

Unveiling consumer preferences and intentions for cocreated features of a combined diet and physical activity app: a cross-sectional study in four European countries

Article

Supplemental Material

Mahmoodi Kahriz, B., Snuggs, S. ORCID: <https://orcid.org/0000-0001-5191-9517>, Sah, A., Clot, S. ORCID: <https://orcid.org/0000-0002-4964-825X>, Lamport, D. ORCID: <https://orcid.org/0000-0002-4592-0439>, Forrest, J., Helme - Guizon, A., Wilhelm, M.-C., Caldara, C., Anin, C. V. and Vogt, J. ORCID: <https://orcid.org/0000-0002-3178-2805> (2023) Unveiling consumer preferences and intentions for cocreated features of a combined diet and physical activity app: a cross-sectional study in four European countries. *JMIR Human Factors*, 10. e44993. ISSN 2292-9495 doi: <https://doi.org/10.2196/44993> Available at <https://centaur.reading.ac.uk/113087/>

It is advisable to refer to the publisher's version if you intend to cite from the work. See [Guidance on citing](#).

To link to this article DOI: <http://dx.doi.org/10.2196/44993>

Publisher: JMIR Publications

All outputs in CentAUR are protected by Intellectual Property Rights law, including copyright law. Copyright and IPR is retained by the creators or other copyright holders. Terms and conditions for use of this material are defined in the [End User Agreement](#).

www.reading.ac.uk/centaur

CentAUR

Central Archive at the University of Reading

Reading's research outputs online

Supplementary materials

Example quotations from the co-creative work aligning with each of the questionnaire items.

Table S1

Example suggestions from co-creation study to support app features named in the questionnaire

Questionnaire item	Example quotation
Suggest home workouts no equipment required	<i>Videos, preferably without the use of gym equipment as lots of people are unable to purchase gym equipment</i>
Exercise tips	<i>An app service that gives exercising tips</i>
Show your progress in graphs and charts	<i>Have a chart of activities, or diet</i>
Suggest quick workouts	<i>Include 15 minutes of physical activity</i>
Healthy eating tips	<i>There would recipes and tips along the way</i>
Set regular goals	
Set goals for you	<i>Maybe you could set yourself goals with your diet that you would add into an app</i>
Planner and tracker of your eating and exercise	<i>Keeping track of food and exercise can become addictive and makes you want to do better!</i>
Provide a step by step plan for eating and exercise	<i>Trained people who can make a plan for you, check up on you and encourage you</i>
Set targets and offer feedback	<i>By using the app to monitor extra food consumed, exercise patterns and body stats, it can suggest exercise plans</i>
Motion sensor to detect your activity level	<i>It can make tailored recommendations according to what goals you inputted</i>
Meal planning advice	<i>Monitor what you are eating throughout the day...it would create menus, recipes, shopping lists and meal planners</i>
Provide recipe suggestions according to your shopping list	<i>Offer recipe guidance, and a selection of possible recipes based on your shopping and the food stuffs that you can input as having in the store cupboard</i>
Personalised recipes	<i>Have recipes that feature these foods so you know what to buy and how to prepare them</i>
Rewards for healthy eating	<i>Give up cake for a month and receive vouchers for free fruit</i>
Connected to running apps strava, fitbit	<i>Link the app to Fitbit or similar so that it can measure and make tailored recommendations</i>
Provide advice based on your mood	<i>There would be a section that allowed you to monitor how you are feeling day to day</i>

Reminders	<i>Whilst shopping, if you are getting reminders, it's reinforcing the idea</i>
Guidance from a professional dietician/fitness coach	<i>Nutritionists, personal trainers, who would be there just to help with advice and new recipes</i>
Goals set by a team of mentors	<i>They are able to set goals, or have them set by a trainer, which would be constantly changing and adapting to how they are progressing</i>
Mood detector suggest food and activity according to your mood	<i>It would be useful for someone who is doing this on their own and needs the support to continue</i>
Provide location of local producers	<i>In conjunction with supermarkets would make it more affordable, using wonky veg etc.</i>
Get feedback from a team of mentors	<i>A plethora of health and fitness professionals all inputting into your pursuit, supporting your journey</i>
Reward for trying rather than succeeding	<i>The person can try what they like after trying an activity, then continue to take part or start the circuit again</i>
Motivational messages	<i>The app could send you notifications with motivational pictures and quotes</i>
Sharing and exchanging recipes	<i>If you wanted to cook a healthy meal but lacked inspiration...take a photo of your fridge...other people could help, suggesting meals you could cook</i>
Emotional/moral support from a professional	<i>It's a network to offer moral, emotional and physical support</i>
Mindfulness, yoga and meditation short clips	<i>Mindfulness, breathing exercises and stretching exercises could be included</i>
Latest news and trends in eating and exercise	<i>Perhaps a newsletter linked to the app...it could feature interviews with people who have used it to get healthy</i>
Connected to supermarket for grocery shopping	<i>It could easily be incorporated into something like the Tesco Clubcard, or Sainsbury's Nectar card...it would be one of their offerings to promote healthy eating</i>
Scanner for supermarket receipts	<i>I keep a log of all the food I buy along with Best Before Date. How about an app which is a log of the same details, notifies you when the date is coming up?</i>
Match you to app users in similar situation as you	<i>The app could have some kind of community behind it which would allow you to connect with people in similar situations</i>
Community support	<i>People most succeed when they have support from others</i>
Competitions among users	<i>Generate competitions, with rewards - fun amongst family and friends</i>
Challenges with close ones	<i>Weekly workshops with games and challenges, and prizes</i>
Connected to close ones	<i>The app would geolocate you and link you with others nearby who are also looking to go out exercising</i>
Connected to Facebook, Twitter, Instagram etc	<i>There could be a private Facebook group, for example, where you share personal stories and struggles</i>

Ranking the preferences of mobile app features based on consumers' attitudes

Table S2

Rank case analysis on mean score of attitudes towards mobile app features and the rewards for app features.

App features			Rewards		
Ranking	Items	M	Ranking		M
1	Suggest home workouts (no equipment required)	5.98	1	Gift vouchers	5.56
2	Exercise tips	5.73	2	Discount on your shopping	5.55
2	Show your progress in graphs and charts	5.73	3	Prizes like books, watches, fitbit, sports equipment	5.45
4	Suggest quick workouts	5.65	4	Points that can be redeemed for experiences, shopping, days out	5.40
5	Healthy eating tips	5.63	5	Points can be redeemed for charitable causes	4.88
6	Set regulatory goals	5.62			
7	Set goals for you	5.53			
8	Planner and tracker of your eating and exercise	5.50			
9	Provide a step by step plan for eating and exercise	5.46			
10	Motion sensor (to detect your activity level)	5.38			
11	Meal planning advice	5.36			
12	Provide recipe suggestions according to your shopping list	5.36			
13	Personalised recipes	5.19			
14	Rewards for healthy eating	4.92			
15	Connected to running apps (strava, fitbit)	4.86			
16	Provide advice based on your mood	4.85			
17	Reminders	4.83			
18	Guidance from a professional (dietician/fitness coach)	4.77			
19	Mood detector (suggest food and activity according to your mood)	4.67			
20	Provide location of local producers	4.64			
21	Reward for trying rather than succeeding	4.60			
22	Motivational messages	4.50			
23	Sharing and exchanging recipes	4.49			
24	Emotional/moral support from a professional	4.36			
25	Mindfulness, yoga and meditation (short clips)	4.30			
26	Latest news and trends in eating and exercise	4.29			
27	Connected to supermarket (for grocery shopping)	4.13			

Health app combining diet and physical activity advice: Preferences and behavioural intentions towards co-created app features

4

28	Scanner for supermarket receipts	4.07
29	Match you to app users in similar situation as you	3.96
30	Community support	3.88
31	Competitions among users	3.62
32	Challenges with close ones	3.59
33	Connected to close ones	3.55
34	Connected to Facebook, twitter, Instagram etc	2.72

Correlations among variables

We used correlation analyses (see Table S3) to understand the relationships between consumers' positive app feature attitudes with their intention to use and willingness to pay for the app and to explore how these variables are associated with differences in consumers' health status, motivational factors, and basic demographics and socioeconomic status (SES).

Table S3

Correlations between variables

		1	2	3	4	5	6	7	8
1-Age	<i>r</i>	-							
	sig								
2-Gender	<i>r</i>	.090	-						
	sig	.197							
3-Education	<i>r</i>	-.041	.049	-					
	sig	.554	.483						
4-Income	<i>r</i>	.148	.049	.183	-				
	sig	.038	.496	.010					
5-BMI	<i>r</i>	.175	.087	-.218	-.080	-			
	sig	.013	.219	.002	.270				
6-Motivation-EAT	<i>r</i>	-.043	-.075	-.135	-.021	.173	-		
	sig	.542	.286	.052	.767	.014			
7-Barrier-EAT	<i>r</i>	-.089	.008	-.213	-.125	.275	.141	-	
	sig	.202	.909	.002	.078	<.001	.043		
8- Solution -EAT	<i>r</i>	-.068	-.151	-.088	-.130	.003	.626	.116	-
	sig	.331	.030	.206	.067	.971	<.001	.096	
9-Motivation- PHYSIC	<i>r</i>	-.083	-.057	-.094	.059	.158	.810	.163	.577
	sig	.237	.414	.177	.411	.024	<.001	.019	<.001
10-Barrier-PHYSIC	<i>r</i>	-.139	-.100	-.186	-.162	.187	.099	.783	.097
	sig	.045	.153	.007	.023	.008	.156	<.001	.166
11- Solution - PHYSIC	<i>r</i>	-.111	-.102	-.066	-.072	.065	.509	.053	.707
	sig	.111	.144	.347	.315	.358	<.001	.449	<.001
12-F1	<i>r</i>	-.020	-.037	.022	-.027	.043	.423	.064	.616
	sig	.779	.596	.751	.704	.539	<.001	.360	<.001
13-F2	<i>r</i>	-.090	-.113	-.083	.065	.023	.410	.058	.548
	sig	.197	.104	.233	.364	.746	<.001	.408	<.001
14-F3	<i>r</i>	-.152	-.052	-.104	-.126	.007	.397	-.021	.498
	sig	.029	.456	.137	.077	.923	<.001	.767	<.001
15-F4	<i>r</i>	-.063	-.060	-.134	-.097	.136	.421	.194	.459
	sig	.370	.388	.055	.173	.052	<.001	.005	<.001
16- Health Confidence	<i>r</i>	-.080	-.020	-.043	.055	.052	.424	.007	.488
	sig	.250	.775	.537	.440	.460	<.001	.922	<.001
17- Health Maintenance	<i>r</i>	-.118	-.073	-.100	.007	.106	.446	.016	.548
	sig	.091	.297	.151	.923	.131	<.001	.816	<.001
18-Intention	<i>r</i>	-.105	-.021	-.086	.005	.078	.469	.068	.564
	sig	.133	.761	.221	.940	.271	<.001	.330	<.001
19-Pay	<i>r</i>	-.088	-.020	.040	.053	.075	.156	.029	.233
	sig	.211	.773	.572	.465	.291	.026	.679	<.001
20-Health/Activity	<i>r</i>	.093	-.055	.132	.146	-.264	.268	-.477	.241
	sig	.182	.433	.059	.039	<.001	<.001	<.001	<.001
21-Cluster Membership	<i>r</i>	-.244	-.117	-.136	-.139	.017	.427	.107	.597
	sig	<.001	.107	.061	.055	.819	<.001	.141	<.001

