Table 1.

Point on figure 1 of Burke (2025) (reference)	Caveat	Action
A (reference 16 in Burke 2025)	Non RCT parallel-group design. Short dietary adaptation period (<4 weeks). Performance test – 10 000m race walk	Remove as not RCT or cross-over trial
B (reference 15 in Burke 2025)	Non RCT parallel-group design. Short dietary adaptation period (<4 weeks). Performance test – 10 000m race walk	Remove as not RCT or cross-over trial
C (reference 29 in Burke 2025)	Cross-over trial with short dietary adaptation period of 3 weeks. Performance test - 5km time trial following 50min run in heat. Note – the exercise intensity during this trial was 93-97%, not 89% as shown in the figure.	Retain
D (reference 28 in Burke 2025)	Non RCT parallel group design.12 week dietary adaptation period. Performance trials – 100km time trial; six second sprint test; Critical Power Test. No difference in 100km time trial performance but slight performance gains in other two tests for LCHF group.	Remove as not RCT or cross-over trial
E (reference 27 in Burke 2025)	Cross-over trial with short adaptation period of 3 weeks. Performance test – cycling to exhaustion at 62-64%VO_2max.	Retain
F, G, H, I (reference 32 in Burke 2025)	RCT with 6 week period of dietary adaptation. Four data points reflect improved running performances with increased duration of dietary adaptation, peaking at 4 weeks. Performance test – 5km time trial on laboratory treadmill.	Retain
J (reference missing in Burke 2025. Correct reference 9 in Noakes 2025.	RCT with 4 week period of dietary intervention. Two performance tests (not one as shown in figure 1A) – I mile time trial on laboratory treadmill (point J) and 6x800m intervals also on laboratory treadmill (point j_2).	Retain and add additional data point (j_2) on figure 1B.
K (reference 26 in Burke 2025). (Incorrectly referenced in legend to figure 1 in Burke 2025)	RCT with 31 day period of dietary adaptation. Performance test- exercise time to exhaustion at 70%VO_2max. When initially exhausted subjects were allowed to walk for a short period before resuming exercise at 70%VO2max. This was repeated twice. Subjects covered a distance of ~50km following either diet.	Retain

L (reference 30 in Burke 2025)	Parallel group design with 6 day period of dietary adaptation. Performance test – 90 minutes at 70%VO_2max followed by increase of 5%VO_2max every 5 minutes until exhaustion. Subjects on LCHF alone became profoundly hypoglycemic during the prolonged exercise test.	Remove as not RCT or cross-over trial. Absence of adequate CHO intake during exercise in LCHF group.
M (reference 15 in Burke 2025)	Non RCT. Short dietary adaptation period (<4 weeks). Performance test - 10 000m race walk.	Remove as not RCT or cross-over trial
N (reference 23 in Burke 2025)	Non RCT. Short dietary adaptation period (<4 weeks). Performance test - 10 000m race walk.	Remove as not RCT or cross-over trial
O, P, Q, R (reference 25 in Burke 2025)	Case study of single athlete habitually adapted to LCHF diet. Study of effects of CHO ingestion during exercise trials of different durations (30 sec sprint; 4 min sprint; 20km and 100km time trials) not of adaptation to the LCHF diet	Retain whilst noting incongruity – not a study of the LCHF vs HCLF diet.
S (reference 24 in Burke 2025)	Non RCT. Short dietary adaptation period (5 days). Performance trial 10 000m race walk	Remove as not RCT or cross-over trial
T, U, V, W (reference 18 in Burke 2025)	RCT with 6 week dietary adaptation period provided only 2 (not four) comparisons between LCHF and HCLF diets, with and without CHO ingestion during exercise. Performance trial – exercise to exhaustion at 70%VO_2max.	Include but corrected to show effect of CHO ingestion during exercise (see w_2 below).
	Missing data from Figure 1 A added to Figure 1 B	
a (reference 30 in Noakes 2025)	RCT with 5 week dietary adaptation period. Performance trial 20 min all-out cycling time trial	Add
b (reference 30 in Noakes 2025)	RCT with 5 week dietary adaptation period. Performance trial 21.1km cycling time trial	Add
c (reference 32 in Burke 2025)	RCT with 6 week dietary adaptation period. Performance trial VO_2max test.	Add
d (reference 32 in Noakes 2025)	RCT 4 week dietary adaptation period. Performance trial self-paced time trial to complete a fixed workload equivalent to five hours exercise at 55%VO_2max. Subjects ingested a high carbohydrate diet for the final 24 hours before exercise and 40 grams carbohydrate/hr during the exercise test.	Add

e_1 (Carpenter et al. 2025)	Single-blinded cross-over trial. Subjects habitually adapted to a high-fat diet (> 48 weeks). Performance trial 16.1k cycling time trial following 48hrs ingestion of either placebo or 200g carbohydrate/day.	Add
e_2 (Carpenter et al. 2025)	Single-blinded cross-over trial. Subjects habitually adapted to a high-fat diet (> 48 weeks). Performance trial 16.1k cycling time trial with ingestion of placebo or 60 g carbohydrate 30 mins before exercise following 48 hrs of the habitual high fat diet.	Add
e_3 (Carpenter et al. 2025)	Single-blinded cross-over trial. Subjects habitually adapted to a high-fat diet (> 48 weeks). Performance trial 16.1k cycling time trial with ingestion of placebo or 60 g carbohydrate 30 mins before exercise following 48hrs of 200g carbohydrate/day.	Add
f_1 (reference 29 in Noakes 2025)	Cross-over trial with 4 weeks adaptation to LCHF diet. Performance trial total work during Wingate test	Add
f_2 (reference 29 in Noakes 2025)	Cross-over trial with 4 weeks adaptation to LCHF diet. Performance trial time to complete 2.41km run	Add
f_3 (reference 29 in Noakes 2025)	Cross-over trial with 4 weeks adaptation to LCHF diet. Performance trial completed number of pull-ups in 2 minutes	Add
j_2 (reference 9 in Noakes 2025)	RCT with 4 week period of dietary intervention. Two performance tests (not one as shown in figure 1A) – I mile time trial on laboratory treadmill (point J) and 6x800m intervals also on laboratory treadmill added here as j_2.	Retain and add additional data point (j_2) to figure 1B.
w_2 (reference 18 in Burke 2025)	RCT with 6 week dietary adaptation period. Performance trial exercise to exhaustion at 70%VO_2max. Effects of 10g/hr carbohydrate ingestion during exercise following adaptation to LCHF and HCLF diets	Add

Abbreviations:

RCT Randomized Controlled Trial; LCHF Low-carbohydrate high-fat diet; VO_2max maximum oxygen consumption

References:

Burke LM. Does a low-carbohydrate diet impede endurance sports performance? Yes. Am J Clin Nutr 2025.

Noakes TD. Does a low-carbohydrate diet impede endurance sports performance? No. Am J Clin Nutr 2025.

Carpenter M, Brouner J and Spendiff O. Strategic carbohydrate feeding improves performance in ketogenic trained athletes. Clin Nutr 2025; 51: 212-221.