Supplementary Information File

A randomized controlled trial of pharmacist-led therapeutic carbohydrate and energy restriction in type 2 diabetes

*To whom correspondence should be addressed: Dr. Jonathan Little School of Health and Exercise Sciences University of British Columbia Kelowna, BC V1V 1V7 CANADA Ph: +1-250-807-9876 Email: jonathan.little@ubc.ca

Cody Durrer¹, Sean McKelvey², Joel Singer³, Alan M. Batterham⁴, James D. Johnson^{2,5}, Kelsey Gudmundson¹, Jay Wortman⁶, Jonathan P. Little^{*1,2}

1 School of Health and Exercise Sciences, University of British Columbia, Kelowna, BC CANADA

2 Institute for Personalized Therapeutic Nutrition, Vancouver, BC CANADA

3 School of Population and Public Health, University of British Columbia, Vancouver, BC CANADA

4 Centre for Rehabilitation, School of Health and Life Sciences, Teesside University, Middlesbrough, UNITED KINGDOM

5 Diabetes Research Group, Life Sciences Institute, Faculty of Medicine, University of British Columbia, Vancouver, BC CANADA

6 Faculty of Medicine, University of British Columbia, BC CANADA

Supplementary Table 1: Subgroup analyses of the primary outcome

Data are the proportion achieving the primary outcome within each subgroup and the corresponding difference in proportions with their respective 95% confidence intervals. Data were analyzed using a generalized linear model with a binomial distribution and logit link, with the Huber/White/sandwich variance estimator.

Supplementary Table 2: Treatment effect on HbA1c and V	Weight
disaggregated by sex	

	Treatment Effect	p value
HbA1c		
Sex		
Male	-1.6 (-2.1 to -1.1)	
Female	-1.2 (-1.7 to -0.7)	
Difference	-0.4 (-1.0 to 0.2)	0.21
Weight		
Sex		
Male	-14.0 (-16.0 to -12.0)	
Female	-10.5 (-12.3 to -8.6)	
Difference	-3.5 (-5.6 to -1.5)	0.0012
D	· · · · · / ·	3 4 1

Data are treatment effect estimates in each subgroup (i.e., Male or Female) and the corresponding difference in treatment effect with their respective 95% confidence intervals. Data were analyzed using constrained baseline longitudinal analysis via linear mixed models

Medication Class	Deprescribed	Increased	Lowered	No Change	n
Pharm-TCR					
Insulin	56	0	44	0	27
Sulfonylurea	84	0	10	6	31
SGLT2 Inhibitor	92	0	8	0	13
TZD	100	0	0	0	1
DPP4 Inhibitor	87	0	7	7	15
GLP1 Agonist	62	12	0	25	15
Biguanide	36	1	25	38	78
TAU					
Insulin	0	8	8	85	13
Sulfonylurea	5	15	0	80	20
SGLT2 Inhibitor	0	10	0	90	10
TZD	0	0	0	100	1
DPP4 Inhibitor	0	0	0	100	8
GLP1 Agonist	0	9	0	91	11
Biguanide	2	6	2	91	64

Supplementary Table 3: Glucose-lowering medication changes

Medication changes are denoted as percentages of participants taking each respective medication at baseline. SGLT2: Sodium-glucose transport protein 2; TZD: Thiazolidinedione; DPP4: Dipeptidyl peptidase-4; GLP1: Glucagon-like peptide-1.

Supplementary Table 4: Blood pressure medication changes

Medication Class	Deprescribed	Increased	Lowered	No Change	n
Pharm-TCR					
ACE Inhibitors	11	8	25	56	36
ARBs	37	0	11	53	19
Beta Blockers	25	0	25	50	8
Calcium Channel Blockers	11	6	17	67	18
Diuretics	58	0	12	29	24
Vasodilators	0	0	0	100	1
TAU					
ACE Inhibitors	0	0	0	100	23
ARBs	0	5	5	90	21
Beta Blockers	0	10	0	90	10
Calcium Channel Blockers	0	0	0	100	14

Diuretics	0	0	0	100	20
Madiantian abangas are de	noted as percentages	of portioino	nto toking angh	ragnaativa	

Medication changes are denoted as percentages of participants taking each respective medication at baseline. ACE: Angiotensin-converting enzyme; ARB: Angiotensin II receptor blockers.

Supplementary Table 5: Macronutrient and kilocalorie intake at baseline, week 6, and week 12

	Kilocalories	Kilojoules	Carbohydrates (g)	Fats (g)	Protein (g)
Pharm-TCR					
Baseline	1789 (543)	7485 (2272)	188 (72)	72 (29)	85 (30)
Week 6	989 (217)	4138 (906)	69 (22)	34 (14)	106 (22)
Week 12	984 (212)	4116 (885)	66 (20)	34 (15)	106 (23)
TAU					
Baseline	1806 (608)	7558 (2544)	192 (80)	76 (32)	87 (28)
Week 6	1714 (597)	7172 (2497)	174 (71)	71 (37)	90 (28)
Week 12	1667 (589)	6975 (2465)	166 (85)	74 (45)	90 (28)

Data are daily means (SD). Descriptive data are based on complete cases of n=67 (Pharm-TCR) and n=53 (TAU).