

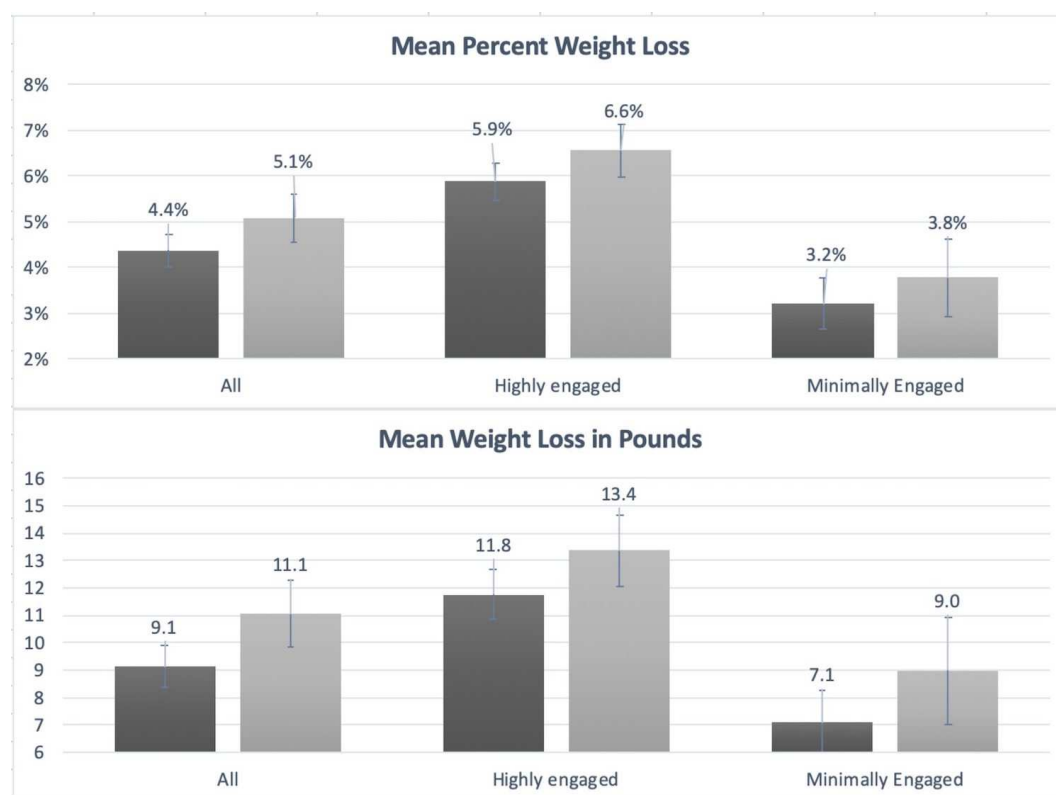
Supplemental Tables and Figures

Table S1. DPP Lesson Schedule and Topics

WEEK	TOPIC
1	Lesson 1: An Introduction to Diabetes Prevention
2	Lesson 2: Tracking Your Food
3	Lesson 3: Getting Started with Healthy Eating
4	Lesson 4: Track Your Activity
5	Lesson 5: Getting Started with Physical Activity
6	Lesson 6: Finding Your Calorie Balance
7	Lesson 7: Managing Stress
8	Lesson 8: Preparing Delicious, Healthy Meals
9	Lesson 9: Getting More Active
11	Lesson 10: Getting Support
13	Lesson 11: Finding Time for Fitness
15	Lesson 12: Eating Well Away From Home
17	Lesson 13: Making Triggers Work for You
19	Lesson 14: Taking Charge of your Thoughts
21	Lesson 15: Keeping your Heart Healthy
23	Lesson 16: Staying Motivated
25	Lesson 17: Take Active Breaks
27	Lesson 18: Making Fast, Tasty Meals
29	Lesson 19: Healthy Sleep Habits
31	Lesson 20: When Weight Loss Stalls
33	Lesson 21: Staying Active When Life Gets In The Way
35	Lesson 22: Staying Social While Staying On Track
37	Lesson 23 - Finding Your Mindfulness
39	Lesson 24 - Powering Up Your Meals
41	Lesson 25 - Working Out At Home
43	Lesson 26 - Setting Floor and Push Goals
45	Lesson 27 - Relieving Stress, Now and Later

