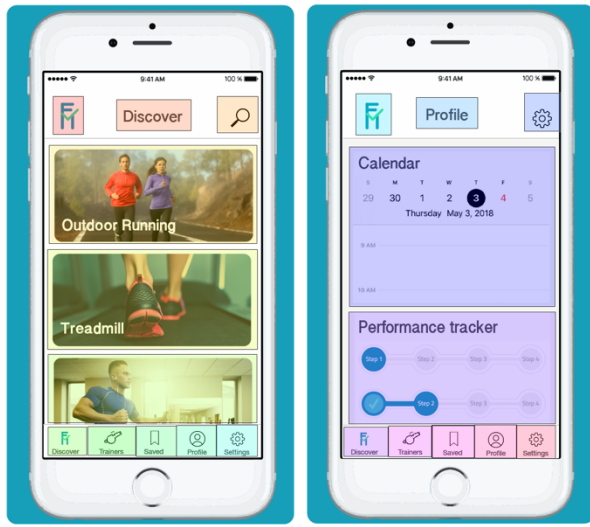


**Appendix A.** App Preview Hot Spots for Attention and Use

Table A1. Attention and Predicted Use of Features in the High Prototypicality Fitness App ( $n = 165$ )



	Attention		Use		$\chi^2$	<i>P</i>
	<i>n</i>	%	<i>n</i>	%		
<b>Left app preview</b>						
Header app logo icon (top left)	38	23%	14	9%	<b>17.63</b>	<b>&lt;.001</b>
Header page title (“Discover”)	34	21%	26	16%	n/a	.15
Header search icon	40	24%	57	35%	<b>7.31</b>	<b>.007</b>
Activity 1 “Outdoor running”	109	66%	63	38%	<b>32.66</b>	<b>&lt;.001</b>
Activity 2 “Treadmill”	104	63%	53	32%	<b>38.46</b>	<b>&lt;.001</b>
Activity 3 “Individual Exercising”	90	55%	36	22%	<b>40.13</b>	<b>&lt;.001</b>
Footer menu option “Discover”	48	29%	52	32%	.20	.66
Footer menu option “Trainers”	49	30%	36	22%	3.35	.07
Footer menu option “Saved”	41	25%	42	26%	.00	1.00
Footer menu option “Profile”	53	32%	70	42%	<b>5.02</b>	<b>.03</b>
Footer menu option “Settings”	49	30%	69	42%	<b>7.22</b>	<b>.01</b>
<b>Right app preview</b>						
Header app logo icon (top left)	24	15%	11	7%	n/a	<b>.02</b>
Header page title “Profile”	37	22%	32	19%	.49	.49
Header settings icon	46	28%	62	38%	<b>4.89</b>	<b>.03</b>
Calendar feature	<b>107</b>	<b>65%</b>	<b>118</b>	<b>72%</b>	1.96	.16
Performance tracker feature	142	86%	157	95%	<b>n/a</b>	<b>.003</b>
Footer menu option “Discover”	42	26%	48	29%	.52	.47
Footer menu option “Trainers”	48	29%	39	24%	1.36	.24
Footer menu option “Saved”	40	24%	45	27%	.37	.54
Footer menu option “Profile”	49	30%	75	46%	<b>12.50</b>	<b>&lt;.001</b>
Footer menu option “Settings”	52	32%	71	43%	<b>7.20</b>	<b>.01</b>

Note: n/a = chi square values are not applicable if fewer than 25 discordant pairs; binominal distributions are used for exact 2-tailed significance in these comparisons.

Table A2. Attention and Predicted Use of Features in the High Prototypicality Nutrition App (*n* = 182)



	Attention		Use		$\chi^2$	<i>P</i>
	<i>n</i>	%	<i>n</i>	%		
<b>(LEFT SIDE)</b>						
Header app logo icon (top middle)	38	21%	8	4%	23.36	<.001
Header search icon	19	10%	54	30%	21.81	<.001
Calorie tracker feature	156	86%	160	88%	n/a	.54
Details icon	14	8%	50	28%	26.63	<.001
Calendar feature	88	48%	114	63%	11.57	.001
Footer menu option “Profile”	37	20%	90	50%	38.09	<.001
Footer menu option “Recipes”	58	32%	106	58%	32.49	<.001
Footer menu option “Plus”	30	17%	45	25%	4.56	.03
Footer menu option “Plans”	50	28%	102	56%	36.13	<.001
Footer menu option “Settings”	35	19%	87	48%	36.13	<.001
<b>(RIGHT SIDE)</b>						
Header app logo icon (top middle)	40	22%	12	7%	20.25	<.001
Header search icon	21	12%	38	21%	5.95	.02
Holistic icon	4	2%	9	5%	n/a	.13
Ketogenic Easy feature	109	60%	71	39%	20.74	<.001
Footer menu option “Profile”	25	14%	58	32%	19.32	<.001
Footer menu option “Recipes”	45	25%	80	44%	18.95	<.001
Footer menu option “Plus”	23	13%	28	15%	.46	.50
Footer menu option “Plans”	37	20%	72	40%	18.95	<.001
Footer menu option “Settings”	26	14%	57	31%	16.36	<.001
Classic feature	70	39%	46	25%	11.50	.001
Simple rules icon	3	2%	9	5%	n/a	.07
Ketogenic Medium feature	101	56%	68	37%	16.25	<.001
5:2 feature	67	37%	52	29%	4.00	.046
Take the Test feature	108	59%	131	72%	9.88	.002

Note: n/a = chi square values are not applicable if fewer than 25 discordant pairs; binominal distributions are used for exact 2-tailed significance in these comparisons.

