A summary table of randomised controlled trials comparing low-carb diets of less than 130g carbohydrate per day to low-fat diets of less than 35% fat of total calories with type 2 diabetes participants, compiled by the Public Health Collaboration

Time Period/Ref.	LC HbA1c Change	LF HbA1c Change	Participants (LC v LF)
1 Year [1]	-8.8 mmol/mol^*	-1.1 mmol/mol	27 v 27 (54)
3 Months [2]	-6 mmol/mol^	-2.5 mmol/mol	40 v 39 (79)
24 Weeks [3]	-16.4 mmol/mol^*	-5.5 mmol/mol	21 v 29 (50)
12 Months [4]	-0.2 mmol/mol^	+2.6 mmol/mol	47 v 49 (96)
24 Months [5]	-1.1 mmol/mol	-2.2 mmol/mol^	28 v 40 (68)
24 Months [6]	0.0 mmol/mol^	+2.2 mmol/mol	30 v 31 (61)
24 Weeks [7]	-28.4 mmol/mol^*	-20.8 mmol/mol	46 v 47 (93)
6 Months [8]	-4.0 mmol/mol^	-1.0 mmol/mol	29 v 30 (59)
52 Weeks [9]	-10.9 mmol/mol	-11.0 mmol/mol^	41 v 37 (78)
6 Months [10]	-7.6 mmol/mol^*	0.0 mmol/mol	30 v 32 (62)
4 Months [11]	-9.8 mmol/mol^	-4.4 mmol/mol	40 v 36 (76)
48 Weeks [12]	-7.7 mmol/mol^*	+1.1 mmol/mol	16 v 21 (37)
6 Months [13]	-6.6 mmol/mol^*	-2.2 mmol/mol	12 v 12 (24)
3 Months [14]	-6.5 mmol/mol^*	0.0 mmol/mol	16 v 18 (34)
32 Weeks [15]	-8.7 mmol/mol^*	-3.3 mmol/mol^	12 v 13 (25)
12 Weeks [16]	-16.3 mmol/mol^*	-0.7 mmol/mol	21 v 12 (33)
	13/15 LC Are > LF	2/15 LF Are > LC	474 v 488 (962)
	8/15 LC Are Sig.	0/15 LF Are Sig.	

^ = Greater HbA1c Reduction * = Significantly Greater HbA1c Reduction Between Groups

References:

[1] The effects of low-carbohydrate versus conventional weight loss diets in severely obese adults: one-year follow-up of a randomized trial. May 2004. <u>https://www.ncbi.nlm.nih.gov/pubmed/15148064</u>

[2] Short-term effects of severe dietary carbohydrate-restriction advice in Type 2 diabetes—a randomized controlled trial. September 2005. <u>http://onlinelibrary.wiley.com/doi/10.1111/j.1464-5491.2005.01760.x/abstract</u>
[3] The effect of a low-carbohydrate, ketogenic diet versus a low-glycemic index diet on glycemic control in type 2 diabetes mellitus. December 2008. <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2633336/</u>

[4] Comparative Study of the Effects of a 1-Year Dietary Intervention of a Low-Carbohydrate Diet Versus a Low-Fat Diet on Weight and Glycemic Control in Type 2 Diabetes. July 2009. http://care.diabetesjournals.org/content/32/7/1147.full

[5] Effects of a Low-intensity Intervention That Prescribed a Low-carbohydrate vs. a Low-fat Diet in Obese, Diabetic Participants. September 2010. <u>http://onlinelibrary.wiley.com/doi/10.1038/oby.2009.460/full</u>

[6] In type 2 diabetes, randomisation to advice to follow a low-carbohydrate diet transiently improves glycaemic control compared with advice to follow a low-fat diet producing a similar weight loss. May 2012. http://link.springer.com/article/10.1007/s00125-012-2567-4/fulltext.html

[7] A very low-carbohydrate, low-saturated fat diet for type 2 diabetes management: a randomized trial. November 2014. <u>https://www.ncbi.nlm.nih.gov/pubmed/25071075</u>

[8] Advice to follow a low-carbohydrate diet has a favourable impact on low-grade inflammation in type 2 diabetes compared with advice to follow a low-fat diet. May 2014. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4025600/

[9] Comparison of low- and high-carbohydrate diets for type 2 diabetes management: a randomized trial. July 2015. <u>http://ajcn.nutrition.org/content/early/2015/07/29/ajcn.115.112581.abstract</u>

[10] A randomized controlled trial of 130 g/day low-carbohydrate diet in type 2 diabetes with poor glycemic control. July 2016. <u>http://www.clinicalnutritionjournal.com/article/S0261-5614(16)30169-8/pdf</u>

[11] Short-term safety, tolerability and efficacy of a very low-calorie-ketogenic diet interventional weight loss program versus hypocaloric diet in patients with type 2 diabetes mellitus. September 2016. http://www.nature.com/nutd/journal/v6/n9/full/nutd201636a.html

[12] Two Diets with Different Hemoglobin A1c and Antiglycemic Medication Effects Despite Similar Weight Loss in Type 2 Diabetes. August 2013. <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3867584/</u>

[13] A non-calorie-restricted low-carbohydrate diet is effective as an alternative therapy for patients with type 2 diabetes. 2014. <u>https://www.ncbi.nlm.nih.gov/pubmed/24390522</u>

[14] A Randomized Pilot Trial of a Moderate Carbohydrate Diet Compared to a Very Low Carbohydrate Diet in Overweight or Obese Individuals with Type 2 Diabetes Mellitus or Prediabetes. April 2014. http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0091027

[15] An Online Intervention Comparing a Very Low-Carbohydrate Ketogenic Diet and Lifestyle Recommendations Versus a Plate Method Diet in Overweight Individuals With Type 2 Diabetes: A Randomized Controlled Trial. February 2017. <u>https://www.ncbi.nlm.nih.gov/pubmed/28193599</u>

[16] A food-based, low-energy, low-carbohydrate diet for people with type 2 diabetes in primary care: A randomized controlled feasibility trial. Morris et al. <u>https://doi.org/10.1111/dom.13915</u>