47	Lesson 28 - Strength Training for Success
49	Lesson 29 - The Grainy Truth
51	Lesson 30 - Celebrate Your Wins
52	Lesson 31 - Preventing Diabetes For Life

Figure S1. Mean Weight Loss in Percent and Pounds by Engagement at 12 months.



Statistical significance tests were conducted between engagement and weight-loss categories. T-tests were used for engagement group comparisons of continuous variables, Jonckheere-Tersptra were used for tests of trends for weight-loss categories, and Chi-square test for group comparisons of discrete variables.

Table S2. Program Participation at 6-months by Engagement and Weight-Loss Category summarized using mean and standard deviation (SD) and percentages

Self-monitoring	All Participants ^a	Highly Engaged ^b	Minimally Engaged ^c	P-value	WL <5%	WL 5- <7%	WL 7- <10%	WL ≥10%	P-value ^e
N	1355 (100%)	640 (47%)	715 (53%)		771 (57%)	161 (12%)	163 (12%)	260 (19%)	
Weigh-ins / Week	4.38 (1.72)	5.08 (1.58)	3.83 (1.62)	<0.001	4.09 (1.68)	4.60 (1.66)	5.00 (1.60)	4.95 (1.73)	<0.001
4 or more Weigh-ins / Week(%)	64.51% (31.56%)	75.80% (29.23%)	55.72% (30.50%)	<0.001	59.76% (31.44%)	69.14% (30.62%)	74.31% (29.55%)	73.38% (30.30%)	<0.001
Food Logs / Week	17.17 (11.06)	24.35 (9.81)	11.54 (8.41)	<0.001	14.35 (9.76)	18.22 (11.29)	22.93 (10.69)	24.03 (11.77)	<0.001
Food Log Days / Week	4.21 (2.17)	5.71 (1.56)	3.04 (1.83)	<0.001	3.71 (2.10)	4.47 (2.05)	5.27 (1.88)	5.31 (2.07)	<0.001
Weeks with 5 or more Food Logs (%)	68.22% (31.28%)	88.61% (20.41%)	52.23% (28.94%)	<0.001	61.76% (31.41%)	72.21% (29.00%)	82.41% (25.71%)	81.44% (28.35%)	<0.001
Weeks with 15 or more Food Logs (%)	55.08% (34.16%)	77.94% (27.10%)	37.15% (27.85%)	<0.001	46.81% (32.42%)	58.00% (33.49%)	73.26% (30.02%)	74.00% (32.05%)	<0.001
Tracker Days / Week	4.35 (2.46)	5.24 (2.03)	3.66 (2.55)	<0.001	4.07 (2.56)	4.58 (2.34)	4.92 (2.16)	4.92 (2.14)	<0.001
Steps / Day	5654.31 (3653.56)	6737.55 (3852.36)	4693.85 (3174.77)	<0.001	5015.40 (3275.91)	5845.22 (3797.64)	6489.30 (3542.78)	7528.71 (4374.38)	<0.001
Active Minutes/ Week (highly+fairly)	217.34 (229.22)	298.27 (265.00)	152.18 (169.81)	<0.001	177.96 (209.86)	208.89 (209.16)	273.43 (223.47)	358.06 (273.79)	<0.001
% of weeks with 150 mins more (highly+fairly active)	43.43% (34.99%)	58.84% (33.64%)	31.44% (31.13%)	<0.001	35.95% (32.51%)	45.60% (34.40%)	58.24% (35.13%)	63.00% (34.75%)	<0.001
Highly Active Minutes / Week	159.26 (176.76)	225.58 (207.66)	105.79 (123.69)	<0.001	126.53 (160.87)	156.09 (156.79)	204.63 (174.10)	273.65 (211.19)	<0.001
Fairly Active Minutes / Week	75.94 (87.76)	88.68 (102.16)	64.31 (70.25)	<0.001	68.76 (90.43)	68.72 (71.39)	82.56 (72.87)	109.02 (96.41)	<0.001
Lightly Active Minutes / Week	1081.36 (536.03)	1172.69 (512.89)	998.14 (543.49)	<0.001	1021.01 (530.13)	1230.76 (606.59)	1144.11 (511.47)	1153.16 (476.63)	<0.001
Coach-Participant Interactions	All Participants ^a	Highly Engaged ^b	Minimally Engaged ^c	P-value	WL <5%	WL 5- <7%	WL 7- <10%	WL ≥10%	P-value ^e
Lesson Attendance	16.76 (9.00)	25.49 (4.39)	9.97 (4.86)	<0.001	15.04 (8.70)	17.44 (8.51)	20.31 (8.48)	20.91 (8.99)	<0.001
Coaching Session Attendance	1.32 (0.47)	1.46 (0.50)	1.18 (0.39)	<0.001	1.27 (0.44)	1.35 (0.48)	1.42 (0.50)	1.42 (0.50)	<0.001
Having Initial Session before Week 5 (%)	36.14%	36.67%	35.73%	<0.001	35.54%	37.78%	35.94%	37.77%	0.777
Number of Food Log Feedbacks /	1.74 (1.25)	2.06 (1.28)	1.50 (1.16)	<0.001	1.63 (1.23)	1.82 (1.22)	2.07 (1.31)	1.89 (1.20)	<0.001