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for

exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood

management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health

Maintenance = Perception of ability to maintain healthy eating and exercise habits; Intention = Intention to use

the app; Pay = Willingness to pay for the app.

Table S3 Continuance

Correlations between variables

		9	10	11	12	13	14	15	16	17	18	19	20	21
9-	<i>r</i>	-												
Motivation -	<i>sig</i>													
PHYSIC														
10-Barrier-	<i>r</i>	.069	-											
PHYSIC	<i>sig</i>	.321												
11- Solution	<i>r</i>	.570	.020	-										
-PHYSIC	<i>sig</i>	<.001	.770											
12-F1	<i>r</i>	.425	.043	.573	-									
	<i>sig</i>	<.001	.538	<.001										
13-F2	<i>r</i>	.435	.024	.475	.626	-								
	<i>sig</i>	<.001	.728	<.001	<.001									
14-F3	<i>r</i>	.329	-.024	.393	.546	.653	-							
	<i>sig</i>	<.001	.732	<.001	<.001	<.001								
15-F4	<i>r</i>	.399	.226	.342	.515	.530	.494	-						
	<i>sig</i>	<.001	.001	<.001	<.001	<.001	<.001							
16- Health	<i>r</i>	.447	-.045	.385	.476	.633	.433	.406	-					
Confidence	<i>sig</i>	<.001	.525	<.001	<.001	<.001	<.001	<.001						
17- Health	<i>r</i>	.515	-.037	.481	.528	.678	.531	.427	.800	-				
Maintenance	<i>sig</i>	<.001	.594	<.001	<.001	<.001	<.001	<.001	<.001					
18-Intention	<i>r</i>	.530	.029	.533	.546	.612	.467	.493	.740	.813	-			
	<i>sig</i>	<.001	.683	<.001	<.001	<.001	<.001	<.001	<.001	<.001				
19-Pay	<i>r</i>	.204	.082	.209	.312	.215	.151	.196	.272	.338**	.319	-		
	<i>sig</i>	.003	.242	.003	<.001	.002	.032	.005	<.001	<.001	<.001			
20-Health /	<i>r</i>	.235	-.527	.289	.242	.167	.123	-.034	.321	.239**	.237	.058	-	
Activity	<i>sig</i>	<.001	<.001	<.001	<.001	.016	.078	.628	<.001	<.001	<.001	.410		
21- Cluster	<i>r</i>	.467	.023	.551	.581	.620	.569	.522	.572	.635	.726	.320	.224	-
Membership	<i>sig</i>	<.001	.748	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	.002	

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for

exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood

management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health

Maintenance = Perception of ability to maintain healthy eating and exercise habits; Intention = Intention to use

the app; Pay = Willingness to pay for the app.

Predicting roles of factors of app feature attitudes on self-efficacy

To investigate whether factors of app feature attitudes predict ‘*perception of ability and confidence for healthy eating and exercise*’ and ‘*perception of ability to maintain healthy eating and exercise habits*’, we used two multiple regression analyses (see Table S4 and S5).

Table S4

Regression analysis summary for factors of app feature attitudes predicting perception of ability and confidence for healthy eating and exercise

	<i>B</i>	<i>SE</i>	β	<i>Sig</i>
(Constant)	3.099	1.575		.051
F1: Social support, connectedness and mindfulness	.050	.032	.114	.119
F2: Goal setting, tracking, and advice for exercising	.245	.037	.529	<.001
F3: Tips and advice for food and home workouts	-.0005	.043	-.009	.900
F4: Digital score connection and mood management	.064	.058	.073	.276
<i>R</i> ²			.415	
Adjusted <i>R</i> ²			.403	
<i>F</i>			35.677	<.001

Multiple regression analysis is used to test which one of the factors related to app features significantly predict participants' ‘*perception of ability and confidence for healthy eating and exercise*’ (see Table S4). The results of the regression indicate that the only factor two (‘*goal setting, tracking, and advice for exercising*’) significantly predicts participants’ ‘*perception of ability and confidence for healthy eating and exercise*’ ($\beta = .529, p < .001$).

Table S5

Regression analysis summary for factors of app features predicting perception of ability to maintain healthy eating and exercise habits

	<i>B</i>	<i>SE</i>	β	<i>Sig</i>
(Constant)	-.078	.797		.922
F1: Social support, connectedness and mindfulness	.031	.016	.134	.051
F2: Goal setting, tracking, and advice for exercising	.125	.019	.501	<.001
F3: Tips and advice for food and home workouts	.035	.022	.112	.109

F4: Digital score connection and mood management	.017	.029	.037	.560
R^2			.486	
Adjusted R^2			.475	
F			47.666	<.001

Multiple regression analysis is used to test which one of the factors related to app features significantly predict participants' 'perception of ability to maintain healthy eating and exercise habits' (see Table S5). The results of the regression indicate that the only factor two ('goal setting, tracking, and advice for exercising') significantly predicts participant's 'perception of ability to maintain healthy eating and exercise habits' ($\beta = .501, p < .001$).

Mediating impact of self-efficacy

We used Process Macro model 4 to investigate whether self-efficacy ('perception of ability and confidence for healthy eating and exercise' and 'perception of ability to maintain healthy eating and exercise habits') mediates the relationship between intention to use and intention to pay for the app.

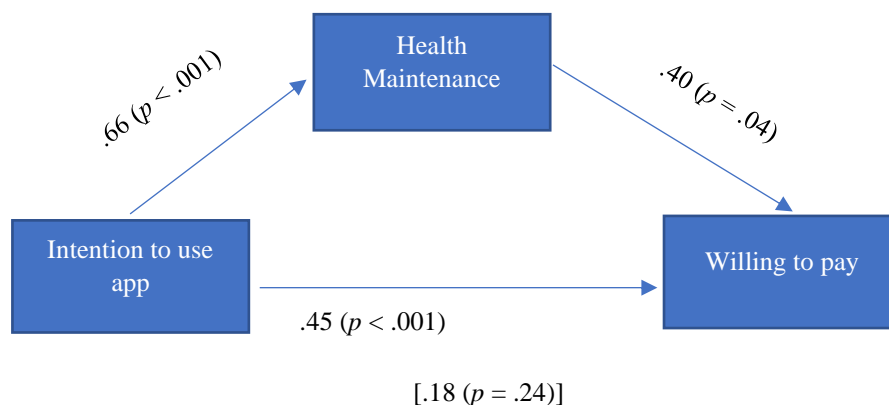


Figure S1. Direct and indirect effects of intention to use the app on willingness to pay for the app through perception of ability to maintain healthy eating and exercise habits; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits.

The results indicate a significant mediating impact of 'perception of ability to maintain healthy eating and exercise habits' on the link between intention to use the app and willingness to

pay for the app, $B = .26$, $SE = .12$, $CI [.04, .53]$. This means that higher intention to use the app is associated with higher ‘*perception of ability to maintain healthy eating and exercise habits*’ which in turn leads to higher willingness to pay for the app.

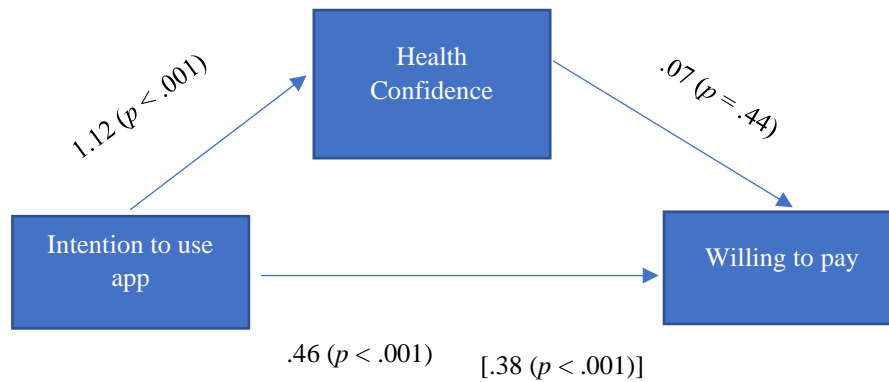


Figure S2. Direct and indirect effects of intention to use the app on willingness to pay for the app through perception of ability and confidence for healthy eating and exercise; Health Confidence = Perception of ability and confidence for healthy eating and exercise.

However, the results do not indicate a significant mediating impact of ‘*perception of ability and confidence for healthy eating and exercise*’ on the link between intention to use app and willingness to pay for the app, $B = .08$, $SE = .11$, $CI [-.14, .30]$.

