# Weight loss efficacy of a novel mobile Diabetes Prevention Program delivery platform with human coaching

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# Clinical care/education/nutrition/psychosocial research

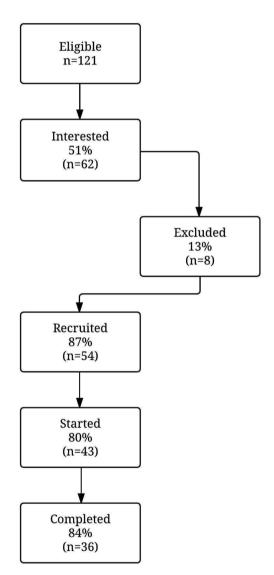


Figure 1 Flow chart for study recruitment, starting and completion status. Eligible, participants who signed-up and were included in the study; interested, individuals that performed at least one in-app action during the first week of the NDPP curriculum; recruited, participants who read at least one article during any 4 of the 16 initial weeks and also messaged the coach at least one time within the first month; completers, read at least one article per week during any 9 of the 16 weeks; excluded, participants who had <2 weigh-ins (n=8), none of which were considered 'starters'.

# Statistical analysis

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## **Power analysis**

### **RESULTS**

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	Non-starters (N=77/121) Mean±SD	Starters (N=43) Mean±SD	Completers (N=36) Mean±SD
Baseline			
Gender, female N (%)	54 (69.2%)*	37 (86%)	30 (83.3%)
Mean age (years)	46.97±9.44†	51.49±8.30	51.44±8.48
Height (m)	1.68±0.15	1.65±0.09	1.66±0.09
Weight (kg)	91.50±18.21 (N=29)	96.61±22.33	96.26±23.08
BMI (kg/m <sup>2</sup> )	32.55±6.99 (N=29)	35.51±7.38	34.79±7.33
16 weeks‡			
Weight loss (kg)		-5.40±4.43	$-6.00\pm4.34$
Weight loss (%)		-5.65±4.34	-6.33±4.22
BMI change (kg/m²)		-1.99±1.66	-2.20±1.63
24 weeks§			
Weight loss (kg)		-6.22±5.00	-7.01±4.83
Weight loss (%)		-6.58±5.12	-7.50±4.93
BMI change (kg/m²)		-2.29±1.87	-2.57±1.81
24 week engagement—in-app actions			
Meals logged (meals per week)		13.93±6.00	15.28±5.13
Exercise (times/week)		3.11±2.34	3.43±2.34
Time exercised (minutes/week)		126.61±110.76	141.60±112.88
Steps recorded (steps/week)		21116.87±18413.06	24045.97±18112.21
Number of weigh-ins (times/week)		1.04±0.93	1.17±0.96
Articles read (articles/week)		5.11±2.67	5.86±2.22
Group posts (posts/week)		0.51±0.85	0.59±0.91
Group comments (comments/week)		1.80±1.77	2.08±1.79
Messages to coach (messages/week)		3.32±2.77	3.78±2.75
Group likes (likes/week)		1.00±1.71	1.11±1.80

Weight change from 16 to 24 weeks was not significant.

<sup>\*</sup>p=0.036 between non-starters and starters.

<sup>†</sup>p=0.008 between non-starters and starters.

<sup>‡</sup>All changes from baseline to 16 weeks were significant in starters and completers, p<0.001, d=1.22 and 1.38, respectively. §All changes from baseline to 24 weeks were significant in starters and completers, p<0.001, d=1.24 and 1.45, respectively.

BMI, body mass index.

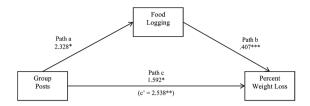


Figure 2 Food logging mediation of group posts on percent weight loss. \*p<0.05, \*\*p<0.01, \*\*\*p<0.001.

### CONCLUSIONS

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Contributors TT-R wrote the manuscript and conducted data analyses. AM is the principal investigator. AM co-wrote the manuscript and conducted data analyses. AM is also the guarantor of this work and, as such, had full access to all the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis. CR is the research coordinator, reviewed the manuscript, and oversaw the conduct of the study. MW is the coach manager, provided oversight to coaching and training with AM, and reviewed the manuscript. KF provided medical input in the study development, and co-wrote and reviewed the manuscript.

Competing interests None declared.

Ethics approval An advisory review Institutional Review Board (IRB) letter was obtained after study completion stating the study protocol would have been approved.

Provenance and peer review Not commissioned: externally peer reviewed.

Data sharing statement Owing to confidentiality agreements with research collaborators, supporting data can only be made available to bona fide researchers subject to a non-disclosure agreement on agreement by both parties. Details of the data and how to request access are available by contacting research@noom.com.

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