

Weight loss for asthma in children

Characteristics of studies

Characteristics of included studies

Jensen 2013

Methods	Study design: Randomized controlled trial
Participants	Baseline Characteristics
	Dietary Intervention <ul style="list-style-type: none"> ● Mean age (<i>SD</i>): 11.5 (2.1) ● Gender, %females (%): 3 (23.1) ● Body Lean Mass at baseline (<i>SD</i>) : 53.3 (5.6) ● Median ACQ score at baseline (<i>IQR</i>): 1.14 (0.43;1.57) Waiting list Control <ul style="list-style-type: none"> ● Mean age (<i>SD</i>): 12.4 (2.4) ● Gender, %females (%): 8 (53.3) ● Body Lean Mass at baseline (<i>SD</i>) : 53.3 (6.8) ● Median ACQ score at baseline (<i>IQR</i>): 0.57 (0.29;0.86)
Interventions	<ul style="list-style-type: none"> ●
Outcomes	<i>Continuous:</i> <ul style="list-style-type: none"> ● Mean total Body Lean Mass ● FEV1 (L) ● FVC (L) ● logPD15 (ml); hypertonic Saline 4.5% ● ACQ score (values read from Fig. 3) ● Total PAQLQ (values from txt p. 778)
Identification	Email: lisa.wood@newcastle.edu

Notes**Continuous outcomes:**

June Kehlet Mæthins outcome table with confidence intervals: numbers reported are median NOT mean values, Lower and upper values are Interquartile range values NOT CI values

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	
Allocation concealment (selection bias)	High risk	
Blinding of participants and personnel (performance bias)	High risk	
Blinding of outcome assessment (detection bias)	Unclear risk	
Incomplete outcome data (attrition bias)	Low risk	
Selective reporting (reporting bias)	Low risk	
Other bias	Unclear risk	Unclear

*Footnotes***Characteristics of excluded studies***Footnotes***Characteristics of studies awaiting classification***Footnotes*

Characteristics of ongoing studies

Footnotes

References to studies

Included studies

Jensen 2013

Jensen ME.; Gibson PG.; Collins CE.; Hilton JM.; Wood LG.. Diet-induced weight loss in obese children with asthma: a randomized controlled trial.. Clinical and experimental allergy : journal of the British Society for Allergy and Clinical Immunology 2013;43(7):775-84. [DOI: 10.1111/cea.12115]

Excluded studies

Data and analyses

1 Dietary Intervention vs Waiting list Control

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.1 Mean total Body Lean Mass (%)	1		Mean Difference (IV, Fixed, 95% CI)	Subtotals only
1.1.1 change (end of trial vs baseline)	1	28	Mean Difference (IV, Fixed, 95% CI)	1.90 [-0.16, 3.96]
1.2 FEV1 (L)	1		Mean Difference (IV, Fixed, 95% CI)	Subtotals only
1.2.1 change (End of trial vs baseline)	1	28	Mean Difference (IV, Fixed, 95% CI)	0.00 [-0.21, 0.21]
1.3 FVC (L)	1	28	Mean Difference (IV, Fixed, 95% CI)	0.10 [-0.05, 0.25]
1.4 logPD15 (m); hypertonic Saline 4.5%	1		Mean Difference (IV, Fixed, 95% CI)	Subtotals only
1.4.1 change (End of trial vs baseline)	1	28	Mean Difference (IV, Fixed, 95% CI)	-1.00 [-1.89, -0.11]
1.5 ACQ score (values read from Fig. 3)	1		Mean Difference (IV, Fixed, 95% CI)	Subtotals only
1.5.1 change (end of trial vs baseline)	1	28	Mean Difference (IV, Fixed, 95% CI)	-0.50 [-0.86, -0.14]

1.6 Total PAQLQ	1	Mean Difference (IV, Fixed, 95% CI)	Subtotals only
1.6.1 change (end of trial vs baseline)	1	28	Mean Difference (IV, Fixed, 95% CI) 0.60 [-0.14, 1.34]
1.7 PAQLQ symptoms	1	Mean Difference (IV, Fixed, 95% CI)	Subtotals only
1.7.1 change (end of trial vs baseline)	1	28	Mean Difference (IV, Fixed, 95% CI) 0.50 [-0.14, 1.14]

Figures

Figure 1 (Analysis 1.1)