Week									
Number of Food Log Feedback Days / Week	0.92 (0.48)	1.05 (0.48)	0.82 (0.45)	<0.001	0.87 (0.48)	0.99 (0.49)	1.06 (0.46)	0.95 (0.44)	<0.001
Number of Exercise Feedbacks / Week	0.51 (0.43)	0.59 (0.44)	0.46 (0.41)	<0.001	0.49 (0.43)	0.52 (0.42)	0.60 (0.44)	0.50 (0.42)	0.009
Number of Exercise Feedback Days / Week	0.36 (0.27)	0.40 (0.28)	0.33 (0.27)	<0.001	0.35 (0.27)	0.38 (0.28)	0.40 (0.27)	0.34 (0.26)	0.063
Number of Coach Message / Week	3.63 (1.91)	4.16 (1.87)	3.22 (1.83)	<0.001	3.43 (1.86)	3.75 (1.82)	4.21 (1.97)	3.89 (2.00)	<0.001
Number of Coach Message Days / Week	1.84 (0.65)	2.03 (0.60)	1.70 (0.65)	<0.001	1.77 (0.64)	1.94 (0.64)	2.06 (0.62)	1.90 (0.66)	<0.001
Number of Participant Messages / Week	1.93 (1.63)	2.40 (1.98)	1.56 (1.17)	<0.001	1.79 (1.55)	1.92 (1.35)	2.36 (1.78)	2.17 (1.96)	<0.001
Number of Participant Message Days / Week	1.16 (0.72)	1.37 (0.82)	1.00 (0.59)	<0.001	1.10 (0.70)	1.19 (0.65)	1.36 (0.78)	1.26 (0.76)	<0.001
Number of Participant Community Messages / Week	0.10 (0.15)	0.12 (0.19)	0.07 (0.11)	<0.001	0.08 (0.13)	0.10 (0.15)	0.14 (0.23)	0.13 (0.16)	<0.001

- a. *All Participants:* Any participant enrolled in Livongo DPP who attended lesson one and provided a start weight.
- b. *Highly Engaged Participants:* Participants who met the CDC high-engagement criteria by completing nine lessons within months 1-6 of the program and three lessons within months 7-12 of the program with a minimum of 9-months between first and final lesson completed.[7]
- c. *Minimally Engaged Participants:* All participants not meeting the CDC high-engagement criteria.[7]
- d. Standard deviations in parentheses.

