NUTRIADDER MANUAL

Nutriadder – User Manual

1. Introduction

"Nutriadder" is similar to other nutrition software for nutrition analysis for the diet with an added advantage of giving not only the nutrient values but also the pyramid food group values for the Diet

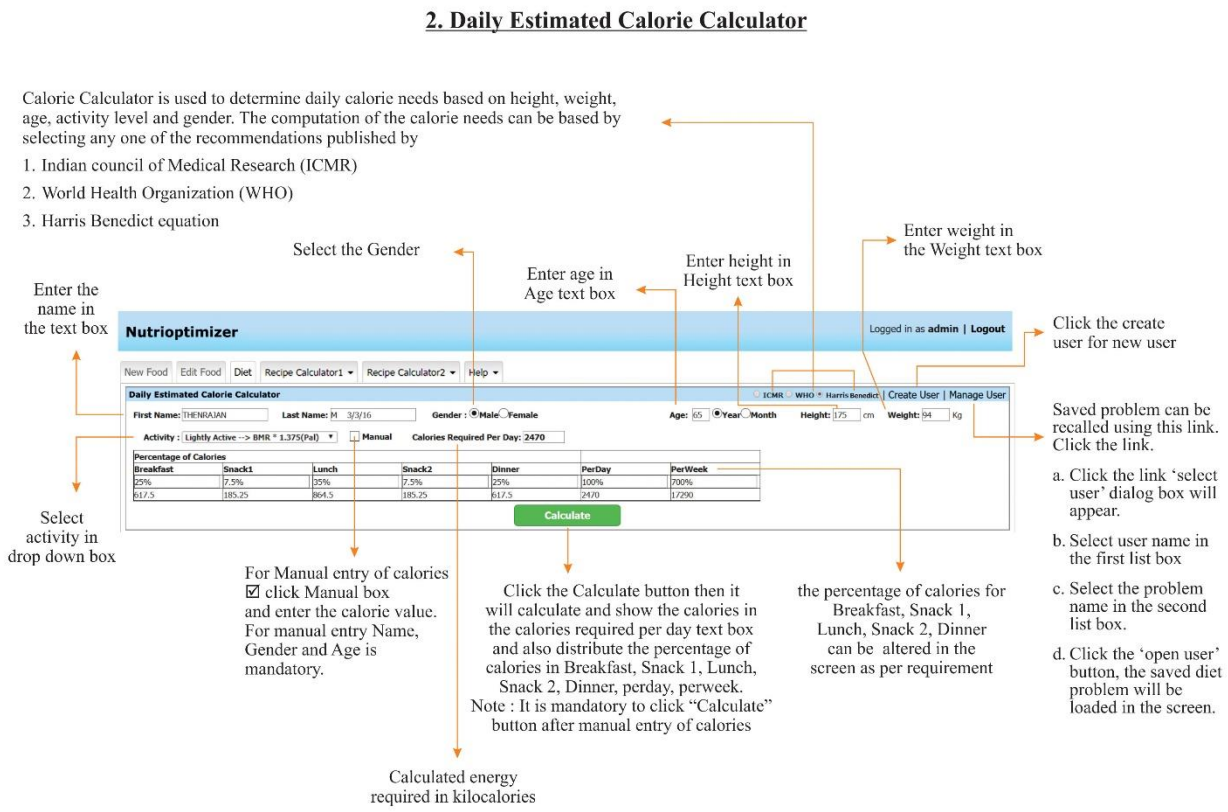
Dietary Guidelines are a translation of scientific knowledge on nutrients into specific Dietary Guidelines (Based on Recommended Pyramid Food Group Values). They represent the Recommended Dietary Allowances of Nutrients in terms of Pyramid Food Groups that should be consumed.

The "Nutriadder" shows your Pyramid Food Group targets – what and how much to eat within your calorie allowances.

An adequate diet, providing all nutrients is needed throughout our lives. The nutrients must be obtained through a choice and combination of a variety of food stuffs from different Pyramid Food Groups (within the recommended value of Pyramid Food Groups.)

As Pyramid Food Group is essential to follow the Food Guidelines these Food Group Values are included in 'Nutriadder' to design a balanced diet.

