

Supplementary Materials

Efficacy of intermittent fasting on blood glucose and weight in type 2 diabetes and prediabetes: A comparison with ad libitum and continuous energy restriction diets

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Supplementary Table 1. Search Strategy in Cochrane Library

Cochrane Library		
procedure	Key words	number of articles
#6	#1 AND #4 AND #5	25554
#5	("randomized controlled trial" or "randomized controlled trials" or "RCT" or "RCTs" or "randomized controlled study" or "randomized controlled studies" or "randomized trial" or "randomized trials" or "clinical trial" or "clinical trials" or "clinical study" or "clinical studies" or "Controlled Trial" or "Controlled Trials" or "controlled clinical trial" or "controlled clinical trials" or "randomized" or "randomly" or "random allocation"):ti,ab,kw	156658 39
#4	#2 or #3	193638
#3	("prediabetes" or "prediabetic" or "pre-diabetes" or "pre diabetes" or "pre-diabetic" or "pre diabetic" or "insulin resistance" or "insulin sensitivity" or "glucose intolerance" or "impaired glucose tolerance" or "prediabetic State" or "State, Prediabetic" or "States, Prediabetic" or "Blood Glucose" or "glucose blood level" or "hyperglycaemia" or "Hyperglycemia" or "Hyperinsulinemia" or "glycuresis" or "Glycemic" or "Glycaemic" or "Glycemia" or "Glycaemia" or "HbA1" or "HB A1" or "HbA1c" or "Hemoglobin" or "haemoglobin" or "HOMA-IR" or "HOMA-β" or "impaired glucose" or "impaired fasting glucose" or "impaired fasting insulin"):ti,ab,kw	124210
#2	("diabetes" or "diabetes mellitus" or "mellitus" or "Diabetes Mellitus, Type 1" or "Diabetes Mellitus, Type 2" or "Diabetics" or "Diabetic" or "diabetic State" or "State, diabetic" or "States, diabetic" or "type 2 diabetes" or "type 2 diabetes mellitus" or "dm2" or "dm 2" or "T2DM" or "T2D" or "dm type 2" or "Insulin-dependent Diabetes" or "Insulin dependent Diabetes" or "Insulin-dependent diabetes mellitus" or "Insulin dependent diabetes mellitus" or "iddm" or "Non insulin-dependent diabetes" or "Non insulin dependent diabetes" or "Non insulin-dependent diabetes mellitus" or "Non insulin dependent diabetes mellitus" or "niddm" or "adult-onset diabetes" or "adult-onset diabetes mellitus" or "Maturity-Onset Diabetes" or "Maturity-Onset Diabetes Mellitus" or "Slow-Onset Diabetes Mellitus" or "Juvenile diabetes" or "Juvenile diabetes mellitus" or "Juvenile-Onset Diabetes" or "Juvenile-Onset Diabetes Mellitus" or "autoimmune diabetes" or "Brittle Diabetes Mellitus" or "type 1 diabetes" or "type 1 diabetes mellitus" or "T1D" or "T1DM" or "Stable Diabetes Mellitus" or "Gestational diabetes" or "Gestational diabetes mellitus" or "GDM"):ti,ab,kw	132116
#1	("fasting" OR "intermittent fasting" OR "intermittent energy restriction" OR "intermittent calorie restriction" OR "intermittent caloric restriction" OR "periodic fasting" OR "alternate-day fasting" OR "alternate day fasting" OR "zero-calorie alternate-day fasting" OR "zero-calorie alternate day fasting" OR "modified alternate-day fasting" OR "modified alternate day fasting" OR "time restricted feeding" OR "time restricted feedings" OR "time-restricted feeding" OR "time-restricted feedings" OR "feeding, time restricted" OR "5:2 diet" OR "time restricted eating" OR "time-restricted eating" OR "whole day fasting" OR "low calorie diet" OR "very low calorie diet" OR "fasting, intermittent" OR "eating, time restricted" OR "fasting, time restricted" OR "time restricted fasting"):ti,ab,kw	69270

