

Low-Carb / Keto



What is a low carbohydrate and/or ketogenic (keto) diet?

Restriction of carbohydrate intake at varying levels while promoting higher intakes of protein and fat.^{1,2}

PURPOSE / MECHANISM - induces nutritional ketosis³

Forces body to use fat instead of the preferred carbohydrates as main energy source

Perceived health benefits & scientific evidence

Most current research conducted with low-carbohydrate diets



Weight loss/gain

low-carb diets

Some evidence for significant weight loss likely related to lower calorie intake, but results not significantly different when compared to other lower calorie diets^{1,6-8}



Heart disease

low-carb diets

Some evidence for significant improvements in cardiovascular risk factors (likely related to weight loss), but unclear if improvement is significantly different compared to other diets^{1,8}



Type 2 diabetes

low-carb diets

Some evidence for significant improvements in some measures of diabetes management in the short-term (likely related to weight loss), but changes were not significant in long-term or compared to diets with similar calorie levels^{1,8}



Neurological conditions

keto diets

Limited, low-quality evidence for association with short-term seizure reduction in children (and some adults) with drug-resistant epilepsy⁹

Rules

Recommendations for % daily calories from each macronutrient by diet^{1,2,4,5}

	Carbohydrates	Protein	Fat
Low-Carb	~25%	40-50%	30-40%
Keto (very low-carb)	5-10%	20-25%	70-80%
Normal (Dietary Guidelines for Americans)	45-65%	10-35%	20-35%

Nutrition considerations

Diet quality compared to normal control diet^{1,10}

 **HIGHER**
protein
total & saturated fat

 **LOWER**
calories
sodium
fiber
vitamins & minerals

References

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