

SUPPLEMENTARY DATA

Supplementary Table S1. Baseline characteristics of participants by study arm

	Adapted DSME (N=110)	Standard DSME (N=111)
Baseline HbA_{1c} (%)*	10.5 (2.4)	10.4 (2.2)
Baseline HbA_{1c} (mmol/mol)*	91.3 (26.2)	90.2 (24.0)
Age (years)*	51.4 (11.1)	53.0 (10.6)
Age ranges (years)†		
18-30	0.0	0.0
31-40	18.2	11.7
41-50	30.9	32.4
51-60	28.2	29.7
61-70	19.1	21.6
71-80	3.6	4.5
Male†	47.3	35.1
Married†	74.6	70.3
Education†		
Less than HS	60.4	61.8
HS/GED	27.0	30.9
Higher than HS	12.6	7.3
Employed†	42.7	34.2
Any diabetes medication†	43.6	44.1

Note: HbA_{1c}, glycated hemoglobin; DSME, diabetes self-management education; HS, high school; Any diabetes medication, participant was taking at least one medication to regulate blood glucose.

*Mean (standard deviation).

†Percent of participants.

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Supplementary Table S2. Comparison of baseline participant characteristics by missing outcome status at immediate post-intervention

	Missing (N=13)	Complete (N=208)	<i>P</i> value
Baseline HbA_{1c} (%)*	11.1 (2.7)	10.4 (2.3)	0.302
Baseline HbA_{1c} (mmol/mol)*	97.8 (29.5)	90.2 (25.1)	0.302
Age (years)*	55.9 (11.0)	52.0 (10.8)	0.204
Male†	38.5	41.4	0.838
Married†	61.5	73.1	0.523‡
Education†			0.495‡
Less than HS	69.2	60.6	
HS/GED	30.8	28.8	
Higher than HS	0.0	10.6	
Employed†	38.5	38.5	1.000
Any diabetes medication†	30.8	44.7	0.326

Note: HbA_{1c}, glycated hemoglobin; HS, high school; Any diabetes medication, participant was taking at least one medication to regulate blood glucose.

*Mean (standard deviation).

†Percent of participants.

‡Exact *P* value.

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Supplementary Table S3. Comparison of baseline participant characteristics by missing outcome status at 6 months post-intervention

	Missing (N=33)	Complete (N=188)	<i>P</i> value
Baseline HbA_{1c} (%)*	10.5 (2.2)	10.5 (2.3)	0.943
Baseline HbA_{1c} (mmol/mol)*	91.3 (24.0)	91.3 (25.1)	0.943
Age (years)*	53.9 (10.5)	51.9 (10.9)	0.314
Male†	39.4	41.5	0.822
Married†	63.6	73.9	0.222
Education†			0.973
Less than HS	60.6	61.2	
HS/GED	30.3	28.7	
Higher than HS	9.1	10.1	
Employed†	42.4	37.8	0.612
Any diabetes medication†	45.5	43.6	0.845

Note: HbA_{1c}, glycated hemoglobin; HS, high school; Any diabetes medication, participant was taking at least one medication to regulate blood glucose.

*Mean (standard deviation).

†Percent of participants.

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Supplementary Table S4. Comparison of baseline participant characteristics by missing outcome status at 12 months post-intervention

	Missing (N=48)	Complete (N=173)	<i>P</i> value
Baseline HbA_{1c} (%)*	10.5 (2.3)	10.5 (2.3)	0.902
Baseline HbA_{1c} (mmol/mol)*	91.3 (25.1)	91.3 (25.1)	0.902
Age (years)*	53.8 (11.6)	51.8 (10.6)	0.243
Male†	39.6	41.6	0.800
Married†	56.3	76.9	0.005
Education†			0.913
Less than HS	62.5	60.7	
HS/GED	29.2	28.9	
Higher than HS	8.3	10.4	
Employed†	35.4	39.3	0.624
Any diabetes medication†	45.8	43.4	0.759

Note: statistically significant *P* values are bolded. HbA_{1c}, glycated hemoglobin; HS, high school; Any diabetes medication, participant was taking at least one medication to regulate blood glucose.

*Mean (standard deviation).

†Percent of participants.

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Supplementary Table S5. Longitudinal analysis: estimated regression coefficients and 95% confidence intervals for primary outcome by study arm and time after multiple imputation*

Outcome Variable	Study Arm	Baseline (Base)	Post (Post)	6 months (6 mo)	12 months (12 mo)	Between-Arm Difference† (Arm x time interaction)							
		Est. Mean	Est. Mean	Est. Mean	Est. Mean	Base	P value	Post	P value	6 mo	P value	12 mo	P value
HbA_{1c} (%)	Standard	10.46 (10.46;	9.87 (9.87;	10.25 (10.24;	10.27 (10.25;	0.01		-0.56 (-		-0.46 (-	0.07	-0.60 (-	
	DSME	10.47)	9.88)	10.26)	10.28)	(-	0.97	1.08;	0.02	0.96;	2	1.11;	0.02
	Adapted	10.47 (10.46;	9.30 (9.29;	9.79 (9.78;	9.67 (9.65;	0.50;	6	-	6	0.04)		-	
	DSME	10.48)	9.30)	9.80)	9.68)	0.51)		0.08)		0.04)		0.10)	
HbA_{1c} (mmol/mol)	Standard	90.8 (90.8;	84.4 (84.4;	88.5 (88.4;	88.8 (88.5;	0.1 (-		-6.1 (-		-5.0 (-	0.07	-6.6 (-	
	DSME	90.9)	84.5)	88.6)	88.9)	5.5;	0.97	(-	0.02	(-	2	(-	0.02
	Adapted	90.9 (90.8;	78.2 (78.0;	83.5 (83.4;	82.2 (82.0;	5.6)	6	11.8;	6	10.5;	2	12.1;	3
	DSME	91.1)	78.2)	83.6)	82.3)			-0.9)		0.4)		-1.1)	

Note: statistically significant *P* values are bolded. DSME, diabetes self-management education; HbA_{1c}, glycated hemoglobin.