Supplementary Table 2. Search Strategy in Embase

Embase		
procedure	Key words	number of articles
#6	#1 AND #4 AND #5	24537
#5	('randomized controlled trial':ab,ti OR 'randomized controlled trials':ab,ti OR rct:ab,ti OR rcts:ab,ti OR 'randomized controlled study':ab,ti OR 'randomized controlled studies':ab,ti OR 'randomized trial':ab,ti OR 'randomized trials':ab,ti OR 'clinical trial':ab,ti OR 'clinical trials':ab,ti OR 'clinical study':ab,ti OR 'clinical studies':ab,ti OR 'controlled trial':ab,ti OR 'controlled trials':ab,ti OR 'controlled clinical trial':ab,ti OR 'controlled clinical trials':ab,ti OR randomized:ab,ti OR randomly:ab,ti OR 'random allocation':ab,ti) AND [1967-2023]/py AND [01-01-1976]/sd NOT [01-07-2023]/sd	2,152,366
#4	#2 or #3	1,784,942
#3	(prediabetes:ab,ti OR 'pre diabetes':ab,ti OR 'pre diabetic':ab,ti OR 'insulin resistance':ab,ti OR 'insulin sensitivity':ab,ti OR 'glucose intolerance':ab,ti OR 'impaired glucose tolerance':ab,ti OR 'prediabetic state':ab,ti OR 'state, prediabetic':ab,ti OR 'states, prediabetic':ab,ti OR 'blood glucose':ab,ti OR 'glucose blood level':ab,ti OR hyperglycaemia:ab,ti OR hyperglycemia:ab,ti OR hyperinsulinemia:ab,ti OR glycaemia:ab,ti OR glycaemic:ab,ti OR glycaemia:ab,ti OR glycaemia:ab,ti OR hba1c:ab,ti OR 'hb a1':ab,ti OR hba1c:ab,ti OR hemoglobin:ab,ti OR haemoglobin:ab,ti OR 'homa ir':ab,ti OR 'homa β':ab,ti OR 'impaired glucose':ab,ti OR 'impaired fasting glucose':ab,ti OR 'impaired fasting insulin':ab,ti) AND [1967-2023]/py AND [01-01-1976]/sd NOT [01-07-2023]/sd	807,751
#2	(diabetes:ab,ti OR 'diabetes mellitus':ab,ti OR mellitus:ab,ti OR 'diabetes mellitus, type 1':ab,ti OR 'diabetes mellitus, type 2':ab,ti OR diabetics:ab,ti OR diabetic:ab,ti OR 'diabetic state':ab,ti OR 'state, diabetic':ab,ti OR 'states, diabetic':ab,ti OR 'type 2 diabetes':ab,ti OR 'type 2 diabetes mellitus':ab,ti OR dm2:ab,ti OR 'dm 2':ab,ti OR t2dm:ab,ti OR t2d:ab,ti OR 'dm type 2':ab,ti OR 'insulin-dependent diabetes':ab,ti OR 'insulin dependent diabetes':ab,ti OR 'insulin-dependent diabetes mellitus':ab,ti OR 'insulin dependent diabetes mellitus':ab,ti OR iddm:ab,ti OR 'non insulin-dependent diabetes':ab,ti OR 'non insulin dependent diabetes':ab,ti OR 'non insulin-dependent diabetes mellitus':ab,ti OR 'non insulin dependent diabetes mellitus':ab,ti OR niddm:ab,ti OR 'adult-onset diabetes':ab,ti OR 'adult-onset diabetes mellitus':ab,ti OR 'maturity-onset diabetes':ab,ti OR 'maturity-onset diabetes mellitus':ab,ti OR 'slow-onset diabetes mellitus':ab,ti OR 'juvenile diabetes':ab,ti OR 'juvenile diabetes mellitus':ab,ti OR 'juvenile-onset diabetes':ab,ti OR 'juvenile-onset diabetes mellitus':ab,ti OR 'autoimmune diabetes':ab,ti OR 'brittle diabetes mellitus':ab,ti OR 'type 1 diabetes':ab,ti OR 'type 1 diabetes mellitus':ab,ti OR t1d:ab,ti OR t1dm:ab,ti OR 'stable diabetes mellitus':ab,ti OR 'gestational diabetes':ab,ti OR 'gestational diabetes mellitus':ab,ti OR gdm:ab,ti) AND [1967-2023]/py AND [01-01-1976]/sd NOT [01-07-2023]/sd	1,328,755
#1	(fasting:ab,ti OR 'intermittent fasting':ab,ti OR 'intermittent energy restriction':ab,ti OR 'intermittent calorie restriction':ab,ti OR 'intermittent caloric restriction':ab,ti OR 'periodic fasting':ab,ti OR 'alternate-day fasting':ab,ti OR 'alternate day fasting':ab,ti OR 'zero-calorie alternate-day fasting':ab,ti OR 'zero-calorie alternate day fasting':ab,ti OR 'modified alternate-day fasting':ab,ti OR 'modified alternate day fasting':ab,ti OR 'time restricted feeding':ab,ti OR 'time restricted feedings':ab,ti OR 'feeding, time restricted':ab,ti OR '5:2 diet':ab,ti OR 'time restricted eating':ab,ti OR 'time-restricted eating':ab,ti OR 'whole day fasting':ab,ti OR 'low calorie diet':ab,ti OR 'very low calorie diet':ab,ti OR 'fasting, intermittent':ab,ti OR 'eating, time restricted':ab,ti OR 'fasting, time restricted':ab,ti OR 'time restricted fasting':ab,ti) AND [1967-2023]/py AND [01-01-1976]/sd NOT [01-07-2023]/sd	218,810

#3	<p>IR[Title/Abstract]) OR (HOMA- β[Title/Abstract]) OR (impaired glucose[Title/Abstract]) OR (impaired fasting glucose[Title/Abstract]) OR (impaired fasting insulin[Title/Abstract]) AND (1000/1/1:2023/6/30[pat]) Filters: from 1000/1/1 - 2023/6/30</p> <p>((((((((((((((((((((((((((((((("Prediabetic State"[Mesh]) OR (prediabetic State[Title/Abstract]) OR (prediabetes[Title/Abstract]) OR (pre-diabetes[Title/Abstract]) OR (pre diabetes[Title/Abstract]) OR (prediabetic[Title/Abstract]) OR (pre-diabetic[Title/Abstract]) OR (pre diabetic[Title/Abstract]) OR (insulin resistance[Title/Abstract]) OR (insulin sensitivity[Title/Abstract]) OR (glucose intolerance[Title/Abstract]) OR (impaired glucose tolerance[Title/Abstract]) OR (State, Prediabetic[Title/Abstract]) OR (States, Prediabetic[Title/Abstract]) OR (Blood Glucose[Title/Abstract]) OR (glucose blood level[Title/Abstract]) OR (hyperglycaemia[Title/Abstract]) OR (Hyperglycemia[Title/Abstract]) OR (Hyperinsulinemia[Title/Abstract]) OR (glycuresis[Title/Abstract]) OR (Glycemic[Title/Abstract]) OR (Glycaemic[Title/Abstract]) OR (Glycemia[Title/Abstract]) OR (Glycaemia[Title/Abstract]) OR (HbA1[Title/Abstract]) OR (HB A1[Title/Abstract]) OR (HbA1c[Title/Abstract]) OR (Hemoglobin[Title/Abstract]) OR (haemoglobin[Title/Abstract]) OR (HOMA-IR[Title/Abstract]) OR (HOMA-β[Title/Abstract]) OR (impaired glucose[Title/Abstract]) OR (impaired fasting glucose[Title/Abstract]) OR (impaired fasting insulin[Title/Abstract]) Filters: from 1000/1/1 - 2023/6/30</p>	556,360
#2	<p>((((((((((((((((((((((((((((((("Diabetes Mellitus"[Mesh]) OR (diabetes mellitus[Title/Abstract]) OR (diabetes[Title/Abstract]) OR (mellitus[Title/Abstract]) OR (Diabetes Mellitus, Type 1[Title/Abstract]) OR (Diabetes Mellitus, Type 2[Title/Abstract]) OR (Diabetics[Title/Abstract]) OR (Diabetic[Title/Abstract]) OR (diabetic State[Title/Abstract]) OR (State, diabetic[Title/Abstract]) OR (States, diabetic[Title/Abstract]) OR (type 2 diabetes[Title/Abstract]) OR (type 2 diabetes mellitus[Title/Abstract]) OR (dm2[Title/Abstract]) OR (dm 2[Title/Abstract]) OR (T2DM[Title/Abstract]) OR (T2D[Title/Abstract]) OR (dm type 2[Title/Abstract]) OR (Insulin-dependent Diabetes[Title/Abstract]) OR (Insulin dependent Diabetes[Title/Abstract]) OR (Insulin-dependent diabetes mellitus[Title/Abstract]) OR (Insulin dependent diabetes mellitus[Title/Abstract]) OR (iddm[Title/Abstract]) OR (Non insulin-dependent diabetes[Title/Abstract]) OR (Non insulin dependent diabetes mellitus[Title/Abstract]) OR (Non insulin dependent diabetes mellitus[Title/Abstract]) OR (niddm[Title/Abstract]) OR (adult-onset diabetes[Title/Abstract]) OR (adult-onset diabetes mellitus[Title/Abstract]) OR (Maturity-Onset Diabetes[Title/Abstract]) OR (Maturity-Onset Diabetes Mellitus[Title/Abstract]) OR (Slow-Onset Diabetes Mellitus[Title/Abstract]) OR (Juvenile diabetes[Title/Abstract]) OR (Juvenile diabetes mellitus[Title/Abstract]) OR (Juvenile-Onset Diabetes[Title/Abstract]) OR (Juvenile-Onset Diabetes Mellitus[Title/Abstract]) OR (autoimmune diabetes[Title/Abstract]) OR (Brittle Diabetes Mellitus[Title/Abstract]) OR (Type 1 diabetes[Title/Abstract]) OR (type 1 diabetes mellitus[Title/Abstract]) OR (T1D[Title/Abstract]) OR (T1DM[Title/Abstract]) OR (Stable Diabetes Mellitus[Title/Abstract]) OR (Gestational diabetes[Title/Abstract]) OR (Gestational diabetes mellitus[Title/Abstract]) OR (GDM[Title/Abstract]) Filters: from 1000/1/1 - 2023/6/30</p>	966,352
#1	<p>((((((((((((((((((((((((((((((("fasting"[Mesh] OR "Intermittent fasting"[Mesh]) OR (fasting[Title/Abstract]) OR (intermittent fasting[Title/Abstract]) OR (intermittent energy restriction[Title/Abstract]) OR (intermittent calorie restriction[Title/Abstract]) OR (intermittent caloric restriction[Title/Abstract]) OR (periodic fasting[Title/Abstract]) OR (alternate-day fasting[Title/Abstract]) OR (alternate day fasting[Title/Abstract]) OR (zero-calorie alternate-day fasting[Title/Abstract]) OR (zero-calorie alternate day fasting[Title/Abstract]) OR (modified alternate-day fasting[Title/Abstract])</p>	160,869

