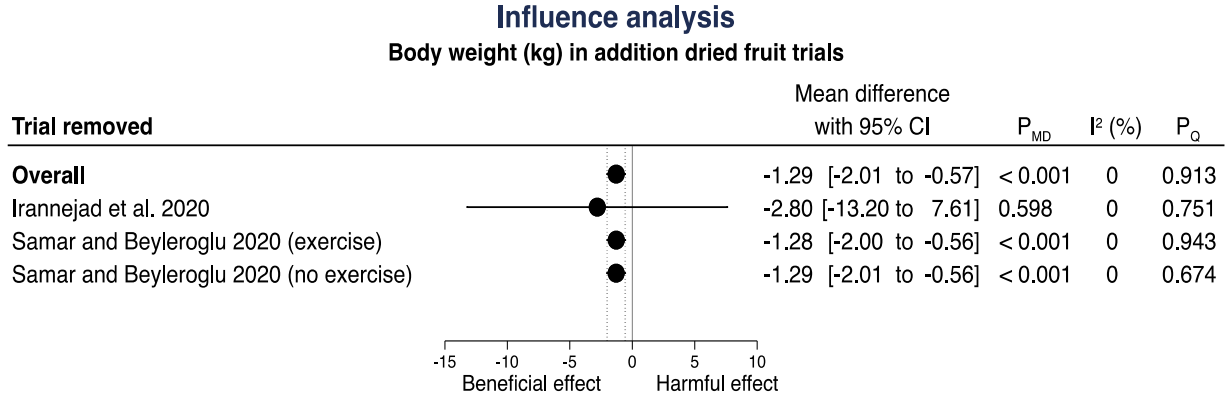
Supplementary Figure 52: Sensitivity analysis of the systematic removal of each trial for the effect of fruit on body weight (kg) in addition trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

BB=blueberry; CI=confidence interval; Ctrl=control; DM=diabetes mellitus; HC=hypercholesterolemia; HD=high dose; LD=low dose; MD=mean difference; Pmc=apple pomace; SB=strawberry; vit C=vitamin C; w/=with; w/o=without.

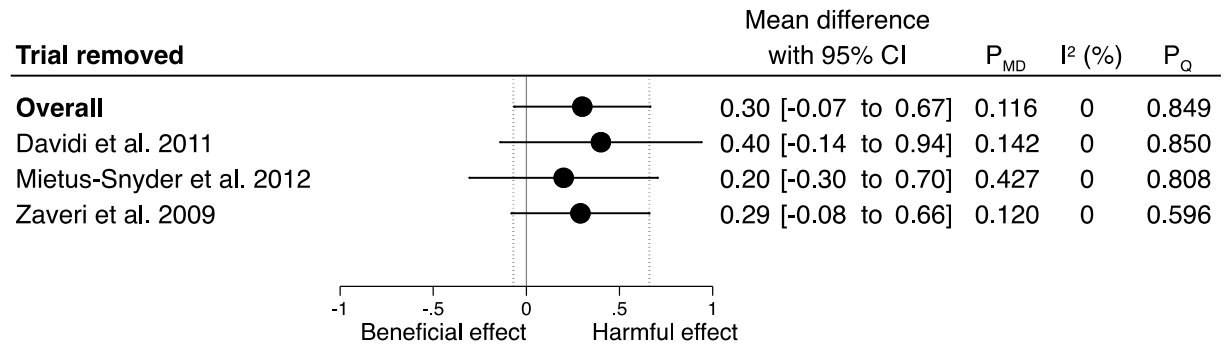
Supplementary Figure 53: Sensitivity analysis of the systematic removal of each trial for the effect of dried fruit on body weight (kg) in addition trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

CI=confidence interval; MD=mean difference.