*Estimates from linear mixed effects regression models adjusted for baseline sex, age, education, marital status, employment status, use of diabetes medication, and households containing multiple participants. Estimates from 25 imputed datasets obtained from Markov chain Monte Carlo methods with a monotone missing pattern.

†The estimated arm contrast of the changes from baselines correspond to the estimates of the arm x time interaction.

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Supplementary Table S6. Longitudinal analysis: estimated regression coefficients and 95% confidence intervals for primary outcome by study arm and time after multiple imputation*

Outcome Variable	Study arm	Within-Arm Change (Δ)					
		Δ Post – Baseline	<i>P</i> value	Δ 6 months – Baseline	<i>P</i> value	Δ 12 months – Baseline	<i>P</i> value
HbA_{1c} (%)	Standard DSME	-0.58 (-0.74; -0.42)	<0.001	-0.21 (-0.38; -0.03)	0.021	-0.19 (-0.36; -0.01)	0.037
	Adapted DSME	-1.17 (-1.32; -1.00)	<0.001	-0.67 (-0.84; -0.50)	<0.001	-0.80 (-0.98; -0.62)	<0.001
HbA_{1c} (mmol/mol)	Standard DSME	-6.3 (-8.1; -4.6)	<0.001	-2.3 (-4.2; -0.3)	0.021	-2.1 (-5.2; 3.5)	0.037
	Adapted DSME	-12.8 (-14.4; -10.9)	<0.001	-7.3 (-9.2; -5.5)	<0.001	-8.7 (-10.7; -6.8)	<0.001

Note: statistically significant *P* values are bolded. DSME, diabetes self-management education; HbA_{1c}, glycated hemoglobin.

*Estimates from linear mixed effects regression models adjusted for baseline sex, age, education, marital status, employment status, use of diabetes medication, and households containing multiple participants. Estimates from 25 imputed datasets obtained from Markov chain Monte Carlo methods with a monotone missing pattern.

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Supplementary Table S7. Longitudinal analysis: estimated regression coefficients and 95% confidence intervals for study outcomes by study arm and time*

Outcome Variables	Study arm	Δ Post – Baseline	<i>P</i> value	Within-Arm Change (Δ)			
				Δ 6 months – Baseline	<i>P</i> value	Δ 12 months – Baseline	<i>P</i> value
Primary Outcome							
HbA_{1c} (%)	Standard DSME	-0.55 (-0.93; -0.17)	0.005	-0.20 (-0.60; 0.19)	0.312	-0.08 (-0.48; 0.32)	0.693
	Adapted DSME	-1.18 (-1.55; -0.81)	<0.001	-0.67 (-1.06; -0.28)	<0.001	-0.87 (-1.28; -0.46)	<0.001
HbA_{1c} (mmol/mol)	Standard DSME	-6.0 (-10.2; -1.9)	0.005	-2.2 (-6.6; 2.1)	0.312	-0.9 (-5.2; 3.5)	0.693
	Adapted DSME	-12.9 (-16.9; -8.9)	<0.001	-7.3 (-11.6; -3.1)	<0.001	-9.5 (-14.0; -5.0)	<0.001
Secondary Outcomes							
BMI	Standard DSME	0.03 (-0.31; 0.37)	0.863	-0.07 (-0.43; 0.28)	0.691	-0.14 (-0.50; 0.21)	0.425
	Adapted DSME	0.08 (-0.25; 0.41)	0.632	0.40 (0.05; 0.74)	0.026	0.21 (-0.16; 0.57)	0.268
Total Cholesterol	Standard DSME	-6.44 (-13.01; 0.14)	0.055	-13.24 (-20.08; -6.40)	<0.001	-8.29 (-15.15; -1.42)	0.018
	Adapted DSME	-11.24 (-17.73; -4.76)	0.001	-2.70 (-9.41; 4.02)	0.430	-10.51 (-17.56; -3.45)	0.004
HDL	Standard DSME	-1.36 (-3.06; 0.33)	0.116	-1.50 (-3.25; 0.25)	0.093	-1.41 (-3.18; 0.35)	0.116
	Adapted DSME	1.10 (-0.56; 2.77)	0.194	2.91 (1.19; 4.63)	0.001	1.07 (-0.75; 2.89)	0.249

Note: statistically significant *P* values are bolded. DSME, diabetes self-management education; HbA_{1c}, glycated hemoglobin; BMI, body mass index; HDL, high-density lipoproteins.

*Estimates from linear mixed effects regression models adjusted for baseline sex, age, education, marital status, employment status, use of diabetes medication, and households containing multiple participants.