Carb and Move

Wellness

Carb and Move Wellness

Application for continuous fitness tracking and nutrients control. Lifestyle monitoring suitable for: young, old, active, healthy, with weight problems, susceptible top diabetes and more.

Fitness

- Precise pedometer tracking of physical activities for users of all ages and fitness levels
- Goal setting in terms of: steps, distance, active time or calories
  - Monitoring of steps, distance and duration of walking and running in ten speed ranges

Food

- Extendable Food Library for menu creation starting with over 3600 items
- Food consumption planner to meet calory and carb goals
- Detailed analysis of nutrients consumed in meals including glycemic index and load
  - Carb and calory counting for each meal

Wellness

- Integration of food and exercise monitoring for:
  - Closer weight management
  - Aid in post-meal blood glucose peak and enabling better blood glucose control

WARNING!

Carb and Move Wellness is a monitoring App. It cannot be used as a substitute for any medication or prescribed medical treatments.

Any decisions regarding exercises and diet are the responsibility of the user. Please consult your doctor regarding the exercise and diet regime that you want to monitor using Carb and Move Wellness App.

Carb and Move Wellness App is a purely monitoring device that can guarantee neither expected weight-loss results nor desired improvements in physical exercises performance.

Results obtained while using Carb and Move Wellness App can vary among users.

Carb and Move Wellness does not take any responsibility for any type of injuries happening while using Carbs and Move Wellness App. Please apply caution while exercising and using this app.

Activation

Carb and Move Wellness should be activated daily in the morning before registering first activity.

To activate Carb and Move Wellness it is enough to open the App at any page (including the main entry).

Once activated Carb and Move Wellness runs uninterruptedly in background and foreground.

Mounting

Carb and Move Wellness is an App running on Apple iPhones and iPods.

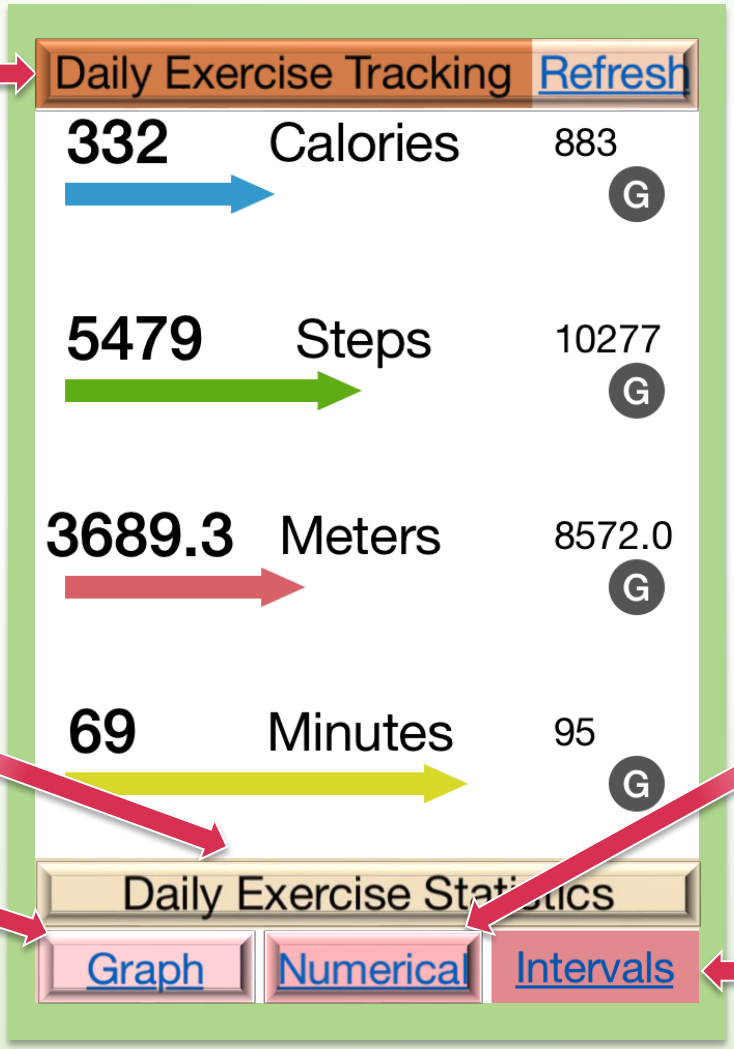
The precision of registered physical activities by Carb and Move Wellness App. depends on the mounting of the hosting device (iPhone or iPod) .

It is recommended, that the hosting device is placed in the pocked close to the hips or legs in the upright position.

Walking Through Slides

To reach information about particular section of the tool, click on the **3D convex** field in the screen capture with the name of the location you want to reach

Link to
Daily Exercise Tracking

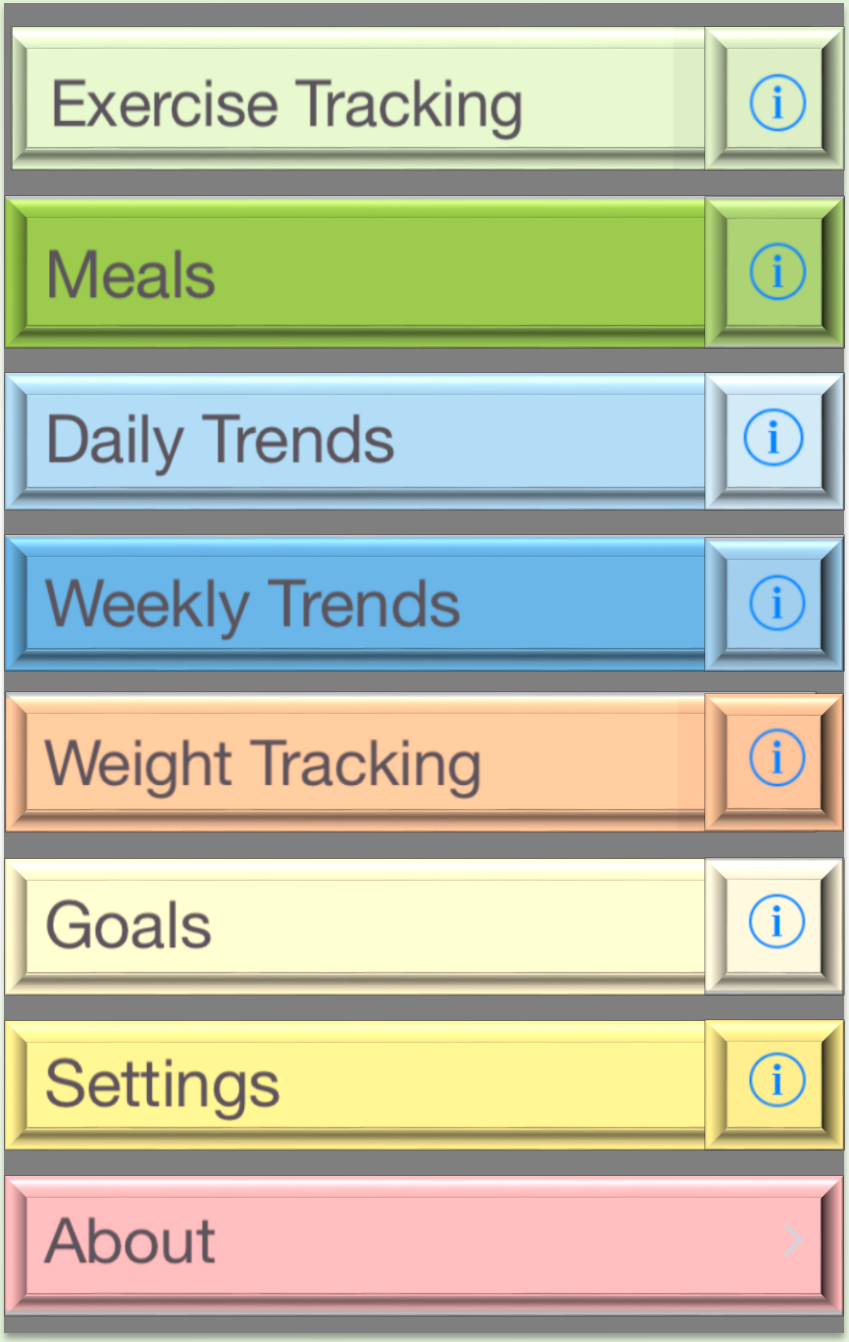


Link to Graph of
Daily Exercise Stats

Link to Numerical Data
of Daily Exercise Stats

Link to
Daily Exercise Statistics

No link as field not
marked as 3D convex one



Console View

- **Exercise Tracking**: pedometer monitoring of daily exercise progress
- **Meals**: creation and analysis of consumed meals
- **Daily Trends**: visual breakdown of daily food and exercises
- **Weekly Trends**: graphical analysis of weekly food and exercises
- **Weekly Weight-Loss**: reporting of food and exercise from weight-loss perspective
- **Goals**: setting food (calories, carbs), exercise (steps, duration, calories), weight-loss plans
- **Settings**: personal data, measurement units and E-mail addresses
- **Readme**: locations on Facebook and Website with tool instructions

Exercise Tracking: User's Guide

Back

Exercise Tracking Guide

Exercise Tracking is the main interface to view the *progress in exercises*, set the *short term exercise goals* and relate the the *calories intake* with the *expenditure* by exercise.

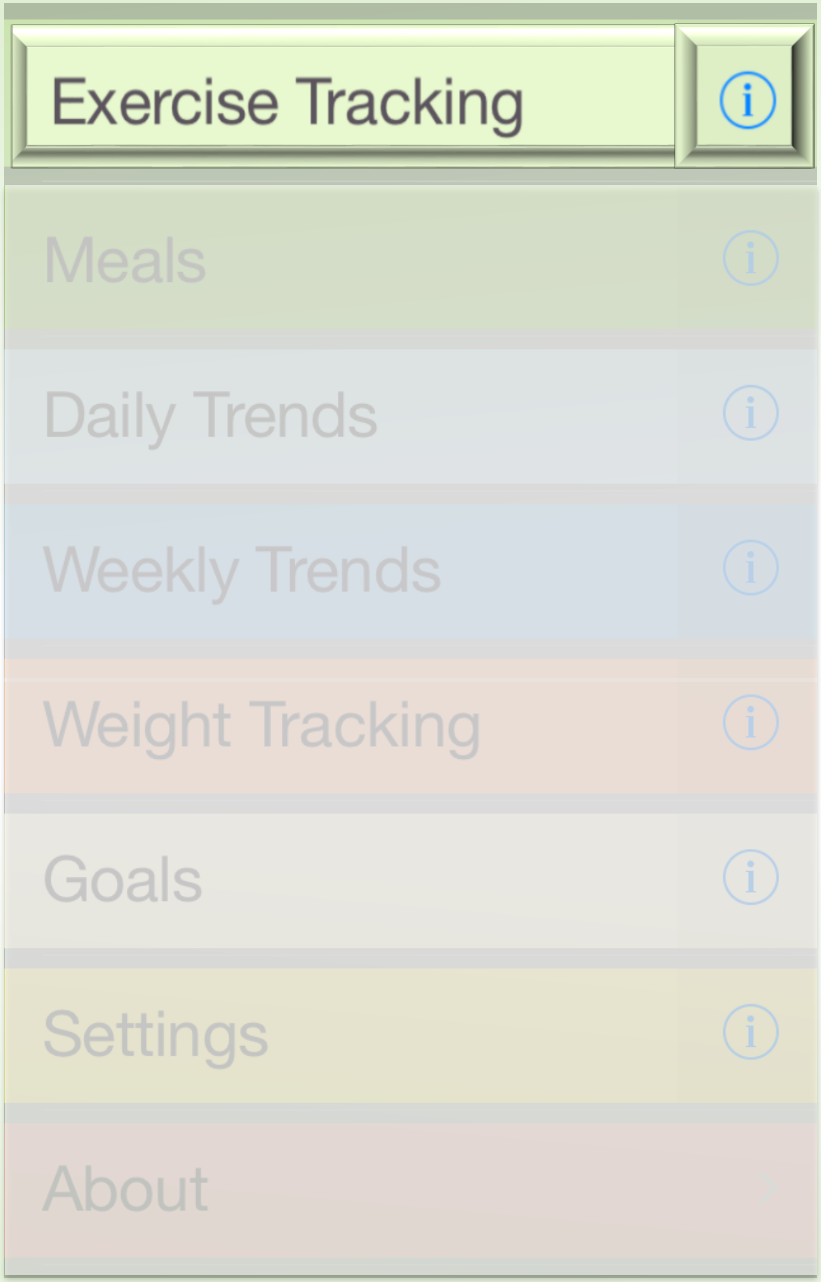
Current Total Calories Balance progress bars display *calories consumed* (Food data imported from Meals entry), *calories expended* (Exercise and Metabolism) and *Daily Calories Balance*. All three bars are contrasted with *goals* set in Goals entry.

Daily Exercise Tracking is a graphical summary of a pedometer report of total exercise: *calories*, *steps*, *distance* and *active minutes*. All four graphs show the progress towards *exercise goals* set by user in Goals.

Daily Exercise Statistics is a detailed reporting of daily exercises in form of: *Graph* (time-continuos display of *steps*, *calories* and *distance* of exercises), *Numerical* (summary of *minutes*, *steps* and *calories* of walking and running in 10 speed ranks), and *Interval data* (summary of *steps*, *calories*, *average speed* and *active minutes* in *user-specified time interval*). Distance and speeds of exercise are reported in units chosen in Settings.

Short Term Goal button opens up a view for setting and tracking *short-term exercise goals*. Starting of the exercise includes a 5-second preparation countdown. The exercise routine can be optionally accompanied with *music* played in the *background*. A *complete profile* of the exercise is given in the *Exercise Report* inside the Short Term Goal view. Regardless of short term goal settings, *steps*, *calories*, *distance* and *duration* of the *short term exercise* are always *daily activities report* in the main Exercise Tracking view.

Carb and Move takes no responsibility for any injuries during the exercise.



Exercise Tracking

- Three types of daily activity monitoring

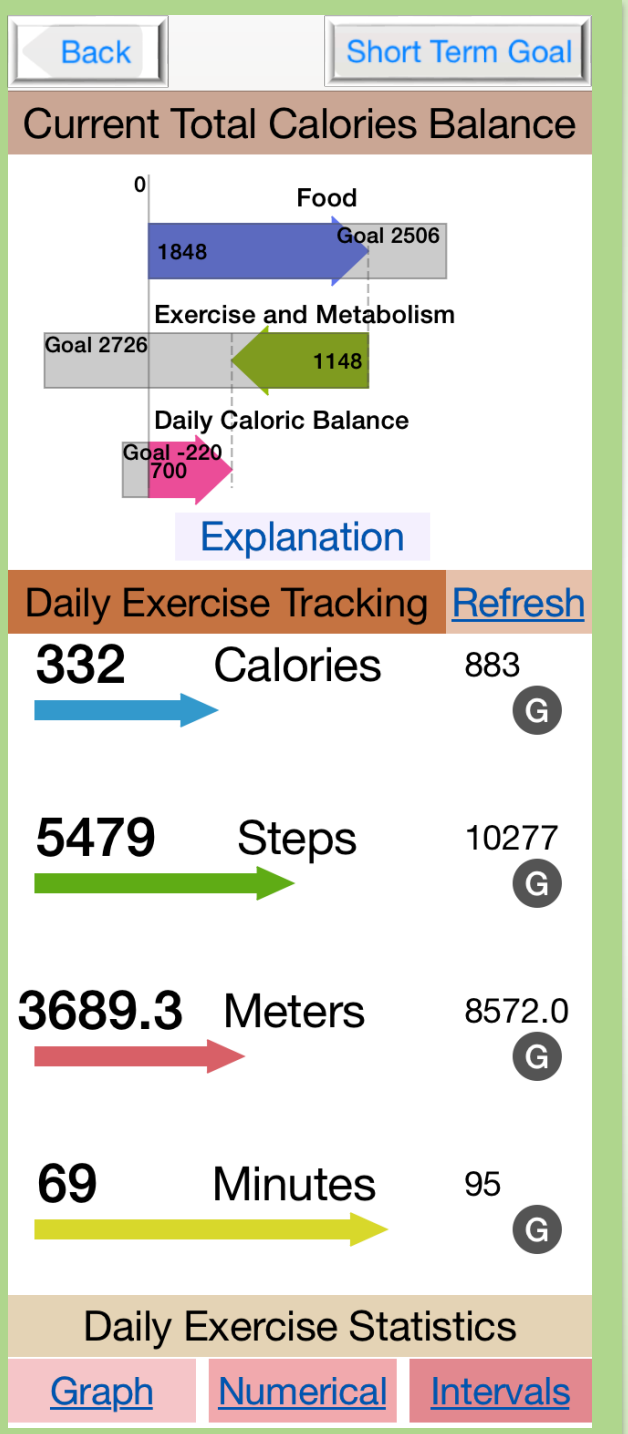
Daily Caloric Balances Graph

- Display of:
  - Calories consumed (*food*)
  - Calories expended (*metabolism and exercise*)
  - Energy balance (*Calories consumed – Calories expended*)

Physical Activities Progress Bars

- Calories expended in exercises
- Steps
- Distance (meters or miles)
- Active minutes

All displays reset at midnight



Exercise Tracking: View of Pedometer View During Daily Activities

- Two sections

Current Total Calories Balance

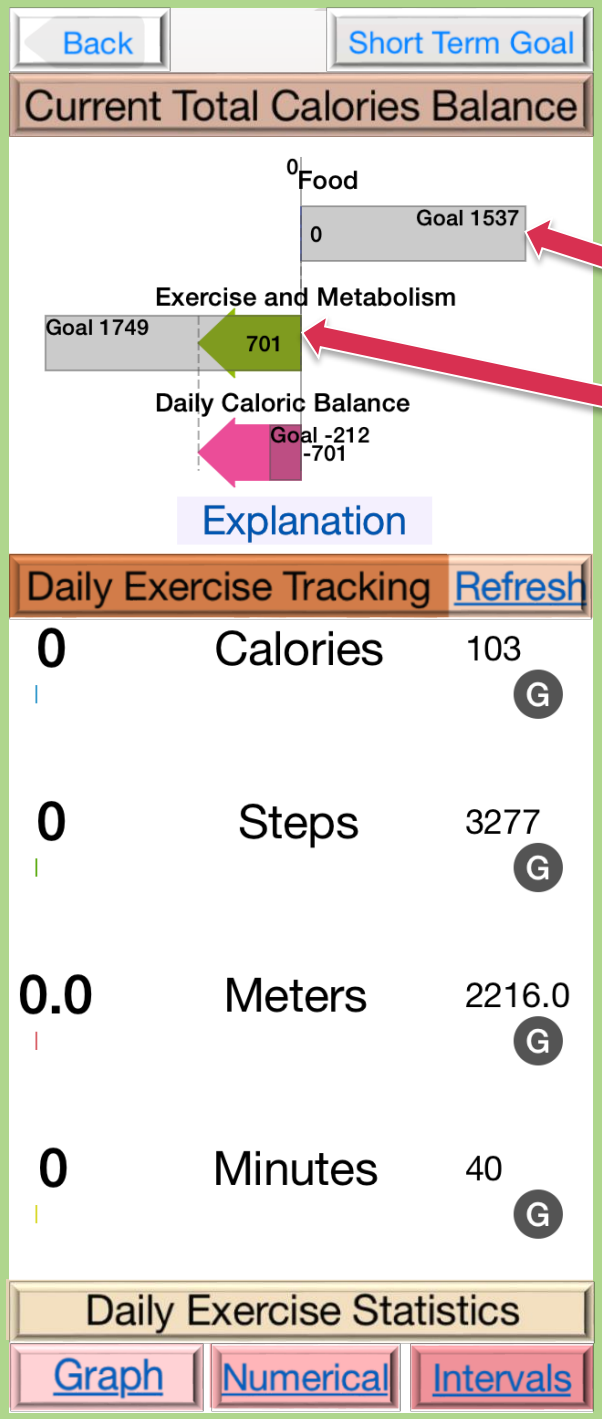
- Visualization of balance between consumed and expended calories

Daily Exercise Tracking

- Pedometer readings displaying in real-time:
  - Exercise Calories
  - Steps
  - Distance
  - Active minutes

Daily Exercise Statistics

- Link to detailed graphical and numerical analysis of physical activities



Exercise Tracking: Pedometer View - Beginning of the Day

Current Calories Balance Graph Updates

- **Food calories** updated upon entering by user
  - No food calories recorded yet
- **Calories expended**
  - Exercise calories updated by pedometer
  - Metabolic rate calories refreshed automatically every minute in 24h cycle
    - Counting of metabolism calories starts at midnight
  - 701 calories (green arrow) represent Metabolic calories only

Daily Exercise Tracking

- Movement data determined by pedometer
- Updated automatically and by pressing Refresh button

Page View Reset

- Display reset at midnight

Exercise Tracking: Current Total Calories Balance - Food (Blue Arrow)

- Daily calories consumption

Goal: Grey Rectangle

- Set in Goals (6th entry in Console View)

Progress Bar: Blue Arrow

- Display of cumulative daily consumption tracking
- Indicated calories are derived from meals
  - Recorded in Meal (2nd entry in Console View)
- If no food entered, then no blue food arrow bar appears on display
- Direction of growth of blue food arrow bar: from **left to right**

Exercise Tracking: Current Total Calories Balance - Exercise and Metabolism (Green Arrow)

- Daily calories expenditure

Goal: Grey Rectangle

- Two contributing factors in goal allotting:
  - Goal for total daily exercise calories
    - Set by user (6th entrance in Console)
  - Daily metabolism calories
    - Calculated automatically based on user's personal data (7th entrance in Console View)

Progress Bar: Green Arrow

- Green progress bar derived as sum of Exercise and Metabolism Calories
  - Exercise calories provided by pedometer
  - Metabolism calories calculated automatically
- Direction of arrow bar growth: from **right to left**

Exercise Tracking: Current Total Calories Balance – Daily Caloric Balance (Pink Arrow)

Goal: Grey Rectangle

- Daily weight-loss balance:
  - Set in Goals (6th entrance in Console)

Progress Bar (Pink Arrow)

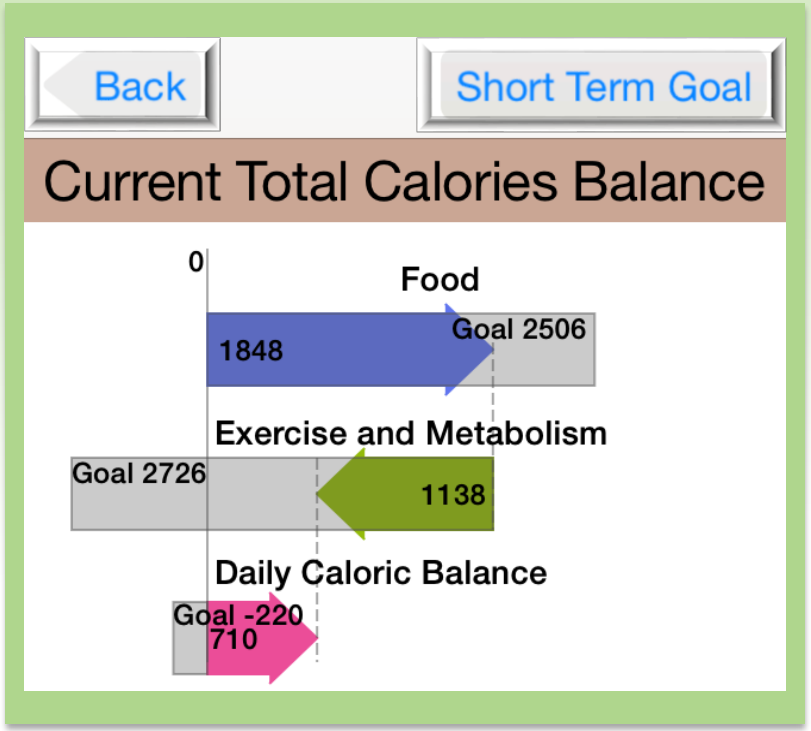
- Arrow direction:
  - **Left to right**: Weight Gain
  - **Right to left** : Weight Loss
- Numeric value increases and decreases several times during the day reflecting changes in food, exercises and metabolism calories

Daily Caloric Balance = Consumed Calories – Expended Calories

- Consumed calories (Food)
- Expended Calories (Exercise + Metabolism)

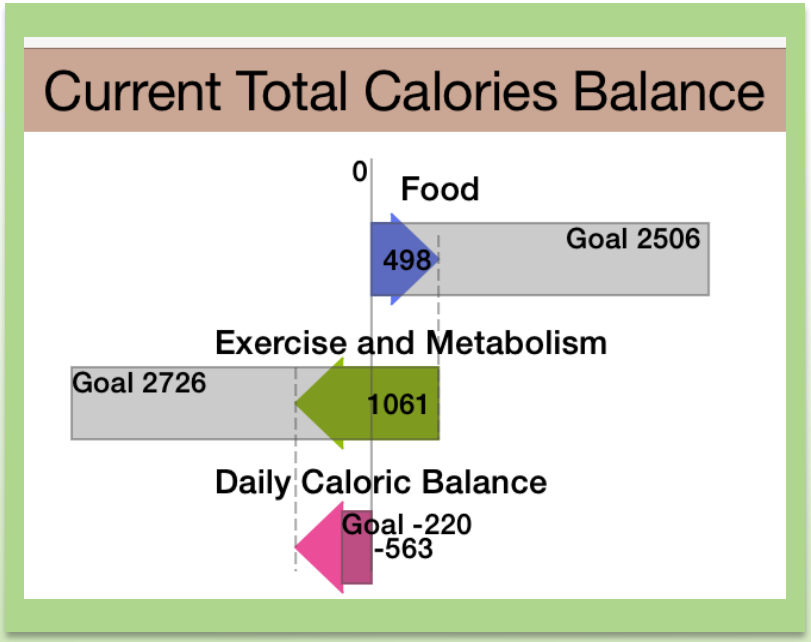
- Negative Balance: Weight Loss
- Positive Balance: Weight Gain

Exercise Tracking: Positive and Negative Caloric Balance



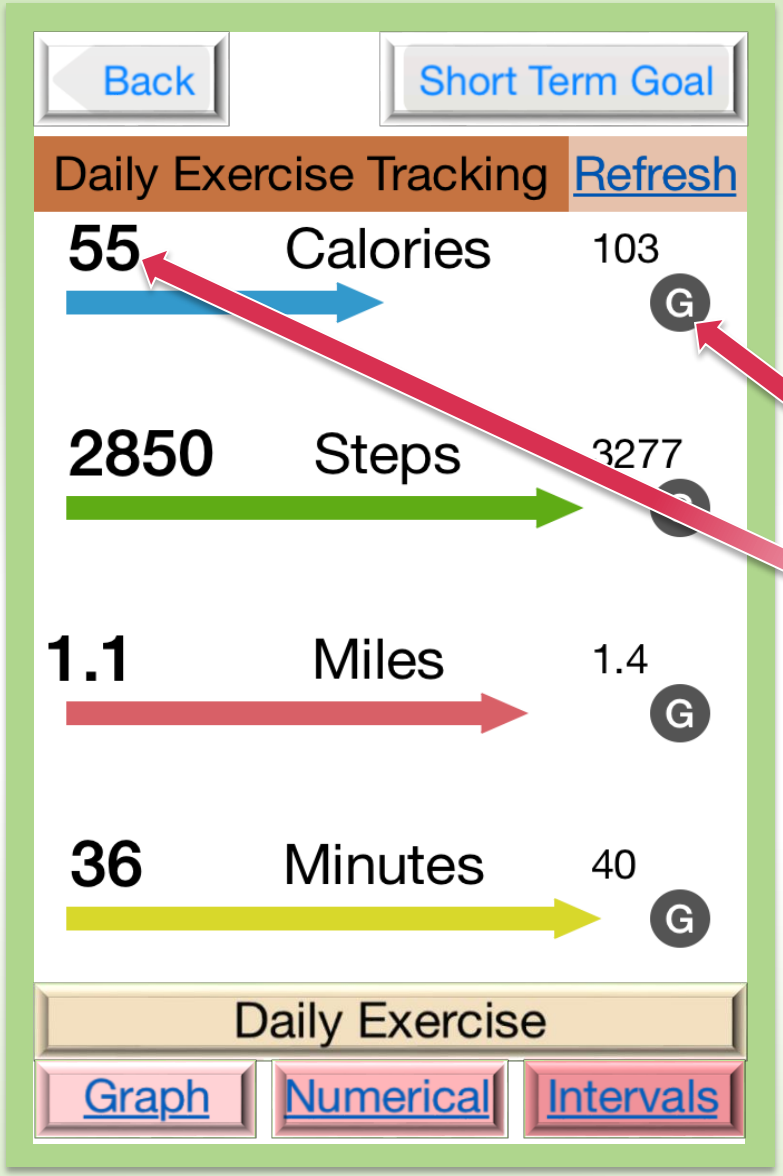
Positive Caloric Balance

- Calories consumed surpasses calories exhorted
- Daily Caloric Balance arrow is **positive** pointing from **left to right**



Negative Caloric Balance

- Calories exerted surpasses calories consumed
- Daily Caloric Balance arrow is in **negative** pointing from **right to left**



Exercise Tracking: Daily Exercise Tracking - Goals in Progress

Progress Tracking

- Monitoring of physical activity: calories, steps, distance and active minutes
- Current readings display data from pedometer
  - Numbers in right column above G circle: Goals set in (6th entry in Console View)
  - Numbers in left column: Current values of tracked features

Display

- Distance reported in miles or kilometers
  - Units chosen in Settings (7th entrance in Console View)
- Bars and numbers in left column reset at midnight
- Goals (numbers in right column) retained

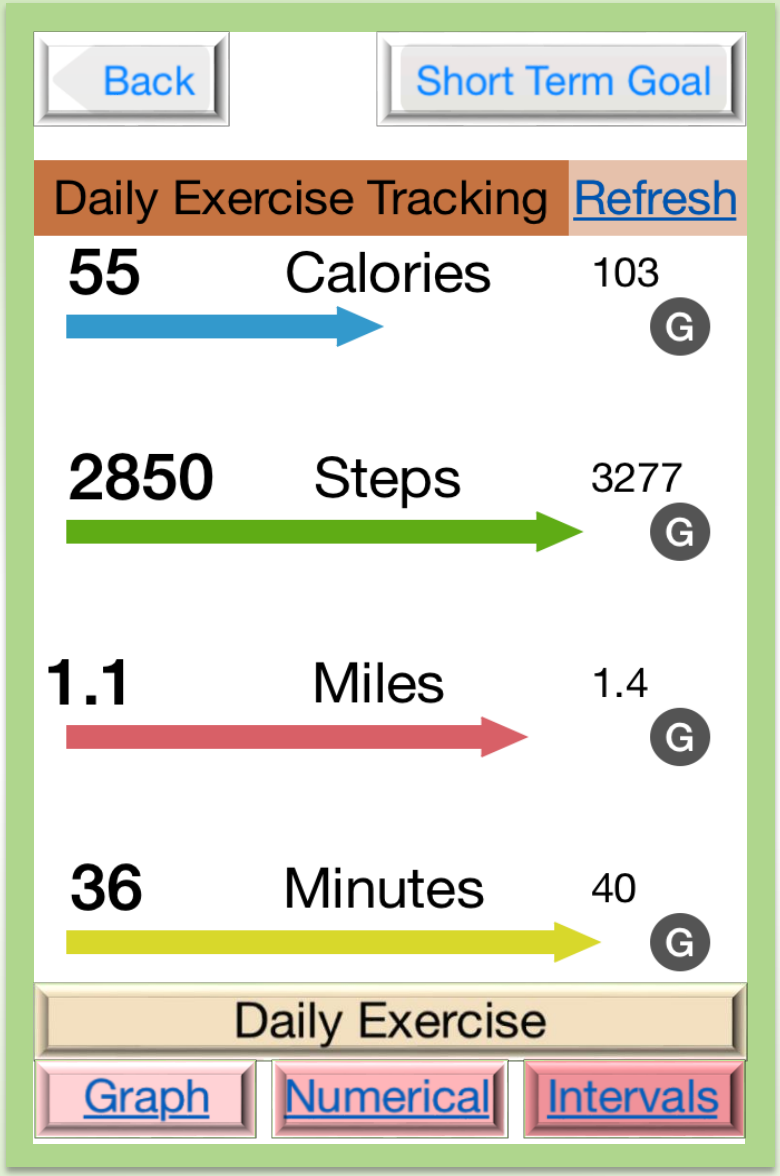
Exercise Tracking: Daily Exercise Tracking - Reaching and Exceeding Goals

Numbers

- Numbers in the left columns continuously updated with the progress of exercises

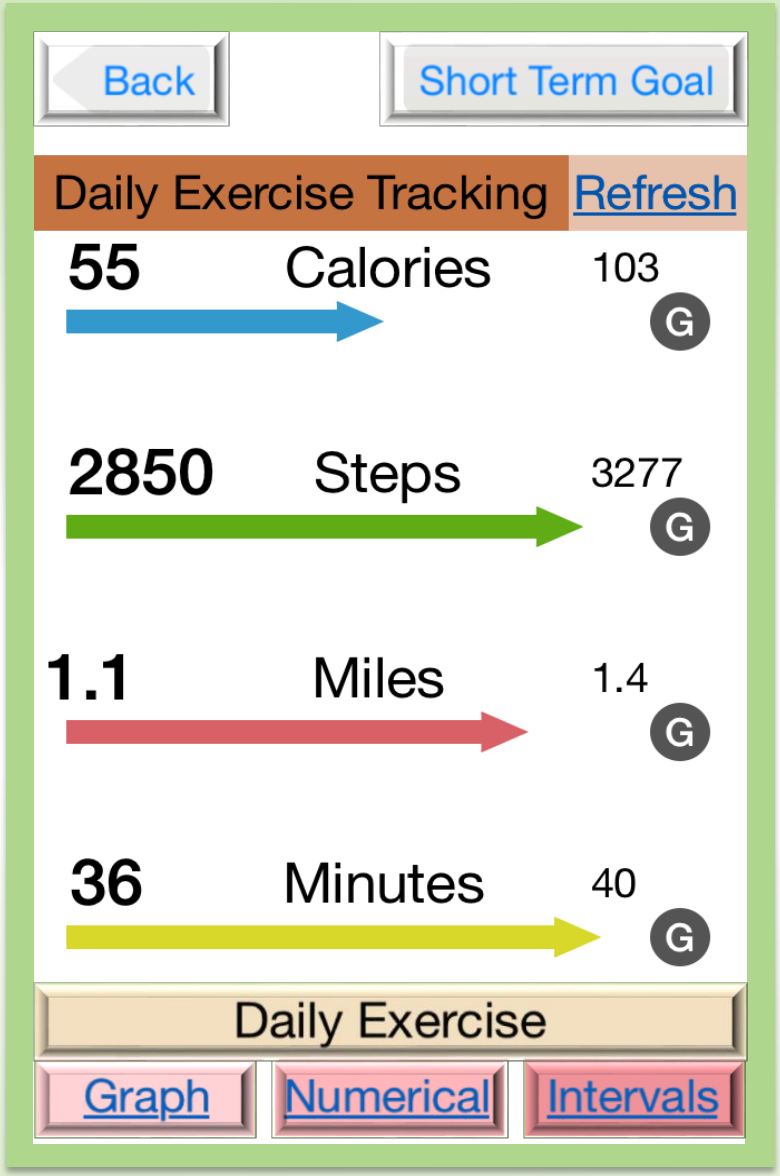
Progress Bars

- Upon reaching the goal, G circles slide on progress bar from left to right
  - Location of G circle on the bar indicates how much the goal is exceeded
- Numerical value of the goal is replaced by surpassed goal percentage



Exercise Tracking: Daily Exercise Tracking - Refresh Button

- Automatically updated every 10 minutes
- Refresh button for immediate pedometer update



Exercise Tracking: Reading Pedometer for Step and Distance Goals

Exercise Goals: Steps or Duration

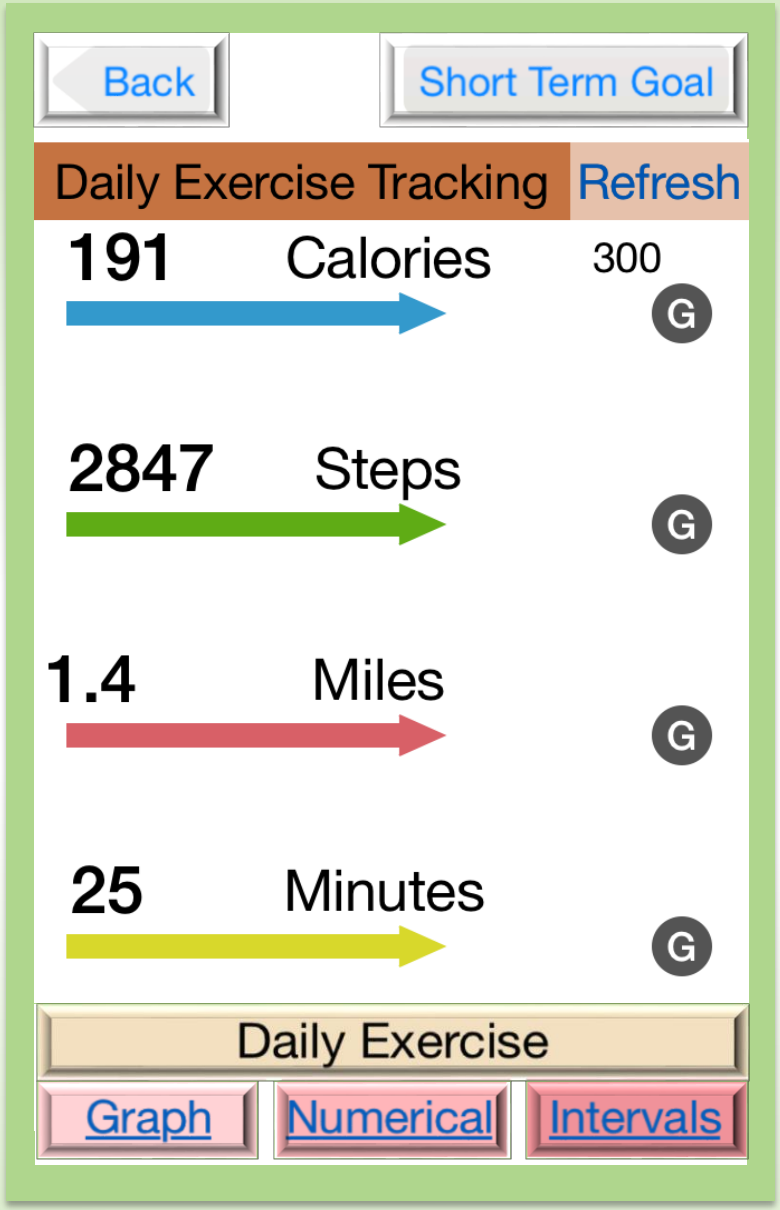
- Steps or duration goals include specifying step count or duration of walking or running with 10 speeds accounted by pedometer

Setting Steps or Duration Goals

- User determines step count or duration goal to be executed with up to 10 speeds of walking or running
  - Set in Goals (6th entry in Console View)

Note

- If step or goals executed with speeds different then goal setting, then calories arrow bar will not be aligned with steps, distance and duration arrows



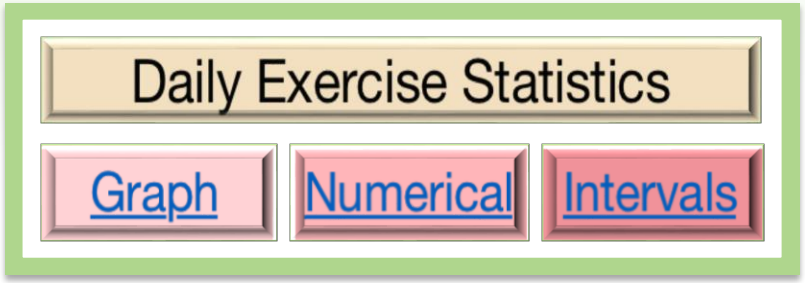
Exercise Tracking: Reading Pedometer for Calories Goal

Exercise Goals

- Exercise calory goal specifies the overall calories count to be exerted during exercises
  - Neither total step count nor exercise duration can be automatically derived

Graphs Tracing Goals

- No goal numbers can be specified in Steps, Distance and Duration bar graphs
- All goal arrows progressing with the same pace on the graph



Exercise Tracking: Daily Exercise Statistics

- Detailed chronological analysis of daily physical activities from midnight until present

Bar Graph

- Chronological display of steps, calories and distance

Numerical

- Presentation of steps, calories distance and active minutes in 10 speed ranges

Interval

- Reporting of steps, calories, distance and average speed of physical activity in the user-specified time interval

Exercise Tracking: Daily Exercise Statistics - Graph

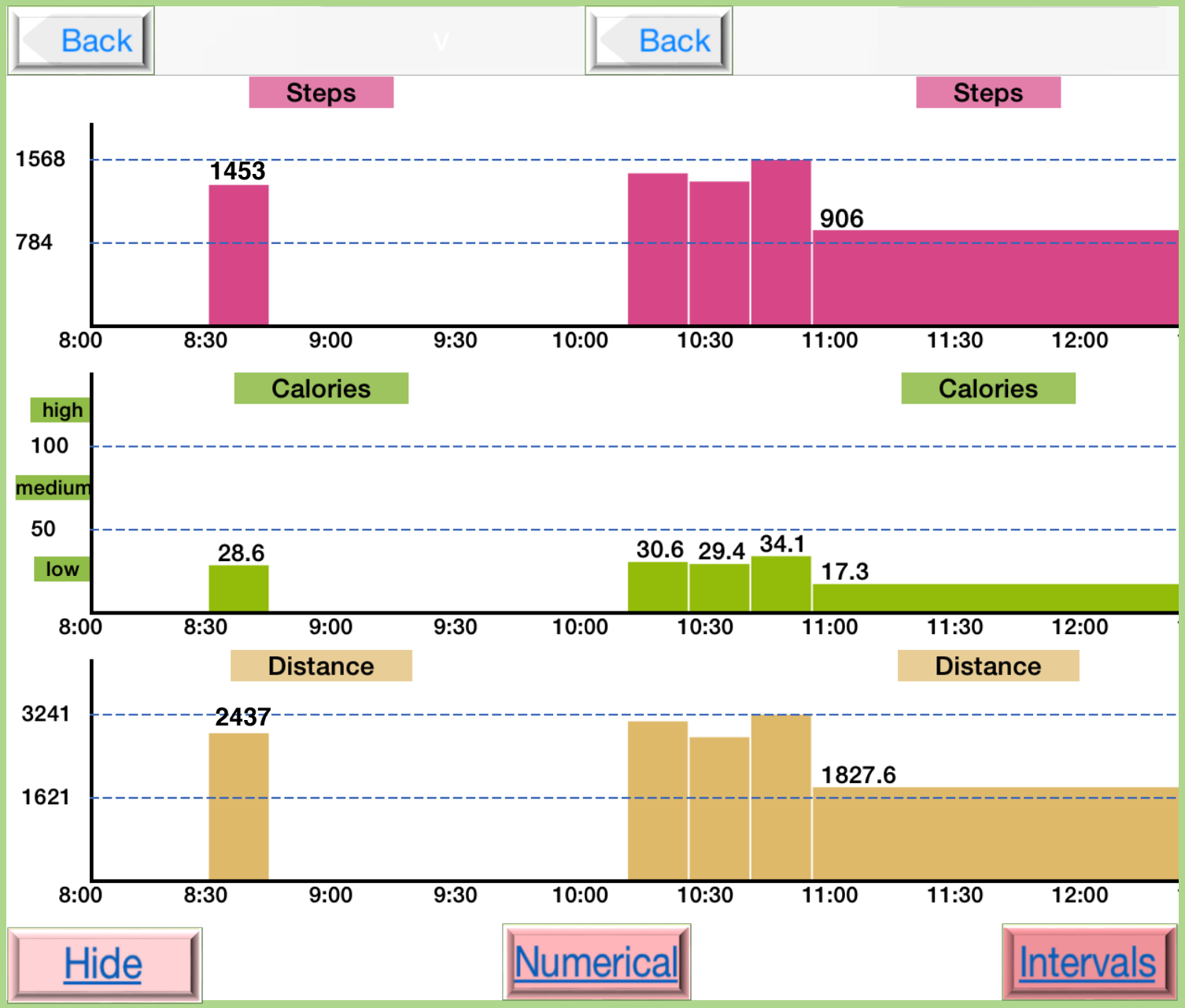
Bar Graphs

- Displays of steps, calories and distance
- Graphs zeroed at midnight
- Time of first user's physical activity of the day being the starting point of the graph
- Distance displayed in miles or meters depending on units specified in Settings (7th entry in Console View)

Updates

- Steps, calories and distance are updated every 15 min
    - Numerical values are placed over bars in the graphs

Exercise Tracking: Daily Exercise Statistics - Graph



Exercise: Sep-7-2014 | E-mail

Steps:	7411	Avg Speed:	1.7
Calories:	152	Time [min]:	72

Walk	mph	min	steps	cals
Very Slow:	1	24	1981	38
Slow:	2	47	5397	114
Regular:	3	0	33	0
Fast:	4	0	0	0
Run				
Very Slow:	5	0	0	0
Slow:	6	0	0	0
Regular:	7	0	0	0
Accelerated:	8	0	0	0
Fast:	9	0	0	0
Very Fast:	10	0	0	0

Previous

Exercise Tracking: Daily Exercise Statistics - Numerical

- Summary of daily physical activities

Display

- Total steps, calories, average speed of walking/running and active time
- Steps, active minutes and calories expended in 10 speed ranges
  - Speeds of motion reported in mph or km/h depending on user Setting (7th entry in Console View)

Previous Days

- Summary of previous days exercises including: steps, average speed, calories and active time

Back | Exercise: Sep-10-2014 | E-mail

Steps:	8902	Avg Speed:	5.6
Calories:	532	Time [min]:	69

Walk	km/h	min	steps	cals
Very Slow:	2.0	15	959	71
Slow:	3.5	16	1828	59
Regular:	5.0	6	838	30
Fast:	6.5	4	715	73
Run				
Very Slow:	8.0	6	983	62
Slow:	9.5	14	2612	194
Regular:	11.0	4	949	42
Accelerated:	12.5	0	0	0
Fast:	14.0	0	0	0
Very Fast:	16.0	0	18	0

Previous

Exercise Tracking: Daily Exercise Statistics – Numerical: Metric Speed Scale

Metric Scale

- Speed ranges in km/h:
  - 2.0, 3.5, 5.0, 6.5, 8.0, 9.5, 11.0, 12.5, 14.0 and 16.0

