

Table of Contents

BWM 2.0 diet manager user manual	1
Introducing BWM 2.0 diet manager	1
System Requirements	1
Installation	3
Uninstall.....	3
Getting Started	3
Application Basics	7
Daily Steps	7
Journal.....	10
Labels.....	11
Food	12
Exercises.....	15
What are basal and resting metabolic rates?	16

Introducing BWM 2.0 diet manager

BWM 2.0 diet manager is a desktop application, designed to help you achieve your weight loss, nutrition, and diet or fitness goals. Whatever your personal goals are, BWM 2.0 provides daily feedback, generates detailed graphical reports on weight goal progress, calories, nutritional analysis and more.

This version of BWM 2.0 is free, and the unmodified copy of it can be distributed without other restrictions. Please, consider [donation](#) to help future development and improvement. We would appreciate any feedback or bug report you [sent](#) to us.

***** Please read End User License Agreement *****

System Requirements

Supported Operating Systems

BWM 2.0 runs on operating systems that support the Java VM. Below is a list of platforms where BWM 2.0 has been tested on:

- Microsoft Windows XP Home/Professional SP2
- Microsoft Windows Vista
- Microsoft Windows 2000 Professional SP4
- Linux/Ubuntu 7.1

Minimum Hardware Configurations

Minimum screen resolution: 800x600 pixels
Processor: 500 MHz Intel Pentium III workstation or equivalent
Memory: 512 MB
Disk space: 100 MB of free disk space

Recommended Hardware Configurations

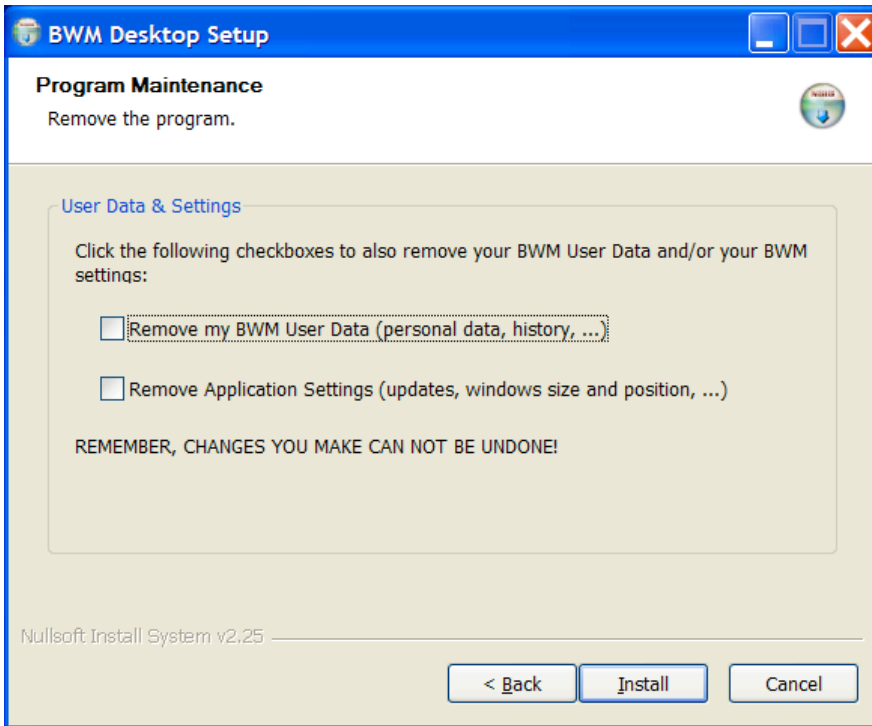
Screen resolution: 1280x1024 pixels
Processor: 1.4 GHz Intel Pentium III workstation or equivalent
Memory: 1 GB
Disk space: 100 MB of free disk space

Required Software

BWM 2.0 runs on the JRE (Java Runtime Environment) v. 1.4.12 or higher. You can download the JRE for your platform from <http://java.sun.com> or use bundled version of BWM 2.0 installer that includes JRE.

Installation

If you install the application for the first time, please follow the steps below. If you observe "**The publisher could not be verified**" just continue. The installation wizard will guide you through simple installation sequence. If you have BWM 2.0 already installed on your desktop there is an option to remove saved BWM personal data (weight, age...) and/or BWM application settings. Check the corresponding check boxes.



Uninstall

To uninstall the application select the **Uninstall** shortcut in **Start->All Programs->BWM 2.0** folder.

Getting Started

Before you begin to use Biometric Weight Manager on a daily basis, complete your personal profile. The first time you run the software, you'll be asked a series of questions to determine what you need to do to achieve your goals. Diet setup wizard provides a convenient way to define your diet goal.

1. Enter your personal information using the **Personal** page:
 - Name
 - Initial Weight
 - Height
 - Gender
 - Birthday
 - Weight measure units (US, Metric)

Edit current diet

Steps

1. **Personal**
2. Activity
3. Goal Type
4. Goal
5. Summary

Personal

Please enter your Gender, Birthday, Measuring System(Units), Height a

Name:

Weight: lbs

Height: ft in

Gender: Male
 Female

Birthday:

Units: Lbs-In
 Kg-Cm

2. Select default activity level using **Activity Level** page.

Edit current diet

Steps

1. Personal
2. **Activity**
3. Goal Type
4. Goal
5. Summary

Activity

Select your usual activity level:

