Methods	RCT, (modified, alternate day	fasting meal replacement program	
		continuous energy restriction mea	
	replacement program (DER))		
	16 weeks		
	Summary risk of bias: low to	moderate	
Participants	-	sity (aged 25–60 years; Body Mas	
1	Index (BMI) $>$ 27.0 kg/m <sup>2</sup> ) we		
	N: 67 intervention, 68 control		
	Age in years (Mean±SD): control	$\pm 40.0 \pm 8.3$ intervention, $40.6 \pm 8.3$	
		s intervention, 16 males /65 female	
	control		
	Location: Australia		
Interventions	Type: alternate day modified	fasting(ADMF)	
	Comparison: ADF + DER vs.		
	1	located to the ADF + DER group	
	-	or three set days per week (Monday	
		00kJ) and alternated with three se	
		ay, Thursday, and Sunday) (2400kJ).	
	Control: 5000kJ/d	wsuay, mursuay, and Sunday) (2400KJ).	
		et individually with a study dietitian	
		week 16. These visits included	
		of dietary compliance which wa	
	-	d 14-day checklist, and a self-rated	
		the dietary program on a scale out of the	
	stars.	Jr - S	
	Length of intervention: 16 we	eks	
Outcomes		ipant retention and change in body	
	weight.		
	Dropouts:15 intervention, 13	control	
	Available outcomes: anthropo		
Notes	The variable of gender and ag		
Risk of bias		*	
Bias	Authors' judgment	Support for judgment	
Random sequence generation		This was a randomized clinical	
(selection bias)	Low risk	trial.	
		Randomization procedures were	
A 11		performed by researchers who	
Allocation concealment	Low risk	were independent of delivering	
(selection bias)		the intervention and assessing	
		outcomes.	
		outeonies.	

personnel (performance bias) All outcomes		dietitians delivering intervention content could not be blinded
Blinding of outcome assessment (detection bias) All outcomes	Low risk	The remaining study team was blinded to the randomization.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Participant flow well described.
Selective reporting (reporting bias)	Low risk	Clinical Trial Center by code no. ACTRN12616000110482
Attention	Low risk	All participants appear to have had similar frequency and quantity of attention and follow- up.
Compliance	Low risk	Participants met individually with a study dietitian every two weeks until week 16. These visits included: troubleshooting, a review of dietary compliance which was assessed by a self- completed 14-day checklist, and a self-rated assessment of compliance to the dietary program on a scale out of 5 stars.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Methods	RCT, (ADMF vs. control) 12 weeks Summary risk of bias: moderate	
Participants	BMI between 20 and 29.9 kg/m <sup>2</sup> ; age between 35 and 65 years N: 15 intervention, 15 control Age in years (Mean±SD): 47±3 intervention, 48±2 control Gender: 5 males/10 females intervention, 3 males /12 femal control Location: US	
Interventions	Location: USType: ADMFComparison: ADMF vs. controlIntervention: ADMF subjects consumed 25% of their baselineenergy needs on the fast day (24 h)(400-600kcal), and then ate alibitum on each alternating feed day (24 h).Control: Control subjects were permitted to eat ad libitum eveday, and were not provided with meals from the research center.Compliance: To assess energy intake on the fast days, AEsubjects were asked to report any extra food items consumeAdditionally, subjects were instructed to return any leftover fooditems to the HNRU for weighing. At baseline, the ReseardDietician provided 15 min of instruction to all participants on horto complete the food records.Length of intervention: 12 weeks	
Outcomes		ntrol
Risk of bias	Authors' judgment	Support for judgment
Bias Random sequence generation	Low risk	Support for judgment
(selection bias)		This was a randomized clinica trial.
(selection bias) Allocation concealment (selection bias)	Low risk	trial.
Allocation concealment		trial. Subjects were randomized by KAV by way of a stratified random sample. Participants and research dietitians delivering interventi
Allocation concealment (selection bias) Blinding of participants and personnel (performance bias)	Low risk	Subjects were randomized by KAV by way of a stratified random sample.

(attrition bias) All outcomes		
Selective reporting (reporting bias)	Unclear risk	Although the design accorded to RCT specifications, the clinical registration number was lacked.
Attention	Low risk	All participants appear to have had similar frequency and quantity of attention and follow- up.
Compliance	Low risk	To assess energy intake on the fast days, ADF subjects were asked to report any extra food items consumed. Additionally, subjects were instructed to return any leftover food items to the HNRU for weighing. At baseline, the Research Dietician provided 15 min of instruction to all participants on how to complete the food records.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Methods	RCT, (ADMF vs. control)		
	12 weeks		
	Summary risk of bias: modera	ate	
Participants	83 were deemed eligible to p	participate according to a prelimin	
	questionnaire and body mass		
	N: 16 intervention, 16 control		
	Age in years (Mean $\pm$ SD): 42		
		s intervention, 1 males /15 fem	
	control		
	Location: US		
Interventions	Type: ADMF		
	Comparison: ADMF vs. contr	ol	
	Intervention: participants cor	nsumed 25% of their baseline ene	
	needs on the "fast day" (24	h) and consumed food ad libitum	
	each "feed day" (24 h).		
	Control: Control subjects we	ere permitted to eat ad libitum ev	
	day		
	Compliance: The diet consiste	ed of a 3-day rotating menu plan, a	
	all fast day meals were prepared in the metabolic kitchen of the		
	Human Nutrition Research Unit (HNRU). Fast day meals we		
	consumed between 12.00 pm and 2.00 pm to ensure that each		
	consumed between 12.00 pr	m and 2.00 pm to ensure that e	
	-	-	
	subject was undergoing the s	ame duration of fasting. each sub	
	subject was undergoing the s	ame duration of fasting. each sub ginning of each week to learn how	
	subject was undergoing the s met with a dietician at the be	ame duration of fasting. each sub- ginning of each week to learn how his or her own at home.	
Outcomes	subject was undergoing the s met with a dietician at the be maintain the ADF regimen on Length of intervention: 12 we	ame duration of fasting. each sub- ginning of each week to learn how his or her own at home. eks	
Outcomes	subject was undergoing the s met with a dietician at the be maintain the ADF regimen on Length of intervention: 12 we Main study outcome: bod coronary heart disease(CHD)	ame duration of fasting. each sub- ginning of each week to learn how his or her own at home. eks y weight, body composition, risk reduction	
Outcomes	subject was undergoing the s met with a dietician at the be maintain the ADF regimen on Length of intervention: 12 we Main study outcome: bod coronary heart disease(CHD) Dropouts:9 intervention, 0 cor	ame duration of fasting. each sub- ginning of each week to learn how his or her own at home. eks y weight, body composition, risk reduction ntrol	
Outcomes	subject was undergoing the s met with a dietician at the be maintain the ADF regimen on Length of intervention: 12 we Main study outcome: bod coronary heart disease(CHD) Dropouts:9 intervention, 0 con Available outcomes: anthropo	ame duration of fasting. each sub- ginning of each week to learn how his or her own at home. eeks y weight, body composition, risk reduction ntrol ometric and metabolic index	
Notes	subject was undergoing the s met with a dietician at the be maintain the ADF regimen on Length of intervention: 12 we Main study outcome: bod coronary heart disease(CHD) Dropouts:9 intervention, 0 cor	ame duration of fasting. each sub- ginning of each week to learn how his or her own at home. eeks y weight, body composition, risk reduction ntrol pometric and metabolic index	
	subject was undergoing the s met with a dietician at the be maintain the ADF regimen on Length of intervention: 12 we Main study outcome: bod coronary heart disease(CHD) Dropouts:9 intervention, 0 con Available outcomes: anthropo The variable of gender and ag	ame duration of fasting. each sub- ginning of each week to learn how his or her own at home. eeks y weight, body composition, risk reduction ntrol pometric and metabolic index	
Notes	subject was undergoing the s met with a dietician at the be maintain the ADF regimen on Length of intervention: 12 we Main study outcome: bod coronary heart disease(CHD) Dropouts:9 intervention, 0 con Available outcomes: anthropo	ame duration of fasting. each sub- ginning of each week to learn how his or her own at home. eeks y weight, body composition, risk reduction ntrol pometric and metabolic index	
Notes <b>Risk of bias</b>	subject was undergoing the s met with a dietician at the be maintain the ADF regimen on Length of intervention: 12 we Main study outcome: bod coronary heart disease(CHD) Dropouts:9 intervention, 0 con Available outcomes: anthropo The variable of gender and ag Authors' judgment	ame duration of fasting. each sub- ginning of each week to learn how his or her own at home. eeks y weight, body composition, risk reduction ntrol ometric and metabolic index ge include dropout. Support for judgment	
Notes Risk of bias Bias	subject was undergoing the s met with a dietician at the be maintain the ADF regimen on Length of intervention: 12 we Main study outcome: bod coronary heart disease(CHD) Dropouts:9 intervention, 0 con Available outcomes: anthropo The variable of gender and ag	ame duration of fasting. each sub- ginning of each week to learn how his or her own at home. weeks y weight, body composition, risk reduction ntrol ometric and metabolic index ye include dropout. Support for judgment	
Notes <b>Risk of bias</b> <b>Bias</b> Random sequence generation (selection bias)	subject was undergoing the s met with a dietician at the be maintain the ADF regimen on Length of intervention: 12 we Main study outcome: bod coronary heart disease(CHD) Dropouts:9 intervention, 0 con Available outcomes: anthropo The variable of gender and ag Authors' judgment	ame duration of fasting. each sub- ginning of each week to learn how his or her own at home. eeks y weight, body composition, risk reduction ntrol ometric and metabolic index e include dropout. Support for judgment This was a randomized clinic	
Notes <b>Risk of bias</b> <b>Bias</b> Random sequence generation (selection bias) Allocation concealment	subject was undergoing the s met with a dietician at the be maintain the ADF regimen on Length of intervention: 12 we Main study outcome: bod coronary heart disease(CHD) Dropouts:9 intervention, 0 con Available outcomes: anthropo The variable of gender and ag Authors' judgment	ame duration of fasting. each sub- ginning of each week to learn how his or her own at home. eeks y weight, body composition, risk reduction ntrol ometric and metabolic index e include dropout. Support for judgment This was a randomized clinic trial. Subjects were recruited and	
Notes <b>Risk of bias</b> <b>Bias</b> Random sequence generation (selection bias)	subject was undergoing the s met with a dietician at the be maintain the ADF regimen on Length of intervention: 12 we Main study outcome: bod coronary heart disease(CHD) Dropouts:9 intervention, 0 con Available outcomes: anthropo The variable of gender and ag Authors' judgment Low risk	ame duration of fasting. each sub- ginning of each week to learn how his or her own at home. eeks y weight, body composition, risk reduction ntrol ometric and metabolic index e include dropout. Support for judgment This was a randomized clinic trial. Subjects were recruited and	
Notes <b>Risk of bias</b> <b>Bias</b> Random sequence generation (selection bias) Allocation concealment	subject was undergoing the s met with a dietician at the be maintain the ADF regimen on Length of intervention: 12 we Main study outcome: bod coronary heart disease(CHD) Dropouts:9 intervention, 0 con Available outcomes: anthropo The variable of gender and ag Authors' judgment Low risk	ame duration of fasting. each sub ginning of each week to learn how his or her own at home. eeks y weight, body composition, risk reduction ntrol ometric and metabolic index ge include dropout. Support for judgment This was a randomized clinic trial. Subjects were recruited and randomized by the clinical	
Notes <b>Risk of bias</b> <b>Bias</b> Random sequence generation (selection bias) Allocation concealment (selection bias)	subject was undergoing the s met with a dietician at the be maintain the ADF regimen on Length of intervention: 12 we Main study outcome: bod coronary heart disease(CHD) Dropouts:9 intervention, 0 con Available outcomes: anthropo The variable of gender and ag Authors' judgment Low risk	ame duration of fasting. each sub- ginning of each week to learn how his or her own at home. eeks y weight, body composition, risk reduction ntrol ometric and metabolic index e include dropout. Support for judgment This was a randomized clinic trial. Subjects were recruited and randomized by the clinical coordinator (SB). Participants and research	
Notes Risk of bias Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and	subject was undergoing the s met with a dietician at the be maintain the ADF regimen on Length of intervention: 12 we Main study outcome: bod coronary heart disease(CHD) Dropouts:9 intervention, 0 con Available outcomes: anthropo The variable of gender and ag Authors' judgment Low risk Low risk	ame duration of fasting. each sub- ginning of each week to learn how his or her own at home. eeks y weight, body composition, risk reduction ntrol ometric and metabolic index ge include dropout. Support for judgment This was a randomized clinic trial. Subjects were recruited and randomized by the clinical coordinator (SB).	
Notes Risk of bias Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias)	subject was undergoing the s met with a dietician at the be maintain the ADF regimen on Length of intervention: 12 we Main study outcome: bod coronary heart disease(CHD) Dropouts:9 intervention, 0 con Available outcomes: anthropo The variable of gender and ag Authors' judgment Low risk Low risk	ame duration of fasting. each sub- ginning of each week to learn how this or her own at home. weeks y weight, body composition, risk reduction ntrol ometric and metabolic index te include dropout. Support for judgment This was a randomized clinic trial. Subjects were recruited and randomized by the clinical coordinator (SB). Participants and research dietitians delivering intervention	

