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(54) **METHOD FOR POPULATING USER ACCOUNTS WITH PROFILES OF SUPPLEMENTS FOR CONSUMPTION**

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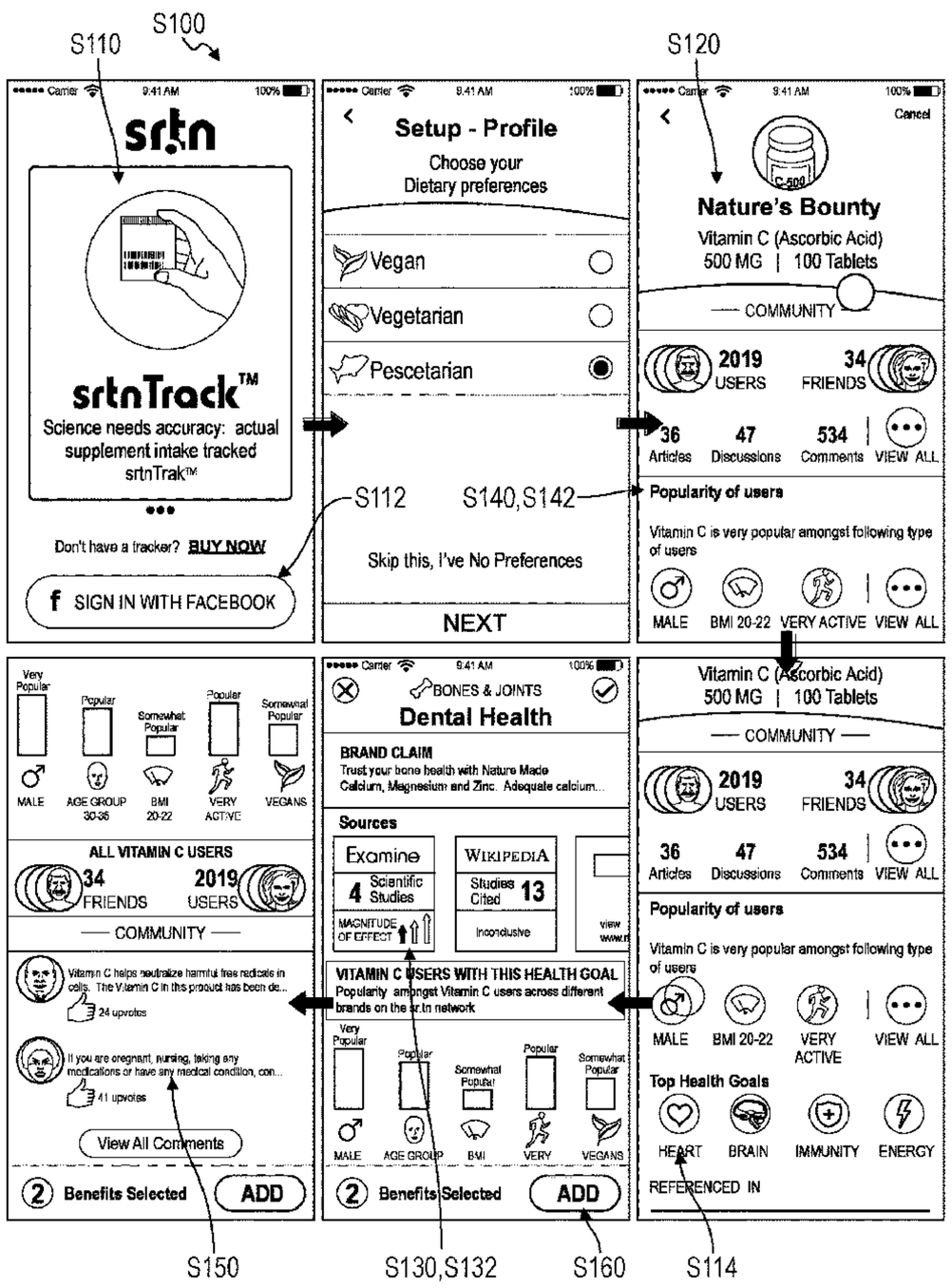
(57) **ABSTRACT**

One variation of a method for populating user accounts with profiles of supplements includes: extrapolating a degree of an effect of a first supplement on a health goal, selected by a user, from a scientific study based on an ingredient of the first supplement selected by the user; presenting, to the user, the degree of the effect; presenting, to the user, a representation of prevalence of the first supplement by demographic within a population of users; presenting, to the user, a set of reviews of the first supplement within the native application submitted by a subset of users within the population associated with user profiles linked to the first supplement for greater than a threshold duration of time; and in response to confirmation of the first supplement profile at the native application, adding a profile for the first supplement profile to a user profile associated with the user.