## Appendix B. Survey items

Concept	Item	Response options
Feature expectation	Select all the elements you would expect to find in a health app. <b>Check all that apply.</b>	1 = Menu 2 = Search option 3 = Settings option 4 = Logo 5 = Log/Input data option 6 = Share with friends option 7 = Summary statistics 8 = Summary graph/chart 9 = Calendar 10 = Page title 11 = Login 12 = User profile
Feature Placement	Where do you think the <b>[feature]</b> should appear in the health app?  Select all the areas on the app screen below where you would expect the <b>[feature]</b> to appear. Selected areas will be shown in green.	Hot spots
App choice	Below are two health apps in development. Please review the apps and <b>select the app you would be most likely to download by checking the circle to the bottom left corner of the preview.</b> We will ask you questions about both, but first we want to know which one you prefer.	1 = Low prototypicality app 2 = High prototypicality app
Attention	For your selected app, what elements in the app caught your <b>attention</b> ? Select all elements that grabbed your attention within the app preview below.	Hot spots
Predicted use	For your selected app, what elements in the app do you think you would <b>use</b> ? Select all elements that you believe you would use within the app preview below.	Hot spots
Aesthetics: Simplicity	The layout appears too dense. (reverse coded) The layout is easy to grasp. Everything goes together on this app. The app appears patchy. (reverse coded) The layout appears well structured.	1 = Strongly disagree 2 = Somewhat disagree 3 = Neither agree nor disagree 4 = Somewhat agree 5 = Strongly agree
Aesthetics: Diversity	The layout is pleasantly varied. The layout is inventive. The design appears uninspired. (reverse coded) The layout appears dynamic. The design is uninteresting. (reverse coded)	1 = Strongly disagree 2 = Somewhat disagree 3 = Neither agree nor disagree 4 = Somewhat agree 5 = Strongly agree
Aesthetics: Colorfulness	The color composition is attractive. The colors do not match. (reverse coded) The choice of colors is botched. (reverse coded) The colors are appealing.	1 = Strongly disagree 2 = Somewhat disagree 3 = Neither agree nor disagree 4 = Somewhat agree 5 = Strongly agree
Aesthetics: Craftsmanship	The layout appears professionally designed. The layout is not up-to-date. (reverse) The app is designed with care. The design of the app lacks a concept. (reverse)	1 = Strongly disagree 2 = Somewhat disagree 3 = Neither agree nor disagree 4 = Somewhat agree

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		5 = Strongly agree
Perceived ease of use	The app would be clear and understandable. Getting the app to function would not require much mental effort. I would find the app easy to use.	1 = Strongly disagree 2 = Somewhat disagree 3 = Neither agree nor disagree 4 = Somewhat agree 5 = Strongly agree
Perceived usefulness	Using the app would improve my health. Using the app would make me more likely to meet my health goals. I would find the app useful for achieving my health goals.	1 = Strongly disagree 2 = Somewhat disagree 3 = Neither agree nor disagree 4 = Somewhat agree 5 = Strongly agree
Intention to use	<b>[Randomized in construct matrix.]</b> If the app were available, I would intend to use it in the next month. If the app were available, I predict I would use it in the next month.	1 = Strongly disagree 2 = Somewhat disagree 3 = Neither agree nor disagree 4 = Somewhat agree 5 = Strongly agree
Perceived affordances	This app would allow me to... Please check all that apply.	1 = Set health goals 2 = Track my progress 3 = Create new health habits 4 = Learn health tips 5 = Interact with others 6 = Earn rewards 7 = Make meeting my health goals easier 8 = Improve my health 9 = Increase my control over my health 10 = Have fun with technology 11 = Give me more information about my health 12 = Share my health data with friends 13 = Share my health data with a healthcare provider
Age	How old are you?	
Gender	How do you describe your gender identity?	1=Male 2=Female 3=Other
Hispanic	Are you of Hispanic, Latino, or Spanish origin?	1=Yes 0=No
Race	Which one of these groups would you say best represents your race?	1 = White 2 = Black or African American 3 = American Indian or Alaska Native 4 = Asian, or 5 = Pacific Islander 6 = Multicultural 7=Other
Education	What is the highest degree or level of school you have completed?	1 = Some high school 2 = High school diploma or GED 3 = Some college, no degree 4 = Associate degree 5 = Bachelor's degree 6= Masters degree (e.g., MA, MS)

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		7 = Professional or Doctorate degree (e.g., JD, MD, PhD)
Health status	In general, would you say your health is ...	1=Very Poor 2=Poor 3=Fair 4=Good 5=Very Good
Mental health status	In general, would you say your mental health is...	1=Very Poor 2=Poor 3=Fair 4=Good 5=Very Good
Health app use	Do you use a health app?	1=Yes 2=No