All outcomes		
Incomplete outcome data (attrition bias) All outcomes	Low risk	Participant flow well described.
Selective reporting (reporting bias)	Unclear risk	Although the design accorded to RCT specifications, the clinical registration number was lacked.
Attention	Low risk	No problem with attention bias.
Compliance	Low risk	The diet consisted of a 3-day rotating menu plan, and all fast day meals were prepared in the metabolic kitchen of the Human Nutrition Research Unit (HNRU). Fast day meals were consumed between 12.00 pm and 2.00 pm to ensure that each subject was undergoing the same duration of fasting. each subject met with a dietician at the beginning of each week to learn how to maintain the ADF regimen on his or her own at home.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Catenacci VA et al.2016		
Methods	RCT, (zero-calorie alternate-d	ay fasting vs. control)
	8 weeks	
	Summary risk of bias: high	
Participants	Respondents who met initial	eligibility criteria (18-55 years, BMI
	$\geq$ 30 kg/m <sup>2</sup> , non-smoker, $\leq$	4.5kg weight change over past 6
	months) were invited to a scre	ening visit.
	N: 13 intervention, 12 control	
	Age in years (Mean $\pm$ SD): 39	.6±9.5 intervention, 42.7±7.9 control
	Gender: 3 males/10 females	s intervention, 3 males /9 females
	control	
	Location: US	
Interventions	Type: complete alternate-day	fasting(CADF)
	Comparison: CADF vs. contro	ol
	Intervention: CADF participation	nts were instructed to begin their fast
	after the evening meal the p	preceding day, and to consume only
	water, calorie-free beverages a	and bouillon/stock cube soup.
	Control: daily caloric restriction Compliance: All food during the 8-week intervention was prov by the CTRC metabolic kitchen; participants collected pre-prep research meals twice weekly. Participants were instructed to re	
	any uneaten food for weigh-t	back and to report any foods eaten in
	addition to the research meals.	
	Length of intervention: 8 weel	ks
Outcomes	Main study outcome: P	Participant Characteristics; Safety
	Assessments; Body Weight	and Body Composition; Lipids and
	Insulin Sensitivity; Leptin, Gh	arelin, and BDNF
	Dropouts:2 intervention, 2 cor	ntrol
	Available outcomes: anthropo	metric and metabolic index
Risk of bias		
Bias	Authors' judgment	Support for judgment
Random sequence generation	Low risk	This was a randomized clinical
(selection bias)	LOW IISK	trial.
Allocation concealment	Unclear risk	Not described
(selection bias)	Unclear fisk	Not described
Blinding of participants and		Participants and research
personnel (performance bias)	-	
All outcomes		content could not be blinded.
Blinding of outcome		
assessment (detection bias)	High risk	No blinded.
All outcomes	-	
Incomplete outcome data		
(attrition bias)	Low risk	Participant flow well described.
· · · · · · · · · · · · · · · · · · ·		

All outcomes		
Selective reporting (reporting bias)	Unclear risk	Although the design accorded to RCT specifications, the clinical registration number was lacked.
Attention	Low risk	No problem with attention bias.
Compliance	Low risk	All food during the 8-week intervention was provided by the CTRC metabolic kitchen; participants collected pre- prepared research meals twice weekly. Participants were instructed to return any uneaten food for weigh-back and to report any foods eaten in addition to the research meals.
Other bias	Unclear risk	evaluation comprehensively