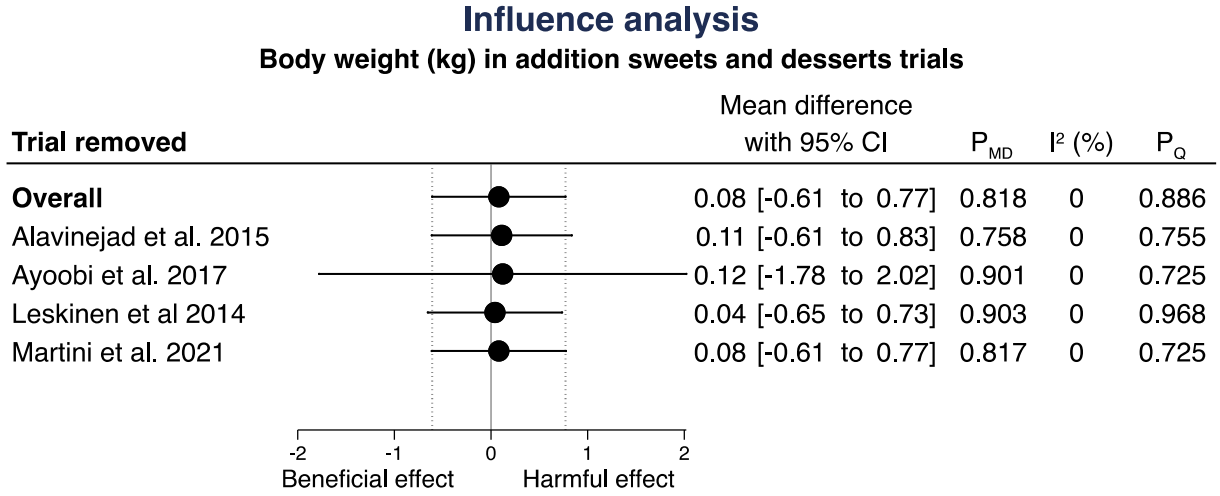
Supplementary Figure 54: Sensitivity analysis of the systematic removal of each trial for the effect of sweetened cereal grains and bars on body weight (kg) in addition trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

CI=confidence interval; MD=mean difference.

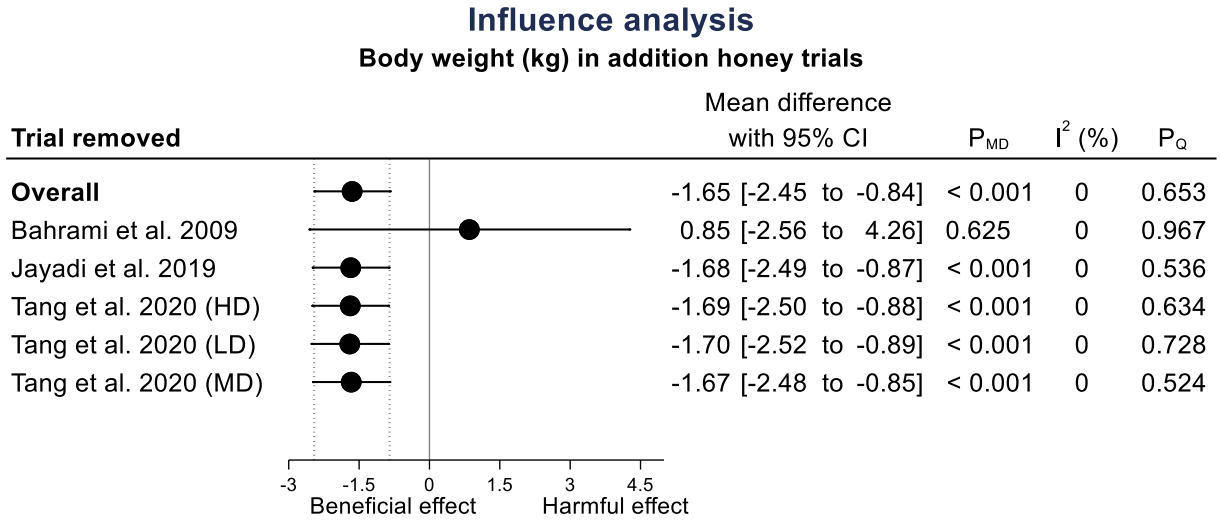
Supplementary Figure 55: Sensitivity analysis of the systematic removal of each trial for the effect of sweets and desserts on body weight (kg) in addition trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

CI=confidence interval; MD=mean difference.

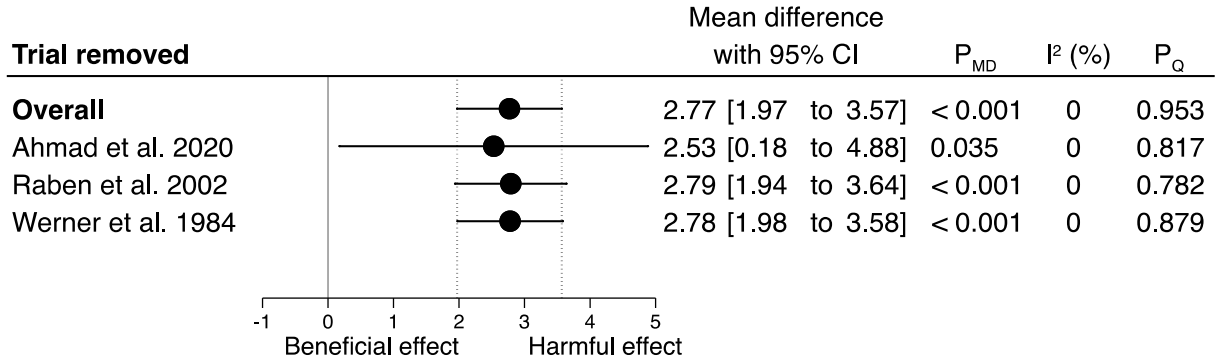
Supplementary Figure 56: Sensitivity analysis of the systematic removal of each trial for the effect of honey on body weight (kg) in addition trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

CI=confidence interval; HD=high dose; LD=low dose; MD=mean difference; MD=medium dose.