Backward regression analyses for intention to use an app and willingness to pay for an app

Table S6

Summary of backward stepwise regression analysis for variables predicting intention to use the app

Predictor	B	SE B	β	Sig
Constant	-2.950	.589		<.001
Digital score connection and mood management	.084	.025	.153	<.001
Health Maintenance	.690	.060	.574	<.001
Cluster Membership	2.222	.361	.307	<.001
Social support, connectedness and mindfulness \times BMI	.327	.116	.104	.005
Goal setting, tracking, and advice for exercising \times Health Confidence	.664	.176	.319	<.001
Tips and advice for food and home workouts \times Health Confidence	-.722	.189	-.316	<.001

R^2	.762	
Adjusted R^2	.754	
F	98.274	<.001

Notes. Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits

Table S7

Descriptive statistics of classification variables in Clusters 1 (Low Health App Users) and 2 (Motivated Health App Enthusiasts), and t test results for investigating differences between the two clusters.

Variables	Cluster 1 (N= 58)		Cluster 2 (N= 133)		t	Sig	Effect size (η^2)
	Cluster centers	SD	Cluster centers	SD			
<i>Demo/Geographic</i>							
Age	.390	1.009	-.144	.969	3.463	.001	.069
Gender	.216	1.033	-.037	.981	1.619	.107	.016
Education	.200	1.091	-.092	.938	1.885	.061	.021
Family status	.15598	1.038	-.026	.968	1.171	.243	.008
Number of households	.263	1.122	-.102	.909	2.378	.018	.033
Income	.208	1.106	-.095	.952	1.929	.055	.022
Country	.145	.866	-.158	1.038	1.956	.052	.023
<i>Health factors</i>							
Height	.168	.970	-.017	1.029	1.172	.243	.008
Weight	-.006	.529	-.030	.377	.358	.721	.0008
BMI	.033	1.246	.069	.868	-.229	.819	.0003
Health/Activity	-.338	.988	.150	.979	-3.162	.002	.058
<i>Previous Experience/Knowledge</i>							
Using app for healthy eating	-.607	.860	.240	.928	-5.931	<.001	.178
Using app for physical activity	-.614	.974	.228	.909	-5.767	<.001	.170
<i>Motivation, barriers and solutions</i>							
Motivation-EAT	-.617	.832	.268	.881	-6.491	<.001	0.206
Barrier-EAT	-.108	1.014	.117	.956	-1.479	.141	0.013
Solution -EAT	-.899	.674	.355	.819	-10.243	<.001	0.393
Motivation-PHYSIC	-.684	.842	.309	.881	-7.256	<.001	0.245
Barrier-PHYSIC	.002	1.001	.051	.971	-.321	.748	0.0006
Solution -PHYSIC	-.848	.861	.360	.837	-9.087	.000	0.328
<i>App Feature Attitude</i>							
F1: Social support, connectedness, and mindfulness	-.864	.742	.387	.840	-9.802	<.001	.372
F2: Goal setting, tracking, and advice for exercising	-.953	1.073	.400	.631	-10.873	<.001	.422
F3: Tips and advice for food and home workouts	-.873	1.034	.371	.725	-9.524	<.001	.357
F4: Digital score connection and mood management	-.821	.834	.323	.879	-8.405	<.001	.304
<i>Rewards Attitude</i>							
Rewards: Vouchers	-.452	1.244	.248	.746	-4.812	<.001	.125
Rewards: Prizes	-.655	1.248	.272	.727	-6.440	<.001	.204
Rewards: Experience	-.485	1.140	.223	.846	-4.768	<.001	.123
Rewards: Discount	-.529	1.208	.249	.747	-5.430	<.001	.154
Rewards: Charitable	-.491	1.150	.210	.861	-4.654	<.001	.118
<i>Self-efficacy</i>							

Health app combining diet and physical activity advice: Preferences and behavioural intentions towards co-created app features

							11
Health Confidence	-.819	1.066	.400	.667	-9.583	<.001	.362
Health Maintenance	-.941	1.097	.422	.570	-11.290	<.001	.441
<i>Use/Pay</i>							
Intention	-1.059	.857	.492	.585	-14.533	<.001	.566
Pay	-.476	.498	.212	1.079	-4.649	<.001	.117

Note. Analysis is done based on standardized (Z) scores. Country; Health/Activity = Healthy Lifestyle scale; Motivation-EAT=Motivation to eat healthily; Barrier-EAT = Barriers to eating healthily; Solution -EAT = Solutions to eating healthily; Motivation-PHYSIC= Motivation to do physical activity and exercise; Barrier -PHYSIC = Barriers to physical activity and exercise; Solution -PHYSIC = Solutions for physical activity/exercise; F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits; Intention = Intention to use the app; Pay = Willingness to pay for the app.

Table S8

Descriptive statistics of demographic/geographic variables and the questions related to using apps for healthy eating and physical activity in Clusters 1 (Low Health App Users) and 2 (Motivated Health App Enthusiasts)

Demographic/Geographic variables	Cluster	
	1	2
Gender		
Female	24 (41.4%)	70 (52.6%)
Male	33 (56.9%)	63 (47.4%)
Other	1 (1.6%)	0 (0.0%)
	Total	133 (100%)
Education		
Less than High School	1 (1.7%)	1 (0.8%)
High School / GCSE	2 (3.4%)	12 (9%)
A Levels	10 (17.2%)	20 (15 %)
Bachelors degree	17 (29.3%)	54 (40.6%)
Masters degree	21 (36.2%)	41 (30.8%)
Doctoral Degree	4 (6.9%)	4 (3 %)
Other	3 (5.2%)	1 (0.8%)
	Total	133 (100%)
Family status		
Single without child/children	21 (36.2%)	51 (38.3%)
Single with child/children from present or past relationship	1 (1.7%)	10 (7.5%)
Couple without child/children	14 (24.1%)	39 (29.3%)
Couple with child/children from present or past relationship	22 (37.9%)	33 (24.8%)
	Total	133 (100%)
Country		
UK	8 (13.8%)	43 (32.3%)
Germany	16 (27.6%)	36 (27.1%)
France	22 (37.9%)	23 (17.3%)
Italy	12 (20.7%)	31 (22.5%)
	Total	129 (100%)

What do you think about using an app for healthy eating?		
I have never thought about using an app for that.	39 (67.2%)	19 (14.3%)
I have thought about using an app for that, but so far I did not do it.	8 (13.8%)	41 (30.8%)
I have thought about using an app for that, but it is not necessary for me to do it	3 (5.2%)	16 (12%)
I am currently using an app for that and intend to continue to use it	1 (1.7%)	19 (14.3%)
I have used an app for that, but I do not use it anymore.	7 (12.1%)	38 (28.6%)
Total	58 (100%)	133 (100%)
What do you think about using an app to for physical activity and exercise?		
I have never thought about using an app for that.	27 (46.6%)	9 (6.8%)
I have thought about using an app for that, but so far I did not do it.	14 (24.1%)	38 (28.6%)
I have thought about using an app for that, but it is not necessary for me to do it.	3 (5.2%)	9 (6.8%)
I am currently using an app for that and intend to continue to use it.	6 (10.3%)	34 (25.6%)
I have used an app for that, but I do not use it anymore.	8 (13.8%)	43 (32.3%)
Total	58 (100%)	133 (100%)

Exploring differences between countries in their attitude towards app features and intention to use.

Table S9

One-way ANOVA results to compare the intention to use and attitude towards app factors between countries

Variables	df	F	Sig
F1: Social support, connectedness and mindfulness	3, 206	3.158	.025
F2: Goal setting, tracking, and advice for exercising	3, 206	1.509	.213
F3: Tips and advice for food and home workouts	3, 206	3.578	.015
F4: Digital score connection and mood management	3, 206	5.003	< .001
Intention to use	3, 206	3.256	.023

Measurements

App feature attitude

The attitude towards mobile app features scale (See Table S10) included 37 items. We told participants that we are in the process of designing an app to motivate people to eat healthily and exercise regularly. Hereafter, we asked them to rate the features of the app (See Table S10) according to how valuable they find them on a scale from 1= *has no value at all* to 7 = *extremely valuable*. Items 27, 27A and 27B were removed from the analysis because of incomplete answers.

Reward Attitude

We asked participants, what form of rewards they would like to receive from a mobile app about healthy food and exercising which provided rewards for achieving goals. In five questions (See Table S10), we asked them to indicate their answers on a scale from 1= *strongly disagree* to 7 = *strongly agree*.

Table S10

Items of the scales App feature attitudes and Rewards attitudes

App feature attitudes	Rewards attitudes
1. Latest news and trends in eating and exercise	1. Gift vouchers
2. Exercise tips	2. Prizes like books, watches, fitbit, sports equipment
3. Healthy eating tips	3. Points that can be redeemed for experiences, shopping, days out
4. Meal planning advice	4. Discount on your shopping
5. Set regular goals (daily/weekly/monthly)	5. Points can be redeemed for charitable causes
6. Personalised recipes	
7. Provide a step by step plan for eating and exercise	
8. Sharing and exchanging recipes	
9. Connected to Facebook, twitter, insta etc	
10. Connected to close ones	
11. Community support	
12. Connected to supermarket (for grocery shopping)	
13. Provide recipe suggestions according to your shopping list	
14. Provide location of local producers	
15. Rewards for healthy eating	
16. Competitions among users	
17. Reminders	

18. Planner and tracker of your eating and exercise
 19. Show your progress in graphs and charts
 20. Connected to running apps (strava, fitbit)
 21. Provide advice based on your mood
 22. Set goals for you
 23. Match you to app users in similar situation as you
 24. Motion sensor (to detect your activity level)
 25. Scanner for supermarket receipts
 26. Mood detector (suggest food and activity according to your mood)
 27. Set targets and offer feedback
 - 27A. Goals set by a team of mentors
 - 27B. Get feedback from a team of mentors
 28. Suggest quick workouts
 29. Suggest home workouts (no equipment required)
 30. Mindfulness, yoga and meditation (short clips)
 31. Reward for trying rather than succeeding
 32. Guidance from a professional (dietician/ fitness coach)
 33. Emotional/moral support from a professional
 34. Motivational messages
 35. Challenges with close ones
-

Self-efficacy for physical activity and healthy eating

We used two different measurements (see Table S11) to evaluate people's self-efficacy regarding physical activity and healthy eating.