Methods	RCT, (zero-calorie alternate-day fasting vs. control)	
Wethous	8 weeks Summary risk of bias: moderate to high	
	-	-
Participants		were screened to participate in this
	single-center, randomized con	
	N: 22 intervention ①, 22 inter	
	Age in years (Mean±SD): 5	1±2 intervention①, 49±2intervention
	②, 49±3 control	
		intervention (1), 0 males/22 females
	intervention2, 0 males /11 fe	emales control
	Location: Australia	
Interventions	Type: CADF	
	Comparison: CADF vs. control	ol
	Intervention: During the fas	st, participants were allowed water,
	small amounts of energy-free	e foods, black coffee, and/or tea and
	<ul> <li>were provided with 250 mL of very-low-energy.</li> <li>Control: 100% of calculated baseline energy requirements of Compliance: Participants completed daily checklists to adherence, and energy intake in weeks 1, 4, and 7 was ca from 7-day food diaries using Food Works. Participants</li> </ul>	
	from <i>/-day</i> food diaries usin	g Food Works. Participants attended
	-	
	clinic weekly, where they re	eturned the 7-day checklist from the
	clinic weekly, where they re previous week, were weighed	eturned the 7-day checklist from the
	clinic weekly, where they reprevious week, were weighed to maintain compliance.	eturned the 7-day checklist from the d, and received individual counseling
Outcomes	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee	eturned the 7-day checklist from the d, and received individual counseling ks
Outcomes	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthrop	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index
Outcomes	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthropo Dropouts:3 intervention①, 3	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index intervention②, 1 control
	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthrop	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index intervention②, 1 control
	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthropo Dropouts:3 intervention①, 3 Available outcomes: anthropo	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index intervention②, 1 control ometric and metabolic index
	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthropo Dropouts:3 intervention①, 3	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index intervention②, 1 control
Risk of bias	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthropo Dropouts:3 intervention①, 3 Available outcomes: anthropo Authors' judgment	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index intervention②, 1 control ometric and metabolic index
Risk of bias Bias	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthropo Dropouts:3 intervention①, 3 Available outcomes: anthropo	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index intervention②, 1 control ometric and metabolic index Support for judgment
Random sequence generation (selection bias)	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthropo Dropouts:3 intervention①, 3 Available outcomes: anthropo Authors' judgment	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index intervention②, 1 control ometric and metabolic index <b>Support for judgment</b> This was a randomized clinical
Risk of bias Bias Random sequence generation (selection bias) Allocation concealment	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthropo Dropouts:3 intervention①, 3 Available outcomes: anthropo Authors' judgment	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index intervention②, 1 control ometric and metabolic index <b>Support for judgment</b> This was a randomized clinical trial.
Risk of bias Bias Random sequence generation (selection bias)	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthropo Dropouts:3 intervention①, 3 Available outcomes: anthropo Authors' judgment Low risk	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index intervention②, 1 control ometric and metabolic index <b>Support for judgment</b> This was a randomized clinical trial. Block randomization (four or
Risk of bias Bias Random sequence generation (selection bias) Allocation concealment (selection bias)	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthropo Dropouts:3 intervention①, 3 Available outcomes: anthropo Authors' judgment Low risk	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index intervention②, 1 control ometric and metabolic index <b>Support for judgment</b> This was a randomized clinical trial. Block randomization (four or eight participants) was performed by a research officer
Risk of bias         Bias         Random sequence generation (selection bias)         Allocation concealment (selection bias)         Blinding of participants and	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthropo Dropouts:3 intervention①, 3 Available outcomes: anthropo Authors' judgment Low risk High risk	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index intervention②, 1 control ometric and metabolic index Support for judgment This was a randomized clinical trial. Block randomization (four or eight participants) was performed by a research officer Participants and research
Risk of bias         Bias         Random sequence generation (selection bias)         Allocation concealment (selection bias)         Blinding of participants and personnel (performance bias)	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthropo Dropouts:3 intervention①, 3 Available outcomes: anthropo Authors' judgment Low risk	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index intervention②, 1 control ometric and metabolic index Support for judgment This was a randomized clinical trial. Block randomization (four or eight participants) was performed by a research officer Participants and research dietitians delivering intervention
Risk of bias         Bias         Random sequence generation (selection bias)         Allocation concealment (selection bias)         Blinding of participants and personnel (performance bias)         All outcomes	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthropo Dropouts:3 intervention①, 3 Available outcomes: anthropo Authors' judgment Low risk High risk	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index intervention②, 1 control ometric and metabolic index Support for judgment This was a randomized clinical trial. Block randomization (four or eight participants) was performed by a research officer Participants and research
Risk of bias         Bias         Random sequence generation (selection bias)         Allocation concealment (selection bias)         Blinding of participants and personnel (performance bias)         All outcomes         Blinding of outcome	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthropod Dropouts:3 intervention①, 3 Available outcomes: anthropod Authors' judgment Low risk High risk	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index intervention②, 1 control ometric and metabolic index <b>Support for judgment</b> This was a randomized clinical trial. Block randomization (four or eight participants) was performed by a research officer Participants and research dietitians delivering intervention content could not be blinded.
Risk of bias         Bias         Random sequence generation (selection bias)         Allocation concealment (selection bias)         Blinding of participants and personnel (performance bias)         All outcomes         Blinding of outcome assessment (detection bias)	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthropo Dropouts:3 intervention①, 3 Available outcomes: anthropo Authors' judgment Low risk High risk	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index intervention②, 1 control ometric and metabolic index Support for judgment This was a randomized clinical trial. Block randomization (four or eight participants) was performed by a research officer Participants and research dietitians delivering intervention
Risk of bias         Bias         Random sequence generation (selection bias)         Allocation concealment (selection bias)         Blinding of participants and personnel (performance bias)         All outcomes         Blinding of outcome assessment (detection bias)         All outcomes	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthropod Dropouts:3 intervention①, 3 Available outcomes: anthropod Authors' judgment Low risk High risk	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index intervention②, 1 control ometric and metabolic index <b>Support for judgment</b> This was a randomized clinical trial. Block randomization (four or eight participants) was performed by a research officer Participants and research dietitians delivering intervention content could not be blinded.
Risk of bias         Bias         Random sequence generation (selection bias)         Allocation concealment (selection bias)         Blinding of participants and personnel (performance bias)         All outcomes         Blinding of outcome assessment (detection bias)	clinic weekly, where they reprevious week, were weighed to maintain compliance. Length of intervention: 8 wee Main study outcome: anthropod Dropouts:3 intervention①, 3 Available outcomes: anthropod Authors' judgment Low risk High risk	eturned the 7-day checklist from the d, and received individual counseling ks ometric and metabolic index intervention②, 1 control ometric and metabolic index <b>Support for judgment</b> This was a randomized clinical trial. Block randomization (four or eight participants) was performed by a research officer Participants and research dietitians delivering intervention content could not be blinded.

All outcomes		
Selective reporting (reporting bias)	Low risk	Clinical Trial Center by code NCT01769976
Attention	Low risk	All participants appear to have had similar frequency and quantity of attention and follow- up.
Compliance	Low risk	Participants completed daily checklists to monitor adherence, and energy intake in weeks 1, 4, and 7 was calculated from 7-day food diaries using Food Works. Participants attended clinic weekly, where they returned the 7-day checklist from the previous week, were weighed, and received individual counseling to maintain compliance.
Other bias	Unclear risk	evaluation comprehensively

Moro T et al.2016	
Methods	RCT, (time-restricted feeding (TRF) vs. normal diet group (ND))
	8 weeks
	Summary risk of bias: low to moderate

Participants	34 subjects (age $29.21 \pm 3.8$ ; weight $84.6 \pm 6.2$ kg) were random		
1		eeding group or standard diet group	
	N: 17 intervention, 17 control		
	Age in years (Mean±SD): 29.	9±4.1intervention, 28.5±3.5 control	
	Gender: 17 males/0 females	s intervention, 17 males /0 fema	
	control		
	Location: Italy		
Interventions	Type: TRF		
	Comparison: TRF vs. ND		
	Intervention: TRF subjects co	onsumed 100 % of their energy nee	
	divided into three meals const	umed at 1 p.m., 4 p.m. and 8 p.m., a	
	fasted for the remaining 16 h	per 24-h period.	
	Control: ND group ingested their caloric intake as three me		
	consumed at 8 a.m., 1 p.m. an	consumed at 8 a.m., 1 p.m. and 8 p.m.	
	Compliance: Every week, subjects were contacted by a dieticia		
	order to check the adherence	e to the diet protocol. The dietici	
	performed a structured interview about meal timing		
	composition to obtain this information.		
	Length of intervention: 8 wee	ks	
Outcomes	Main study outcome: anthrop	ometric and metabolic index	
	Dropouts: 0		
	Available outcomes: anthropo	ometric and metabolic index	
Risk of bias			
Bias	Authors' judgment	Support for judgment	
Random sequence generation	Low risk	This was a randomized clinica	
(selection bias)	LOW IISK	trial.	
Allocation concealment		34 subjects were random	
(selection bias)	Low risk	assigned through compu	
		generated software	

Allocation concealment (selection bias)	Low risk	34 subjects were randomly assigned through computer generated software.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Participants and research dietitians delivering intervention content could not be blinded.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	The research staff conducting outcome assessments was unaware of the assignment of the subjects.
Incomplete outcome data (attrition bias) All outcomes	Low risk	There was no drop out.
Selective reporting (reporting bias)	Unclear risk	Although the design accorded to RCT specifications, the clinical registration number was lacked.

Attention	Low risk	All participants appear to have had similar frequency and quantity of attention and follow- up.
Compliance	Low risk	Every week, subjects were contacted by a dietician in order to check the adherence to the diet protocol. The dietician performed a structured interview about meal timing and composition to obtain this information.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Tinsley GM et al.2017

Methods

RCT, (TRF vs. control group)

	8 weeks	
	Summary risk of bias: moderate	te to high
Participants	Generally healthy, recreational	ly active men
	N: 10 intervention, 8 control	
	Age in years (Mean±SD): 22.9	±4.1 intervention, 22.0±2.4 control
	Gender: 10 males/0 females intervention, 8 males /0 female	
	control	
	Location: US	
Interventions	Type: TRF	
	Comparison: TRF vs. control g	group
	Intervention: Participants were	e required to consume all calories in
	any four-hour window between	n 4 p.m. and midnight.
	Control: Participants in the co	ntrol group were instructed to follow
	their normal dietary patterns.	
	1 0	luration of the study, daily checklists
	were completed in order to ass	•
	Length of intervention: 8 week	S
Outcomes	Main study outcome: Body co	mposition results
	Dropouts:10	
	Available outcomes: anthropor	netric index
Risk of bias		
Bias	Authors' judgment	Support for judgment
Random sequence generation	Low risk	This was a randomized clinical
(selection bias)	Low Hox	trial.
Allocation concealment	Unclear risk	Not described
(selection bias)	Officient fisk	Not described
Blinding of participants and		
		Participants and research
personnel (performance bias)	High risk	Participants and research dietitians delivering intervention
personnel (performance bias) All outcomes	High risk	1
I U /	High risk	dietitians delivering intervention
All outcomes	High risk High risk	dietitians delivering intervention
All outcomes Blinding of outcome	-	dietitians delivering intervention content could not be blinded.
All outcomes Blinding of outcome assessment (detection bias)	-	dietitians delivering intervention content could not be blinded.
All outcomes Blinding of outcome assessment (detection bias) All outcomes	-	dietitians delivering intervention content could not be blinded.
All outcomes Blinding of outcome assessment (detection bias) All outcomes Incomplete outcome data	High risk	dietitians delivering intervention content could not be blinded. No blinded.
All outcomes Blinding of outcome assessment (detection bias) All outcomes Incomplete outcome data (attrition bias) All outcomes	High risk	dietitians delivering intervention content could not be blinded. No blinded.
All outcomes Blinding of outcome assessment (detection bias) All outcomes Incomplete outcome data (attrition bias) All outcomes Selective reporting (reporting	High risk	dietitians delivering intervention content could not be blinded. No blinded. Participant flow well described.
All outcomes Blinding of outcome assessment (detection bias) All outcomes Incomplete outcome data (attrition bias) All outcomes	High risk Low risk	dietitians delivering intervention content could not be blinded. No blinded. Participant flow well described. Although the design accorded to
All outcomes Blinding of outcome assessment (detection bias) All outcomes Incomplete outcome data (attrition bias) All outcomes Selective reporting (reporting	High risk Low risk	dietitians delivering intervention content could not be blinded. No blinded. Participant flow well described. Although the design accorded to RCT specifications, the clinical
All outcomes Blinding of outcome assessment (detection bias) All outcomes Incomplete outcome data (attrition bias) All outcomes Selective reporting (reporting bias)	High risk Low risk Unclear risk	dietitians delivering intervention content could not be blinded. No blinded. Participant flow well described. Although the design accorded to RCT specifications, the clinical registration number was lacked.
All outcomes Blinding of outcome assessment (detection bias) All outcomes Incomplete outcome data (attrition bias) All outcomes Selective reporting (reporting	High risk Low risk	dietitians delivering intervention content could not be blinded. No blinded. Participant flow well described. Although the design accorded to RCT specifications, the clinical registration number was lacked. All participants appear to have