Table S3. Participant Weighing, Food Logging, and Activity Frequency at 12-months by Engagement and Weight Loss Category using mean and standard deviation (SD)

Self-monitoring	All Participants ^a N=1355	Highly Engaged ^b N=640	Minimally Engaged ^c N=715	P-value	WL <5% N=771	WL 5- <7% N=161	WL 7- <10% N=163	WL ≥10% N=260	P-value
Weigh-ins / Week	3.9 (1.8)	4.6 (1.8)	3.2 (1.6)	<0.001	3.6 (1.7)	4.1 (1.8)	4.2 (2.0)	4.2 (2.0)	<0.001
4 or more Weigh-ins / Week (%)	55.3% (32.5%)	67.8% (31.6%)	44.2% (29.1%)	<0.001	51.8% (31.3%)	59.2% (31.8%)	60.5% (33.8%)	60.0% (34.6%)	<0.001
Food Logs / Week	12.6 (10.6)	19.4 (10.6)	6.4 (5.6)	<0.001	10.1 (8.8)	14.0 (10.6)	15.4 (11.2)	17.1 (12.5)	<0.001
Food Log Days / Week	3.1 (2.2)	4.6 (1.9)	1.7 (1.3)	<0.001	2.6 (2.0)	3.4 (2.1)	3.7 (2.3)	3.9 (2.4)	<0.001
Steps / Day	5332.6 (3783.8)	6564.9 (3857.9)	4045.6 (3240.8)	<0.001	4637.5 (3273.0)	5633.2 (4197.9)	5775.8 (3695.2)	6844.4 (4386.9)	<0.001
Active Minutes/ Week (highly + fairly)	197.4 (226.6)	278.1 (258.5)	122.2 (158.9)	<0.001	154.6 (192.8)	206.7 (227.6)	237.0 (217.3)	292.1 (283.8)	<0.001
% of weeks with 150 mins more (highly + fairly active)	39.0% (34.8%)	54.6% (34.3%)	24.9% (28.8%)	<0.001	31.3% (31.1%)	43.5% (35.0%)	49.8% (36.0%)	51.9% (38.2%)	<0.001
Highly Active Minutes / Week	138.2 (169.5)	202.6 (199.0)	78.1 (105.6)	<0.001	103.5 (138.5)	145.9 (174.3)	176.8 (170.2)	210.9 (214.7)	<0.001
Fairly Active Minutes / Week	77.3 (90.9)	90.9 (103.3)	62.4 (72.3)	<0.001	69.1 (93.9)	71.6 (73.1)	77.2 (69.8)	104.6 (100.4)	<0.001

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- c. *Minimally Engaged Participants:* All participants not meeting the CDC high-engagement criteria.[7]

Table S4. Drivers of Weight Loss (lbs) Regression

Variables	Coefficient	Standard Error	Standardized coefficient
Total Lessons Attended	0.144**	0.0705	0.0860
Start Weight	0.0290*	0.0171	0.172
Male	-0.608	0.860	-0.0371
Age	-0.0256	0.0276	-0.0367
Education: College Graduate	-1.384*	0.722	-0.0718
Start BMI	-0.0539	0.114	-0.0462
N of Coaching Sessions Attended			
% of weeks with 4 or more Weigh-ins	0.206	0.986	0.00880
Average Number of Food Logs per Week	0.257**	0.110	0.366
Average Number of Food Logs per Week * Average Number of Food Logs per Week	-0.00181	0.00255	-0.111
% of weeks with 150 minutes or more Activity	0.0426***	0.00931	0.197
Coach Messages per Week	-0.0973	0.596	-0.0177
Days per Week with Community Message	2.940	2.149	0.0543
Had a Coaching Session during 12-month Program	-0.241	0.766	-0.0119
Coach Message per Week * Average Food Logs per Week	-0.0138	0.0232	-0.0940
Constant	-3.897	3.132	
Observations	638		638
R-squared	0.1533		0.153

*** p<0.01, ** p<0.05, * p<0.1