'Perception of ability and confidence for healthy eating and exercise'. We asked participants what they thought about using the described mobile app to track their healthy eating and exercising habits. We asked participants to answer four questions on a scale from 1= *strongly disagree* to 7 = *strongly agree*.

'Perception of ability to maintain healthy eating and exercise habits'. This is another self-efficacy measurement that we used to evaluate the extent which participants agree that the app would help them to maintain healthy eating and physical activity. We asked participants to indicate their agreement with the statements on a scale from 1= *strongly disagree* to 7 = *strongly agree*.

Items of the self-efficacy scales

Perception of ability and confidence for healthy eating and exercise	Perception of ability to maintain healthy eating and exercise habits
1. If I use an app with the above-mentioned characteristics, I will be able to exercise regularly in the next 12 weeks.	1. This app would help me to maintain healthy eating
2. If I use an app with the above-mentioned characteristics, I will be confident over the next 12 weeks I could overcome obstacles that prevent me from exercising regularly.	2. This app would help me maintain physical activity and exercise
3. If I use an app with the above-mentioned characteristics, I will be able to eat healthily in the next 12 weeks.	
4. If I use an app with the above mentioned characteristics, I will be confident over the next 12 weeks I could overcome obstacles that prevent me from eating healthily.	

Motivation to eat healthily and do physical activity (These scales are reported in Snuggs et al. 2022)

In seventeen questions (see Table S12), we asked participants to indicate to what extent the factors motivate them to pursue a healthy diet. Similarly, in fifteen questions (see Table S12), we asked participants to indicate to what extent the factors motivate them to do regular physical activity and exercises on a scale from 1= *strongly disagree* to 7 = *strongly agree*.

Table S12

Items of the scales motivation to eat healthily and do physical activity

Motivation to eat healthily	Motivation to do physical activity
1. Encouragement from close ones	1. Encouragement from close ones
2. Support from close ones	2. Support from close ones
3. Pressure/ comments from close ones	3. Pressure/ comments from close ones
4. Enjoyment from eating healthy food	4. Enjoyment from physical activity/exercise
5. Looking fit	5. Looking fit
6. Weight loss	6. Weight loss
7. Impress others	7. Impress others
8. Feel healthy	8. Feel healthy
9. Constant reminders keep me motivated to eat healthily	9. Constant reminders keep me motivated to eat healthily
10. Seeing and tracking progress	10. Seeing and tracking progress
11. Setting health goals for myself	11. Setting health goals for myself
12. Guilt after eating unhealthy food	12. Guilt after eating unhealthy food
13. Shame from current state of health	13. Shame from current state of health
14. Medical advice or illness	14. Medical advice or illness

- | | |
|---|---|
| 15. Take care of myself | 15. So that I can celebrate the results of exercising |
| 16. Take care of my close ones | |
| 17. So that I can celebrate my success/result from healthy eating | |
-

Barriers to eating healthily and do physical activity (These scales are reported in Snuggs et al. 2022)

In fourteen questions (see Table S13), we asked participants to indicate the extent to which the barriers hinder them from pursuing a healthy diet. Similarly, using the same fourteen questions (see Table S13), we asked participants to indicate to what extent the barriers hinder them from doing regular physical activity and exercises on a scale from 1= *strongly disagree* to 7 = *strongly agree*.

Table S13

Items of the scales barriers to eating healthily and do physical activity

Items of the barrier scales
1. I don't have the time
2. I don't have the money
3. I think it takes too much effort o
4. I don't have the skills
5. I lack self control
6. I give in to temptations
7. I don't have the support of people close to me
8. I'm too stressed
9. I am in a bad mood
10. I lack a routine
11. It is difficult to change my habits
12. I don't know how to go about it
13. Lack of professional guidance
14. I don't care about eating healthily

Solutions to eating healthily and do physical activity (These scales are reported in Snuggs et al. 2022)

In nineteen questions (see Table S14), we asked participants to indicate how the solutions help them have a sustainable healthy eating on a scale from 1= *strongly disagree* to 7 = *strongly agree*. Moreover, in twenty questions, we asked them to indicate how the

solutions help them have sustainable physical activity and exercises on a scale from 1=

strongly disagree to 7 = *strongly agree*.

Table S14

Items of the scales solutions to eating healthily and do physical activity

Solutions to eating healthily	Solutions to do physical activity
1. Set small goals	1. Set small goals
2. Set realistic expectations	2. Set realistic expectations
3. Make flexible plans	3. Make flexible plans
4. Set regular goals (daily/weekly/monthly)	4. Set regular goals (daily/weekly/monthly)
5. Seek professional advice (dietician)	5. Seek professional advice (fitness coach)
6. Install/Use a health app	6. Use/Install a fitness app
7. Keep a diary	7. Keep a diary
8. Share my recipes in a community (online/with close ones)	8. Share my exercise routine in a community (online/with close ones)
9. Make meal plans	9. Make exercise plans
10. Track my progress	10. Track my progress
11. Practice self control/willpower	11. Practice self control/willpower
12. Avoid temptation	12. Avoid temptation
13. Practice mindfulness (yoga/meditation)	13. Mindfulness (yoga/meditation)
14. Seek support from similar people	14. Seek support from similar people
15. Make healthy eating enjoyable for myself	15. Make exercise enjoyable for yourself
16. Pick healthy food that I like	16. Pick exercises that I like
17. Choose foods that provide quick results	17. Pick exercises that are most efficient
18. Set constant reminders	18. Choose activities that provide quick results
19. Reward myself or close ones	19. Set constant reminders
	20. Reward myself or others

Intention to use the app

We asked participants to indicate the extent to which they would intend to use the mobile app for healthy eating and exercise in the next six months (see Table S15). In particular, we asked them to answer two questions on a scale from 1= *strongly disagree* to 7 = *strongly agree*.

Table S15

Items of the scales Intention to use the app

Intention to use the app
1. I intend to use this app in the next six months
2. In the next six months I intend to use this app frequently

Intention to pay for the app

We measured participants' willingness to pay for the mobile app for healthy eating and exercise by asking them to indicate the amount of money (in Pounds sterling and pence and in euros and cent) they would be willing to spend per month for an app that combined the features mentioned earlier in the survey.

Healthy Lifestyle scale

We asked participants to indicate the extent to which they agree that following a healthy lifestyle is important to them (see Table S16). We asked them to indicate their commitment to a healthy lifestyle on a scale from 1= *strongly disagree* to 7 = *strongly agree*.

Table S16

Items of the scales healthy Lifestyle scale

<u>Healthy Lifestyle scale</u>
1. Following a healthy lifestyle is really important to me (especially in terms of physical activity/regular exercise).
2. Following a healthy lifestyle is really important to me (especially in terms of healthy eating).
3. Being physically active is an integral part of my daily life.
4. Eating healthy food is an integral part of my daily life.
5. I believe I am in good health

Table S17

Summary of backward stepwise regression analysis for variables predicting intention to use the app

Variables	Step 1	Step 2	Step 3	Step 4	Step 5
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
F1	.148*	.148*	.147*	.145*	.145*
F2	-.035	-.035	-.035	-.034	-.035
F3	-.030	-.030	-.029	-.029	-.029
F4	.179**	.178**	.178**	.178**	.177**
BMI	-.086	-.086	-.087	-.088	-.086
Health Confidence	.206**	.206**	.205**	.205**	.204**
Health Maintenance	.534**	.534**	.535**	.537**	.538**
F1 × BMI	.104	.102	.102	.105	.109
F1 × Health Confidence	-.019	-.019	-.019		
F1 × Health Maintenance	-.088	-.088	-.088	-.103	-.107
F2 × BMI	-.005				
F2 × Health Confidence	.449**	.448**	.450**	.449**	.445**
F2 × Health Maintenance	-.080	-.080	-.080	-.081	-.077
F3 × BMI	-.093	-.095	-.095	-.096	-.094
F3 × Health Confidence	-.206	-.205	-.205	-.213	-.214
F3 × Health Maintenance	-.094	-.094	-.094	-.087	-.084
F4 × BMI	.111	.112	.112*	.112*	.112*
F4 × Health Confidence	-.065	-.064	-.064	-.070	-.079
F4 × Health Maintenance	.069	.068	.066	.073	.085
BMI × Health Confidence	-.025	-.027	-.028	-.029	-.014
BMI × Health Maintenance	.023	.023	.024	.023	
Age	-.025	-.024	-.024	-.024	-.024
Gender	.027	.027	.027	.027	.027
Number of households	-.019	-.020	-.019	-.020	-.019
Family status	-.019	-.018	-.019	-.019	-.018
Education	-.047	-.048	-.047	-.047	-.045
Income	.015	.015	.014	.014	.012
Country	.005	.005			

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits; Intention = Intention to use the app; Pay = Willingness to pay for the app; * $p < 0.05$; ** $p < 0.01$.