Compliance	Low risk	Throughout the duration of the study, daily checklists were completed in order to assess adherence to the TRF days.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Li C et al.2017

Methods

	1 week	
	Summary risk of bias: modera	te
Participants	Patients with manifest T2	DM medically treated with oral
	hypoglycemic agents and/or in	nsulin.
	N: 16 intervention, 16 control	
	Age in years (Mean±SD): 64.7±7.0intervention, 65.4±5.7 control	
	Location: Germany	
Interventions	Type: very low calorie diet( V	LCD)
	Comparison: one-week fasting	g vs. control group
	Intervention: During the fa	sting period, participants received
	unrestricted amounts of water	r, herbal tea (no black or green tea),
	200 ml fruit juice and sm	all standardized quantities of light
	vegetable soup with a maxim	um total daily energy intake of 1 255
	kJ (300 kcal)	
	Control: normal dietary	
	Compliance: Compliance was	s recorded using personal interviews
	by study physicians and study	nurses.
	Length of intervention: 1 weel	k
Outcomes	Main study outcome: weight a	and metabolic outcomes
	Dropouts: 7 intervention, 7 co	ntrol
	Available outcomes: anthropo	metric and metabolic index
Notes	The variable of gender and ag	e include dropout.
Risk of bias		
Bias	Authors' judgment	Support for judgment
Random sequence generation	Low risk	This was a randomized clinical
(selection bias)		trial.
		Participants were randomly
		allocated to treatment groups
		following a non-stratified block-
Allocation concealment	Low risk	
		randomization with randomly
(selection bias)	Low risk	randomization with randomly varying block lengths based on
(selection bias)	Low risk	-
(selection bias)	Low risk	varying block lengths based on
(selection bias)	Low risk	varying block lengths based on the "ranuni" pseudo-random
(selection bias) Blinding of participants and	Low risk	varying block lengths based on the "ranuni" pseudo-random number generator of the
	Low risk High risk	varying block lengths based on the "ranuni" pseudo-random number generator of the SAS/Base <sup>®</sup> statistical software
Blinding of participants and		varying block lengths based on the "ranuni" pseudo-random number generator of the SAS/Base <sup>®</sup> statistical software Participants and research
Blinding of participants and personnel (performance bias)		varying block lengths based on the "ranuni" pseudo-random number generator of the SAS/Base <sup>®</sup> statistical software Participants and research dietitians delivering intervention
Blinding of participants and personnel (performance bias) All outcomes		varying block lengths based on the "ranuni" pseudo-random number generator of the SAS/Base <sup>®</sup> statistical software Participants and research dietitians delivering intervention
Blinding of participants and personnel (performance bias) All outcomes Blinding of outcome	High risk	varying block lengths based on the "ranuni" pseudo-random number generator of the SAS/Base <sup>®</sup> statistical software Participants and research dietitians delivering intervention content could not be blinded.
Blinding of participants and personnel (performance bias) All outcomes Blinding of outcome assessment (detection bias)	High risk	varying block lengths based on the "ranuni" pseudo-random number generator of the SAS/Base <sup>®</sup> statistical software Participants and research dietitians delivering intervention content could not be blinded.

All outcomes		
Selective reporting (reporting bias)	Unclear risk	Although the design accorded to RCT specifications, the clinical registration number was lacked.
Attention	Low risk	All participants appear to have had similar frequency and quantity of attention and follow- up.
Compliance	Low risk	Compliance was recorded using personal interviews by study physicians and study nurses.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Haywood CJ et al.2017

Methods

	advice)
	12 weeks
	Summary risk of bias: low to moderate
Participants	Volunteers were eligible if they were $\geq 65$ years, community
	dwelling, and had a BMI of $\geq$ 32 kg/m <sup>2</sup> .
	N: 41 intervention, 36 control <sup>①</sup> , 40 control <sup>②</sup>
	Gender: 16 males/25 females intervention, 13 males/23 females
	control (1), 16 males $/24$ females control (2)
	Location: Australia
Interventions	Type: VLCD
	Comparison: VLCD vs. hypocaloric diet, VLCD vs. healthy eating
	advice
	Intervention: Two to three meals of the day were replaced with
	Optifast (Nestle Nutrition)
	Control (1): Participants received healthy eating advice
	Control <sup>(2)</sup> : The diets were nutritionally complete with a 500 kCal/d energy deficit
	Compliance: Participants visited a physician at the study centre
	fortnightly, and their weight, waist circumference and blood
	pressure was measured. Dietitian review occurred fortnightly.
	Length of intervention: 12 weeks
Outcomes	Main study outcome: Physical function; Anthropometry and body
	composition; Nutritional parameters
	Dropouts: 4 intervention, 7 control <sup>①</sup> , 4control <sup>②</sup>
	Available outcomes: anthropometric index

Risk of bias		
Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	This was a randomized clinical trial.
Allocation concealment (selection bias)	Low risk	Participants were randomized according to a computer generated algorithm with block size of 4, and stratified by gender and the presence of type 2 diabetes.
Blinding of participants and personnel (performance bias) All outcomes	High risk	For safety reasons the investigator was aware of treatment group.
Blinding of outcome assessment (detection bias) All outcomes	Low risk	Assessors blinded to group allocation performed physical function testing.
Incomplete outcome data (attrition bias)	Low risk	Participant flow well described.

All outcomes		
Selective reporting (reporting bias)	Low risk	Clinical Trial Center by code no.ACTRN12611000408987
Attention	Low risk	All participants appear to have had similar frequency and quantity of attention and follow- up.
Compliance	Low risk	Participants visited a physician at the study centre fortnightly, and their weight, waist circumference and blood pressure was measured. Dietitian review occurred fortnightly.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Hussin NM et al.2013

Methods

	12 weeks	
	Summary risk of bias: high	
Participants	Healthy Malay men (free from	m any uncontrolled chronic diseases),
-	50 to 70 years of age, BMI 2	23.0 to 29.9 kg/m <sup>2</sup> , with no history of
	mental or physical disabilitie	es were eligible to participate in this
	study.	
	N: 16 intervention, 15 control	
	Age in years (Mean±SD): 59.	7±6.6 intervention, 59.7±6.2 control
	Gender: 16 males/0 females	s intervention, 15 males /0 females
	control	
	Location: Malaysia	
Interventions	Type:VLCD	
	Comparison: VLCD vs. control	ol group
	Intervention: 300-500kcal/day	/
	Control: normal diet	
	•	asures for Assessment of Compliance.
	•	sing fasting logs, food diaries, from
		and verification of the information
	obtained using surrogate information obtained from particip family members.	
	Length of intervention: 12 we	
Outcomes		e of Mood States; Tension Mood;
		d; Confusion Mood; Total Mood
	Disturbance; Depression	
	Dropouts: 0 intervention, 1 co	
	Available outcomes: anthropo	ometric index
Risk of bias		
Bias	Authors' judgment	Support for judgment
Random sequence generation	Low risk	This was a randomized clinical
(selection bias)		trial.
Allocation concealment	Unclear risk	Not mentioned.
(selection bias)	Onorour Hisk	i tot montoneu.
Blinding of participants and		Participants and research
personnel (performance bias)	High risk	dietitians delivering intervention
All outcomes		content could not be blinded.
Blinding of outcome		
assessment (detection bias)	High risk	No blinded.
All outcomes		
Incomplete outcome data		
(attrition bias)	Low risk	Participant flow well described.
(utilition blub)		1

Unclear risk

Although the design accorded to

All outcomes Selective reporting (reporting

bias)		RCT specifications, the clinical registration number was lacked.
Attention	Low risk	All participants appear to have had similar frequency and quantity of attention and follow- up.
Compliance	Low risk	Food Intake Measures for Assessment of Compliance. Compliance was assessed using fasting logs, food diaries, from weekly phone check in logs and verification of the information obtained using surrogate information obtained from participants' family members.
Other bias	Unclear risk	evaluation comprehensively

