CLAIMS

1. A method comprising:

receiving, over a network by one or more computing devices, health parameters and the one or more goals from a user;

receiving, over a network by one or more computing devices, prior to an impending meal-time of the user, proposed meal data from the user comprising an image of a proposed meal that comprises representations of a plurality of food items;

automatically annotatively modifying the proposed meal image, by the one or more computing devices, based, at least in part, on the health parameters and the one or more goals received from the user;

wherein the annotative modifications to the proposed meal image comprise a plurality of modification annotations, wherein each modification annotation of the plurality of modification annotations comprises one or more instructions for modifying a distinct respective food item of the plurality of food items of the proposed meal to align with the one or more goals received from the user, based at least in part on the health parameters received from the user; ~~and~~

wherein annotatively modifying the proposed meal image comprises ~~adding a first modification annotation that corresponds to a first food item of the plurality of food items, and adding a second modification annotation that corresponds to a second food item of the plurality of food items~~:

generating suggested quantity modifications for respective food items in the proposed meal; and

graphically superimposing the suggested quantity modifications adjacent to respective image portions depicting the food items in the proposed meal image;

~~wherein the first food item is different than the second food item;~~

prior to the impending meal-time, sending, by the one or more computing devices, the annotatively modified proposed meal image over a network to a computing device local to the user to enable the user to:

view the annotatively modified proposed meal image, and

modify the proposed meal according to the plurality of modification annotations either before the impending meal-time or while the proposed meal is being consumed.

2. The method of claim 1, further comprising:

detecting ~~the~~ a second impending meal-time of a future meal to be consumed by the user; and

~~prior to receiving the proposed meal data from the user,~~ causing a personalized opening message to be displayed to the user, wherein the personalized opening message comprises preferred meal attributes for the ~~proposed~~ future meal.

3. The method of claim 2, wherein detecting the impending meal-time of the user comprises: using meal-time information from prior meals consumed by the user to estimate ~~a~~ the second impending meal-time ~~for a future meal to be consumed by the user~~.

4. The method of claim 1, wherein annotatively modifying the proposed meal image comprises:

generating estimated nutritional attributes of the proposed meal by assigning respective nutritional attributes to various parts of the proposed meal based on analysis of the proposed meal image; and

graphically superimposing the estimated nutritional attributes over respective image portions depicting the various parts of the proposed meal in the proposed meal image.

5. The method of claim 1, wherein annotatively modifying the proposed meal image comprises:

generating an eating sequence for items in the proposed meal, that is a numbered list associated with the items in the proposed meal; and

graphically superimposing the eating sequence over respective images of the items in the proposed meal image.

~~6. The method of claim 1, wherein annotatively modifying the proposed meal image comprises:~~

~~generating suggested quantity modifications for respective items in the proposed meal; and~~

~~graphically superimposing the suggested quantity modifications adjacent to respective~~

~~image portions depicting the items in the proposed meal image.~~

~~7~~6. The method of claim ~~6~~1, wherein generating the suggested quantity modifications comprises:

generating drawings that graphically indicate quantity modifications to specific food items; and

wherein the drawings for respective graphical indications of quantity modifications are color-coded.

~~8~~7. The method of claim 1, wherein annotatively modifying the proposed meal image comprises:

generating suggested food item recommendations to be eaten by the end of the day to maintain daily dietary limits of the user ~~for items in a next proposed meal, whose nutritional attributes will be better aligned with the~~

~~one or more goals received from the user, in view of the health parameters received from the user; and~~

~~superimposing the suggested food item recommendations over respective image portions depicting various parts of the proposed meal in the proposed meal image~~.

~~9~~8. The method of claim 1, wherein annotatively modifying the proposed meal image comprises:

analyzing, by an automated computer program, the proposed meal image;

generating annotations based on the analysis by the automated computer program; and

superimposing graphical representations of the annotations over the proposed meal image to produce the annotatively modified proposed meal image.

~~10~~9. The method of claim ~~9~~8, wherein analyzing the proposed meal image comprises:

estimating nutritional attributes of the proposed meal based on the proposed meal image;

using the one or more goals received from the user to select, by the automated computer program, one or more applicable user-specific ranked rules for weight loss from a database of ranked rules;

wherein each rule of the one or more applicable user-specific ranked rules for weight loss corresponds to a particular goal of the one or more goals received from the user;

generating meal modifications to the proposed meal by applying the one or more applicable user-specific ranked rules for weight loss to the proposed meal; and

based on the generated meal modifications, generating one or more instructions for modifying one or more food items of the plurality of food items.