Supplementary Figure 57: Sensitivity analysis of the systematic removal of each trial for the effect of mixed sources (with SSBs) on body weight (kg) in addition trials

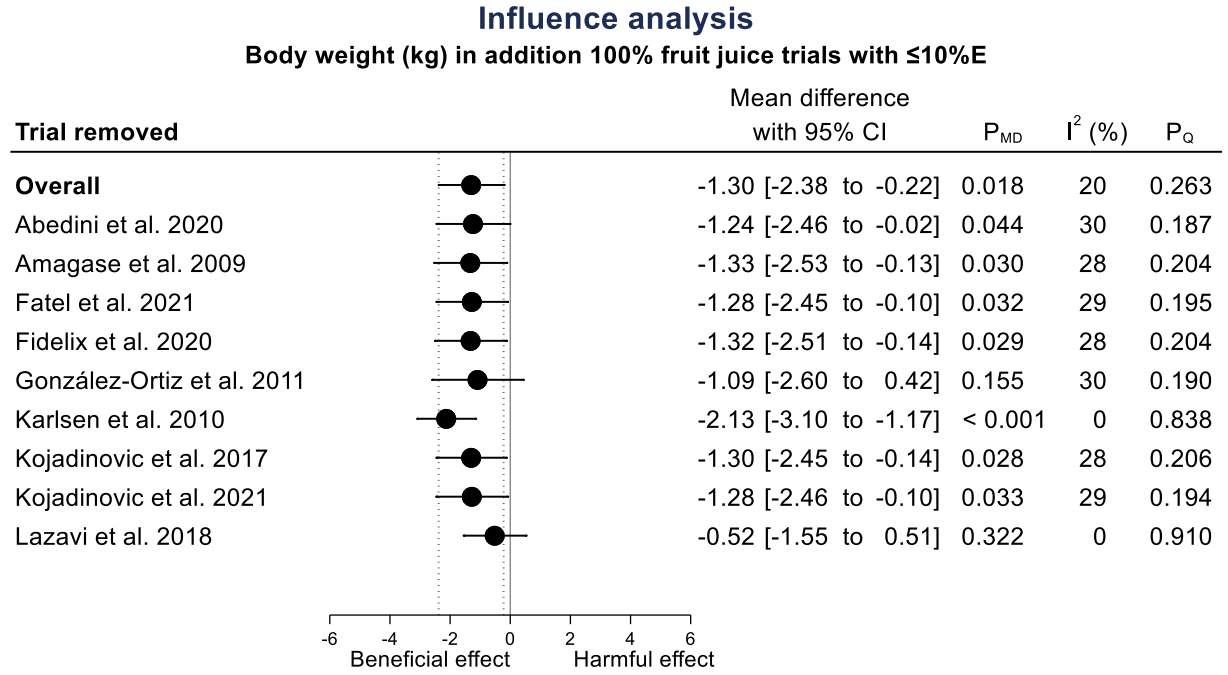


Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

CI=confidence interval; MD=mean difference; SSB=sugars-sweetened beverage.