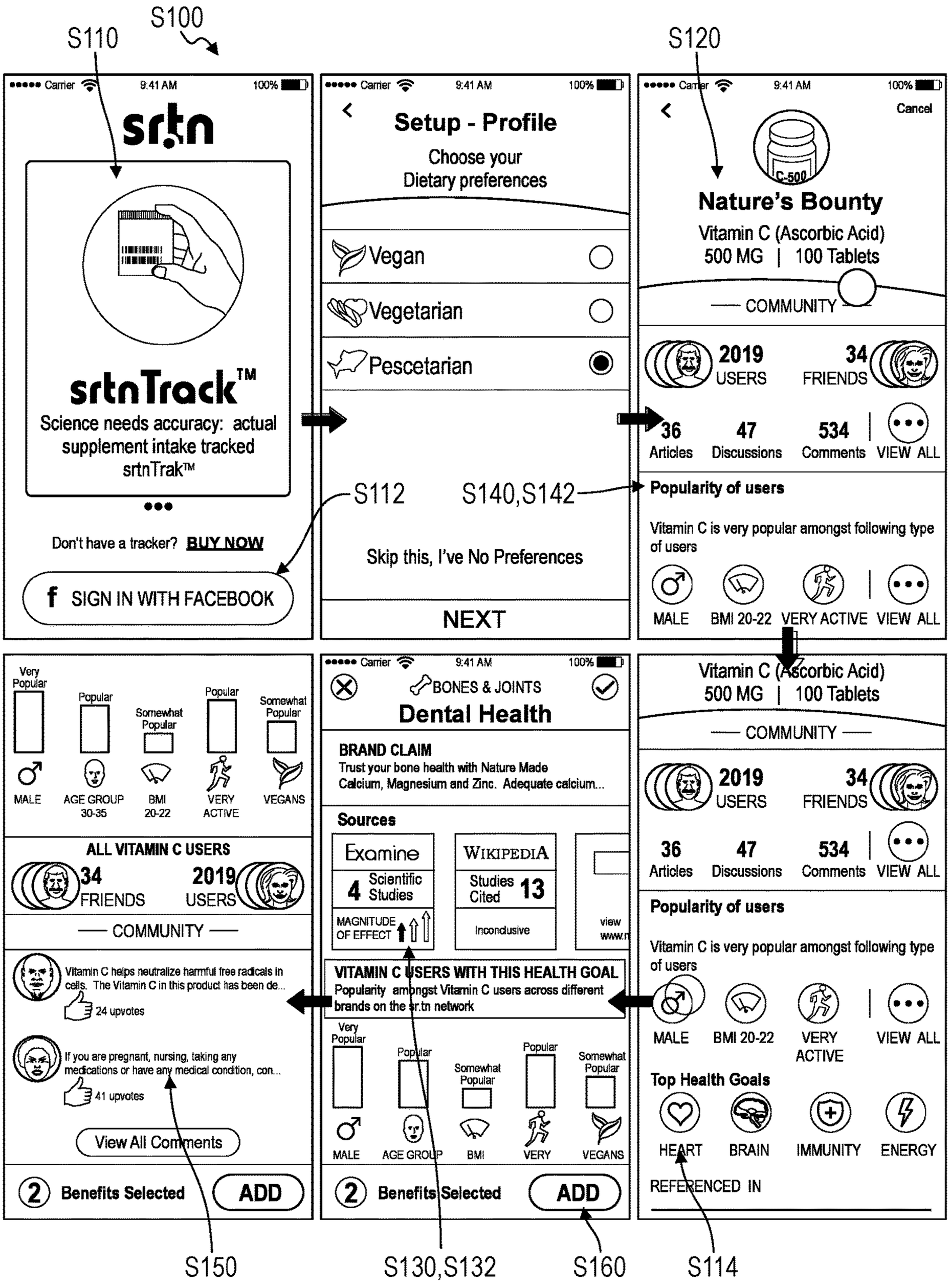

S100
S110
S120
Carrier 9:41 AM 100%
srtn
srtnTrack™
Science needs accuracy: actual supplement intake tracked srtnTrak™
Don't have a tracker? BUY NOW
SIGN IN WITH FACEBOOK
Setup - Profile
Choose your Dietary preferences
Vegan
Vegetarian
Pescetarian
Skip this, I've No Preferences
NEXT
S112
S140,S142
Cancel
C-500
Nature's Bounty
Vitamin C (Ascorbic Acid)
500 MG | 100 Tablets
COMMUNITY
2019 USERS
34 FRIENDS
36 Articles
47 Discussions
534 Comments
VIEW ALL
Popularity of users
Vitamin C is very popular amongst following type of users
MALE
BMI 20-22
VERY ACTIVE
VIEW ALL
Very Popular
Popular
Somewhat Popular
Popular
Somewhat Popular
MALE
AGE GROUP 30-35
BMI 20-22
VERY ACTIVE
VEGANS
ALL VITAMIN C USERS
34 FRIENDS
2019 USERS
COMMUNITY
Vitamin C helps neutralize harmful free radicals in cells. The Vitamin C in this product has been de...
24 upvotes
If you are pregnant, nursing, taking any medications or have any medical condition, con...
41 upvotes
View All Comments
2 Benefits Selected
ADD
BONES & JOINTS
Dental Health
BRAND CLAIM
Trust your bone health with Nature Made Calcium, Magnesium and Zinc. Adequate calcium...
Sources
Examine
4 Scientific Studies
MAGNITUDE OF EFFECT
WIKIPEDIA
Studies Cited 13
Inconclusive
VITAMIN C USERS WITH THIS HEALTH GOAL
Popularity amongst Vitamin C users across different brands on the srtn network
Very Popular
Popular
Somewhat Popular
Popular
Somewhat Popular
MALE
AGE GROUP
BMI
VERY
VEGANS
2 Benefits Selected
ADD
Vitamin C (Ascorbic Acid)
500 MG | 100 Tablets
COMMUNITY
2019 USERS
34 FRIENDS
36 Articles
47 Discussions
534 Comments
VIEW ALL
Popularity of users
Vitamin C is very popular amongst following type of users
MALE
BMI 20-22
VERY ACTIVE
VIEW ALL
Top Health Goals
HEART
BRAIN
IMMUNITY
ENERGY
REFERENCED IN
S150
S130,S132
S160
S114

FIG. 1

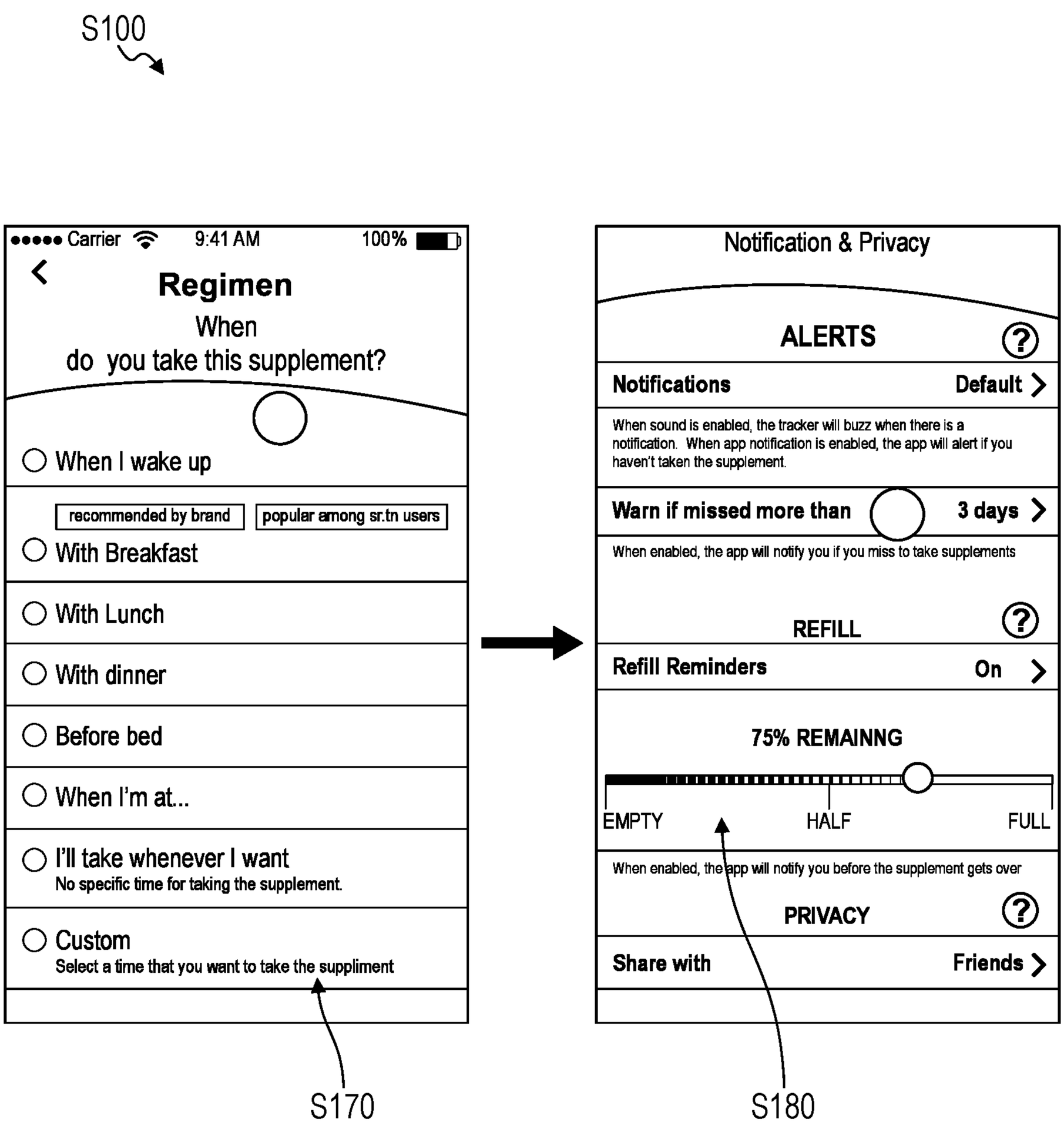

S100
Carrier
9:41 AM
100%
Regimen
When
do you take this supplement?
When I wake up
recommended by brand
popular among sr.tn users
With Breakfast
With Lunch
With dinner
Before bed
When I'm at...
I'll take whenever I want
No specific time for taking the supplement.
Custom
Select a time that you want to take the suppliment
S170
Notification & Privacy
ALERTS
Notifications
Default
When sound is enabled, the tracker will buzz when there is a notification. When app notification is enabled, the app will alert if you haven't taken the supplement.
Warn if missed more than
3 days
When enabled, the app will notify you if you miss to take supplements
REFILL
Refill Reminders
On
75% REMAINNG
EMPTY
HALF
FULL
When enabled, the app will notify you before the supplement gets over
PRIVACY
Share with
Friends
S180