OR (modified alternate day fasting[Title/Abstract])) OR (time restricted feeding[Title/Abstract])) OR (time restricted feedings[Title/Abstract])) OR (time-restricted feeding[Title/Abstract])) OR (time-restricted feedings[Title/Abstract])) OR (feeding, time restricted[Title/Abstract])) OR (5:2 diet[Title/Abstract])) OR (time restricted eating[Title/Abstract])) OR (time-restricted eating[Title/Abstract])) OR (whole day fasting[Title/Abstract])) OR (low calorie diet[Title/Abstract])) OR (very low calorie diet[Title/Abstract])) OR (fasting, intermittent[Title/Abstract])) OR (eating, time restricted[Title/Abstract])) OR (fasting, time restricted[Title/Abstract])) OR (time restricted fasting[Title/Abstract])) Filters: from 1000/1/1 - 2023/6/30

Supplementary Table 4. Search Strategy in Scopus

procedure	Key words	number of articles
#6	#1 AND #4 AND #5	72923
#5	"randomized controlled trial" OR "randomized controlled trials" OR "rct" OR "rcts" OR "randomized controlled study" OR "randomized controlled studies" OR "randomized trial" OR "randomized trials" OR "clinical trial" OR "clinical trials" OR "clinical study" OR "clinical studies" OR "controlled trial" OR "controlled trials" OR "controlled clinical trial" OR "controlled clinical trials" OR "randomized" OR "randomly" OR "random allocation"	7579944
#4	#2 or #3	2169277
#3	"prediabetes" OR "prediabetic" OR "pre-diabetes" OR "pre diabetes" OR "pre-diabetic" OR "pre diabetic" OR "insulin resistance" OR "insulin sensitivity" OR "glucose intolerance" OR "impaired glucose tolerance" OR "prediabetic state" OR "state, prediabetic" OR "states, prediabetic" OR "blood glucose" OR "glucose blood level" OR "hyperglycaemia" OR "hyperglycemia" OR "hyperinsulinemia" OR "glycuresis" OR "glycemic" OR "glycaemic" OR "glycemia" OR "glycaemia" OR "hba1" OR "hb a1" OR "hba1c" OR "hemoglobin" OR "haemoglobin" OR "homa-ir" OR "homa-β" OR "impaired glucose" OR "impaired fasting glucose" OR "impaired fasting insulin"	1176458
#2	"diabetes" OR "diabetes mellitus" OR "mellitus" OR "diabetes mellitus, type 1" OR "diabetes mellitus, type 2" OR "diabetics" OR "diabetic" OR "diabetic state" OR "state, diabetic" OR "states, diabetic" OR "type 2 diabetes" OR "type 2 diabetes mellitus" OR "dm2" OR "dm 2" OR "t2dm" OR "t2d" OR "dm type 2" OR "insulin-dependent diabetes" OR "insulin dependent diabetes" OR "insulin-dependent diabetes mellitus" OR "insulin dependent diabetes mellitus" OR "iddm" OR "non insulin-dependent diabetes" OR "non insulin dependent diabetes" OR "non insulin-dependent diabetes mellitus" OR "non insulin dependent diabetes mellitus" OR "niddm" OR "adult-onset diabetes" OR "adult-onset diabetes mellitus" OR "maturity-onset diabetes" OR "maturity-onset diabetes mellitus" OR "slow-onset diabetes mellitus" OR "juvenile diabetes" OR "juvenile diabetes mellitus" OR "juvenile-onset diabetes" OR "juvenile-onset diabetes mellitus" OR "autoimmune diabetes" OR "brittle diabetes mellitus" OR "type 1 diabetes" OR "type 1 diabetes mellitus" OR "t1d" OR "t1dm" OR "stable diabetes mellitus" OR "gestational diabetes" OR "gestational diabetes mellitus" OR "gdm"	1527574
#1	"fasting" OR "intermittent fasting" OR "intermittent energy restriction" OR "intermittent calorie restriction" OR "intermittent caloric restriction" OR "periodic fasting" OR "alternate-day fasting" OR "alternate day fasting" OR "zero-calorie alternate-day fasting" OR "zero-calorie alternate day fasting" OR "modified alternate-day fasting" OR "modified alternate day fasting" OR "time restricted feeding" OR "time restricted feedings" OR "time-restricted feeding" OR "time-restricted feedings" OR "feeding, time restricted" OR "5:2 diet" OR "time restricted eating" OR "time-restricted eating" OR "whole day fasting" OR "low calorie diet" OR "very low calorie diet" OR "fasting, intermittent" OR "eating, time restricted" OR "fasting, time restricted" OR "time restricted fasting"	219765