Inactive
inactive

Lightly active
Most professionals, office worker, shop worker, teacher,

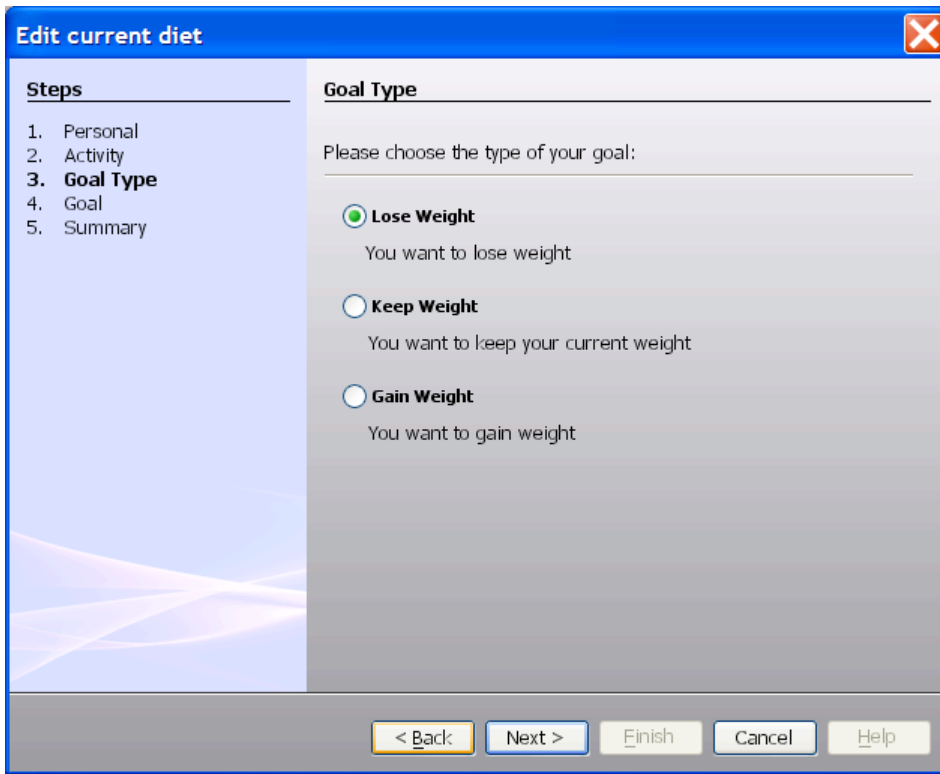
Moderately active
Workers in light industry, most farm workers, active students, department store workers. soldiers not in active service.

Very active
Full-time athletes and dancers, unskilled laborers, forestry workers. military recruits in training. soldiers in active service.

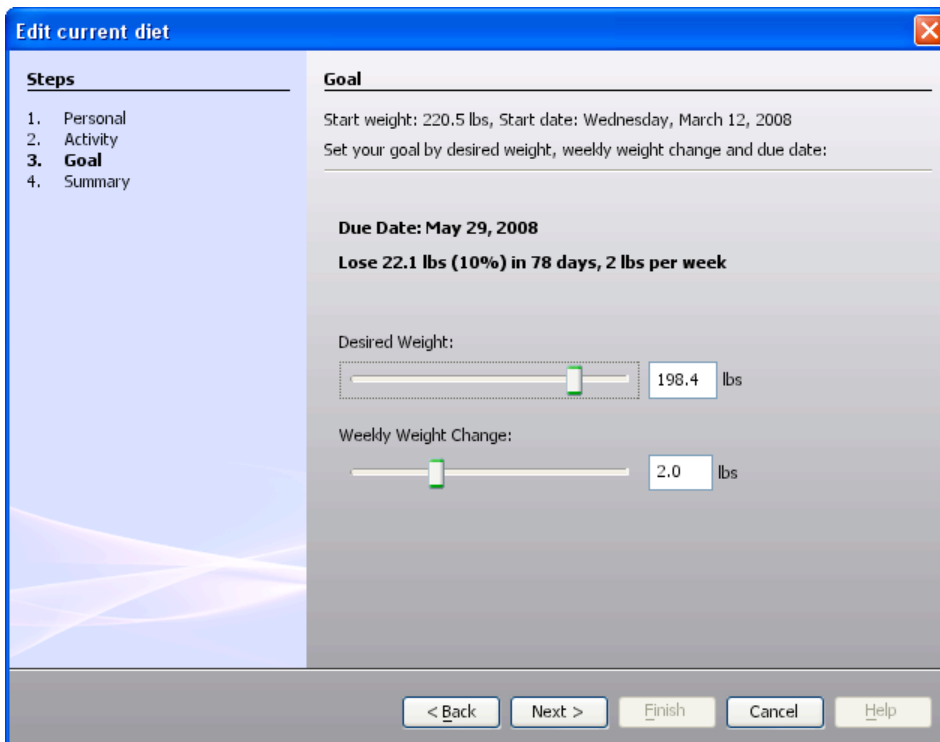
Exceptionally active
Lumberjacks, blacksmiths, female construction workers

Warning! Do not use this option as a way to compensate for exercising during the day. BWM provides another way of doing it.

3. Choose one of available goal types: Lose, Keep or Gain weight.



4. Setting Weight Goals



Follow these steps to enter your weight goals:

- 1) Input your target or desired weight.
 - 2) Use weekly weight change value to adjust the due date when you wish to reach your desired weight.
Warning! Safe weight loss is considered to be no more than 1-2 pounds per week. It is usually not considered safe to eat less than 1,200 calories per day unless advised to do so by your physician. Please consult your doctor before beginning any diet or exercise program
5. Check your goal and personal values, at the Summary page. Click **Finish** at the bottom of the page or **Back** if you want to change some of them.