FIG. 2

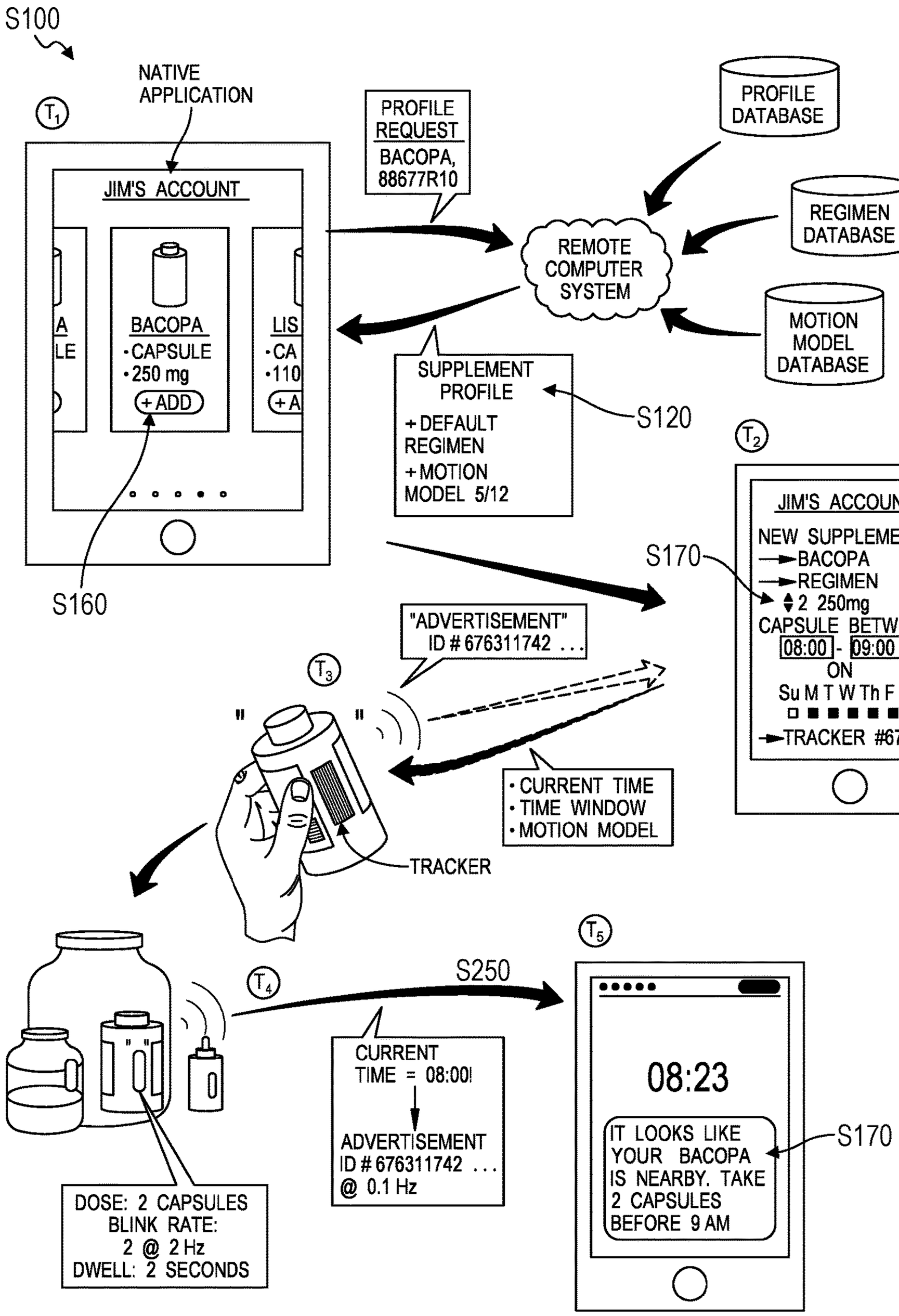

S100
NATIVE APPLICATION
T1
JIM'S ACCOUNT
BACOPA
•CAPSULE
•250 mg
+ADD
S160
PROFILE REQUEST
BACOPA, 88677R10
PROFILE DATABASE
REGIMEN DATABASE
MOTION MODEL DATABASE
REMOTE COMPUTER SYSTEM
SUPPLEMENT PROFILE
+DEFAULT REGIMEN
+MOTION MODEL 5/12
S120
T2
JIM'S ACCOUNT
NEW SUPPLEMENT:
BACOPA
REGIMEN
2 250mg
CAPSULE BETWEEN
08:00 - 09:00
ON
Su M T W Th F S
TRACKER #6763 ..
S170
"ADVERTISEMENT" ID # 676311742 . . .
T3
• CURRENT TIME
• TIME WINDOW
• MOTION MODEL
TRACKER
T4
S250
CURRENT TIME = 08:00!
ADVERTISEMENT ID # 676311742 . . . @ 0.1 Hz
DOSE: 2 CAPSULES
BLINK RATE:
2 @ 2 Hz
DWELL: 2 SECONDS
T5
08:23
IT LOOKS LIKE YOUR BACOPA IS NEARBY. TAKE 2 CAPSULES BEFORE 9 AM
S170

FIG. 3

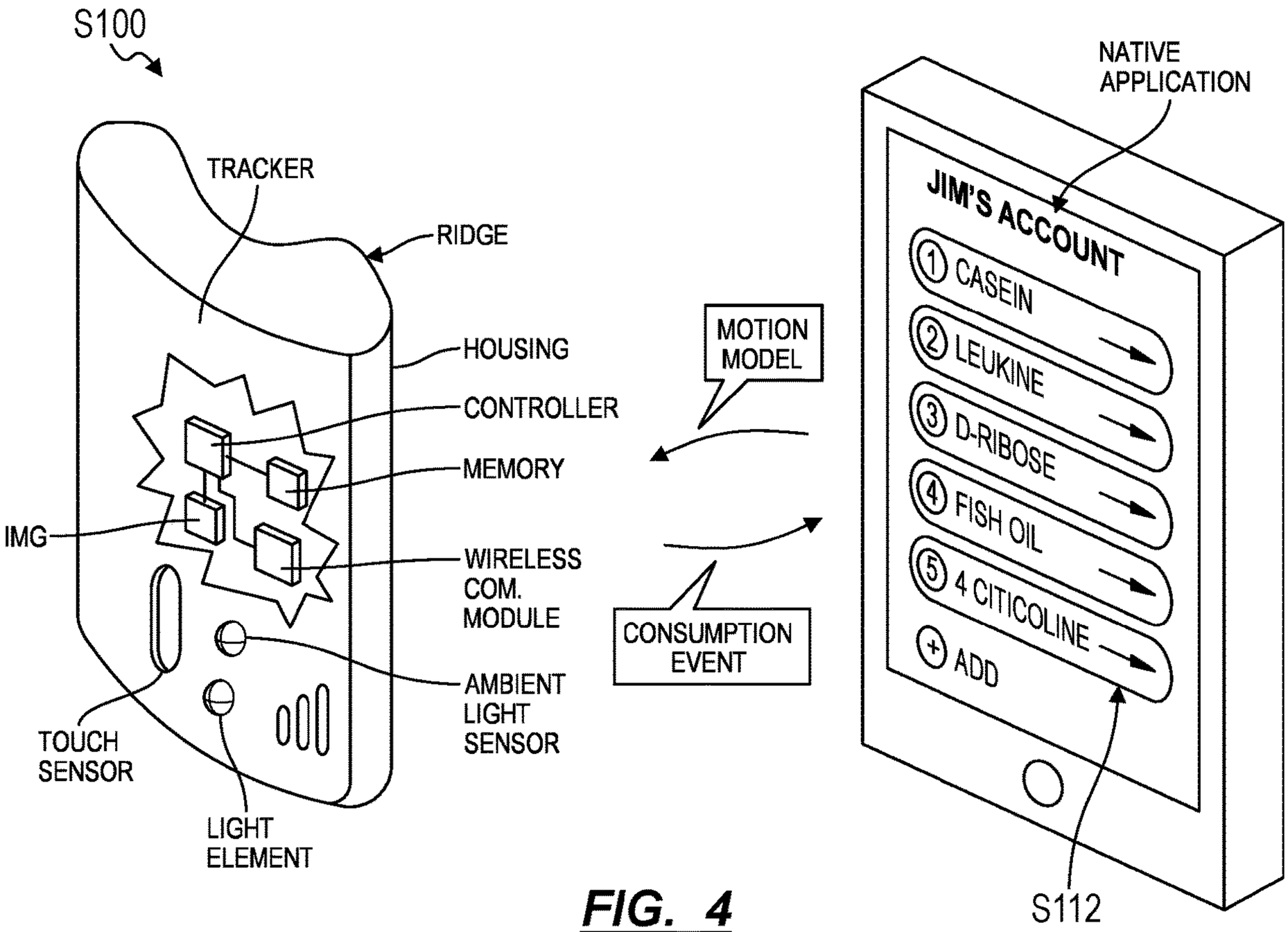

S100
TRACKER
RIDGE
HOUSING
CONTROLLER
MEMORY
IMG
WIRELESS COM. MODULE
AMBIENT LIGHT SENSOR
TOUCH SENSOR
LIGHT ELEMENT
MOTION MODEL
CONSUMPTION EVENT
NATIVE APPLICATION
JIM'S ACCOUNT
① CASEIN
② LEUKINE
③ D-RIBOSE
④ FISH OIL
⑤ 4 CITICOLINE
⊕ ADD
S112

FIG. 4

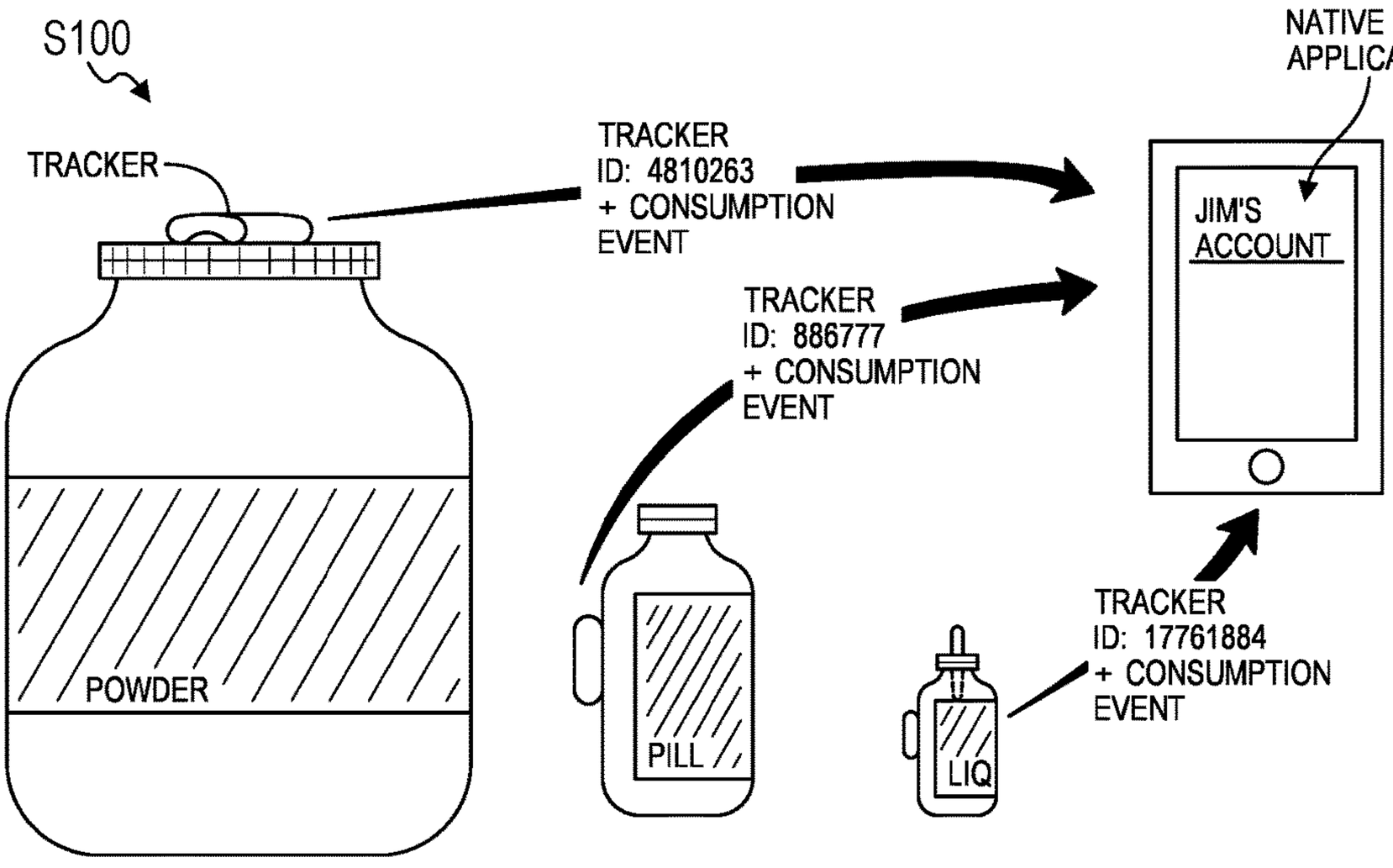

S100
TRACKER
POWDER
TRACKER ID: 4810263 + CONSUMPTION EVENT
TRACKER ID: 886777 + CONSUMPTION EVENT
PILL
LIQ
TRACKER ID: 17761884 + CONSUMPTION EVENT
NATIVE APPLICATION
JIM'S ACCOUNT

FIG. 5

METHOD FOR POPULATING USER ACCOUNTS WITH PROFILES OF SUPPLEMENTS FOR CONSUMPTION

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation of U.S. patent application Ser. No. 16/052,190, filed on 1 Aug. 2018, which claims the benefit of U.S. Provisional Application Nos. 62/547,738, 62/547,741, and 62/547,744, all filed on 18 Aug. 2017, each of which is incorporated in its entirety by this reference.