Setting

- Reported speed ranges correspond to speeds set in Goals (6th entry in Console View)

Back | Exercise: Sep-10-2014 | E-mail

Steps:	8894	Avg Speed:	3.5
Calories:	532	Time [min]:	69

Walk	mph	min	steps	cals
Very Slow:	1	14	950	71
Slow:	2	16	1829	59
Regular:	3	6	837	30
Fast:	4	4	715	73
Run				
Very Slow:	5	6	983	62
Slow:	6	14	2613	194
Regular:	7	4	949	42
Accelerated:	8	0	0	0
Fast:	9	0	0	0
Very Fast:	10	0	18	0

Previous

Exercise Tracking: Daily Exercise Statistics – Numerical: Imperial Speed Scale

Imperial Units Scale

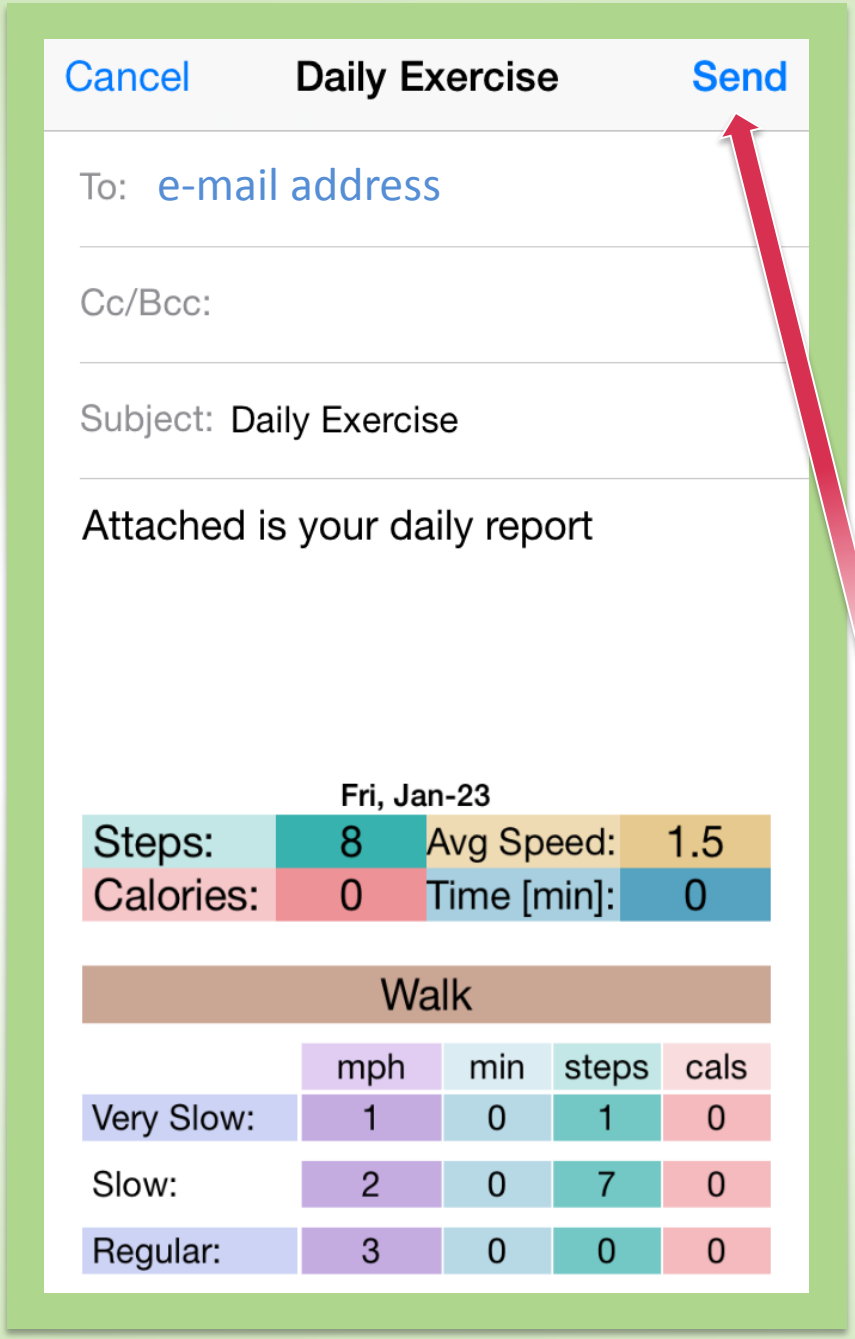
- Speed ranges in mph:
  - 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10

Setting

- Reported speed ranges correspond to speeds set in Goals (6th entry in Console View)

Previous Button

- Previous Button rings the summary of the exercises in the previous days

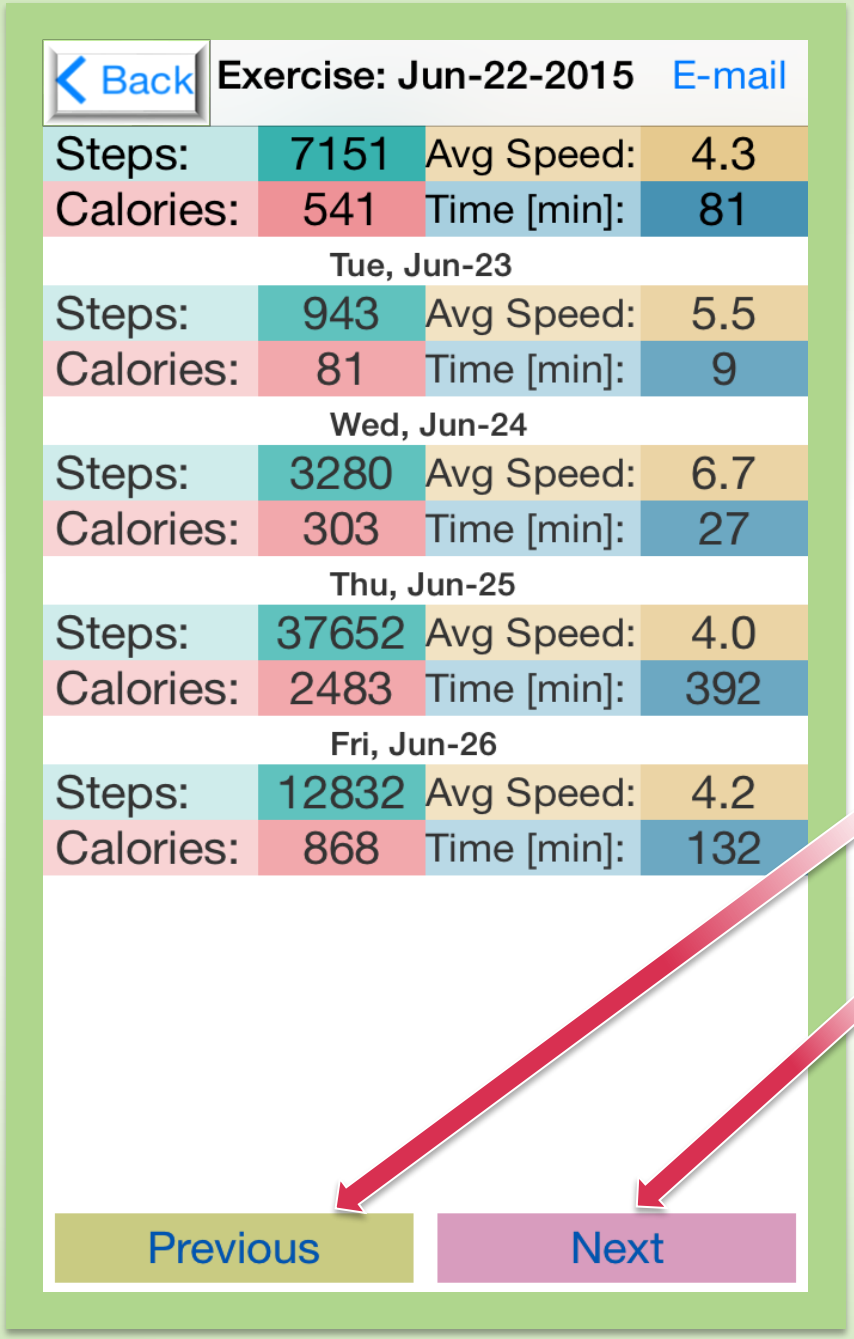


Exercise Tracking: Daily Exercise Statistics - Numerical

- Summary of daily physical activities

E-mail

- Upon pressing E-mail Button the e-mail formatted contents will appear
- Screen shot of the view will be sent to the address set in Settings (7th entry in Console View)
- E-mail sent by pressing **Sent Button**
  - **Sent Button** replaces **E-mail Button** in the view



Exercise Tracking: Daily Exercise Statistics – Numerical: Summary of Previous Days Activities

Display

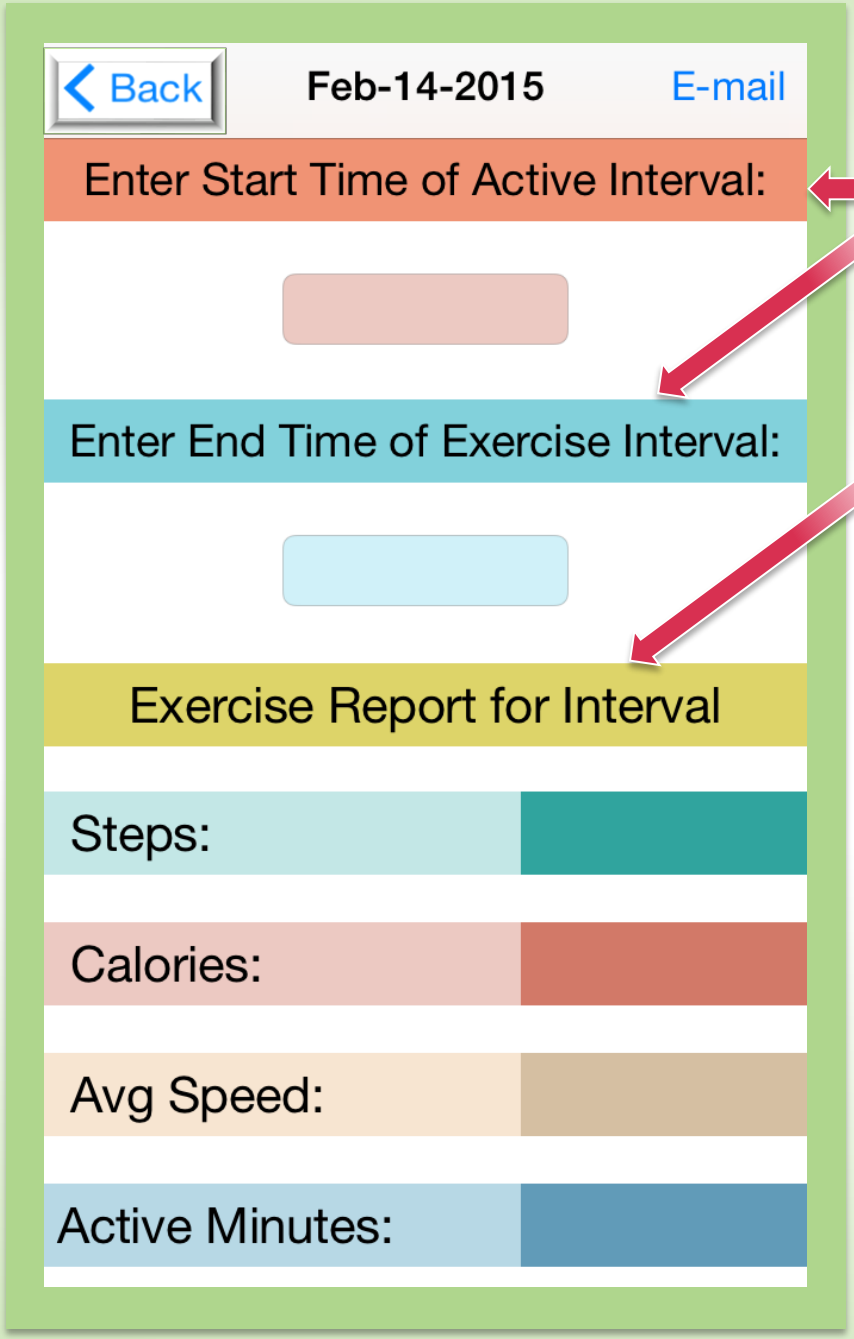
- Short summary of up to one week of activities
- Displayed:
  - Total daily: step count, calories, average speed and active minutes

Previous and Next Buttons

- Previous Button
  - Adds the summary for the day preceding the earliest day displayed
- Next Button
  - Removes display of the earliest day

E-mail Button

- E-mailing the current screen shot of this page to the address set in Settings (7th entry in Console View)



Exercise Tracking: Daily Exercise Statistics – Intervals

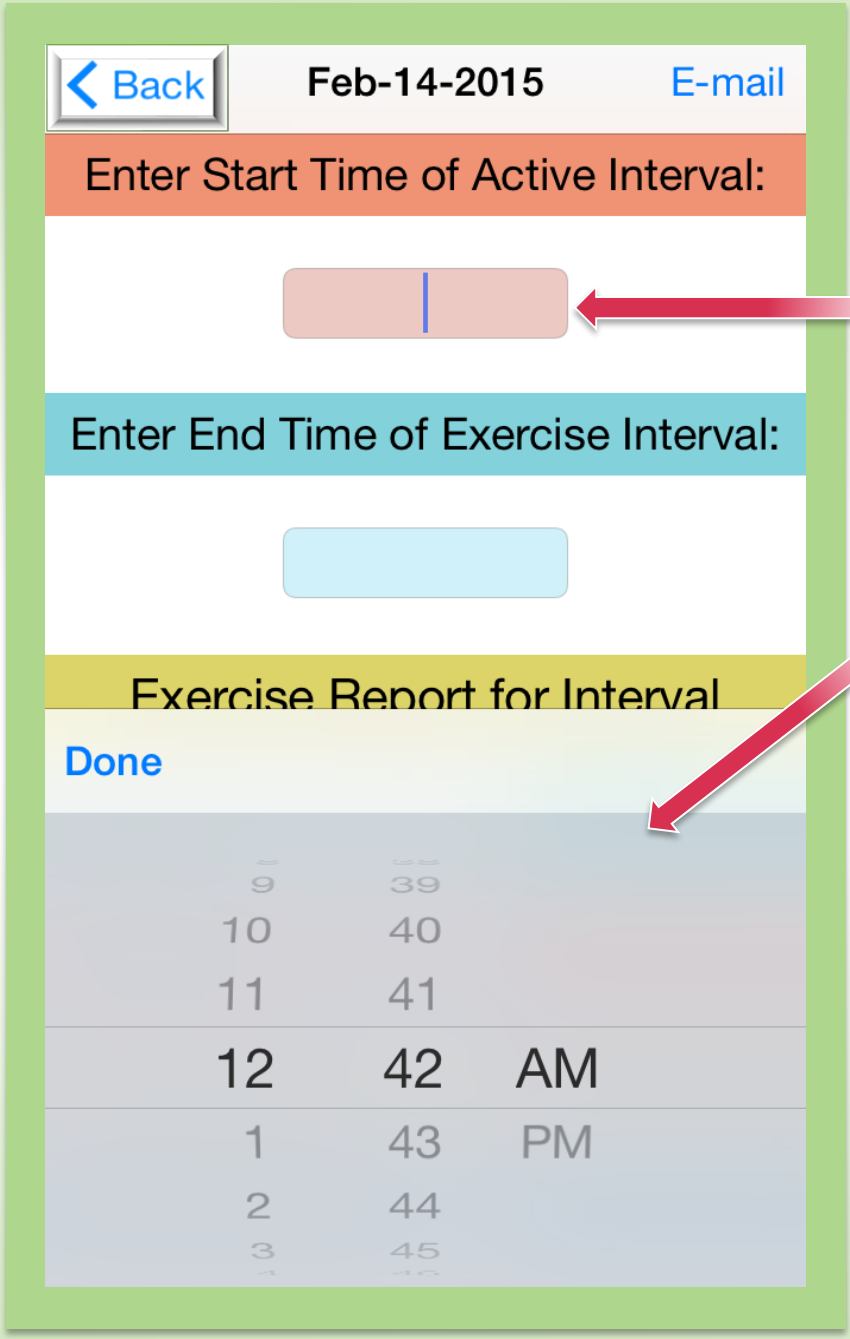
- Summary of physical activity in user-selected **time interval** of the current day

Report

- Reporting of :
  - Total step count
  - Calories expended
  - Average speed
  - Active minutes

E-mail Button

- By pressing E-mail button the screen capture of the page will be sent to recipients selected in Settings (7th entry in Console View)



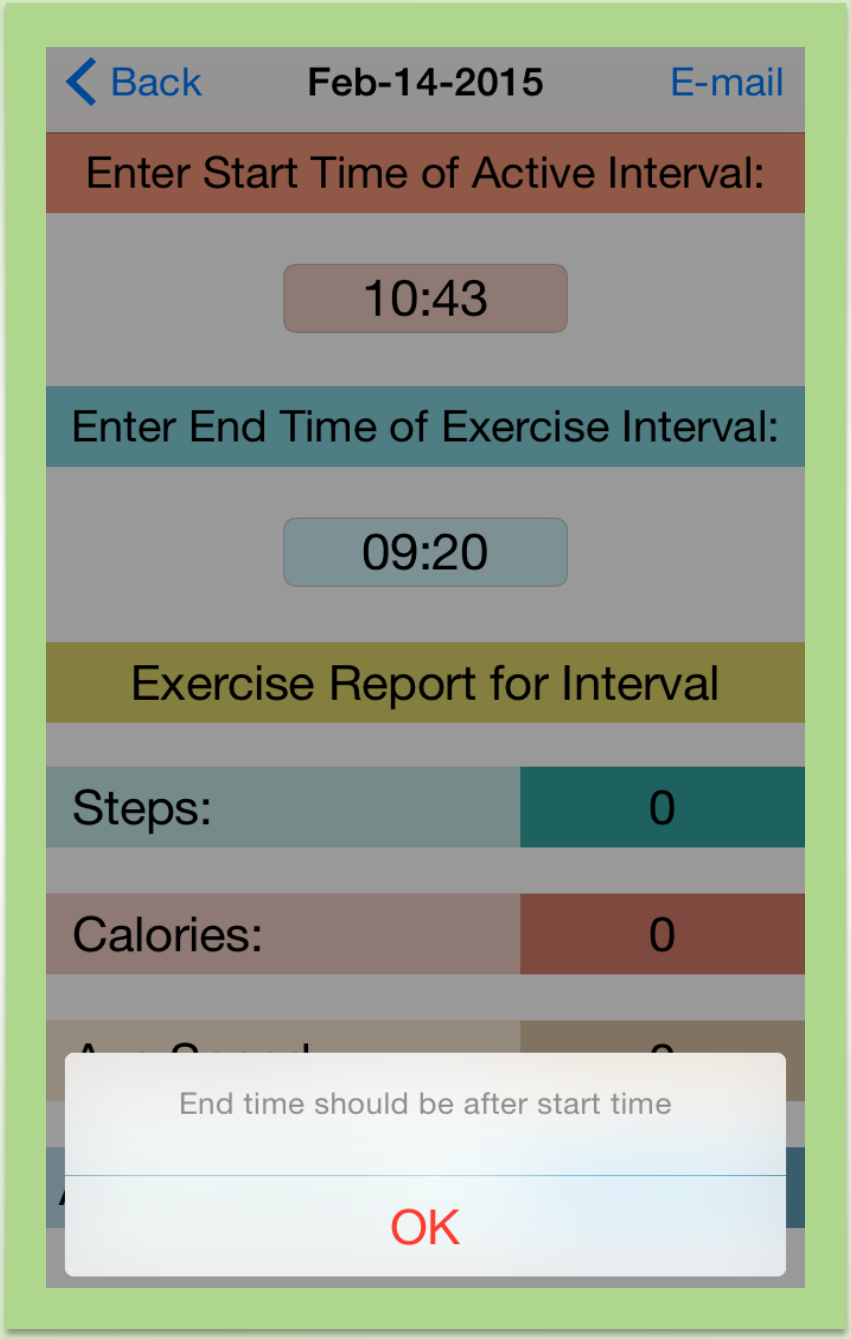
Exercise Tracking: Daily Exercise Statistics – Intervals: Entering Data

Time Intervals

- Beginning and end of the interval is entered by tapping on highlighted fields

Time Picker

- Time picker will occur in the window allowing the user to select the start and end times of the interval



Exercise Tracking: Daily Exercise Statistics – Intervals: Error in Time Specification

Start Time

- **Start time** must not be earlier than the end time

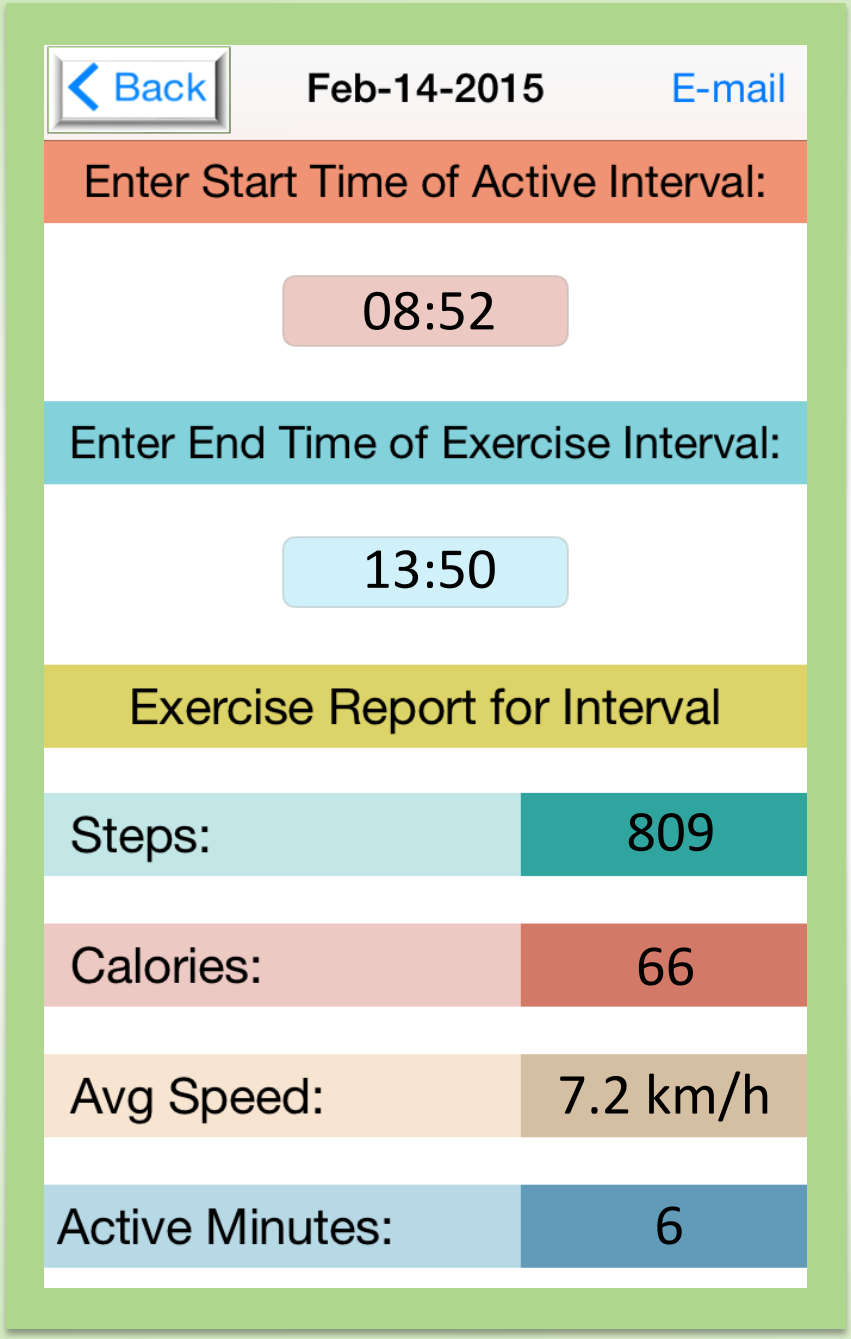
End Time

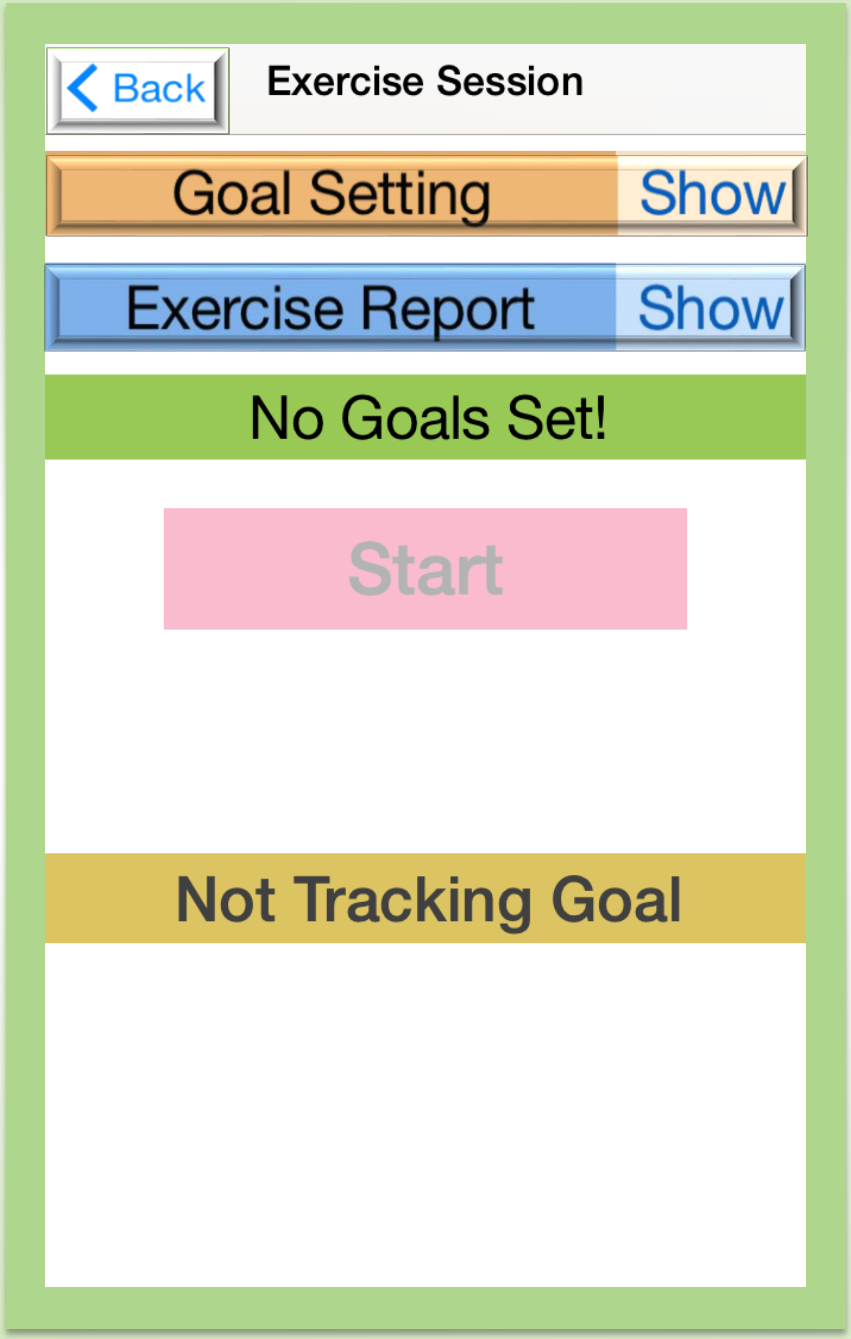
- **End time** should not be latter than current time

Warning Message

- Error will appear upon improper entering of times

Exercise Tracking: Daily Exercise Statistics – Intervals: Example





Exercise Tracking: Short-Term Exercise Session

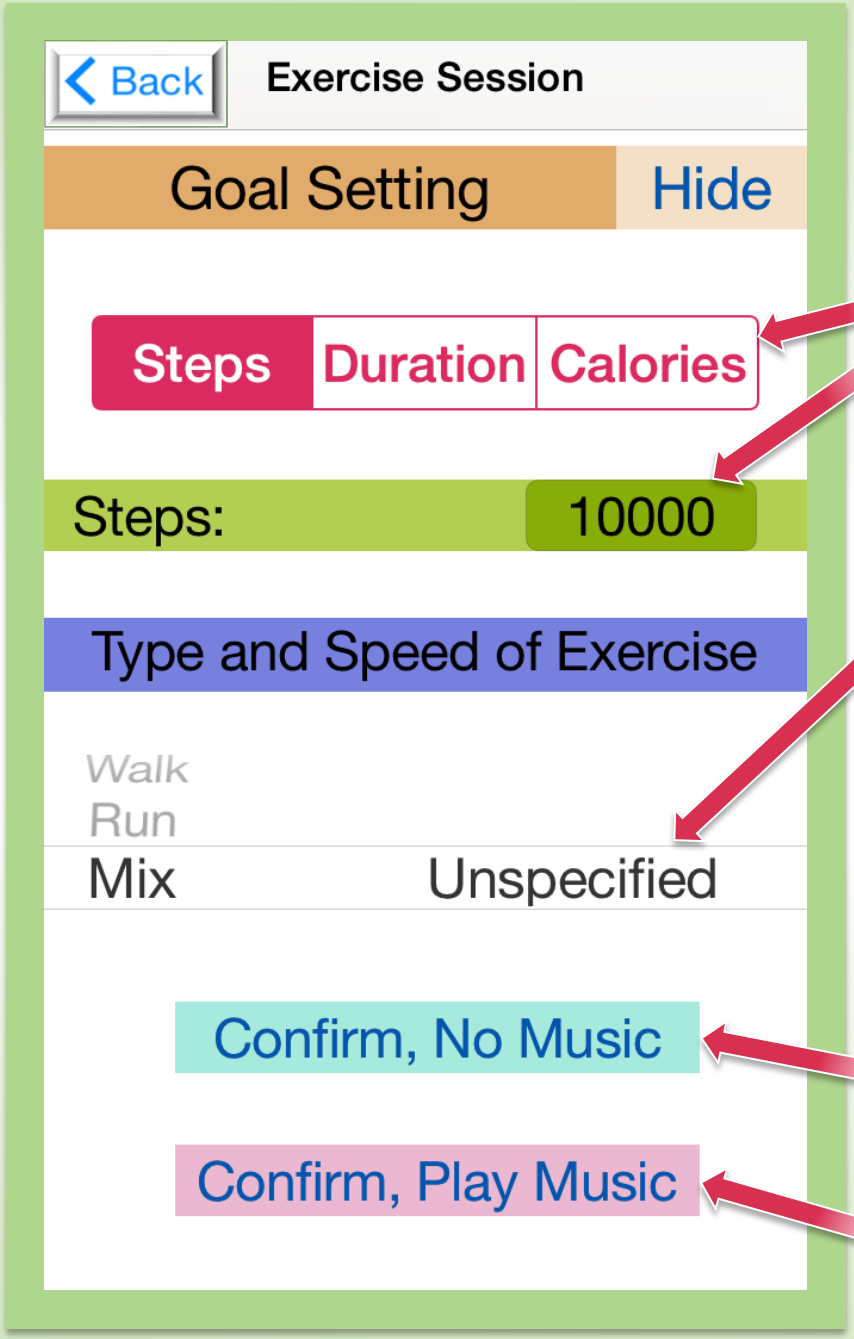
- Real-time monitoring of singular exercise event

Goal Setting

- Goals must be set before the session begins
- Three types of goal settings:
  - Steps
  - Distance
  - Calories

Exercise Reporting

- Tracking of: steps, calories, distance and active minutes in short-term goal execution
- Daily exercise monitoring
  - Short Term Exercise data added to daily activity reporting



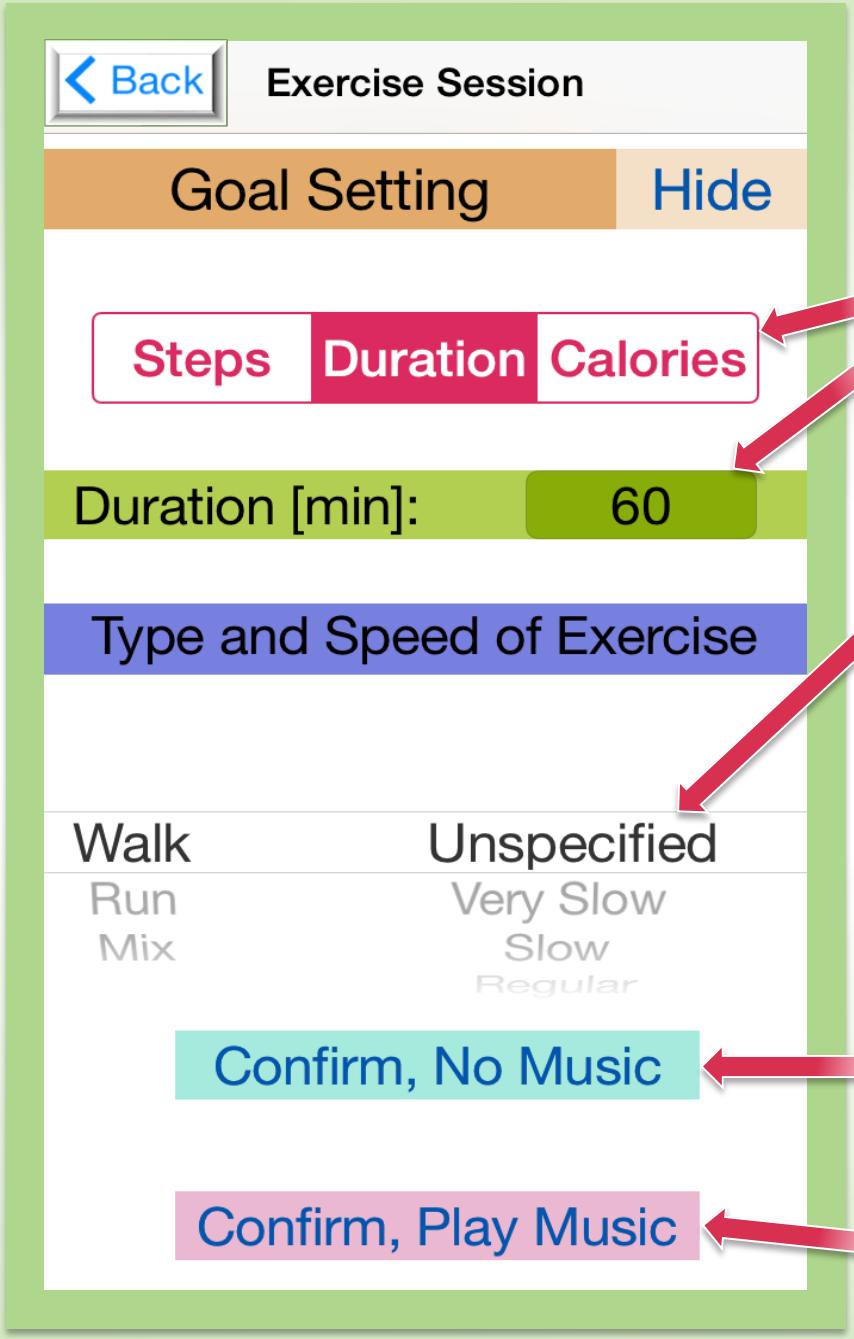
Exercise Tracking: Short-Term Exercise Session: Steps Goal

Setting Steps Goal

- Select **Steps** option in segment selector
- Enter number of steps in green text field right to the text *Steps:*
- Select the type of exercise:
  - Walk, Run or Mix
  - Speed of Walk:
    - Unspecified, very slow, slow, regular, fast
  - Speed of Run:
    - Unspecified, very slow, slow, regular, accelerated, fast, very fast
- Steps executed reported after every 100 steps

Goal Confirmation

- Confirm, No Music
  - Goal is confirmed and executed without music in the background
- Confirm, Play Music
  - Goal is confirmed and played with the next song from user's library



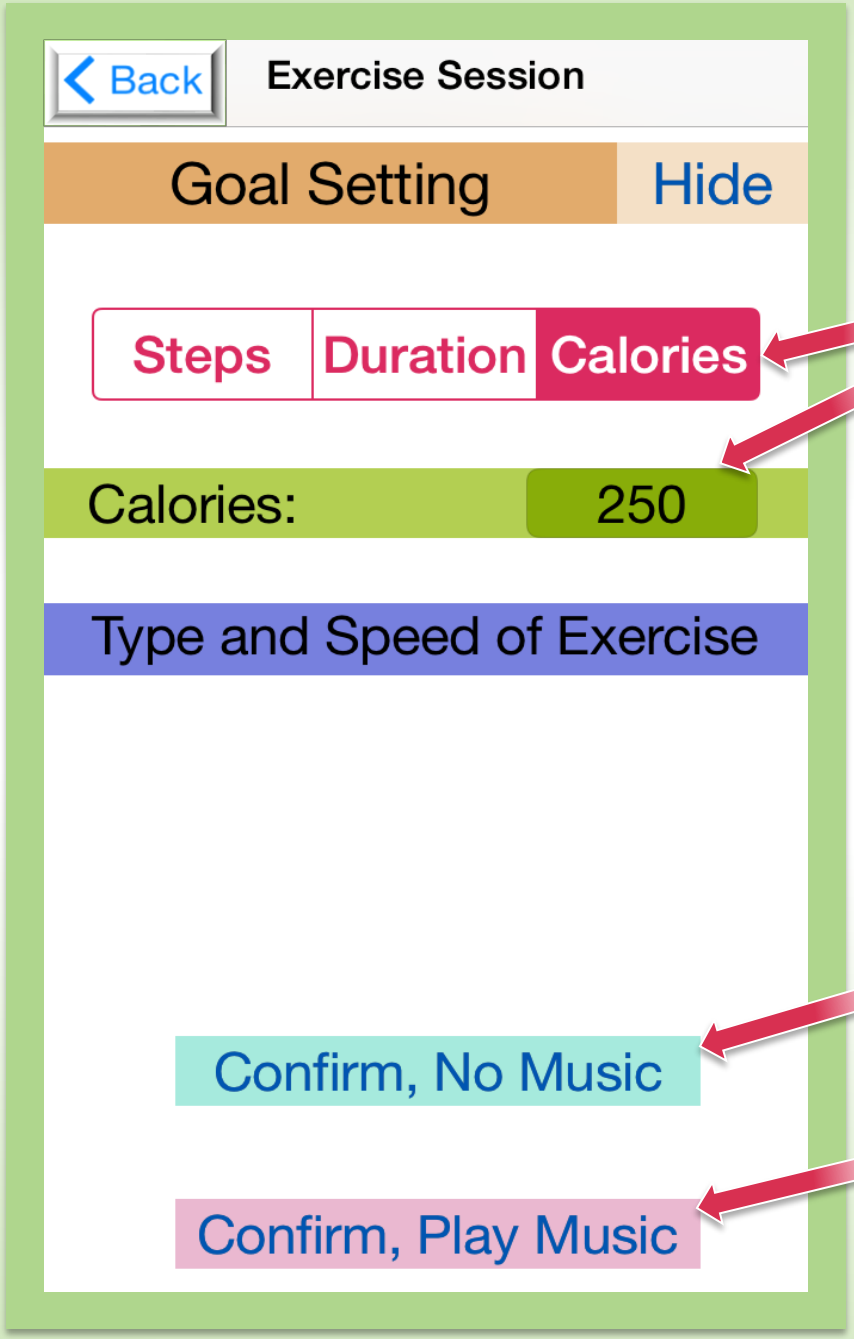
Exercise Tracking: Short-Term Exercise Session: Duration Goal

Setting Duration Goal

- Select **Duration** option in segment selector
- Enter duration of exercise (in minutes) in green text field right to the text *Steps:*
- Select the type of exercise:
  - Walk, Run or Mix
  - Speed of Walk:
    - Unspecified, very slow, slow, regular, fast
  - Speed of Run:
    - Unspecified, very slow, slow, regular, accelerated, fast, very fast
- Steps executed reported after every 100 steps

Goal Confirmation

- Confirm, No Music
  - Goal is confirmed and executed without music background
- Confirm, Play Music
  - Goal is confirmed and executed with music from user's library



Exercise Tracking: Short-Term Exercise Session: Calories Goal

Setting Calories Goal

- Select **Calories** option in segment selector
- Enter exercise calories by clicking on the highlighted field in the *green Calories belt*
- Calories Goal does not require setting exercise type and speed
- Short Term Goal achieved when exercise calories are reached
- Steps executed reported after every 100 steps

Goal Confirmation

- Confirm, No Music
  - Goal is confirmed and executed without music background
- Confirm, Play Music
  - Goal is confirmed and executed with music from user's library

Exercise Tracking: Short Term Exercise Session: Starting the Exercise

Steps to Monitor Short-Term Exercise

- Set goals by entering Goal Setting option (button *Show* in pink belt Goal Setting)
- Press Start (orange button)
  - 5 seconds warm-up countdown begins
    - Flashing red number counts down from 5 to 0 at the bottom of the screen

Exercise Tracking: Short Term Exercise Session: Exercise in Progress

- Pedometer monitors exercise progress

Stop Button

- Exercise monitoring is **terminated**
- Exercise progress given in Exercise Report
- Report on Green belt changes to **Exercise Finished**

Exercise Tracking: Short Term Exercise Session: Pausing the Exercise

Pause Button

- Suspension of exercise session
  - Time progression and steps during pause are not added to Exercise Report for Short-Term Exercise Session
    - Steps, active time and calories of activities during Pause are added to Daily Physical Activity report on Main Pedometer Page

Resume Button

- During pause, **Resume** button replaces **Pause** button
- Reactivates exercise tracing

Back | Exercise Session

Goal Setting	Show
Exercise Report	Hide

Goal Status: Completed!

Steps:	5279	Avg Speed:	6.2
Calories:	454	Time [min]:	46

	km/h	min	steps
Walk: Very Slow	2.0	0	0
Walk: Slow	3.5	11	827
Walk: Regular	5.0	5	648
Walk: Fast	6.5	17	2168
Run: Very Slow	8.0	11	1608
Run: Slow	9.5	0	28
Run: Regular	11.0	0	0
Run: Accelerated	12.5	0	0
Run: Fast	14.0	0	0
Run: Very Fast	16	0	0

Exercise Tracking: Short Term Exercise Session: Exercise Report

Goal Status

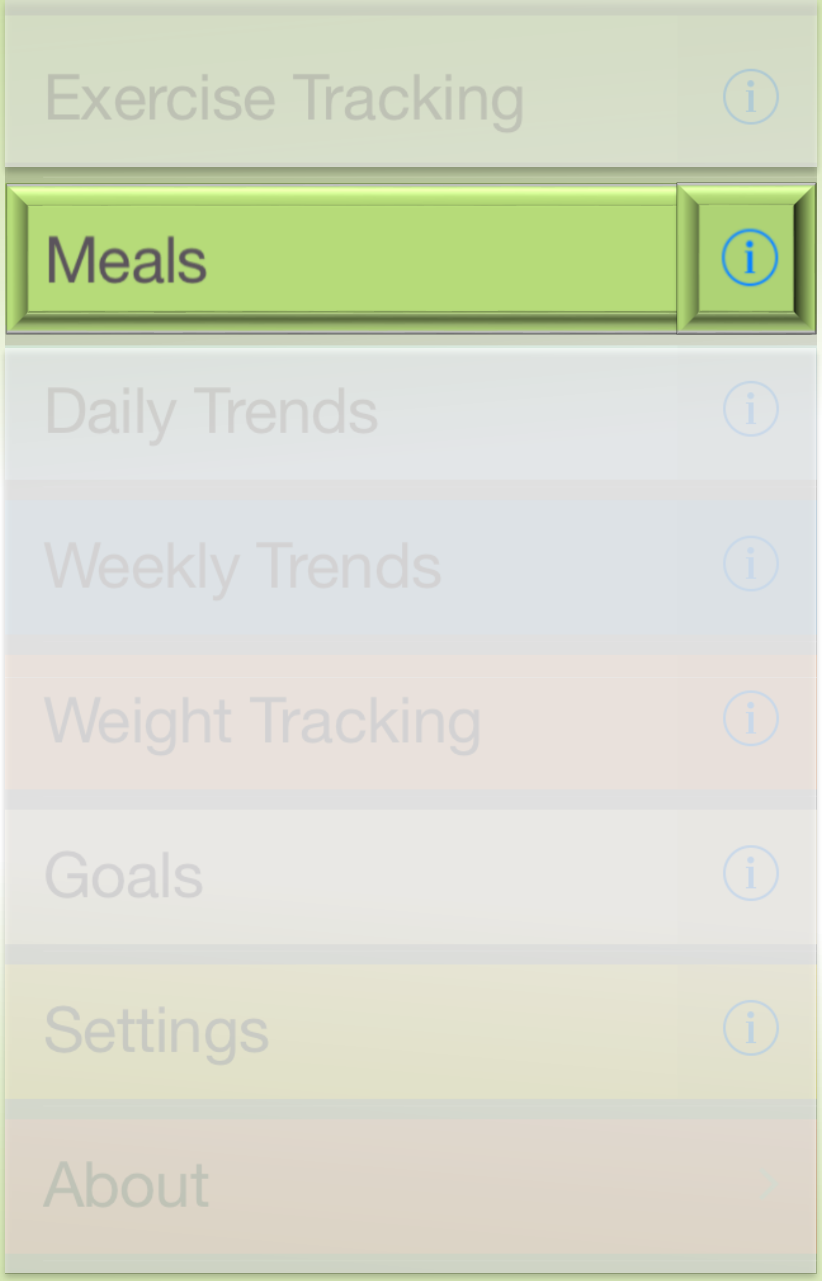
- In Progress (displayed during exercise)
- Not Completed (goal not reached when Stop button pressed)
- Completed (goal achieved when Stop button pressed)

Exercise Summary

- Total steps, calories, average speed and active time
- Detailed Summary of Exercise
  - Total steps and active minutes for ten speeds and two types of movement (walk and run)
    - Active speeds are highlighted in red for easier reading

Main Pedometer Page

- All readings from this page are automatically included in Main Pedometer Page



Meals

- Entry for tracking food intakes in daily meals

Food Library

- Library of over 3600 food items
  - Comprehensive nutritious information augmented with glycemic index and load

Nutrients Analysis

- Nutrients of each meal analyzed and presented in numerical and graph forms

Food Impact on Post-Meal Blood Glucose Level

- Blood glucose profile aimed to help reducing the peak of post-meal blood glucose through exercises
  - Provided for each food item and complete meals

Meals: User's Guide

Back

Meals Guide

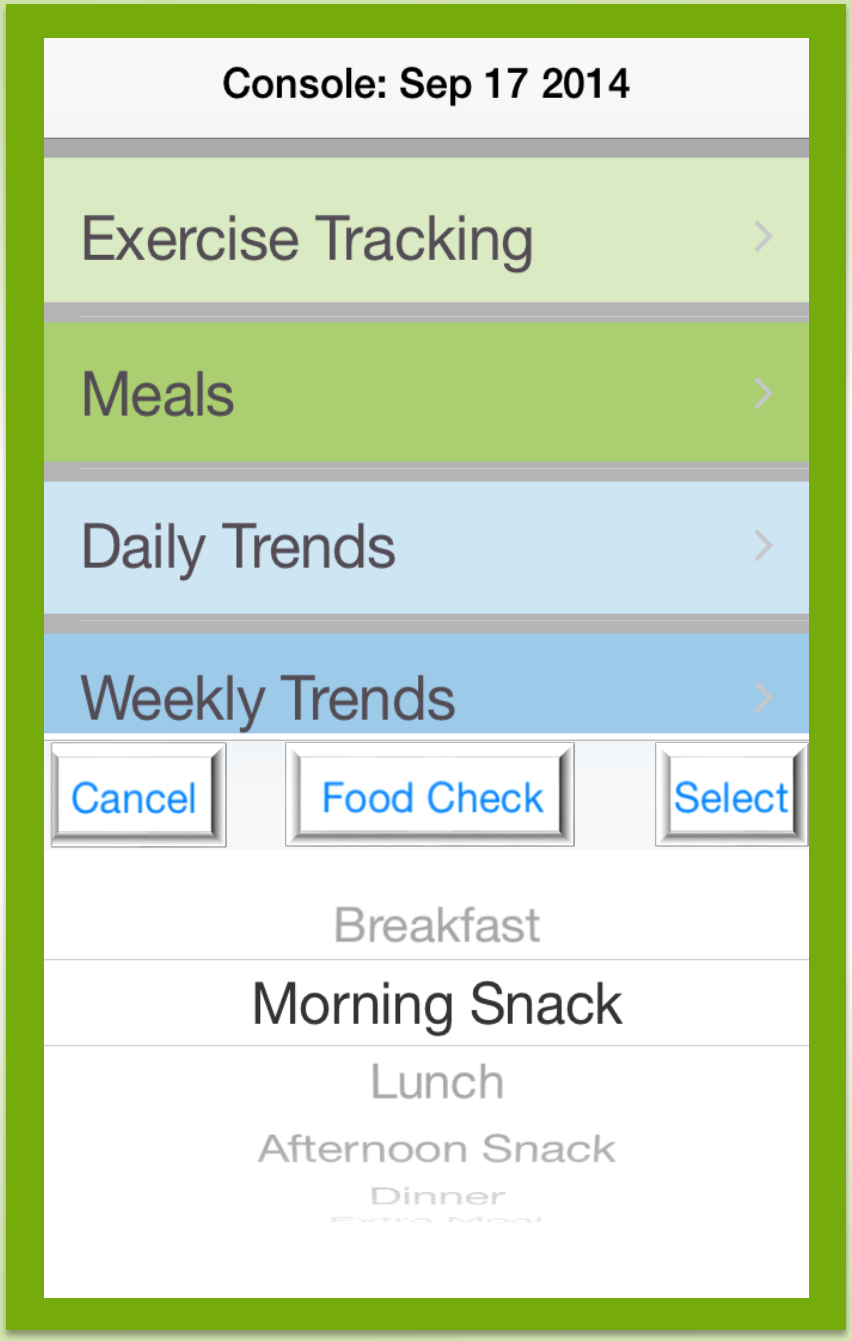
Meals facilitates checking nutrients and managing daily food. *Select* button invokes the creation of a meal menu meeting calories and carbs goals set in *Goals*. With *Food Check* the user can check the nutrients of the over 5000 food items from the in-built *Food Library*.