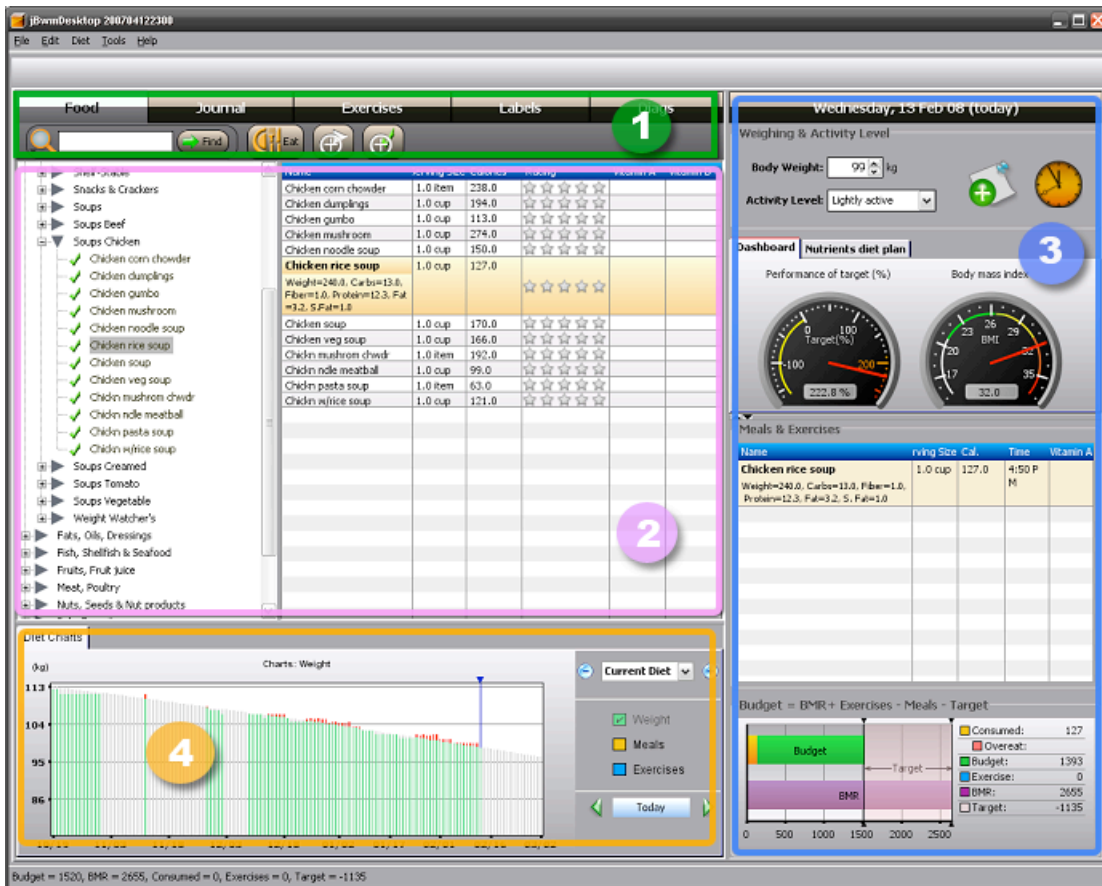
The screenshot shows a software window titled "Edit current diet" with a close button in the top right corner. The window is divided into two main sections: "Steps" on the left and "Summary" on the right. The "Steps" section contains a numbered list: 1. Personal, 2. Activity, 3. Goal Type, 4. Goal, and 5. Summary (which is highlighted). The "Summary" section displays the following information: "Omgeo, Goal Setup Wizard successfully completed", "Personal" details (Gender: Male, Birthday: Jan 1, 1970, Weight: 220.5 lbs, Activity: Lightly active, Height: 5 ft 7 in), and "Goal Objectives" (Goal weight: 198.4 lbs, Goal date: Feb 24, 2008, Description: lose 22.1 lbs in 79 days). At the bottom of the window, there are five buttons: "< Back", "Next >", "Finish", "Cancel", and "Help".

Application Basics

Main Window Layout

The Main application Window contains the following panels:

1. Navigation Bar
2. Explorer Panel (depends on the selected tab in the Navigation Bar displays Food, Exercise, Journal, or Labels view)
3. Today Panel.
4. Progress Chart Panel.



Daily Steps

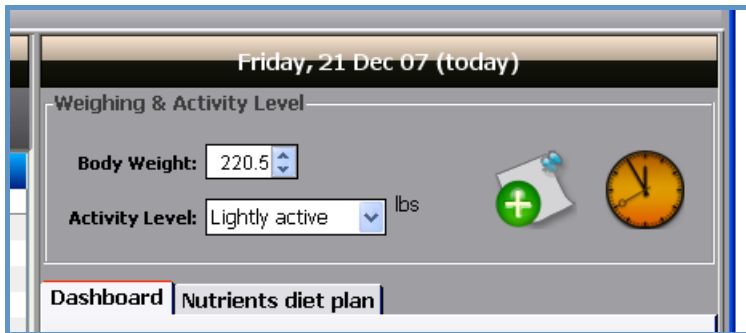
The idea behind the BWMM 2.0 diet manager is that it is a record of the food you eat and the exercise you do. It will also track your weight and measurements over time and provide you with analysis.

Each day you should perform the following steps:

- Input your weight and configure your BMR calculation based on activity level on **Today Panel**. Do not take into account exercises you perform. For example, on weekends you may not be working and therefore may use the weekend primarily for rest. If this is the case, lower your activity level for better BMR estimation.
- Log the foods you eat.
- Log the exercises and activities you perform each day.
- Monitor your total calories balance using the **Dashboard** and the **Budget** diagram on the **Today Panel**
- Make notes into the journal.