TECHNICAL FIELD

[0002] This invention relates generally to the field of health and wellness and more specifically to a new and useful method for populating user accounts with profiles of supplements for consumption in the field of health and wellness.

BRIEF DESCRIPTION OF THE FIGURES

[0003] FIG. **1** is a flowchart representation of a method;
[0004] FIG. **2** is a flowchart representation of one variation of the method;
[0005] FIG. **3** is a flowchart representation of one variation of the method;
[0006] FIG. **4** is a flowchart representation of one variation of the method; and
[0007] FIG. **5** is a flowchart representation of one variation of the method.

DESCRIPTION OF THE EMBODIMENTS

[0008] The following description of embodiments of the invention is not intended to limit the invention to these embodiments but rather to enable a person skilled in the art to make and use this invention. Variations, configurations, implementations, example implementations, and examples described herein are optional and are not exclusive to the variations, configurations, implementations, example implementations, and examples they describe. The invention described herein can include any and all permutations of these variations, configurations, implementations, example implementations, and examples.

1. Method

[0009] As shown in FIG. **1**, a method for populating user accounts with profiles of supplements for consumption includes: initializing a user profile for a user in Block Silo; populating the user profile with demographic information of the user in Block S**112**; populating the user profile with a health goal selected by the user at a native application executing on a computing device in Block S**114**; in response to selection of a first supplement, from a set of known supplements, by the user at the native application, retrieving a first supplement profile of the first supplement in Block S**120**; extrapolating a degree of an effect of the first supplement on the health goal from a scientific study based on an ingredient of the first supplement specified in the first supplement profile in Block S**130**; rendering a representation of the degree of the effect with the native application in Block S**132**; calculating a prevalence of the first supplement by demographic within a population of users in Block S**140**; rendering a representation of prevalence of the first supplement by demographic within the native application in Block S**142**; rendering a set of reviews of the first supplement within the native application in Block S**150**, the set of reviews submitted by a subset of users within the population of users, each user in the subset of users associated with a user profile linked to the first supplement for greater than a threshold duration of time; and, in response to confirmation of the first supplement profile at the native application, adding the first supplement profile to the user profile in Block S**160**.

2. Applications

[0010] The method can be executed by a system including a set of wireless trackers, a software program (hereinafter a "native application") executing on a mobile computing device, and a remote computer system hosting a user network: to generate a user profile representing a user's current demographics; to receive selection of a supplement that the user is considering consuming on a regular interval (i.e., according to a regimen); and to serve prevalence (or "popularity") of the supplement by demographic with a user population, reviews from genuine users of the supplement, and/or scientific evidence suggesting correlation between ingredients in the supplement and an outcome to the user to assist the user in determining whether to add the supplement to her user profile. For example, the native application can: collect a limited amount of user data—such as age, gender, body-mass index (or "BMI"), and activity level—from information already stored on a mobile computing device (e.g., a smartphone) executing the native application; interface with the user to receive an indication of the user's interest in a particular supplement or type of supplement; and then serve guidance to the user in ascertaining relevance of the particular supplement or supplement type to the user based on the user data, demographics of other users within a user population (i.e., the user network) that also consume the same supplement or supplement type, feedback provided passively and actively by these other users over time, and results of scientific studies on the particular supplement or supplement type. By aggregating such data collected from various sources over time and packaging these data in a visual and easily digestible format, the system can enable the user to quickly ascertain relevance of a particular supplement to her implicit or explicit needs.
[0011] Once the user thus confirms her interest in a supplement, the system can add this supplement to her user profile and then interface with the user to define a regimen for consuming this supplement over time, such as by automatically retrieving a default recommended regimen for the supplement, by fusing regimens for the supplement by other users of various demographics similar to those of the user, or by duplicating a regimen from the user account of another user in the user network selected by the user. The system can then monitor the user's adherence to this regimen over time based on consumption event detected by a tracker transiently installed on a supplement package containing the supplement. By tracking user's consumption of the supplement from the supplement package over time, the system can determine that the supplement package is (nearing) empty and automatically order additional supplement for the user or recommend a different, more relevant supplement to the user based on changes to the user's demographic (e.g., BMI, sleep quality, etc.) over time.

[0012] By thus providing multi-source data suggesting a degree of relevance of a supplement to the user when the user is first considering the supplement, tracking the user's adherence to a regimen for the supplement over time, and then automatically reassessing relevance of the supplement to the user at or near completion of a supplement package based on new user-specific data, data from users across the network, and/or related identified research, the system can: support the user in developing and refining a personal supplement plan; while also ensuring high degrees of relevance of multiple supplements in the user's profile to the user's implied needs (e.g., age-, gender-, and BMI-related needs) and explicit needs (e.g., health goals entered manually by the user) over time.

3. System

[0013] As described above, Blocks of the method can be executed by a system including a remote computer system (shown in FIG. **3**), a native application (shown in FIG. **4**), and a set of trackers (shown in FIG. **5**).

3.1 Computer System

[0014] As shown in FIG. **3**, Blocks of the method can be executed by a remote computer system (e.g., a remote server) that hosts a supplement database containing "supplement profiles" of various supplements and supplement types and hosts an online social network of supplement users, include a user profile of each user and connections to other user profiles in the online social network. The remote computer system can also: aggregate passive and active user feedback and supplement consumption data collected from user profiles over time; extract trends from these data; and serve these trends to a user to assist the user in determining whether to add a supplement to her user profile. The remote computer system can also distinguish authentic active feedback (e.g., reviews) provided by users based on their historical consumption data for supplements they have reviewed and selectively provide such authentic feedback to the user. Furthermore, the remote computer system can interface with external sources for scientific data related to supplements and their ingredients and interface with an instance of the native application executing on the user's mobile computing device to automatically provide these scientific data to the user in order to assist the user in determining whether to add a supplement to her user profile.

[0015] The remote computer system can therefore: interface with external sources to collect supplement and related scientific data; and interface with users through instances of the native application executing on their computing devices to serve relevant supplement data to these users and to collect user and consumption data from these users, which the remote computer system can then manipulate to provide improved guidance to each user individually and to the population of users generally over time.

3.2 Native Application

[0016] As shown in FIG. **4**, the native application is configured: to execute on a mobile computing device (e.g., a smartphone, a tablet, a smartwatch); to host a portal into an electronic user account; to manage supplement profiles loaded into the user account by a user; to automatically reconfigure trackers installed on supplement packages when corresponding supplements are added to or updated in the user account; to receive consumption event data from these trackers; to load consumption events; and to selectively serve notifications to the user to consume supplement according to regimens associated with these supplements in the user account.

[0017] Additionally or alternatively, the software program can be implemented in a web browser, such as on the user's mobile computing device or at a desktop computer.

3.3 Internal Social Network

[0018] As described above, the system can host an internal social network (hereinafter a "user network") in which a user may: connect with friends, family members, acquaintances, etc.; form groups with her connections, such as with her connections that are consuming a particular supplement; follow other users, such as to view supplement regimens and guidance of other users the user wishes to emulate; etc. through an instance of the native application executing on her mobile computing device.

3.4 Tracker

[0019] Generally, the tracker is configured to transiently install on a supplement package, to detect consumption events, and to wirelessly transmit consumption event data to a mobile computing device executing an instance of the native application for logging of consumption events in a user account hosted on the native application, as shown in FIG. **5**.

[0020] In one implementation shown in FIG. **2**, the tracker includes: a housing; a memory module arranged in the housing and configured to store motion data in a buffer and to store a motion model received from the native application; a touch and/or proximity sensor (e.g., a capacitance sensor) arranged in the housing and configured to detect a (conductive) body in contact with or near the housing; an ambient light sensor arranged in the housing and configured to detect a change in ambient light around the housing; a motion sensor (e.g., an accelerometer, a gyroscope, a tilt sensor, an IMU) arranged in the housing and configured to output a signal corresponding to movement of the housing; a controller configured to collect data from the touch sensor, the ambient light sensor, and/or the motion sensor and to pass these data through a motion model stored locally in the memory module to identify a consumption event; a feedback element, such as in the form of a light element (e.g., an LED) and/or haptic module (e.g., a vibrator), arranged in the housing and configured to output a signal indicating a state of the controller; a wireless communication module configured to transmit consumption event data to an affiliated mobile computing device; and a battery configured to power the foregoing modules, such as over a period of one or more years.