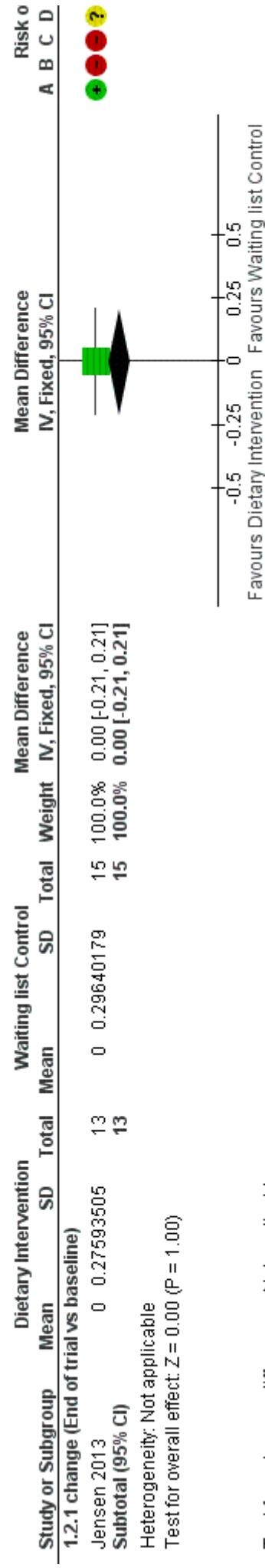
Heterogeneity Not applicable

Test for overall effect: $F = 1.80$ ($P = 0.03$)

lesser equal value, $\Sigma = 1.80$ ($F = 0.07$)



Forest plot of comparison: 1 Dietary Intervention vs Waiting list Control, outcome: 1.1 Mean total Body Lean Mass (%).

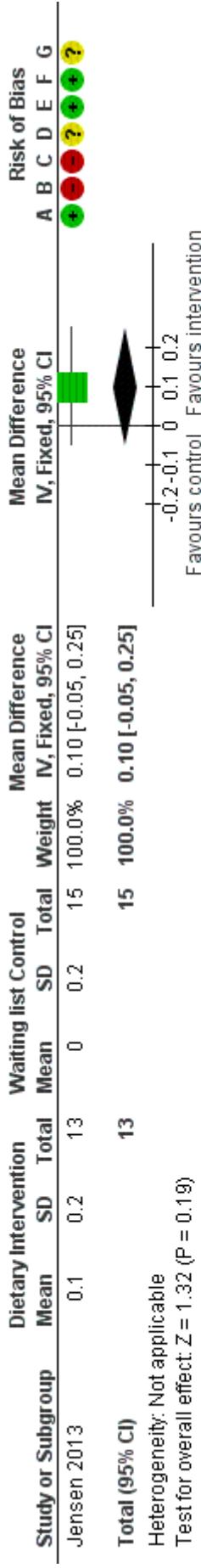
Figure 2 (Analysis 1.2)

Forest plot of comparison: 1 Dietary Intervention vs Waiting list Control, outcome: 1.2 FEV1 (L).



Forest plot of comparison: 1 Dietary Intervention vs Waiting list Control, outcome: 1.2 FEV1 (L).

Figure 3 (Analysis 1.3)

Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias

Forest plot of comparison: 1 Dietary Intervention vs Waiting list Control, outcome: 1.3 FVC (L).

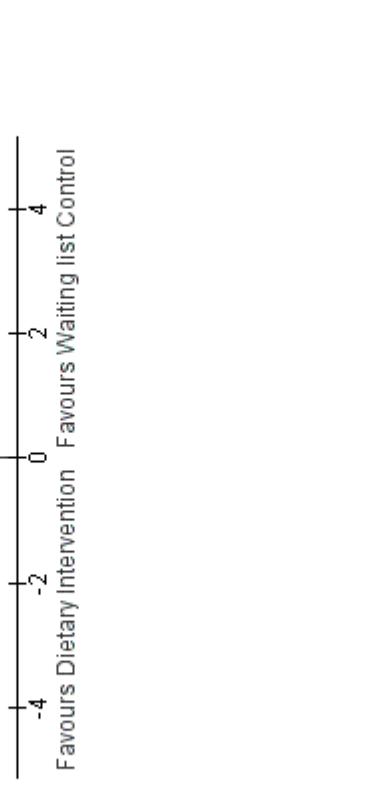
Figure 4 (Analysis 1.4)