Methods	RCT, (VLCD vs. normal diet)	)
	2 weeks	
	Summary risk of bias: low to r	moderate
Participants	patients with symptomatic g	gallstones and BMI >30 kg/m <sup>2</sup> 46
	patients were randomized to a	VLCD or normal diet for two weeks.
	N: 21 intervention, 25 control	
	Age in years (Mean±SD): 43.5	5±31.1 intervention, 48±35.5 control
	Gender: 0 males/21 females	intervention, 4 males /21 females
	control	
	Location: UK	
Interventions	Type: VLCD	
	Comparison: VLCD vs. norma	al diet
	Intervention: The VLCD com	prised a two week calorie-restricted
	diet aiming for a total calorific	t intake of 800 Kcal/day
	Control: normal diet	
	Compliance: Dietician advice	e was available to both arms of the
	study. All patients were asked	to complete a detailed dietary survey
	for the two weeks prior to surg	gery.
	Length of intervention: 2 week	xs
Outcomes	Main study outcome: The primary outcome measure of this stud	
	was operative time, measure	d from first incision to end of skin
	closure.	
	Dropouts: 0	
	Available outcomes: anthropometric index	
Risk of bias		
Bias	Authors' judgment	Support for judgment
Random sequence generation	T. 1	This was a randomized clinical
(selection bias)	Low risk	trial.
· ·		

Random sequence generation (selection bias)	Low risk	This was a randomized clinical trial.
Allocation concealment (selection bias)	Low risk	Randomisation was performed using a computer-generated random number list (Microsoft Excel) with the necessary information (very low calorie diet or control group) being sealed in numeric order envelopes by
		someone independent of the study.
Blinding of participants and		Participants and research
personnel (performance bias)	High risk	dietitians delivering intervention
All outcomes		content could not be blinded.
Blinding of outcome		This was a single centre, blinded,
assessment (detection bias)	Low risk	prospective, randomized
All outcomes		controlled trial

Incomplete outcome data (attrition bias) All outcomes	Low risk	There was no drop out.
Selective reporting (reporting bias)	Low risk	REC number 10/H0305/78
Attention	Low risk	The anaesthetic regime was the same for each patient, all patients underwent routine therapy.
Compliance	Low risk	Dietician advice was available to both arms of the study. All patients were asked to complete a detailed dietary survey for the two weeks prior to surgery.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Methods	RCT, (VLCD vs. control group)
	12 weeks
	Summary risk of bias: high
Participants	Healthy Malay men (free from any uncontrolled chronic diseases),
	50 to 70 years of age, BMI 23.0 to 29.9 kg/m <sup>2</sup> , with no history of
	mental or physical disabilities were eligible to participate in this
	study.
	N: 12 intervention, 13 control
	Age in years (Mean±SD): 59.3±3.4 intervention, 58.3±6.3 control
	Gender: 12 males/0 females intervention, 13 males /0 females
	control
	Location: Malaysia
Interventions	Type: VLCD
	Comparison: VLCD vs. control group
	Intervention: 300-500kcal/day
	Control: normal diet
	Compliance: Food Intake Measures for Assessment of Compliance.
	Compliance was assessed using fasting logs, food diaries, from
	weekly phone check in logs and verification of the information
	obtained using surrogate information obtained from participants'
	family members.
	Length of intervention: 12 weeks
Outcomes	Main study outcome: Food intake and body composition; Quality
	of life
	Dropouts: 2 intervention, 1 control

Risk of bias	
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Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	This was a randomized clinical trial.
Allocation concealment (selection bias)	Unclear risk	Not mentioned.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Participants and research dietitians delivering intervention content could not be blinded.
Blinding of outcome assessment (detection bias) All outcomes	High risk	No blinded.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Participant flow well described.
Selective reporting (reporting	Unclear risk	Although the design accorded to

bias)		RCT specifications, the clinical registration number was lacked.
Attention	Low risk	All participants appear to have had similar frequency and quantity of attention and follow- up.
Compliance	Low risk	Food Intake Measures for Assessment of Compliance. Compliance was assessed using fasting logs, food diaries, from weekly phone check in logs and verification of the information obtained using surrogate information obtained from participants' family members.
Other bias	Unclear risk	evaluation comprehensively

Methods	RCT, (VLCD vs. low-calorie	e diet (LCD))
	8 weeks	
	Summary risk of bias: high	
Participants		2 male and 33 female) were treated e supplemental LCD, randomly, at ar
	outpatient clinic.	
	N: 20 intervention, 25 control	l
		31.6±13.1 intervention, 35.3±11.7
	control	
	Location: Japan	
Interventions	Type: VLCD	
	Comparison: VLCD vs. LCD	
	-	patients (31.6±13.1y; BMI 32.9±6.1) y the VLCD with use of five packages
	of Optifast 70. This provided	a daily energy intake of 1757 kJ.
	-	s were treated for 1-2 month by the
	supplemental LCD of 3515-5	
		s attended our outpatient clinic and
		easured every other week during the
	treatment.	
		1
	Length of intervention: 8 wee	
Outcomes	Length of intervention: 8 wee Main study outcome: anthrop	
Outcomes	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0	ometric and metabolic index
	Length of intervention: 8 wee Main study outcome: anthrop	ometric and metabolic index
Risk of bias	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0 Available outcomes: anthropo	ometric and metabolic index
<i>Risk of bias</i> Bias	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0	ometric and metabolic index ometric and metabolic index Support for judgment
Risk of bias Bias Random sequence generation	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0 Available outcomes: anthropo	ometric and metabolic index ometric and metabolic index <b>Support for judgment</b> This was a randomized clinical
Risk of bias Bias Random sequence generation (selection bias)	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0 Available outcomes: anthropo Authors' judgment	ometric and metabolic index ometric and metabolic index Support for judgment
Risk of bias Bias Random sequence generation (selection bias) Allocation concealment	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0 Available outcomes: anthropo Authors' judgment Low risk	ometric and metabolic index ometric and metabolic index <b>Support for judgment</b> This was a randomized clinical trial.
Risk of bias Bias Random sequence generation (selection bias) Allocation concealment (selection bias)	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0 Available outcomes: anthropo Authors' judgment	ometric and metabolic index ometric and metabolic index Support for judgment This was a randomized clinical trial. Obviously not used.
Risk of bias Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0 Available outcomes: anthropo Authors' judgment Low risk High risk	ometric and metabolic index ometric and metabolic index Support for judgment This was a randomized clinical trial. Obviously not used. Participants and research
Risk of bias Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias)	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0 Available outcomes: anthropo Authors' judgment Low risk	ometric and metabolic index ometric and metabolic index Support for judgment This was a randomized clinical trial. Obviously not used. Participants and research dietitians delivering intervention
Risk of bias Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0 Available outcomes: anthropo Authors' judgment Low risk High risk	ometric and metabolic index ometric and metabolic index Support for judgment This was a randomized clinical trial. Obviously not used. Participants and research
Risk of bias Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias) All outcomes Blinding of outcome	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0 Available outcomes: anthropo Authors' judgment Low risk High risk High risk	ometric and metabolic index metric and metabolic index Support for judgment This was a randomized clinical trial. Obviously not used. Participants and research dietitians delivering intervention content could not be blinded.
Risk of bias Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias) All outcomes Blinding of outcome assessment (detection bias)	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0 Available outcomes: anthropo Authors' judgment Low risk High risk	ometric and metabolic index ometric and metabolic index Support for judgment This was a randomized clinical trial. Obviously not used. Participants and research dietitians delivering intervention
Risk of bias Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias) All outcomes Blinding of outcome	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0 Available outcomes: anthropo Authors' judgment Low risk High risk High risk	ometric and metabolic index metric and metabolic index Support for judgment This was a randomized clinical trial. Obviously not used. Participants and research dietitians delivering intervention content could not be blinded.
Risk of bias Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias) All outcomes Blinding of outcome assessment (detection bias)	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0 Available outcomes: anthropo Authors' judgment Low risk High risk High risk	ometric and metabolic index metric and metabolic index Support for judgment This was a randomized clinical trial. Obviously not used. Participants and research dietitians delivering intervention content could not be blinded.
Risk of bias Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias) All outcomes Blinding of outcome assessment (detection bias) All outcomes	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0 Available outcomes: anthropo Authors' judgment Low risk High risk High risk	ometric and metabolic index metric and metabolic index Support for judgment This was a randomized clinical trial. Obviously not used. Participants and research dietitians delivering intervention content could not be blinded.
Risk of bias         Bias         Random sequence generation (selection bias)         Allocation concealment (selection bias)         Blinding of participants and personnel (performance bias)         All outcomes         Blinding of outcome assessment (detection bias)         All outcomes         Incomplete outcome data	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0 Available outcomes: anthropo Low risk High risk High risk High risk	ometric and metabolic index metric and metabolic index Support for judgment This was a randomized clinical trial. Obviously not used. Participants and research dietitians delivering intervention content could not be blinded. No blinded.
Risk of bias Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Allocation bias) Blinding of participants and personnel (performance bias) All outcomes Blinding of outcome assessment (detection bias) All outcomes Incomplete outcome data (attrition bias) All outcomes	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0 Available outcomes: anthropo Low risk High risk High risk High risk	ometric and metabolic index metric and metabolic index Support for judgment This was a randomized clinical trial. Obviously not used. Participants and research dietitians delivering intervention content could not be blinded. No blinded.
Risk of bias Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias) All outcomes Blinding of outcome assessment (detection bias) All outcomes Incomplete outcome data (attrition bias)	Length of intervention: 8 wee Main study outcome: anthrop Dropouts: 0 Available outcomes: anthropo Low risk High risk High risk High risk	ometric and metabolic index ometric and metabolic index Support for judgment This was a randomized clinical trial. Obviously not used. Participants and research dietitians delivering intervention content could not be blinded. No blinded. Participant flow well described.