Table S17 Continuance

Summary of backward stepwise regression analysis for variables predicting intention to use the app

Variables	Step 6	Step 7	Step 8	Step 9	Step 10
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
F1	.145*	.144*	.144*	.138*	.136*
F2	-.036	-.032	-.033	-.043	-.047
F3	-.026	-.028	-.026		
F4	.177**	.177**	.178**	.176**	.181**
BMI	-.084	-.085	-.085	-.085	-.083
Health Confidence	.204**	.204**	.200**	.203**	.198**
Health Maintenance	.537**	.537**	.539**	.535**	.542**
F1 × BMI	.102	.102	.104	.107*	.110*
F1 × Health Confidence					
F1 × Health Maintenance	-.103	-.102	-.102	-.103	-.104
F2 × BMI					
F2 × Health Confidence	.447**	.452**	.458**	.453**	.404**
F2 × Health Maintenance	-.078	-.081	-.080	-.066	
F3 × BMI	-.094	-.094	-.094	-.096	-.099
F3 × Health Confidence	-.212	-.214	-.225	-.223	-.210
F3 × Health Maintenance	-.089	-.090	-.084	-.089	-.114
F4 × BMI	.111*	.109	.108	.106	.103
F4 × Health Confidence	-.087	-.091	-.088	-.090	-.076
F4 × Health Maintenance	.088	.093	.090	.086	.069
BMI × Health Confidence					
BMI × Health Maintenance					
Age	-.024	-.024	-.028	-.026	-.024
Gender	.027	.028	.030	.029	.028
Number of households	-.019	-.016	-.022	-.022	-.024
Family status	-.019	-.015			
Education	-.044	-.042	-.042	-.041	-.041
Income	.012				
Country					

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits; Intention = Intention to use the app; Pay = Willingness to pay for the app; * $p < 0.05$; ** $p < 0.01$.

Table S17 Continuance

Variables	Step 11	Step 12	Step 13	Step 14	Step 15	Step 16
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
F1	.136*	.134*	.133*	.130*	.132*	.132*
F2	-.047	-.049	-.048	-.050	-.057	-.049
F3						
F4	.185**	.192	.193**	.196**	.198**	.195**
BMI	-.081	-.082	-.081	-.087*	-.084	-.083
Health Confidence	.196**	.200**	.200**	.198**	.203**	.183**
Health Maintenance	.543**	.535**	.536**	.541**	.534**	.558**
F1 × BMI	.109*	.114*	.111*	.111*	.109*	.106*
F1 × Health Confidence						
F1 × Health Maintenance	-.106	-.098	-.100	-.099	-.100	-.116*
F2 × BMI						
F2 × Health Confidence	.402	.400**	.391**	.387**	.389**	.389**
F2 × Health Maintenance						
F3 × BMI	-.096	-.097	-.097	-.099	-.094	-.092
F3 × Health Confidence	-.217	-.246*	-.248*	-.250*	-.247*	-.304**
F3 × Health Maintenance	-.105	-.075	-.071	-.071	-.082	
F4 × BMI	.100	.104	.103	.105	.102	.100
F4 × Health Confidence	-.075	-.019				
F4 × Health Maintenance	.068					
BMI × Health Confidence						
BMI × Health Maintenance						
Age	-.028	-.029	-.029	-		
Gender	.027	.029	.030	.027		
Number of households						
Family status						
Education	-.040	-.041	-.041	-.039	-.038	-.038
Income						
Country						

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits; Intention = Intention to use the app; * $p < 0.05$; ** $p < 0.01$

Table S17 Continuance

Variables	Step 17	Step 18	Step 19	Step 20	Step 21	Step 22	Step 23
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
F1	.117*	.110*	.112*	.111*	.101	.082	
F2							
F3							
F4	.185**	.191**	.177**	.175**	.189**	.188**	.219**
BMI	-.079	-.071					
Health Confidence	.178**	.177**	.191**	.193**	.186**	.181**	.182**
Health Maintenance	.545**	.550**	.539**	.543**	.547**	.573**	.602**
F1 × BMI	.109*	.105*	.109*	.084	.108**	.102*	.114**
F1 × Health Confidence							
F1 × Health Maintenance	-.114	-.113	-.113	-.116*	-.108		
F2 × BMI							
F2 × Health Confidence	.391**	.386**	.376**	.370**	.392**	.314**	.315**
F2 × Health Maintenance							
F3 × BMI	-.095	-.093	-.070				
F3 × Health Confidence	-.297**	-.291**	-.276**	-.270**	-.294**	-.289**	-.294**
F3 × Health Maintenance							
F4 × BMI	.100	.099	.076	.047			
F4 × Health Confidence							
F4 × Health Maintenance							
BMI × Health Confidence							
BMI × Health Maintenance							
Age							
Gender							
Number of households							
Family status							
Education	-.035						
Income							
Country							

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits; Intention = Intention to use the app; * $p < 0.05$; ** $p < 0.01$

Table S18

Summary of backward stepwise regression analysis for variables predicting willingness to pay for the app

Variables	Step1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
F1	.252*	.251*	.251*	.251*	.255*	.254*	.252*
F2	-.048	-.048	-.048	-.051	-.051	-.053	-.047
F3	-.090	-.090	-.091	-.090	-.091	-.092	-.094
F4	.055	.055	.055	.056	.054	.053	.052
BMI	.034	.034	.034	.035	.030	.031	.029
Able	.039	.039	.038	.040	.042	.045	.046
Health Maintenance	.176	.177	.178	.175*	.174	.173	.173
F1 × BMI	.051	.052	.051	.050	.047	.045	.046
F1 × Health Confidence	-.006						
F1 × Health Maintenance	.113	.109	.107	.106	.103	.116	.113
F2 × BMI	-.048	-.048	-.044	-.044	-.042	-.046	-.048
F2 × Health Confidence	.247	.248	.245	.239	.241	.217	.225
F2 × Health Maintenance	.107	.105	.110	.115	.116	.164	.161
F3 × BMI	-.127	-.127	-.129	-.129	-.136	-.133	-.133
F3 × Health Confidence	-.240	-.243	-.241	-.235	-.232	-.201	-.207
F3 × Health Maintenance	.070	.072	.069	.063	.066		
F4 × BMI	-.016	-.016	-.015	-.017			
F4 × Health Confidence	-.253	-.254	-.251	-.252	-.252	-.253	-.263
F4 × Health Maintenance	.145	.147	.145	.144	.141	.132	.147
BMI × Health Confidence	-.176	-.176	-.179	-.180	-.180	-.177	-.173
BMI × Health Maintenance	.264	.263	.265	.266	.272	.272	.270
Intention	.145	.144	.144	.145	.144	.143	.143
F1 × Intention	.081	.080	.084	.085	.087	.077	.082
F2 × Intention	-.217	-.216	-.217	-.216	-.224	-.241	-.241
F3 × Intention	-.106	-.106	-.105	-.108	-.109	-.083	-.084
F4 × Intention	.109	.109	.106	.107	.111	.119	.115
BMI × Intention	-.043	-.043	-.042	-.041	-.051	-.048	-.050
Health Confidence × Intention	.221	.220	.221	.222	.224	.216	.220
Health Maintenance × Intention	-.182	-.181	-.183	-.183	-.185	-.179	-.184
Age	-.079	-.079	-.079	-.077	-.076	-.076	-.074
Gender	.010	.010	.010				
Number of households	.008	.008					
Family status	.050	.050	.053	.051	.049	.047	.055
Education	.038	.038	.038	.038	.038	.037	.042
Income	.020	.020	.022	.023	.024	.024	
Country	.079	.079	.080	.081	.080	.080	.077

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits; Intention = Intention to use the app; * $p < 0.05$; ** $p < 0.01$

Table S18 Continuance

Summary of backward stepwise regression analysis for variables predicting willingness to pay for the app

Variables	Step 8	Step 9	Step 10	Step 11	Step 12	Step 13	Step 14	Step 15	Step 16
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
F1	.255*	.255*	.258*	.247*	.245*	.256*	.258*	.259*	.265*
F2	-.048	-.046	-.045						
F3	-.095	-.097	-.097	-.112	-.114	-.107	-.108	-.104	-.107
F4	.046	.046	.041	.035	.038				
BMI	.032	.034	.035	.037	.035	.040	.038	.038	.040
Able	.052	.051	.053	.044					
Health Maintenance	.172	.177	.170	.163	.194	.191	.192	.193	.189
F1 × BMI	.036	.026							
F1 × Health Confidence									
F1 × Health Maintenance	.116	.103	.109	.101	.098	.107	.123	.123	.188
F2 × BMI	-.046								
F2 × Health Confidence	.226	.228	.228	.222	.198	.192	.271	.311	.292
F2 × Health Maintenance	.158	.147	.149	.144	.161	.142			
F3 × BMI	-.136	-.152	-.144	-.144	-.145	-.141	-.139	-.134	-.133
F3 × Health Confidence	-.208	-.205	-.201	-.183	-.181	-.164	-.169	-.225	-.228
F3 × Health Maintenance									
F4 × BMI									
F4 × Health Confidence	-.257	-.251	-.258	-.253	-.250	-.269	-.282	-.279	-.272
F4 × Health Maintenance	.142	.151	.152	.157	.158	.172	.203	.193	.152
BMI × Health Confidence	-.188	-.206	-.202	-.207	-.201	-.199	-.194	-.196	-.197
BMI × Health Maintenance	.244	.244	.257	.260	.254	.245	.241	.243	.240
Intention	.136	.132	.138	.142	.150	.163	.158	.157	.156
F1 × Intention	.079	.094	.094	.105	.106	.092	.077	.072	
F2 × Intention	-.245	-.246	-.254	-.247	-.242	-.238	-.187	-.228	-.208
F3 × Intention	-.075	-.071	-.069	-.076	-.078	-.071	-.067		
F4 × Intention	.119	.100	.105	.099	.096	.101	.086	.090	.128
BMI × Intention									
Health Confidence × Intention	.221	.221	.226	.216	.206	.208	.178	.185	.192
Health Maintenance × Intention	-.187	-.188	-.198	-.194	-.182	-.179	-.140	-.147	-.154
Age	-.073	-.072	-.073	-.073	-.072	-.072	-.074	-.080	-.078
Gender									
Number of households									
Family status	.057	.058	.057	.055	.057	.056	.054	.059	.061
Education	.039	.038	.040	.040	.041	.039	.040	.039	.038
Income									
Country	.080	.081	.080	.080	.079	.077	.076	.077	.077

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits; Intention = Intention to use the app; * $p < 0.05$; ** $p < 0.01$