Supplementary Table 5. Search Strategy Web of science

procedure	Key words	number of articles
#6	#1 AND #4 AND #5	40698
#5	TS=(randomized controlled trial or randomized controlled trials or RCT or RCTs or randomized controlled study or randomized controlled studies or randomized trial or randomized trials or clinical trial or clinical trials or clinical study or clinical studies or Controlled Trial or Controlled Trials or controlled clinical trial or controlled clinical trials or randomized or randomly or random allocation)	3949186
#4	#2 or #3	1402281
#3	TS=(prediabetes or prediabetic or pre-diabetes or pre diabetes or pre-diabetic or pre diabetic or insulin resistance or insulin sensitivity or glucose intolerance or impaired glucose tolerance or prediabetic State or State, Prediabetic or States, Prediabetic or Blood Glucose or glucose blood level or hyperglycaemia or Hyperglycemia or Hyperinsulinemia or glycaemia or Glycemic or Glycaemic or Glycemia or Glycaemia or HbA1 or HB A1 or HbA1c or Hemoglobin or haemoglobin or HOMA-IR or HOMA- β or impaired glucose or impaired fasting glucose or impaired fasting insulin)	796452
#2	TS=(diabetes or diabetes mellitus or mellitus or Diabetes Mellitus, Type 1 or Diabetes Mellitus, Type 2 or Diabetics or Diabetic or diabetic State or State, diabetic or States, diabetic or type 2 diabetes or type 2 diabetes mellitus or dm2 or dm 2 or T2DM or T2D or dm type 2 or Insulin-dependent Diabetes or Insulin dependent Diabetes or Insulin-dependent diabetes mellitus or Insulin dependent diabetes mellitus or iddm or Non insulin-dependent diabetes or Non insulin dependent diabetes or Non insulin-dependent diabetes mellitus or Non insulin dependent diabetes mellitus or niddm or adult-onset diabetes or adult-onset diabetes mellitus or Maturity-Onset Diabetes or Maturity-Onset Diabetes Mellitus or Slow-Onset Diabetes Mellitus or Juvenile diabetes or Juvenile diabetes mellitus or Juvenile-Onset Diabetes or Juvenile-Onset Diabetes Mellitus or autoimmune diabetes or Brittle Diabetes Mellitus or type 1 diabetes or type 1 diabetes mellitus or T1D or T1DM or Stable Diabetes Mellitus or Gestational diabetes or Gestational diabetes mellitus or GDM)	1237422
#1	TS=(fasting or intermittent fasting or intermittent energy restriction or intermittent calorie restriction or intermittent caloric restriction or periodic fasting or alternate-day fasting or alternate day fasting or zero-calorie alternate-day fasting or zero-calorie alternate day fasting or modified alternate-day fasting or modified alternate day fasting or time restricted feeding or time restricted feedings or time-restricted feeding or time-restricted feedings or feeding, time restricted or 5:2 diet or time restricted eating or time-restricted eating or whole day fasting or low calorie diet or very low calorie diet or fasting, intermittent or eating, time restricted or fasting, time restricted or time restricted fasting)	1372090

Supplementary Table 6. Cochrane risk of bias assessment tool

Content	Evaluation items
Random allocation method	The method for generating the random allocation sequence is described in detail to assess the comparability between groups.
Allocation concealment	Whether the person implementing the allocation strictly followed the results of the random numbers.
Blinding	Whether blinding was used (for participants, researchers, assessors).
Completeness of outcome data	Dropout cases (lost to follow-up, withdrawal, non - compliance) are controlled within a minimal range to ensure the balance of dropout cases between groups.
Selective reporting of study results	Selectively reporting results that are favorable to one's research direction while potentially concealing results that are unfavorable.
Other sources of bias	Conflicts of interest, small sample size, non - balanced baselines.

Supplementary Table 7. Egger's test for publication bias in the comparison between IF and CERD on HbA1c.

Std. Eff.	Coefficient	Std. err.	t	$p > t $	[95% conf. interval]
Slope	0.022	0.360	0.06	0.953	-0.792; 0.836
Bias	-0.555	1.31	-0.42	0.683	-3.53; 2.42

IF, intermittent fasting; CERD, continuous energy restriction diet; HbA1c, glycated hemoglobin; Std_Eff, standardized effect size. Number of studies = 11; Root MSE = 1.094; Test of H0: no small-study effects; $p = 0.683$

Supplementary Table 8. Egger's test for publication bias in the comparison between IF and ad libitum diets on HbA1c.

Std. Eff.	Coefficient	Std. err.	t	$p > t $	[95% conf. interval]
Slope	-0.859	0.768	-1.12	0.345	-3.30; 1.584
Bias	0.771	2.99	0.26	0.814	-8.76; 10.30

IF, intermittent fasting; HbA1c, glycated hemoglobin; Std_Eff, standardized effect size. Number of studies = 5; Root MSE = 1.865; Test of H0: no small-study effects; $p = 0.814$

Supplementary Table 9. Egger's test for publication bias in the comparison between IF and CERD on BW.

Std. Eff.	Coefficient	Std. err.	t	$p > t $	[95% conf. interval]
Slope	0.007	0.339	-0.02	0.985	-0.790; 0.776
Bias	-0.280	1.21	-0.23	0.823	-3.08; 2.51

IF, intermittent fasting; CERD, continuous energy restriction diet; BW, body weight; Std_Eff, standardized effect size. Number of studies = 10; Root MSE = 0.974; Test of H0: no small-study effects; $p = 0.823$

Supplementary Table 10. Egger's test for publication bias in the comparison between IF and ad libitum diets on BW.

