

Evidence Analysis Library

Adult Weight Management: Effect of Interventions delivered by a Dietitian for Individuals with Overweight or Obesity

Summary of Findings Table

Outcome № of participants (studies)	Anticipated absolute or relative effects (95% CI)	Risk of Bias	Inconsistency	Indirectness	Imprecision	Other	Certainty	What happens
Quality of Life_Physical assessed with: SF-36 № of participants: 773 (5 RCTs)	MD 5.8 higher (2.3 higher to 9.4 higher)	■	■	□	□	□	⊕⊕○○ LOW	The evidence suggests adult weight management provided by a dietitian increases physical quality of life.
QoL-Mental № of participants: 773 (5 RCTs)	MD 2.4 higher (1.55 higher to 3.23 higher)	■	□	□	□	□	⊕⊕⊕○ MODERATE	The evidence suggests adult weight management provided by a dietitian likely increases mental quality of life.
BMI (kg/m ²) № of participants: 9567 (38 RCTs)	MD 1.5 kg/m ² lower (1.74 lower to 1.26 lower)	■	■	□	□	■ a-c	⊕⊕⊕○ MODERATE	Adult weight management provided by a dietitian likely results in a reduction in BMI (kg/m ²).
Waist Circumference (cm) № of participants: 8707 (33 RCTs)	MD 3.45 cm lower (4.39 lower to 2.51 lower)	■	■	□	□	■ b,d	⊕⊕⊕⊕ HIGH	Adult weight management provided by a dietitian results in a reduction in waist circumference (cm).
Percent Weight Loss № of participants: 3566 (22 RCTs)	4.01 percent lower (5.26 lower to 2.75 lower)	■	■	□	□	■ b,d	⊕⊕⊕⊕ HIGH	In adults with overweight or obesity, interventions delivered by a dietitian resulted in greater percent weight loss.
5% Weight Loss № of participants: 7586 (19 RCTs)	RR 2.11 (1.30 to 3.41)	■	■	□	□	■ b	⊕⊕⊕○ MODERATE	Adult weight management provided by a dietitian likely results in a large increase in the proportion of participants achieving 5% weight loss.

Outcome № of participants (studies)	Anticipated absolute or relative effects (95% CI)	Risk of Bias	Inconsistency	Indirectness	Imprecision	Other	Certainty	What happens
Fasting Blood Glucose № of participants: 2537 (18 RCTs)	MD 1.37 mg/dL lower (2.75 lower to 0.01 higher)	■	□	□	□	■ d	⊕⊕⊕⊕ HIGH	In adults with overweight or obesity but without diabetes, some types of interventions delivered by an RDN may reduce fasting blood glucose.
Systolic Blood Pressure (mmHg) № of participants: 3983 (26 RCTs)	MD 2.91 mmHg lower (4.9 lower to 0.92 lower)	■	■	□	□	■ a,c,d	⊕⊕⊕○ MODERATE	Adult weight management provided by a dietitian likely reduces systolic blood pressure (mmHg) slightly.
Diastolic Blood Pressure № of participants: 3852 (25 RCTs)	MD 1.99 mmHg lower (3.02 lower to 0.96 lower)	■	■	□	□	■ a,d	⊕⊕○○ LOW	Adult weight management provided by a dietitian likely reduces diastolic blood pressure (mmHg) slightly.
Cost-effectiveness № of participants: 536 (2 RCTs)	not pooled	■	□	□	■	□	⊕⊕○○ LOW	Adult weight management interventions provided by a dietitian may be cost-effective in individuals with overweight or obesity.

- a. Publication bias suspected
- b. Large effect
- c. Plausible confounding would reduce demonstrated effect (ex: results from studies with High risk of bias).
- d. Dose-response gradient