Table S18 Continuance

Variables	Step 17	Step 18	Step 19	Step 20	Step 21	Step 22	Step 23	Step 24	Step 25
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
F1	.274*	.273*	.271*	.264*	.260*	.247*	.246*	.238*	.205*
F2									
F3	-.116	-.114	-.114	-.113	-.110	-.095	-.103	-.099	
F4									
BMI	.033								
Health Confidence									
Health Maintenance	.194	.195	.175	.208	.201	.206	.217	.218	.191
F1 × BMI									
F1 × Health Confidence									
F1 × Health Maintenance	.188	.191	.209	.193	.203	.199	.197	.201	.209*
F2 × BMI									
F2 × Health Confidence	.308	.324	.341	.372	.406	.422	.399	.385	.440
F2 × Health Maintenance									
F3 × BMI	-.133	-.139	-.140	-.140	-.135	-.133	-.134	-.133	-.154
F3 × Health Confidence	-.235	-.244	-.252	-.245	-.244	-.247	-.235	-.232	-.259*
F3 × Health Maintenance									
F4 × BMI									
F4 × Health Confidence	-.261	-.261	-.185	-.184	-.179	-.182	-.178	-.176	-.206
F4 × Health Maintenance	.146	.131							
BMI × Health Confidence	-.206	-.221	-.235	-.209	-.202	-.206	-.206	-.211	-.192
BMI × Health Maintenance	.251	.265	.287	.251	.233	.234	.234	.236	.247
Intention	.148	.149	.169	.158	.155	.148	.146	.152	.148
F1 × Intention									
F2 × Intention	-.223	-.231	-.244	-.281	-.269	-.263	-.251	-.251	-.256
F3 × Intention									
F4 × Intention	.127	.138	.179	.184	.182	.170	.167	.163	.165
BMI × Intention									
Health Confidence × Intention	.180	.184	.147	.074					
Health Maintenance × Intention	-.141	-.143	-.105						
Age	-.082	-.076	-.077	-.075	-.074	-.070	-.054		
Gender									
Number of households									
Family status	.063	.061	.060	.060	.063	.053			
Education									
Income									
Country	.084	.073	.066	.064	.058				

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits; Intention = Intention to use the app; * $p < 0.05$; ** $p < 0.01$

Table S18 Continuance

Variables	Step 26	Step 27	Step 28	Step 29	Step 30	Step 31	Step 32	Step 33	Step 34	Step 35
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
F1	.194*	.191*	.196*	.176*	.182*	.212*	.207*	.210*	.207*	.229**
F2										
F3										
F4										
BMI										
Health Confidence										
Health Maintenance	.226	.226	.214	.192	.199	.319*	.321*	.302*	.305*	.237**
F1 × BMI										
F1 × Health Confidence										
F1 × Health Maintenance	.215*	.201	.179	.220	.159*	.154*	.132	.136	.136	
F2 × BMI										
F2 × Health Confidence	.305	.255	.168							
F2 × Health Maintenance										
F3 × BMI	-.151*	-.146	-.139	-.132	-.124	-.120				
F3 × Health Confidence	-.235	-.223	-.218	-.100						
F3 × Health Maintenance										
F4 × BMI										
F4 × Health Confidence	-.078									
F4 × Health Maintenance										
BMI × Health Confidence	-.227	-.253*	-.232	-.225	-.243*	-.246*	-.240	-.086		
BMI × Health Maintenance	.286	.283*	.247*	.232	.233	.244*	.186			
Intention	.114	.122	.143	.166	.168					
F1 × Intention										
F2 × Intention	-.136	-.121								
F3 × Intention										
F4 × Intention										
BMI × Intention										
Health Confidence × Intention										
Health Maintenance × Intention										
Age										
Gender										
Number of households										
Family status										
Education										
Income										
Country										

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits; Intention = Intention to use the app; * $p < 0.05$; ** $p < 0.01$

Table S19

Summary of backward stepwise regression analysis for variables predicting intention to use the app

Variables	Step 1	Step 2	Step 3	Step 4	Step 5
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
F1	.095	.095	.094	.095	.095
F2	-.092	-.092	-.092	-.091	-.091
F3	-.068	-.068	-.067	-.067	-.067
F4	.145**	.145**	.145**	.145**	.145**
BMI	-.061	-.062	-.062	-.061	-.061
Health Confidence	.171	.171	.171*	.171*	.170*
Health Maintenance	.466**	.466**	.466**	.466**	.466**
F1 × BMI	.085	.085	.087	.087	.088
F1 × Health Confidence	.072	.072	.072	.073	.073
F1 × Health Maintenance	-.116	-.116	-.116	-.117	-.117
F2 × BMI	.006	.007			
F2 × Health Confidence	.622**	.621**	.620**	.623**	.625**
F2 × Health Maintenance	-.360	-.358	-.354	-.357	-.358
F3 × BMI	-.064	-.065	-.062	-.062	-.062
F3 × Health Confidence	-.412*	-.411*	-.411**	-.414**	-.417**
F3 × Health Maintenance	.129	.128	.126	.129	.131
F4 × BMI	.076	.077	.076	.076	.075
F4 × Health Confidence	-.131	-.130	-.131	-.131	-.132
F4 × Health Maintenance	.167	.166	.167	.167	.168
BMI × Health Confidence	-.031	-.032	-.029	-.028	-.028
BMI × Health Maintenance	.032	.033	.033	.033	.032
Age	.005	.005	.004		
Gender	.038	.038	.038	.039	.039
Number of households	.003				
Family status	-.006	-.005	-.005	-.004	
Education	-.026	-.026	-.026	-.027	-.026
Income	.034	.035	.035	.035	.033
Country	.047	.047	.047	.047	.048
Cluster membership	.326**	.325**	.325**	.324**	.325**

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits; * $p < 0.05$; ** $p < 0.01$

Table S19 Continuance

Summary of backward stepwise regression analysis for variables predicting intention to use the app

Variables	Step 6	Step 7	Step 8	Step 9	Step 10
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
F1	.094	.095	.101	.094	.093
F2	-.093	-.093	-.094	-.092	-.094
F3	-.064	-.065	-.065	-.062	-.066
F4	.145**	.145**	.145**	.146**	.149**
BMI	-.057	-.057	-.054	-.050	-.048
Health Confidence	.169*	.169*	.168*	.167*	.172*
Health Maintenance	.466**	.468**	.464**	.465	.463**
F1 × BMI	.085	.090	.083	.081	.082
F1 × Health Confidence	.071	.072			
F1 × Health Maintenance	-.115	-.120	-.063	-.062	-.057
F2 × BMI					
F2 × Health Confidence	.624**	.619**	.610**	.611**	.540**
F2 × Health Maintenance	-.355	-.352	-.336	-.338	-.253
F3 × BMI	-.060	-.059	-.054	-.053	-.053
F3 × Health Confidence	-.415**	-.415**	-.376**	-.372**	-.297**
F3 × Health Maintenance	.128	.131	.099	.097	
F4 × BMI	.074	.075	.075	.073	.070
F4 × Health Confidence	-.148	-.148	-.120	-.123	-.125
F4 × Health Maintenance	.183	.186	.159	.161	.163
BMI × Health Confidence					
BMI × Health Maintenance	.009				
Age					
Gender	.039	.040	.041	.041	.035
Number of households					
Family status					
Education	-.024	-.024	-.024		
Income	.032	.032	.033	.029	.026
Country	.049	.049	.049	.044	.045
Cluster membership	.324**	.324**	.322**	.324**	.320**

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits; * $p < 0.05$; ** $p < 0.01$

Table S19 Continuance

Variables	Step 11	Step 12	Step 13	Step 14	Step 15	Step 16	Step 17
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
F1	.093	.082	.077	.071	.073	.072	.064
F2	-.085	-.084	-.086	-.111	-.120*	-.125*	-.124*
F3	-.070	-.072	-.057				
F4	.147 ^a	.148 ^a	.145 ^a	.142 ^a	.144 ^a	.138 ^a	.147 ^a
BMI	-.052	-.053	-.065	-.064	-.062	-.051	-.045
Health Confidence	.175**	.178**	.176**	.186**	.191**	.194**	.187**
Health Maintenance	.465**	.465**	.469**	.459**	.451**	.451**	.457**
F1 × BMI	.083	.085	.085	.093	.089	.069	.086*
F1 × Able							
F1 × Health Maintenance	-.056						
F2 × BMI							
F2 × Health Confidence	.555**	.540**	.553**	.575**	.585**	.579**	.584**
F2 × Health Maintenance	-.262	-.284	-.278	-.276	-.287*	-.294	-.276
F3 × BMI	-.054	-.055	-.057	-.066	-.059		
F3 × Health Confidence	-.303	-.305**	-.311**	-.323**	-.329**	-.319**	-.337**
F3 × Health Maintenance							
F4 × BMI	.070	.067	.068	.066	.062	.036	
F4 × Health Confidence	-.133	-.122	-.122	-.135	-.137	-.142	-.141
F4 × Health Maintenance	.171	.155	.141	.142	.142	.148	.148
BMI × Health Confidence							
BMI × Health Maintenance							
Age							
Gender	.037	.039	.042	.041			
Number of households							
Family status							
Education							
Income							
Country	.040	.040					
Cluster membership	.313**	.320**	.311**	.300**	.300**	.308**	.311**

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits; * $p < 0.05$; ** $p < 0.01$