[0021] A transient attachment interface can also be coupled to the inner surface of the housing, thereby enabling the tracker to be removed from one supplement package and installed on another supplement package over time. For example, one element of a two-part hook-and-loop attachment system can be (permanently) adhered to the inner surface of the housing; a second element of the two-part hook-and-loop attachment system can be manually applied to a side of a supplement package; and the tracker can then be placed over the second element to transiently couple the tracker to the supplement package. When the supplement

package is empty, the supplement package can be discarded with the second element. Another instance of the second element can be manually installed on a second supplement package, and the tracker can be placed over the second instance of the second element to transiently couple the tracker to the second supplement package. Alternatively, the tracker can be installed with double-sided tape, an elastic band, a suction cup, or any other transient attachment system.

[0022] However, the tracker can include any other elements, can define any other geometry, and can be transiently mounted to a supplement package in any other way.

4. User Profile

[0023] Block S**110** of the method recites initializing a user profile for a user; and Block S**112** of the method recites populating the user profile with demographic information of the user. Generally, in Blocks S**110** and S**112**, the system generates a new user profile for a new user and aggregates demographic and/or biometric data of the user from one or more sources, such as existing external sources.

[0024] In one implementation, the native application: prompts the user to log into an external online social network through the native application; and then pulls the user's age and gender (and other demographic data) from the user's profile on the external online social network. In this implementation, the native application can also: prompt the user to enable access to a health- and wellness-related native application also executing on the user's mobile computing device; and then pull weight, height, activity level, and other demographic and biometric data of the user from this health- and wellness-related native application. The native application can additionally or alternatively prompt the user to manually select these characteristics from dropdown or other menus. The native application can also prompt the user to select her current diet plan, such as pescetarian diet, vegetarian diet, vegan diet, raw-food diet, Mediterranean diet, etc. However, the native application can collect any other existing user data automatically or prompt the user to manually enter any other data in Blocks S**110** and S**112**.

[0025] The system (e.g., the native application) can then associate the user with various demographic groups or "buckets." For example, the system can calculate the user's BMI and place the user in one of various quantitative or qualitative BMI groups (e.g., underweight, healthy, overweight, obese, and extremely obese). In another example, the system can: collect max daily heart rate, average number of steps per day, average or maximum duration of daily sedentary periods, intensity and duration of daily activities, etc. from the health- and wellness-related native application; transform these data into a qualitative measure of activity level; and then place the user in one of various quantitative or qualitative activity level groups (e.g., very active, moderately active, low activity, and not active). The system can similarly group the user by gender and age.

[0026] The system can thus construct a user profile for the user in Block S**110** and populate this user profile with representations of various qualitative and/or quantitative characteristics of the user in Block S**112**.

5. User Goals

[0027] One variation of the method includes Block S**114**, which recites populating the user profile with a health goal selected by the user at a native application executing on a computing device. Generally, in Block S**114**, the system can collect a health goal entered manually by the user through the native application and then store this health goal in the user's profile.

[0028] In one implementation, the native application serves a prepopulated list of health goals to the user, such as in the form of icons representing: increase energy level; increase focus; weight loss; increase muscle growth; improve sleep quality; etc. The native application can then record selection of one or more of these health goals and write these health goals to the user's profile in Block S**114**. Later, the system can compare these health goals to known effects or correlation outcomes of supplements considered by the user in Block **120** or loaded into the user's profile in Block S**160** to gauge relevance of these supplements to the user.

6. Viewing New Supplements

[0029] Block S**120** of the method recites, in response to selection of a first supplement, from a set of known supplements, by the user at the native application, retrieving a first supplement profile of the first supplement. Generally, in Block S**120**, the native application accesses a supplement profile of a supplement of interest selected by the user, such as a supplement profile specific to a particular SKU (i.e., a supplement by a particular brand or manufacturer, in a particular format, and supplied in a supplement package of a particular size) or a generic supplement profile for the particular supplement or generic supplement type.

6.1 Optical Scan

[0030] In one implementation, to load a new supplement to the user account, the user records a photographic image or a camera feed (i.e., a "scan") of a barcode or other label on the supplement package. The native application accesses this image or a camera feed, implements computer vision techniques to extract an identifier (e.g., a SKU) of the supplement package from this image or camera feed, and retrieves a supplement profile associated with this identifier from a remote supplement database. For example, the supplement profile can specify: a name of the supplement; a format of the supplement (e.g., capsule form, powder, etc.); a size of one dose of the supplement (e.g., 100 milligrams per pill, 30 grams per scoop, etc.); a packaging format and size of the supplement packaging (e.g., three-ounce amber glass bottle with dropper lid, eight-ounce white plastic jar with pop lid, five-liter white plastic jar with screw lid); ingredients; a consumption recommendation or regimen (e.g., recommended or maximum number of doses per day); etc.

6.2 Keyword Search

[0031] In another implementation, the user can manually enter search terms for a new supplement or supplement type into the native application—such as a name, size, or SKU of the supplement or supplement package—and the native application can retrieve a supplement profile of a supplement selected from results of the user's search.

6.3 Social Connection

[0032] In yet another implementation, the native application can access the social network to enable the user to view

supplements loaded into profiles of other users, such as friends, family, and other acquaintances of the user. The user can thus select a supplement shown in another user's profile to copy the supplement into the user's own profile; the native application can retrieve a corresponding supplement profile, as described above.

[0033] Alternatively, another user within the social network may send (e.g., "push") supplement data from her user account to the user's account, such as in the form of a name of the supplement, a SKU or other identifier of the supplement, a supplement profile of the supplement, and/or her regimen for consuming the supplement. Upon receipt of these supplement data from the other user at the user's account, the user can: reject the supplement; accept the supplement and regiment to load the regiment directly into her virtual shelf (described below) and then manually enter changes to the regimen; or open the supplement profile to view more information regarding the supplement before accepting or rejecting the supplement.

7. Supplement Data

[0034] Once the user selects a supplement of interest and the system retrieves a corresponding supplement profile in Block S**120**, the native application can present to the user graphical and/or textual information pertaining to consumption of the supplement within the user network, scientific research relating to ingredients in the supplement, and reviews or other feedback provided by other users who have consumed the supplement in the past.

7.1 Popularity/Trends Among Users

[0035] One variation of the method includes: Block S**140**, which recites calculating a prevalence of the first supplement by demographic within a population of users; and Block S**142**, which recites rendering a representation of prevalence of the first supplement by demographic within the native application. Generally, in Blocks S**140** and S**142**, the system can communicate to the user how many other users in the user network globally or in the user's connections in the user network specifically currently consume the supplement of interest and their demographics.

[0036] In one implementation, the remote computer system: maintains one user profile per user within the user network, including static and dynamic demographic information that may change over time (e.g., age, gender, BMI, activity level); collects supplement consumption data from each user's instance of the native application, which interfaces with trackers to automatically record consumption events; and maintains a log of which supplements each user has consumed, when, and in what quantity. By cross-referencing supplement profiles for these supplements, which indicate types and quantities of ingredients (e.g., compounds) in these supplements, the system can estimate quantities of a large number (e.g., hundreds, thousands) of ingredients consumed by users in the user network over time.

[0037] The system can then: identify a primary ingredient in the supplement of interest from its supplement profile; and extract trends between user demographics and consumption of this ingredient over time across the user network. For example, the system can determine that the primary ingredient or compound in the supplement of interest has historically been consumed with greatest prevalence by [very active] [male users] with [BMIs between 20 and 22].

[0038] The system can implement similar methods and techniques to isolate greatest historical prevalence of consumption of other ingredients in the supplement of interest to particular combinations of demographics and then calculate a linear combination of historical prevalence for these various ingredients into a single set of demographics.

[0039] The system can additionally or alternatively extract a trend between a particular set of demographics and greatest prevalence of consumption of a primary ingredient (or combination of ingredients) in the supplement of interest across the user network at the current time (i.e., rather than historically).

[0040] The system can additionally or alternatively extract a trend between a particular set of demographics and greatest prevalence of consumption of a type of the supplement of interest (e.g., generic vitamin C) or the supplement of interest specifically (e.g., of a particular type and format from a particular manufacturer) across all users in the user network over time or at the current time.

[0041] However, the system can implement any other method or technique to identify a set of demographics (e.g., age, gender, BMI, and activity level) that currently or that have historically exhibited greatest consumption of one or more ingredients in the supplement or greatest consumption of the supplement specifically. The native application can then render a textual description and/or graphic indicators (e.g., icons) that represent this set of demographics for inter-network consumption related to the supplement of interest. Furthermore, the native application can: similarly render a textual description and/or graphic indicators that represent the user's demographics; and highlight alignment or misalignment between the inter-network demographics related to the supplement of interest and the user's demographics, thereby providing the user rapid feedback regarding relevance of the supplement to the user.

[0042] The system can implement similar methods and techniques to: identify a set of demographics that currently or that have historically exhibited greatest consumption of one or more ingredients in the supplement or greatest consumption of the supplement specifically within a subset of other users connected to the user (e.g., the user's friends, family, and other users followed by the user); and then communicate this set of demographics to the user.