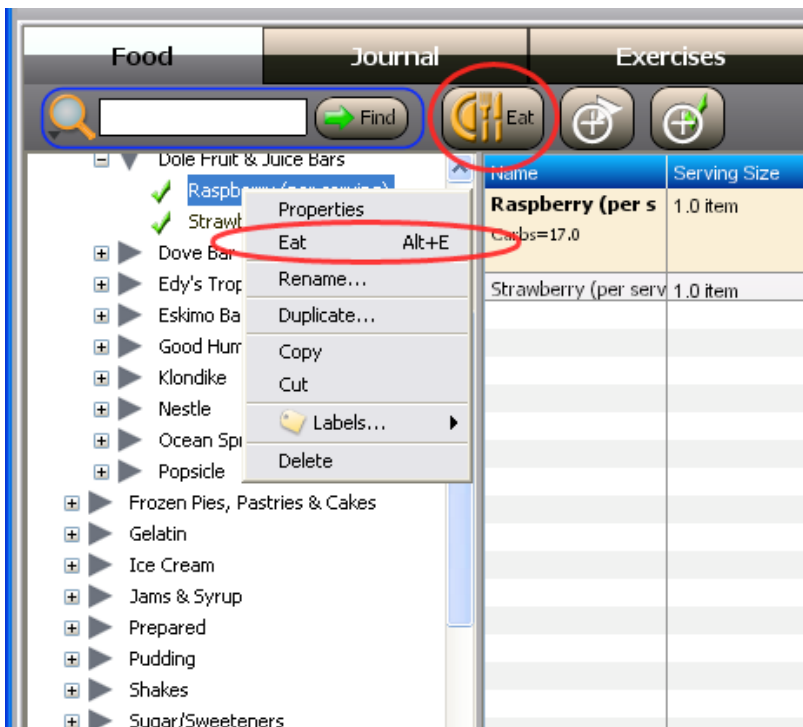
Weighing In

The best time to update your weight is in the morning before breakfast. It is a good practice to weigh in at the same time every day and in the similar body conditions, either with similar clothing or without any. At the end of the day you may want to adjust your activity level according to the actual. Observe how BMR is affected by this change.



Entering Meal

Whatever you eat during the day it should be registered in the daily meal list. To enter meal select **Food** tab in the **Navigation Bar**. BWM comes with a very large and customizable food database. You can select from thousands of standard food items or enter your own items if they do not exist in the database. Select **Eat** in the popup menu or corresponding button in the Food list toolbar for entering meal into to the daily meals list. You can also drag an item and drop it to the daily meals list window.



Tracking Goals

Tracking calories goal

The objective is to get “performance index” gauge pointing at 100% mark as close as possible by the end of each day. The Dashboard is a visual representation of calories and nutrients balances. It gives you an idea of where you are on the way towards the target for the day in a visual form. This panel has two tabs: **Dashboard tab** and **Nutrient diet plan tab**. The calculation of the index percentage is based on the following equation:

$$\text{Performance Index} = 100 * (\text{BMR} + \text{EXERCISE} - \text{MEALS}) / \text{GOAL}.$$

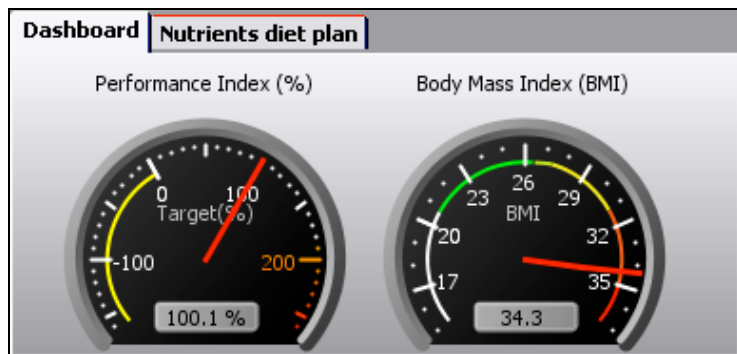
Thus if you have BMR = 2652 calories and have consumed about 1552 calories from meal and your target is to obtain deficit of 1100 cal. per day you are 100% on track for today.

$$\text{Performance Index} = 100 * (2652 + 0 - 1552) / 1100 = 100\%$$

If you consume additional 200 calories, so the total number calories from meals would be 1752:

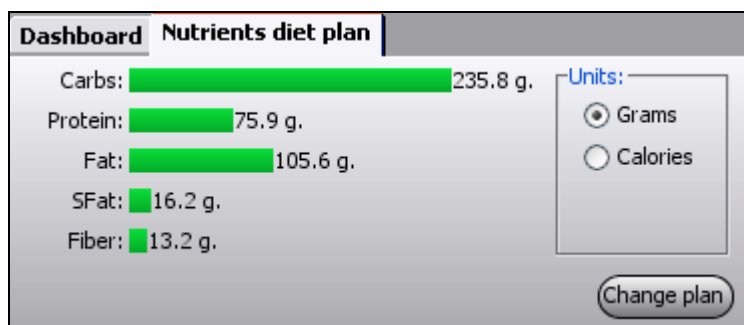
$$\text{Performance Index} = 100 * (2652 - 1752) / 1100 = 81.8\%$$

In this case, you have achieved only 82% of your daily target, therefore you should consider some exercise to get back on track. Think about exercise like speeding up and food like slowing down. This **Performance index** value does not have to be exact 100%. Try to keep it in 85-115% range for the most of the days. In case you missed your target, do not be upset, BWM desktop will automatically recalculate target every new day based on the real body weight you have entered.



Tracking nutrient goal

BWM diet manager allows you to set up your own nutrient diet plan and corresponding nutrient percentages. To define a plan click on **Change Plan** button in the **Nutrients diet plan** tab of the Dashboard Panel.



You can configure BWM to work in combination with any of the popular diet programs: South Beach, Shape Up, Atkins, Zone, etc. For example, to set up BWM to track an Atkins diet, you should select the low carbohydrate diet. You should select **Absolute nutrient values** and manually specify the grams of carbohydrates you are allowed to have depending on the phase of your Atkins diet.