Select button first points to the review of meal goals: *Original Meal Goals* are shown by the carbs and calories progress bars. *Bonus Calories* adjusts the Original Meal Goal by considering the excess of calories consumed already (Original Meal Goal calories reduction) or exercise above the daily goal (Original Meal Goal calories increase). *Food Search* button launches food selection.

Meal is created by items from the Food Library or by adding new items (option *Add Item*). *Add to Meal* button in top right corner of *Food Item* view includes the item in the given meal. The items already selected are shown using *Menu* button.

Food Item view shows the nutrients and cummulative calories and carbs of the meal. Cummulative *carbs* of the meal can be reported with or without *fiber* depending on user's preferences selected in *Settings*. Amount of food can be selected by *weight, carbs, calories*, or by *serving size* (if applicable). *Calories Impact* reports the exercise needed to expend the total calories of the food item. *Carb Impact* gives examples of exercises to lower the post-meal blood glucose peak.

Meal Summary lists a complete meal *Nutrients*, and the *Calories* and *Carb Impact* of the meal. Depending on the user *Settings*, carb counting can *include or exclude fiber*. A food item can be *removed* by sliding it off a *List of Meal Items*. Meal calories are tracked in *Food and Total Calories Balance* indicators in *Exercise Tracking*.



Meals: Options

Meal Picker

- Upon tapping Meals entry in Console the picker for meal select appears on the screen
- User selects the type of meal

Select

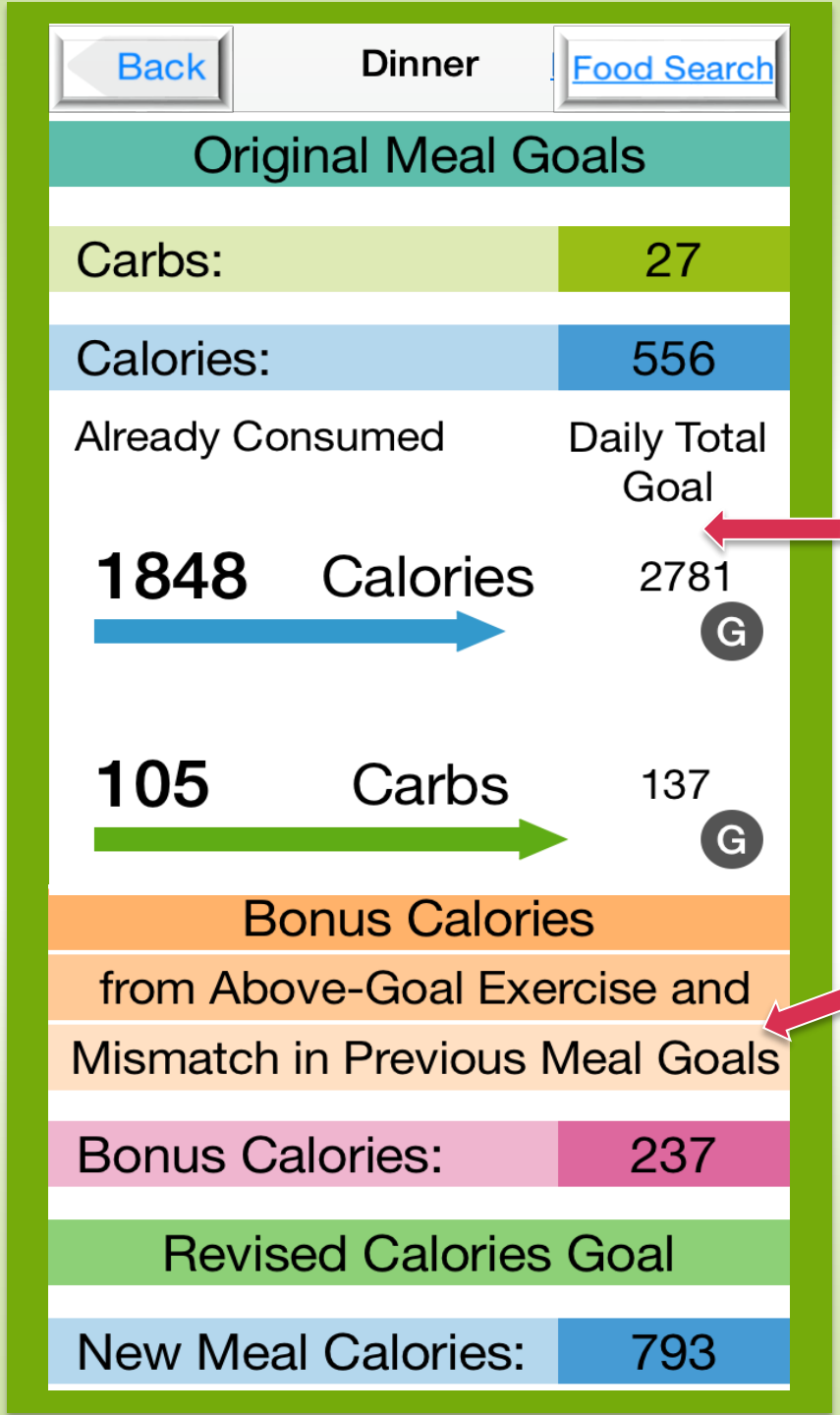
- Launch of meal creation

Food Check

- Nutrients check of a food item from Food Library without launching meal creation

Cancel

- Brings back Console Vies



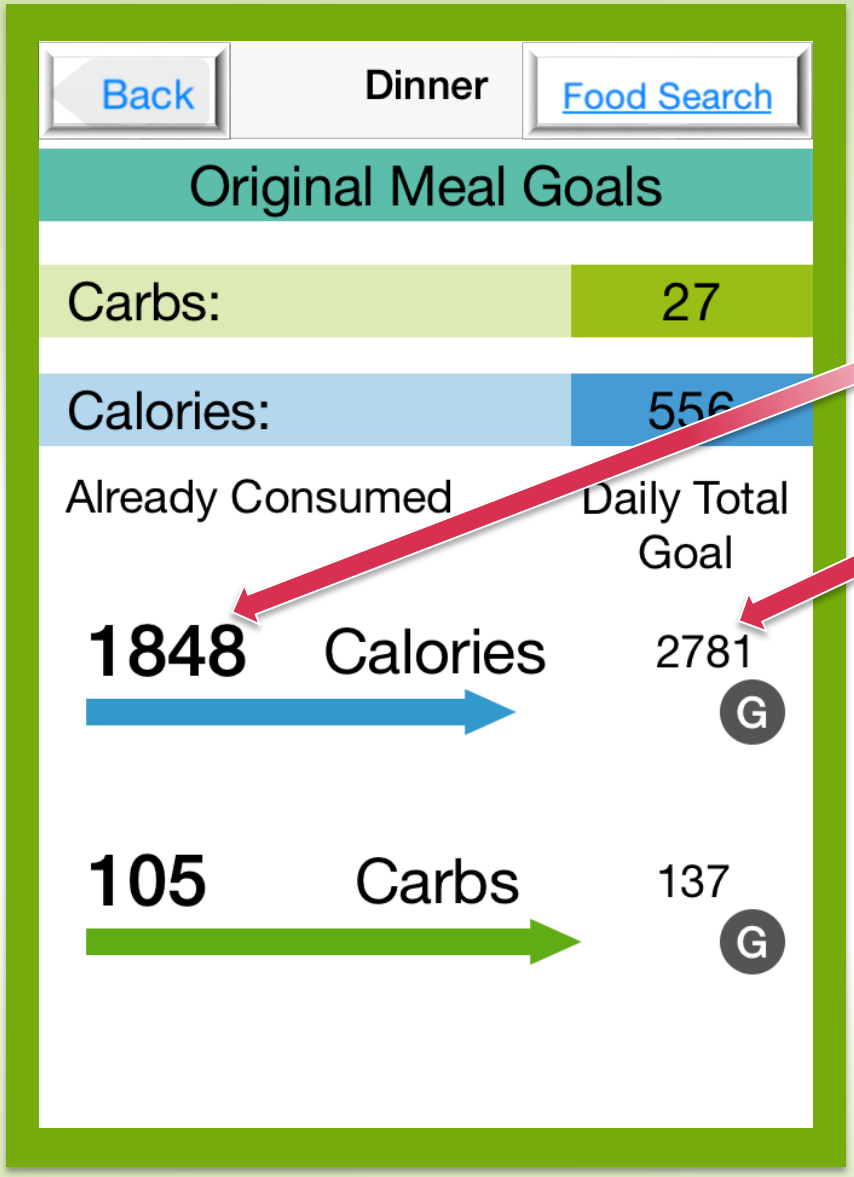
Meals: Calories and Carbs Goals

Original Meal Goals

- Review of Calories and Carbs goals for the given meal set in Goals (6th entry in Console)
- Progress bars of daily consumption of calories and carbs

Bonus Meal Calories

- Verification and update of meal Calories goal based on food consumed so far in the day and exercise
- Calories allowed for this meal can be modified if the user:
  - Exceeded/undertaken Calories goals of any of previous meals
  - Exceeded Daily Exercise Goal



Meals: Select Meal

Original Meal Goals – Progress Bars

- Numbers in left column
  - Total calories and carbs consumed so far in other meals of the day
- Numbers in right column
  - Daily Total Goals for carbs and calories selected in Goals (6th entry , Console)
- Bars
  - Progress in calories and carbs consumption relative to the goals

Meals: Goal Adjustment

Bonus Meal Calories

- Proposed adjustment of Meal Calories Goal based on food consumed in previous meals and exercise

Extension of Meal Calories

- Extra calories added if:
  - Calories consumed in previous meals fallen behind respective meal goals
  - Exercise goal for the day exceeded

Reduction of Meal Calories

- Calories subtracted if:
  - Calories consumed in previous meals exceeded respective meal goals

Aim of Bonus Meal Calories

- To help achieving **Daily Caloric Balance** at the end of the day

Meals: Food Search/Food Check Food Library

Food Items from Library

- **Food Library**: list of food items with summary of calories and carbs per indicated serving
- Over 5000 food items in Food Library
- Food items categories:
  - Bakery, breads, beverages, cakes, cereals, cold-cut meats, cookies and crackers, dairy, eggs, fats, fish, fruits, grains, meats, nuts and seeds, pasta, vegetables, yogurts and ice creams
  - Cafes and diners: Dunkin's Donut, Starbucks, Domino Pizza, Pizza Hut, Burger King and McDonald's

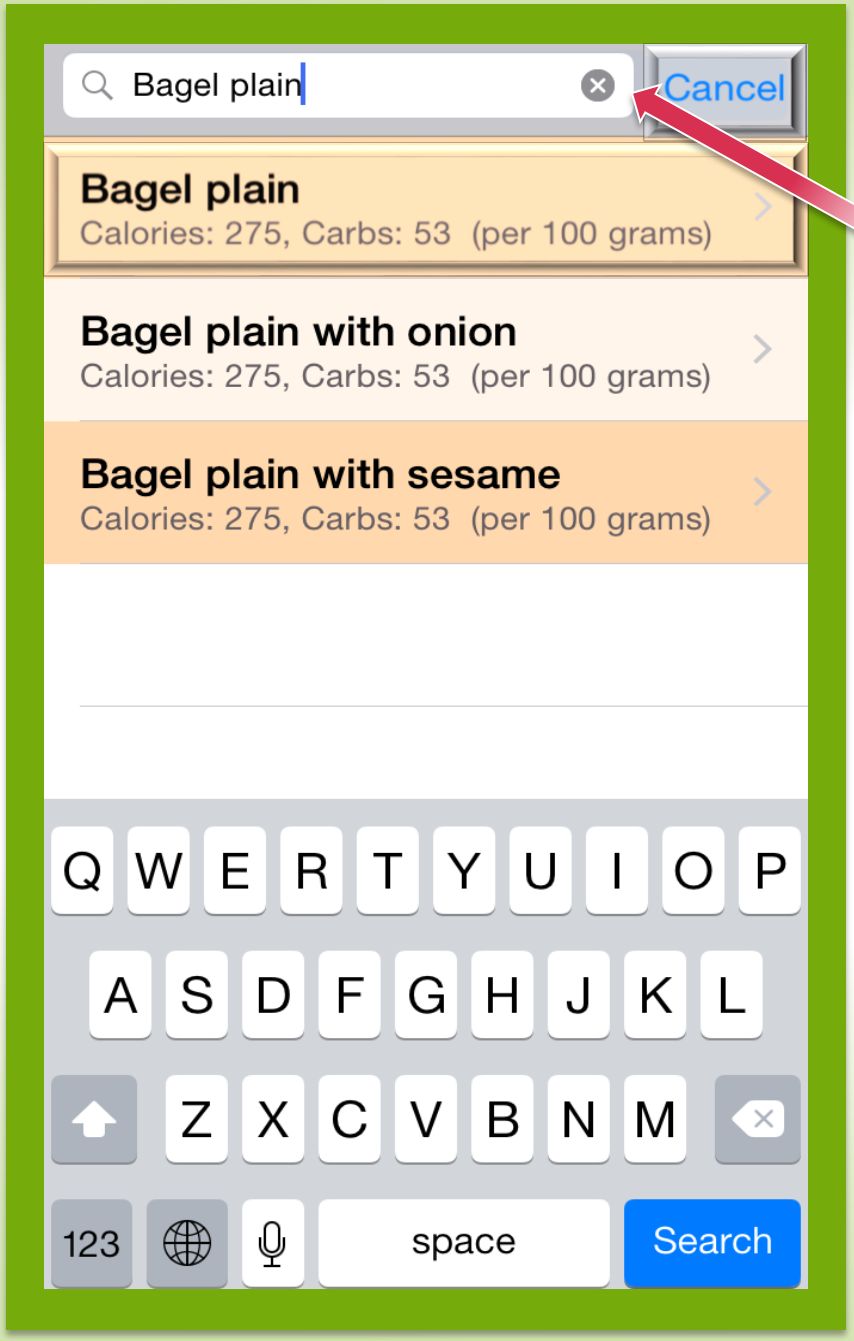
Meals: Food Search/Food Check Food Library

Add Food Item to Library

- Food items not listed in the library can be added to the food library by pressing **Add Item** Button at the top of the page

Meal Button

- By pressing Meal Button the user is prompted to the list of current menu



Meals: Searching Item in Food Library

Library Search

- Searching in Food library done by either:
  - Scrolling the screen
  - Using search navigator at the top of the page

Food Item Not Found

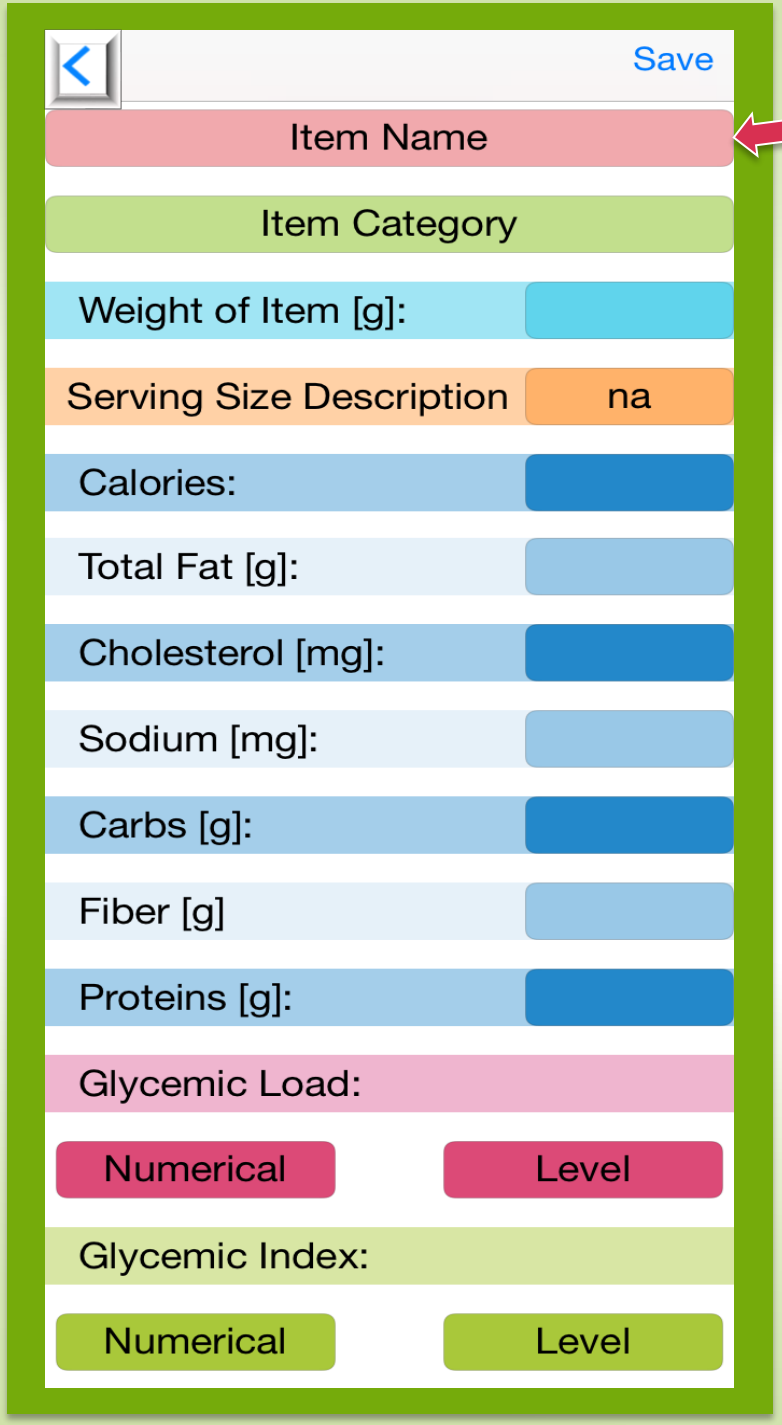
- Search is terminated by pressing Cancel button

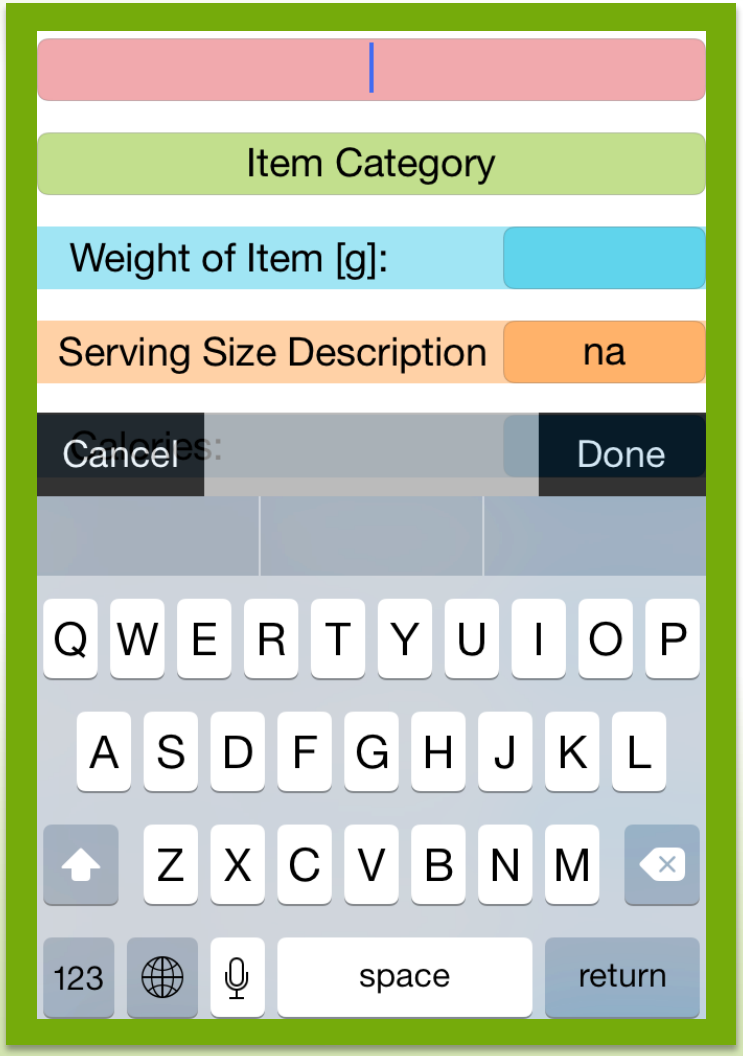
Food Item Found

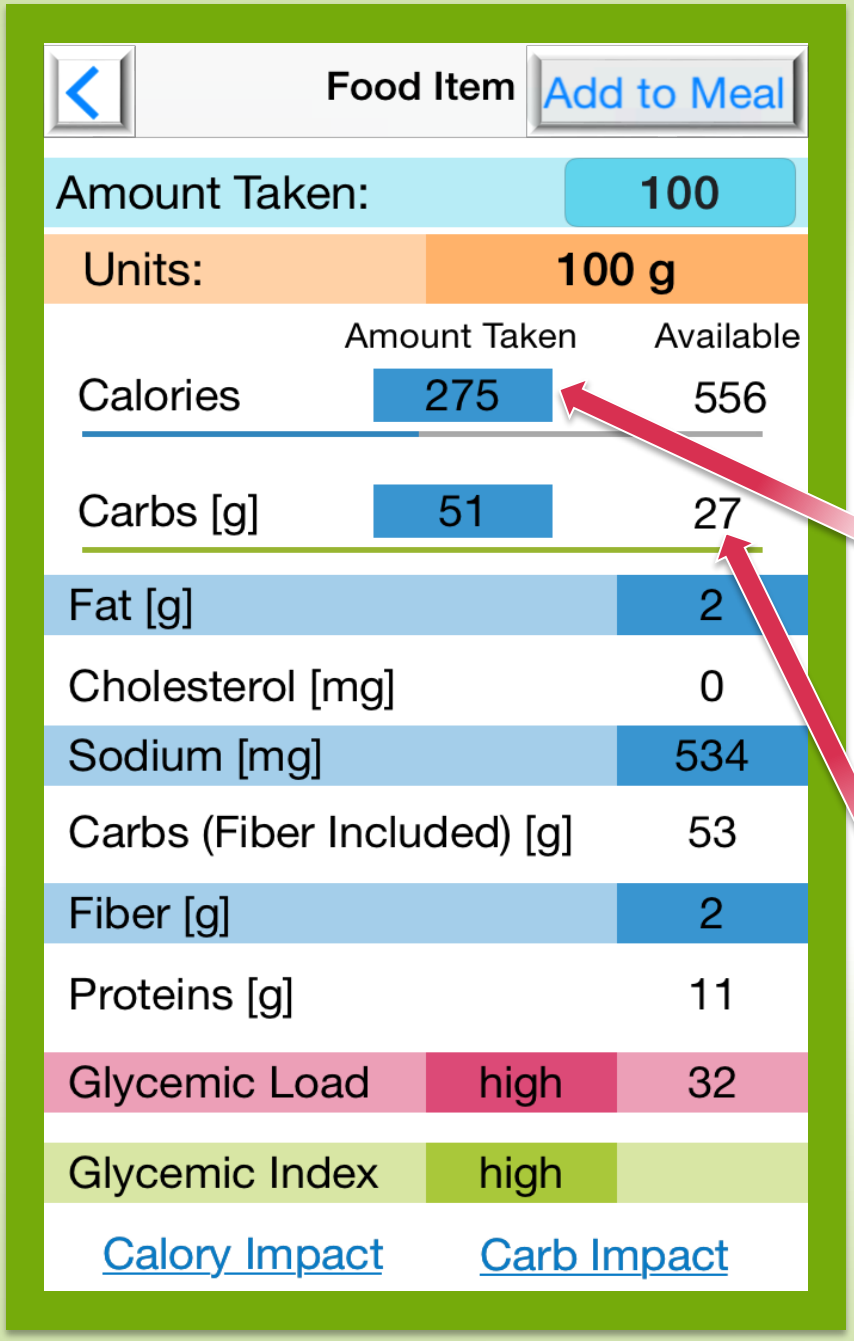
- User can proceed with checking nutrients of food item by tapping on the name of food item

Meals: Add Item

- Tap on marked fields to fill blanks with the data
- Press **Save** button (top right corner) – item will be added to Food Library
- Press Return Button to retreat to Food Search







Meals: Food Item - Nutrients

Item Weight and Serving

- Nutrients listed for default serving
- Change in serving size done by selecting text field of **Amount Taken**

Calories and Carbs Progress Bars

- Calories and carbs in food item listed above bars
  - Food carbs listed above progress bar include or exclude fiber depending of user's choice (Settings – 7th entry in Console)
- Unused goal calories and carbs available for this meal are listed in right part of graphs

Major Nutrients

- Listing of food item nutrients for selected size

Meals: Food Item – Carb Counting

	Amount Taken	Available
Calories	275	556
Carbs [g]	51	27
Fat [g]		2
Cholesterol [mg]		0
Sodium [mg]		534
Carbs (Fiber Included) [g]		53
Fiber [g]		2
Proteins [g]		11

Carb counting excluding fiber

Carb counted in meal

Total carbs in food

Food item nutirients report always includes fiber in total carbs listing: Carbs [g] (Finer Included)

User can select Available Carbs reported in Carbs Goal and Item Nutrients to include or exclude fiber

Fiber in Available Carbs Reporting

Include | Subtract

	Amount Taken	Available
Calories	275	196
Carbs [g]	53	27
Fat [g]		2
Cholesterol [mg]		0
Sodium [mg]		534
Carbs (Fiber Included) [g]		53
Fiber [g]		2
Proteins [g]		11

Carb counting including fiber

Carb counted in meal

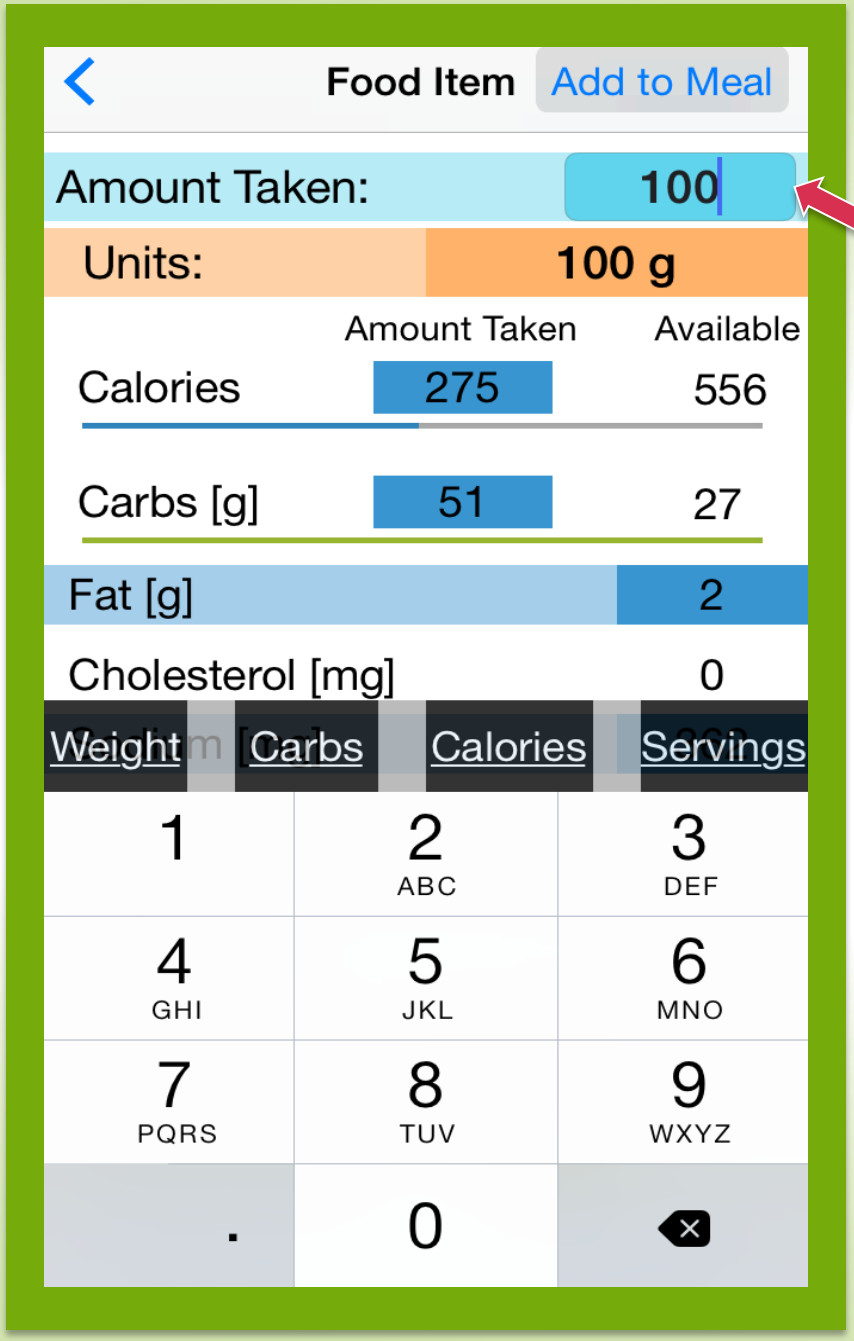
Total carbs in food

Food item nutirients report always includes fiber in total carbs listing: Carbs [g] (Finer Included)

User can select Available Carbs reported in Carbs Goal and Item Nutrients to include or exclude fiber

Fiber in Availabe Carbs Reporting

Include | Subtract



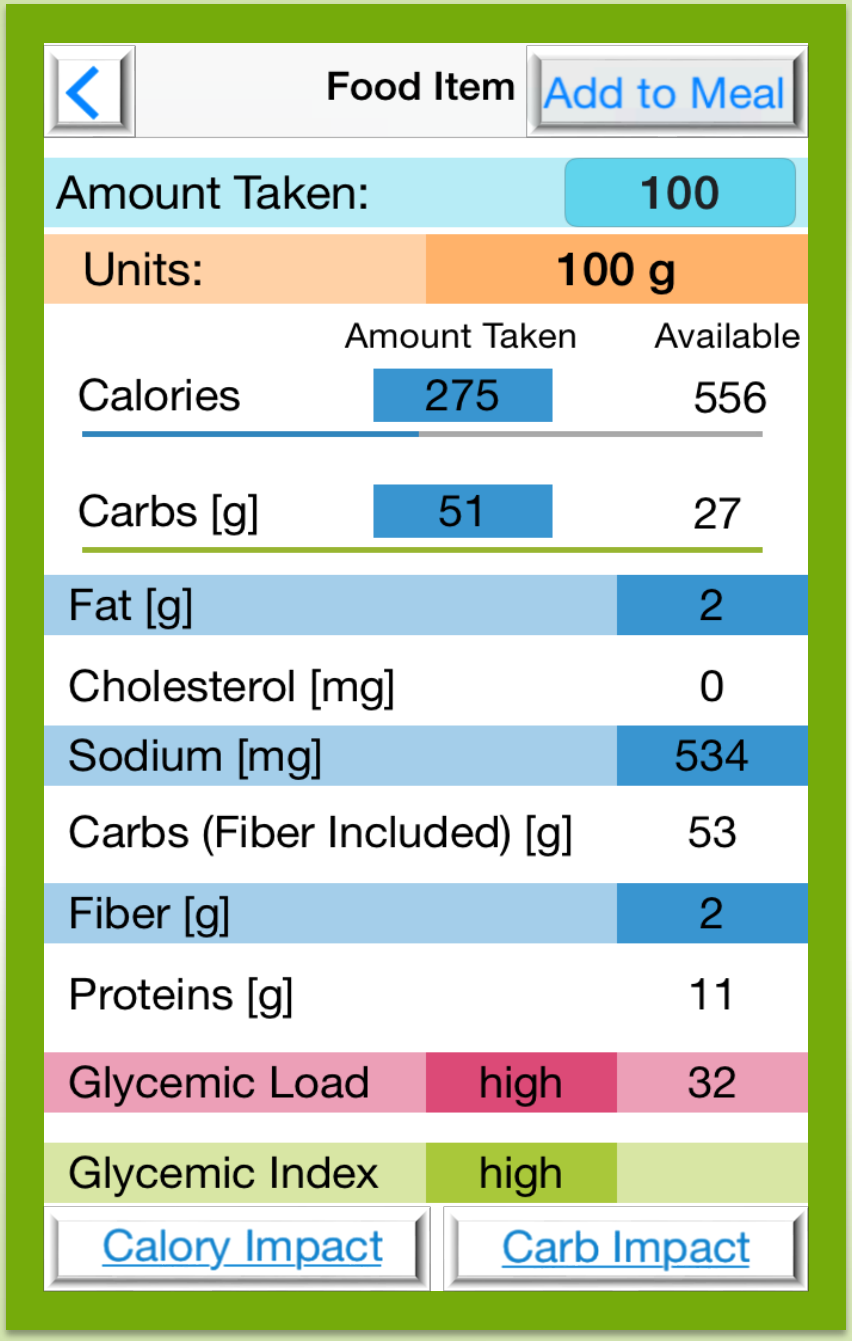
Meals: Food Item – Selecting Service Size

Serving Units

- Pressing marked text field in Amount Taken line invokes a keypad for selecting the food item amount by:
  - Weight
  - Carbs,
  - Calories,
  - Servings (if applicable to the item)
- All nutrients are listed for serving amount selected by user

Default Display

- The default display shows item nutrients per:
  - Serving size (if applicable)
  - 100 g or 1 oz. (depending on selected units)



Meals: Food Item – Calory, Carb Impact

Calory Impact

- Estimation of exercises needed to burn all the calories of the food item

Carb Impact

- Estimation of impact of food item nutrients on rising post-meal blood glucose

Meals: Food Item – Calory Impact (Steps)

- Proposed exercises to burn calories of the food item
  - Step count of walking and running in 10 speed ranges covered by the tool

WARNING

- ***CONSULT YOUR DOCTOR BEFORE EXERCISING!***

Food Item | Disclaimer

Calory Impact of Food Item

Selected Food Item Contains

Total Calories:

275

Sample Exercise for Meal Calories

Steps | Time[min]

Walk					
mph	Slow	mph	or Regular	mph	or Fast
1	124	3	41	4	31
2	62				
Run					
5	21	7	16	9	12
6	18	8	14	10	11

Meals: Food Item – Calory Impact (Time)

- Proposed exercises to burn all the calories contents of the food item
  - Duration of walking and running with 10 speed ranges covered by the tool

Meals: Food Item – Carb Impact (Steps)

Prediction of Carbs Impact

- Estimation of impact of consumed food on post-meal blood glucose peak

Time of Exercise

- Tool determines the post-meal time to schedule exercise

Calories to Burn

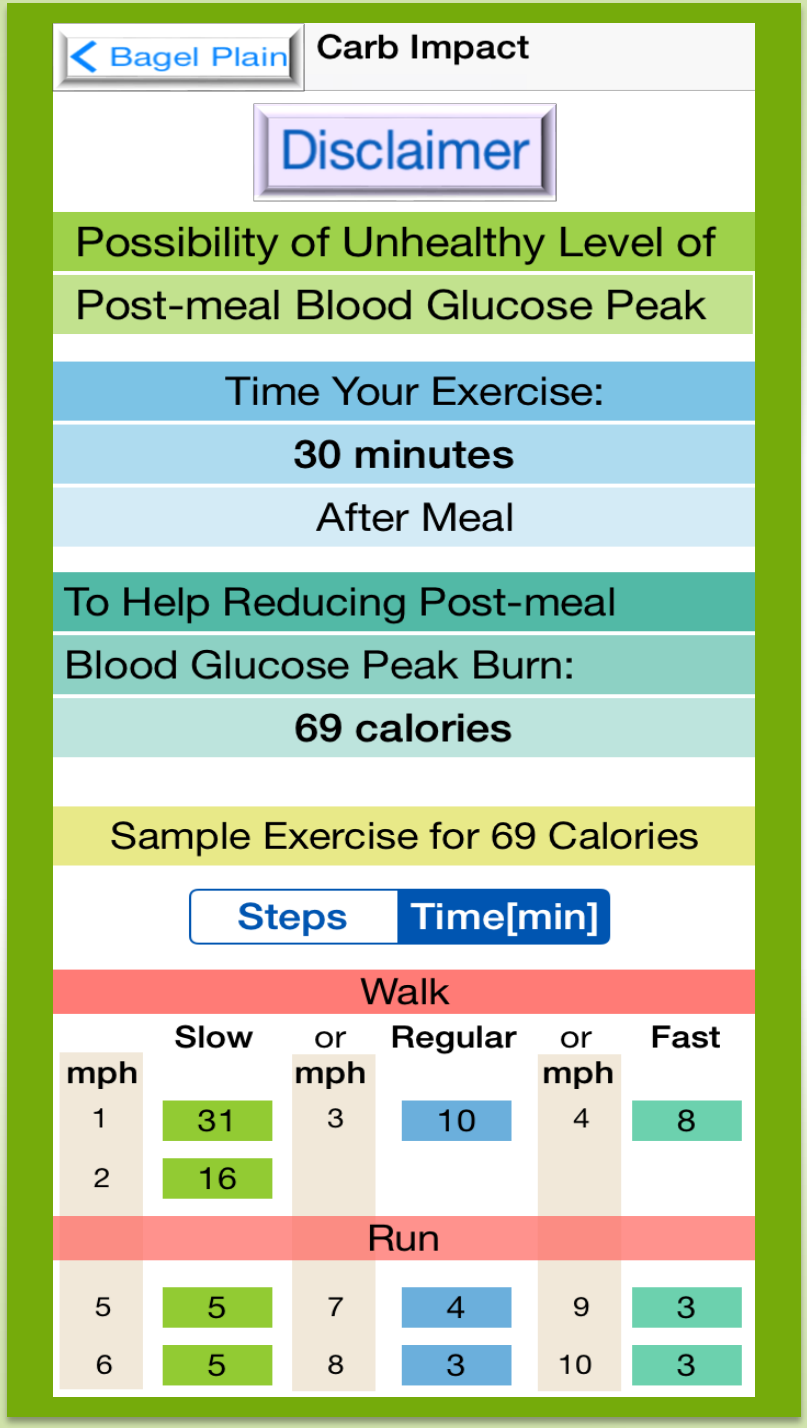
- Estimation of portion of consumed calories to be burned in exercises to minimize post-meal blood glucose

Sample Exercise

- Example of step-count of walk/run to burn required calories

WARNING

- ***EXERCISE DOES NOT SUBSTITUTE MEDICATIONS FOR CONTROLLING BLOOD GLUCOSE. CONSULT YOUR DOCTOR!***



Meals: Food Item – Carb Impact (Time)

Sample Exercise

- Capture of Carb Impact View with Sample Exercises specified in terms of the duration

WARNING

- Impact of given food item on post-meal blood glucose is only a rough estimate for an average healthy population (not a particular user)
- Results are not crafted for a particular user and can vary for different users
- This information cannot be treated as:
  - Substitute for medication regulating blood glucose level
  - Indicator to determine doses of medications for regulating blood glucose levels

Bagel Plain

Carb Impact

Disclaimer

Possibility of Unhealthy Level of Post-meal Blood Glucose Peak

Time Your Exercise:

30 minutes

After Meal

To Help Reducing Post-meal Blood Glucose Peak Burn:

69 calories

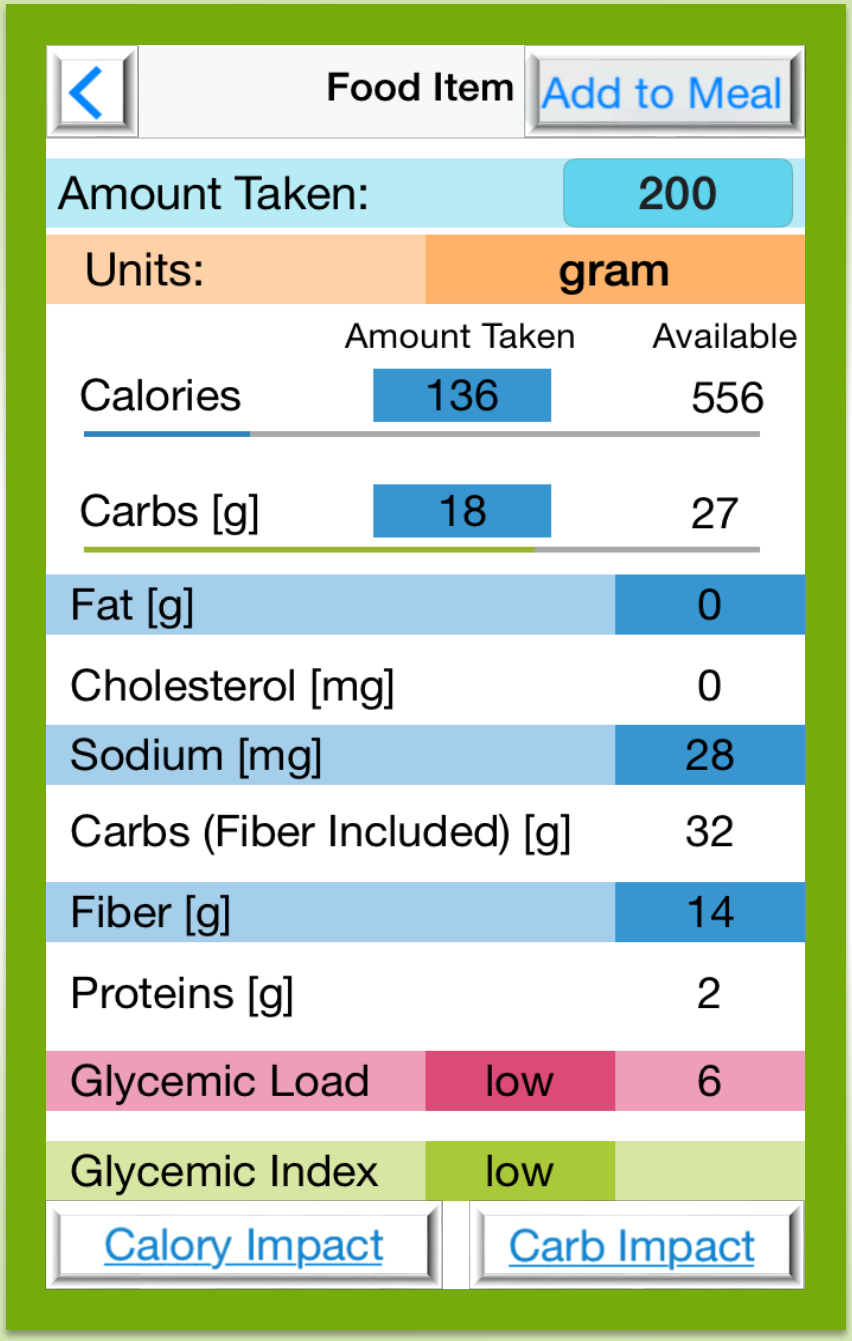
Please consult your doctor before setting exercise routines.Check your blood glucose level and adjust medication before exercising.

