

**A summary table of randomised controlled trials of a year or  
more comparing low-carb diets of less than 130g carbohydrate  
per day to low-fat diets of less than 35% fat of total calories  
compiled by the Public Health Collaboration**

Time Frame & Reference	Low Carb (LC) Weight Loss	Low Fat (LF) Weight Loss	Subjects (LC v LF)
12 Months [1]	4.3kg^	2.5kg	20 v 17
12 Months [2]	4.7kg^*	2.2kg	68 v 61
2 Years [3]	5.5kg^*	3.3kg	83 v 94
12 Months [4]	14.5kg^	11.5kg	33 v 36
24 Months [5]	2.34kg	2.97kg^	31 v 30
12 Months [6]	5.6kg^*	1.4kg	59 v 60
12 Months [7]	3.1kg	3.1kg	47 v 49
2 Years [8]	6.34kg	7.37kg^	154 v 153
24 Months [9]	1.5kg^	0.2kg	28 v 40
1 Year [10]	13.7kg	13.7kg	55 v 51
1 Year [11]	5.1kg^	3.1kg	62 v 64
1 Year [12]	2.1kg	3.0kg^	40 v 40
12 Months [13]	11.8kg^*	6.9kg	55 v 55
1 Year [14]	2.9kg	3.7kg^	30 v 30
52 Weeks [15]	9.8kg	10.1kg^	41 v 37
18 Months [16]	5.0kg^	2.4 kg	32 v 33
12 Months [17]	7.9kg^*	1.7kg	16 v 18
2 Years [18]	6.8kg^	6.6kg	33 v 28
12 Months [19]	6.0kg^	5.3kg	304 v 305
18 Months [20]	2.76kg^*	0.71kg	43 v 42
12 Months [21]	9.3kg^*	5.8kg	76 v 64
Totals:	14/21 Are > LF	5/21 Are > LC	1,310 (LC) v 1,307 (LF)
	7/21 Are Sig. >	0/21 Are Sig. >	
(2 RCTs Are Equal)			

## References:

- [1] A Randomized Trial of a Low-Carbohydrate Diet for Obesity. Foster et al. <https://doi.org/10.1056/NEJMoa022207>
- [2] Comparison of the Atkins, Zone, Ornish, and LEARN Diets for Change in Weight and Related Risk Factors Among Overweight Premenopausal Women The A TO Z Weight Loss Study: A Randomized Trial. Gardner et al. <https://doi.org/10.1001/jama.297.9.969>
- [3] Weight Loss with a Low-Carbohydrate, Mediterranean, or Low-Fat Diet. Shai et al. <https://doi.org/10.1056/NEJMoa0708681>
- [4] Long-term effects of a very-low-carbohydrate weight loss diet compared with an isocaloric low-fat diet after 12 mo. Brinkworth et al. <https://doi.org/10.3945/ajcn.2008.27326>
- [5] 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. Guldbrand et al. <https://doi.org/10.1007/s00125-012-2567-4>
- [6] Effects of Low-Carbohydrate and Low-Fat Diets: A Randomized Trial. Bazzano et al. <https://doi.org/10.7326/M14-0180>
- [7] 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. Davis et al. <https://doi.org/10.2337/dc08-2108>
- [8] Weight and Metabolic Outcomes After 2 Years on a Low-Carbohydrate Versus Low-Fat Diet: A Randomized Trial. Foster et al. <https://doi.org/10.7326/0003-4819-153-3-201008030-00005>
- [9] Effects of a Low-intensity Intervention That Prescribed a Low-carbohydrate vs. a Low-fat Diet in Obese, Diabetic Participants. Iqbal et al. <https://doi.org/10.1038/oby.2009.460>
- [10] Long-term Effects of a Very Low-Carbohydrate Diet and a Low-Fat Diet on Mood and Cognitive Function. Brinkworth et al. <https://doi.org/10.1001/archinternmed.2009.329>
- [11] The effects of low-carbohydrate versus conventional weight loss diets in severely obese adults: one-year follow-up of a randomized trial. Stern et al. <https://doi.org/10.7326/0003-4819-140-10-200405180-00007>
- [12] Comparison of the Atkins, Ornish, Weight Watchers, and Zone Diets for Weight Loss and Heart Disease Risk Reduction: A Randomized Trial. Dansinger et al. <https://doi.org/10.1001/jama.293.1.43>
- [13] Enhanced weight loss with protein-enriched meal replacements in subjects with the metabolic syndrome. Flechtner-Mors et al. <https://doi.org/10.1002/dmrr.1097>
- [14] Long-term effects of a low carbohydrate, low fat or high unsaturated fat diet compared to a no-intervention control. Lim et al. <https://doi.org/10.1016/j.numecd.2009.05.003>
- [15] Comparison of low- and high-carbohydrate diets for type 2 diabetes management: a randomized trial. Tay et al. <https://doi.org/10.3945/ajcn.115.112581>
- [16] Dynamics of intrapericardial and extrapericardial fat tissues during long-term, dietary-induced, moderate weight loss. Tsaban et al. <https://doi.org/10.3945/ajcn.117.157115>
- [17] Twelve-month outcomes of a randomized trial of a moderate-carbohydrate versus very low-carbohydrate diet in overweight adults with type 2 diabetes mellitus or prediabetes. Saslow et al. <https://doi.org/10.1038/s41387-017-0006-9>
- [18] Effects of an energy-restricted low-carbohydrate, high unsaturated fat/low saturated fat diet versus a high-carbohydrate, low-fat diet in type 2 diabetes: A 2-year randomized clinical trial. Tay et al. <https://doi.org/10.1111/dom.13164>
- [19] Effect of Low-Fat vs Low-Carbohydrate Diet on 12-Month Weight Loss in Overweight Adults and the Association With Genotype Pattern or Insulin Secretion: The DIETFITS Randomized Clinical Trial. Gardner et al. <https://doi.org/10.1001/jama.2018.0245>

[20] Effect of a 90 g/day low-carbohydrate diet on glycaemic control, small, dense low-density lipoprotein and carotid intima-media thickness in type 2 diabetic patients: An 18-month randomised controlled trial. Chen et al. <https://doi.org/10.1371/journal.pone.0240158>

[21] Carbohydrate Content of Diet Determines Success in Type 2 Diabetes Outcomes. Govers et al. <https://doi.org/10.1016/j.metabol.2020.154591>