Table S19 Continuance

Variables	Step 18	Step 19	Step 20	Step 21	Step 22	Step 23	Step 24
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
F1	.064						
F2	-.116	-.093	-.100	-.100	-.099		
F3							
F4	.135 ^a	.149 ^a	.167 ^a	.169 ^a	.168 ^a	.142 ^a	.153 ^{**}
BMI							
Health Confidence	.192 ^{**}	.186 ^{**}	.185 ^{**}	.185 ^{**}	.157 [*]	.146 [*]	
Health Maintenance	.449 ^{**}	.464 ^{**}	.464 ^{**}	.463 ^{**}	.504 ^{**}	.478 ^{**}	.574 ^{**}
F1 × BMI	.089 [*]	.096 [*]	.101 ^{**}	.104 ^{**}	.098 ^{**}	.096 ^{**}	.104 ^{**}
F1 × Able							
F1 × Health Maintenance							
F2 × BMI							
F2 × Health Confidence	.558 ^{**}	.539 ^{**}	.447 ^{**}	.445 ^{**}	.329 ^{**}	.331 ^{**}	.319 ^{**}
F2 × Health Maintenance	-.259	-.238	-.136	-.125			
F3 × BMI							
F3 × Health Confidence	-.324 ^{**}	-.321 ^{**}	-.331 ^{**}	-.332 ^{**}	-.326 ^{**}	-.305 ^{**}	-.316 ^{**}
F3 × Health Maintenance							
F4 × BMI							
F4 × Health Confidence	-.134	-.123					
F4 × Health Maintenance	.143	.134	.013				
BMI × Health Confidence							
BMI × Health Maintenance							
Age							
Gender							
Number of households							
Family status							
Education							
Income							
Country							
Cluster membership	.314 ^{**}	.325 ^{**}	.319 ^{**}	.318 ^{**}	.316 ^{**}	.296 ^{**}	.307 ^{**}

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits; * $p < 0.05$; ** $p < 0.01$

Table S20

Summary of backward stepwise regression analysis for variables predicting willingness to pay for the app

Variables	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
F1	.232*	.232*	.234*	.235*	.239*	.246*	.243*	.245*
F2	-.075	-.074	-.074	-.078	-.077	-.084	-.077	-.078
F3	-.120	-.120	-.120	-.120	-.121	-.121	-.125	-.124
F4	.046	.046	.046	.046	.044	.039	.042	.042
BMI	.040	.040	.041	.042	.035	.036	.034	.034
Health Confidence	.036	.036	.036	.038	.041	.045		
Health Maintenance	.190	.190	.188	.184	.182	.178	.206	.206
F1 × BMI	.052	.053	.050	.047	.043	.045	.049	.049
F1 × Health Confidence	.020	.022						
F1 × Health Maintenance	.123	.122	.137	.136	.132	.193	.190	.192
F2 × BMI	-.060	-.059	-.058	-.058	-.055	-.068	-.067	-.056
F2 × Health Confidence	.329	.339	.340	.336	.338	.327	.310	.306
F2 × Health Maintenance	.019							
F3 × BMI	-.108	-.108	-.107	-.106	-.117	-.110	-.112	-.118
F3 × Health Confidence	-.310	-.314	-.304	-.297	-.292	-.289	-.291	-.286
F3 × Health Maintenance	.108	.114	.109	.104	.109	.088	.101	.090
F4 × BMI	-.023	-.023	-.023	-.024				
F4 × Health Confidence	-.285	-.287	-.281	-.283	-.283	-.285	-.281	-.270
F4 × Health Maintenance	.169	.174	.168	.168	.163	.132	.134	.125
BMI × Health Confidence	-.169	-.169	-.169	-.170	-.171	-.164	-.159	-.168
BMI × Health Maintenance	.267	.266	.266	.267	.277	.272	.270	.273
Intention	.062	.061	.062	.064	.062	.062	.071	.071
F1 × Intention	.062	.061	.063	.064	.066			
F2 × Intention	-.245	-.239	-.239	-.237	-.247	-.236	-.222	-.211
F3 × Intention	-.087	-.088	-.090	-.094	-.097	-.083	-.092	-.090
F4 × Intention	.136	.134	.134	.135	.139	.175	.170	.165
BMI* Intention	-.051	-.051	-.050	-.049	-.063	-.061	-.069	-.064
Health Confidence × Intention	.212	.209	.211	.213	.215	.215	.205	.203
Health Maintenance × Intention	-.157	-.153	-.154	-.154	-.157	-.155	-.142	-.145
Age	-.062	-.062	-.062	-.060	-.059	-.058	-.057	-.058
Gender	.012	.012	.013					
Number of households	.027	.027	.027	.029	.028	.032	.031	
Family status	.049	.049	.049	.046	.043	.042	.044	.055
Education	.045	.045	.046	.046	.045	.045	.046	.043
Income	.033	.033	.034	.035	.037	.038	.038	.046
Country	.100	.100	.100	.101	.100	.099	.098	.100
Cluster membership	.177	.177	.177	.176	.175	.176	.177	.171

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits; Intention = Intention to use the app; * $p < 0.05$; ** $p < 0.01$

Table S20 Continuance

Summary of backward stepwise regression analysis for variables predicting willingness to pay for the app

Variables	Step 9	Step 10	Step 11	Step 12	Step 13	Step 14	Step 15	Step 16
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
F1	.243*	.245*	.250*	.251*	.252*	.257*	.267**	.271**
F2	-.077	-.081	-.079	-.079	-.078	-.070	-.073	-.076
F3	-.127	-.123	-.124	-.125	-.127	-.124	-.130	-.134
F4	.041	.038	.030	.031	.028			
BMI	.034	.035	.037	.039	.042	.046	.040	.041
Health Confidence								
Health Maintenance	.051	.213	.206	.210	.214	.210	.214	.259*
F1 × BMI	.051	.042						
F1 × Health Confidence								
F1 × Health Maintenance	.199	.196	.205	.203	.202	.200	.199	.195
F2 × BMI	-.056	-.052	-.037					
F2 × Health Confidence	.312	.344	.337	.328	.322	.310	.322	.337
F2 × Health Maintenance								
F3 × BMI	-.116	-.112	-.108	-.124	-.129	-.127	-.127	-.126
F3 × Health Confidence	-.243	-.285	-.273	-.270	-.267	-.249	-.253	-.263
F3 × Health Maintenance								
F4 × BMI								
F4 × Health Confidence	-.278	-.276	-.282	-.273	-.265	-.277	-.265	-.271
F4 × Health Maintenance	.139	.133	.134	.131	.129	.141	.132	.157
BMI × Health Confidence	-.163	-.168	-.171	-.188	-.200	-.200	-.208	-.208
BMI × Health Maintenance	.270	.268	.279	.275	.248	.243	.253	.256
Intention	.069	.066	.072	.068	.062	.071	.066	
F1 × Intention								
F2 × Intention	-.213	-.248	-.256	-.253	-.250	-.251	-.264	-.270
F3 × Intention	-.054							
F4 × Intention	.158	.159	.164	.155	.155	.156	.155	.136
BMI* Intention	-.062	-.056	-.044	-.044				
Health Confidence × Intention	.175	.181	.187	.189	.186	.188	.175	.173
Health Maintenance × Intention	-.116	-.121	-.136	-.137	-.135	-.135	-.121	-.116
Age	-.059	-.062	-.062	-.060	-.059	-.058	-.062	-.061
Gender								
Number of households								
Family status	.051	.055	.054	.056	.057	.056	.056	.056
Education	.042	.041	.042	.040	.037	.036		
Income	.044	.045	.046	.047	.047	.046	.054	.055
Country	.100	.102	.102	.103	.105	.104	.110	.112
Cluster membership	.171	.174	.175	.173	.171	.173	.171	.192

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits; Intention = Intention to use the app; * $p < 0.05$; ** $p < 0.01$

Table S20 Continuance

Variables	Step 17 <i>b</i>	Step 18 <i>b</i>	Step 19 <i>b</i>	Step 20 <i>b</i>	Step 21 <i>b</i>	Step 22 <i>b</i>	Step 23 <i>b</i>	Step 24 <i>b</i>	Step 25 <i>b</i>	Step 26 <i>b</i>
F1	.271*	.271*	.256*	.246*	.248*	.244*	.234*	.235*	.224*	.213*
F2	-.079	-.067								
F3	-.130	-.136	-.158	-.157	-.158	-.155	-.157	-.161	-.137	-.134
F4										
BMI										
Health Confidence										
Health Maintenance	.263*	.266*	.251*	.275*	.262*	.254*	.256*	.268*	.272*	.291*
F1 × BMI										
F1 × Health Confidence										
F1 × Health Maintenance	.198	.198	.201	.191	.210	.220	.224*	.219*	.213*	.218*
F2 × BMI										
F2 × Health Confidence	.358	.370	.369	.409	.417	.452	.436	.417	.436	.288
F2 × Health Maintenance										
F3 × BMI	-.133	-.133	-.133	-.133	-.134	-.129	-.128	-.129	-.127	-.124*
F3 × Health Confidence	-.277	-.290	-.278	-.274	-.285	-.283	-.280	-.266	-.270	-.238
F3 × Health Maintenance										
F4 × BMI										
F4 × Health Confidence	-.274	-.287	-.271	-.238	-.178	-.173	-.171	-.168	-.171	-.042
F4 × Health Maintenance	.142	.167	.157	.100						
BMI × Health Confidence	-.225	-.219	-.229	-.207	-.227	-.219	-.224	-.223	-.227	-.259*
BMI × Health Maintenance	.272	.267	.276	.246	.276*	.257	.259	.259	.260	.293*
Intention										
F1 × Intention										
F2 × Intention	-.281	-.280	-.275	-.321	-.321	-.310	-.309	-.293	-.284	-.156
F3 × Intention										
F4 × Intention	.149	.140	.140	.164	.190	.189	.188	.188	.165	
BMI × Intention										
Health Confidence × Intention	.180	.187	.179	.083	.075					
Health Maintenance × Intention	-.120	-.129	-.131							
Age	-.054	-.054	-.056	-.054	-.054	-.053				
Gender										
Number of households										
Family status	.056	.073	.071	.070	.069	.072	.057			
Education										
Income	.049									
Country	.098	.094	.094	.089	.084	.078	.077	.066		
Cluster membership	.190	.178	.170	.171	.177	.175	.189	.176	.158	.137

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits; Intention = Intention to use the app; * $p < 0.05$; ** $p < 0.01$.