Weight loss for asthma in children



Test for subgroup differences: Not applicable
Risk of bias legend

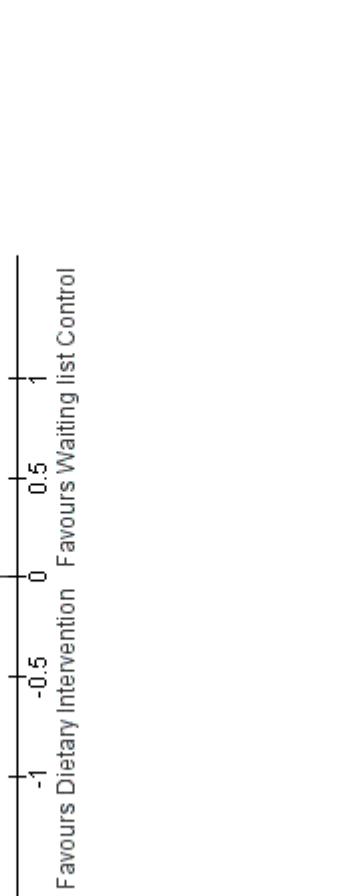
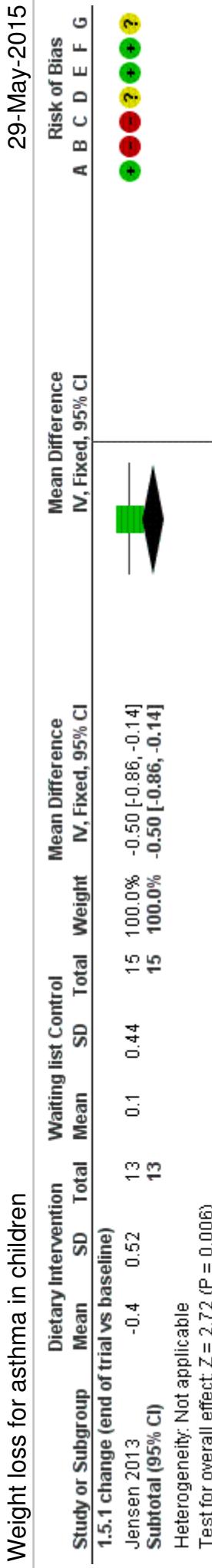
- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



Forest plot of comparison: 1 Dietary Intervention vs Waiting list Control, outcome: 1.4 logPD15 (ml); hypertonic Saline 4.5%.

Figure 5 (Analysis 1.5)

Weight loss for asthma in children



Test for subgroup differences: Not applicable

Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias

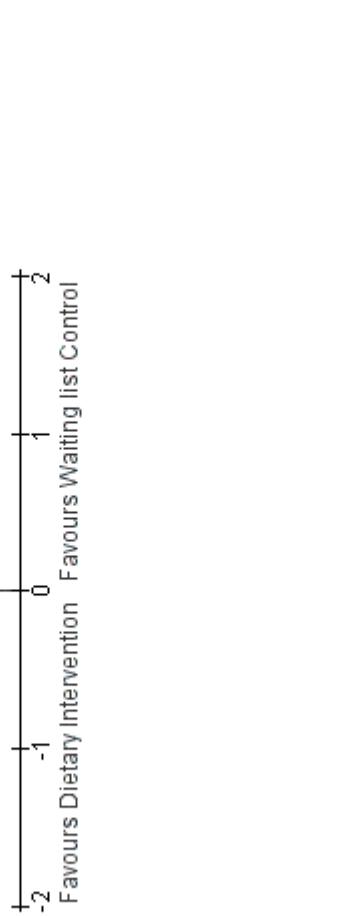
Forest plot of comparison: 1 Dietary Intervention vs Waiting list Control, outcome: 1.5 ACQ score (values read from Fig. 3).