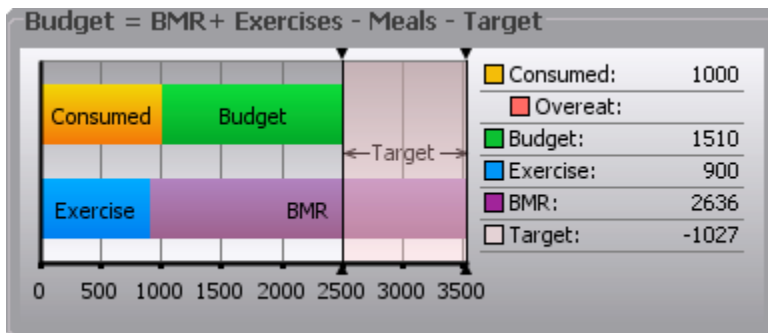
Nutrient Diet Plan	Absolute nutrient values (g.)
<input type="radio"/> No Nutrient Diet Plan	<input checked="" type="checkbox"/> Carbohydrate 54.3 g.
<input checked="" type="radio"/> Proportional to consumed calories	<input checked="" type="checkbox"/> Protein 244.3 g.
<input type="radio"/> USDA Dietary Guidelines	<input checked="" type="checkbox"/> Fat (including S.Fat) 106.2 g.
<input type="radio"/> Low Carbohydrate	<input type="checkbox"/> S.Fat 35.4 g.
<input type="radio"/> Custom Diet Plan	<input type="checkbox"/> Fiber 25.0 g.
<input checked="" type="radio"/> Absolute nutrient values (g.)	

Nutrient targets are calculated from the percentages specified as part of the diet plan. These percentages represent the percent values of calories you will receive from each nutrient. BWM tracks the three nutrients that contribute to total calories of a food item: carbohydrates, protein, and fat.

- 1 gram carbohydrate = 4 calories
- 1 gram protein = 4 calories
- 1 gram fat = 9 calories

Note: Do not expect the total calories published by a food manufacturer to exactly match the calories from the individual nutrients tracked by BWM. Various factors, such as manufacturer averaging of values, etc., can cause discrepancies between the sum of calories from carbohydrates, protein, and fat of a particular food item and the total calories published by a manufacturer.

How to read Budget Chart Diagram



- **Consumed** – amount of calories from meals you have registered with BWM during the day.
- **Budget** – calories from food you should not exceed to stay on track.
- **BMR** – [Basal Metabolic Rate](#) amount of calories your body going to burn by the end of the day excluding exercise.
- **Exercise** – calories expended through exercise in one day.
- **Target** - a calorie deficit that you must obtain each day in order to achieve your weight loss goals (negative number).

The daily budget is defined by the following equation:

$$\text{Budget} = \text{BMR} + \text{Exercise} - \text{Meal} - \text{Target}$$

If you have a calorie deficit each day that is equal to or less than your daily goal, you will reach your weight loss objectives. As long as you run a calorie deficit each day, you will lose weight.

Journal

The **Journal** tab can be used to view past activities, to generate reports and track your overall progress. Please keep in mind, that you can see only dates starting from the beginning of the current diet until the end.

Food	Journal	Exercises	Labels																																				
<div style="display: flex; justify-content: space-between;"> Reports </div>																																							
Diet Summary (3/13/08-3/20/08) Days on diet: 8 days. Weight change: 2.0 lbs. Meals: total: 13444.0 cal. average per day: 1681.0 cal. Exercises: total: 1002.0 cal. average per day: 125.0 cal. Energy Burned : total: 22020.0 cal. average per day: 2752.0 cal. Energy Defecit: total: 9577.0 cal. average per day: 1197.0 cal.		Calendar <table border="1"> <tr> <td>3/13/08</td> <td>Weight: 221.0 lbs</td> <td>Meals: 1636.0</td> </tr> <tr> <td>3/14/08</td> <td>Weight: 220.0 lbs</td> <td>Meals: 2171.0 Exercise: 477.2</td> </tr> <tr> <td>3/15/08</td> <td>Weight: 220.0 lbs</td> <td>Meals: 1417.0</td> </tr> <tr> <td>3/16/08</td> <td>Weight: 220.0 lbs</td> <td>Meals: 1559.0</td> </tr> <tr> <td>3/17/08</td> <td>Weight: 220.0 lbs</td> <td>Meals: 1518.0</td> </tr> <tr> <td>3/18/08</td> <td>Weight: 219.0 lbs</td> <td>Meals: 1695.0</td> </tr> <tr> <td>3/19/08</td> <td>Weight: 219.0 lbs</td> <td>Meals: 1604.0</td> </tr> <tr> <td>3/20/08</td> <td>Weight: 219.0 lbs</td> <td>Meals: 1844.0 Exercise: 524.4</td> </tr> <tr> <td>3/21/08</td> <td></td> <td></td> </tr> <tr> <td>3/22/08</td> <td></td> <td></td> </tr> <tr> <td>3/23/08</td> <td></td> <td></td> </tr> <tr> <td>3/24/08</td> <td></td> <td></td> </tr> </table>		3/13/08	Weight: 221.0 lbs	Meals: 1636.0	3/14/08	Weight: 220.0 lbs	Meals: 2171.0 Exercise: 477.2	3/15/08	Weight: 220.0 lbs	Meals: 1417.0	3/16/08	Weight: 220.0 lbs	Meals: 1559.0	3/17/08	Weight: 220.0 lbs	Meals: 1518.0	3/18/08	Weight: 219.0 lbs	Meals: 1695.0	3/19/08	Weight: 219.0 lbs	Meals: 1604.0	3/20/08	Weight: 219.0 lbs	Meals: 1844.0 Exercise: 524.4	3/21/08			3/22/08			3/23/08			3/24/08		
3/13/08	Weight: 221.0 lbs	Meals: 1636.0																																					
3/14/08	Weight: 220.0 lbs	Meals: 2171.0 Exercise: 477.2																																					
3/15/08	Weight: 220.0 lbs	Meals: 1417.0																																					
3/16/08	Weight: 220.0 lbs	Meals: 1559.0																																					
3/17/08	Weight: 220.0 lbs	Meals: 1518.0																																					
3/18/08	Weight: 219.0 lbs	Meals: 1695.0																																					
3/19/08	Weight: 219.0 lbs	Meals: 1604.0																																					
3/20/08	Weight: 219.0 lbs	Meals: 1844.0 Exercise: 524.4																																					
3/21/08																																							
3/22/08																																							
3/23/08																																							
3/24/08																																							
Selected period: 3/13/08-3/20/08 (8 days.) Weight change: 2.0 lbs. Meals: total: 13444.0 cal. average per day: 1681.0 cal. Exercises: total: 1002.0 cal. average per day: 125.0 cal. Energy Burned : total: 22020.0 cal. average per day: 2752.0 cal.																																							