7.2 Scientific Data

[0043] Another variation of the method includes: Block S**130**, which recites extrapolating a degree of an effect of the first supplement on the health goal from a scientific study based on an ingredient of the first supplement specified in the first supplement profile; and Block S**132**, which recites rendering a representation of the degree of the effect within the native application. Generally, in this variation, the system can aggregate available scientific data related to one or more ingredients in the supplement of interest and present these data to the user in a compressed (textual and/or graphical) format within the native application.

[0044] In one implementation, the system identifies a primary ingredient in the supplement of interest from the corresponding software program profile and scans a corpus of scientific publications for a set of scientific publications that reference the primary ingredient, such as scientific studies directly and/or news articles referencing these sci-

entific studies. The system can then: flag this set of scientific publications for manual recordation of correlations between the primary ingredient and a user outcome by a human reviewer; or automatically extract such correlations from these scientific publications, such as by implementing natural language processing ("NLP") techniques.

[0045] The system can then aggregate these correlations—recorded manually by a human reviewer or extracted automatically by the system—between the primary ingredient and a degree of correlation (e.g., low, medium, or high correlation) to a particular outcome, such as improved sleep, reduced anxiety, weight loss, increased activity level, or improved focus, etc. For example, the system can calculate a linear combination (e.g., an average) of correlations between consumption of the primary ingredient and a particular outcome extracted from multiple scientific studies—weighted according to sample sizes noted in these studies—to output a degree or confidence in correlation between the primary ingredient and the outcome.

[0046] The system can then generate a visual summary of this correlation, such as with links to supporting or exemplary scientific studies, and then serve this visual summary to the user via the native application.

[0047] Furthermore, the system can predict an effect of the supplement on the user based on these scientific data. For example, the system can: generate a first-order prediction for a type of outcome effected by consumption of the supplement of interest that contains this primary ingredient; generate a second-order prediction for a degree of the predicted outcome based on an amount of the primary ingredient per dose of the supplement of interest, a recommend number of daily doses of the supplement of interest, (the user's weight or BMI,) and a correlation between quantity of the supplement of interest and degree of effect suggested in the scientific data; and serve these predicted effects to the user through the native application to inform the user of an effect she may anticipate upon beginning consumption of the supplement. In this example, the native application can render a textual or graphical representation of the degree of the outcome or effect on the user upon consumption of the supplement of interest over time adjacent a textual or graphical representation of a most similar health goal selected by the user in Block S**114** in order to indicate to the user a strength of alignment between the supplement of interest and the user's health goal.

[0048] As described above, the system can collect and store user demographic and consumption event data for users in the user network over time. The system can also implement methods and techniques similar to those described above to: extract trends in various fields (e.g., weight, BMI, activity level, sleep quality, focus, etc.) across a population of users within the user network; and to extract correlations between these trends (i.e., outcomes, effects) and consumption of the primary ingredient, such as based on quantity and frequency of consumption of the primary ingredient across the population of users. For example, the system can implement machine learning or regression techniques to identify a correlation (and a strength of this correlation) between: adherence to a regimen for a supplement containing the primary ingredient and frequencies and amounts of the primary ingredient consumed by a subset of users in the user network; and a change in a demographic or other field among this subset of users over a period of time. The system can thus handle demographic and consumption event data collected from users in the network as raw study data and then automatically process these data to extract correlations between ingredients consumed by users in the network and changes to their demographics and/or other monitors fields (e.g., BMI, sleep quality, activity level, focus, etc.).

[0049] The system can implement similar methods and techniques to extract correlations between multiple other ingredients noted in the supplement of interest and multiple other possible outcomes from scientific data and intra-network data and to package these correlations for visual consumption by the user while considering the supplement of interest.

7.3 User Comments and Reviews

[0050] Another variation of the method incudes Block S**150**, which recites rendering a set of reviews of the first supplement within the native application, wherein the set of reviews was submitted by a subset of users within the population of users, and wherein each user in the subset of users is associated with a user profile linked to the first supplement for greater than a threshold duration of time. Generally, in Block S**150**, the native application can: qualify reviews of the supplement of interest (or of the supplement type of the supplement of interest, an ingredient in the supplement of interest, etc.) submitted by other users based on whether these other users have the same or similar supplements loaded into their user profiles, the degree to which these users have adhered to their regimens for these supplements, and the duration over which these users have consumed the same or similar supplements; and then selectively reveal these reviews of the supplement of interest (or of the supplement type of the supplement of interest, an ingredient in the supplement of interest, etc.) based on quality of these reviews, thereby enabling the user to access user feedback provided by other users in the user network most likely to provide informed opinions related to the supplement of interest.

[0051] In one implementation, the system tracks a user's consumption of a supplement and adherence to a corresponding regimen over time and permits the user to submit a review of the supplement only once certain conditions are met. For example, the system can: track consumption of a supplement and adherence to a regimen for this supplement by a user over time through an instance of the tracker transiently installed on a supplement package containing doses of this supplement; and permit this user to submit a review of the supplement only once the user has achieved at least a minimum adherence (e.g., 80% adherence) to a reasonable regimen (e.g., at least one consumption event per day) over a minimum duration of time (e.g., two months). The system can implement this process across the entire user network for all known supplements loaded into user profiles in the user network.

[0052] The system can additionally or alternatively rank reviews submitted by users in the user network based on tracked consumption of these supplements by users. For example, for a particular supplement, particular supplement type, or particular supplement ingredient, the system can aggregate reviews of this particular supplement, particular supplement type, or supplements containing this particular ingredient submitted by users in the user network and then rank these reviews by: a number of consumption events recorded for a user for the reviewed supplement; a duration

of time over which each user achieved minimum adherence to a regimen for a supplement she reviewed; a degree of a user's adherence to a regimen for a supplement she reviewed; a total quantity of a reviewed supplement consumed by a user; etc.

[0053] For another user considering adding a supplement of interest to her user profile, the system can thus: aggregate and rank reviews related to the supplement of interest, to a particular type of supplement of interest, or to a particular ingredient in the supplement of interest; and serve a limited number of the highest-ranked reviews to the user through the native application in Block S**150**, thereby enabling the user to access feedback from other users who have consumed the supplement of interest or like supplements in the past.

8. Insertion of Supplement Profile into User Profile

[0054] Block S**160** of the method recites, in response to confirmation of the first supplement profile at the native application, adding the first supplement profile to the user profile. Generally, in Block S**160**, the system can load an instance of the supplement profile of the supplement of interest into the user's profile once confirmed by the user and in preparation for defining a regimen for consumption of the supplement by the user. For example, the native application can host a "virtual shelf" containing graphical representations of supplements loaded into the user's profile and then update the virtual shelf with a graphical representation of the supplement of interest once confirmed by the user in Block S**160**. Once the supplement is added to the user's profile, the native application can also guide the user in placing a tracker on a supplement package containing the supplement and then linking this tracker to a supplement profile in the user's profile. Once the tracker is installed on the supplement package, the native application can interface with the tracker to track the user's consumption of the supplement over time.

9. Regimen

[0055] In one variation, upon insertion of a supplement profile into the user's account, the native application can write a regimen for consuming the supplement to the supplement profile within the user's profile.

[0056] In one implementation, the native application automatically loads a default recommended regimen for the supplement from a supplement manufacturer into the supplement profile; the native application can then interface with the user to modify this default recommended regimen, such as to define specific times or time windows for a default number of recommended daily consumption events for the supplement or to adjust a number of daily consumption events for the supplement, as shown in FIG. **1**. For example, the default regimen can specify consumption of the supplement twice per day, including once between the hours of 7 AM and 8 AM and again between the hours of 7 PM and 8 PM; the native application can then interface with the user to adjust the time windows to 6 AM to 7 AM and to 4 PM to 6 PM.

[0057] In another implementation, the native application can: access a portal into the user network; enable the user to navigate to a profile of a friend, family member, or other connection and to select a regimen for the same (or similar) supplement from this other profile; copy the regimen from this other profile into the supplement profile in the user's account; and then enable the user to manually adjust parameters of this supplement profile, such as target times, time windows, days of the week, and dose size for consumption events specified in the regimen.

[0058] In a similar implementation, the system compiles (e.g., averages) regimens for the supplement (or for an ingredient contained in the supplement) across a subset of users in the user network who exhibit similar characteristics (e.g., age, gender, BMI, activity level, etc.) and who have consumed the same (or similar) supplement for at least a minimum duration (e.g., two months) and with a minimum adherence (e.g., 80%) to their selected regimens to form a regimen for consumption of the supplement by the user.

[0059] In yet another implementation, the system can extract a recommended regimen for consumption of the supplement based on: supporting scientific data, as described above; the user's health goals recorded in Block S**114**; various user characteristics; and/or the quantity of a particular ingredient contained in each dose of the supplement.

[0060] However, the native application can implement any other method or technique to define, import, and/or customize a regimen for consumption of a supplement by the user and to link this regimen to a supplement profile in the user's account.

10. Reordering

[0061] In another variation, the system can: track an amount of a supplement remaining in a current supplement package; and automatically order a new supplement package containing this supplement once the current supplement package is (nearly) empty or automatically recommend an alternate supplement to the user, such as based on a change in characteristics of the user or new internal or external scientific data.