Figure 6 (Analysis 1.6)

Weight loss for asthma in children

Study or Subgroup	Dietary Intervention		Waiting list Control		Mean Difference		N, Fixed, 95% CI	Risk of Bias							
	Mean	SD	Total	Mean	SD	Total	Weight	A	B	C	D	E	F	G	
1.6.1 change (end of trial vs baseline)															
Jensen 2013	0.7	1.2	13	0.1	0.7	15	100.0%	0.60 [-0.14, 1.34]	?	+	+	+	+	+	+
Subtotal (95% CI)			13			15	100.0%	0.60 [-0.14, 1.34]							

Heterogeneity: Not applicable
Test for overall effect: Z = 1.58 (P = 0.11)



Test for subgroup differences: Not applicable

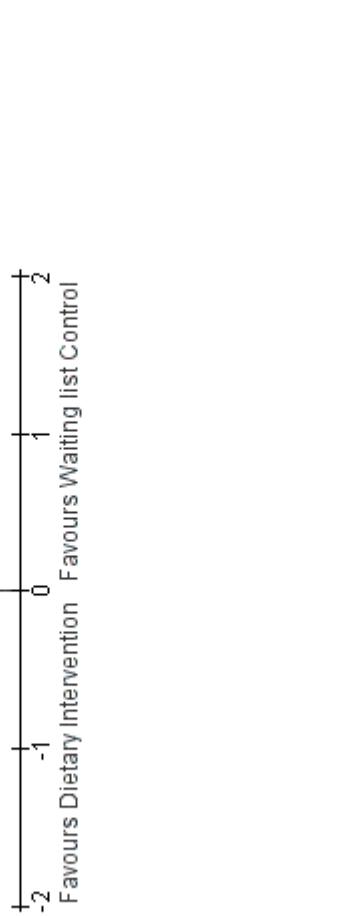
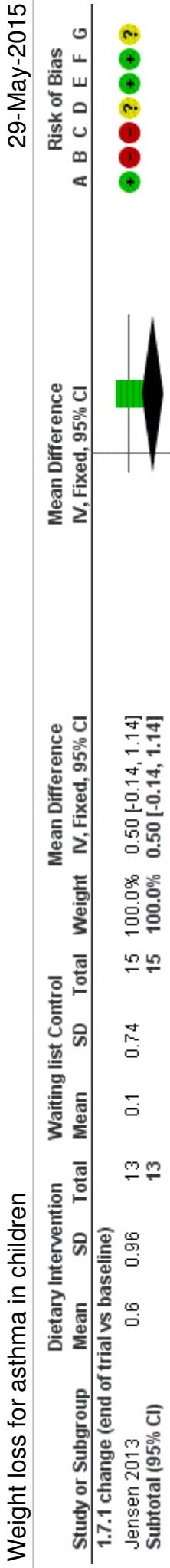
Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias

Forest plot of comparison: 1 Dietary Intervention vs Waiting list Control, outcome: 1.6 Total PAQLQ.

Figure 7 (Analysis 1.7)

Weight loss for asthma in children



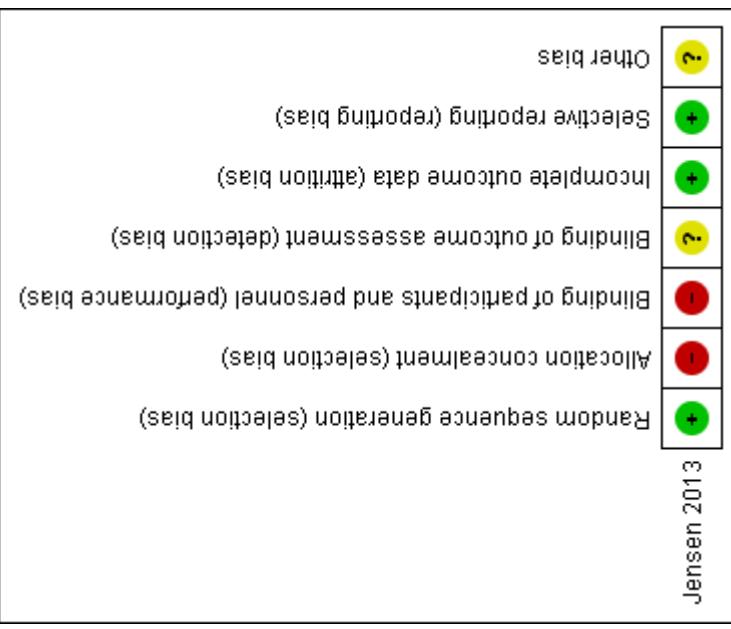
Test for subgroup differences: Not applicable

Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias

Forest plot of comparison: 1 Dietary Intervention vs Waiting list Control, outcome: 1.7 PAQLQ symptoms.

Figure 8



Risk of bias summary: review authors' judgements about each risk of bias item for each included study.