Std. Eff.	Coefficient	Std. err.	t	$p > t $	[95% conf. interval]
Slope	-0.966	0.419	-2.30	0.105	-2.30; 0.368
Bias	2.65	1.65	1.60	0.207	-2.61; 7.92

IF, intermittent fasting; CERD, continuous energy restriction diet; BW, body weight; Std_Eff, standardized effect size. Number of studies = 5; Root MSE = 1.038; Test of H0: no small-study effects; $p = 0.207$

Supplementary Table 11. Egger's test for publication bias in the comparison between IF and CERD on BMI.

Std. Eff.	Coefficient	Std. err.	t	$p > t $	[95% conf. interval]
Slope	-0.272	0.403	-0.68	0.518	-1.20; 0.66
Bias	0.541	1.43	0.38	0.716	-2.77; 3.85

IF, intermittent fasting; CERD, continuous energy restriction diet; BMI, body mass index; Std_Eff, standardized effect size. Number of studies = 10; Root MSE = 1.147; Test of H0: no small-study effects; $p = 0.716$

Supplementary Table 12. Egger's test for publication bias in the comparison between IF and ad libitum diets on BMI.

Std. Eff.	Coefficient	Std. err.	t	$p > t $	[95% conf. interval]
Slope	-0.828	0.278	-2.98	0.096	-2.02; 0.367
Bias	2.34	1.10	2.12	0.168	-2.40; 7.08

IF, intermittent fasting; BMI, body mass index; Std_Eff, standardized effect size.
 Number of studies = 4; Root MSE = 0.683; Test of H0: no small-study effects; $p = 0.168$

Supplementary Table 13. Egger's test for publication bias in the comparison between IF and CERD on FBG.

Std. Eff.	Coefficient	Std. err.	t	$p > t $	[95% conf. interval]
Slope	-0.339	0.462	-0.73	0.491	-1.47; 0.792
Bias	1.17	1.64	0.71	0.505	-2.85; 5.19

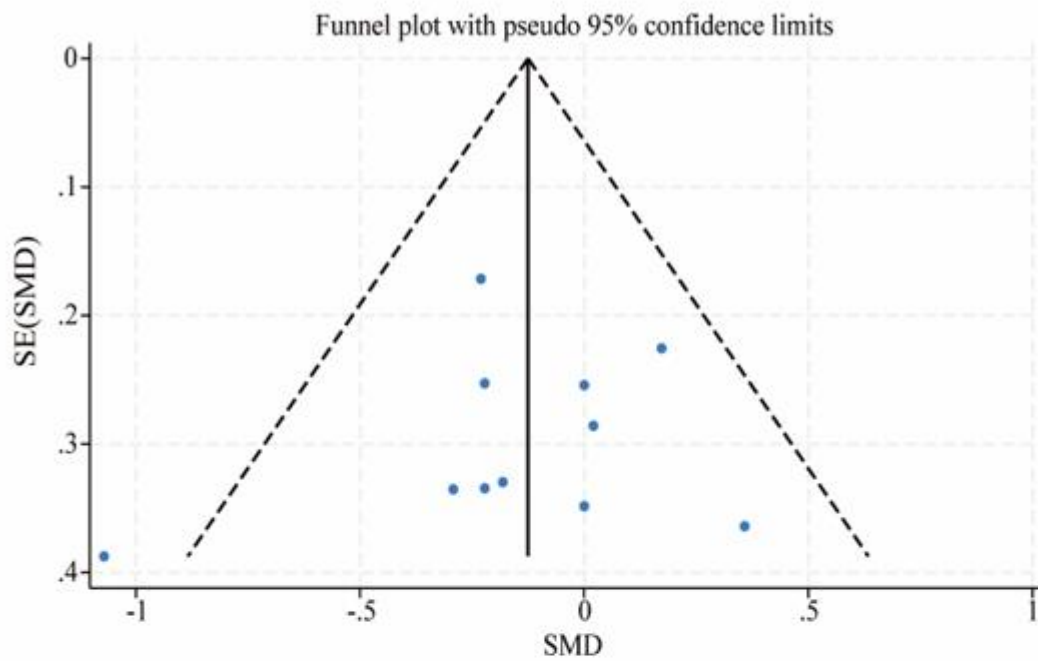
IF, intermittent fasting; CERD, continuous energy restriction diet; FBG, fasting blood glucose; Std_Eff, standardized effect size.
 Number of studies = 8; Root MSE = 1.235; Test of H0: no small-study effects; $p = 0.505$

Supplementary Table 14. Egger's test for publication bias in the comparison between IF and ad libitum diets on FBG.

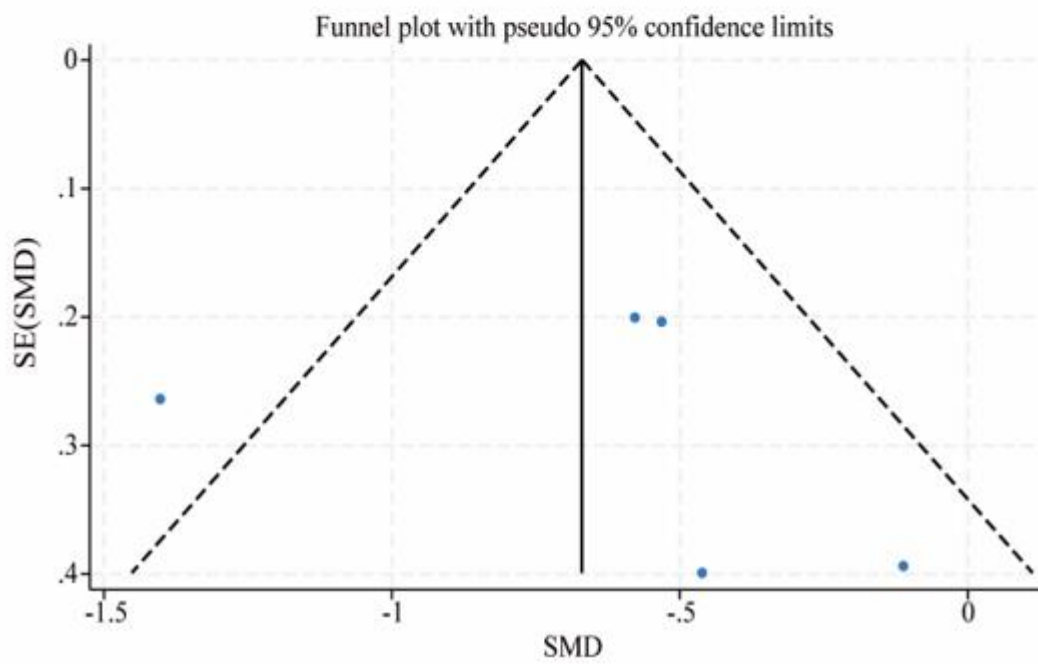
Std. Eff.	Coefficient	Std. err.	t	$p > t $	[95% conf. interval]
Slope	-0.526	0.274	-1.92	0.195	-1.70; 0.652
Bias	0.528	1.08	0.49	0.674	-4.13; 5.18