OK

mph mph mph

Meals: Food Item – Carb Impact

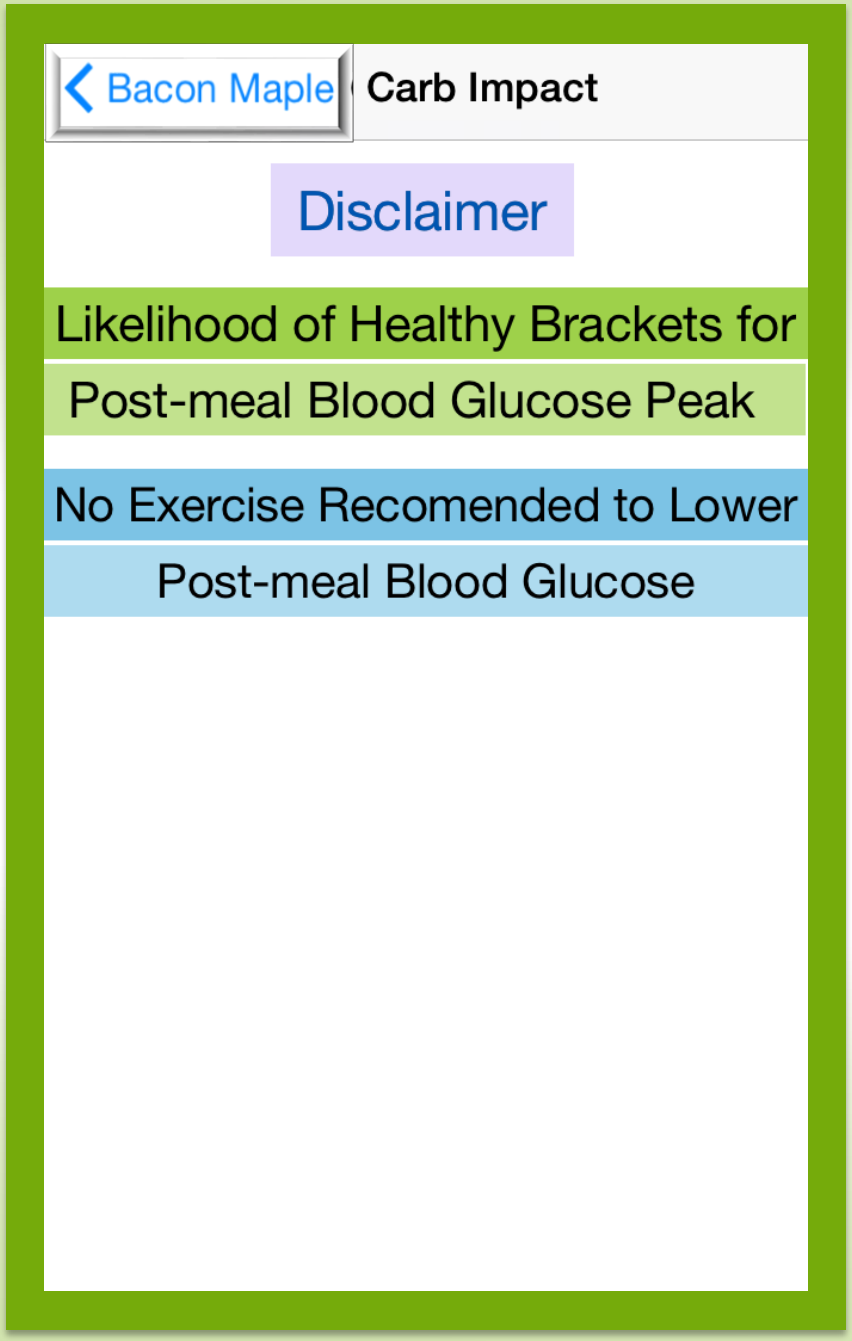
Disclaimer



Meals: Food Item – Carb Impact (Low)

Food Item Example

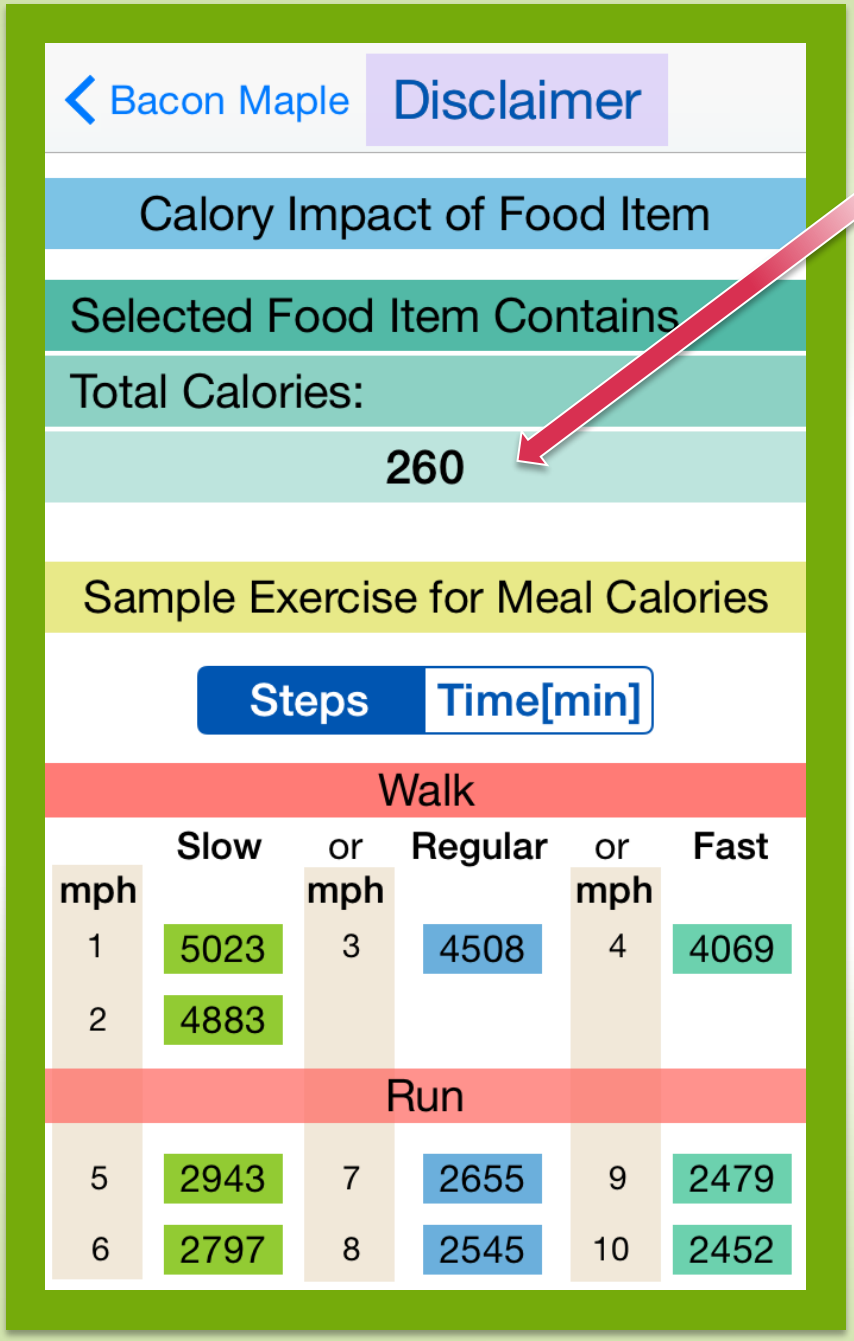
- Example of food item with low glycemic load and index
- No exercise prediction to reduce carb impact



Meals: Food Item – Carb Impact

No Recommendations for Exercises

- View of Carb Impact screen for food item having a probability of post-meal blood glucose within healthy brackets



Meals: Food Item – Calory Impact (Steps)

- Foods with low carbs impact can still have significant calories content (for example fats)

Exercise - Steps

- Step counts in 10 speeds to exert **all** food item calories

WARNING

- ***CONSULT YOUR DOCTOR BEFORE EXERCISING!***

Bacon Maple

Disclaimer

Calory Impact of Food Item

Selected Food Item Contains

Total Calories:

260

Sample Exercise for Meal Calories

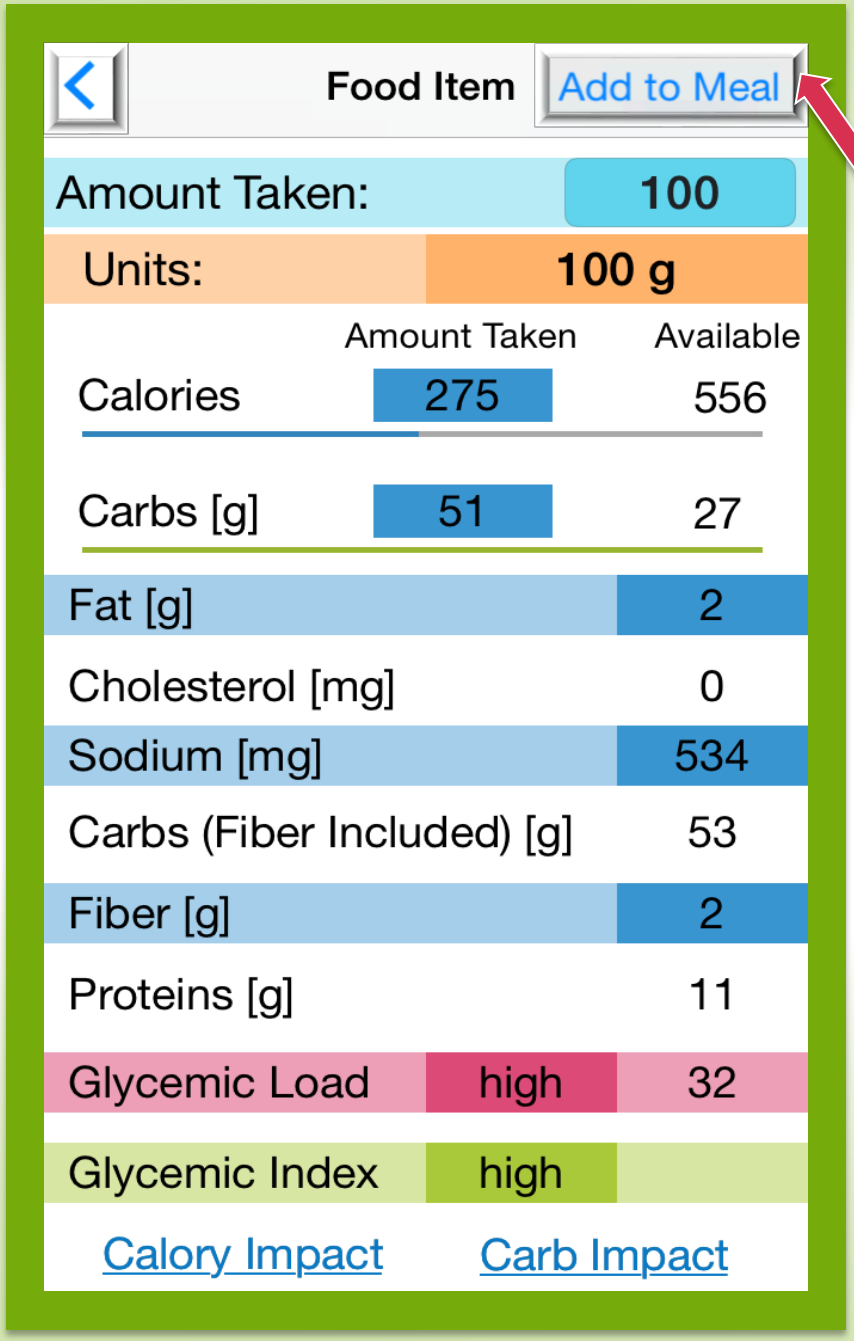
Steps | Time[min]

Walk					
mph	Slow	mph	or Regular	mph	or Fast
1	117	3	39	4	29
2	59				
Run					
5	20	7	15	9	12
6	17	8	13	10	11

Meals: Food Item – Calory Impact (Time)

Exercise - Duration

- Exercise duration to exert all food item calories in 10 speeds covered by pedometer



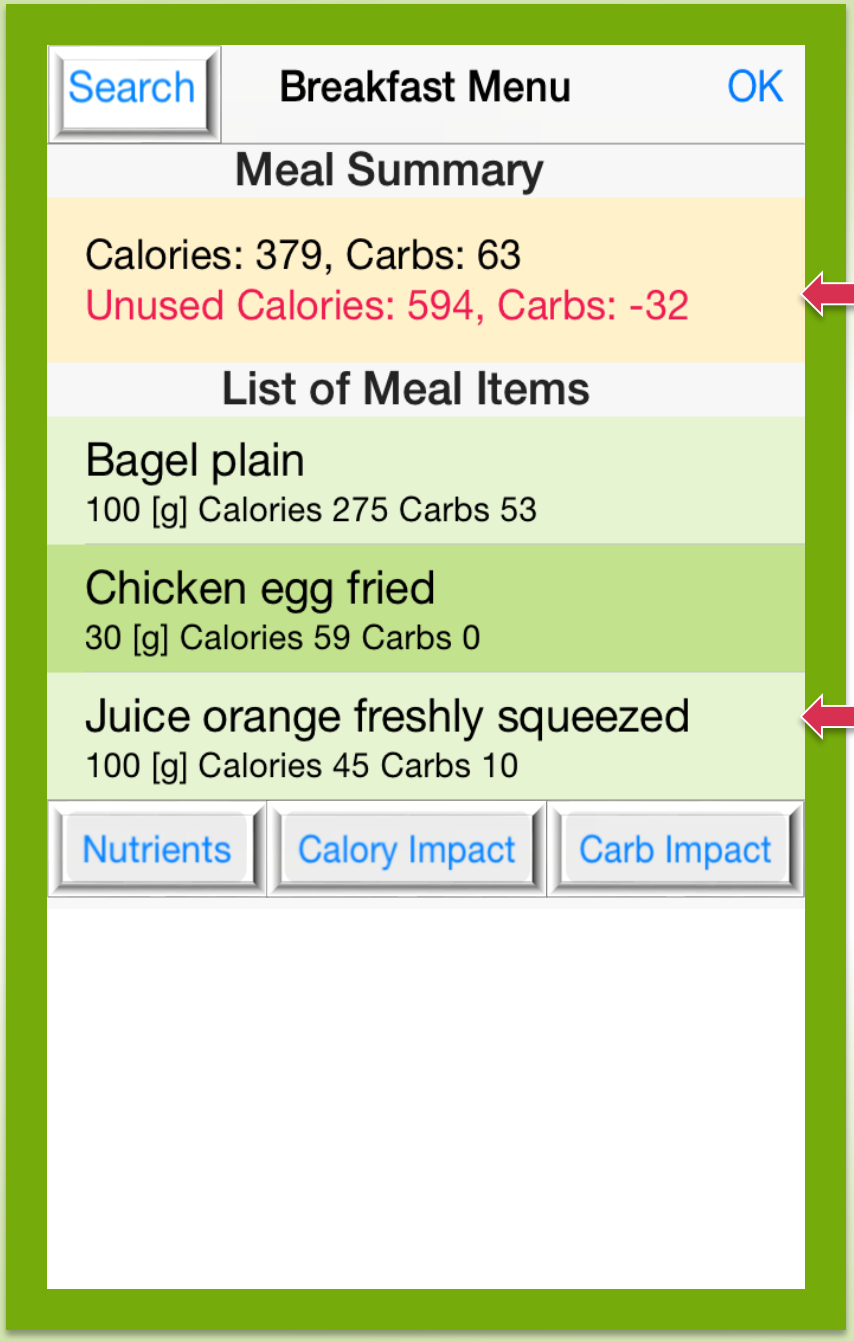
Meals: Food Item – Carb Impact

Add to Meal

- Food item of selected serving size is added to meal by pressing **Add to Meal** Button (Right upper corner of the page)

Return Back Arrow

- If food item is not to be added to meal, then pressing the return arrow brings the user to the to Food Search



Meals: Complete Meal Menu

Consumption Summary

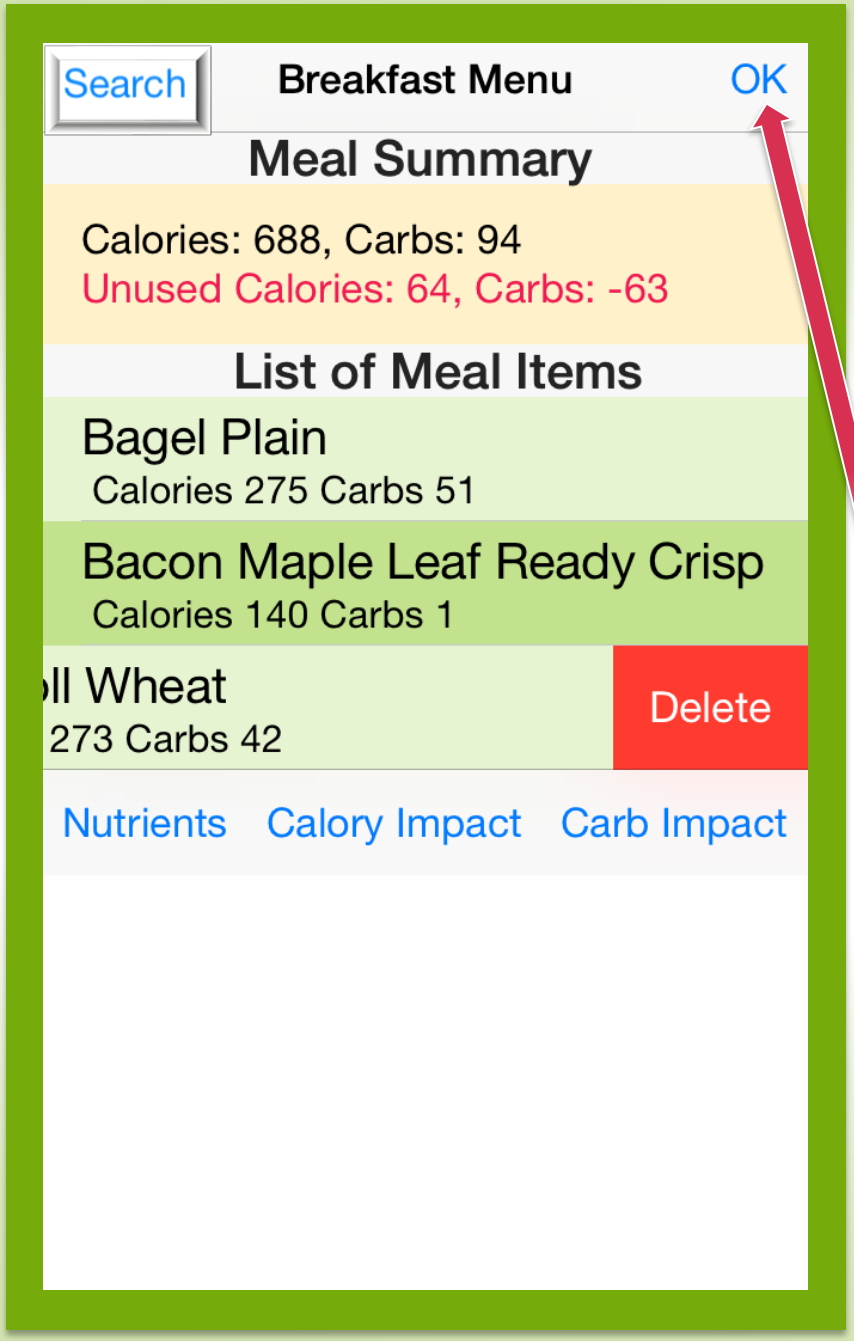
- Listing of total calories and carbs of the current meal (first row)
- Posting of unused calories and carbs (second row)

List of Meal Items

- Record of all menu food items
  - Indication of serving size, calories and carbs of each meal item

Nutrients and Carbs Impact

- **Nutrients**: Complete nutrients profile of the meal together with calories breakdown among carbs, proteins and fats
- **Carbs Impact**: Guidance to post-meal exercise



Meals: Remove from Menu

Removing Food Item from Menu

- To remove food item from the menu:
  - Slide the selected food item entry to the left
  - Press on Delete button which appears at the right part of the screen

Confirm

- Process of meal selection is completed upon pressing **OK** Button in the top right corner of the display

Back **Breakfast Nutrient Analysis**

Calories	415
Carbs (Available) [g]	50
Fat [g]	14.0
Cholesterol [mg]	20.0
Sodium [mg]	962.0
Carbs (Fiber Included) [g]	52
Fiber [g]	2.0
Proteins [g]	19.0
Glycemic Load	medium

Calories Distribution

Carbs: 208.0 (50.7% of calories)

Proteins: 76.0 (18.5% of calories)

Fats: 126.0 (30.7% of calories)

Meals: Nutrients Analysis

Nutrients of This Meal

- Profile of: calories, carbs, fat cholesterol, sodium, fiber, proteins and glycemic load of the complete meal

Carbs (Available)

- Carbs in the menu counted either together with fiber or with fiber excluded
  - Depending on user selected option in Settings (7th entry in Console)

Carbs (Fiber Included)

- Listing of all carbs in menu with fiber included

Calories Distribution

- Donut graph of meal calories distribution among carbs, proteins and fats

Menu: Calories Impact (Steps)

Sample Exercise – Steps

- Step counts in 10 speeds to exert **all** calories of complete menu

WARNING

- ***CONSULT YOUR DOCTOR BEFORE EXERCISING!***

Back

Disclaimer

Calory Impact of Food Item

Selected Food Item Contains

Total Calories:

415

Sample Exercise for Meal Calories

Steps | Time[min]

Walk					
mph	Slow	or mph	Regular	or mph	Fast
1	187	3	62	4	47
2	94				
Run					
5	32	7	24	9	19
6	27	8	21	10	17

Menu: Calories Impact (Time)

Sample Exercise

- Duration for different speed of walking or running needed to expend **total** calories of the complete meal

Menu: Carb Impact (Steps)

Prediction of Carbs Impact

- Estimation of impact of consumed food on post-meal blood glucose peak

Time of Exercise

- Tool determines the post-meal time to schedule exercise

Calories to Burn

- Estimation of portion of consumed calories to be burned in exercises to minimize post-meal blood glucose

Sample Exercise

- Example of step-count of walk/run to burn required calories

WARNING

- ***EXERCISE DOES NOT SUBSTITUTE MEDICATIONS FOR CONTROLLING BLOOD GLUCOSE. CONSULT YOUR DOCTOR!***

Back

Carb Impact

Disclaimer

Possibility of Unhealthy Level of Post-meal Blood Glucose Peak

Time Your Exercise:

30 minutes

After Meal

To Help Reducing Post-meal Blood Glucose Peak Burn:

97 calories

Sample Exercise for 97 Calories

Steps | Time[min]

Walk					
mph	Slow	mph	or Regular	mph	or Fast
1	44	3	15	4	11
2	22				
Run					
5	7	7	6	9	4
6	6	8	5	10	4

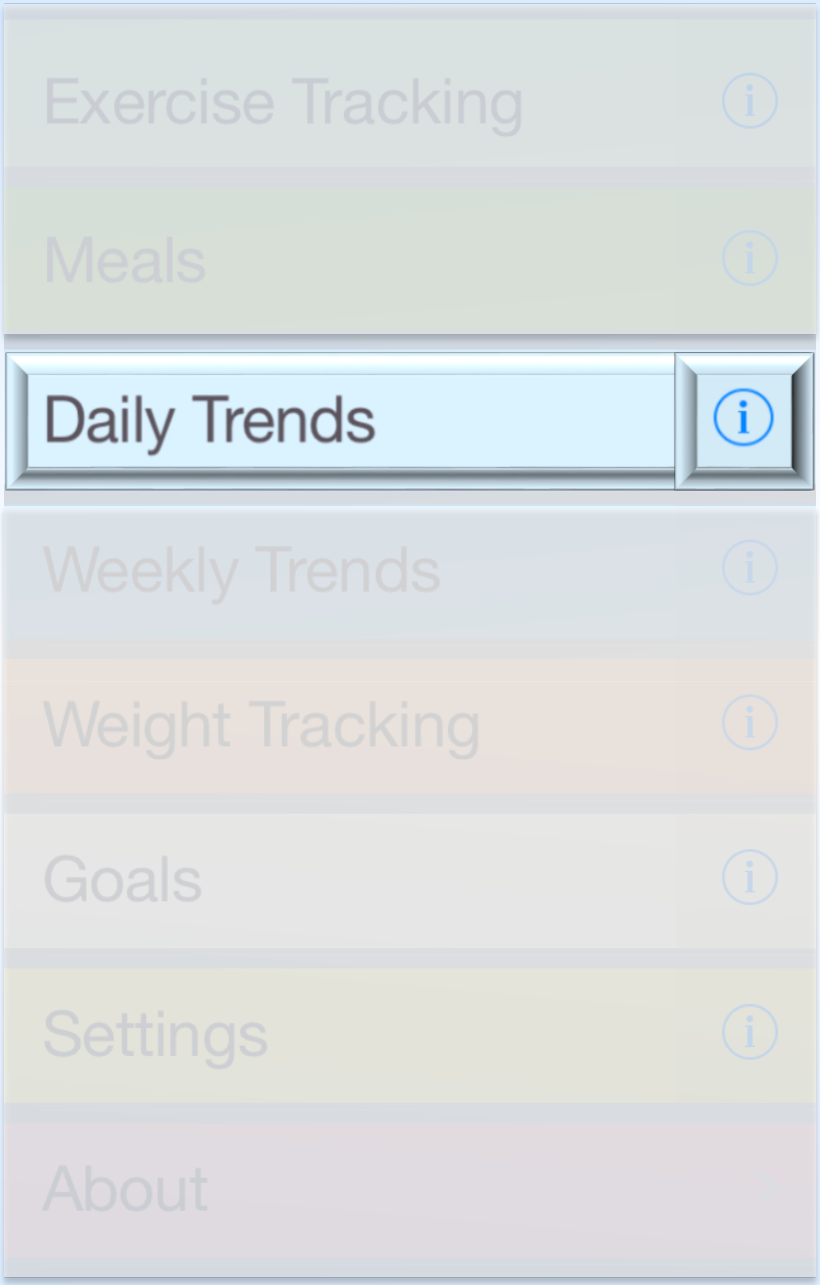
Menu: Carb Impact (Time)

Sample Exercise

- Carb Impact View with Sample Exercises specified in terms of the duration for different speeds of walking and running

WARNING

- Digestion of complex meals can differ from user to user
- Impact of complex meal on post-meal blood glucose is only a rough estimate for an average healthy population (not a particular user)
- Results are not crafted for a particular user and can very for different users
- This information cannot be treated as:
  - Substitute for medication regulating blood glucose level
  - Indicator to determine doses of medications for regulating blood glucose levels



Daily Trends

Daily Wellness

- Estimation of daily caloric balance
- Determination of weight-control zone

Daily Exercise Activities

- Summary of daily exercises including total
  - Calories burned
  - Steps
  - Active minutes
- Status of execution of daily exercise goal

Daily Food Trends

- Status of food goals of the day (carbs and calories goals)
- List of menus of all meals consumed in the day
- Graphical and numerical analysis of nutrients in all daily meals

Daily Trends: User's Guide

Back

Daily Trends Guide

Daily Trends entry summarizes the key elements such as *Daily Calories Balance*, *Exercise* and *Food* traced during the day.

Daily Calories Balance outlines the equity of calories consumed (*Food*) and energy expended (*Exercises* and *Metabolism*).

Zone provides the *weight-loss status of the day*: *Weight Gain* - if calories consumed exceed those expended, *Neutral* - if calories consumed were within 5% of these expended in exercises, and *Weight Loss* - if calories consumed were lower than these expended in exercises.

Exercise Summary reports: status of the *Exercise Goal* of the day (set in *Goals*), *Total Calories Burned* in the exercises, *Total Step Count* and *Active Minutes*. *Complete Exercise Report* points to the *Exercise Tracking* (pedometer) entry.

Food Goal reports the status of the *calories goal of the day* set by the user together with carbs and exercise goals in the *Goals* entry. Food goal is met if the calories consumed are within 5% of the user set goal.

Food Summary points to the *Complete Meal List* with all meal menus of the day. It also includes bar graphs of *calories*, *proteins*, *fats*, *carbs* and *glycemic load* of each meal as well as the *total daily consumption* of all the above. Further, the *doughnut graph* shows the breakdown of daily consumed calories among carbs, proteins and fats.

Daily Trends

Daily Calories Balance

Daily Caloric Balance = Calories Consumed – Calories Expended

- Calories Consumed (food)
- Calories Expended (exercise and metabolism)

Zone: Weight Control

- **Weight gain**: positive balance
- **Neutral**: zero calories balance
- **Weight loss**: negative balance

Exercise

- Account for daily physical activities:
  - Exercise calories
  - Step count
  - Active minutes
- Complete Exercise Report
  - Link to Main Pedometer View

Food

- Numerical and graphical display of nutrients in food consumed throughout the day

Daily Trends - Zone

- Three zones :
  - Weight Loss
  - Weight Gain
  - Neutral

Zone: Weight Loss

- Zone is declared weight-loss when Daily Calories Balance is **negative**
  - More calories were exerted on exercise and metabolism than were consumed in all meals

Daily Trends - Zone

Zone: Neutral Weight Impact

- Zone is declared neutral when Daily Calories Balance is **zero**
  - Energy exerted in exercises and metabolism was the same as that consumed in all daily meals

Daily Trends - Zone

Zone: Weight Gain

- Zone declared weight gain when Daily Calories Balance is **positive**
  - Energy exerted in exercises and metabolism is lesser than the number of calories consumed in all daily meals

Daily Trends - Exercise Goal

- Three exercise goal classifications:
  - Not Met
  - Met
  - Exceeded

Reaching Daily Exercise Goal

- Daily exercise goal selected by user in Goals (6th entry in Console)
- Goal types: Step Count, Duration, Calories
- Daily goal realization based on calories equivalence
- Goals set in terms of steps or duration are declared **reached** if:
  - Step count or duration of exercise with selected speeds is met
  - Caloric equivalence in exercises is obtained

Daily Trends - Exercise Goal

Exercise Goal Setting

Goals | **Step Goals** | Clear

Walk: 2000 steps total

Slow

	Very Slow		Slow
1 mph		2 mph	

Regular

3 mph 2000

Verification

Calories & duration for step goals

Calories	Time[min]	Distance

Walk calories: 103

	Slow	and	Regular	and	Fast
mph		mph		mph	
1	0	3	103	4	0
2	0				

Run calories: 0

- Step Goal executed with greater speed and smaller step count
- Step Goal calories: 103
- Goal execution calories: 108
- Goal reached as caloric equivalence of goal met in execution

Exercise Goal Execution

Back **Exercise: Jan-12-2015** E-mail

Steps:	1582	Avg Speed:	4.6
Calories:	108	Time [min]:	11

Walk

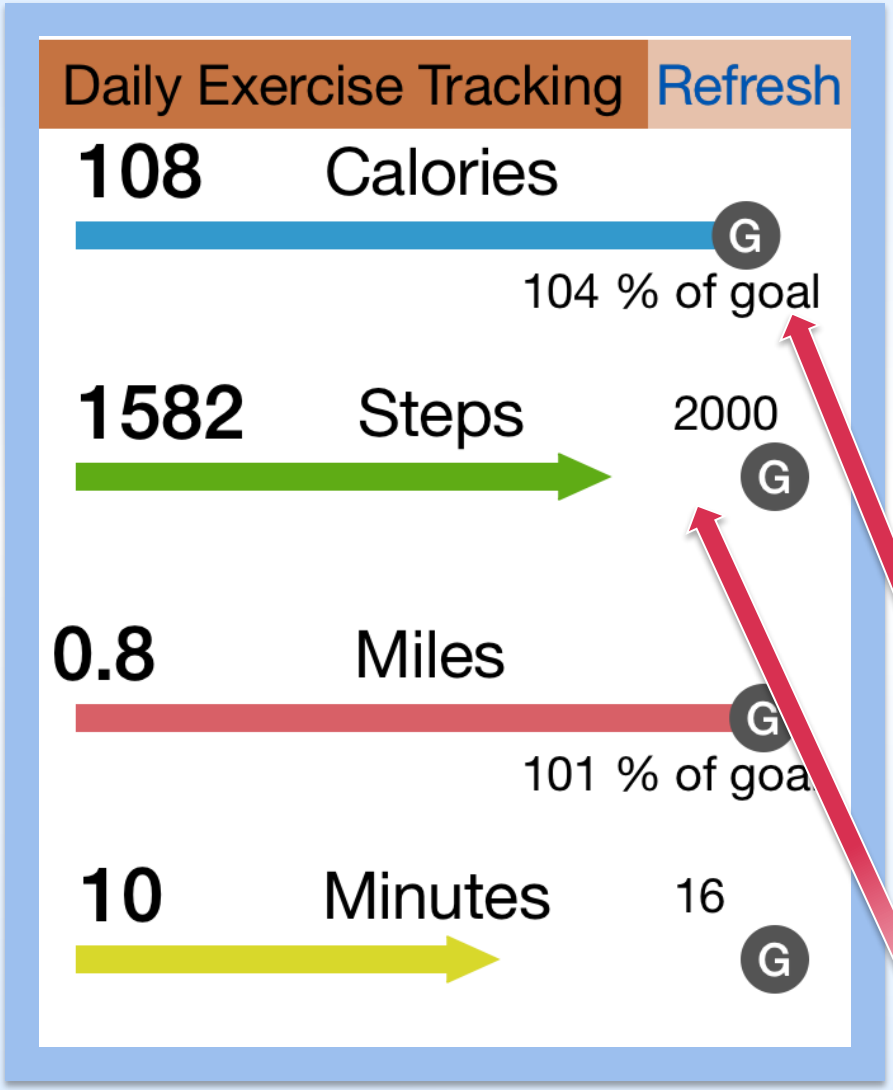
	mph	min	steps	cals
Very Slow:	1	0	0	9
Slow:	2	1	89	1
Regular:	3	0	0	0
Fast:	4	0	0	0

Run

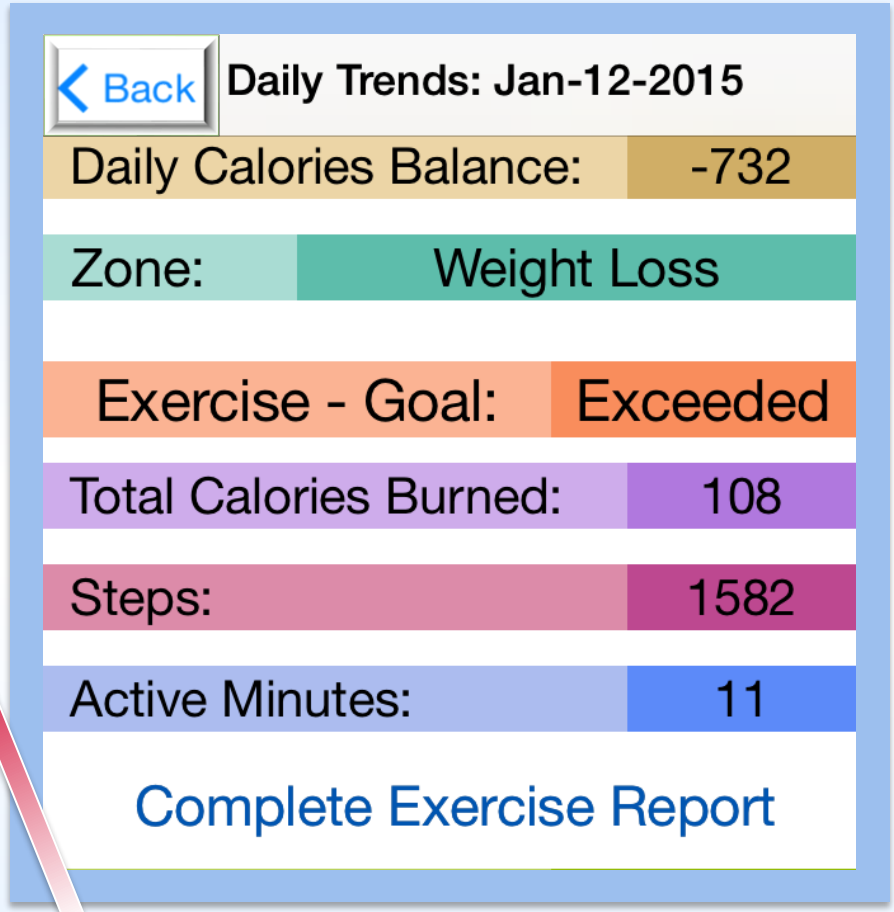
Very Slow:	5	9	1493	97
Slow:	6	0	0	0
Regular:	7	0	0	0
Accelerated:	8	0	0	0
Fast:	9	0	0	0
Very Fast:	10	0	0	0

Daily Trends - Exercise Goal

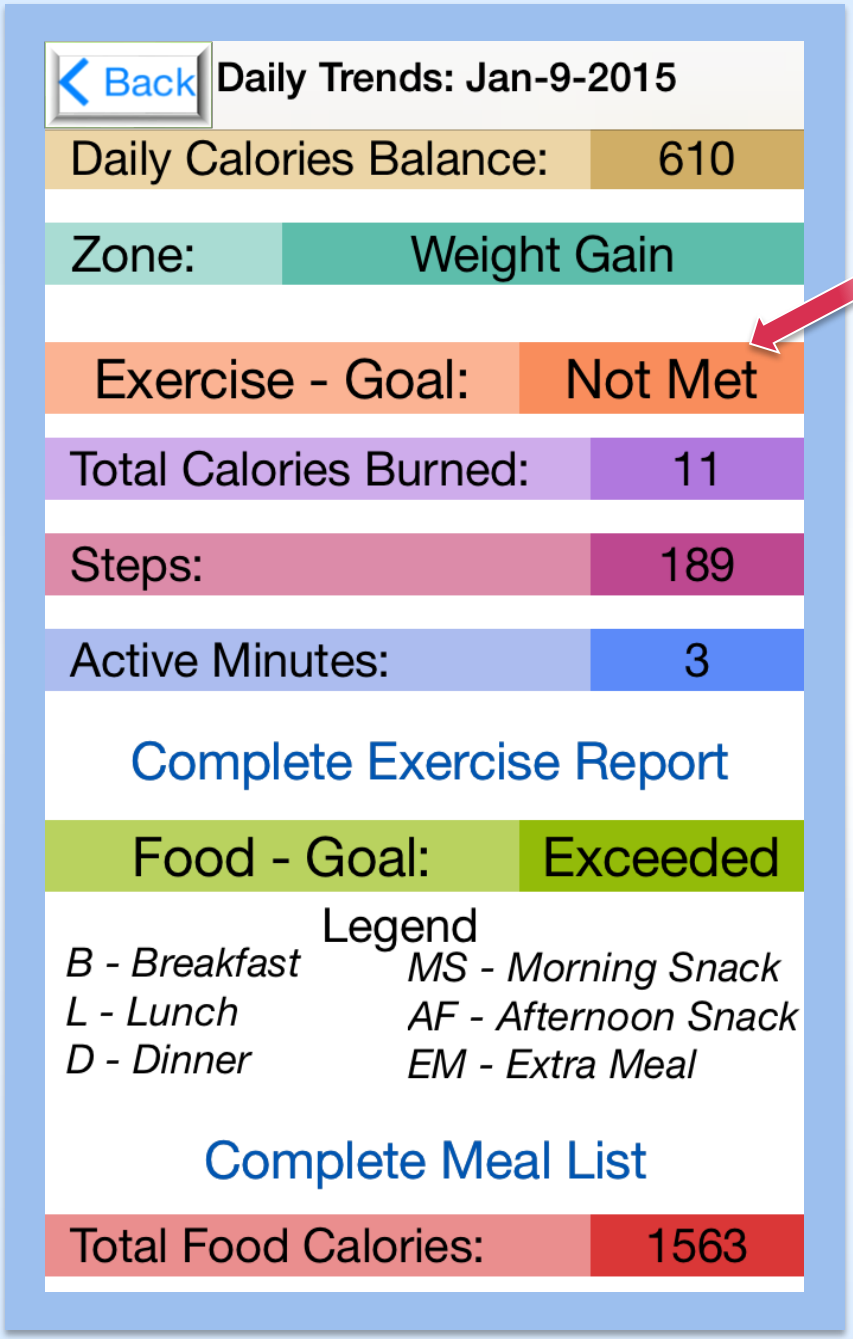
Pedometer Display



Daily Trends Page – Goal Exceeded



- **Caloric equivalence** of Step Goal (103 calories) exceeded
- Exercise Goal for the day exceeded
  - Even if step count of the goal (2000 steps) not reached



Daily Trends - Exercise Goal

Exercise Goal – Not Met

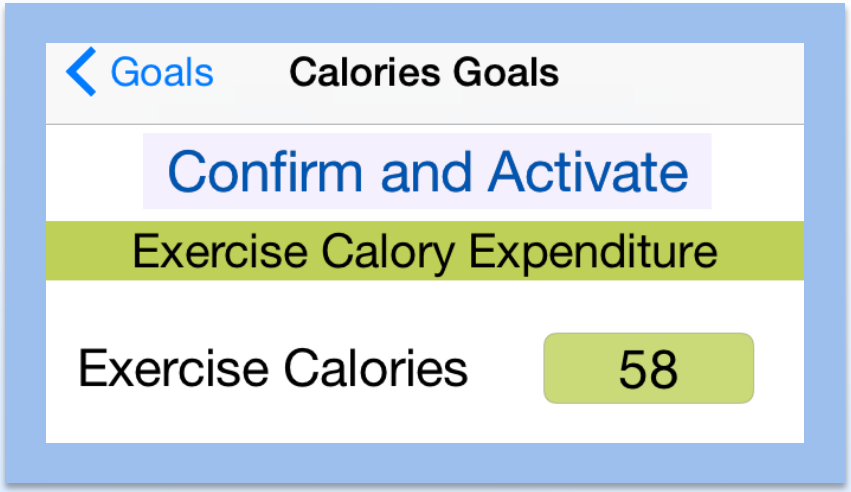
- Daily exercise goal was **not met** if it fallen behind by more than 2% of neither:
  - Exercise goal set in Goals (6th entry in Console View)
  - Caloric equivalence of daily exercise to set exercise goal

Daily Trends - Exercise Goal

Exercise Goal – Met

- Daily exercise goal is **met** if it was within 2% of either:
  - Exercise goal set in Goals (6th entry in Console View)
  - Caloric equivalence of daily exercise to set exercise goal

Exercise Calories Goal Setting



Daily Trends - Exercise Goal

Exercise Goal – Exceeded

- Daily exercise goal was **exceeded** if it is surpassed by more than 2% in either:
  - Exercise goal set in Goals (6th entry in Console View)
  - Caloric equivalence of daily exercise goal

Complete Exercise Report

- Pressing on Complete Exercise Report brings the user to the Pedometer Mail page
  - The user can view the comprehensive daily exercise report

Daily Trends - Food Goal

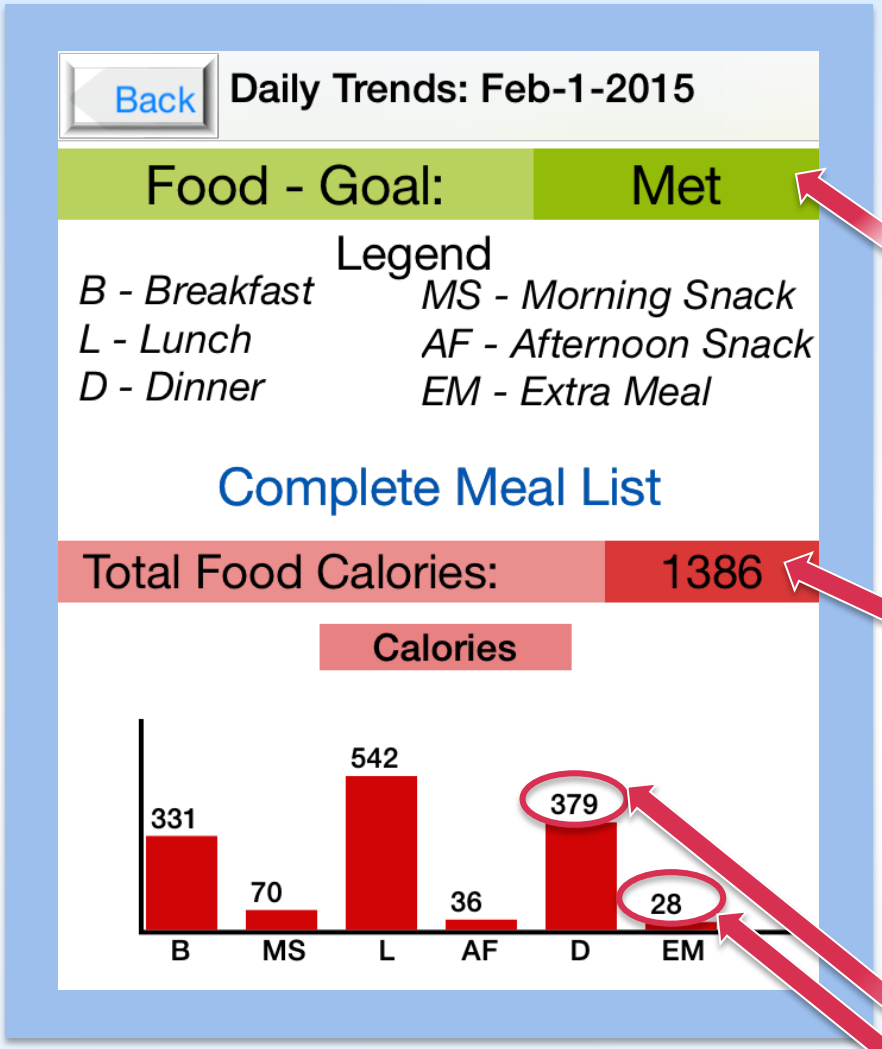
- Three settings of Food Goal
  - Not Met
  - Met
  - Exceeded

Food Goal: Not Met

- Food Goal is **not met**, when the amount of calories consumed in all daily meals fails by more than 2% below the Calories Goal set in Goals (6th entry in Console View)

Clarification

- Note that the goal refers to the total caloric consumption in all daily meals
  - Goals of some meals could be met or even exceeded