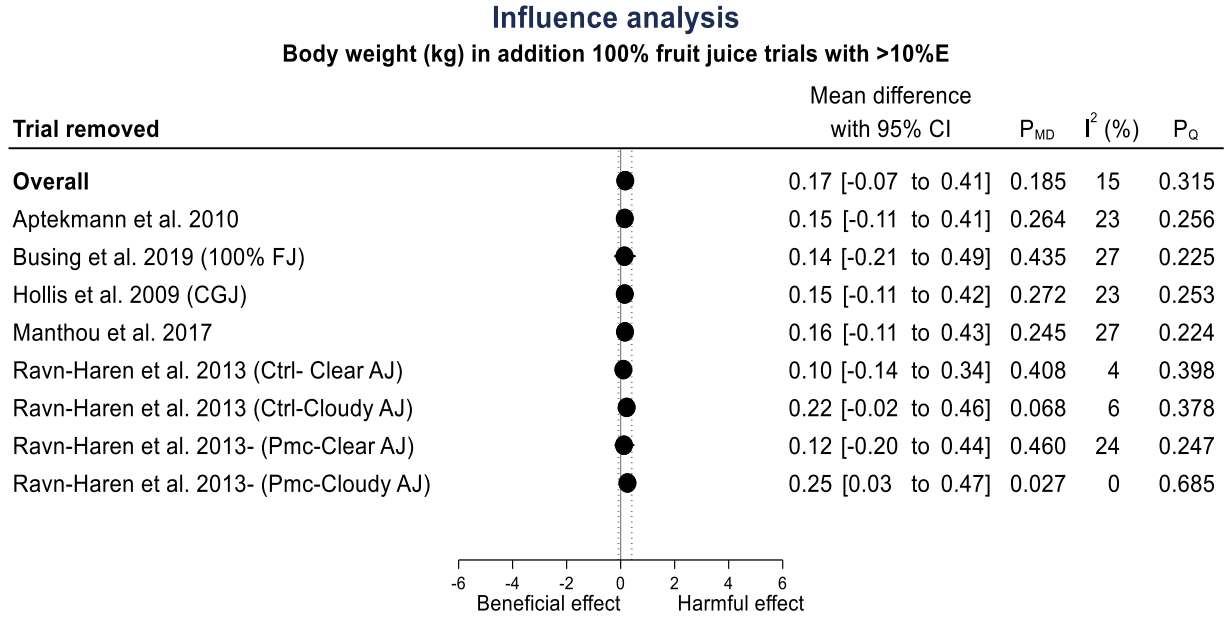
Supplementary Figure 58: Sensitivity analysis of the systematic removal of each trial for the effect of 100% fruit juice on body weight (kg) in addition trials with ≤10%E or >10%E

A



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

B

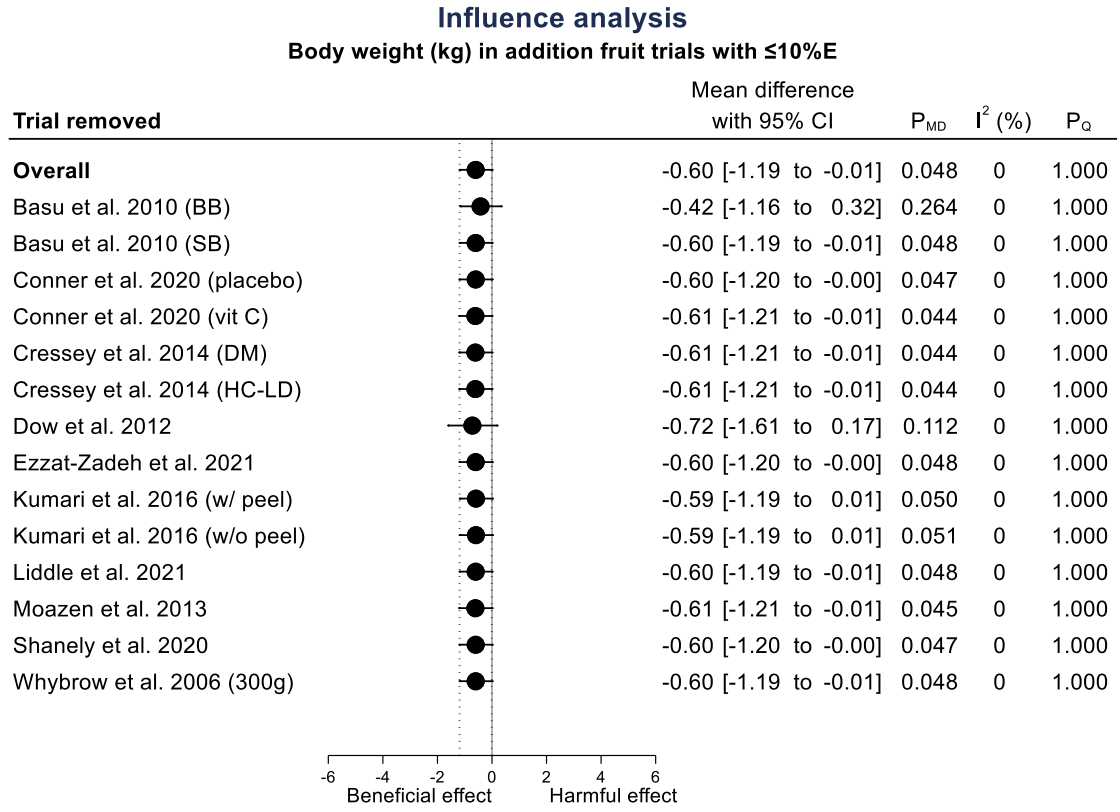


Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

Panel A: 100% fruit juice trials with ≤10%E; B: 100% fruit juice trials with >10%E
AJ=apple juice; CGJ=Concord grape juice; CI=confidence interval; Ctrl=control; FJ=fruit juice; MD=mean difference; Pmc=apple pomace.