~~11~~10. The method of claim ~~9~~8, wherein annotatively modifying the proposed meal image further comprises:

after generating the annotations based on the analysis by the automated computer program, ~~sending~~ uploading the generated annotations and the proposed meal image ~~to~~ for approval by a dietary expert; and

~~receiving, from~~ directing the dietary expert to estimate nutritional attributes of the plurality of food items~~, particular comment data; and~~

~~wherein the graphical representations of the annotations superimposed over the proposed meal image comprise the particular comment data from the dietary expert~~.

~~12~~11. The method of claim ~~11~~10, wherein annotatively modifying the proposed meal image further comprises:

wherein said receiving the particular comment data from the dietary expert is performed at the automated computer program;

based on the particular comment data from the dietary expert, further analyzing, by the automated computer program, the proposed meal image; and

wherein the graphical representations of the annotations superimposed over the proposed meal image are based on the further analysis by the automated computer program.

~~13~~12. The method of claim 1, wherein annotatively modifying the proposed meal image comprises:

~~providing~~ uploading ~~to~~ for approval by a dietary expert for comment;

receiving comment data from the dietary expert; and

using the comment data from the dietary expert to ~~generate, by an automated computer program, one or more instructions for modifying one or more food items of the plurality of food items~~ recommend one or more food items to be eaten by the end of the day to maintain daily dietary limits of the user.

~~14~~13. The method of claim 1, further comprising:

prompting the user to, prior to the impending meal-time, provide one or more of:

one or more images of the proposed meal,

one or more specific user requests to a reviewing dietary expert of the proposed meal data,

one or more text comments specifying additional detail about various food items illustrated in image of the proposed meal, or

one or more audio messages relating additional comments from the user about the proposed meal;

wherein receiving the proposed meal data from the user is performed after said prompting the user.

~~15~~14. The method of claim 1, further comprising:

determining a location of the user prior to the impending meal-time;

generating, based on the determined user location, suggested dietary choices available nearby to the user that align with the one or more goals received from the user; and

causing the suggested dietary choices available nearby to the user to be displayed via the computing device local to the user.

~~16~~15. The method of claim 1, wherein annotatively modifying the proposed meal image comprises: graphically superimposing a pre-configured graphic over at least a portion of the proposed meal image.

~~17~~16. The method of claim 1, wherein annotatively modifying the proposed meal image comprises: causing a personalized message to be displayed to the user, wherein the personalized message comprises one or more color-coded graphics that represent at least one nutritional attribute of one or more previous meals consumed by the user prior to the impending meal-time.

~~18~~17. A method of receiving dietary intervention services using mobile computing resources, comprising:

providing, by the mobile computing resources, user health information comprising one or more health objectives;

receiving, at the mobile computing resources, prior to an upcoming meal-time, a prompt to provide proposed meal data comprising an image of a proposed meal;

providing, to a service, by the mobile computing resources, proposed meal data that includes an image of a particular proposed meal that comprises representations of a plurality of food items; and

prior to the upcoming meal-time, receiving, from the service, a plurality of modification annotations for the image of the particular proposed meal;

wherein each modification annotation of the plurality of modification annotations comprises one or more instructions for modifying a distinct respective food item of the plurality of food items of the proposed meal such that modifying the proposed meal according to the one or more instructions improves the proposed meal in accordance with the one or more health objectives;

wherein a first modification annotation, of the plurality of modification annotations, ~~corresponds to~~ reduce a first food item of the plurality of food items~~, and a second modification annotation, of the plurality of modification annotations, corresponds to~~ or increase a second food item of the plurality of food items to compensate nutritional values based on the one or more health objectives; and

~~wherein the first food item is different than the second food item~~

wherein annotatively modifying the proposed meal image further comprises:

uploading the proposed meal image for approval by a nutritionist.

~~19~~18. One or more non-transitory computer-readable media storing instructions that, when executed by one or more computing devices, cause performance of the method of any one of claims 1-~~18~~17.