Health app combining diet and physical activity advice: Preferences and behavioural intentions towards co-created app features

Table S20 Continuance

Variables	Step 27	Step 28	Step 29	Step 30	Step 31	Step 32	Step 33	Step 34	Step 35	Step 36
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
F1	.215*	.227*	.216*	.221*	.230*	.266*	.292*	.295*	.285**	.229**
F2										
F3	-.148	-.147	-.164	-.189*	-.181*	-.151	-.168	-.167	-.149	
F4										
BMI										
Health Confidence										
Health Maintenance	.296*	.300*	.298*	.306*	.318*	.366*	.314*	.291*	.288**	.237**
F1 × BMI										
F1 × Health Confidence										
F1 × Health Maintenance	.210*	.181	.218*	.191*	.125	.116				
F2 × BMI										
F2 × Health Confidence	.257	.158								
F2 × Health Maintenance										
F3 × BMI	-.118	-.110	-.100							
F3 × Health Confidence	-.230	-.229	-.119	-.109						
F3 × Health Maintenance										
F4 × BMI										
F4 × Health Confidence										
F4 × Health Maintenance										
BMI × Health Confidence	-	-	-	-	-	-	-	-	-.104	
BMI × Health Maintenance	.274*	.249*	.245*	.245*	.264*	.257*	.265*			
Intention	.291*	.248*	.235	.188	.194	.189	.195			
F1 × Intention										
F2 × Intention	-.150									
F3 × Intention										
F4 × Intention										
BMI* Intention										
Health Confidence × Intention										
Health Maintenance × Intention										
Age										
Gender										
Number of households										
Family status										
Education										
Income										
Country										
Cluster membership	.142	.142	.146	.151	.139					

Notes. F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management; Health Confidence = Perception of ability and confidence for healthy eating and exercise; Health Maintenance = Perception of ability to maintain healthy eating and exercise habits; Intention = Intention to use the app; * $p < 0.05$; ** $p < 0.01$.

Figure S3. Confirmatory Factor Analysis (CFA). All pathways are shown within the model are significant ($p < .001$). F1= Social support, connectedness and mindfulness; F2= Goal setting, tracking, and advice for exercising; F3= Tips and advice for food and home workouts; F4= Digital score connection and mood management.

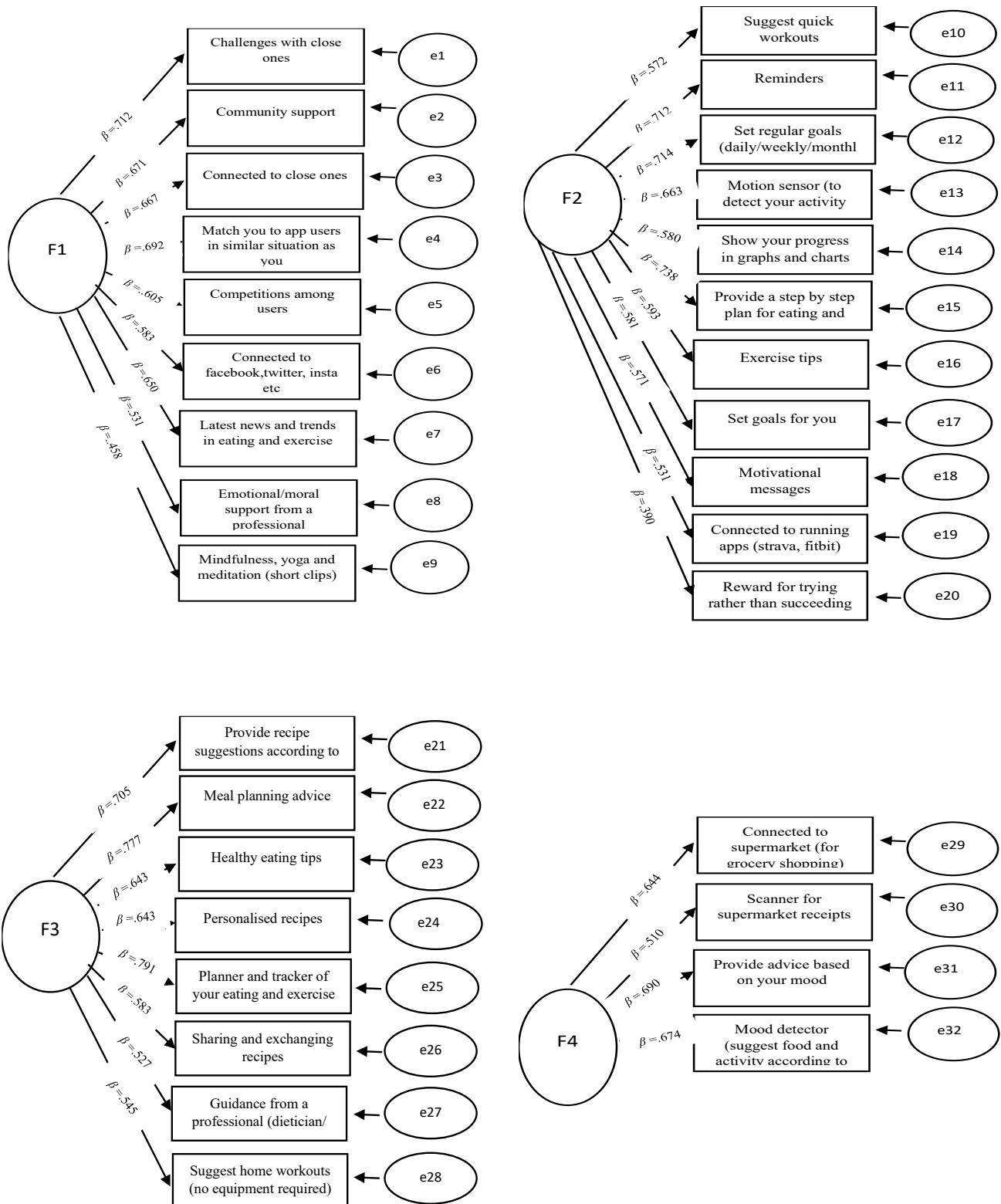


Table S21

Unstandardized estimates and Standard Errors for all Covariate Paths

Covariance		Unstandardized estimates (B)	S.E.	C.R.	sig	
F1	<-->	F3	1.081	.186	5.820	<.001
F1	<-->	F2	.652	.120	5.455	<.001
F2	<-->	F3	.679	.123	5.526	<.001
F4	<-->	F1	1.307	.231	5.651	<.001
F4	<-->	F2	.645	.118	5.467	<.001
F4	<-->	F3	.970	.199	4.871	<.001
e1	<-->	e3	.862	.155	5.576	<.001
e30	<-->	e32	.857	.197	4.358	<.001
e29	<-->	e31	.794	.226	3.519	<.001
e25	<-->	e26	-.266	.096	-2.757	.006
e24	<-->	e26	.419	.125	3.341	<.001
e22	<-->	e23	.235	.071	3.300	<.001
e21	<-->	e24	.390	.104	3.739	<.001
e21	<-->	e25	-.268	.074	-3.612	<.001
e20	<-->	e23	-.312	.108	-2.883	.004
e18	<-->	e20	.505	.170	2.967	.003
e18	<-->	e21	-.400	.114	-3.501	<.001
e21	<-->	e28	.371	.093	3.999	<.001
e19	<-->	e31	.486	.172	2.827	.005
e18	<-->	e31	-.531	.168	-3.161	.002
e16	<-->	e32	.179	.078	2.297	.022
e16	<-->	e28	.263	.067	3.911	<.001
e16	<-->	e27	.311	.087	3.557	<.001
e16	<-->	e29	-.266	.098	-2.721	.007
e16	<-->	e23	.176	.059	2.999	.003
e15	<-->	e24	.232	.083	2.797	.005
e14	<-->	e28	.284	.079	3.587	<.001
e14	<-->	e29	-.292	.115	-2.533	.011
e21	<-->	e31	.592	.142	4.164	<.001
e19	<-->	e28	.234	.103	2.260	.024
e13	<-->	e30	.252	.104	2.411	.016
e13	<-->	e26	-.409	.130	-3.149	.002
e13	<-->	e22	-.342	.083	-4.126	<.001
e13	<-->	e21	-.372	.097	-3.857	<.001
e13	<-->	e15	-.308	.090	-3.439	<.001
e13	<-->	e19	.273	.140	1.943	.052
e12	<-->	e15	.189	.075	2.527	.012
e21	<-->	e29	.557	.137	4.073	<.001
e12	<-->	e25	.216	.065	3.344	<.001
e12	<-->	e17	.152	.071	2.147	.032
e11	<-->	e18	.290	.130	2.230	.026
e10	<-->	e29	-.234	.096	-2.439	.015
e10	<-->	e28	.373	.078	4.803	<.001
e9	<-->	e18	.472	.179	2.635	.008
e8	<-->	e27	1.150	.171	6.734	<.001
e7	<-->	e23	.337	.096	3.493	<.001
e6	<-->	e13	-.434	.139	-3.120	.002
e5	<-->	e32	-.214	.107	-2.005	.045
e5	<-->	e26	.392	.138	2.837	.005
e5	<-->	e10	-.182	.086	-2.108	.035
e4	<-->	e27	.533	.126	4.246	<.001
e4	<-->	e14	.362	.113	3.191	.001
e3	<-->	e25	-.226	.082	-2.740	.006
e3	<-->	e23	.172	.076	2.262	.024
e1	<-->	e5	.775	.149	5.213	<.001
e24	<-->	e29	.373	.120	3.106	.002
e14	<-->	e27	.261	.107	2.431	.015
e12	<-->	e24	.218	.074	2.955	.003
e10	<-->	e21	.242	.082	2.959	.003

e10	<-->	e19	.276	.103	2.666	.008
e10	<-->	e16	.165	.067	2.475	.013
e6	<-->	e31	.551	.190	2.902	.004
e2	<-->	e5	.354	.149	2.380	.017
e2	<-->	e13	-.237	.109	-2.176	.030
e20	<-->	e22	-.264	.113	-2.341	.019
e20	<-->	e21	-.332	.123	-2.694	.007
e6	<-->	e29	.432	.172	2.511	.012
e6	<-->	e26	.394	.159	2.480	.013
e1	<-->	e2	.237	.117	2.021	.043
e4	<-->	e7	-.291	.138	-2.116	.034
e2	<-->	e4	.596	.161	3.693	<.001

Notes. Only significant covariates are shown within the table.