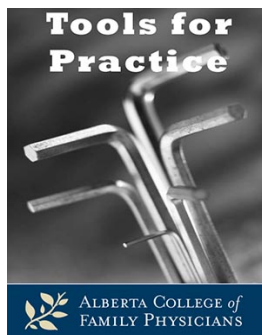


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Evidence Updated: RCT and systematic reviews added; context updated
Bottom Line: Unchanged
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Is any diet better for weight loss or preventing negative health outcomes?

Clinical Question: Is any particular diet better for weight loss or preventing negative health outcomes like heart disease or mortality?

Bottom-line: Weight loss for all diets is greatest around six months and by two years is very similar. Only the Mediterranean diet has demonstrated positive results on hard outcomes like mortality, despite not causing differences in weight or surrogate markers like lipid profiles.

Evidence:

- Low Carbohydrate (Low carb) diet: Three newest randomized controlled trials (RCTs).
 - Two, 2-year RCTs (322 and 811 patients):^{1,2}
 - High carb (low fat) diet lost 2.9 kg, Mediterranean lost 4.4 kg and low carb lost 4.5 kg.¹
 - Low carb had highest drop-out rate.
 - Four different diets (varying concentrations of carbohydrate, protein, and fat):²
 - No difference: All diets lost about 3-3.5 kg at two years.
 - 15% of participants lost 10% of their weight.
 - Weight loss best at six months, regain thereafter.
 - One year RCT (148 patients): Low carb lost 3.5 kg more than low fat.³
 - Systematic reviews found similar.⁴⁻⁷
- Very low calorie diets (≤ 800 calories/day): Most impressive weight loss at six months but quicker weight gain (with no difference at one year).^{8,9}
- Mediterranean diet: Only diet with reduced health outcomes evidence.
 - Large RCT (7,447 primary prevention patients) for 4.8 years:
 - Cardiovascular disease: 3.6% versus 4.4% low fat diet, Number Needed to Treat (NNT)=125.¹⁰
 - Post-myocardial infarction RCT (584 patients) over 2.3 years:¹¹

- Weight, blood pressure, and cholesterol: No difference.
- Myocardial infarction and cardiovascular death: 2.6% versus 10.9% normal diet, NNT=12.
- Death: 2.6% versus 6.6%, NNT=25.
- Another RCT of high risk patients: Reduced cardiac endpoints (NNT=14).¹²

Context:

- There is no reliable difference between any commercial diet.^{13,14}
 - Studies finding differences are at high risk of funding bias.¹⁵
- DASH diet shows BP reductions in short-term (~6 months)^{16,17} not in longer term (18 months).¹⁸
 - No consistent evidence for weight loss and no cardiovascular outcomes studied.¹⁶⁻¹⁸
- Obesity is associated with increased mortality.¹⁹
- In cohort studies when obese people intentionally lose weight, mortality results vary (sometimes increasing).^{20,21}
- Evidence suggests activity likely has more impact on outcomes like mortality.²²

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