IF, intermittent fasting; FBG, fasting blood glucose; Std_Eff, standardized effect size.
 Number of studies = 4; Root MSE = 0.675; Test of H0: no small-study effects; $p = 0.674$

A

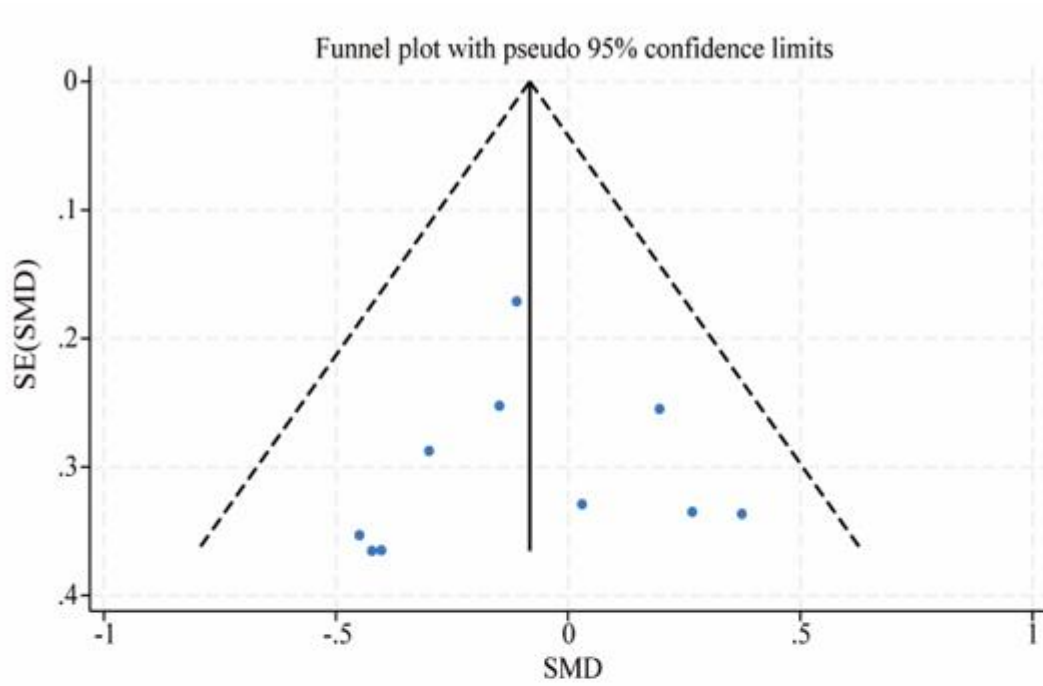


B

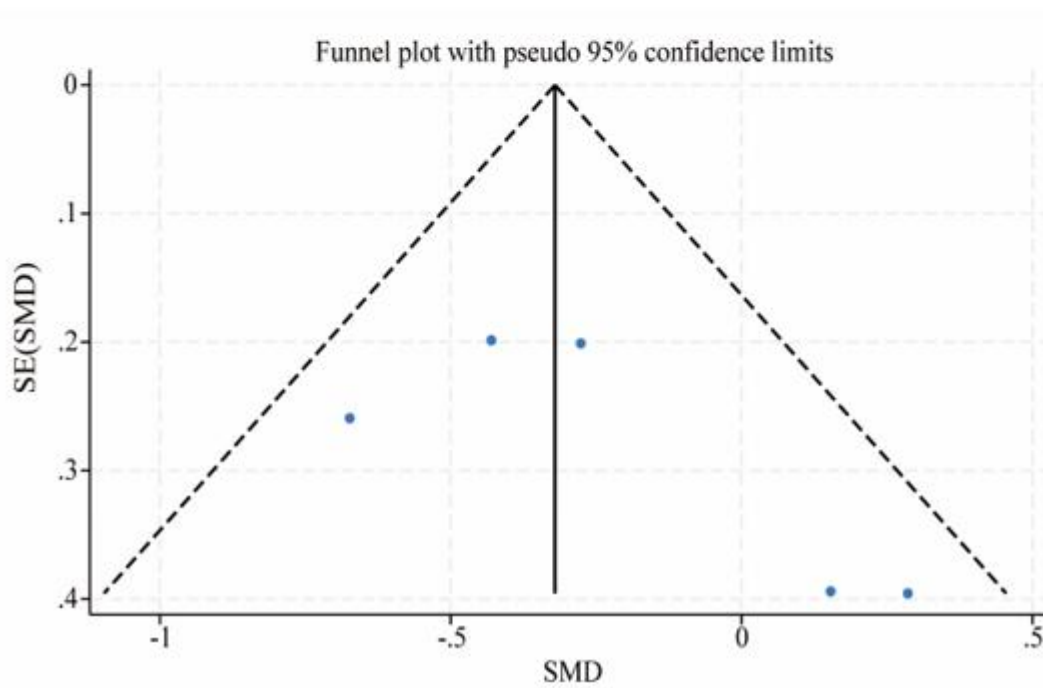


Supplementary Figure 1. Funnel plots comparing IF with CERD and ad libitum diet for glycaemic and anthropometric outcomes: (A-B) HbA1c; (C-D) BW; (E-F) BMI; (G-H) FBG. IF, intermittent fasting; CERD, continuous energy restriction diet.