Attention	Low risk	All participants appear to have had similar frequency and quantity of attention and follow- up.
Compliance	Low risk	All the patients attended our outpatient clinic and their body weights were measured every other week during the treatment.
Other bias	Unclear risk	evaluation comprehensively

Methods	RCT, (VLCD vs. control group	)
	12 weeks	
	Summary risk of bias: high	
Participants	Healthy Malay men (free from	any uncontrolled chronic diseases),
	50 to 70 years of age, BMI 23.	0 to 29.9 kg/m <sup>2</sup> , with no history of
	mental or physical disabilities	were eligible to participate in this
	study.	
	N: 28 intervention, 28 control	
	Age in years (Mean±SD): 59.6±	5.4 intervention, 59.1±6.2 control
	Gender: 28 males/0 females	intervention, 28 males /0 females
	control	
	Location: Malaysia	
Interventions	Type: VLCD	
	Comparison: VLCD vs. control	group
	Intervention: 300-500kcal/day	
	Control: normal diet	
	Compliance: Subjects were con	ntacted once a week via telephone
	calls. Family members, esp	becially the spouse, were also
	interviewed to obtain inform	ation regarding subjects' dietary
	intake.	
	Length of intervention: 12 weeks	
Outcomes	Main study outcome: anthropon	netric and metabolic index
	Dropouts: 0	
	Available outcomes: anthropom	etric and metabolic index
Risk of bias		
Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	This was a randomized clinical trial.

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Random sequence generation (selection bias)	Low risk	This was a randomized clinical trial.
Allocation concealment (selection bias)	Unclear risk	Not mentioned.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Participants and research dietitians delivering intervention content could not be blinded.
Blinding of outcome assessment (detection bias) All outcomes	High risk	No blinded.
Incomplete outcome data (attrition bias) All outcomes	Low risk	There was no drop out.
Selective reporting (reporting bias)	Unclear risk	Although the design accorded to RCT specifications, the clinical registration number was lacked.

Attention	Low risk	All participants appear to have had similar frequency and quantity of attention and follow- up.
Compliance	Low risk	Subjects were contacted once a week via telephone calls. Family members, especially the spouse, were also interviewed to obtain information regarding subjects' dietary intake.
Other bias	Unclear risk	evaluation comprehensively

Methods	RCT, (VLCD vs. intensive conventional diet(ICD)) 12 weeks Summary risk of bias: high	
Participants	<ul> <li>52 subjects were successfully recruited into the group of the preference.</li> <li>N: 14 intervention, 14 control</li> <li>Age in years (Mean±SD): 53.9±5.7 intervention, 55.4±7.3 control</li> <li>Gender: 7 males/7 females intervention, 3 males /11 female</li> </ul>	
	control Location: UK	intervention, 5 mates /11 females
Interventions	Type: VLCD Comparison: VLCD vs. ICD Intervention: The formula used was Lipotrim, providing 400 700kcal/day for women and 540-670kcal/day for men. Control: intensive conventional diet Compliance: These sessions were run by two nurses with the counsellor and medical practitioner available as required. Length of intervention: 12 weeks	
Outcomes	Main study outcome: anthropometric and metabolic index Dropouts: 5 Available outcomes: anthropometric and metabolic index	
Risk of bias		
Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Unclear risk	Not mentioned.
Allocation concealment (selection bias)	High risk	Obviously not used.
Blinding of participants and	TT' 1' 1	Participants and research
personnel (performance bias) All outcomes	High risk	dietitians delivering intervention content could not be blinded.
	High risk	dietitians delivering intervention
All outcomes Blinding of outcome assessment (detection bias)	-	dietitians delivering intervention content could not be blinded.
All outcomes Blinding of outcome assessment (detection bias) All outcomes Incomplete outcome data (attrition bias)	High risk	dietitians delivering intervention content could not be blinded. No blinded. Reason of dropout was not

		up.
Compliance	Low risk	These sessions were run by two nurses with the counsellor and medical practitioner available as required.
Other bias	High risk	evaluation comprehensively

Methods	RCT, (VLCD vs. ICD)	
	16 weeks Summary risk of bias: high	
Participants	<ul> <li>Newspaper advertisements were used to recruit overweight persons with type II diabetes who were either more than 30% or more than 18 kg above ideal body weight based on Metropolitan Life Insurance norms.</li> <li>N: 45 intervention, 48 control</li> <li>Age in years (Mean±SD): 52.3±10.7 intervention, 51.3±8.7 control</li> <li>Gender: 15 males/30 females intervention, 18 males /30 females control</li> </ul>	
	Location: US	
Interventions	kcal per day.	
Outcomes	Main study outcome: Weight Loss; Glycemic Control; Changes in Cardiovascular Risk Factors; Psychologic Changes and Responses to the VLCD Dropouts: 0 Available outcomes: anthropometric and metabolic index	
Risk of bias	1	
Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	This was a randomized clinical trial.
Allocation concealment (selection bias)	High risk	Obviously not used.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Participants and research dietitians delivering intervention content could not be blinded.
Blinding of outcome assessment (detection bias) All outcomes	High risk	No blinded.
Incomplete outcome data (attrition bias) All outcomes	Low risk	No dropout.
Selective reporting (reporting		Although the design accorded to

Unclear risk

RCT specifications, the clinical

registration number was lacked.

Selective reporting (reporting

bias)

Low risk	All participants appear to have had similar frequency and quantity of attention and follow- up.
Unclear risk	Not mentioned.
Unclear risk	evaluation comprehensively
	Unclear risk

Methods	RCT, (VLCD vs. regular dietary and behavioural support)
	12 weeks
	Summary risk of bias: moderate
Participants	113 obese men and women aged 37-58y, BMI>32.0kg/m <sup>2</sup> ,
	participating in the Swedish Obese Subjects (SOS) study.
	N: 58 intervention, 55 control
	Age in years (Mean±SD): 47.3±6.7 intervention, 46.9±5.8 control
	Gender: 22 males/36 females intervention, 17 males /38 females
	control
	Location: Sweden
Interventions	Type: VLCD
	Comparison: VLCD vs. regular dietary and behavioral support
	Intervention: Subjects in the VLCD-group were provided with
	1909–2545kJ/d (456–608kcal/d).
	Control: Received supportive program only.
	Compliance: patients met a dietitian for individual nutritional
	counseling. Food records were kept for 4d before each visit and
	analyzed records were discussed with each patient.
	Length of intervention: 12 weeks
Outcomes	Main study outcome: Weight loss
	Dropouts: 0
	Available outcomes: Weight loss

Risk of bias

Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	This was a randomized clinical trial.
Allocation concealment (selection bias)	Low risk	Subjects were randomized consecutively to either treatment group, using a set of 100 sealed envelopes per hospital, prepared in random order by a staff member at the SOS-secretariat who did not participate further in the study.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Participants and research dietitians delivering intervention content could not be blinded.
Blinding of outcome assessment (detection bias) All outcomes	High risk	No blinded.
Incomplete outcome data (attrition bias) All outcomes	Low risk	No dropout.

Selective reporting (reporting bias)	Unclear risk	Although the design accorded to RCT specifications, the clinical registration number was lacked.
Attention	Low risk	No problem with attention bias.
Compliance	Low risk	patients met a dietitian for individual nutritional counseling. Food records were kept for 4d before each visit and analyzed records were discussed with each patient.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Methods	RCT, (VLCD vs. balanced deficit diet (BDD))	
	16 weeks	
	Summary risk of bias: high	
Participants	<ul> <li>Subjects were 49 women with a mean age of 39.31 years, height of 164.38 cm, weight of 106.33 kg, and BMI of 39.46.</li> <li>N: 26 intervention, 17 control</li> <li>Age in years (Mean±SD): 36.8±8.9 intervention, 42.9±10.1control</li> <li>Gender: 0 males/28 females intervention, 0 males /21 females</li> </ul>	
	control	
	Location: US	
Interventions	Type: VLCD Comparison: VLCD vs. BDD Intervention: 420 kcal/d Control: 1200 kcal/day Compliance: The procedure was supervised by the dietitian. Length of intervention: 16 weeks	
Outcomes	Main study outcome: Weigh binge eating Dropouts: 6 Available outcomes: Weight a	t and body composition; Mood and and body composition
Notes	The variable of gender and ag	e include dropout.
Risk of bias		
Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	This was a randomized clinical trial.
Allocation concealment (selection bias)	Unclear risk	Not mentioned.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Participants and research dietitians delivering intervention content could not be blinded.
Blinding of outcome assessment (detection bias) All outcomes	High risk	No blinded.
Incomplete outcome data (attrition bias) All outcomes	Unclear risk	Reason of dropout was not mentioned.
Selective reporting (reporting bias)	Unclear risk	Although the design accorded to RCT specifications, the clinical registration number was lacked.
Attention	Low risk	No problem with attention bias.
Compliance	Low risk	The procedure was supervised by

		No commercial company
Other bias	Low risk	involved, and no conflict of
		interest.