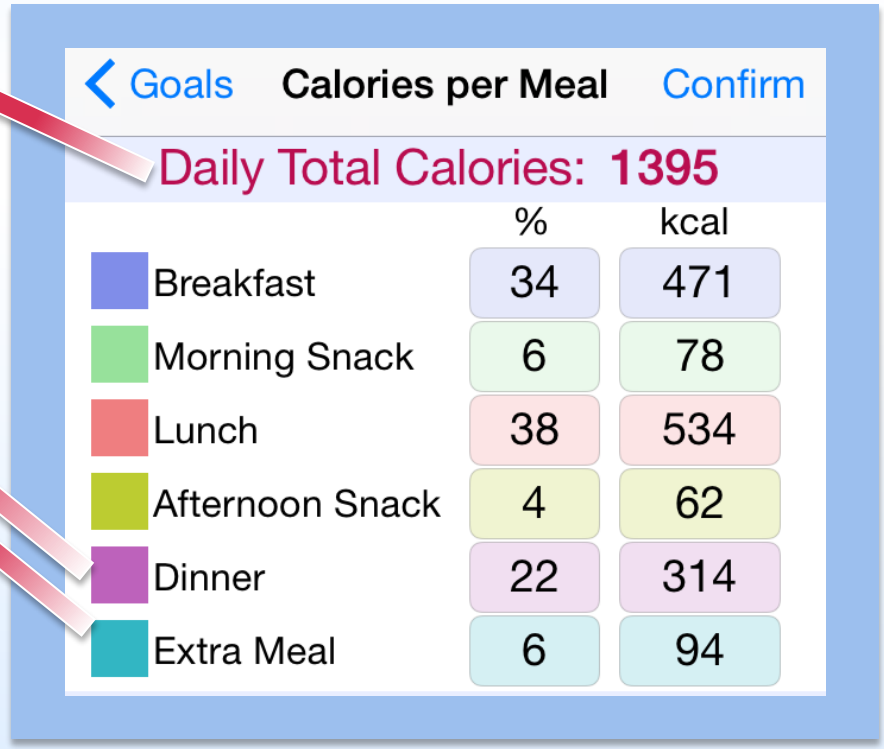


Daily Trends - Food Goal

Food Goal: Met

- Food Goal is **met** when cumulative calories of all meals are within 2% of Calories Goal set in Goals (6th entry in Console View)

Listing of Food Goals



	%	kcal
Breakfast	34	471
Morning Snack	6	78
Lunch	38	534
Afternoon Snack	4	62
Dinner	22	314
Extra Meal	6	94

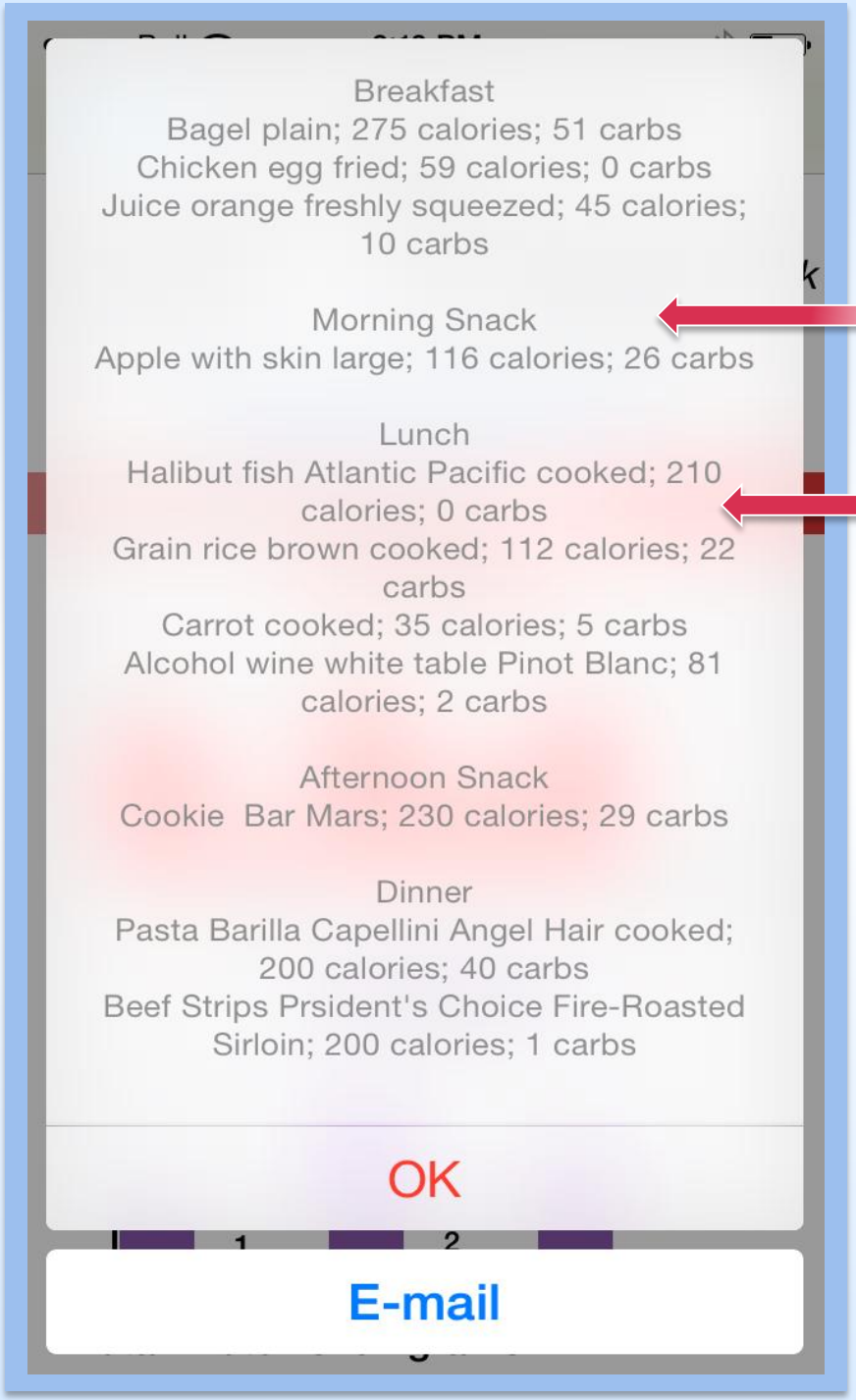
Note

- Daily Food Goal met within 2%
- Not all meal goals on target

Daily Trends - Food Goal

Food Goal: Exceeded

- Food Goal is **exceeded** when the amount of calories consumed in all daily meals surpasses by more than 2% the Calories Goal set in Goals (6th entry in Console View)



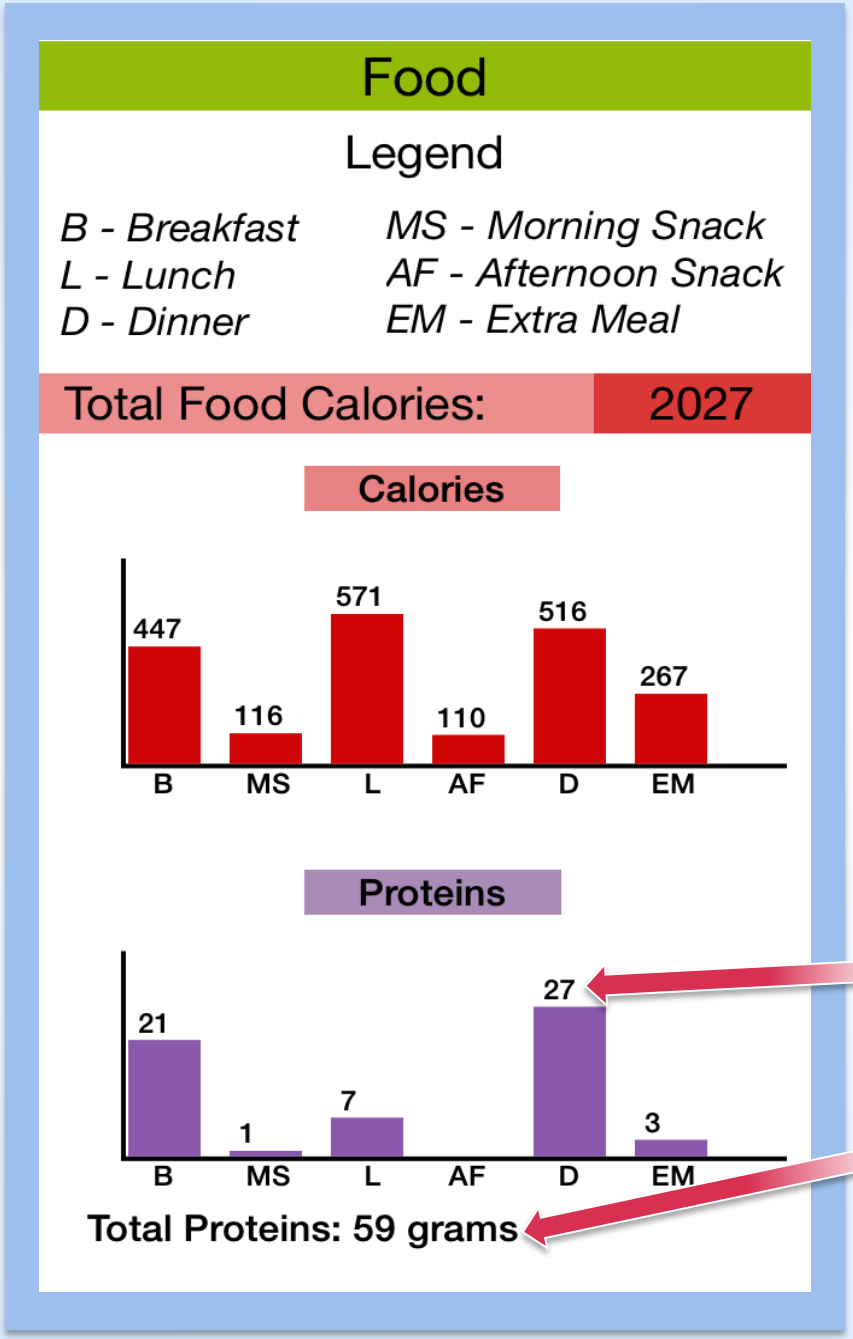
Daily Trends – Complete Meal List

Food Listing

- List of menus for all meals taken in the current day
- Specified are:
  - Names of food products
  - Calories of each food product
  - Carb content of each food product
    - Carbs reported either with or without fiber based on user's preferences (Settings, 7th entry in Console)

E-mail

- Option for sending by e-mail the complete meal of the day
  - E-mail recipients are specified in Settings (7th entry in Console)



Daily Trends: Food – Calories and Proteins

- Graphs illustrating total calories and proteins in all daily meals

Source of Data

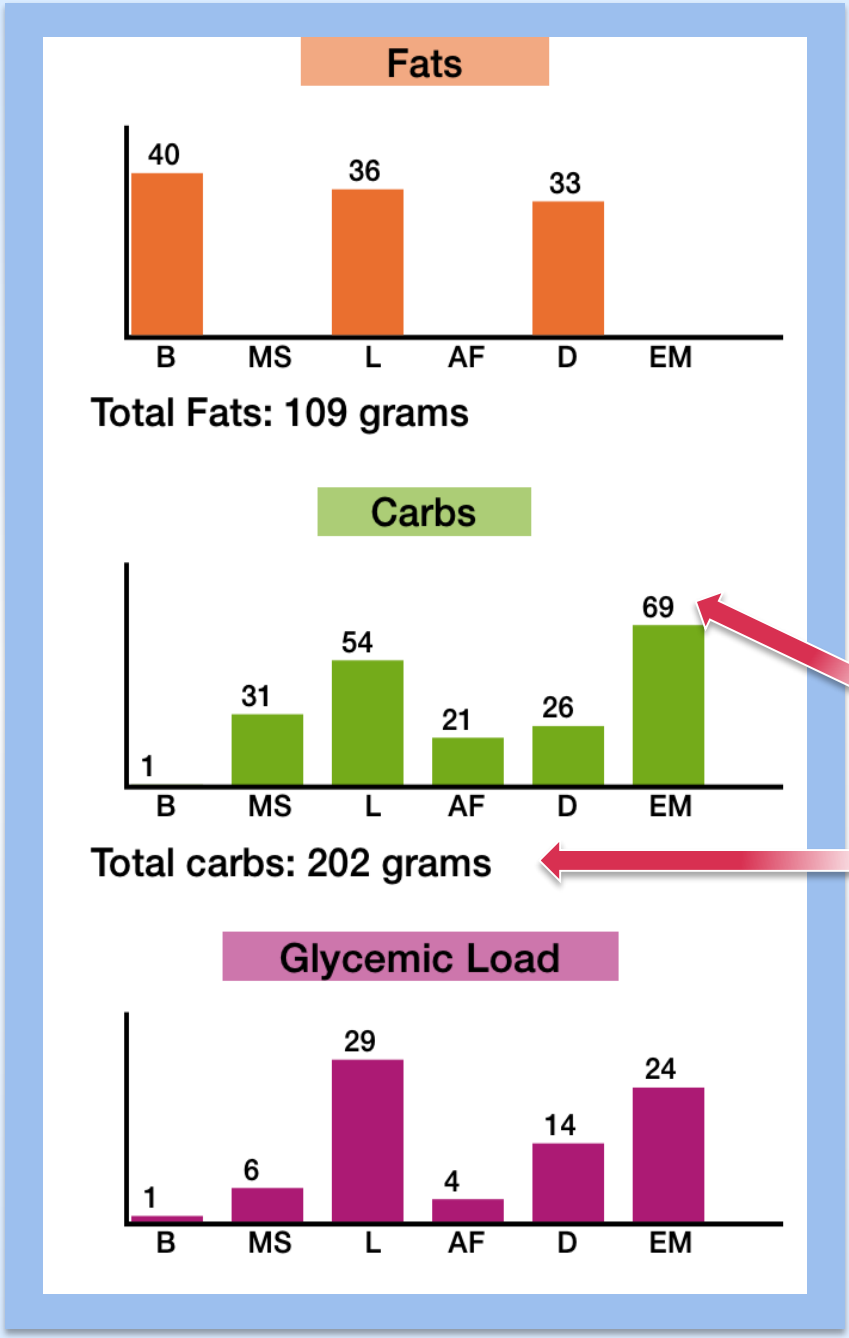
- Graph data extracted from nutrients for each meal

Meal Totals

- Calories and proteins consumed in each meal displayed above the corresponding meal bar

Daily Totals

- Calories and proteins consumed in each individual meal displayed above corresponding bars
- Total calories and proteins displayed below the graphs



Daily Trends: Food – Fats, Carbs and Glycemic Load

- Graphs of total contents of fats and carbs in all daily meals

Source of Data

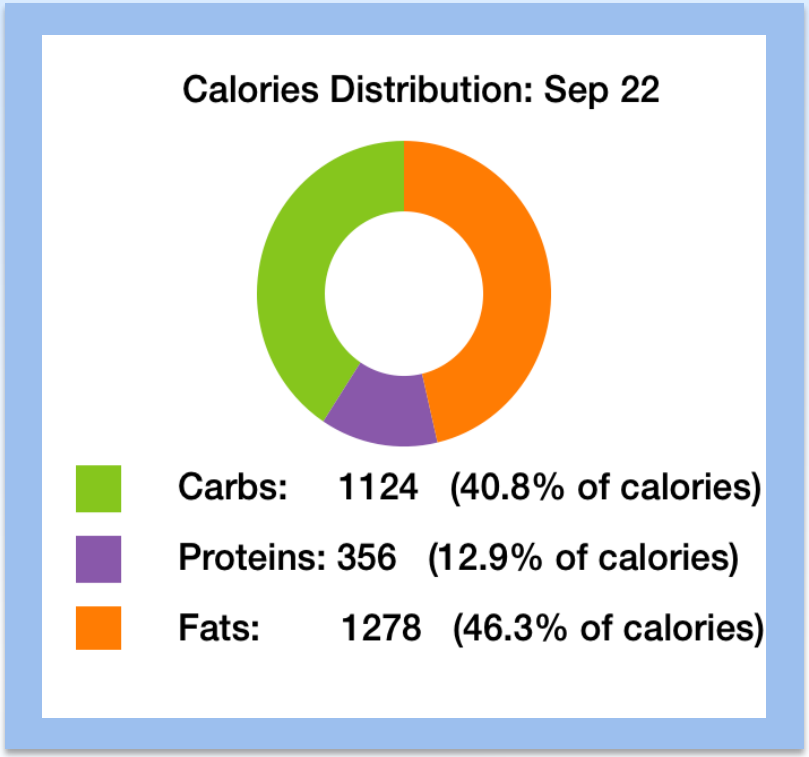
- Graph data extracted from nutrients for each meal

Daily Totals

- Fats, carbs and glycemic loads of each individual meal displayed above corresponding bars
- Total calories and proteins consumed daily displayed below the graphs

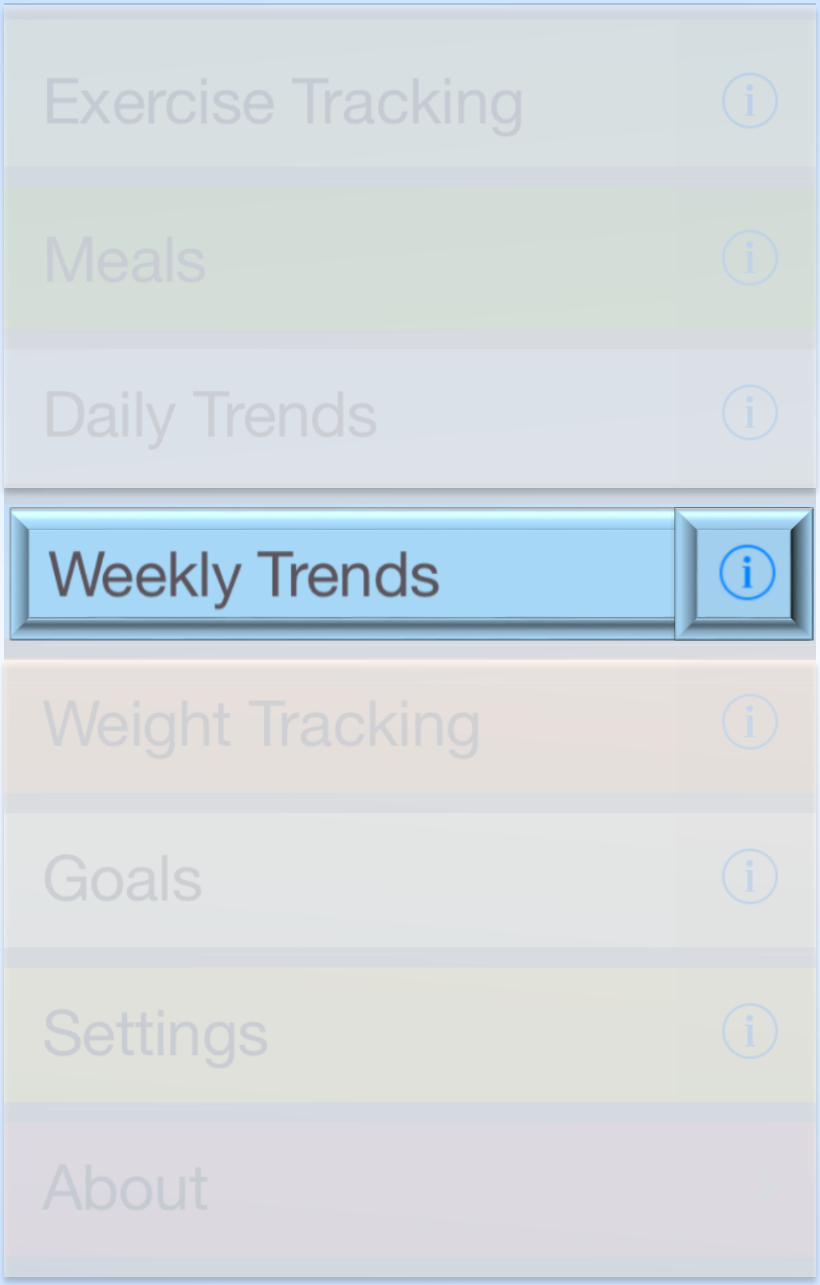
Carbs Counting

- Meal carbs reported with or without fiber depending of user's selected preference set in Settings (7th entry in Console View)



Daily Trends: Food – Calories Distribution

- Distribution of calories in daily meals among carbs, proteins and fats shown by doughnut graph



Weekly Trends

- Profile of weekly activities and meals

Current Weight

- Graph of weekly weight registry

Exercise and Food

- Graphical and numerical reporting on daily basis of:
  - Exercise activities
  - Nutrients information of consumed food

Weekly Trends: User's Guide

Back

Weekly Trends Guide

Weekly Trends entry summarizes food and exercise activities in the *last week*. The page keeps track of user's weight (*Current Weight*), *Food* and *Exercise*.

Current Weight requires the user to update the weight *once a week*. More frequent entries will be discarded. *Weekly Weight* progress is displayed on the long-term graph.

Daily Averages From Last Week summarize: *Daily Metabolism Calories* (may change during the year due to weight and age changes of the user), *Food Calories* consumed daily, *Exercise Calories* expended, *Step Count* and *Active Minutes*. The above date is provided from *Food* and *Pedometer* archives.

Food Record displays *complete menus* of each day of the week. Each consumed food item has a listing of its *calories* and *carbs* contents. Data displayed is taken from *Food* archives,which are updated after each new meal is registered by the user.

Sport & Food summarizes daily *Exercise* and *Food* calories, *Daily Calories Balance* and *nutrient* of combined meals of each day (*proteins*, *fats*, *carbs* and *Glycemic Loads)*. Presented are also daily averages of all the above values. Data displayed comes from *Food* and *Pedometer* archives.

Weekly Trends: Main Page

Daily Averages from Last Week

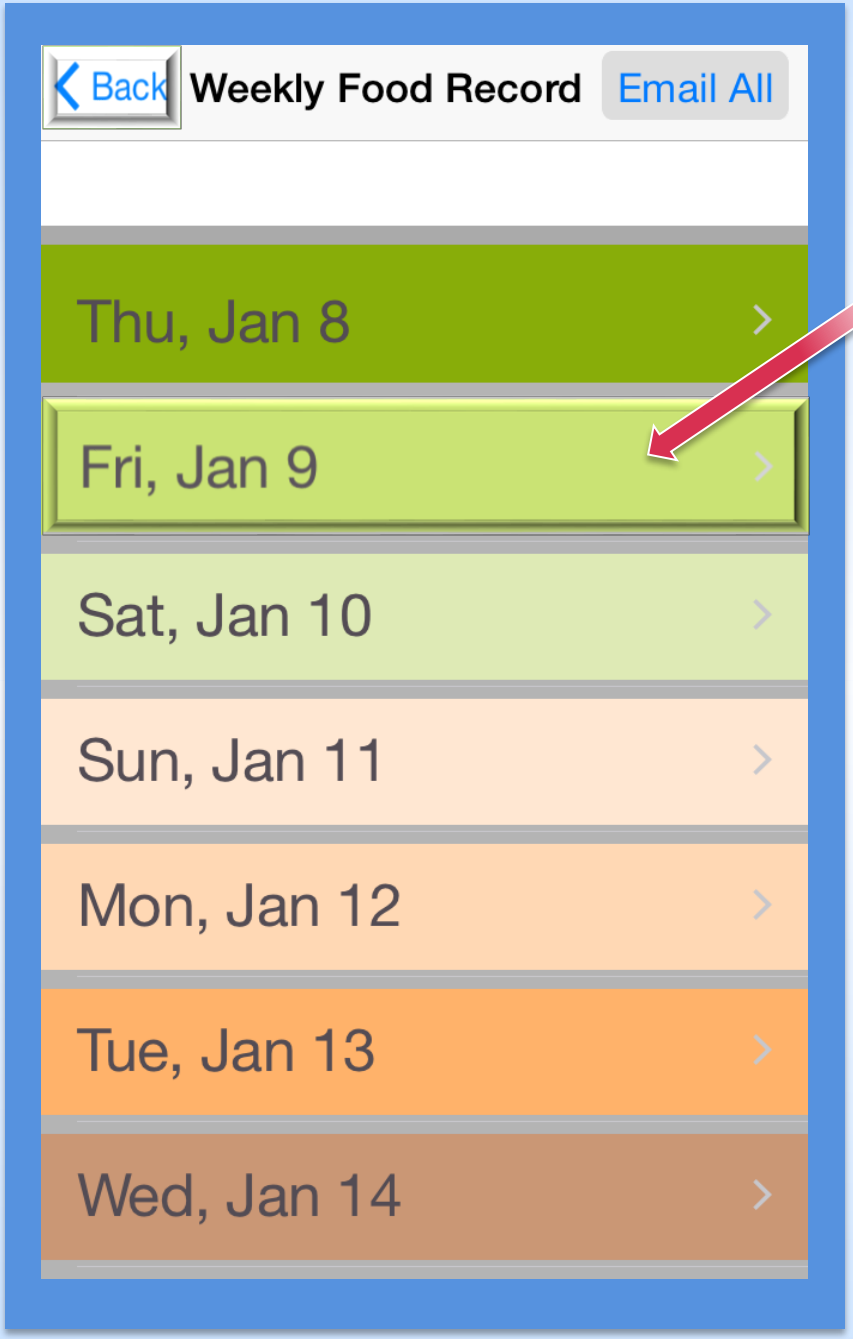
- Summary of major wellness factors from previous week: Metabolism Calories, Food Calories, Exercise Calories, Step Count and Active Minutes

Food Record

- Complete menus of all daily meals for the past seven days

Weekly Trends

- Graphs illustrating weekly profiles of: exercise calories, meal calories, caloric balance, proteins, fats carbs and glycemic loads



Weekly Trends: Food Record

- Listing of complete daily menus for all days of a passing week
- Each menu is accessible by selecting the day of interest from the presented list

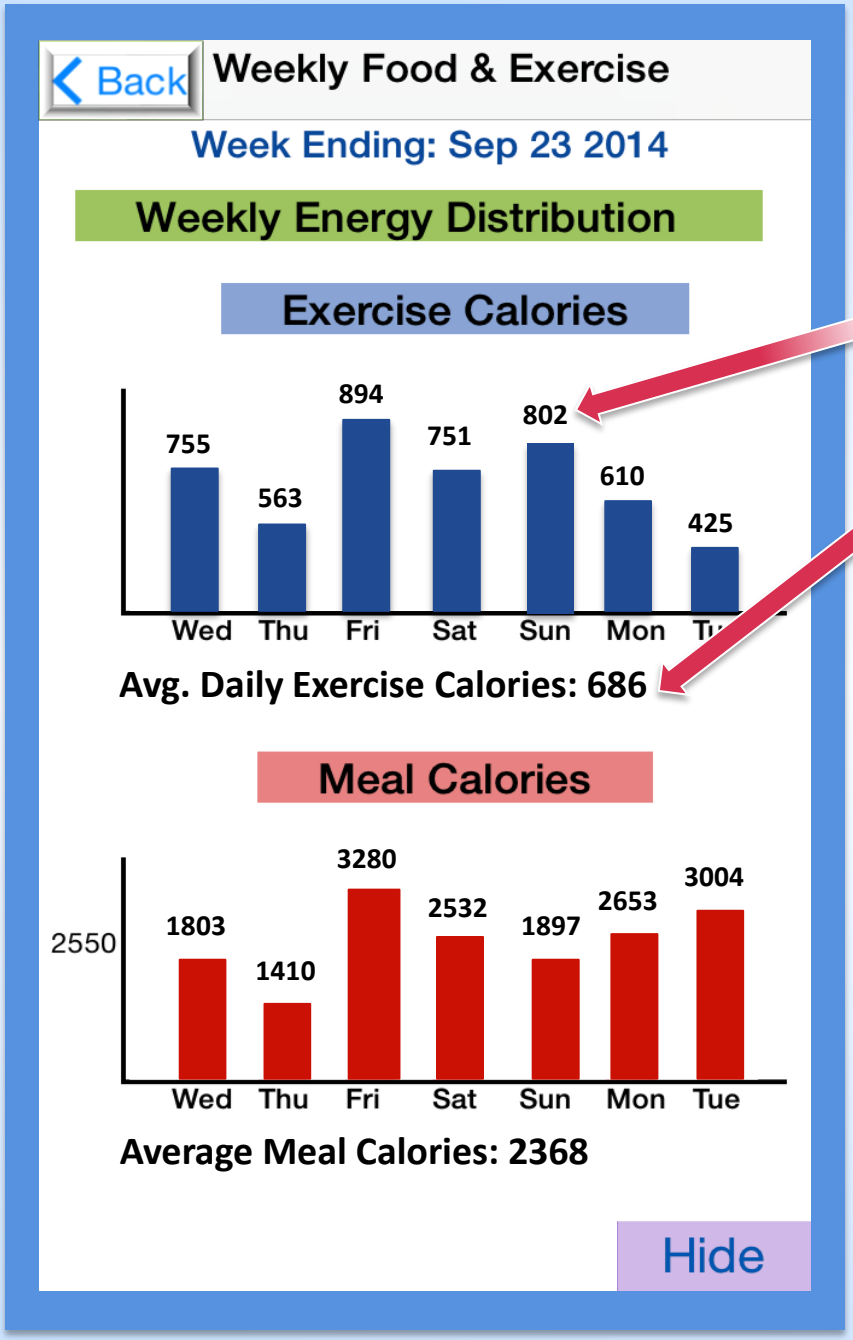
Weekly Trends: Food Menu

Viewing Daily Menu

- Complete menu of all daily meals consumed is displayed upon tapping the prompt with the date of the day of interest

Listing in Daily Menu

- Daily menu consists of:
  - Listing of food items per each meal
  - Calories and carbs contents of each food item



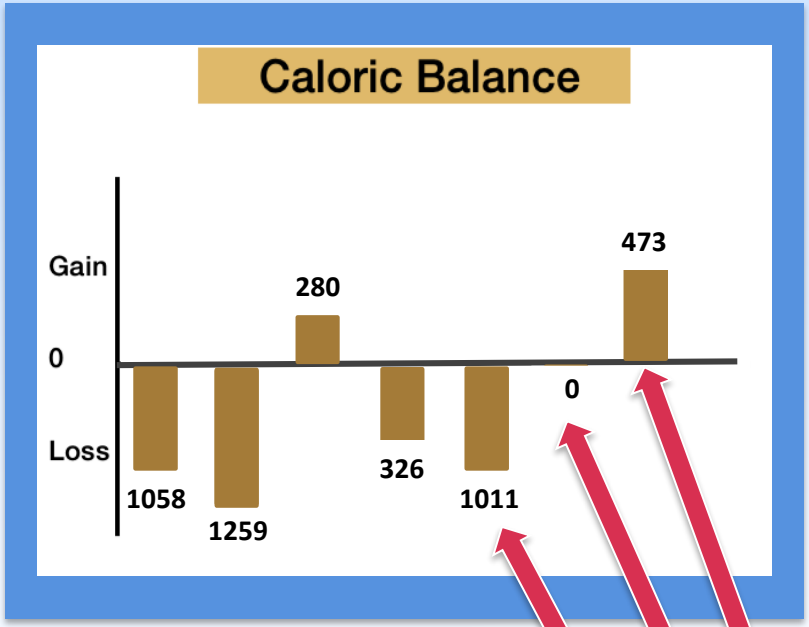
Weekly Trends: Exercise and Meal Calories Bar Graphs

Weekly Energy Distribution

- Graphs of daily Exercise Calories and Meal Calories over the last week
  - Daily average is displayed below each graph

Sources of Data

- Exercise calories provided by pedometer
- Meal calories automatically extracted from nutrients for each meal



Weekly Trends: Caloric Balance Bar Graphs

Caloric Balance Graph

- Daily energy balances for each week day
- Calculation of Caloric Balance:

Caloric Balance = Calories Consumes – Calories Expended

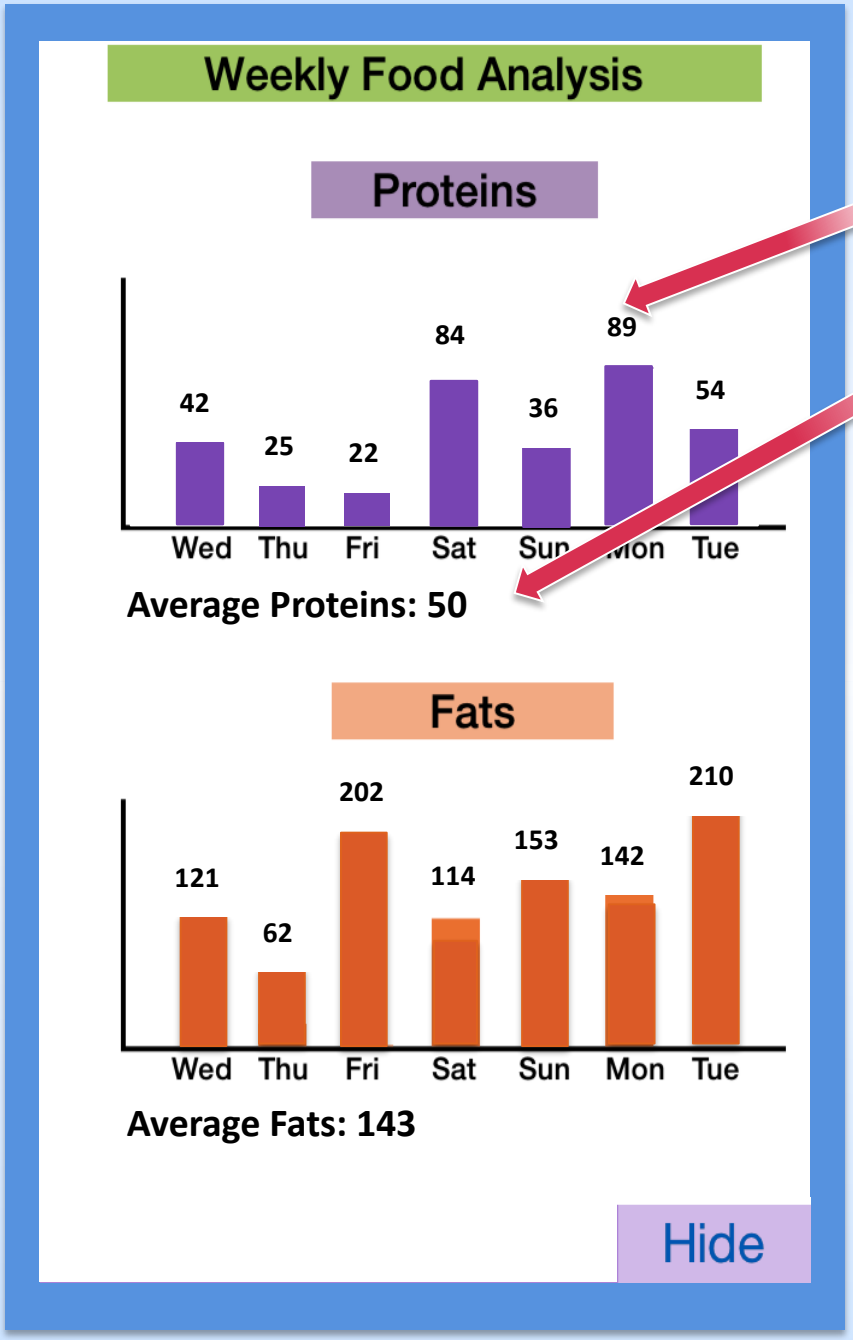
- Calories Consumed (food)
- Calories Expended (exercise and metabolism)

Sources of Data

- Exercise calories provided by pedometer
- Meal calories automatically extracted from nutrients for each meal

Interpreting Bar Graph

- Balance for the day:
  - <u>Positive</u>: weight gain
  - <u>Zero</u>: no weight changes
  - <u>Negative</u>: weight loss

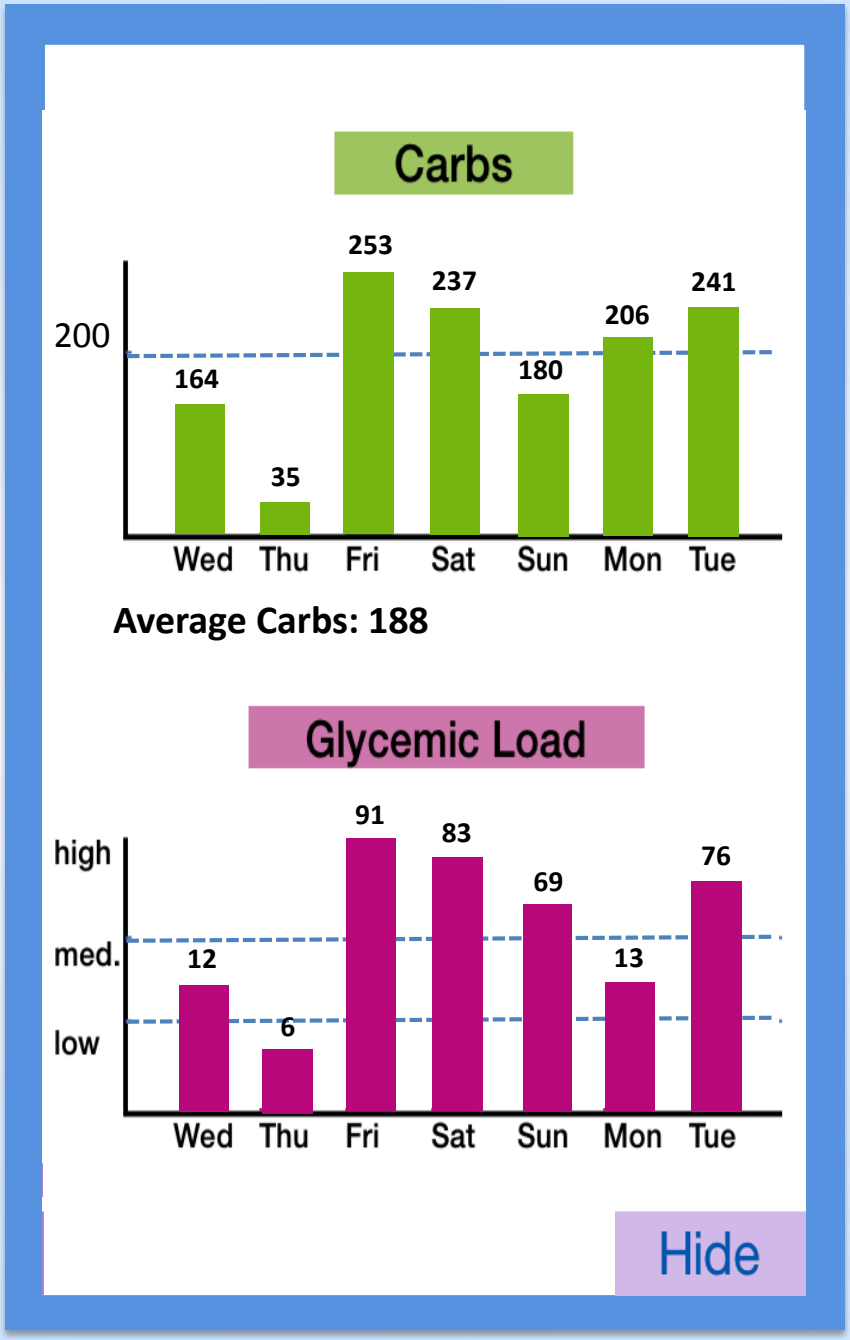


Weekly Trends: Proteins and Fats Bar Graphs

- Graphs showing proteins and fats consumed in the last week
  - Daily average is displayed below each graph

Source of Data

- Graphs created based on data taken automatically from the Meals entry (2nd option in the Console View)

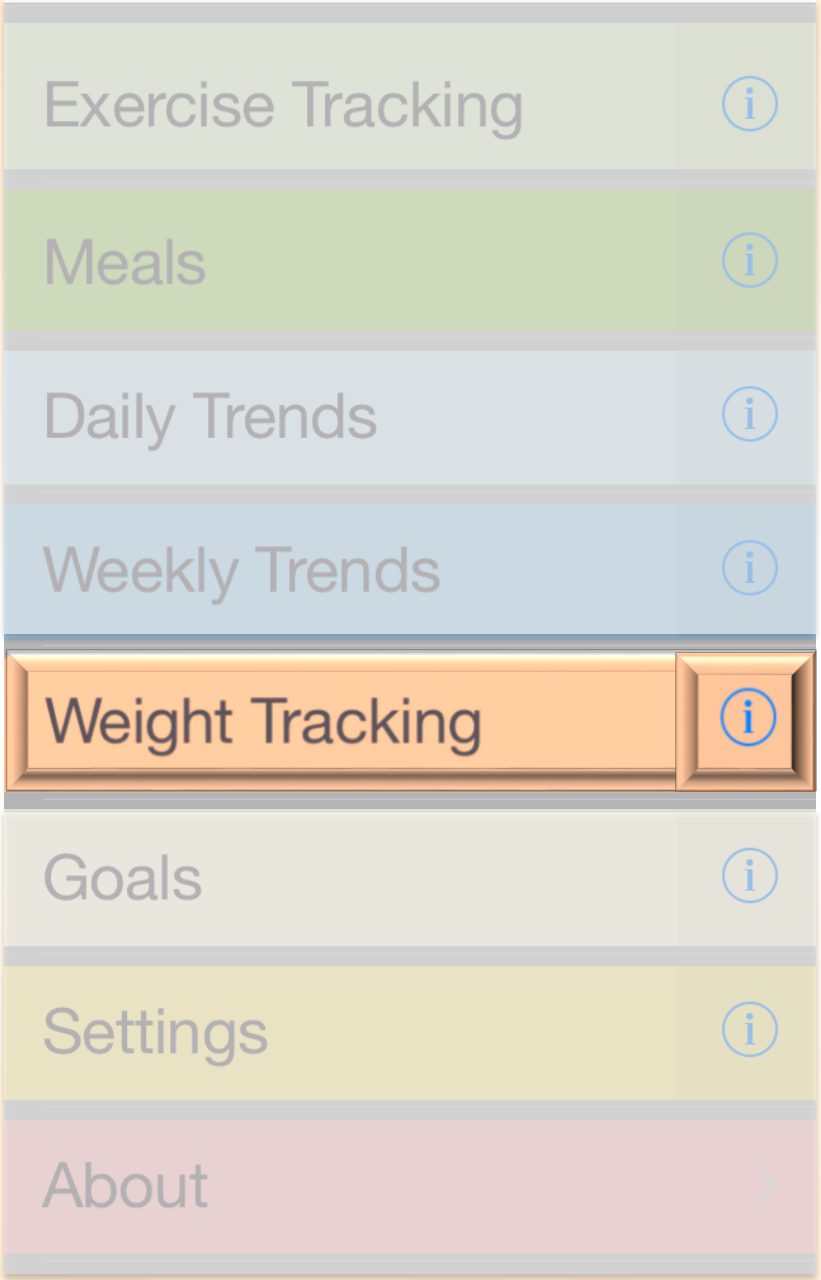


Weekly Trends: Carbs and Glycemic Load Bar Graphs

- Graphs displaying contents of carbs in consumed food and cumulative glycemic load of daily meals over the last week
- Daily average of carb intake presented below the graph

Carbs Counting

- Carbs reported either with or without fiber depending of user's choice set in Settings (7th entry in Console Vies)



Weekly Weight-Loss

- Entry for tracking weight-loss progress

Weight Management

- Graph registering progress in weight loss from beginning of weight-loss program until present
- Report of weekly weight change during the duration of weight-loss plan

Weight-Loss Plan

- Daily calories deficit established in Weight-loss goals (goals- 6th entry in Console View)

Exercise and Food Analysis

- Weekly Trends in exercise and food consumed

Weekly Weight-Loss: User's Guide

Back

Weekly Weight-Loss Guide

Weekly Weight Loss entry assists user in the weight-loss efford during the *duration* of the *Weight-loss Plan* set in Goals.

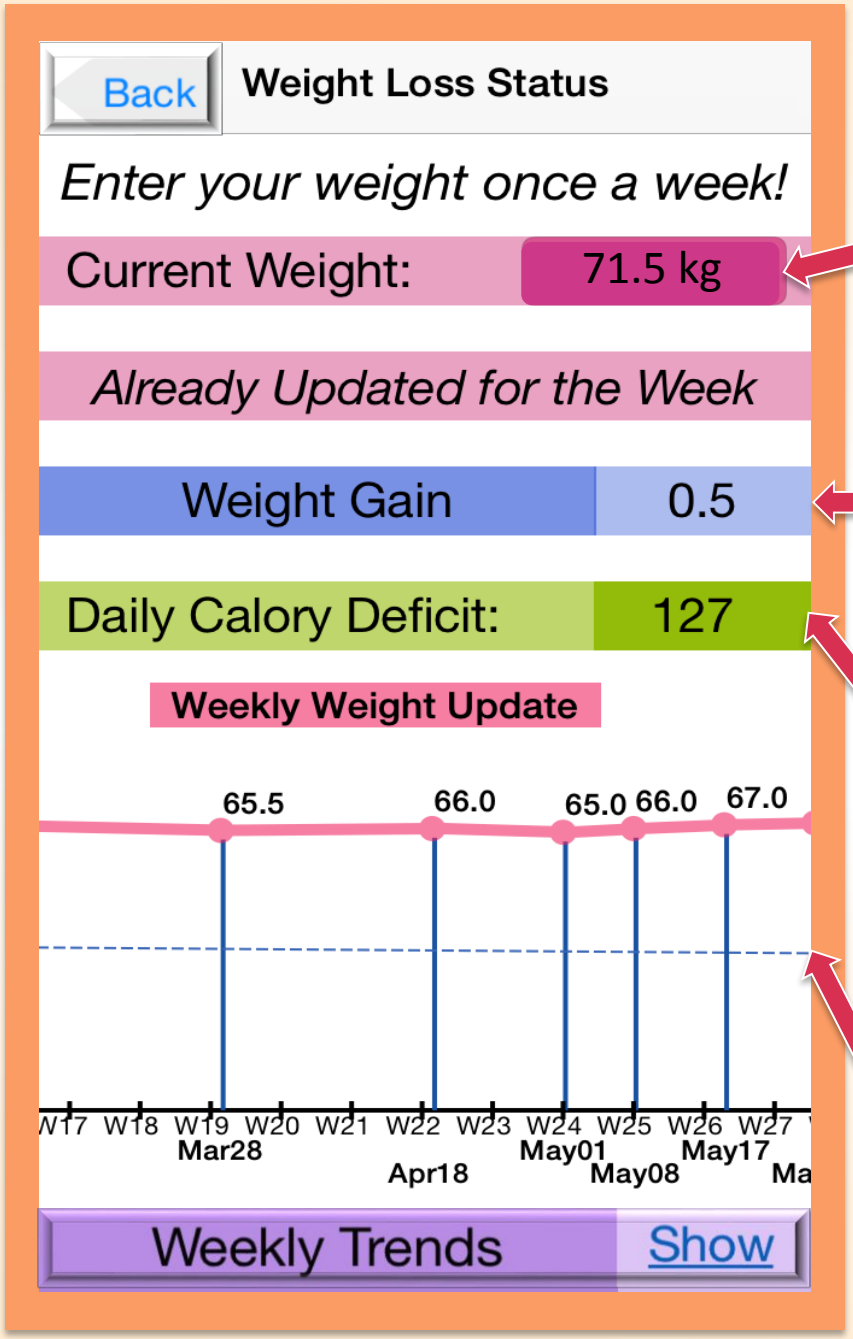
Current Weight must be updated *once a week* either in *this entry*, *Weekly Trends* page or *Settings*. More frequent entries will be *disregarded*. Weight is reported either in *metric* or *imperial* units depending on the user's choice in *Settings*.