C

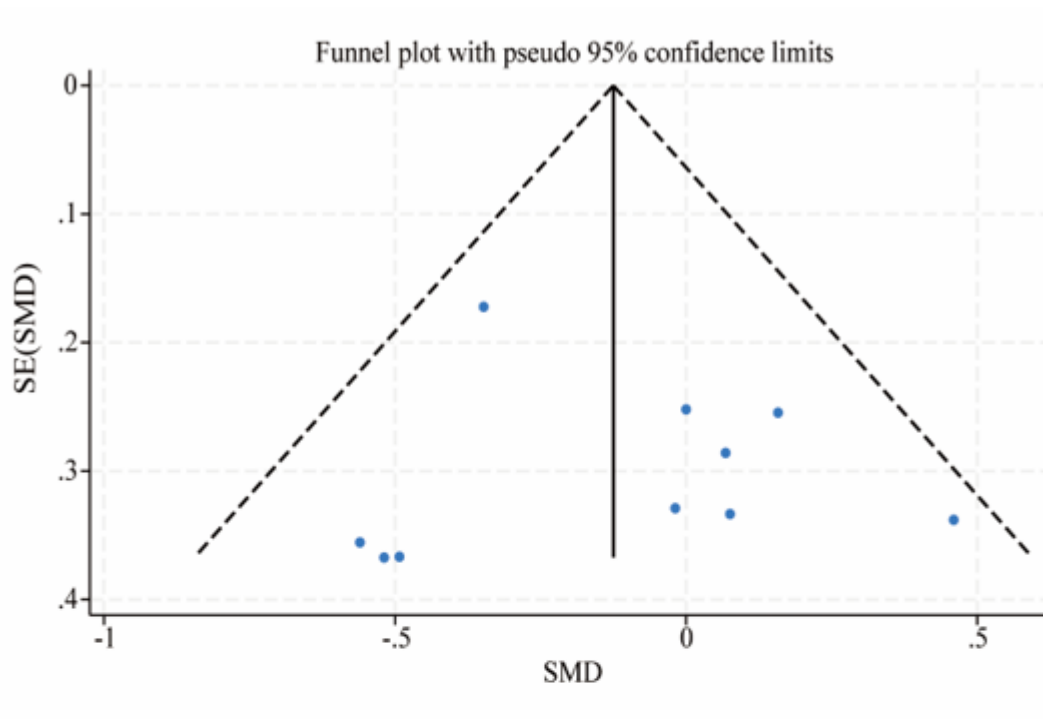


D

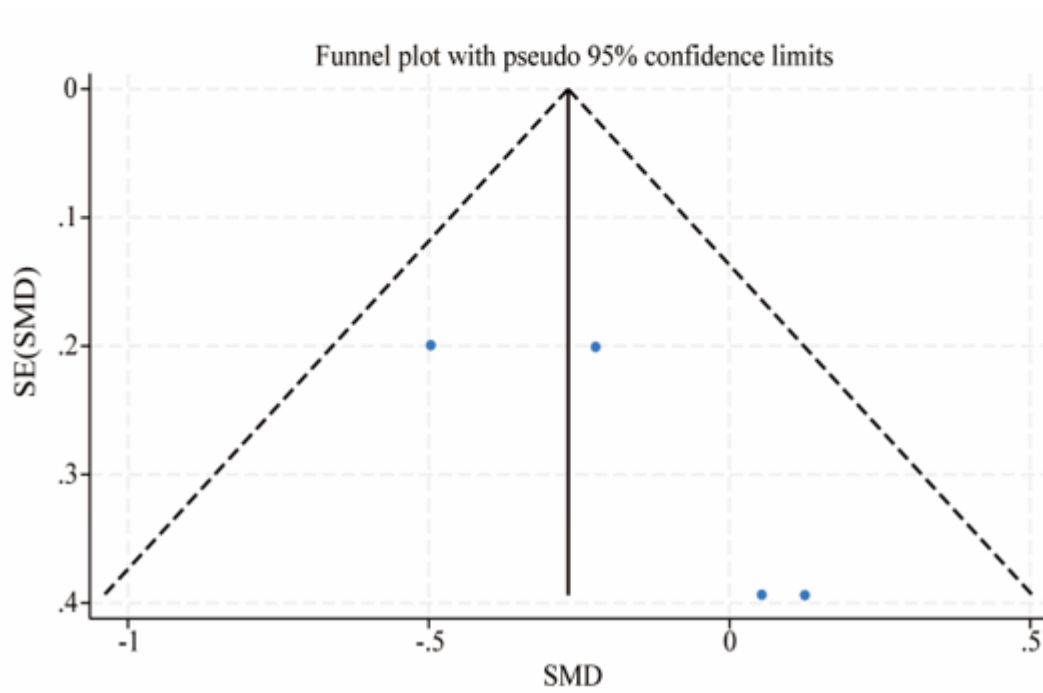


Supplementary Figure 1. (cont.) Funnel plots comparing IF with CERD and ad libitum diet for glycaemic and anthropometric outcomes: (A-B) HbA1c; (C-D) BW; (E-F) BMI; (G-H) FBG. IF, intermittent fasting; CERD, continuous energy restriction diet.