Purcell K et al. 2014
Methods	RCT, (rapid weight loss programme vs. gradual weight loss programme) 12 weeks Summary risk of bias: low to moderate		
Participants	<ul> <li>Eligible patients at screening were obese (BMI 30.0–45.0 kg/m²), otherwise healthy, and aged between 18 and 70 years.</li> <li>N: 76 intervention, 51 control</li> <li>Age in years (Mean±SD): 49.6±10.9 intervention, 50.1±11.1control</li> <li>Gender: 26 males/71 females intervention, 25 males /78 females control</li> <li>Location: Australia</li> </ul>		
Interventions	Type: VLCD Comparison: rapid weight loss programme vs. gradual weight loss programme Intervention: participants consumed a commercially available very low energy diet preparation according to the manufacturer's recommendations, for 12 weeks. This diet contains between 450 and 800 kcal per day. Control: participants consumed an energy-reduced diet (400–500 kcal per day deficit), on the basis of recommendations in the Australian Guide to Healthy Eating. Compliance: Adherence to the diets was estimated by the rate at which participants were losing weight. Length of intervention: 12 weeks		
Outcomes	Main study outcome: weight loss Dropouts: 21 intervention/ 52 control Available outcomes: Weight and body composition		
Notes	The variable of gender and age include dropout.		
Risk of bias	<u> </u>	1	
Bias	Authors' judgment	Support for judgment	
Random sequence generation (selection bias)	Low risk	This was a randomized clinical trial.	
Allocation concealment (selection bias)	Low risk	Randomisation was done with a computer-generated randomization sequence with a block design accounting for the potential confounding factors	
Blinding of participants and personnel (performance bias) All outcomes	High risk	Participants, dietitians, study investigators, and research staff who did the assessments were not masked to treatment assignments.	
Blinding of outcome assessment (detection bias)	Low risk	Laboratory staff was masked to treatment assignments.	

All outcomes		
Incomplete outcome data (attrition bias) All outcomes	Low risk	Participant flow well described.
Selective reporting (reporting bias)	Low risk	Trial registry code: ACTRN12611000190909
Attention	Low risk	No problem with attention bias.
Compliance	Low risk	Adherence to the diets was estimated by the rate at which participants were losing weight.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Methods	RCT, (VLCD vs. control group) 8 weeks		
	Summary risk of bias: moder	ate	
Participants	Two groups of 19 obese patients with asthma (BMI (kg/m <sup>2</sup> ) 30 t		
	42) recruited through newspa	aper advertisements.	
	N: 19 intervention, 19 contro	1	
	Location: Finland		
Interventions	Type: VLCD		
	Comparison: VLCD vs. contr	rol group	
	Intervention: The daily dose	gave 1760 kJ of energy and contained	
	daily allowances of all essent	tial nutrients	
	Control: normal diet		
	Compliance: All participation	nts received normal medical care	
	throughout the study.		
	Length of intervention: 8 wee	eks	
Outcomes	(PEF), forced vital capacity one second (FEV 1); and also	weight, morning peak expiratory flow (FVC), forced expiratory volume in so asthma symptoms, number of acute oids, health status (quality of life).	
		1088	
Disk of higs	Available butcomes. weight	loss	
-	_		
Bias	Authors' judgment	Support for judgment	
Risk of bias Bias Random sequence generation (selection bias)	_		
Bias Random sequence generation (selection bias)	Authors' judgment	<b>Support for judgment</b> This was a randomized clinical trial.	
Bias Random sequence generation (selection bias) Allocation concealment	Authors' judgment	Support for judgment This was a randomized clinical trial. Randomization was by "shuffling	
Bias Random sequence generation (selection bias)	Authors' judgment Low risk	Support for judgment This was a randomized clinical trial. Randomization was by "shuffling	
Bias Random sequence generation (selection bias) Allocation concealment	Authors' judgment Low risk	Support for judgment This was a randomized clinical trial. Randomization was by "shuffling cards," with the help of someone	
Bias Random sequence generation (selection bias) Allocation concealment (selection bias)	Authors' judgment Low risk	Support for judgment This was a randomized clinical trial. Randomization was by "shuffling cards," with the help of someone not involved in the study. Participants and research	
Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and	Authors' judgment Low risk Low risk	Support for judgment This was a randomized clinical trial. Randomization was by "shuffling cards," with the help of someone not involved in the study. Participants and research	
Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias) All outcomes	Authors' judgment Low risk Low risk	Support for judgment This was a randomized clinical trial. Randomization was by "shuffling cards," with the help of someone not involved in the study. Participants and research dietitians delivering intervention	
Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias) All outcomes Blinding of outcome	Authors' judgment Low risk Low risk High risk	Support for judgment This was a randomized clinical trial. Randomization was by "shuffling cards," with the help of someone not involved in the study. Participants and research dietitians delivering intervention	
Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias) All outcomes	Authors' judgment Low risk Low risk	Support for judgment This was a randomized clinical trial. Randomization was by "shuffling cards," with the help of someone not involved in the study. Participants and research dietitians delivering intervention content could not be blinded.	
Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias) All outcomes Blinding of outcome assessment (detection bias) All outcomes	Authors' judgment Low risk Low risk High risk	Support for judgment This was a randomized clinical trial. Randomization was by "shuffling cards," with the help of someone not involved in the study. Participants and research dietitians delivering intervention content could not be blinded.	
Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias) All outcomes Blinding of outcome assessment (detection bias) All outcomes Incomplete outcome data	Authors' judgment Low risk Low risk High risk High risk	Support for judgment This was a randomized clinical trial. Randomization was by "shuffling cards," with the help of someone not involved in the study. Participants and research dietitians delivering intervention content could not be blinded. No blinded.	
Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias) All outcomes Blinding of outcome assessment (detection bias) All outcomes Incomplete outcome data (attrition bias)	Authors' judgment Low risk Low risk High risk	Support for judgment This was a randomized clinical trial. Randomization was by "shuffling cards," with the help of someone not involved in the study. Participants and research dietitians delivering intervention content could not be blinded.	
Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias) All outcomes Blinding of outcome assessment (detection bias) All outcomes Incomplete outcome data	Authors' judgment Low risk Low risk High risk High risk	Support for judgment This was a randomized clinical trial. Randomization was by "shuffling cards," with the help of someone not involved in the study. Participants and research dietitians delivering intervention content could not be blinded. No blinded. No blinded.	
Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias) All outcomes Blinding of outcome assessment (detection bias) All outcomes Incomplete outcome data (attrition bias)	Authors' judgment         Low risk         Low risk         High risk         High risk         Low risk	Support for judgment         This was a randomized clinical trial.         Randomization was by "shuffling cards," with the help of someone not involved in the study.         Participants and research dietitians delivering intervention content could not be blinded.         No blinded.         No drop out.         Although the design accorded to	
Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias) All outcomes Blinding of outcome assessment (detection bias) All outcomes Incomplete outcome data (attrition bias) All outcomes	Authors' judgment Low risk Low risk High risk High risk	Support for judgment         This was a randomized clinical trial.         Randomization was by "shuffling cards," with the help of someone not involved in the study.         Participants and research dietitians delivering intervention content could not be blinded.         No blinded.         No drop out.         Although the design accorded to RCT specifications, the clinical	
Bias Random sequence generation (selection bias) Allocation concealment (selection bias) Blinding of participants and personnel (performance bias) All outcomes Blinding of outcome assessment (detection bias) All outcomes Incomplete outcome data (attrition bias) All outcomes Selective reporting (reporting bias)	Authors' judgment         Low risk         Low risk         High risk         High risk         Low risk         Unclear risk	Support for judgment         This was a randomized clinical trial.         Randomization was by "shuffling cards," with the help of someone not involved in the study.         Participants and research dietitians delivering intervention content could not be blinded.         No blinded.         No drop out.         Although the design accorded to RCT specifications, the clinical registration number was lacked.	
Bias         Random sequence generation (selection bias)         Allocation concealment (selection bias)         Allocation concealment (selection bias)         Blinding of participants and personnel (performance bias)         All outcomes         Blinding of outcome assessment (detection bias)         All outcomes         Incomplete outcome data (attrition bias)         All outcomes         Selective reporting (reporting	Authors' judgment         Low risk         Low risk         High risk         High risk         Low risk	Support for judgment         This was a randomized clinical trial.         Randomization was by "shuffling cards," with the help of someone not involved in the study.         Participants and research dietitians delivering intervention content could not be blinded.         No blinded.         No drop out.         Although the design accorded to RCT specifications, the clinical	

		medical care throughout the study.
Other bias	Low risk	No commercial company involved, and no conflict of interest.