The section **Diet Summary** contains up-to-date information about total and average-per-day calories consumption and spending. To view detailed information for a certain day, click on desired date in **Calendar** panel. Using **Calendar** panel you can also get information for selected period of time. To make the selection click on desired start date and drag the mouse pointer to the end date.

Use **Report** button to generate report for selected date. It will be opened in html format in the new browser window.

Labels

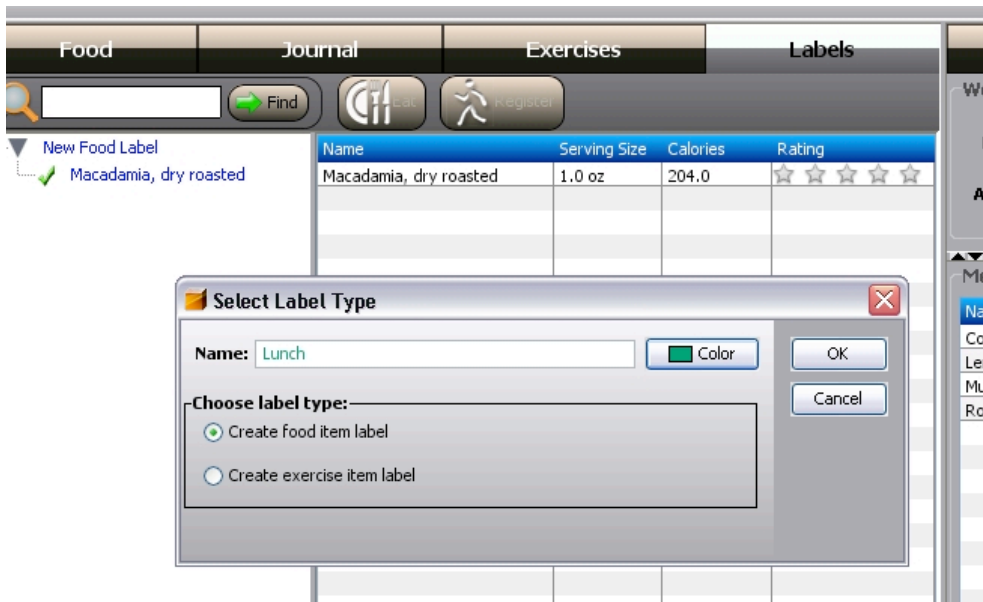
What are BWM Labels?

BWM Labels are links to food items you eat frequently or exercise that you perform often. By adding an item to your labels list, you can register it by simply clicking its name in the Labels view, instead of having to search through complete hierarchy of the food or exercises.

Labels tab in the **Navigation Bar** allows organizing your items into labeled groups that are meaningful to you. For example, you might create one group labeled as “Breakfast” items and another group labeled as “Snacks”.

Steps to create a new label or edit existing one

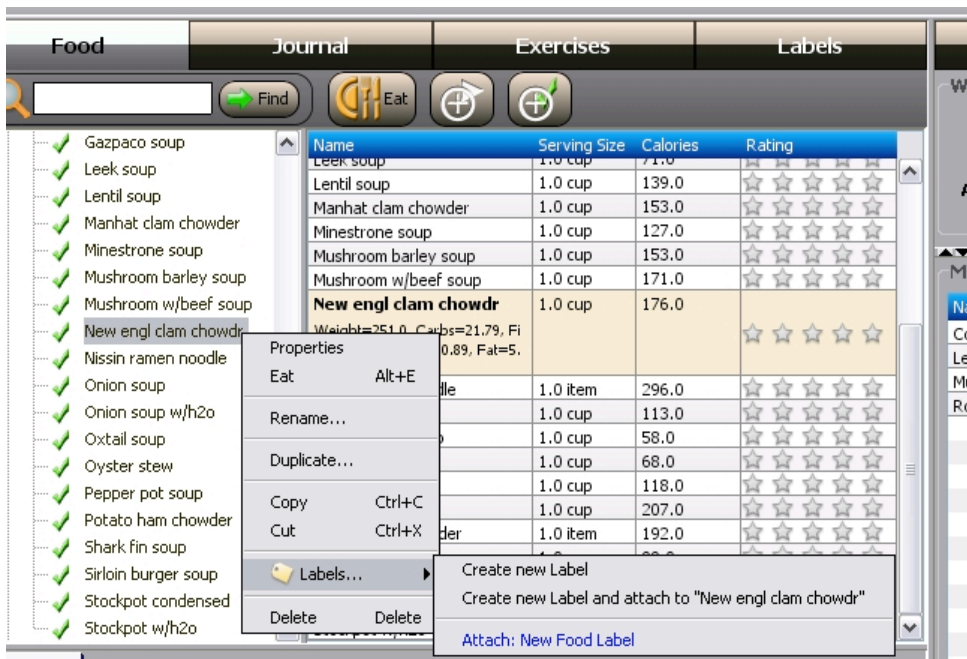
1. In the Labels view, select a label to edit and right click on it to call the context menu. If you want to add a new label, simply right click on empty space.
2. The **New label** dialog box or **Edit** dialog will open.