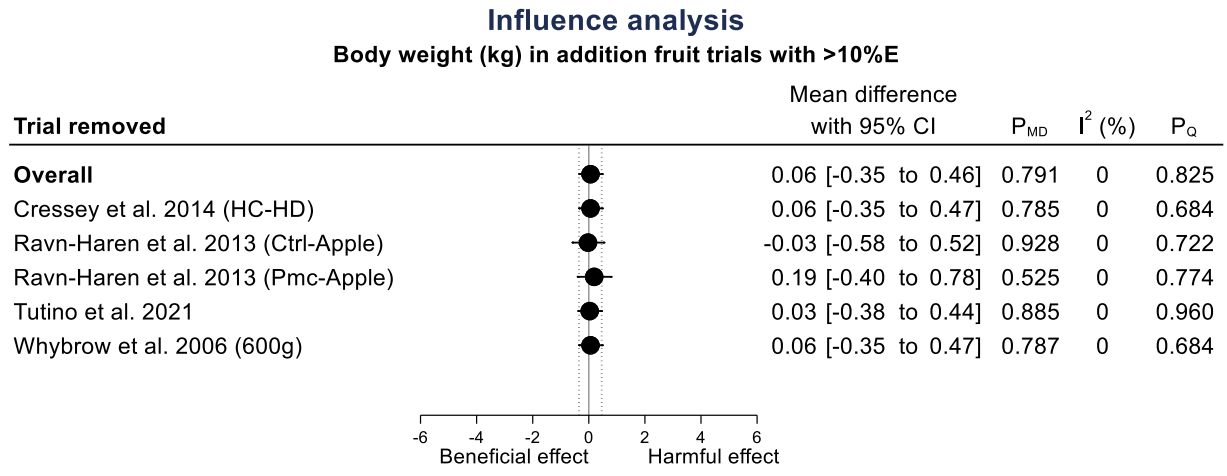
Supplementary Figure 59: Sensitivity analysis of the systematic removal of each trial for the effect of fruit on body weight (kg) in addition trials with ≤10%E or >10%E