Methods	RCT, (VLCD vs. control group)
	8 weeks
	Summary risk of bias: high
Participants	N: 15 intervention, 16 control
	Age in years (Mean±SD): 44.3±8.7 intervention, 44.3±8.6 control
	Gender: 2 males/13 females intervention, 3 males /13 females
	control
	Location: US
Interventions	Type: VLCD
	Comparison: VLCD vs. control group

Intervention: They consumed a very low calorie diet (400-500 kcal/		
day) consisting of lean meat, fish, and fowl.		
Control: Subjects consumed a 1000-1200-balanced calorie diet (of		
Compliance: Two doctoral-le groups, following procedure manuals, which differed for ea at least one group in each of th	evel clinical psychologists led the s described in detailed treatment ach condition. Each psychologist led e three treatment conditions.	
Main study outcome: Weight loss; Blood Pressure; Depression		
Dropouts: 3 intervention, 2 control Available outcomes: Weight loss		
Authors' judgment	Support for judgment	
Low risk	This was a randomized clinical trial.	
Unclear risk	Not mentioned.	
	day) consisting of lean meat, fr Control: Subjects consumed a their choosing) throughout the Compliance: Two doctoral-le groups, following procedure manuals, which differed for ea at least one group in each of th Length of intervention: 8 week Main study outcome: Weight Ic Dropouts: 3 intervention, 2 cor Available outcomes: Weight Ic Authors' judgment Low risk	

(selection bias)	Unclear risk	Not mentioned.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Participants and research dietitians delivering intervention content could not be blinded.
Blinding of outcome assessment (detection bias) All outcomes	High risk	No blinded.
Incomplete outcome data (attrition bias) All outcomes	Unclear risk	Reason of dropout was not mentioned.
Selective reporting (reporting bias)	Unclear risk	Although the design accorded to RCT specifications, the clinical registration number was lacked.
Attention	Low risk	No problem with attention bias.
Compliance	Low risk	Two doctoral-level clinical psychologists led the groups, following procedures described in detailed treatment manuals, which differed for each condition. Each psychologist led at least one group in each of the three treatment conditions.
Other bias	Unclear risk	evaluation comprehensively

Tuomilehto H et al. 2010			
Methods	RCT, (VLCD vs. control group)		
	12 weeks		
	Summary risk of bias: low to moderate		
Participants	Eighty-one consecutive overweight adult patients with mild OSA were recruited.		
	N: 35 intervention, 36 control		
	Age in years (Mean±SD): 51.8±9.0 intervention, 51.7±8.8 control		
	Gender: 26 males/9 females intervention, 27 males /9 females		
	control		
	Location: Finland		

Tuomi	lehto	H et	al	2010	
I UUIIII	iciito.	11 U	ai.	2010	

Interventions	Type: VLCD		
	Comparison: VLCD vs. control group		
	Intervention: The intervention providing 600–800 kcal/d.	n was initiated with a 12-wk VLCE	
	Control: standard diet		
	the lifestyle goals agreed on patient at the beginning of provided face-to-face couns patient in the intervention gro		
Outcomes	Main study outcome: anthropo Dropouts: 5 intervention, 5 co Available outcomes: anthropo	ntrol	
Risk of bias			
Bias	Authors' judgment	Support for judgment	
Random sequence generation (selection bias)	Low risk	This was a randomized clinical trial.	
		A block randomization, but no	

(selection bias)	Low risk	trial.
Allocation concealment (selection bias)	Low risk	A block randomization, but no stratification, was used in the allocation of the participants.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Participants and research dietitians delivering intervention content could not be blinded.
Blinding of outcome assessment (detection bias) All outcomes	High risk	No blinded.
Incomplete outcome data (attrition bias) All outcomes	Low risk	Participant flow well described.
Selective reporting (reporting bias)	Low risk	Trial registry code:NCT00486746
Attention	Low risk	No problem with attention bias.
Compliance	Low risk	Compliance with the program was based on achieving the lifestyle goals agreed on by the nutritionist and the individual patient at the beginning of the intervention. The nutritionist provided face-to-face counseling

		individually tailored to each
		patient in the intervention group
		and also participated in the group
		sessions. The subjects in the
		control group were given
		standard care by the study nurse
		and physician.
		No commercial company
Other bias	Low risk	involved, and no conflict of
		interest.

Tuomilehto HP et al. 2009		
Methods	RCT, (VLCD vs. control group)	
	12 weeks	
	Summary risk of bias: moderate	
Participants	Eighty-one consecutive overweight adult patients with mild OSA	
	were recruited.	
	N: 35 intervention, 37 control	
	Age in years (Mean±SD): 51.8±9.0 intervention, 50.9±8.6 control	
	Gender: 26 males/9 females intervention, 27 males /10 females	

## Tuomilehto HP et al. 2009

	control	
	Location: Finland	
Interventions	Type: VLCD	
	Comparison: VLCD vs. contr	ol group
	Intervention: The interventio	on was initiated with a 12-wk VLCD
	providing 600-800 kcal/d.	
	Control: standard diet	
	Compliance: Compliance with the program and supervision for any	
	possible adverse events were	monitored by individual interviews at
	each visit by the nutritionist.	
	Length of intervention: 12 we	eeks
Outcomes	Main study outcome: anthrop	ometric and metabolic index
	Dropouts: 5 intervention, 4 co	ontrol
	Available outcomes: anthropo	ometric and metabolic index
Risk of bias		
Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	This was a randomized clinical trial.
A 11		A block randomization, but no
Allocation concealment (selection bias)	Low risk	stratification, was used in the
		allocation of the participants.
Blinding of participants and		Participants and research
personnel (performance bias)	High risk	dietitians delivering intervention
All outcomes		content could not be blinded.
Blinding of outcome		
assessment (detection bias)	High risk	No blinded.
All outcomes		
Incomplete outcome data		
(attrition bias)	Low risk	Participant flow well described.
All outcomes		
Coloctive reporting (reporting		Although the design accorded to
Selective reporting (reporting	Unclear risk	RCT specifications, the clinical
bias)		registration number was lacked.
Attention	Low risk	No problem with attention bias.
Compliance		Compliance with the program
	Low risk	and supervision for any possible
		adverse events were monitored
		by individual interviews at each
		visit by the nutritionist.
		No commercial company
Other bias	Low risk	involved, and no conflict of
		interest.

Wadden TA et al. 1988		
Methods	RCT, (VLCD vs. control group)	
	8 weeks	
	Summary risk of bias: high	
Participants	Subjects were the 43 women and 7 men	
	N: 15 intervention, 16 control	
	Age in years (Mean±SD): 44.3±8.7 intervention, 44.3±8.6 control	
	Gender: 2 males/13 females intervention, 3 males /13 females	
	control	

Type: VLCD
Comparison: VLCD vs. control group
Intervention: They consumed a very low calorie diet (400-500 kcal/
day) consisting of lean meat, fish, and fowl.
Control: Subjects consumed a 1000-1200-balanced calorie diet (of
their choosing) throughout the study.
Compliance: Two doctoral-level clinical psychologists led the
groups, following procedures described in detailed treatment
manuals, which differed for each condition. Each psychologist led
at least one group in each of the three treatment conditions.
Length of intervention: 8 weeks
Main study outcome: Weight loss; Weight Regainers and Weight
Maintainers; Psychological Functioning
Dropouts: 3 intervention, 2 control
Available outcomes: Weight loss

Bias	Authors' judgment	Support for judgment
Random sequence generation (selection bias)	Low risk	This was a randomized clinical trial.
Allocation concealment (selection bias)	Unclear risk	Not mentioned.
Blinding of participants and personnel (performance bias) All outcomes	High risk	Participants and research dietitians delivering intervention content could not be blinded.
Blinding of outcome assessment (detection bias) All outcomes	High risk	No blinded.
Incomplete outcome data (attrition bias) All outcomes	Unclear risk	Reason of dropout was not mentioned.
Selective reporting (reporting bias)	Unclear risk	Although the design accorded to RCT specifications, the clinical registration number was lacked.
Attention	Low risk	No problem with attention bias.
Compliance	Low risk	Two doctoral-level clinical psychologists led the groups, following procedures described in detailed treatment manuals, which differed for each condition. Each psychologist led at least one group in each of the

		three treatment conditions.
Other bias	Unclear risk	evaluation comprehensively

Williams KV et al. 1998		
Methods	RCT, ( PF vs. standard behavioral therapy)	
	20 weeks Summary risk of bias: moderate to high	
Participants	Individuals with type 2 diabetes who were $\geq 20\%$ over ideal body weight participated in a 20-week behavioral weight control program.	
	N: 16 intervention, 14 control	

		4±7.9 intervention, 54.1±7.0 control intervention, 7 males /11 females
Interventions	Type: PF	
	Comparison: PF vs. standard l	behavioral therapy
	Intervention: 400-600 kcal/day	
	Control: 1,500-1,800 kcal/day	
	· · · ·	
	Compliance: A registered dietitian reviewed these diaries weekly and provided all subjects with individualized written comments	
	1 0	et and exercise in order to insure
	compliance with the study pro	
	Length of intervention: 20 we	
0.4	-	
Outcomes	Main study outcome: anthropo	Smetric and metabolic index
	Dropouts: 0	we obtain and we obtain its indeed
	Available outcomes: anthropo	
Notes	The variable of gender and ag	e include dropout.
Risk of bias		
Bias	Authors' judgment	Support for judgment
Random sequence generation	Low risk	This was a randomized clinical
(selection bias)	LOW H5K	trial.
Allocation concealment	Unclear risk	Not mentioned.
(selection bias)	Ulicical fisk	Not mentioned.
Blinding of participants and		Participants and research
personnel (performance bias)	High risk	dietitians delivering intervention
All outcomes		content could not be blinded.
Blinding of outcome		
assessment (detection bias)	High risk	No blinded.
All outcomes		
Incomplete outcome data		
(attrition bias)	Low risk	No drop out.
All outcomes		1
		Although the design accorded to
Selective reporting (reporting	Unclear risk	RCT specifications, the clinical
bias)	Cherour Hisk	registration number was lacked.
Attention	Low risk	No problem with attention bias.
Attention	LOW IISK	-
		A registered dietitian reviewed
	Low risk	these diaries weekly and provided
Compliance		all subjects with individualized
-		written comments regarding their
		reported diet and exercise in
		order to insure compliance with

		the study protocol.
Other bias	Low risk	No commercial company involved, and no conflict of
		interest.