Fill in Label's name, pick a color choose type and click OK to save changes.

To add a food or exercise item to a labeled group

1. In the **Food or Exercise** view right click on the item and select Labels from context menu.



2. To add an item to the existing group select **Attach :< Name of the group>**.
3. To create a new label and add the current item to a newly created group click **Create new label and attach to <selected item>**.

Food

Consuming food adds calories to your daily energy balance. Select "Food" tab to activate Food Explorer view. For your convenience there is tool bar at the top of the panel. Toolbar's controls are designed to manage food items and hierarchy structure. You can use search control to quickly find food by any part of the name. Other buttons allows adding

Editing cooked, dry heat

Category: Fish, Shellfish & Seafood/Fresh Finfish/Cod/... This foo

Rating: ★★★★★

Name: cooked, dry heat

Serving Size: 172 g = 1.0 item

Calories: 180.6 **Protein:** 39.3

Carbs: 0.0 **Fat:** 1.5

Fiber: 0.0 **S.Fat:** 0.3

Comments:

Cholesterol: 10.0 mg

Buttons: Eat, Restore, Save

Category – Shows location in the food catalog. It is read-only.

Rating – You can rate a food item. Select rating by clicking on star-bar.

Name – Name of the food item as it appears in the food catalog.

Serving Size – Select amount and units enter alternative measurements if you wish.

Nutrition Facts – Regular nutrition facts: calories, carbohydrates, fiber, proteins, fat/saturated fat. Enter nutrition facts per serving.

Comments – you can add your comment on food item here. It is for you reference only and does not affect balance.

Custom Properties – You can add any custom property and its balance will be calculated for you along with calories and other regular nutrient parameters. Click on “+” sign and fill the name of the new property, units of measure and value.

You can restore original properties values by clicking “Restore” unless you click on “Save” button.

After you finish editing, click on “Save” to update item properties in food catalog. If you close properties window without saving, changes will be discarded.

Import/Export

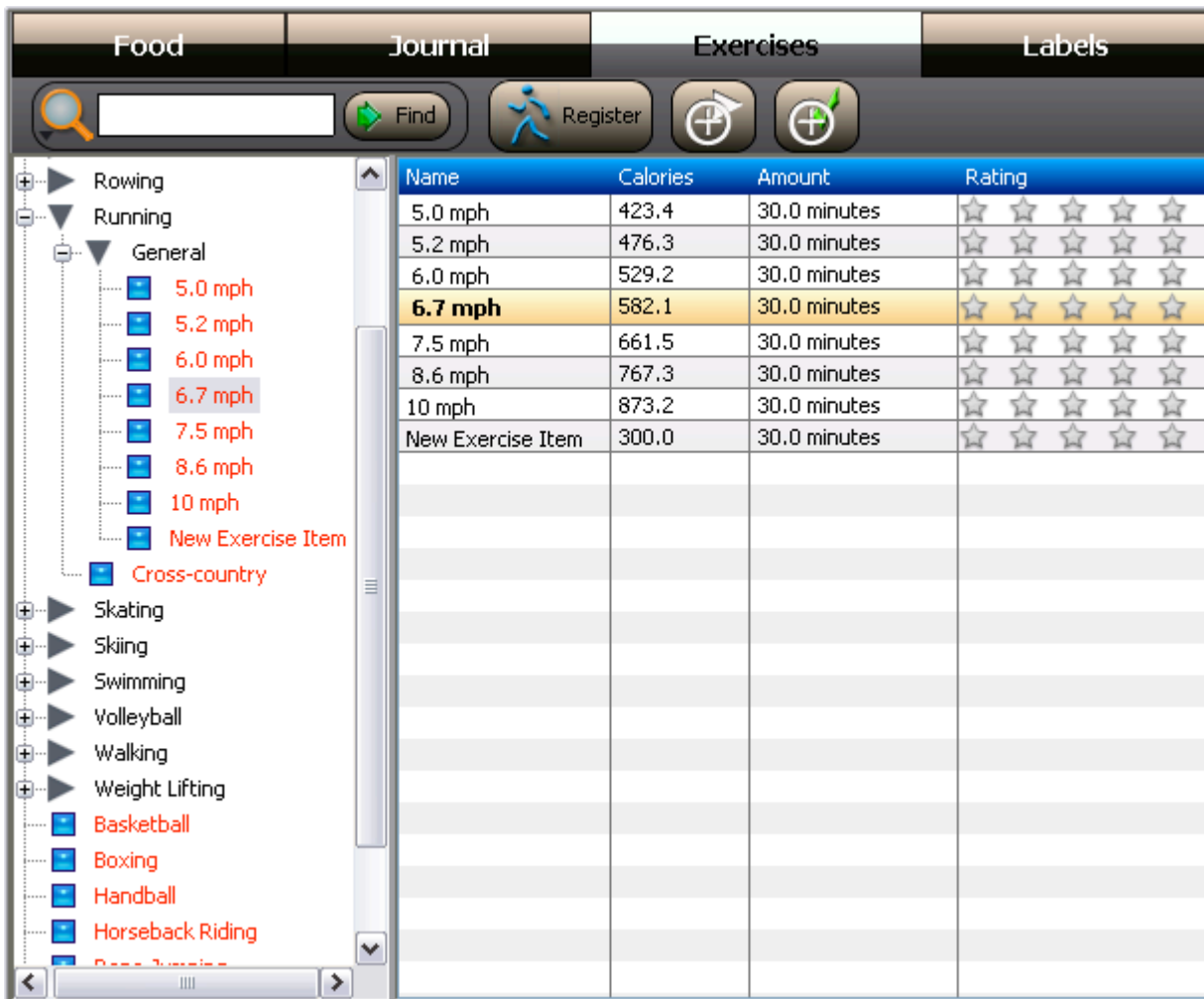
Any particular category or set of categories can be exported into a file. This file can be imported into another instance of BWM application. This feature is helpful to backup data, share food data between users or transfer data to another account. Select categories to export; right click; choose export or import; browse for file or enter the file name.