A



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

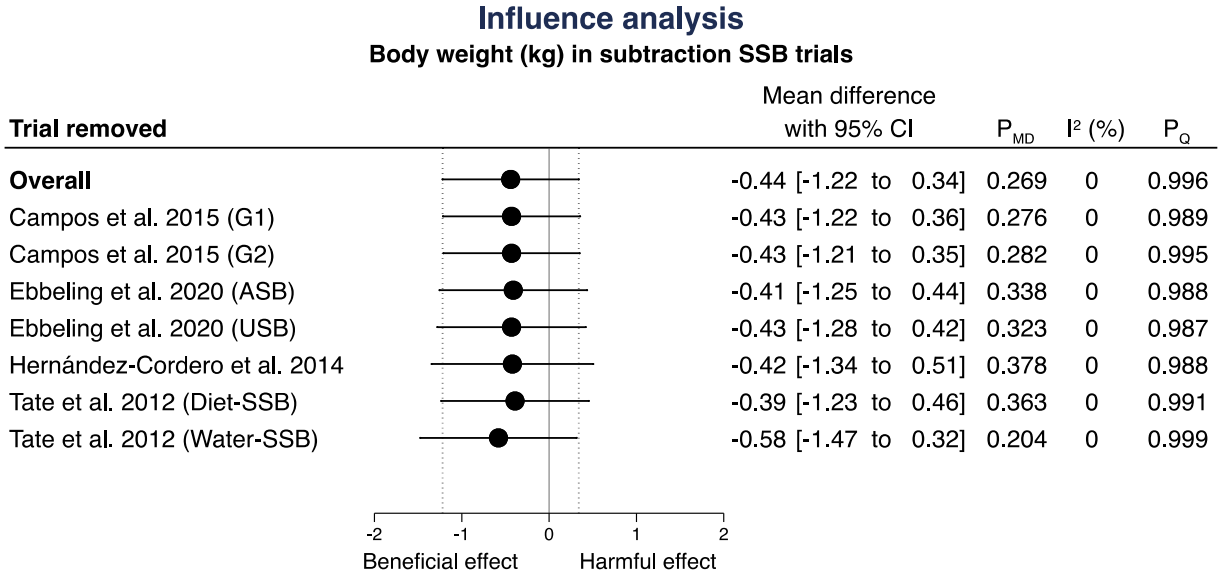
B



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

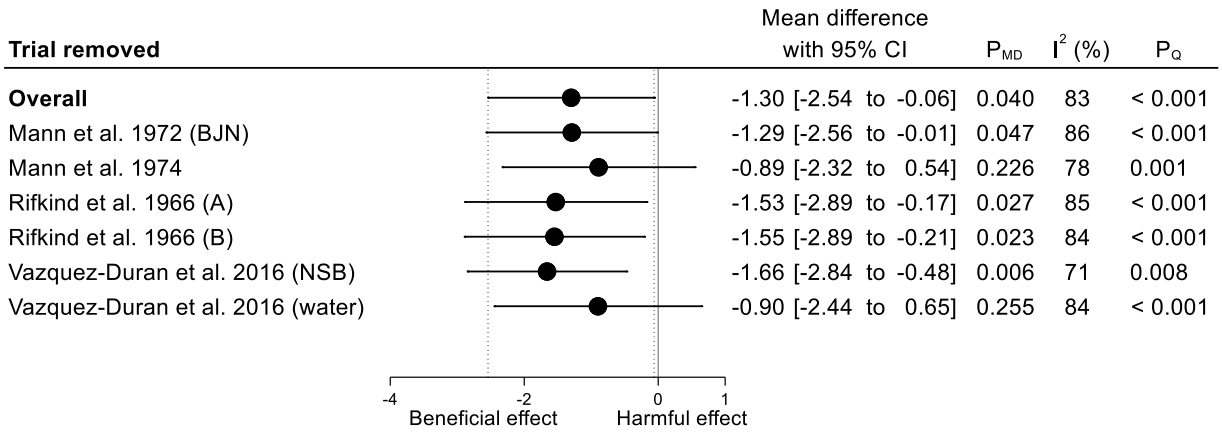
Panel A: addition trials of fruit with ≤10%E; B: addition trials of fruit with >10%E
BB=blueberries; CI=confidence interval; Ctrl=control; DM=diabetes mellitus; %E=percentage of total energy intake; HC=hypercholesterolemia; HD=high dose; LD=low dose; MD=mean difference; Pmc=apple pomace; SB=strawberries; vit C=vitamin C; w/=with; w/o=without.

Supplementary Figure 60: Sensitivity analysis of the systematic removal of each trial for the effect of SSBs on body weight (kg) in subtraction trials



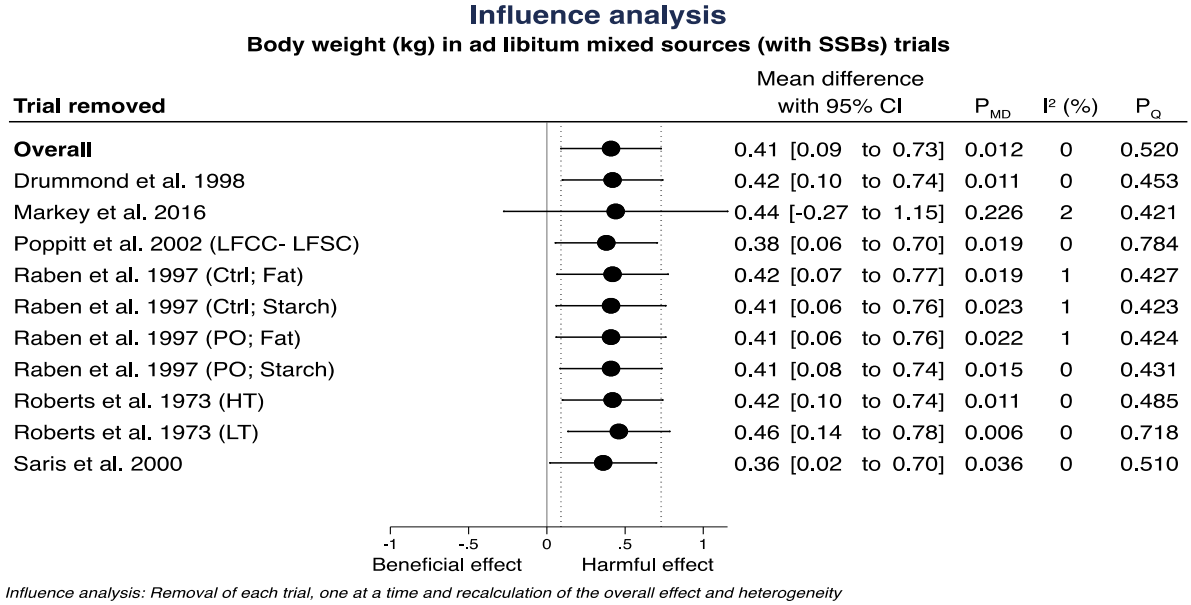
ASB=artificially sweetened beverage; CI=confidence interval; G1=group 1; G2=group 2; MD=mean difference; SSB=sugars-sweetened beverage; USB=unsweetened beverage.