10.1 Supplement Package Fill Level

[0062] In one implementation, the system: retrieves an original weight of supplement, volume of supplement, or number of supplement pills, etc. contained in the full supplement package, such as from the supplement profile once loaded in the user account; retrieves a standard dose size for the supplement from the supplement profile; and calculates a number of standard-sized doses in the supplement package accordingly. Alternatively, the system can retrieve a total number of standard-sized doses in the supplement package directly from the supplement profile. Over time, the system can sum a number of consumption events associated with the supplement since the current supplement package was linked to the tracker and subtract this sum from the total number of standard-sized doses in the supplement package to determine a current fill level of the supplement package. The system (e.g., the native application) can thus maintain an estimate of a remaining quantity of supplement in the supplement package.

[0063] Alternatively, in addition to outputting a confidence score that a consumption event occurred, the motion model can also transform a motion of the supplement package during a consumption into an estimate of the fill level of the supplement package and output this estimate to the native application when the tracker wirelessly connects to the mobile computing device. In particular, motion of the supplement package during a consumption event may be unique to a fill level of the supplement package (and the package type and supplement format); the motion model can

thus leverage motion of the supplement—detected by sensors in the tracker—to estimate the fill level of the supplement package; the tracker can then output this fill level to the native application, which can selectively execute a reorder routine accordingly.

[0064] The native application can additionally or alternatively enable the user to manually indicate a fill level of the supplement package, such as: by explicitly adjusting a slider within the supplement profile in the user's profile to indicate the fill level in the current supplement package; explicitly noting the current supplement package as empty within the supplement profile; or implicitly by initiating a pairing routine to link a tracker associated with the current supplement package to another supplement package containing the same supplement.

10.2 Actual Dose Size for User

[0065] Upon receipt of an indication from the user that a current supplement package is empty, the system can divide a total amount of supplement in the package by the total number of consumption events recorded at the supplement package since it was initially linked to the user's account in order to calculate an actual dose size for the supplement by the user. The system can then implement this actual dose size to estimate fill level of supplement packages containing the same supplement and linked to the user's account in the future.

10.3 Reordering and Supplement Changes

[0066] When the system determines that a current supplement package linked to the user's profile is (nearly) empty, the system can automatically initiate a reorder routine to either: order another unit of the supplement package on behalf of the user; or recommend an alternative supplement to the user based on data collected from the user over time, feedback from other users in the user network, and/or recent scientific data related to the supplement or its contents. For example, the native application can: predict a time to complete exhaustion of the current supplement package based on the estimated amount of supplement remaining in the supplement package and upcoming consumption events specified in a regimen for the supplement in the user's profile; estimate a duration of time to receipt of a replacement supplement package containing the same supplement based on current availability; and then execute the reorder routine when the estimated duration of time to receive a replacement supplement package exceeds the time to complete exhaustion of the current supplement package.

[0067] In one implementation, during a reorder routine, the system: accesses recent data collected from the user, such as daily step count, daily activity, weight, sleep, and/or other data; recalculates user demographics or other fields or characteristics of the user based on these data; and/or prompts the user to confirm or adjust her health goals through the native application. The system can then recalculate a correlation (e.g., low, medium, or high correlation) between consumption of an ingredient in the supplement and a particular outcome, such as noted in the user's confirmed health goals, in light of new scientific data and/or additional user data collected since the user first linked this supplement package to her user profile. The system can also identify other supplements that similar users or users exhibiting similar demographic changes over time have switched to.

[0068] Based on the foregoing data, the system can then implement the foregoing methods and techniques to qualify or quantify current relevance of the supplement to the user. For example, the system can calculate a score for relevance of a primary ingredient in the supplement to the user's current demographic and/or current health goals. The system can also determine whether the supplement contains any compounds shown to be deleterious to the user in light of the user's current demographic and health goals. If the relevance of the supplement to the user has diminished (e.g., dropped below a threshold), the system can scan supplement profiles and related internal and external data of other supplements for a second supplement that may be more relevant to the user; recommend this second supplement to the user in place of the original supplement through the native application; and provide supporting evidence, such as in textual and/or graphical form, supporting this recommendation through the native application.

[0069] If the user confirms the recommended second supplement, the system can automatically submit an order for a supplement package containing the second supplement in place of the original supplement and load a supplement profile for the second supplement into the user's profile, as described above. However, if the user declines the second supplement or if the current supplement remains relevant to the user's demographic and/or stated health goals, the system can automatically submit an order for another supplement package containing the original supplement. (Alternatively, the native application can serve a prompt to the user to manually purchase a supplement package containing the second supplement or the original supplement, such as with a link to an online website where the supplement package is available or indicating a local brick-and-mortal shop that stocks the supplement package.)

[0070] Therefore, the system can serve guidance to the user for maintaining or altering her supplement regimen as a current supplement package nears exhaustion, thereby limiting supplement waste while also maintaining strong alignment between the user's needs and goals and supplements she is consuming over time.

[0071] The systems and methods described herein can be embodied and/or implemented at least in part as a machine configured to receive a computer-readable medium storing computer-readable instructions. The instructions can be executed by computer-executable components integrated with the application, applet, host, server, network, website, communication service, communication interface, hardware/firmware/software elements of a user computer or mobile device, wristband, smartphone, or any suitable combination thereof. Other systems and methods of the embodiment can be embodied and/or implemented at least in part as a machine configured to receive a computer-readable medium storing computer-readable instructions. The instructions can be executed by computer-executable components integrated by computer-executable components integrated with apparatuses and networks of the type described above. The computer-readable medium can be stored on any suitable computer readable media such as RAMs, ROMs, flash memory, EEPROMs, optical devices (CD or DVD), hard drives, floppy drives, or any suitable device. The computer-executable component can be a processor but any suitable dedicated hardware device can (alternatively or additionally) execute the instructions.

[0072] As a person skilled in the art will recognize from the previous detailed description and from the figures and claims, modifications and changes can be made to the embodiments of the invention without departing from the scope of this invention as defined in the following claims.

I claim:

1. A method for managing supplement consumption comprises:

initializing a user profile for a user;

populating the user profile with a first demographic value of the user;

populating the user profile with a first health goal selected by the user at a graphical user interface executing on a computing device;

retrieving a first supplement profile of a first supplement selected, from a population of supplements, by the user;

extracting an identifier of a first ingredient, in the first supplement, from the first supplement profile;

identifying a first subset of user profiles, in a population of user profiles affiliated with a population of users, specifying the first demographic value and the first health goal;

deriving a first correlation between the first health goal and the first ingredient for the first demographic value based on the first subset of user profiles;

calculating a first relevance of the first supplement for the user based on the first correlation;

accessing a corpus of scientific publications;

scanning the corpus of scientific publications for a set of scientific publications containing the identifier of the first ingredient;

extracting a second correlation between the first ingredient and the first health goal from the set of scientific publications;

extrapolating a magnitude of a predicted effect of the first supplement on the first health goal for the user based on the second correlation;

accessing a set of reviews specifying the first supplement and submitted by users associated with the population of user profiles;

for each review in the set of reviews, calculating a score of the review based on:

quality of adherence of an extant user, associated with the review, to a regimen specifying the first supplement; and

a duration of consumption of the first supplement by the extant user; and

selecting a subset of reviews exhibiting highest scores in the set of reviews;

at the graphical user interface executing on the computing device:

receiving, by the user, a selection of the first health goal;

rendering a first representation of the relevance of the first supplement within the graphical user interface;

rendering a second representation of the magnitude of the predicted effect within the graphical user interface;

presenting the subset of reviews to the user within the graphical user interface; and

receiving, by the user, a confirmation of the first supplement; and

in response to receiving the confirmation of the first supplement at the graphical user interface, adding the first supplement to the user profile.

2. The method of claim **1**:

wherein rendering the second representation of the magnitude of the predicted effect within the graphical user interface comprises rendering the second representation of the magnitude of the predicted effect within the graphical user interface concurrently with the first representation of the relevance of the first supplement; and

wherein presenting the subset of reviews to the user within the graphical user interface comprises presenting the subset of reviews, ordered by score, within the graphical user interface concurrently with the first representation and the second representation.

3. A method for managing supplement consumption comprises executing computer-readable instructions on a computer-readable medium of a computing device, the instructions comprising:

initializing a user profile for a user

with a first demographic value of the user;

receiving a selection of a first health goal by the user at a graphical user interface executing on the computing device;

populating the user profile with the first health goal;

retrieving a first supplement profile of a first supplement selected, from a population of supplements, by the user from a supplement database;

identifying a first ingredient in the first supplement based on the first supplement profile;

identifying a first subset of user profiles, in a population of user profiles, specifying the first demographic value and the first health goal;

deriving a first correlation between the first health goal and the first ingredient for the first demographic value based on a frequency of user profiles, in the first subset of user profiles, that specify the first ingredient;

calculating a first relevance of the first supplement for the user based on the first correlation;

generating a first graphical representation of the first relevance;

rendering the first graphical representation for the first user at the graphical user interface; and

in response to receiving a confirmation by the user of the first supplement at the graphical user interface, adding the first supplement profile to the user profile.

4. The method of claim **3**, further comprising:

identifying, from a corpus of scientific publications,

a set of scientific publications that reference the first ingredient;

extracting a second correlation between the first ingredient and the first health goal from the set of scientific publications;

extrapolating a magnitude of an effect of the first supplement on the first health goal based on the second correlation;

rendering a second representation of the magnitude of the effect within the graphical user interface concurrently with the first graphical representation;

accessing a set of reviews specifying the first supplement and submitted by users associated with the population of user profiles;

for each review in the set of reviews, calculating a score of the review based on:

a quality of adherence of an extant user, associated with the review, to a regimen specifying the first supplement; and

a duration of consumption of the first supplement by the extant user; and

selecting a subset of reviews exhibiting highest scores in the set of reviews; and

presenting the subset of reviews to the user within the graphical user interface concurrently with the first graphical representation.

