

## Supplementary Online Content 2

Jakcic JM, Davis KK, Rogers RJ, et al. Effect of wearable technology combined with a lifestyle intervention on long-term weight loss: the IDEA randomized clinical trial. *JAMA*. doi:10.1001/jama.2016.12858

**eTable 1.** Participants With Available and Valid Objectively Measured Physical Activity Data at Each Assessment Period

**eTable 2.** User Experience Responses, Completed at the 24 Month Assessment, for Use of the Bodymedia System Within the Intervention

This supplementary material has been provided by the authors to give readers additional information about their work.

**eTable 1. Participants With Available and Valid Objectively Measured Physical Activity Data at Each Assessment Period**

Outcome Assessment Period	Participants with Weight Data (N)	Participants with Objectively Measured Physical Activity Data (N)	Percent of Participants with Objectively Measured Physical Activity Data (%)	Participants with Valid Objectively Measured Physical Activity Data (N)	Percent of Participants with Valid Objectively Measured Physical Activity Data (%)*
Baseline	470	469	99.8%	457	97.4%
6 months	424	415	97.9%	392	94.5%
12 months	384	363	94.5%	354	97.5%
18 months	343	314	91.5%	301	95.9%
24 months	350	287	82.0%	281	97.9%

\*Valid data based on wearing the physical activity device for  $\geq 10$  hours per day for  $\geq 4$  days during the outcome assessment period.

**eTable 2. User Experience Responses, Completed at the 24 Month Assessment, for Use of the Bodymedia System Within the Intervention**

Instructions to Study Participants for Completing this Questionnaire: Please indicate your level of agreement or disagreement with each of the following statements relative to your past use of the BodyMedia System using the scale provided. If the statement does not apply to your experience, please select “Not Applicable”.

Statements Regarding Past Use of the BodyMedia System	Frequency of Responses*					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Response Missing
1. The BodyMedia System made it easier to monitor my dietary intake.	9	21	36	36	40	16
2. The BodyMedia System made it easier to monitor my exercise.	1	7	17	47	75	11
3. The BodyMedia System made it easier to understand how I needed to change my eating behaviors to control my weight.	7	17	31	49	40	14
4. The BodyMedia System made it easier to understand how I needed to change my exercise behaviors to control my weight.	2	9	23	57	55	12
5. The BodyMedia System provided valuable feedback and information to help me modify my eating patterns to control my weight.	5	23	27	54	35	14
6. The BodyMedia System provided valuable feedback and information to help me to modify my exercise to control my weight.	4	16	14	53	60	11
7. The BodyMedia System helped me to overcome the barriers that I typically experience to eating a healthy diet.	14	34	53	26	17	14
8. The BodyMedia System helped me to overcome the barriers that I typically experience to exercising.	10	28	39	41	29	11

Statements Regarding Past Use of the BodyMedia System	Frequency of Responses					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Response Missing
9. The BodyMedia System helped me to interact with my weight loss counselor regarding my diet.	11	17	38	42	35	15
10. The BodyMedia System helped me to interact with my weight loss counselor regarding my exercise.	7	12	38	47	38	16
11. The BodyMedia System made me more aware of my eating behaviors compared to if I did not use the BodyMedia System.	12	22	28	44	34	18
12. The BodyMedia System made me more aware of my exercise compared to if I did not use the BodyMedia System.	7	7	15	42	73	14
13. The BodyMedia System made me more aware of my weight loss efforts compared to if I did not use the BodyMedia System.	7	11	23	59	42	16
14. The BodyMedia System motivated me to be adherent with my eating behaviors.	8	30	42	40	19	19
15. The BodyMedia System motivated me to be adherent with my exercise.	8	10	27	51	47	15
16. The BodyMedia System motivated me to be adherent with my weight loss efforts.	6	13	34	54	36	15
17. The BodyMedia System made me more accountable for my weight loss efforts.	4	10	25	64	40	15
18. It was easy to setup the BodyMedia software on my computer.	3	3	11	43	83	18
19. The BodyMedia software was easy to use to track my eating behaviors.	7	28	27	40	38	18
20. The BodyMedia software was easy to use to track my exercise.	2	3	9	46	81	17
21. The BodyMedia software was easy to use to track my weight loss progress.	0	4	22	54	62	16

Statements Regarding Past Use of the BodyMedia System	Frequency of Responses					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Response Missing
22. The armband was easy to setup.	0	0	5	54	80	19
23. The armband was comfortable to wear.	15	22	37	47	24	13
24. Wearing the armband did not interfere with my job.	4	12	17	55	54	16
25. Wearing the armband did not interfere with my social life.	9	26	25	53	32	13
26. Wearing the armband did not make me feel uncomfortable around others.	13	22	25	46	40	12
27. The digital display was comfortable to wear.	10	9	24	41	23	51
28. Wearing the digital display did not interfere with my job.	5	7	15	46	31	54
29. Wearing the digital display did not interfere with my social life.	9	11	14	40	31	53
30. Wearing the digital display did not make me feel uncomfortable around others.	7	14	17	38	33	49
31. Receiving immediate feedback from the armband on the display was helpful in increasing my exercise.	9	7	19	38	44	41
32. Receiving immediate feedback from the armband on the display was helpful in my weight loss efforts.	11	5	21	40	41	40

Question	Possible Responses	Response Frequency
On average, I used the BodyMedia System to assist me with tracking my eating behaviors	Every day	27
	At least 3 days per week	20
	At least once per week	15
	At least one week per month	10
	Less than one week per month	21
	Only when I was struggling with my weight control efforts	27
	Response Missing	38
On average, I used the software component of BodyMedia to assist me with tracking my exercise behaviors	Every day	24
	At least 3 days per week	31
	At least once per week	21
	At least one week per month	13
	Less than one week per month	25
	Only when I was struggling with my weight control efforts	21
	Response Missing	23
On average, I wore the armband from the BodyMedia System to assist me with tracking my exercise	Every day	46
	At least 3 days per week	30
	At least once per week	9
	At least one week per month	17
	Less than one week per month	16
	Only when I was struggling with my weight control efforts	17
	Response Missing	23

<b>Question</b>	<b>Possible Responses</b>	<b>Response Frequency</b>
On average, I wore the digital display from the BodyMedia System to assist me with tracking my exercise.	Every day	9
	At least 3 days per week	16
	At least once per week	11
	At least one week per month	10
	Less than one week per month	28
	Only when I was struggling with my weight control efforts	26
	Response Missing	58
When I did not wear the armband, the main reason that I did not wear the armband was.	The armband was uncomfortable.	22
	I did not find the armband provides me with helpful information.	6
	Family, friends, or coworkers questioned me about the armband.	4
	The armband was visible and I could not conceal it under my clothing.	23
	Wearing the armband made me feel uncomfortable in public situations.	11
	Other	76
	Response Missing	16

\*Data based on 158 participants. Data missing for 79 participants (56 participants did not participate in the 24 month assessment 23 participants who participated in the 24 month assessment were not provided the opportunity to complete this questionnaire).