Exercises

Performing exercises helps to expend calories in addition to [BMR](#) value. To activate Exercise Explorer view select "Exercises" tab in the **Navigation bar**.

Managing exercises hierarchy.

All exercise items are grouped by category.



The screenshot shows the Exercise Explorer interface with four tabs: Food, Journal, Exercises, and Labels. The Exercises tab is active. The interface includes a search bar, a 'Find' button, a 'Register' button, and two buttons with plus signs. The left pane shows a tree view of exercise categories: Rowing, Running (General, 5.0 mph, 5.2 mph, 6.0 mph, 6.7 mph, 7.5 mph, 8.6 mph, 10 mph, New Exercise Item), Cross-country, Skating, Skiing, Swimming, Volleyball, Walking, Weight Lifting, Basketball, Boxing, Handball, and Horseback Riding. The right pane shows a table of exercise items.

Name	Calories	Amount	Rating
5.0 mph	423.4	30.0 minutes	☆☆☆☆
5.2 mph	476.3	30.0 minutes	☆☆☆☆
6.0 mph	529.2	30.0 minutes	☆☆☆☆
6.7 mph	582.1	30.0 minutes	☆☆☆☆
7.5 mph	661.5	30.0 minutes	☆☆☆☆
8.6 mph	767.3	30.0 minutes	☆☆☆☆
10 mph	873.2	30.0 minutes	☆☆☆☆
New Exercise Item	300.0	30.0 minutes	☆☆☆☆

Using Exercise Explorer, you can copy, move, rename, and search for exercise items or categories.

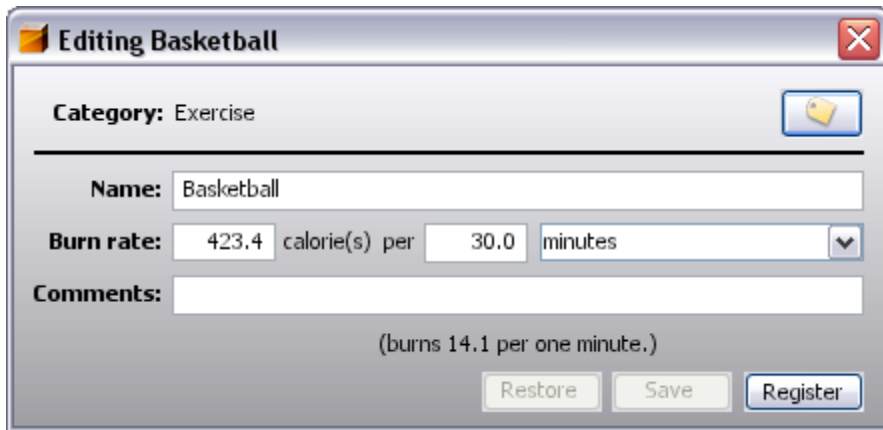
Creating new exercise item

Right click on the exercise catalog where new a category or item should be added and select "New Exercise Item".

You can also use  button in the toolbar.

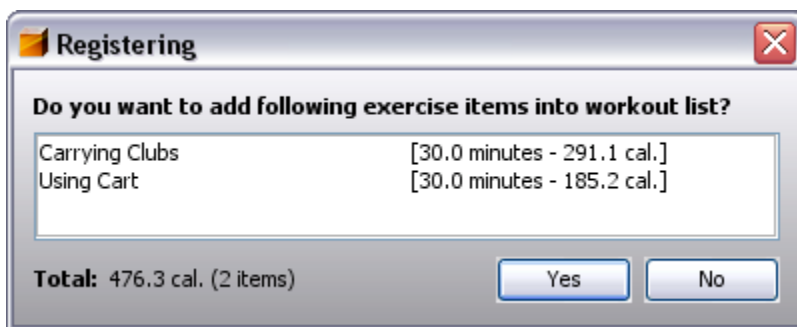
Changing exercise item's properties

Select "Properties" in the context menu. Use the following dialog to edit Name, Burn rate, Units or add comments.



Registering exercise items

To register an exercise click on "Register" button in the tools bar, or double click on exercise item, or select "Register" in the context menu of this item. One or more selected exercise items can be added into the Daily List at one time. In case when only one item is selected, "Registering" dialog allows you to adjust workout value of this item.



What are basal and resting metabolic rates?

BMR and RMR

These two terms are used interchangeably, although they are not technically the same. Resting metabolic rate is really, what most lay people mean when they say basal metabolic rate. Resting metabolic rate is the energy required by a human to stay alive with no activity. Your real metabolic rate is always significantly higher than your RMR. Calculating RMR is a very useful first step in calculating your real metabolic rate.

Your metabolic rate = your resting metabolic rate (easy to calculate reasonably accurately) + energy consumed by your daily activities (must guesstimate).

For the vast majority of people, resting metabolic rate can be calculated knowing a few key variables. They are age, sex, weight, and height.

Calculating your basal metabolic rate (BMR)

You take a certain percentage of your RMR and add that to the RMR, giving your total estimated metabolic rate.

Table 1

Activity Level	Men	Women
<u>Sedentary</u> (inactive)	15%	15%
<u>Lightly Active</u> (most professionals, office workers, shop workers, teachers, homemakers)	40%	35%
<u>Moderately active</u> (workers in light industry, most farm workers, active students, department store workers, solders not in active service, commercial fishing workers)	50%	45%
<u>Very active</u> (full-time athletes and dancers, unskilled laborers, forestry workers, military recruits in training, soldiers in active service, mineworkers, steel workers)	85%	70%
<u>Exceptionally active</u> (lumberjacks, blacksmiths, female construction workers)	110%	100%