Weight Status displays *weight loss/gain* for the passing week based on the previous and this week weight entries. The weight is reported either in *metric* or *imperial* units depending on user's choice in Settings.

Daily Calories Deficit is an estimate of the *caloric deficit* for each day of the current week of weight-loss. It is *automatically* determined in *Goals* based on the *duration of the weight loss plan*, *intended weight loss* and *daily sports activities*. Daily calories deficit *may change* on the weekly basis.

Weekly Weight Graph displays *weekly user's weight* in the *duration of the weight loss plan*.

Sport & Food Trends summaries for each day of the passing week: *exercise calories extortion*, *food calories*, *Daily Caloric Balance* and daily consumed nutrients (*proteins*, *fats*, *carbs* and *Glycemic Loads*. The *average* daily values of all of the above parameters are also displayed. *Food* and *exercise* data is obtained from *Food* and *Pedometer* archives.



Weekly Weight-Loss: Main View

Current Weight

- To be entered once a week

Weight Loss

- Based on weight change from last week
  - **Positive value**: weight gain
  - **Zero value**: weight unchanged
  - **Negative value**: weight loss

Daily Calories Deficit

- Established as Calories Deficit in Weight-Loss Goals (6th entry in Main Page)

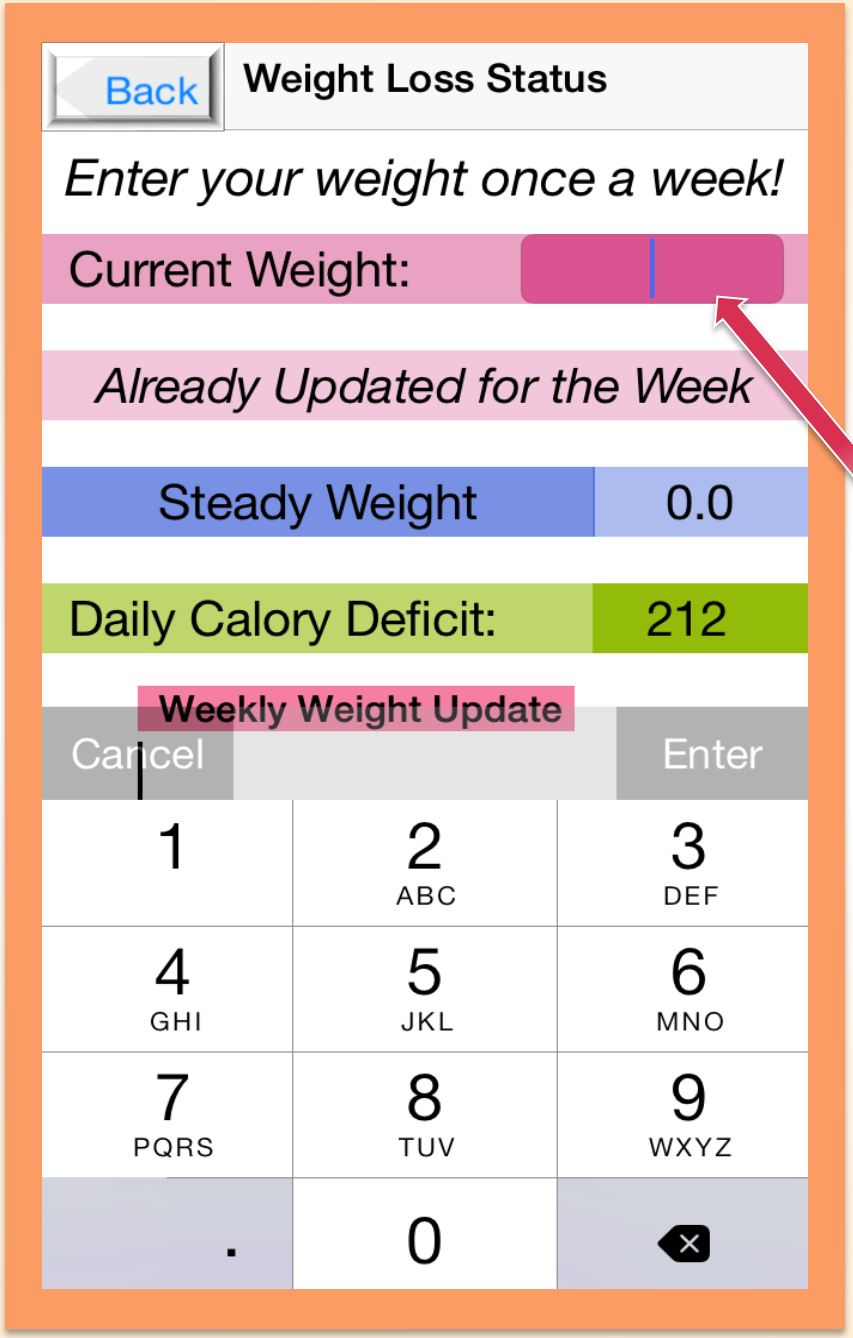
Daily Calories Deficit = Calories Expended (exercise/metabolism) - Calories Consumed

Weekly Weight Update

- Graphical display of progress in weekly weight loss

Weekly Trends

- Analysis of weekly exercises and food



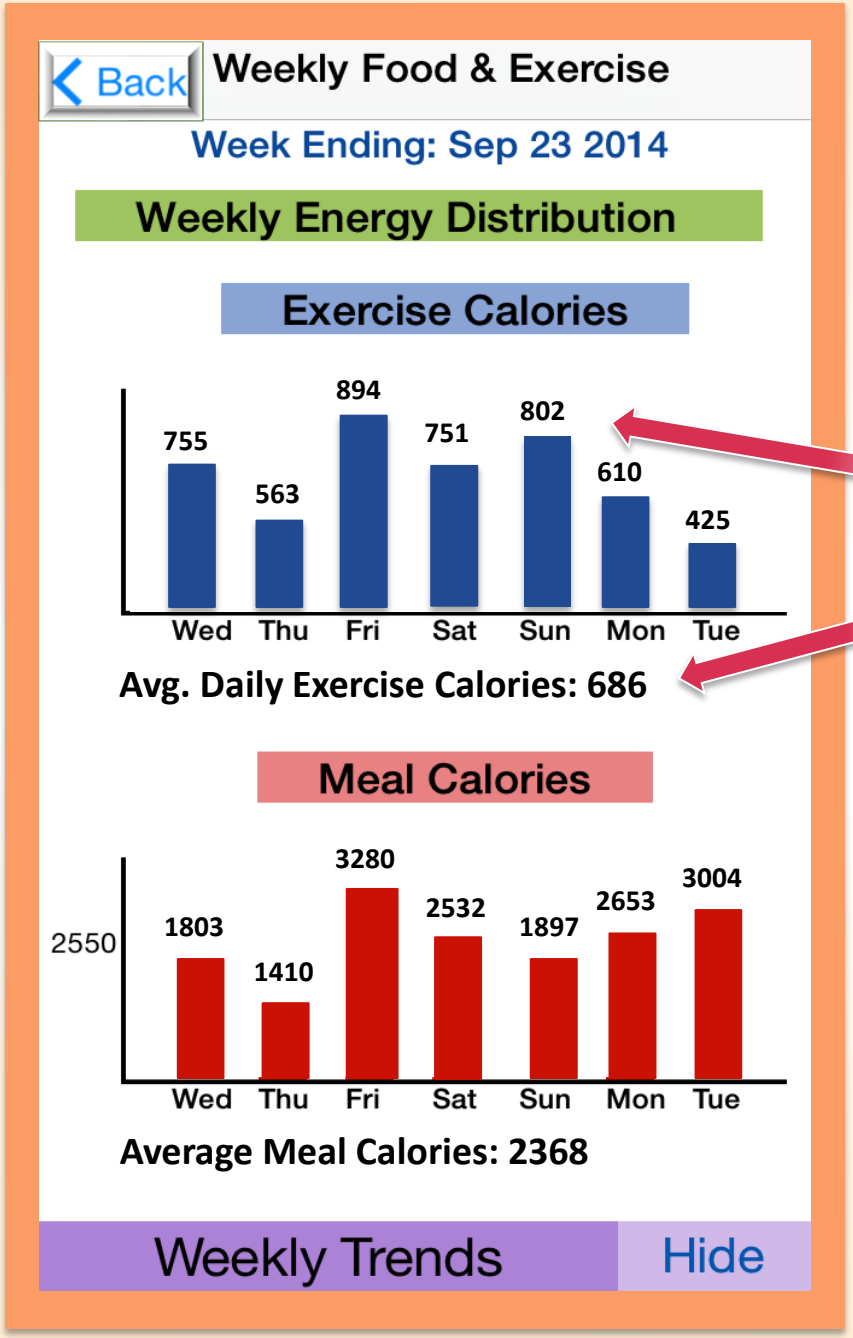
Weekly Weight-Loss: Weight Update

Current Weight

- To be entered once a week
  - More frequent weight update prompting message: *Already Updated for the Week*

Entering Weight

- Tapping on the dark pink field on the Current Weight belt prompts a keypad to appear on the screen
- Weight is entered using keypad which
- No confirmation of the entered weight is needed appears



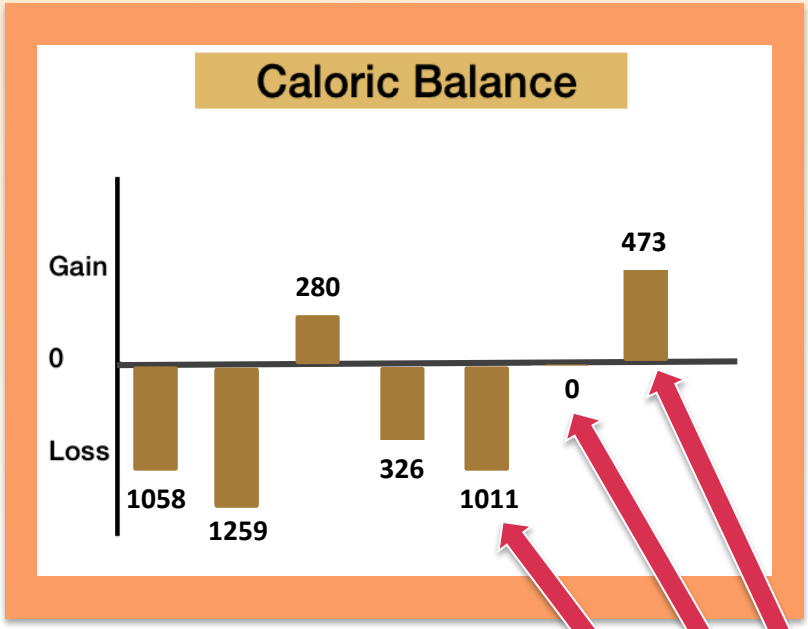
Weekly Weight-Loss: Exercise and Meal Calories Bar Graphs

Weekly Energy Distribution

- Bar graphs summarizing daily Exercise Calories and Meal Calories over the last week
  - Daily Exercise and Meal Calories are displayed above corresponding bars
  - Daily average gathered over the week is displayed below each graph

Sources of Data

- Exercise Calories provided by pedometer
- Meal Calories automatically extracted from nutrients of daily menus



Weekly Weight-Loss: Caloric Balance Bar Graphs

Caloric Balance Graph

- Daily Energy Balances of the previous week
- Calculation of Caloric Balance:

Caloric Balance = Calories Consumes – Calories Expended

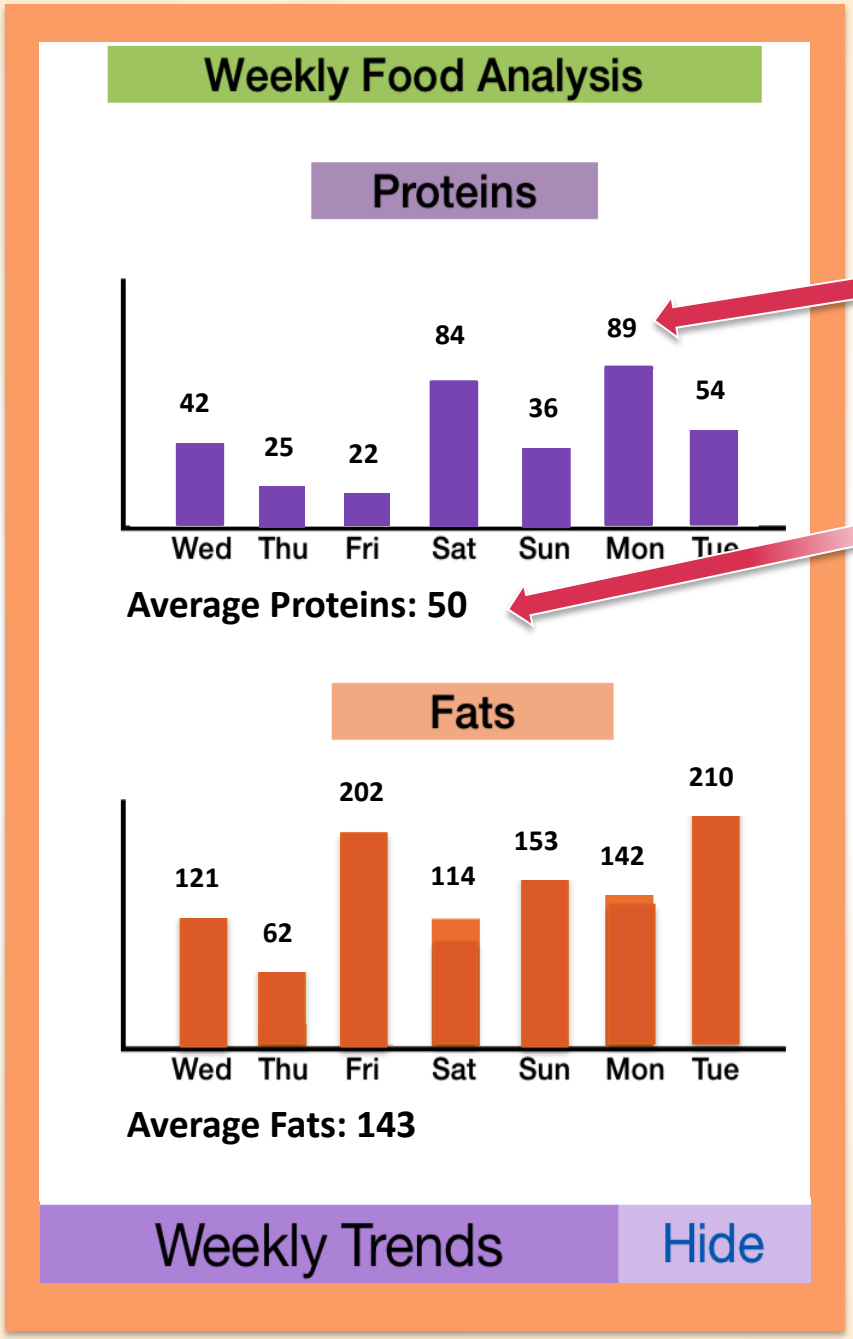
- Calories Consumed: food
- Calories Expended: exercise and metabolism

Interpreting Bar Graph

- Balance for the day:
  - Positive: weight gain
  - Zero: no weight changes
  - Negative: weight loss

Sources of Data

- Exercise calories provided by pedometer
- Meal calories automatically extracted from nutrients for each meal

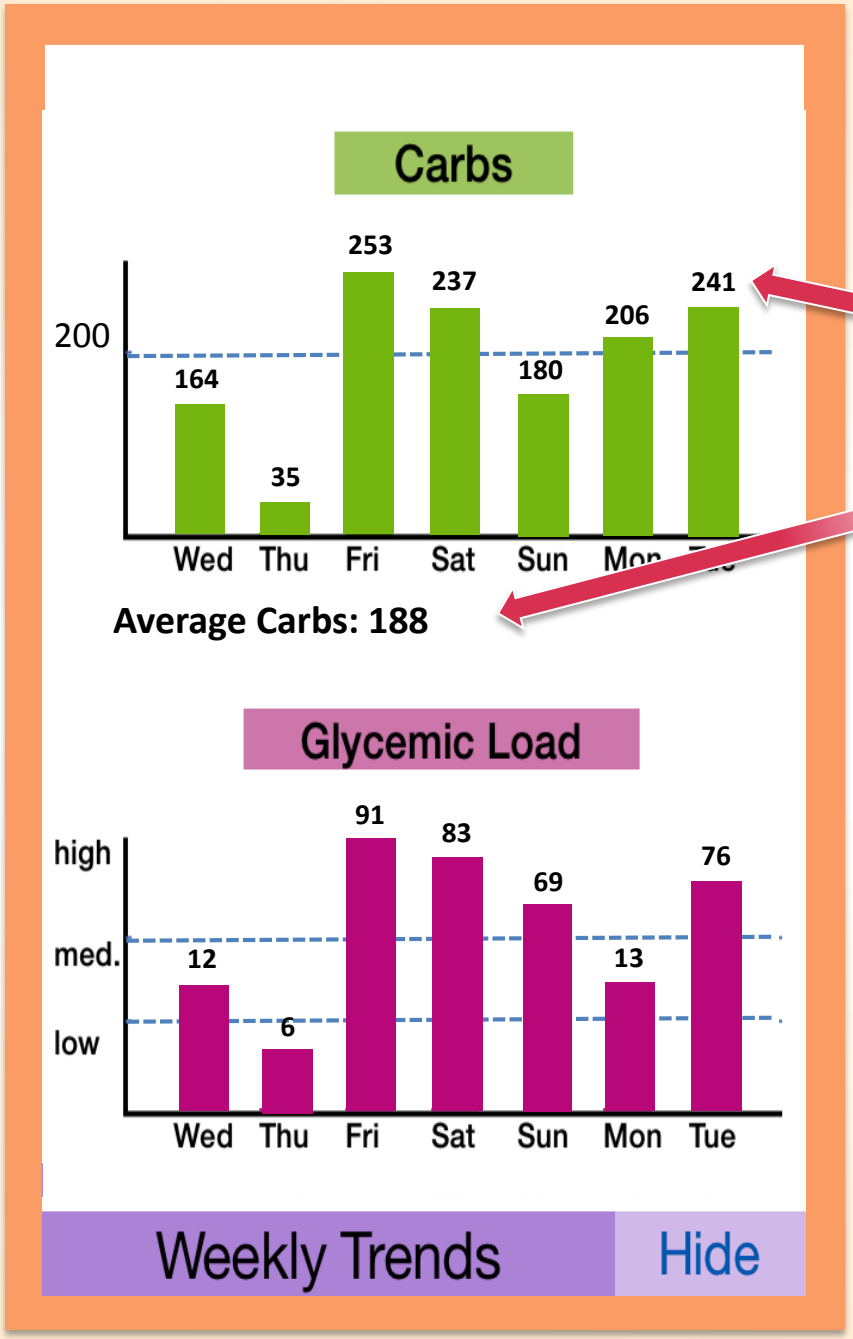


Weekly Weight-Loss : Proteins and Fats

- Graph displays of last week intake of proteins and fats
  - Total consumption in given day displayed above corresponding bars
  - Daily average is displayed below each graph
- Data to the graphs is taken automatically from the Meals entry (2nd entry in Console View)

Source of Data

- Meal calories automatically extracted from nutrients for each meal



Weekly Trends: Carbs and Glycemic Load

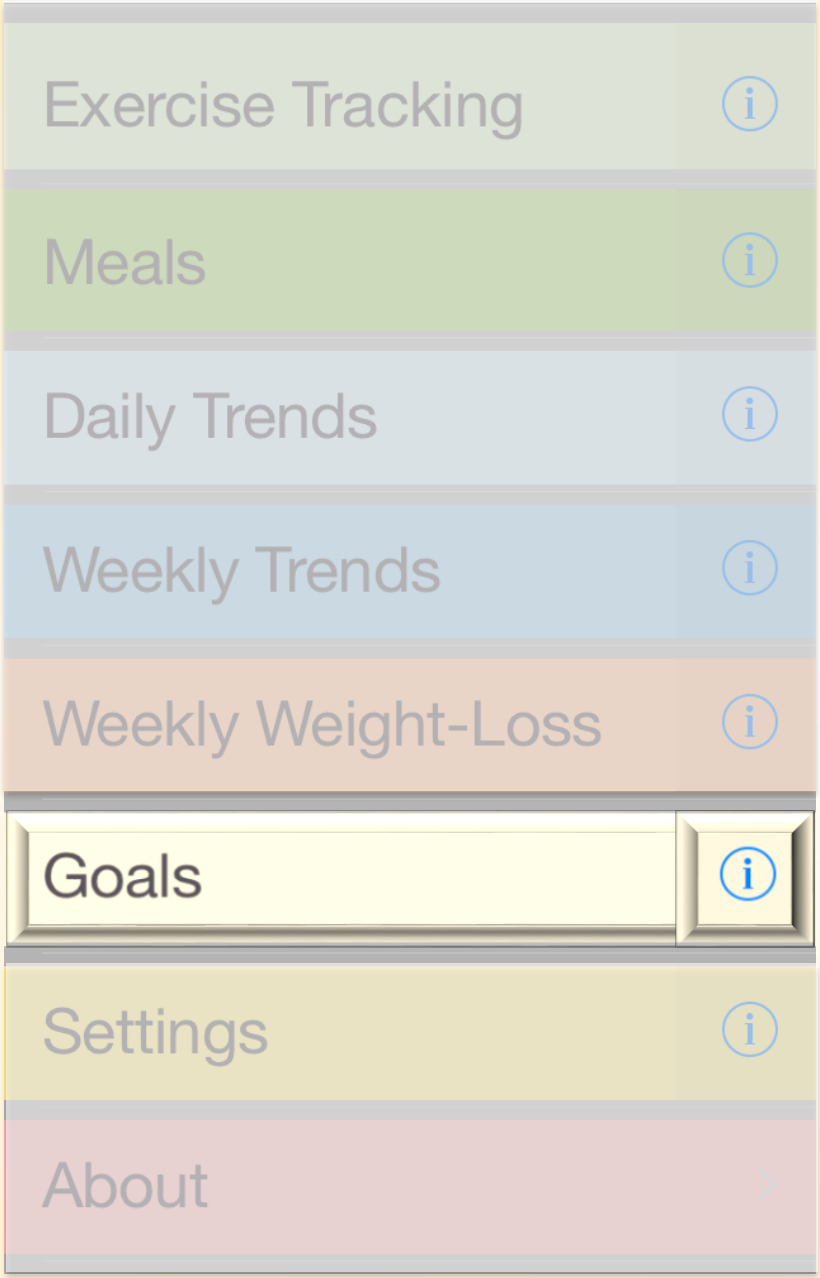
- Graph displays of last week intake of carbs in consumed food and cumulative glycemic load of daily meals
  - Total consumption in given day displayed above corresponding bars
  - Daily average of carbs intake presented below the graph
- Data to the graphs is taken automatically from the Meals entry (2nd entry in Controller View)

Carbs Counting

- Carbs reported either with or without fiber depending of user's choice
  - Set in Settings (7th entry in Console Vies)

Source of Data

- Meal calories automatically extracted from nutrients in daily menus



Goals

- Entry for setting long-term daily nutrition and exercise goals

Food Consumption Goals

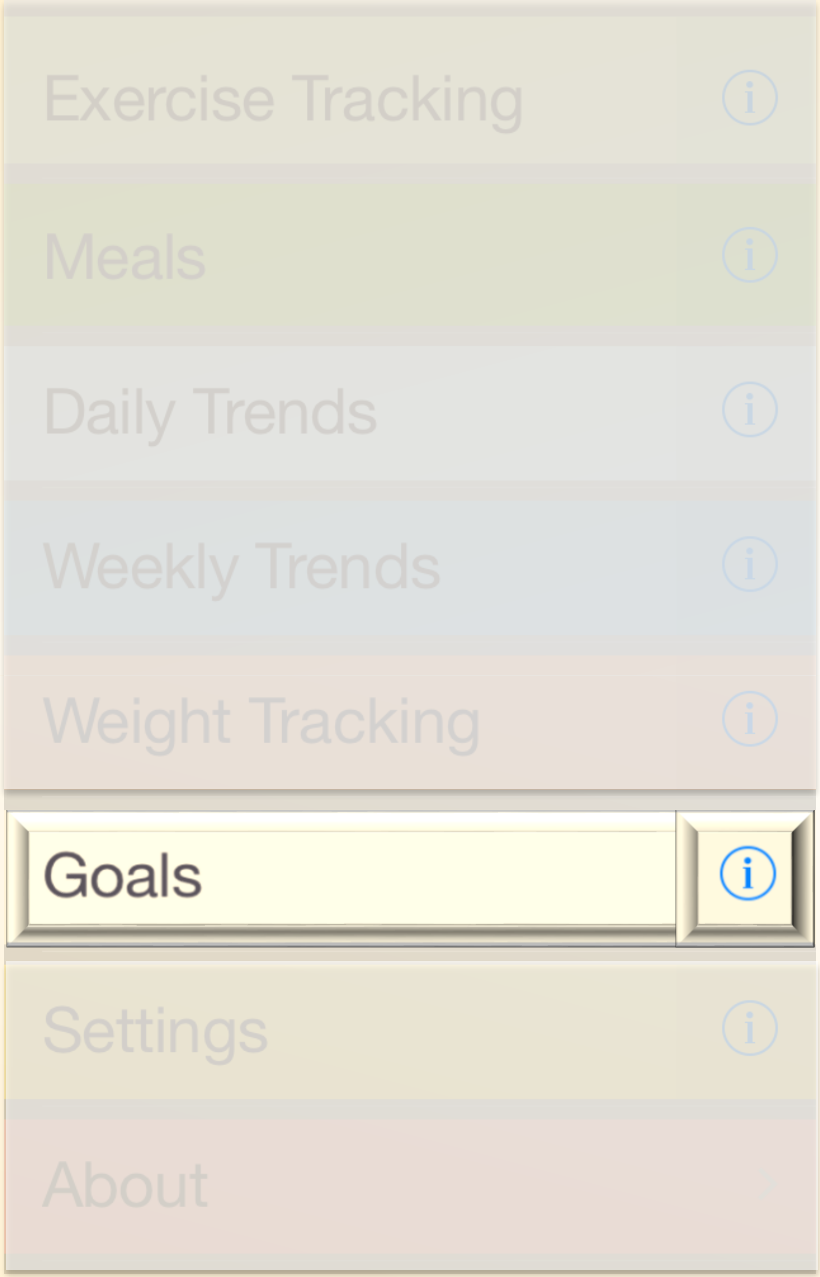
- Establishing daily calories and carbs intake goals for each meal of the day
- Listing of approximate meal times
  - Time used to issue reminders if data for meal scheduled around current time not entered

Exercise Goals

- Three types of exercise goals
  - Step count in ten speed ranges
  - Duration of exercise
  - Exercise Calories

Weight-Loss Goals

- Establishing a weight-loss plan crafted for desired weight loss



Goals

Note

- Goals should be set before first launch of the tool
- Goals should be updated periodically to reflect the wellness expectations of the user
- The tool will operate without setting the goals, however it will not show the progress of exercise and food consumption versus user intended plan

Goals: User's Guide

Back

Goals Guide

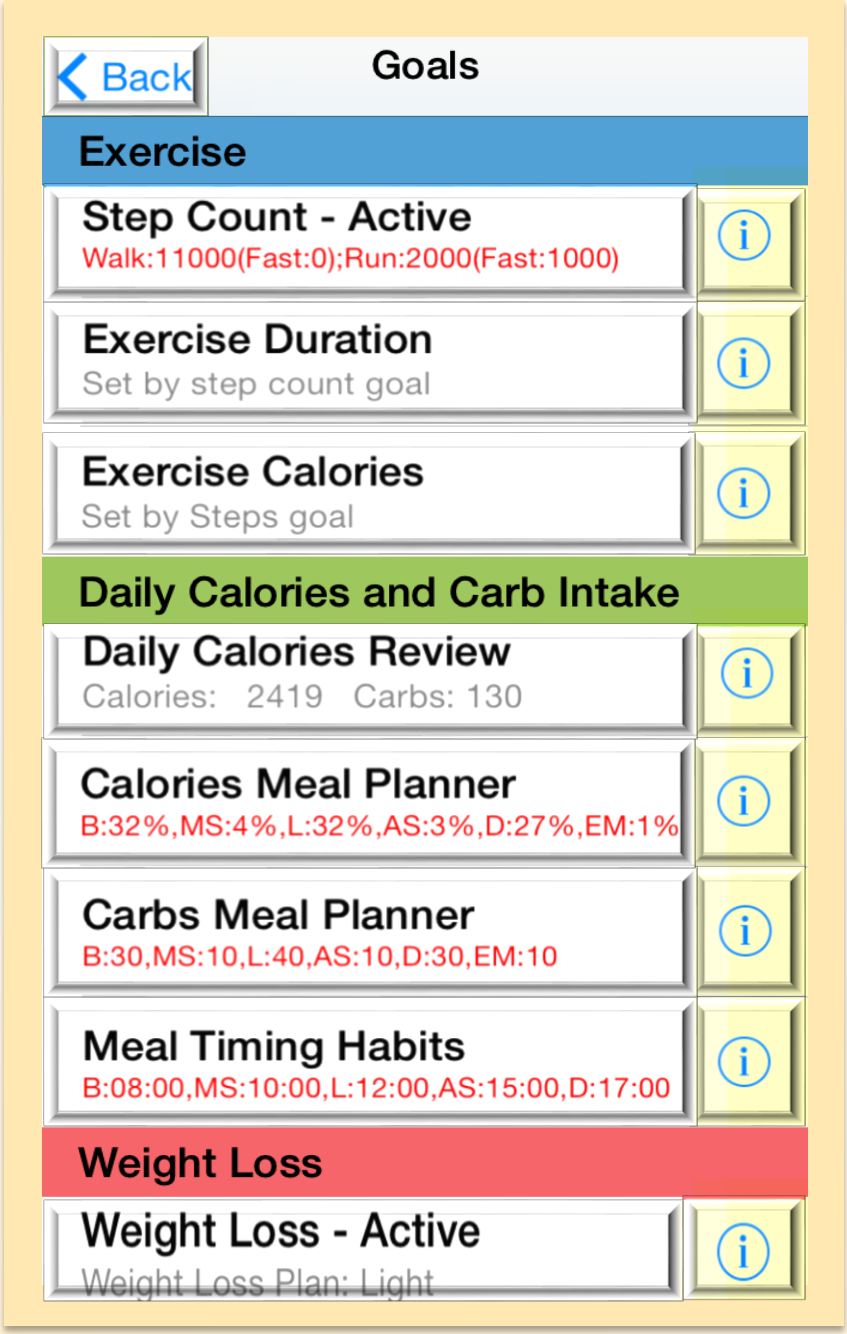
Goals deals with three aspects of wellness: *food consumption*, *exercises* and *weight-loss*.

It is important for the user to set the goals, as they contribute to better management of exercise, food and weight loss regimes.

The Exercise section is designated to *exercise goals*. The user sets and activates *only one* type of the *goals* (*steps*, *duration* or *calories*).

Daily Calories and Carbs Intake *requires* that the user set *all three* categories of goals (*Calories Meal Planner*, *Carbs Meal Planner* and *Meal Timing Habits*).

Daily Calories Review is the graphical review of the daily *calories* flow. Its intention is to help the user to select the *food calories goal* by reviewing all the contiributors to the *Daily Caloiric Balance Goal*. Note, that the *Daily Calories Balance Goal* aims at balancing the *exercise* and *user's metabolism calories* and eventual *calories deficit* coming from the *Weight-Loss Plan*.



Goals: Main View

Daily Calories and Carbs Intake

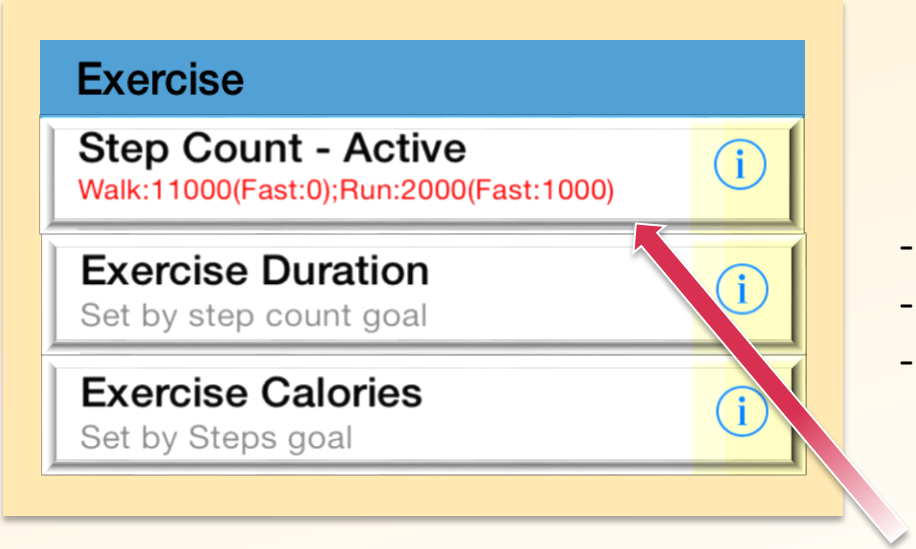
- Daily Calories Review
  - Calories balance comprising food, metabolism, exercise and weight-loss calories expenditure plan
- Calories Percentage and Daily Carbs Meal Planners
  - Calories and carbs contents of all daily meals: breakfast, morning snack, lunch, afternoon snack, dinner and extra meal
- Daily Meal Timing Habits
  - Planning of approximated meal time
    - Needed to issue warning when meal at given time is not entered by user

Exercise

- Daily exercise goals set by selecting one of the three options:
  - Step Count, Exercise Duration or Calories

Weight-Loss

- Plan optimized for desired weight loss



Goals: Exercise Goals Setting

Types of Exercise Goals

- Steps
- Duration
- Calories

Exclusiveness of Goal Selection

- The user can select only one way of goal setting at a time
  - In the Goal View, the summary of the **active goal** is highlighted in red

Goal Duration

- Once set, the exercise goal can stay active for days, or can be changed many times a day
- Tracking of the exercise goals is reset at midnight each day

Goals

Step Count - Active Guide

Step Count Goals allows the user to set the total step count for the day. This goal can be set by user for *walking* and *running* with different *speed ranges*. Speeds are specified in *metric* or *imperial* units depending on the user's preferences set in Settings.

The cummulative number of steps for *walking* and *running* is dispalyes after each new step update.

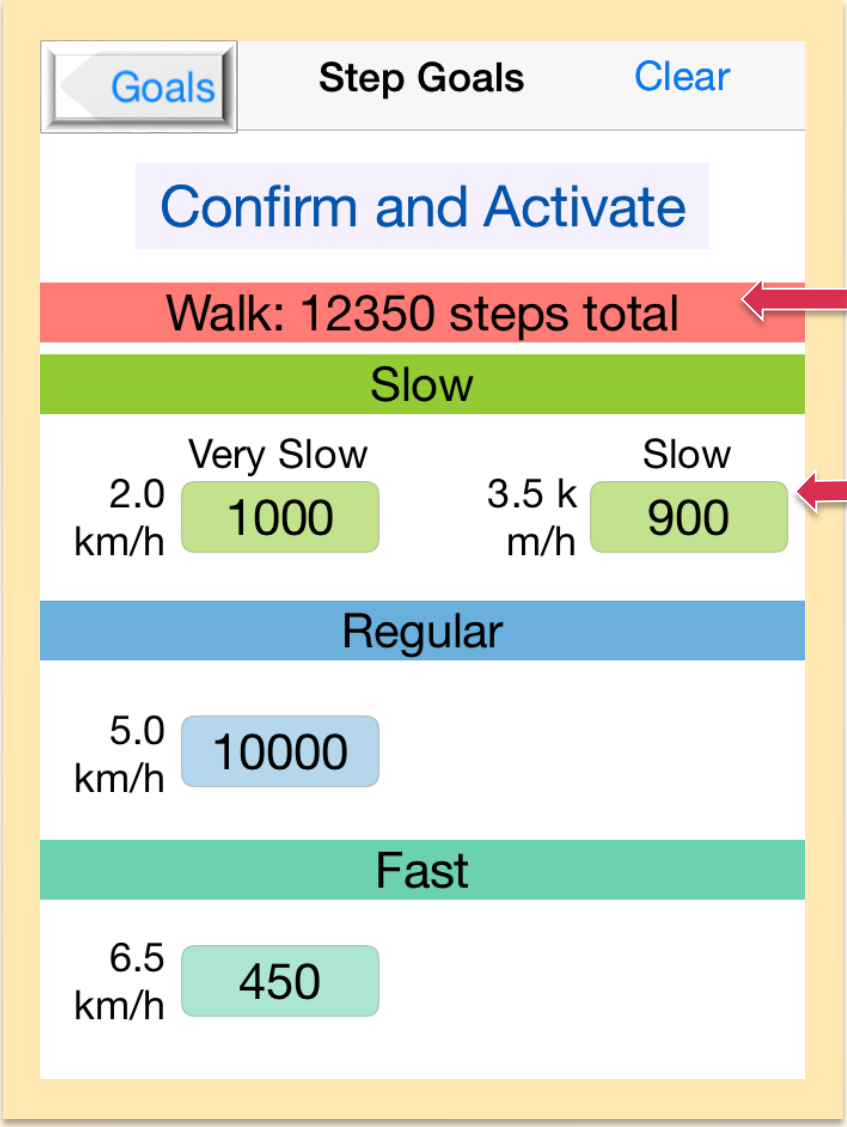
The verification of the *calories equivalence*, *duration* and *distance* is available for every *step count* of walking and running with a selected speeds. The *distance* is displayed in either *metric* or *imperial* units depending on user's preferences in Settings.

Step Count Goal is *confirmed and activated* by pressing *Confirm and Activate* button at the top of the page.

Note that only one of the three exercise goals (Steps, Duration or Calories) can be set active at a time.

Goals – Exercise (Step Count): Guide

- Short guide to setting exercise goal in terms of step count



Goals: Exercise – Step Goal Setting - Walk

Setting Steps Goal - Walk

- Total step count for walking goal appears at the brown belt above the step goal setting
- Step counts can be set for 10 speed ranges of walking and running
  - Multiple entries are possible

Confirmation

- When completed, the page should be confirmed by pressing Confirm and Activate Button

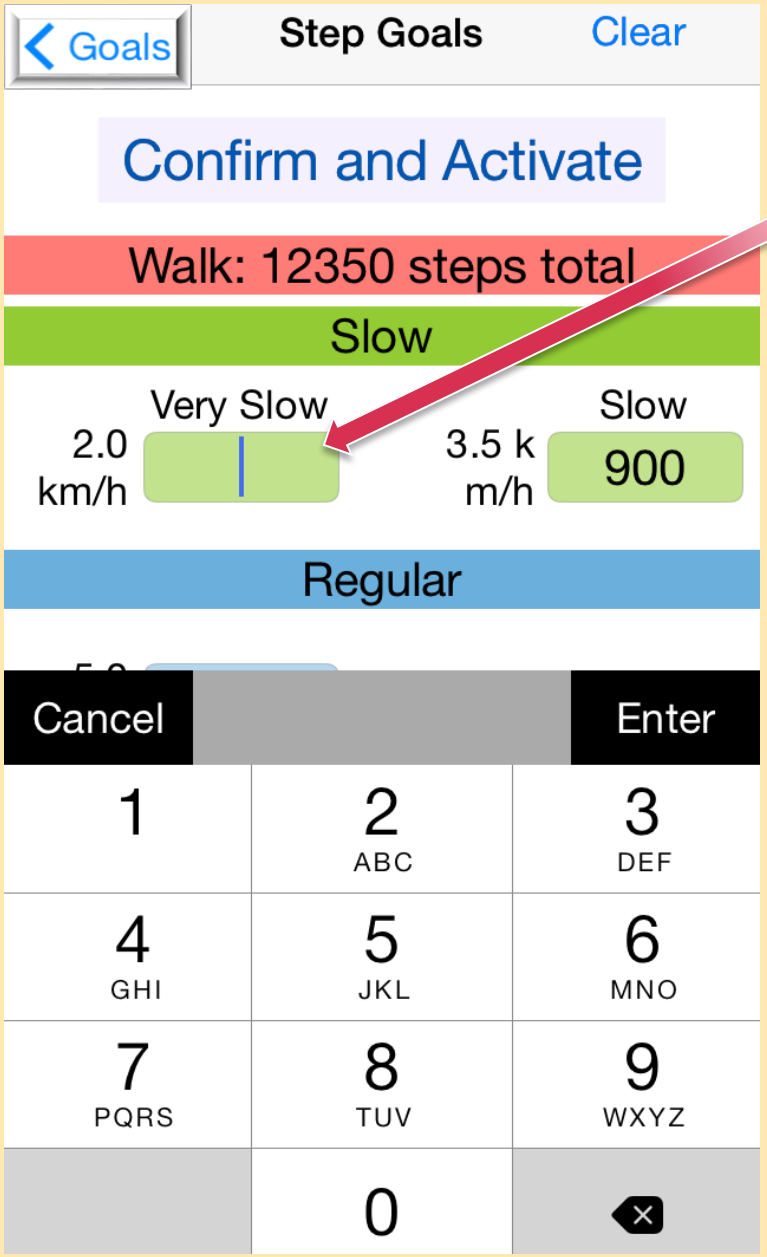
Goal Tracking

- Tracking of the goal starts at the moment of activation, and carries through the day
  - Each day at midnight the goal tracking is reset, however, the goals are sustained

Goals: Exercise – Step Goal Setting - Run

Setting Steps Goal - Run

- Total step count for running activity appears at the light brown belt above the step setting
- Multiple entries for step counts with different speeds are allowed



Goals: Exercise – Step Goal Setting - Entering Data

- Data for the goal is entered by tapping on the colored text field of the appropriate type of motion and speed
  - Data is entered using keypad, which appears on the screen

Verification

Calories & duration for step goals

Calories	Time[min]	Distance

Walk calories: 704

	Slow	and	Regular	and	Fast
km/h		km/h		km/h	
2.0	52	5.0	576	6.5	29
3.5	48				

Run calories: 797

8.0	106	11.0	98	14.0	105
9.5	279	12.5	51	16.0	159

Goals: Exercise – Step Goal Verification - Calories

- For the set step goal, user can check: caloric expenditure, duration and distance equivalences

Caloric Verification

- The amount of calories burned, duration and distance is displayed for:
  - Total walk and run activities
  - For each steps/speed selection

Goals: Exercise – Step Goal Verification - Time

- Duration of the goal exercise is displayed for:
  - Total walk and run activities
  - For each steps/speed selection

Verification

Calories & duration for step goals

Calories	Time[min]	Distance

Walk time: 2 hrs, 4 min.

Slow	and	Regular	and	Fast
km/h		km/h	km/h	
2.0	23	5.0	87	6.5	3
3.5	11			

Run time: 46 minutes

8.0	8	11.0	6	14.0	5
9.5	18	12.5	3	16.0	7

Verification

Calories & duration for step goals

Calories	Time[min]	Distance

Walk distance: 8534 meters

Slow		and Regular		and Fast	
km/h		km/h		km/h	
2.0	626	5.0	6980	6.5	348
3.5	580				

Run distance: 8549 meters

8.0	1095	11.0	1056	14.0	1145
9.5	2953	12.5	555	16.0	1745

Goals: Exercise – Step Goal Verification - Distance

- Approximate distance covered in the exercise is displayed for:
  - Total walk and run activities
  - Individually, for each steps/speed selection

Distance is a function of number of steps, speed of exercise and personal parameters such as high, weight, age and gender

Goals

Exercise Duration Guide

Exercise Duration Goals allows the users to specify the *total duration* of daily *walking* and *running* with selected speeds. Distances and speeds are specified in *metric* or *imperial* units depending on the user's preferences set in Settings.

The cummulative distance for *walking* and *running* is dispalyes after each new distance update.

The verification of the *calories equivalence*, *steps* and *distance* is available for every *distance settingt* of walking and running with a selected speeds.

Duration Goal is *confirmed and activated* by pressing *Confirm and Activate* button at the top of the page.

Note that only one of the three exercise goals (Steps, Duration or Calories) can be set active at a time.