5. The method of claim **3**, wherein deriving the first correlation between the first health goal and the first ingredient for the first demographic value comprises:

identifying a second subset of user profiles, in the first subset of user profiles, specifying adherence to regimens for a set of supplements comprising the first ingredient greater than a threshold adherence for durations of time greater than a threshold duration; and

deriving the first correlation between the first health goal and the first ingredient for the first demographic value based on the frequency of the second subset of user profiles in the first subset of user profiles.

6. The method of claim **3**, wherein deriving the first correlation between the first health goal and the first ingredient for the first demographic value comprises:

identifying a second subset of user profiles, in the first subset of user profiles, indicating transition from the first demographic value to a second demographic value associated with the first health goal;

identifying a third subset of user profiles, in the first subset of user profiles, specifying adherence to regimens for a set of supplements comprising the first ingredient greater than a threshold adherence for durations of time greater than a threshold duration; and

deriving the first correlation between the first health goal and the first ingredient for the first demographic value based on frequencies of the second subset of user profiles and the third subset of user profiles in the first subset of user profiles.

7. The method of claim **3**:

wherein deriving the first correlation comprises deriving a trend between the first health goal and prevalence of consumption of the first ingredient across the first subset of user profiles;

wherein calculating the first relevance of the first supplement for the user comprises characterizing a difference between the first health goal and the first demographic value of the user and the trend; and

wherein generating the first graphical representation of the first relevance comprises generating the first graphical representation indicating the trend.

8. The method of claim **3**, further comprising:

identifying a set of user profiles, in the population of user profiles, connected to the user profile within an online user network;

accessing a set of virtual shelves within the set of user profiles;

presenting a subset of supplements, in the population of supplements, specified in the set of virtual shelves;

transmitting a prompt to the user to select from the set of supplements at the graphical user interface; and

receiving the selection of the first supplement in the set of supplements at the graphical user interface.

9. The method of claim **3**:

further comprising transmitting a notification from a second user to the user within an online user network at the graphical user interface, the notification comprising a recommendation for the first supplement generated by the second user; and

wherein retrieving the first supplement profile of the first supplement comprises retrieving the first supplement profile of the first supplement in response to receiving a confirmation of the notification by the user at the graphical user interface.

10. The method of claim **3**:

identifying, from the corpus of scientific publications, the set of scientific publications that reference the first ingredient, further comprising:

automatically extracting a second correlation between the first ingredient and the first health goal from the set of scientific publications;

wherein calculating the first relevance comprises calculating the first relevance of the first supplement for the user further based on the second correlation; and

further comprising presenting a set of links to the set of scientific publications, in association with the first supplement, at the graphical user interface.

11. The method of claim **1**:

wherein automatically extracting the second correlation from the set of scientific publications comprises automatically extracting the second correlation, between the first ingredient and an outcome associated with the first health goal, from the set of scientific publications;

further comprising:

calculating a first prediction for the outcome effected by consumption of the first supplement by the user; and

calculating a second prediction for a magnitude of the outcome for the user based on an amount of the first ingredient per dose of the first supplement, the first demographic value of the user, and the second correlation; and

wherein generating the first graphical representation comprises generating the first graphical representation depicting the first prediction for the outcome and the second prediction for the magnitude of the outcome.

12. The method of claim **3**, further comprising:

accessing a set of reviews specifying the first supplement and submitted by users associated with the population of user profiles;

for each review in the set of reviews, calculating a score of the review based on:

quality of adherence of an extant user, associated with the review, to a regimen specifying the first supplement; and

a duration of consumption of the first supplement by the extant user;

selecting a subset of reviews exhibiting highest scores in the set of reviews; and

presenting the subset of reviews to the user with the first graphical representation.

13. The method of claim **3**, further comprising, in response to receiving a confirmation by the user of the first supplement at the graphical user interface:

presenting the first subset of user profiles to the user at the graphical user interface;

transmitting a prompt to the user to select from the first subset of user profiles at the graphical user interface; and

in response to receiving a selection by the user of a particular user profile from the first subset of user profiles at the graphical user interface, importing a regimen for the first supplement from the particular user profile into the user profile, the regimen specifying a schedule for consuming doses of the first supplement.

14. The method of claim **3**, further comprising:

in response to receiving a confirmation by the user of the first supplement at the graphical user interface, associating a tracker, coupled to a first supplement package containing the first supplement, with the user profile;

receiving a sequence of consumption event records from the tracker over a first time period;

determining a fill level of the first supplement package based on the sequence of consumption event records received from the tracker;

in response to the fill level of the first supplement package falling below a threshold fill level, transmitting a prompt to the user to confirm the first health goal via the graphical user interface;

in response to the user electing a second health goal:

identifying a second subset of user profiles, in the population of user profiles, specifying the first demographic value and the second health goal;

deriving a second correlation between the second health goal and the first ingredient for the first demographic value based on a second frequency of user profiles, in the second subset of user profiles, that specify the first ingredient;

calculating a second relevance of the first supplement for the user based on the first demographic and the second health goal; and

in response to the second relevance falling below the first relevance and in response to the fill level of the first supplement package falling below a threshold fill level, serving a recommendation to the user to elect an alternate supplement within the graphical user interface.

15. The method of claim **3**, further comprising:

based on the user confirming the first supplement, associating a tracker, coupled to a first supplement package containing the first supplement, with the user profile;

receiving a sequence of consumption event records from the tracker over a time period;

tracking a fill level of the first supplement package based on the sequence of consumption event records;

deriving a second demographic value of the user based on data collected during the time period;

identifying a second subset of user profiles, in the population of user profiles, specifying the second demographic value and the first health goal;

deriving a second correlation between the first health goal and the first ingredient for the second demographic value based on a second frequency of user profiles, in the second subset of user profiles, that specify the first ingredient;

calculating a second relevance of the first supplement for the user based on the second demographic and the first health goal; and

in response to the second relevance falling below the first relevance and in response to the fill level of the first supplement package falling below a threshold fill level, serving a recommendation to the user to elect an alternate supplement within the graphical user interface.

16. The method of claim **15**:

wherein serving the recommendation to the user to elect the alternate supplement within the graphical user interface comprises, in response to the second relevance falling below the first relevance:

scanning supplement profiles, of supplements in the population of supplements, for a second supplement comprising a second ingredient exhibiting a third relevance to the user greater than the second relevance based on the second demographic value of the user; and

in response to the fill level of the first supplement package falling below the threshold fill level, transmitting a prompt to the user to elect the second supplement in place of the first supplement via the graphical user interface; and

further comprising, in response to receiving a confirmation by the user of the first supplement at the graphical user interface:

replacing the first supplement profile within the second supplement profile in the user profile; and

initiating an order for a second supplement package containing the second supplement.

17. The method of claim **15**:

wherein populating the user profile with the first demographic value comprises populating the user profile with the first demographic value representing a first activity level reported by the user; and

wherein deriving the second demographic value of the user comprises deriving the second demographic value representing a second activity level, greater than the first activity level, based on motion data collected by a wearable device, associated with the user profile, during the time period.

18. The method of claim **3**, further comprising:

generating a regimen for the first supplement for the user, the regimen specifying a schedule for consuming doses of the first supplement; and

transmitting, at the graphical user interface, to the user a set of notifications over a first time period in accordance with the schedule for consuming doses.

19. A method for managing supplement consumption comprises:

initializing a user profile for a user;

populating the user profile with a first demographic value of the user;

receiving a selection by the user of a first health goal at a graphical user interface executing on a computing device;

populating the user profile with the first health goal;

retrieving a first supplement profile of a first supplement selected, from a population of supplements, by the user from a supplement database;

calculating a first relevance of the first supplement for the user based on the first demographic and the first health goal;

presenting the first relevance to the user at the graphical user interface;

in response to receiving a confirmation by the user for the first supplement at the graphical user interface:

adding the first supplement profile to the user profile; and

associating a tracker, coupled to a first supplement package containing the first supplement, with the user profile, the tracker comprising a motion sensor and configured to transmit consumption event data of the first supplement to the computing device, wherein the consumption event data is based on motion data of the first supplement package;

receiving a sequence of consumption event records from the tracker over a first time period;

determining a fill level of the first supplement package based on the sequence of consumption event records received from the tracker;

deriving a second demographic value of the user based on data collected during the first time period;

calculating a second relevance of the first supplement for the user based on the second demographic value and the first health goal;

in response to the second relevance falling below the first relevance and in response to the fill level of the first supplement package falling below a threshold fill level, serving a recommendation to the user to elect an alternate supplement within the graphical user interface.

20. The method of claim **19**:

wherein serving the recommendation to the user to elect the alternate supplement within the graphical user interface comprises, in response to the second relevance falling below the first relevance:

identifying supplement profiles, of supplements in the population of supplements from the supplement database, for a second supplement comprising a second ingredient exhibiting a third relevance to the user greater than the second relevance based on the second demographic value of the user; and

in response to the fill level of the first supplement package falling below the threshold fill level, transmitting a prompt to the user to elect the second supplement in place of the first supplement via the graphical user interface; and

further comprising, in response to receiving the confirmation by the user for the first supplement at the graphical user interface:

replacing the first supplement profile with the second supplement profile in the user profile; and

initiating an order for a second supplement package containing the second supplement.

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