Supplementary Figure 61: Sensitivity analysis of the systematic removal of each trial for the effect of mixed sources (with SSBs) on body weight (kg) in subtraction trials



A=group A; B=group B; BJN=British Journal of Nutrition; CI=confidence interval; MD=mean difference; NSB=non-nutritive sweetened beverage; SSB=sugars-sweetened beverage.

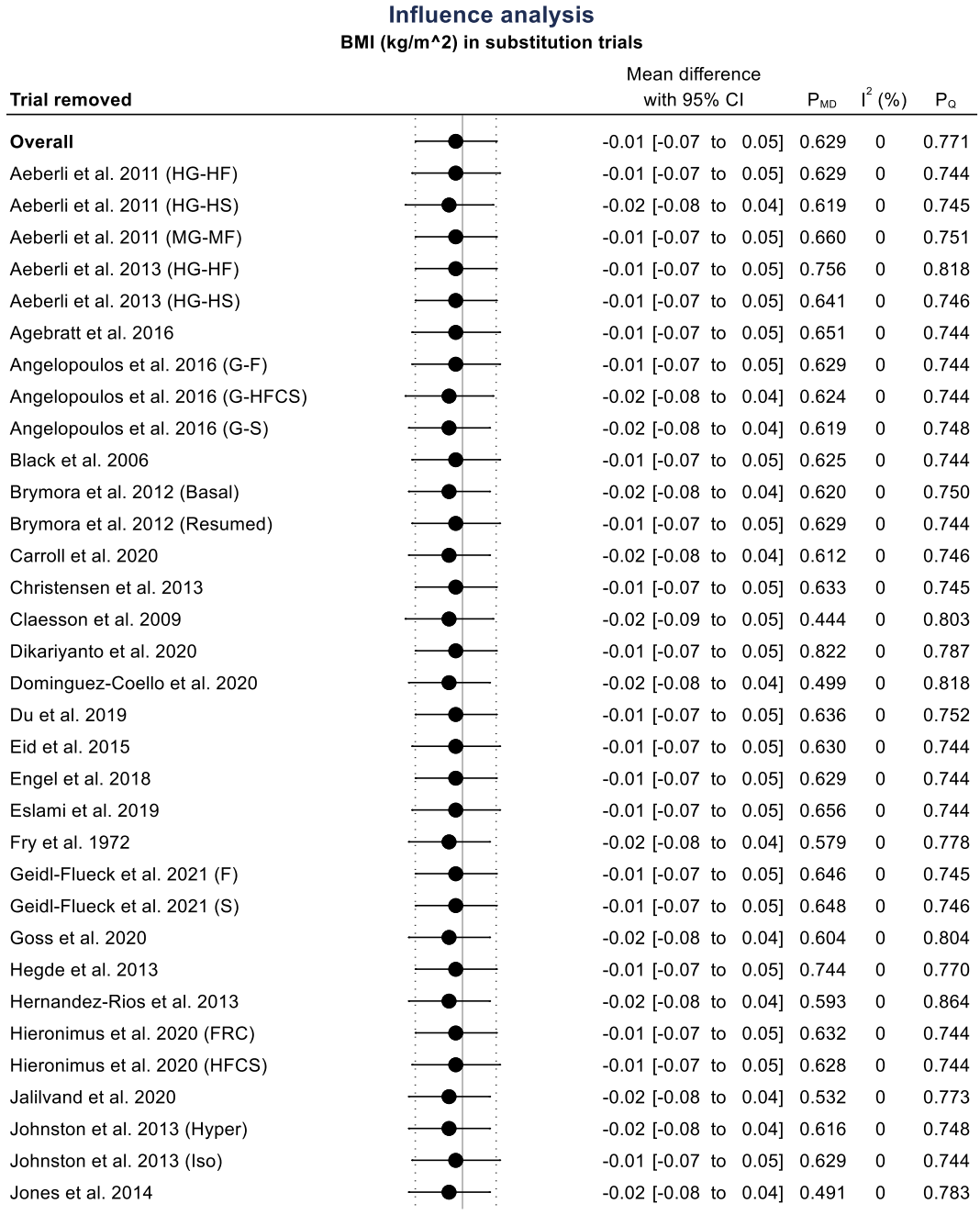
Supplementary Figure 62: Sensitivity analysis of the systematic removal of each trial for the effect of mixed sources (with SSBs) on body weight (kg) in *ad libitum* trials