Goals – Exercise (Duration): Guide

- Short guide to setting exercise goal in terms of active time

Goals: Exercise – Duration Goal Setting - Walk

Setting Duration Goal - Walk

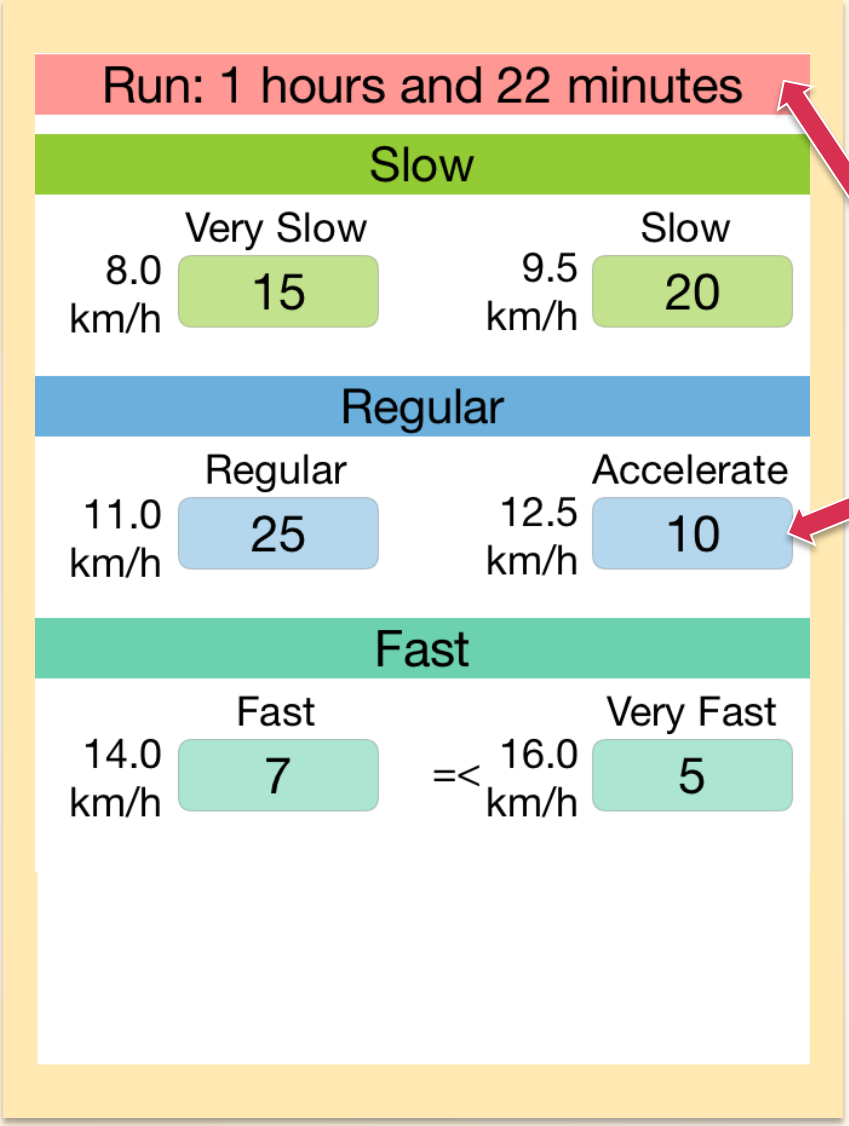
- Total duration of walking goal appears at the brown belt above the duration goal setting
- Duration goal can be set for 10 speed ranges of walking and running
  - Multiple entries are possible

Confirmation

- When completed, the choice is activated by pressing Confirm and Activate Button

Goal Tracking

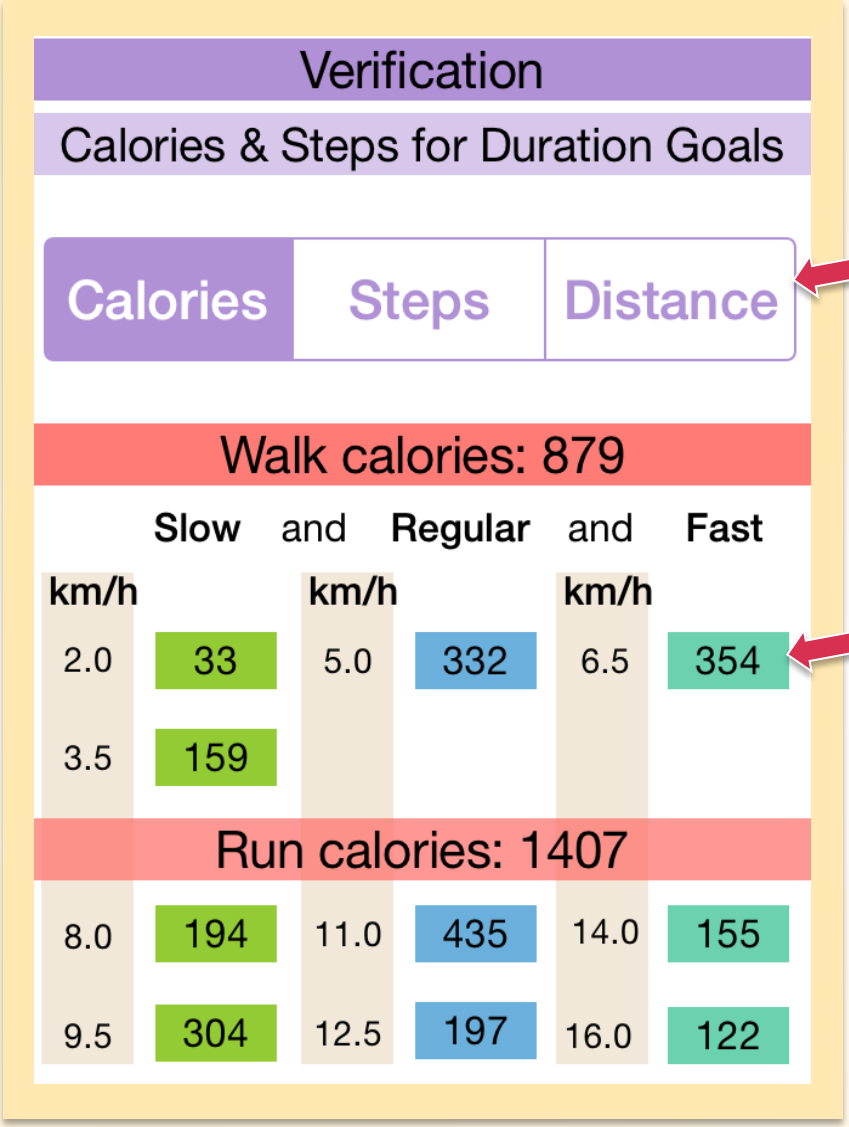
- Tracking of the goal starts at the moment of activation, and carries through the day
  - Each day at midnight the goal tracking is reset, however, the goals are sustained



Goals: Exercise – Duration Goal Setting - Run

Setting Steps Goal - Run

- Goal for total duration of running appears at the light brown belt above the duration goal setting
- Multiple entries are possible



Goals: Exercise – Duration Goal Verification: Calories

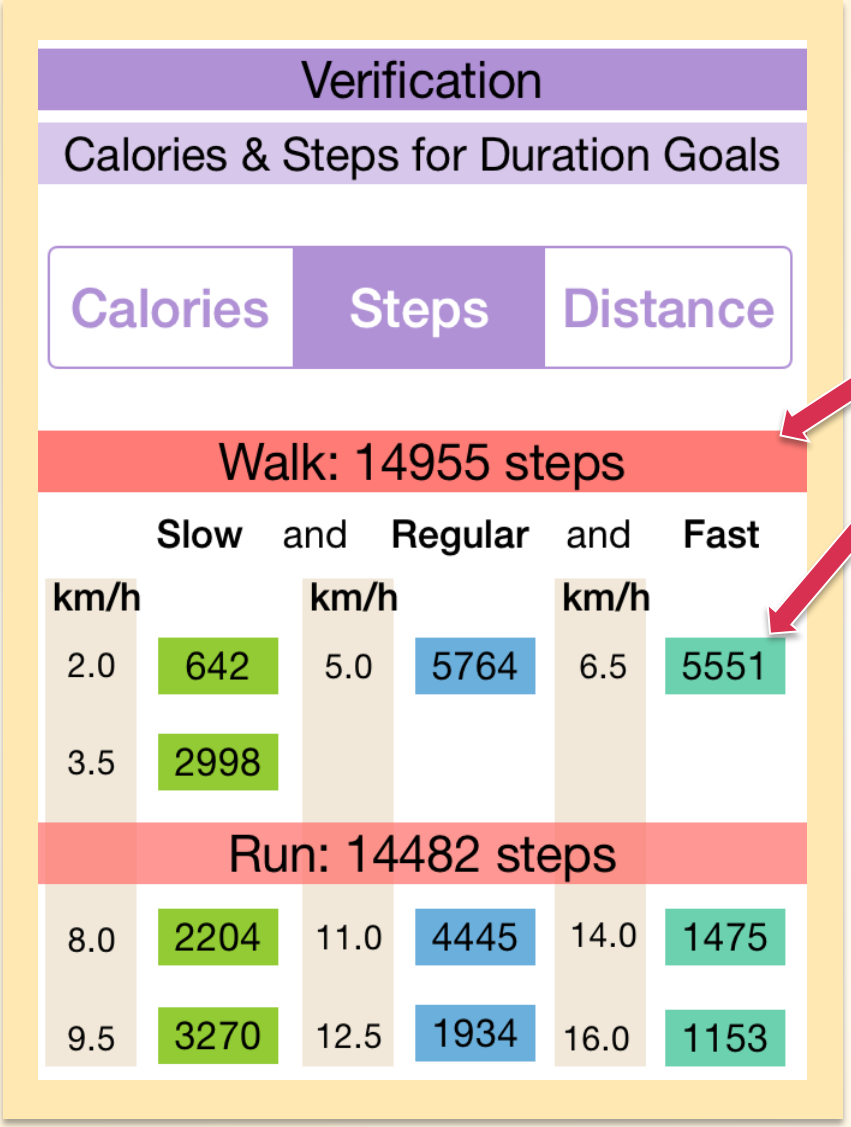
- For the selected duration goal, user can verify the caloric expenditure, steps and distance equivalence of the goal

Caloric Verification

- The amount of calories expended, duration and distance is displayed for:
  - Total walk and run activities
  - For each steps/speed selection

Goals: Exercise – Duration Goal Verification: Steps

- The duration of the goal exercise is displayed for:
  - Total walk and run activities
  - For each steps/speed selection



Goals: Exercise – Step Goal Verification: Calories

- Approximate distance covered in the exercise is displayed for:
  - Total walk and run activities
  - For each steps/speed selection

Verification

Calories & Steps for Duration Goals

Calories | Steps | Distance

Walk: 10648 meters

	Slow	and	Regular	and	Fast
km/h		km/h		km/h	
2.0	402	5.0	4023	6.5	4292
3.5	1931				

Run: 15101 meters

8.0	2012	11.0	4694	14.0	1690
9.5	3219	12.5	2146	16.0	1341

Goals

Exercise Calories Guide

Exercise Calories Goal allows the user to set the daily exercise goal in terms of the *total calories* to be expended.

The verification of the *steps* and *duration* is available for the Calories Goal.

Calories Goal is *confirmed and activated* by pressing *Confirm and Activate* button at the top of the page.

Note that only one of the three exercise goals (Steps, Duration or Calories) can be set active at a time.

Goals – Exercise (Calories): Guide

- Short guide to setting exercise goal in terms of calories to exerted

Goals: Exercise – Calories Goal Setting
Goal Verification: Calories

Setting Calories Goal

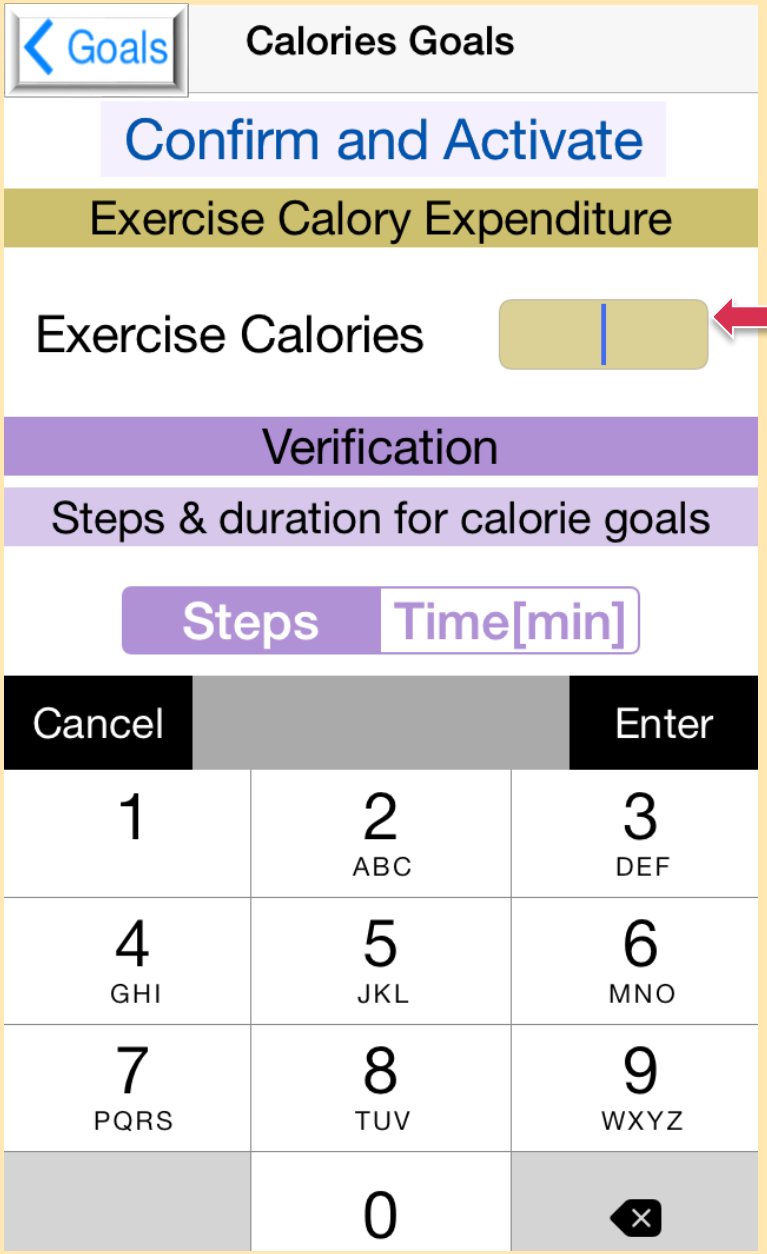
- User selects the amount of calories to be expended during daily activities
- To better plan the activities, user is presented with summary of steps needed to spend the planned calories by walking or running with various speeds

Calories Goal Verification - Steps

- Examples of steps (walking and running in 10 speed intervals)
  - Energy expenditure of proposed step exercises is equal to caloric goal

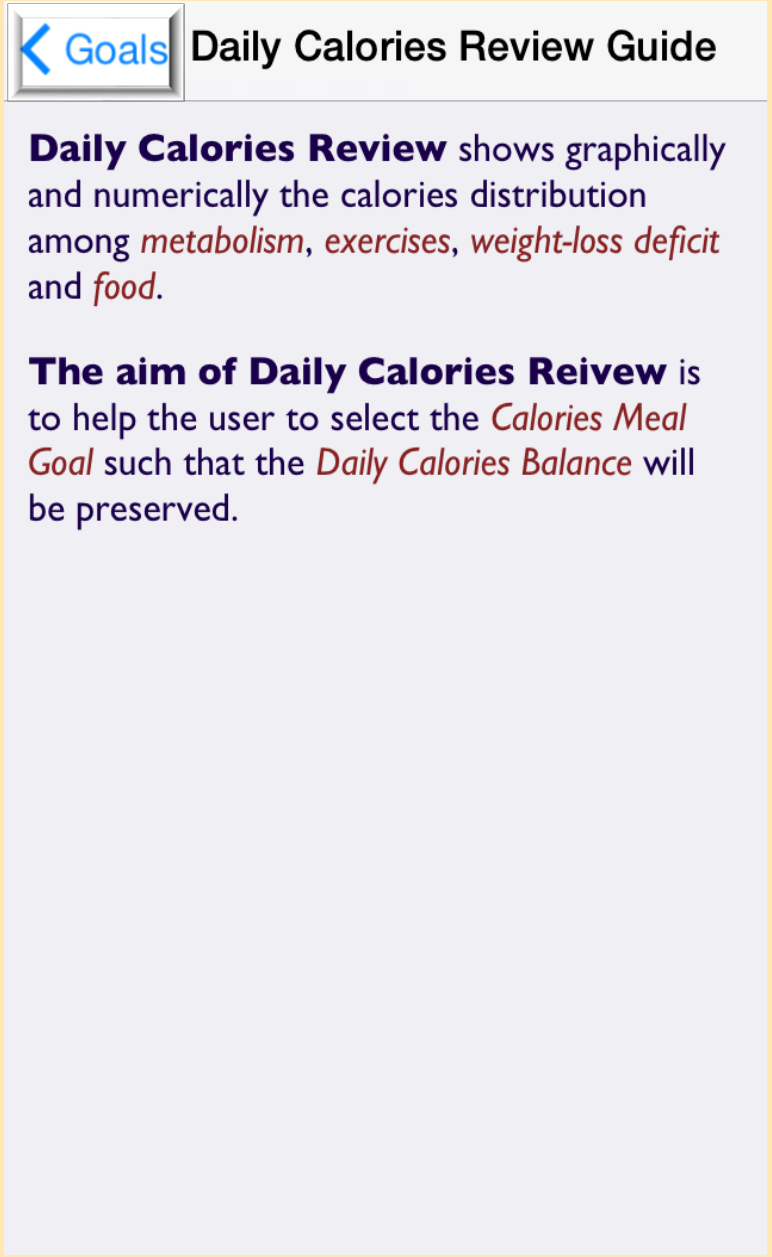
Goals: Exercise – Calories Goal Setting
Goal Verification: Time

- To plan the activities, user is presented with the examples of steps (walking or running in all considered speed intervals)
  - Energy expenditure of proposed step exercises is equal to caloric goal



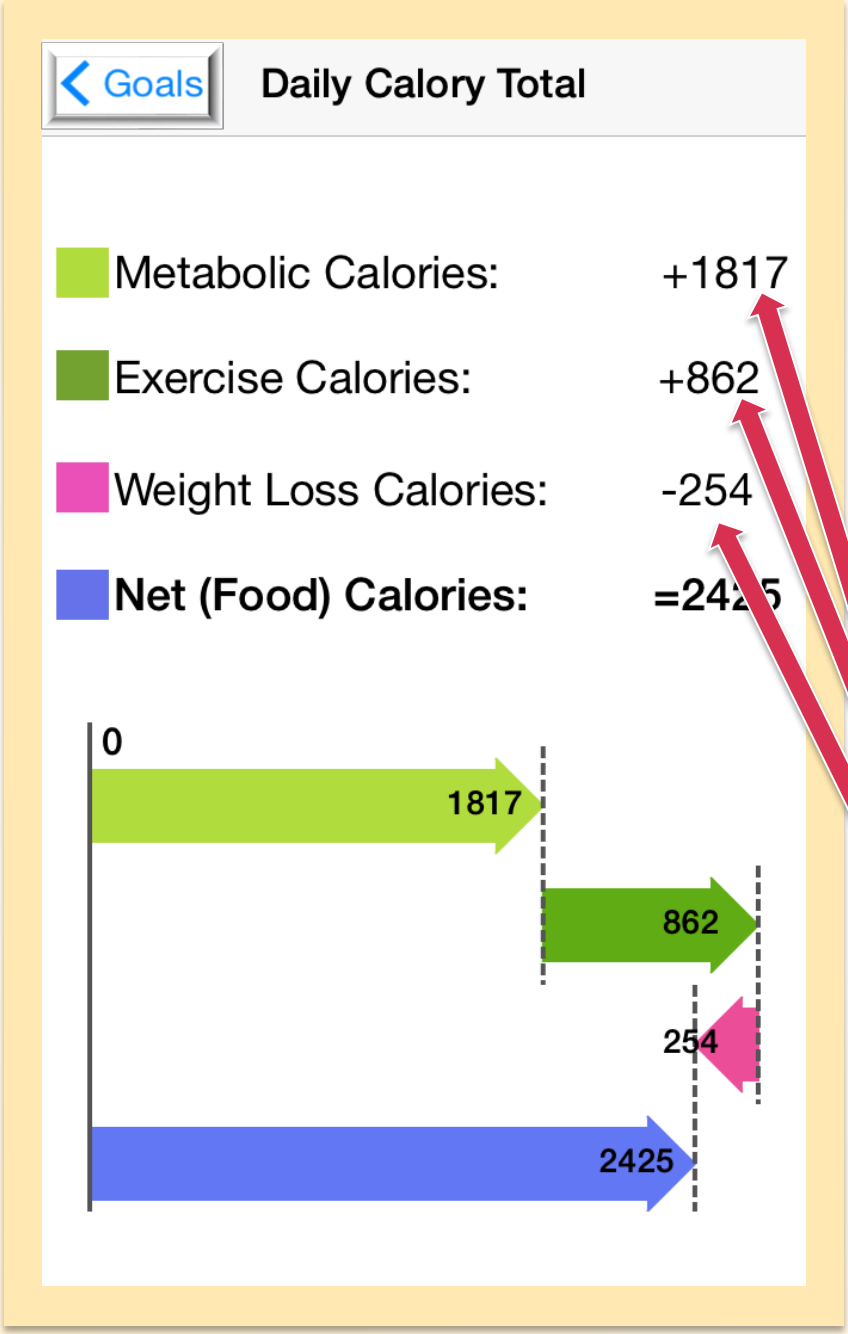
Goals: Exercise – Calories Goal: Entering Data

- Data for the goal is entered by tapping on the colored text field next to Exercise Calories
  - Goal calories are entered using the keypad



Goals – Daily Calories Review: Guide

- Short guide to reviewing the setup of all daily active calories and their deficits



Goals: Daily Calories Total

- Numerical and graphical aid in visualizing:
  - The food calories goal
  - Relation among calories consumes, expanded and weight-loss caloric deficit

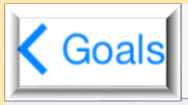
Food Calories - Formula

- Net (food) calories determined automatically
- Food calories must balance the calories expended through exercise and metabolism plus the caloric deficit determined in weight-loss goal

Food Calories = Calories Expended - Calories Deficit

- Calories Expended (exercise and metabolism)
- Calories Deficit (determined in Weight-Loss Plan – last entry in Goals View)

Weekly Weight-Loss: User's Guide



Calories Meal Planner Guide

Calories Meal Planner prompts the user to setting the *caloric contents* of each of the *five meals of the day* supported by the planner. Each meal calories can be defined either by the *absolute value* or *percentage* of the total daily calories.

Suggested Calories Balance Goal is listed at the top of the page. This value accords to *Daily Calorie Balance*, which balances calories of *Metabolism*, *Exercise* and eventual *deficit* due to the ,*Weight Loss Plan* with *Food* calories.

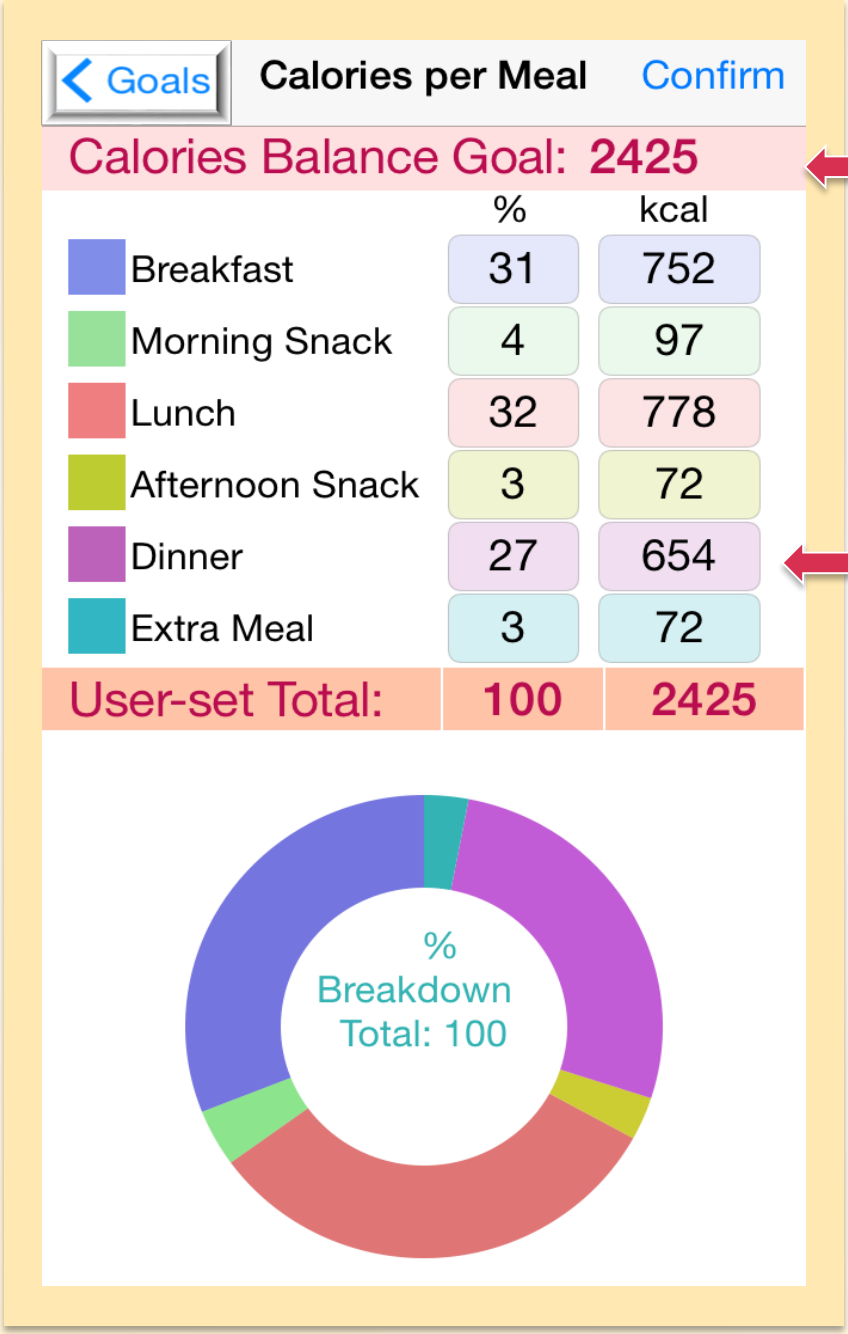
The total amount of meal calories accumulated in all meal goals is listed as *User-set Total* at the bottom of the selection part. The user does not need to follow the suggested *Calories Balance Goal* in scheduling calories for each meal.

If Calories Balance Goal differs from *User-set Total*, then the *pop-up question* appears regarding which of the above two values should be used as the *Calories Meals Goal*.

The selected Calories Meals Goal is propagated to *Exercise Tracking*, *Meals*, *Daily*, *Weekly* and *Weight-Loss Trends*.

The doughnut graph at the *bottom of the page* shows the *percentage distribution of calories* among all the considered meals.

The Calories Meal Goal must be confirmed by pressing *Confirm* button in the *upper right corner* of the screen.



Goals: Calories Meal Planner

- Calories goal enables:
  - Control over calories consumption
  - Realization of weight-loss plan

User Entry

- Calories per each meal
  - Can be entered either as numbers of percentage of total daily calories

Distribution of Carbs Goal

- Calories Goal is pushed to:
  - Pedometer View (1st entry in Console View) for Daily Calories Balance
  - Meals (2nd entry in Console View)

Confirmation

- When completed, data saved by pressing Confirm Button

Goals

Carbs Meal Planner Guide

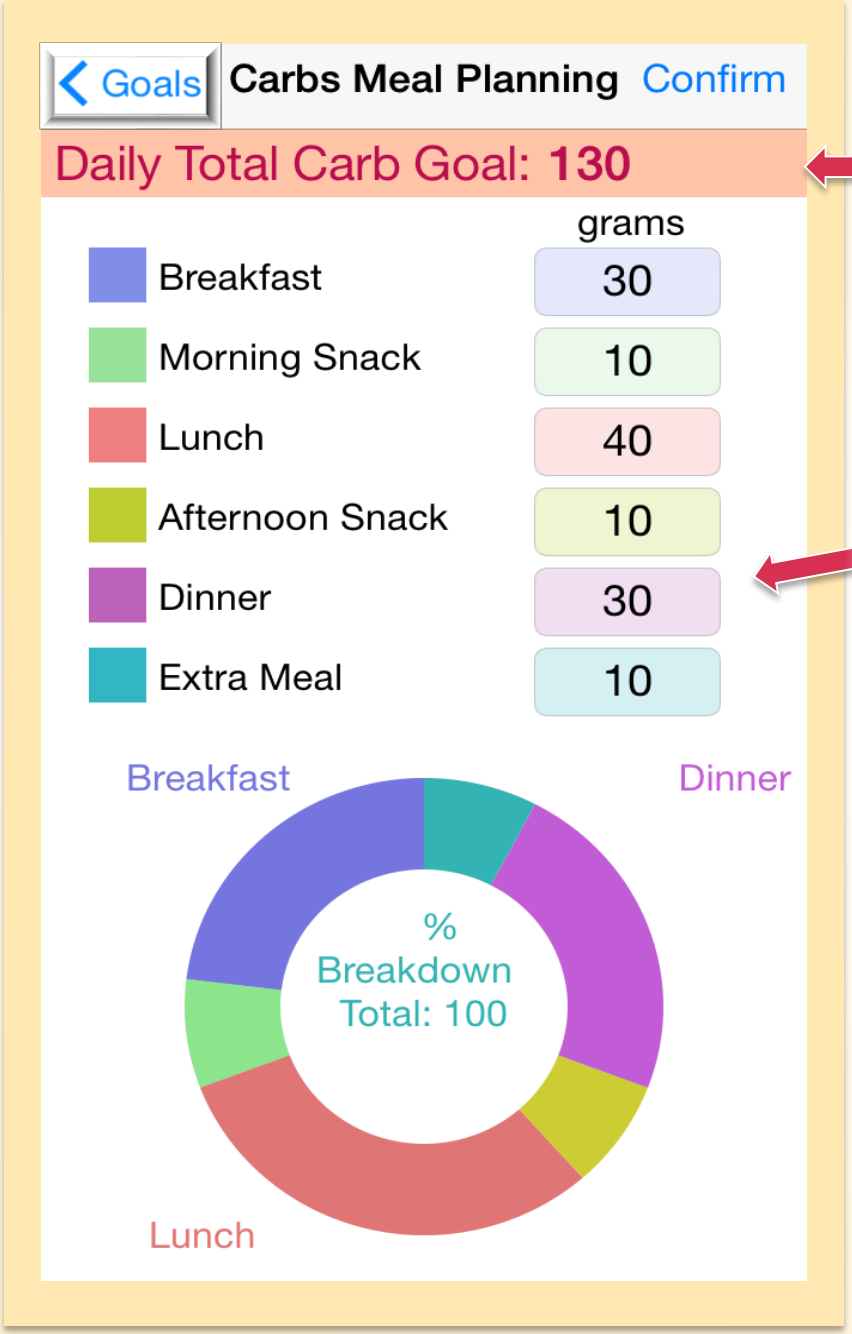
Carbs Meal Planner allows the user to set the amount of *carbs per each meal* of the day.

The Daily Total Carb Goal, displayed at the top of the page is the *total amount of carbs goals* accumulated in all meals.

The Carbs Goal must be confirmed by pressing *Confirm* button in the *upper right corner* of the screen.

Goals – Carbs Meal Planner: Guide

- Short guide to setting carbs count of all daily meals



Goals: Carbs Meal Planner

- Carbs goals aids in planning daily meals
  - Particularly recommended for users with diabetes and pre-diabetes

User Entry

- Carbs per each meal
- As positions are filled percentage breakdown of carbs is displayed as donut graph

Distribution of Carbs Goal

- Carbs Goal is pushed to:
  - Meals (2nd entry in Main Page)

Confirmation

- When completed, data saved by pressing Confirm Button

Goals

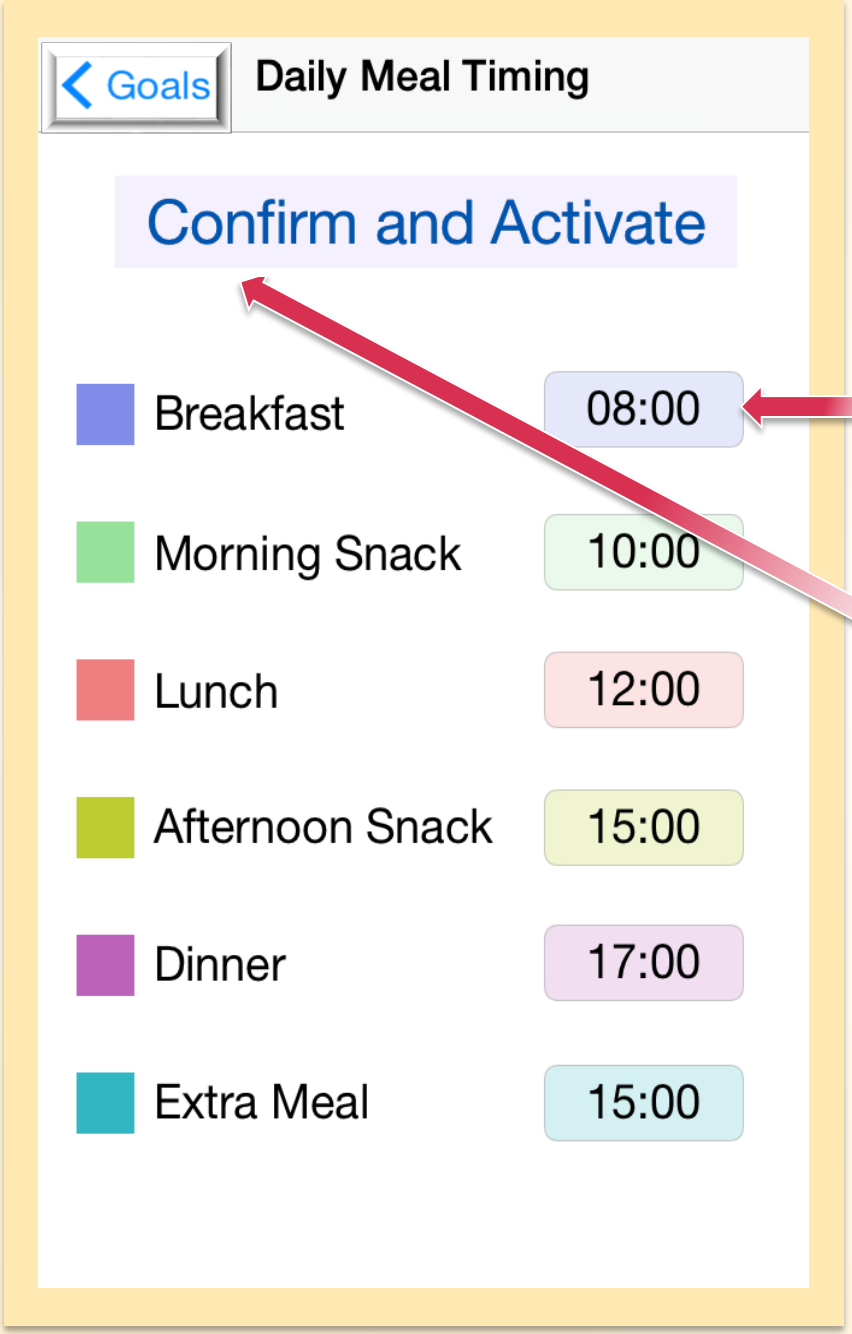
Meal Timing Habits Guide

Daily Meal Timing Habits allow the user to schedule the *time of each meal*. This information is *optional*, however it is *useful* for *issuing reminders* to the user in the case the meal data is *not entered* at the time of the *scheduled meal*.

The set meal times must be *confirmed and activated* by pressing *Confirm and Activate* button at the *top of the page*.

Goals – Meal Timing Habits: Guide

- Short guide to setting approximate time of all daily meals



Goals: Daily Meal Time Planner

- Schedule of approximate meal times
  - Helps keeping meals regularly

User Entry

- Planned time of each daily meal

Confirmation

- When completed, the plan is saved by pressing Confirm and Activate button

Weekly Weight-Loss: User's Guide

Goals

Weight Loss - Active Guide

Weight-Loss Plan assists in the weight-loss process by tracking the *weekly calories deficit* based on the *current user's weight*, *weight goal* and *duration (in weeks)* of the weight plan. Its activation tracks *calories deficit* to obtain intended *weight loss*.

Current Weight is ported *automatically* from one of: *Personal Settings*, *Weekly Trends* or *Weekly Weight-Loss* entries. It is recommended to *keep the updated weight* by entering the weight *once a week*.

Goal Weight is the *intended weight* entered by the *user*.**Weight-Loss Duration** is expressed in *weeks* of the weight-loss plan. The *completion date* of the plan is calculated by the tool.**Weight-Loss Plan** describes *Daily Calories Deficit* needed to *approximatelly obtain* the planned Weekly Weight Loss. The intended *Weekly Weight Loss* remains constant, but the *Daily Calories Deficit* may *change weekly* with the progress of the weight loss.

The Daily Calories Deficit can be checked in *Goals: Weight-Loss Plan*, *Daily Calories Review*, or in *Weekly Weight-Loss entry*. *Daily Calories Deficit* can be obtained either through *restrictions on the consumed food* or throught the *increase of execises*.

Sample Exercise lists the *step count* or *duration* of *walking* and *running* in all considered speeds *exerting* the *Daily Calories Deficit*.

Severity of the plan depends on the *weekly loss*. **The weight loss plan** is *activated* by pressing *Confirm and Activate* button. *The Weight-Loss plan can be changed before the completion of the previously set plan. However, any changes must be confirmed.*

Goals: Weight Loss Plan

Body Weight Data

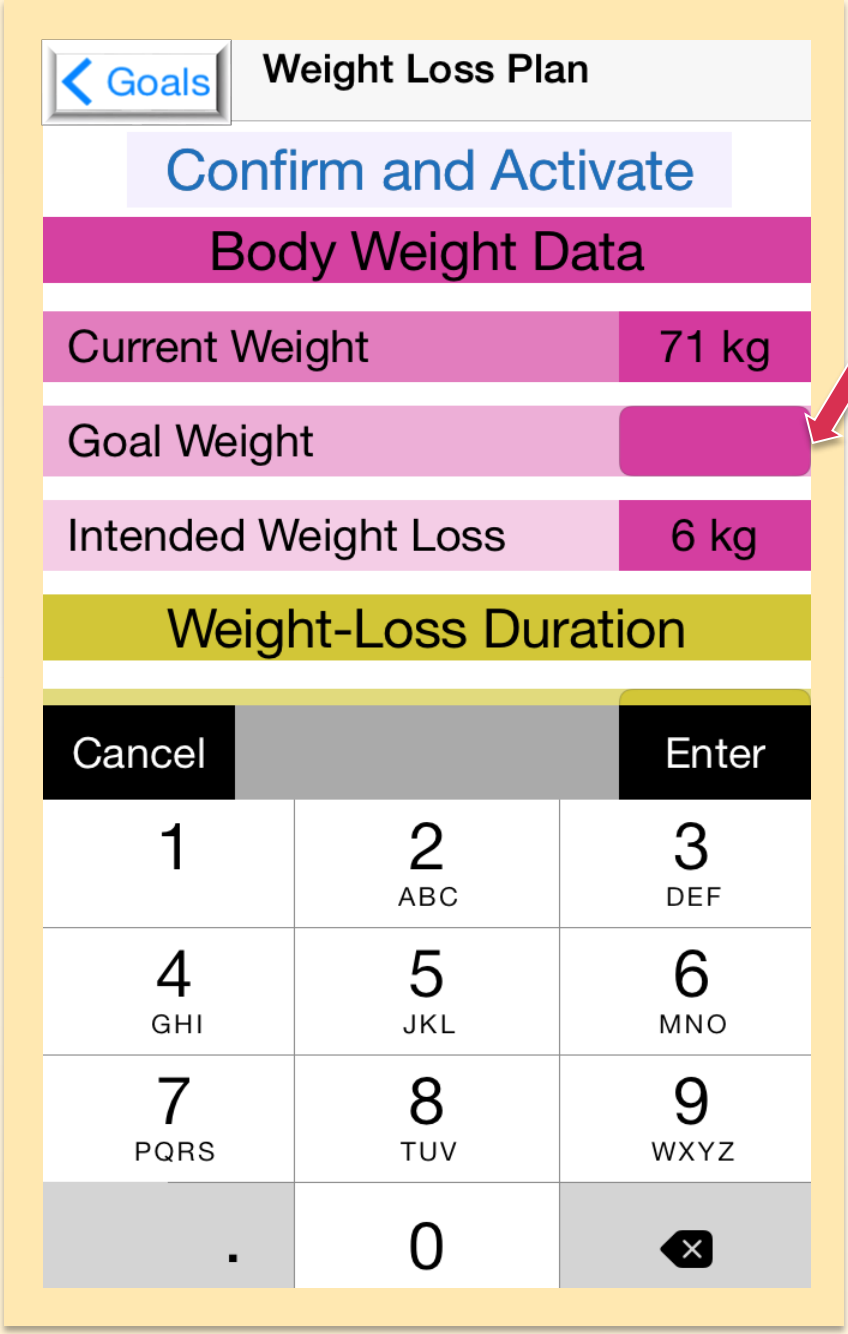
- Initial Weight is taken either from:
  - Settings or Weekly Trends (if updated in the last week)
- Goal Weight Loss is entered by user

Weight-Loss Duration

- User enters weeks of weight-loss plan
  - End day is calculated with respect to the current date

Weight-Loss Plan

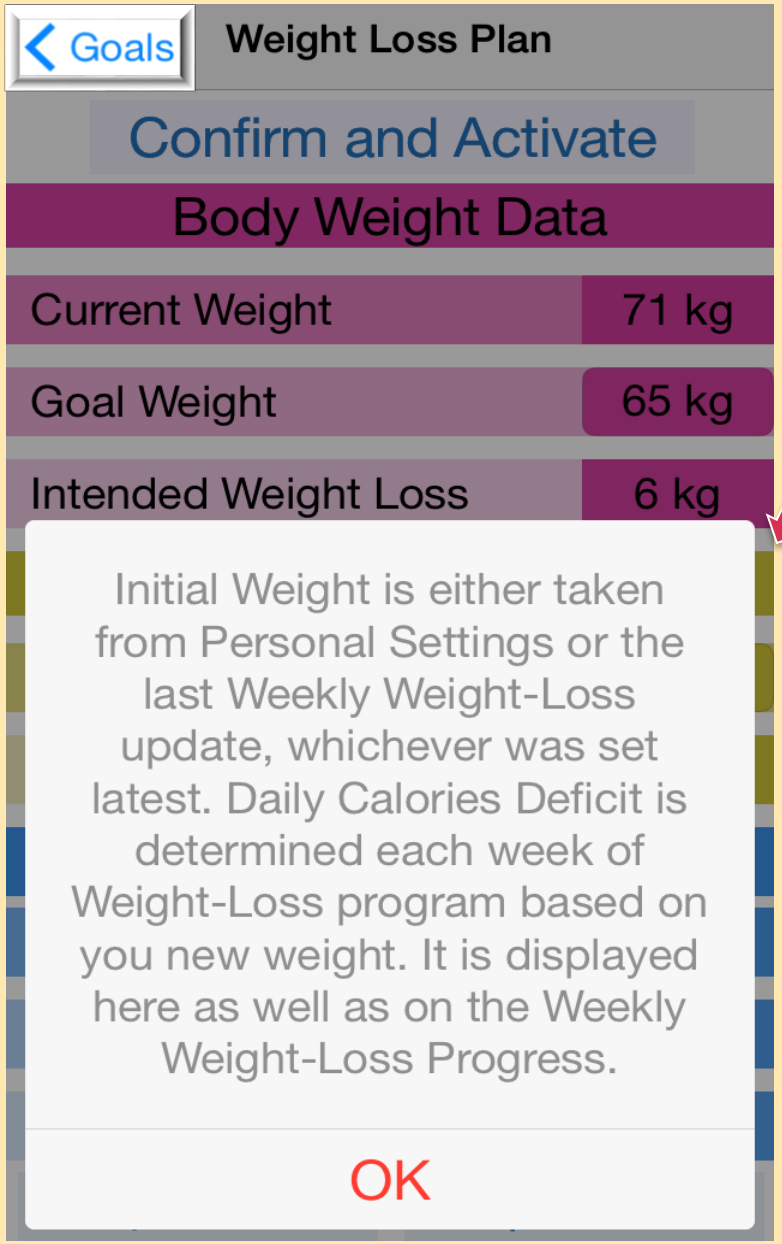
- **Daily Calories Deficit**: automatically determined deficit of calories consumed vs. expended in exercises and metabolism
  - To keep planned weekly weight loss, daily calories balance can be adjusted automatically each week
    - Daily calories balance reported on Weekly Weight-Loss View
- **Weekly Weight Loss**: intended weekly weight lost
- **Weight-Loss Plan**: severity of approach



Goals: Weight Loss Plan

Entering Data

- User data entered by tapping on the data fields in the page
- Upon tapping empty Goal Weight field the keypad appears on the screen



Goals: Weight Loss Plan

Explanation Buttons

- Key explanations for weight-loss program

Back

This is not Exercise Goal Setting Page. Use it Only for Estimating Exericse Time and Effort.

Exercise Calory Expenditure

Exercise Calories 254

Verification

Steps & duration for calorie goals

Steps | Time[min]

Walk

km/h	Slow	km/h	or Regular	km/h	or Fast
2.0	4914	5.0	4410	6.5	3981
3.5	4777				

Run

8.0	2879	11.0	2597	14.0	2425
9.5	2736	12.5	2489	16.0	2399

Goals: Weigh- Loss Plan
Sample Exercise - Steps

- Caloric deficit of weight-loss program can be achieved through calories food reduction or exercises
- Upon pressing Sample Exercise, user is shown:
  - Sample exercises (**steps**) to reach the caloric deficit of the weight-loss programs

Back

This is not Exercise Goal Setting Page. Use it Only for Estimating Exericse Time and Effort.