E

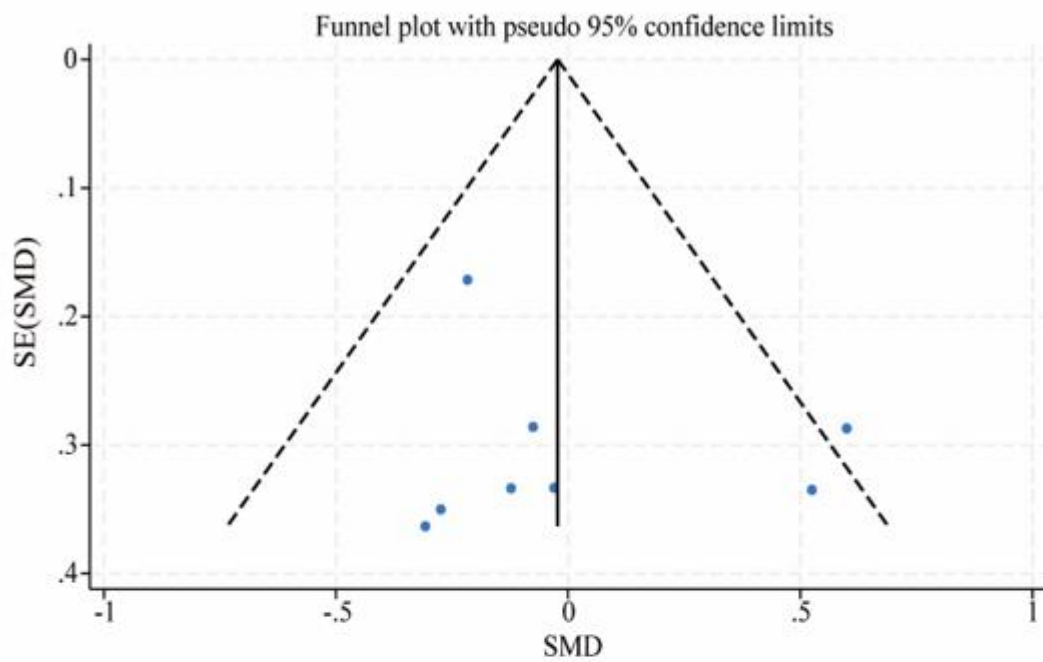


F

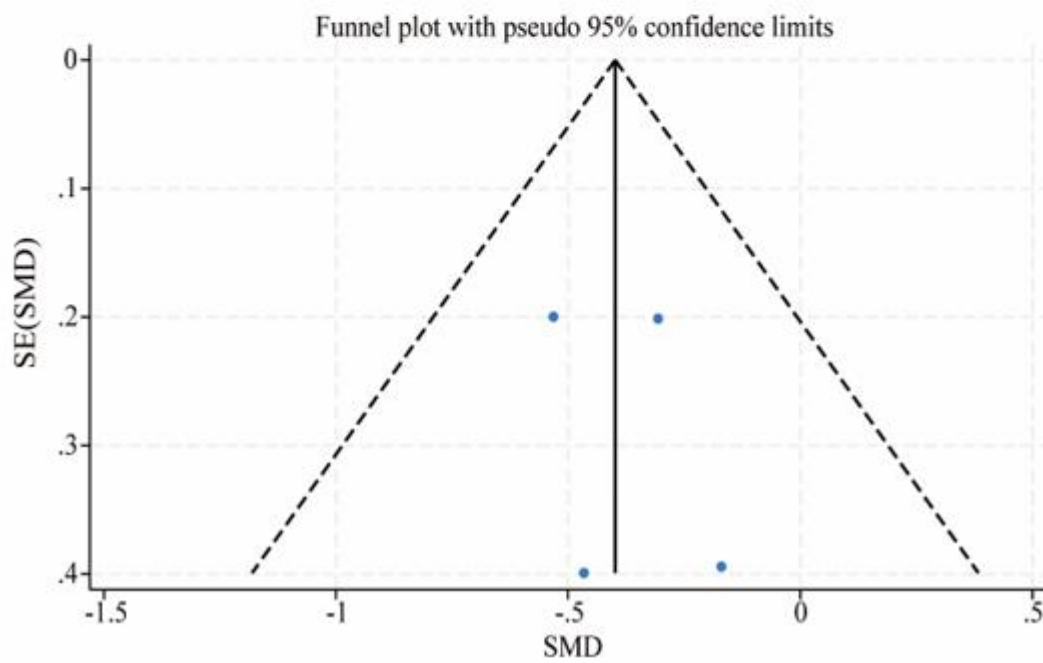


Supplementary Figure 1. (cont.) Funnel plots comparing IF with CERD and ad libitum diet for glycaemic and anthropometric outcomes: (A-B) HbA1c; (C-D) BW; (E-F) BMI; (G-H) FBG. IF, intermittent fasting; CERD, continuous energy restriction diet.

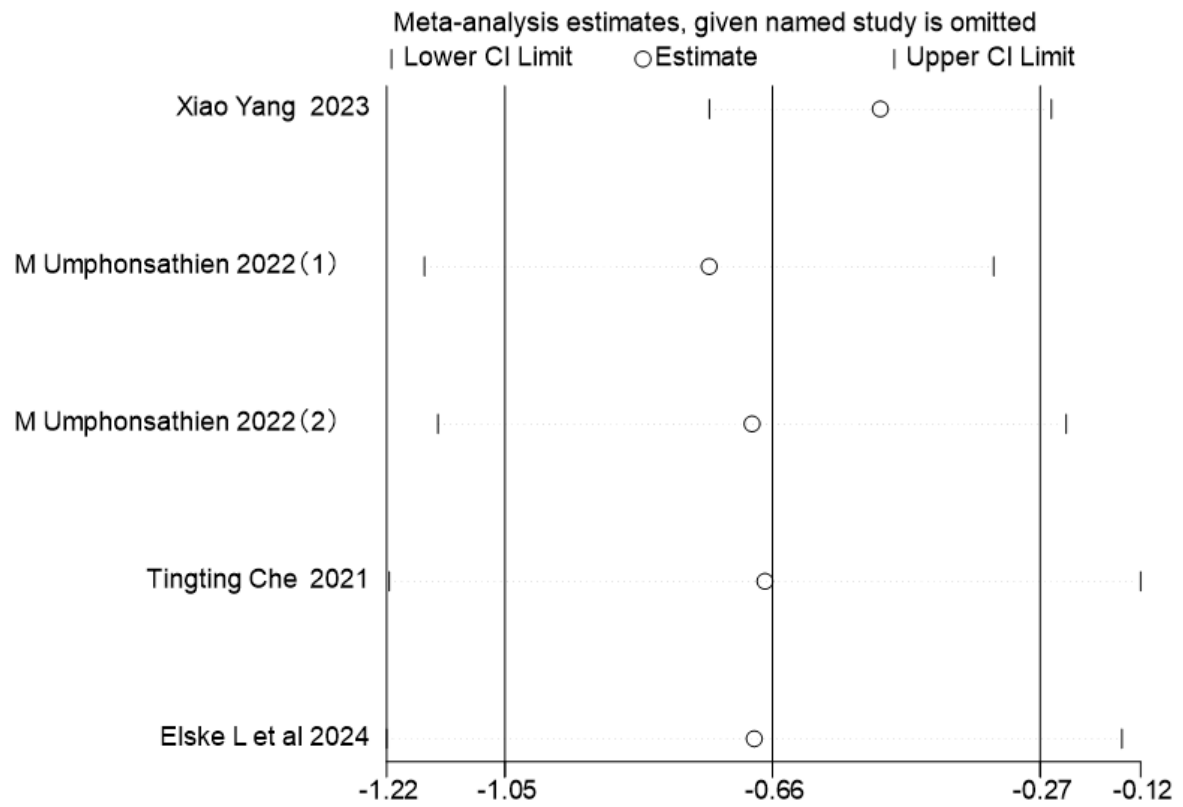
G



H



Supplementary Figure 1. (cont.) Funnel plots comparing IF with CERD and ad libitum diet for glycaemic and anthropometric outcomes: (A-B) HbA1c; (C-D) BW; (E-F) BMI; (G-H) FBG. IF, intermittent fasting; CERD, continuous energy restriction diet.



Supplementary Figure 2. Sensitivity analysis for HbA1c comparing IF and ad libitum diets.