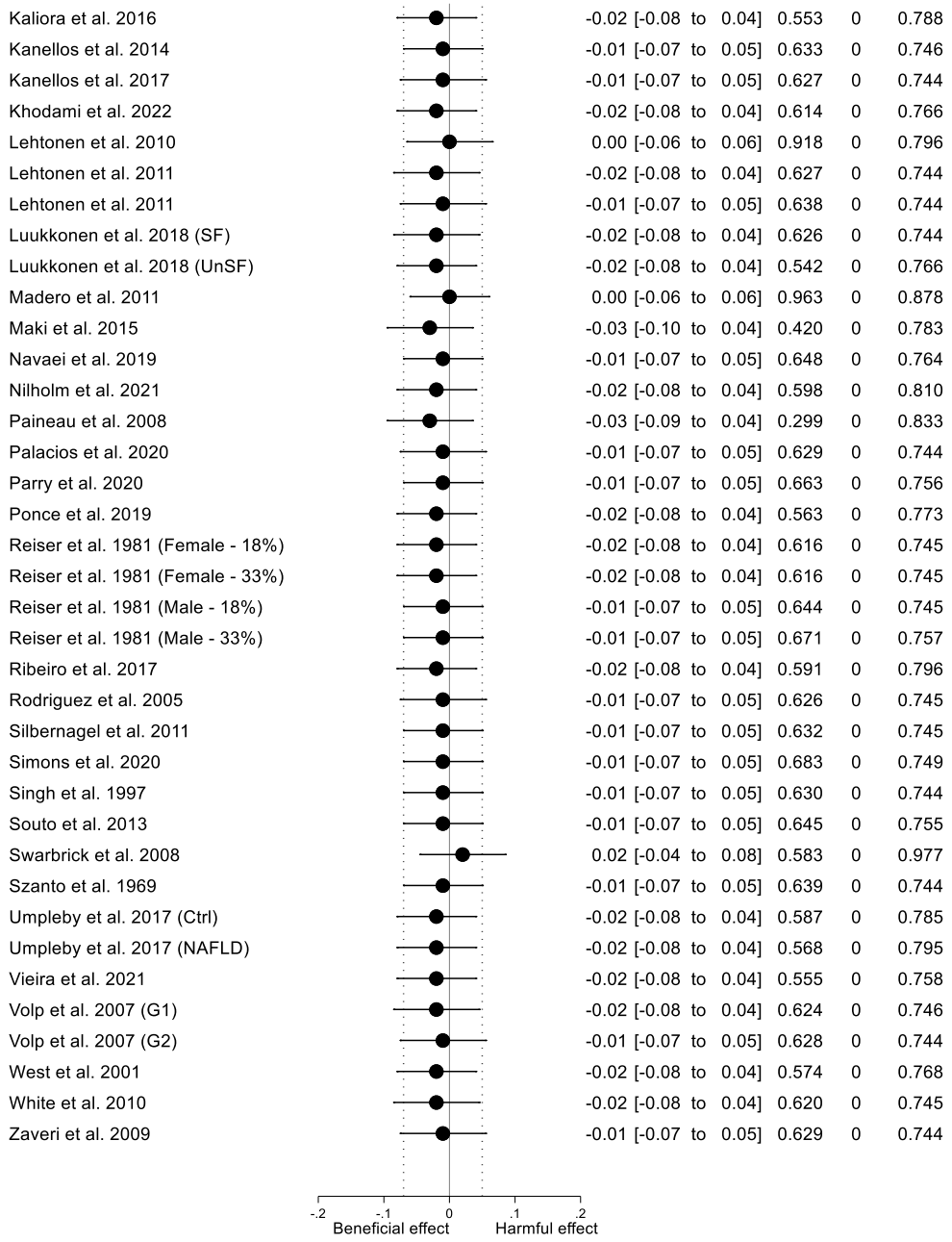
Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

CI=confidence interval; Ctrl=control; HT=high triglyceride group; LFCC=low-fat, complex carbohydrate diet; LFSC=low-fat, simple carbohydrate diet; LT=low triglyceride group; MD=mean difference; PO=post-obese; SSB=sugars-sweetened beverage.

Supplementary Figure 63 (1 of 2): Sensitivity analysis of the systematic removal of each trial for the effect of important food sources of fructose-containing sugars on BMI (kg/m^2) in substitution trials



Supplementary Figure 63 (2 of 2): Sensitivity analysis of the systematic removal of each trial for the effect of important food sources of fructose-containing sugars on BMI (kg/m^2) in substitution trials



Influence analysis: Removal of each trial, one at a time and recalculation of the overall effect and heterogeneity

BMI=body mass index; CI=confidence interval; Ctrl=control; F=fructose; FRC=fructose; G=glucose; G1=group 1; G2=group 2; H=high glucose; HF=high fructose; HFCS=high fructose corn syrup; HG=high glucose; HS=high sucrose; Hyper=hypercaloric diet; Iso=isocaloric diet; MD=mean difference; MF=medium fructose; MG=medium glucose; NAFLD=non-alcoholic fatty liver disease; S=sucrose; SF=saturated fat; UnSF=unsaturated fat.