Exercise Calory Expenditure

Exercise Calories 254

Verification

Steps & duration for calorie goals

Steps | Time[min]

Walk

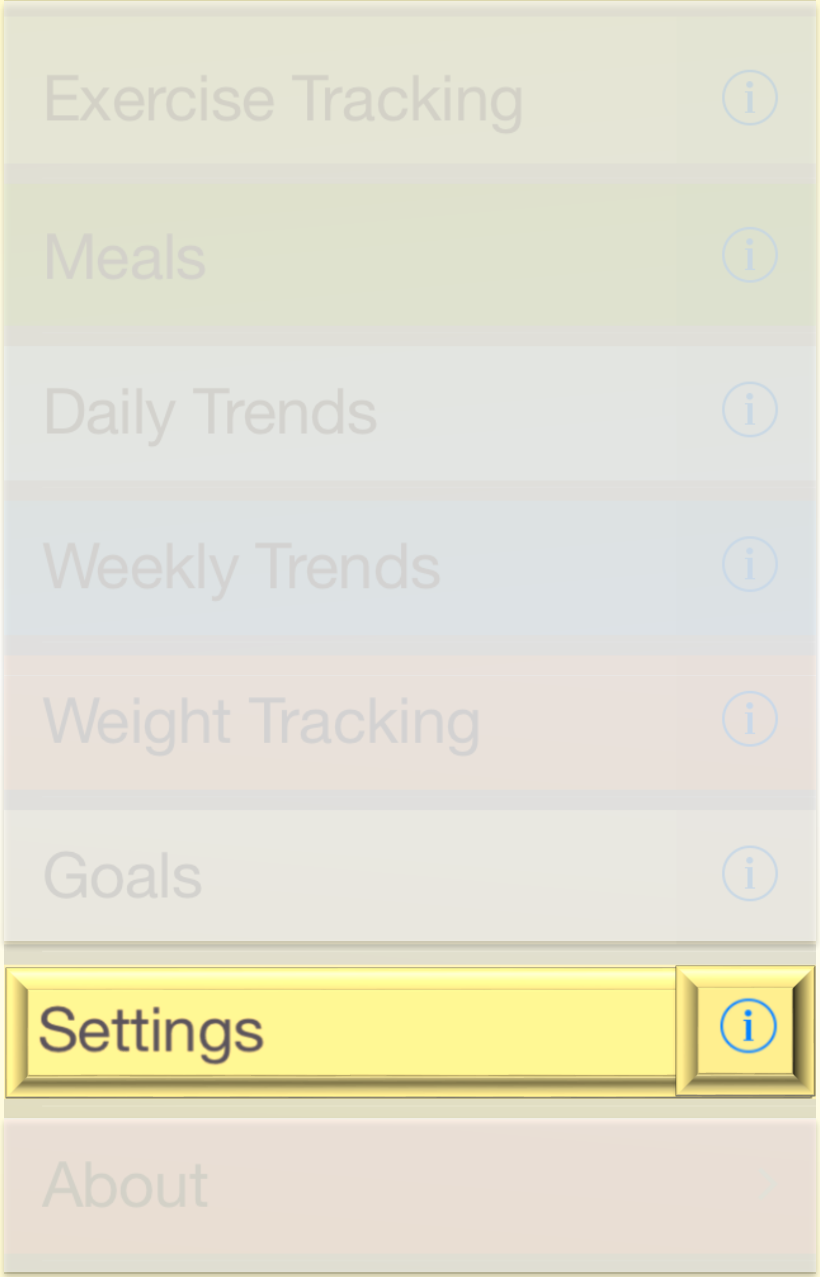
km/h	Slow	or km/h	Regular	or km/h	Fast
2.0	115	5.0	38	6.5	29
3.5	57				

Run

8.0	20	11.0	15	14.0	12
9.5	17	12.5	13	16.0	10

Goals: Weigh- Loss Plan
Sample Exercise - Duration

- Caloric deficit of weight-loss program can be achieved through calories food reduction or exercises
- Upon pressing Sample Exercise, user is shown:
  - Sample exercises (**duration**) to reach the caloric deficit of the weight-loss programs



Settings

- Entry for introducing personal user data as well as various display and counting schemes

Personal Settings

- Date of birth
- Gender
- Weight and high

Measurement Units

- Two choices of measurement units: standard and imperial
  - Weight, volume and distance reported in selected units

Personal Settings

- List of E-mail contacts for automatic sharing some of views

Carb Counting

- Inclusion or exclusion of fiber in counting carbs towards carbs consumption goal

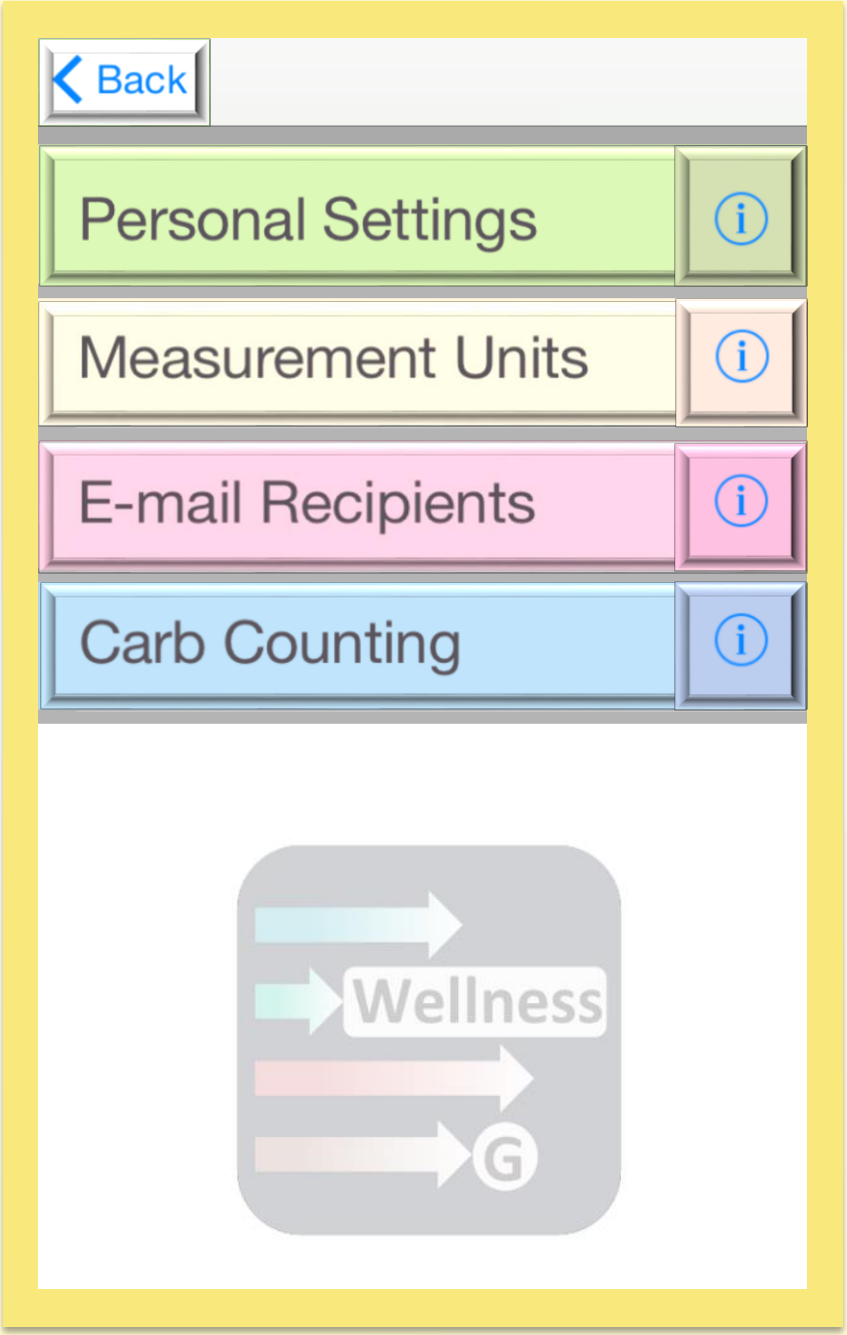
Back

Settings Guide

Settings section is a ***mandatory entry*** to be filled by the user with *personal* and *administrative data* before using *Carb and Move* tool. Based on the personal data, the tool is able to better trace the exercise speed, distance and calories expenditure.

Settings: User's Guide

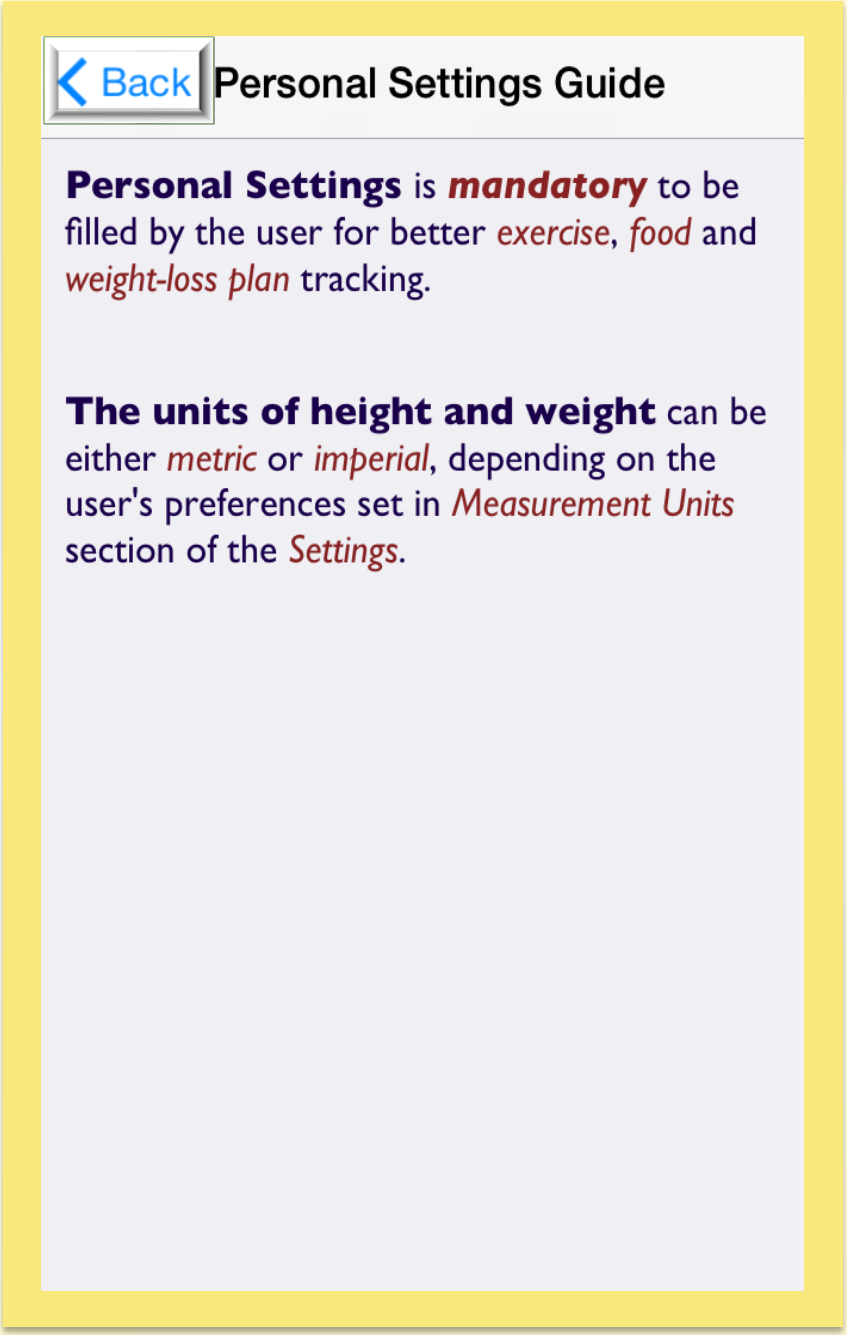
- Short guide to Settings options



Settings - Options

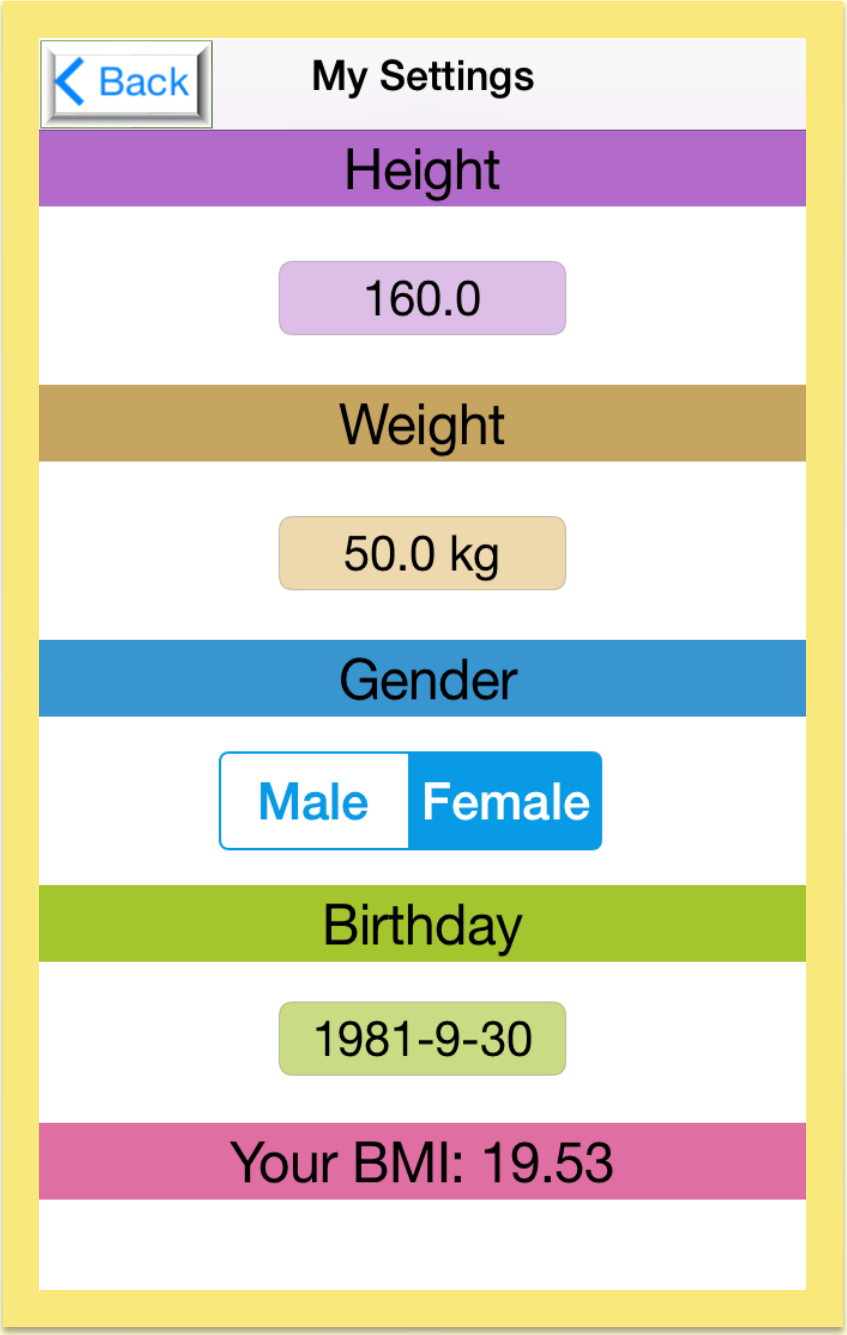
Note

- The tool will not operate correctly without a correct setting
- Settings must be done before first time of launching the tool
- Some settings data like weight or height must be updated upon changes to guarantee the correct operation of the tool



Settings: Personal Setting Guide

- Short guide to filling up and application of Personal Settings



Settings: Personal Settings

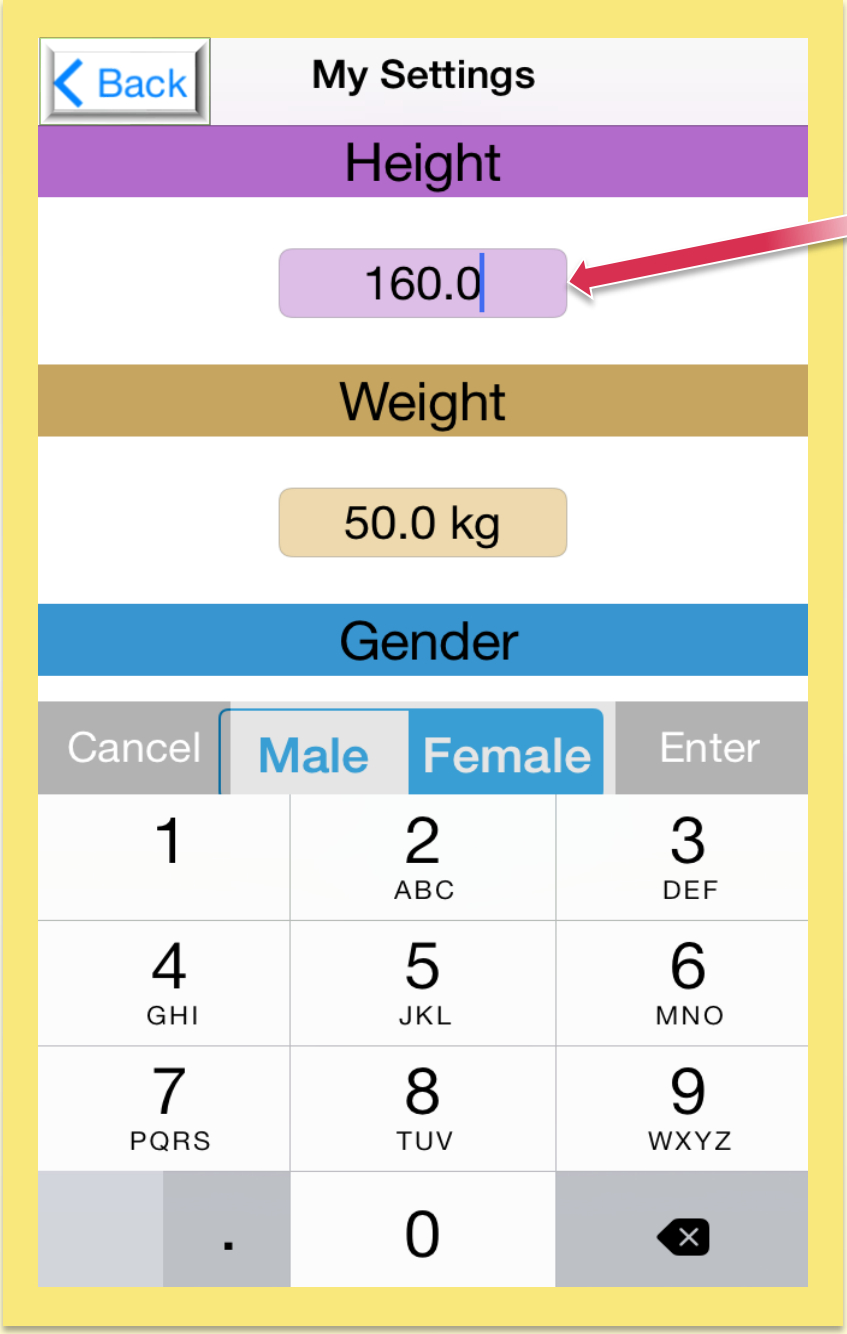
- The user enters: height, weight, gender and date of birth

Changes to Personal Settings

- If changes happen often (children) then users can update data through this view
- If weight changes, user can introduce the new weight:
  - In this page
  - In Weekly Trends (4th entry in the Console View)

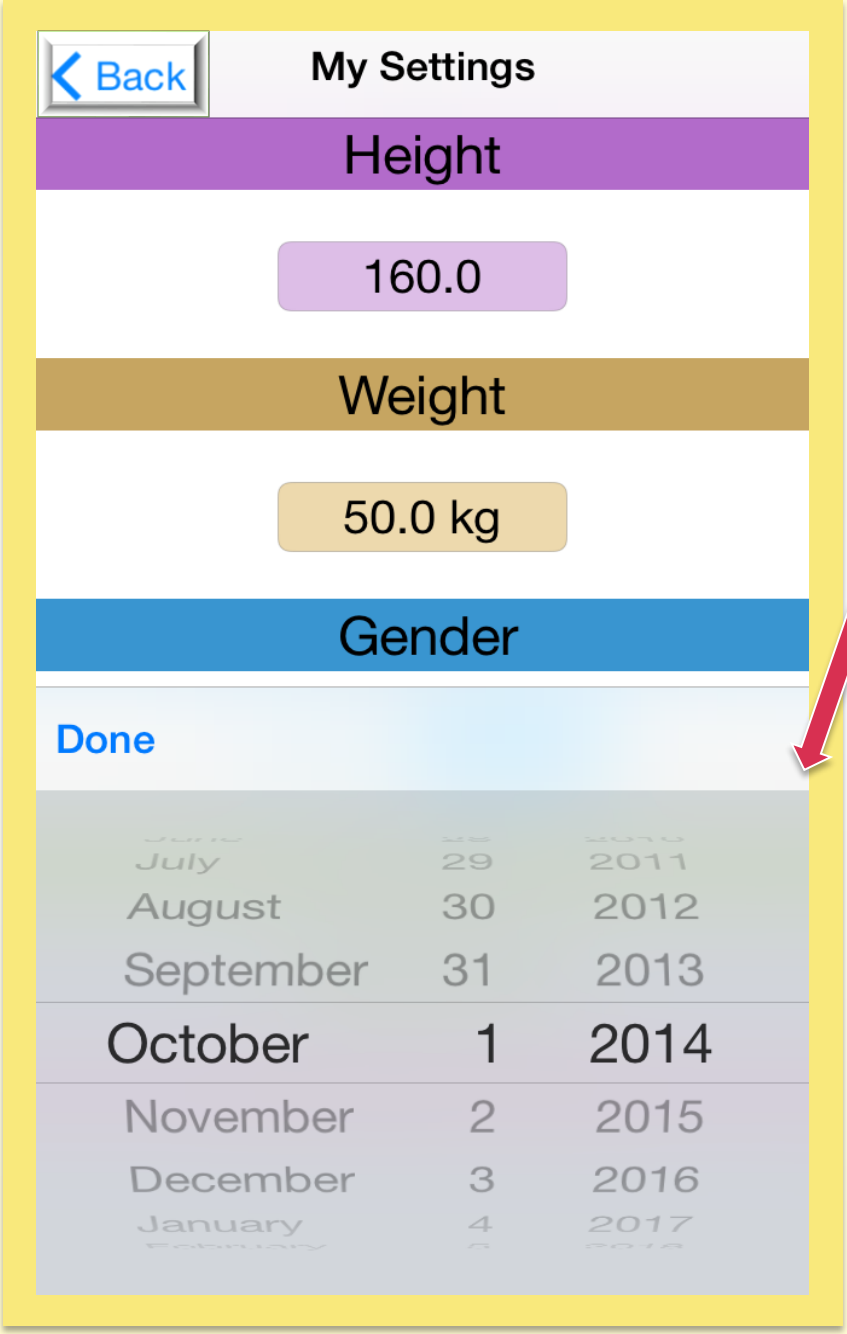
Note

- Personal data is used for precise operation of pedometer and determination of energy balance
- Keeping personal data up to date is mandatory



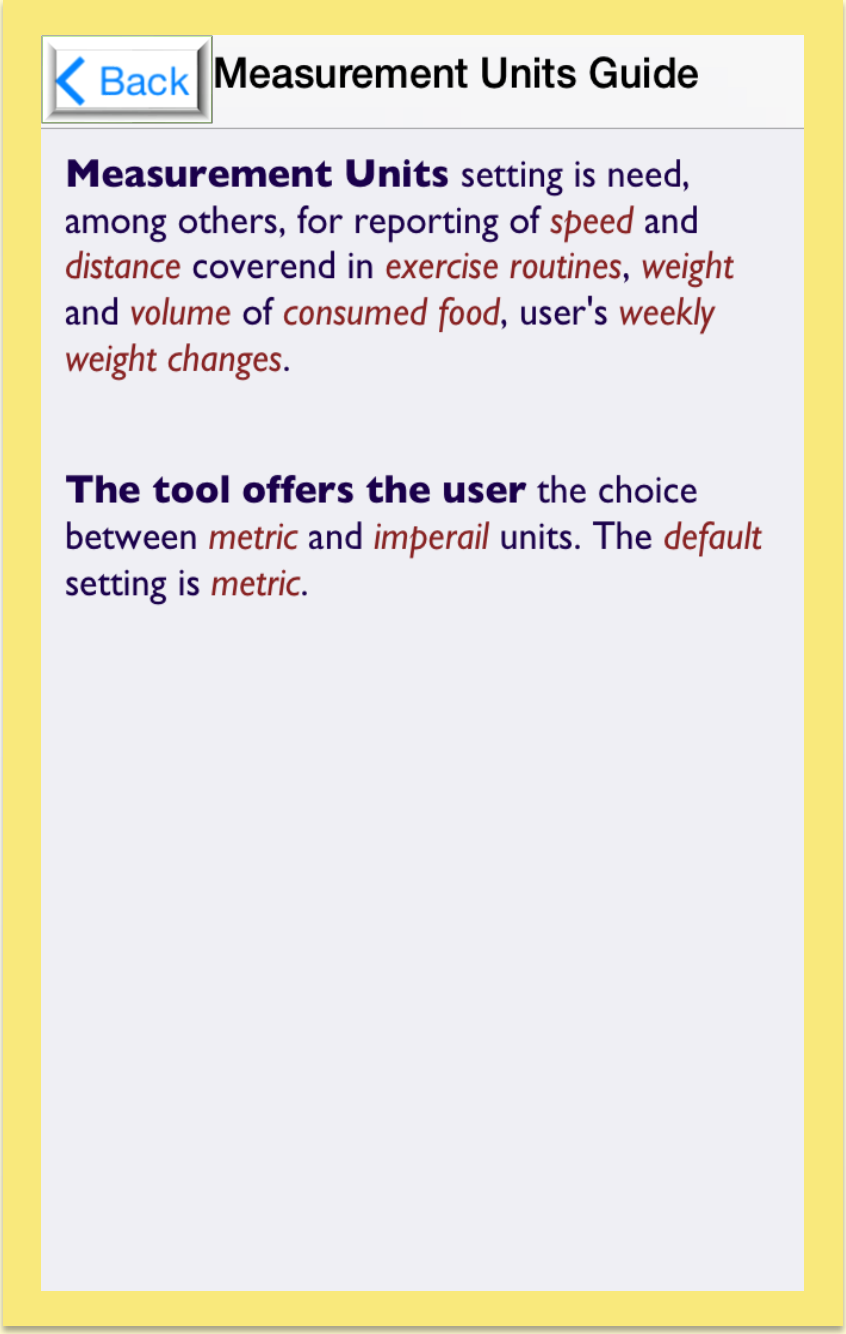
Settings: Personal Settings
- Entering Data (Height and Weight)

- Height and Weight can be entered by tapping on the highlighted filed
- The keypad for entering data will occur



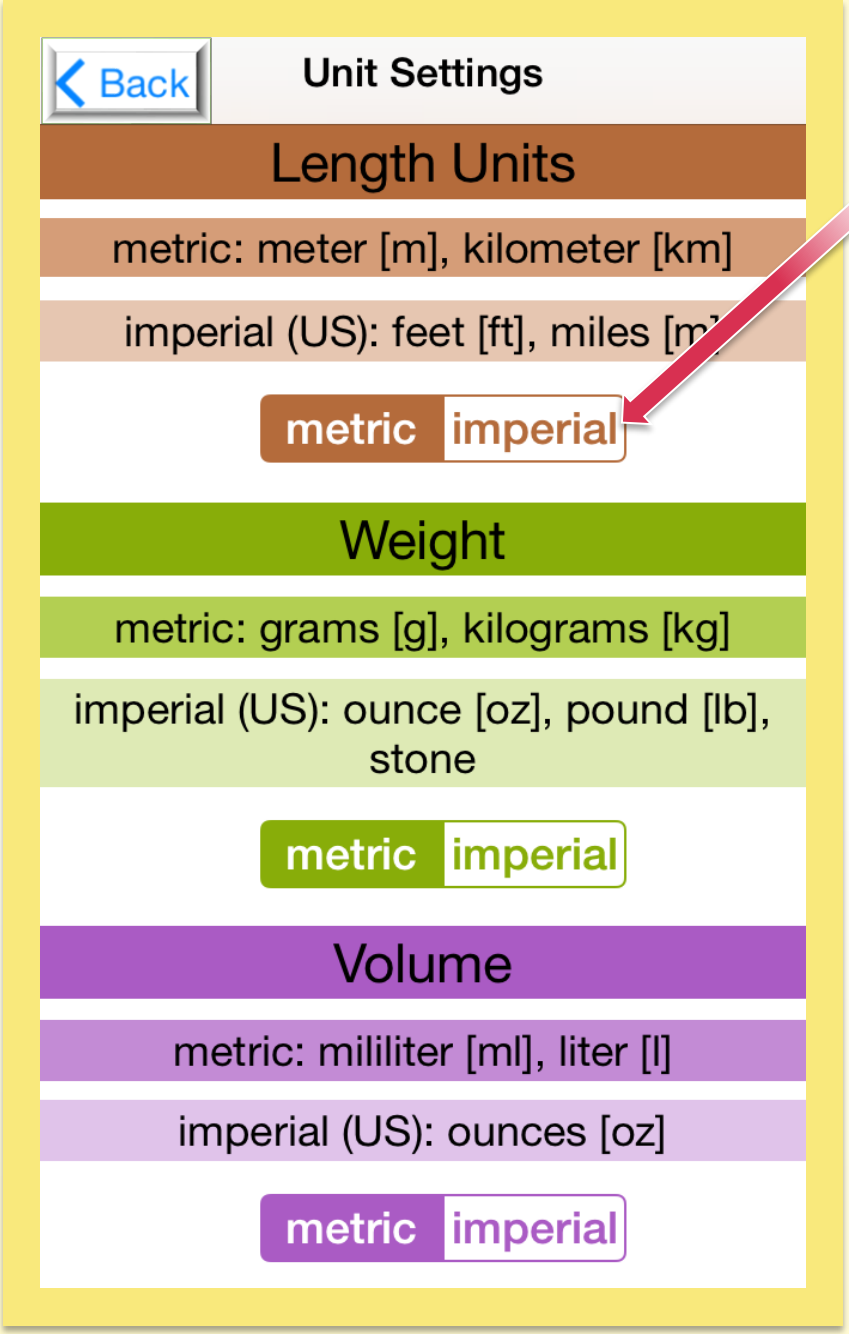
Settings: Personal Settings
- Entering Data (Date of Birth)

- Upon tapping Date of Birth entry, a date picker is called for selecting month day and year



Settings: Measurement Units Guide

- Short guide to filling Measure Units section



Settings: Measurement Units

- User can select between **metric** and **imperial** measurement units of length, weight and volume
- Once selected, all the relevant data will be reported in the chosen units
- Measurement units can be changed at any time
- Mixing of metric and imperial units is allowed
  - For example: weight reported in imperial and length in metric units

Note

- Mixing of metric and imperial measurement units is allowed
  - For example user can select reporting of length in metric units and weight in imperial ones

Back

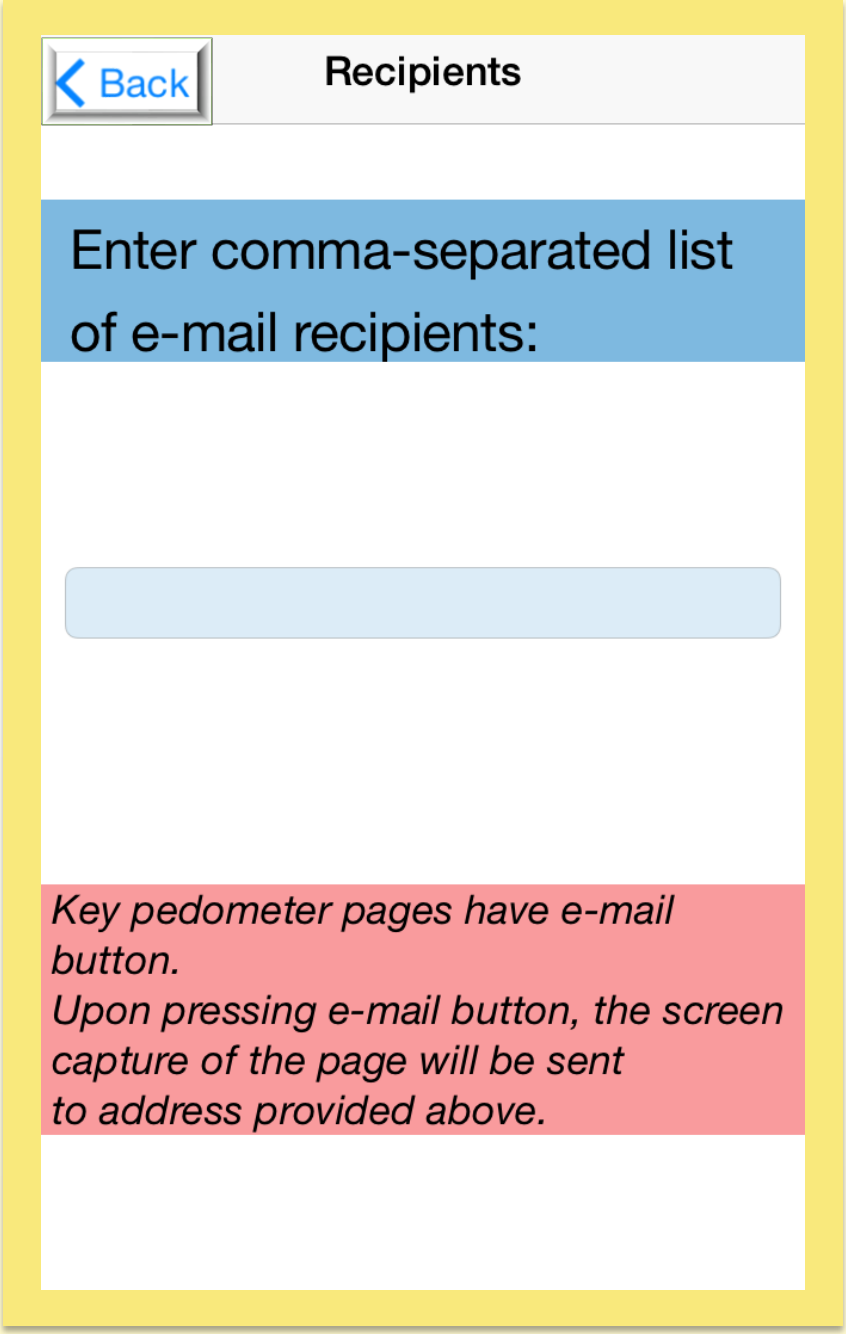
E-mail Recipients Guide

E-mail Recipients entry stores *e-mail addresses* of recepients of *view captures* of *selected pages* of *Carb and Move*.

The user must ented the adresses *manually*. Upon setting mailing addresses all *pages*, which have *email button* in the upper left or right corner can be *sent* by *pressing* this button.

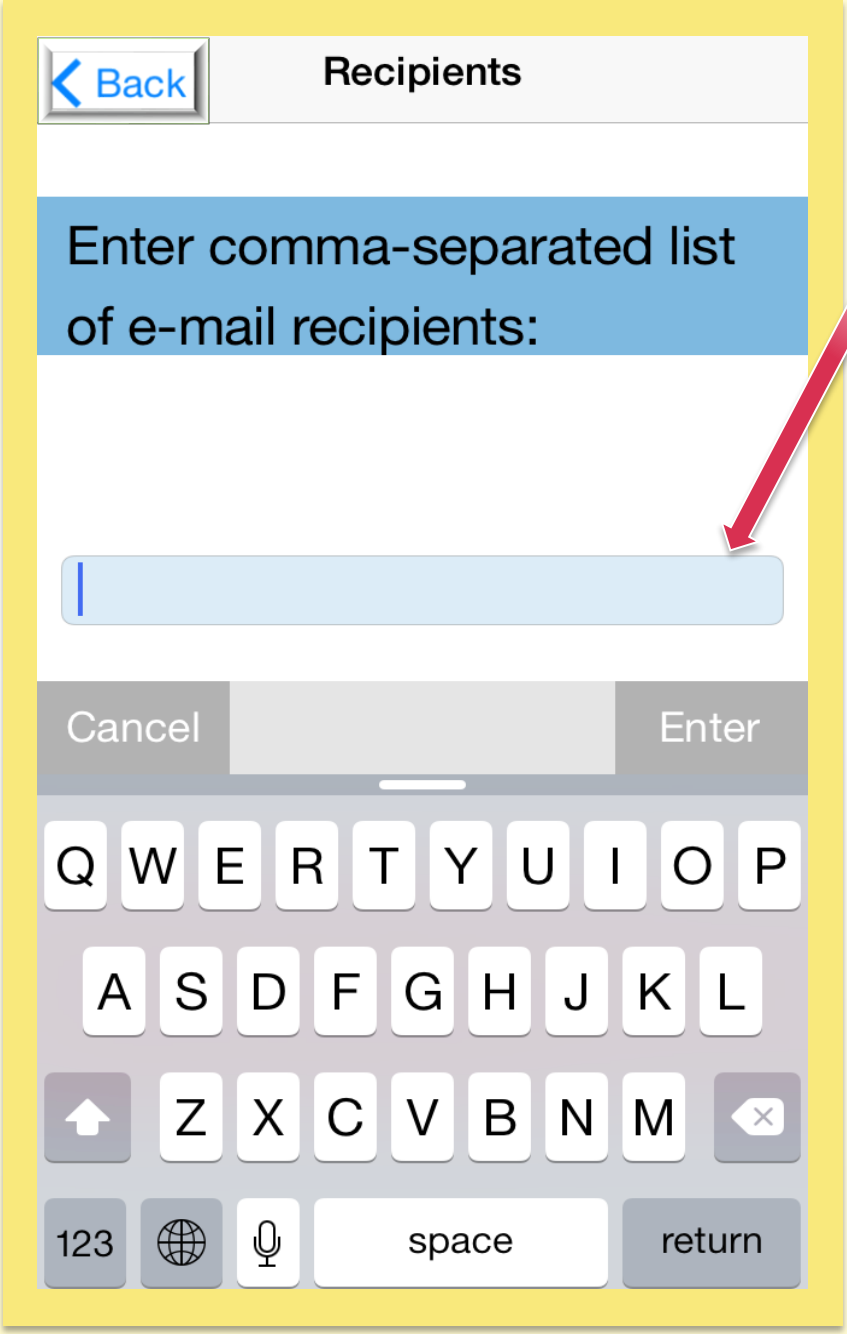
Settings: E-mail Recipients Guide

- Short guide to filling E-mail Recipients section



Settings: E-mail Recipients

- Screen capture of key views can be easily e-mailed to selected recipients
- Views with data to be sent have an E-mail button in their upper right corner
  - Pressing E-mail button on a given view will cause an automatic emailing of a screen capture of this view



Settings: E-mail Recipients
- Entering E-mail addresses

- E-mail addresses of recipients, separated by comma can be entered by tapping the blue prompt

Back

Carb Counting Guide

Carb Counting entry is designes particularly for users watching their *carbs intake*.

This option allows the user to *include* or *exclude* ***fiber*** in the *total carbs count* of an *individial food item* or *whole menu*.

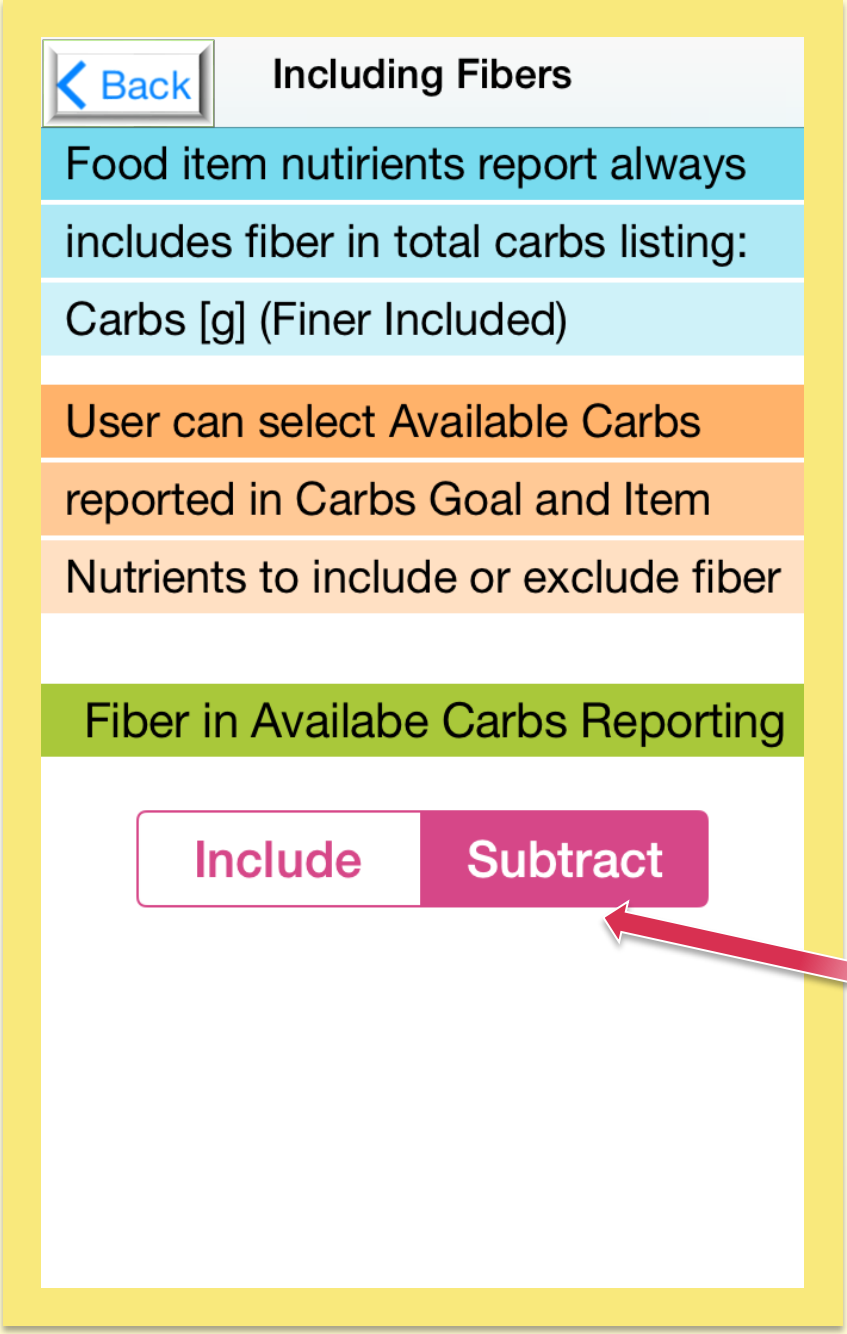
The Default setting ***includes*** *fiber* in reporting of the overal carb content of the considered food.

Settings: Carb Counting Guide

- Short guide to filling Carb Counting section

Note

- Including or excluding fiber in total carbs counted in consumed item(s) is particularly important for users dealing with diabetes related issues



Settings: Carb Counting

Carbs Goal

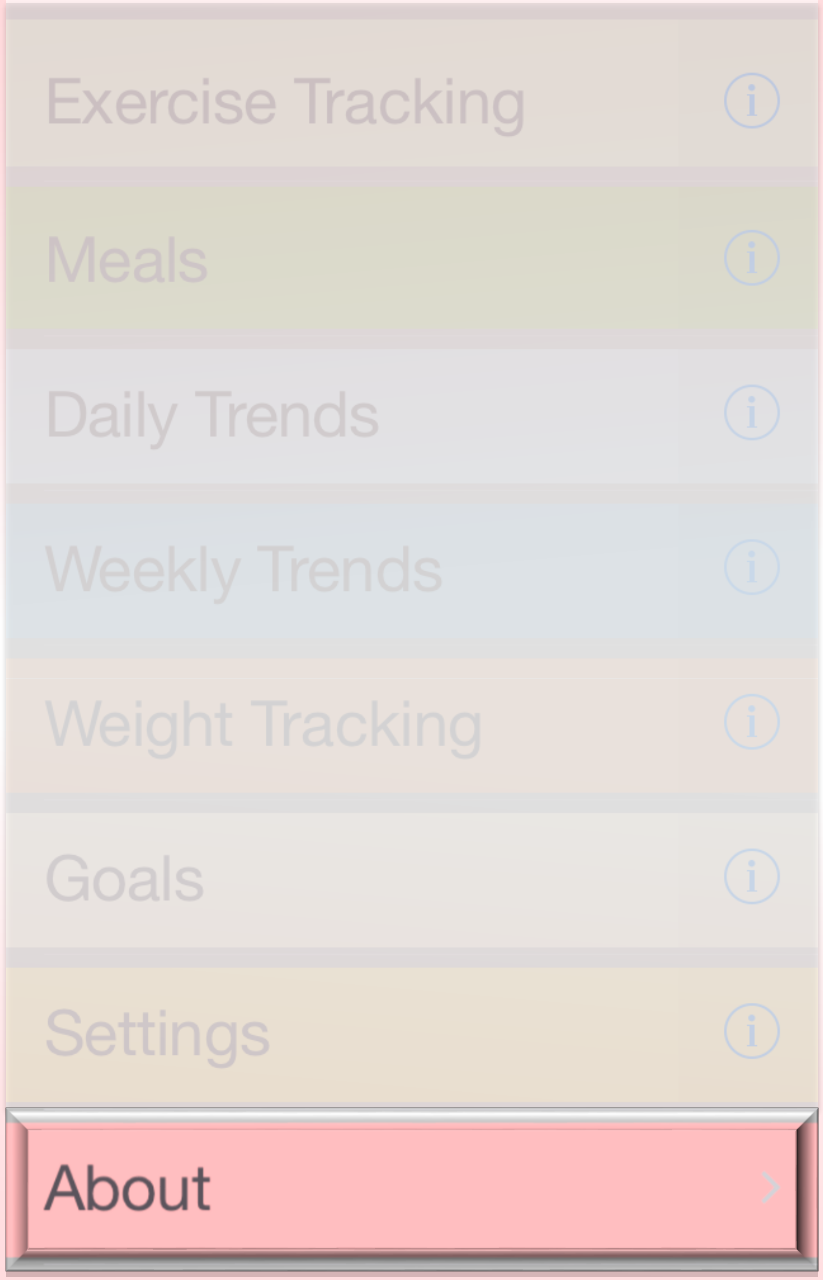
- Daily total and per meal consumption of carbs and calories are set in Goals (6th entry in Console View)

Standard Carbs Reporting

- Standard Nutrition Facts reporting include listing of total carbs contents and fiber contents of food item

Selective Carbs Reporting

- In counting carbs towards meal carbs goals the user has an option to **include** or **subtract fiber** from the total carbs of accounted food item as well as a complete meal



About

- Short description of the use of this application
- Facebook and Website locations with:
  - Detailed project description
  - Updated articles and news regarding about fitness and diets

About: User's Fast Guide

Back

For precise tracking of daily food intake and exercise, Carb and Move should be brought to the foreground before registering the first activities of the day. Afterwards, Carb and Move runs in the background registering daily activities. All meals must be entered explicitly by the user.

Carb and Move tracks *food*, *exercise*, *daily/ weekly energy balances* and *weight-loss progress*.

Exercise tracking reports the progress in *daily activities (walking or running)* as well as *short-term exercise goals*.

Meal entry actively tracks *nutrients intake* for each of 5 daily meals. The tool also contrasts *calories* and *carbs consumptions* vs. user's set *meal goals*. The *calories goal* for each meal can be *automatically modified* based on the *increase/ decrease of exercise levels* and *under/over consumption of carlories* in previous meals.*Carbs counting* of each meal can include or exclude *fiber*, depending on *Settings*.

Daily Trends outline the *balance* of *energy consumed* and *expended*.

Weekly Trends track *exercise*, *nutrients* and *daily balances* over a *week*. Users can view summary of each *consumed meal* in the *week*. The tool also trace the *current weight*.

Weight-loss, if activated, *assist* the effort to achieve a planned *weight loss*.

Goal setups allows *multiple types* of *daily* and *short-term* exercise and meal goals.

Settings specify *personal data* and *measurement units*.

Site

Web Link