2. Daily Estimated Calorie Calculator



Introduction:

Calorie calculator is used to determine daily calorie needs based on Height, Weight, Age, Activity level and Gender. The computation of the calorie needs can be based on recommendations published by

2.1 Indian Council Of Medical Research (ICMR),
2.2 World Health Organization (WHO) or
2.3 Harris Benedict Equation

The procedure for using the Calorie Calculator for each recommendation is detailed below:

2.1 ICMR based Calorie Calculator:

1.Select "ICMR" radio button

2.Enter "First Name" and "Last Name" in the respective text boxes.

3. Select the Gender in the "Gender" box

In case of female, if relevant select “Pregnant Woman” or “ Lactating Woman” in the dropdown box next to “Female”

4. Enter Age in “Age” text box

5. Enter Height in “Height” text box

6. For Age 0 – 12 month & 1 – 18 year ; system will display the weight automatically in Weight Text Box.

For the Age above 18 years enter weight

7. Select activity level in the “Activity” dropdown box

7.1.1.If Age is selected between 0 to 12 month

No activity will be displayed in “Activity” dropdown box. (i.e. there is no need to select the activity level)

7.1.2.For Age 1- 5 years – only “Moderate Activity” is displayed in activity drop down box.

7.1.3. Select “Moderate Activity”

7.1.4. For age 6 – 18 years three activity levels are displayed i.e.

a) Sedentary Activity

b) Moderate Activity

c) Heavy Activity

For age above 18 three activity levels are displayed i.e.

a)Sedentary work

b) Moderate work

c) Heavy work

Select the appropriate activity level

8. Click the “Calculate” button then user can see the “Calorie value” in the “Calories required per day” text box.

The “Percentage of Calories” table appears displaying the default values in the respective column for “ Breakfast”, “Snack 1”, “Lunch”, “Snack2”, “Dinner”, “Per day”, and “Per week”.

The percentage of calories displayed on the screen for “ Breakfast”, “Snack 1”, “Lunch”, “Snack2”, “Dinner” can be altered by the user as per the requirement.

2.2 WHO based Calorie Calculator

1. Select “WHO” radio button
2. Enter first name and last name in respective text boxes “First Name” and “Last Name”
3. Select the “Gender”
   In case of female, if relevant select “Pregnant Woman” or “ Lactating Woman” in the dropdown box next to “Female”
4. Enter Age in “Age” text Box
5. Enter “Height”
6. For Age 0 – 12 month & 1 – 18 year ; system will display the weight automatically in Weight Text Box.
   For the Age above 18 enter weight

7. Select activity level in the “Activity” dropdown box

7.1.1. If Age is selected between 0 to 12 month

No activity will be displayed in “Activity” dropdown box. (i.e. there is no need to select the activity level)

7.1.2. For Age 1- 5 years – only “Moderate Activity” is displayed in activity drop down box.

7.1.3. Select “Moderate Activity”

7.1.4. For Age 6 – 18 years three activity levels are displayed i.e.

a) Light Activity

b) Moderate Activity

c) Heavy Activity

7.1.5. For Age above 18 years six activity levels are displayed i.e.

a) Sedentary

b) Lightly Active

C) Active

d) Moderately Active

e) Vigorous Active

f) Vigorously Active

Select the appropriate activity level

8. Click the “Calculate” button then user can see the “Calorie value” in the “Calories required per day” text box.

The “Percentage of Calories” table appears displaying the default values in the respective column for “Breakfast”, “Snack 1”, “Lunch”, “Snack2”, “Dinner”, “Per day”, and “Per week”.

The percentage of calories displayed on the screen for “Breakfast”, “Snack 1” , “Lunch” , “Snack2”, “Dinner” can be altered by the user as per the requirement.

2.3 Harris Benedict Equation based Calorie Calculator

1. Select “Harris Benedict” radio button
2. Enter first name and last name in respective text boxes “First Name” and “Last Name”
3. Select the “Gender”
   In case of female, if relevant select “Pregnant Woman” or “ Lactating Woman” in the dropdown box next to “Female”
4. Enter Age in “Age” text Box

   For Age 0-3 years, normally Harris Benedict Equation is not used.

   For 3 to 70 years only Harris Benedict Equation used.

5. Enter “Height”

6. Enter the “Weight”.

7. Select Activity level in the activity dropdown box.

   1. Sedentary

   2. Lightly Active

   3. Moderately Active

   4. Very Active

   5. Extremely Active

Click the “Calculate” button then user can see the “Calories” in the “Calories required per day” text box.

The “Percentage of Calories” table appears displaying the default values in the respective column for “ Breakfast”, “Snack 1” , “Lunch” , “Snack2”, “Dinner” , “Per day” , and “Per week”.

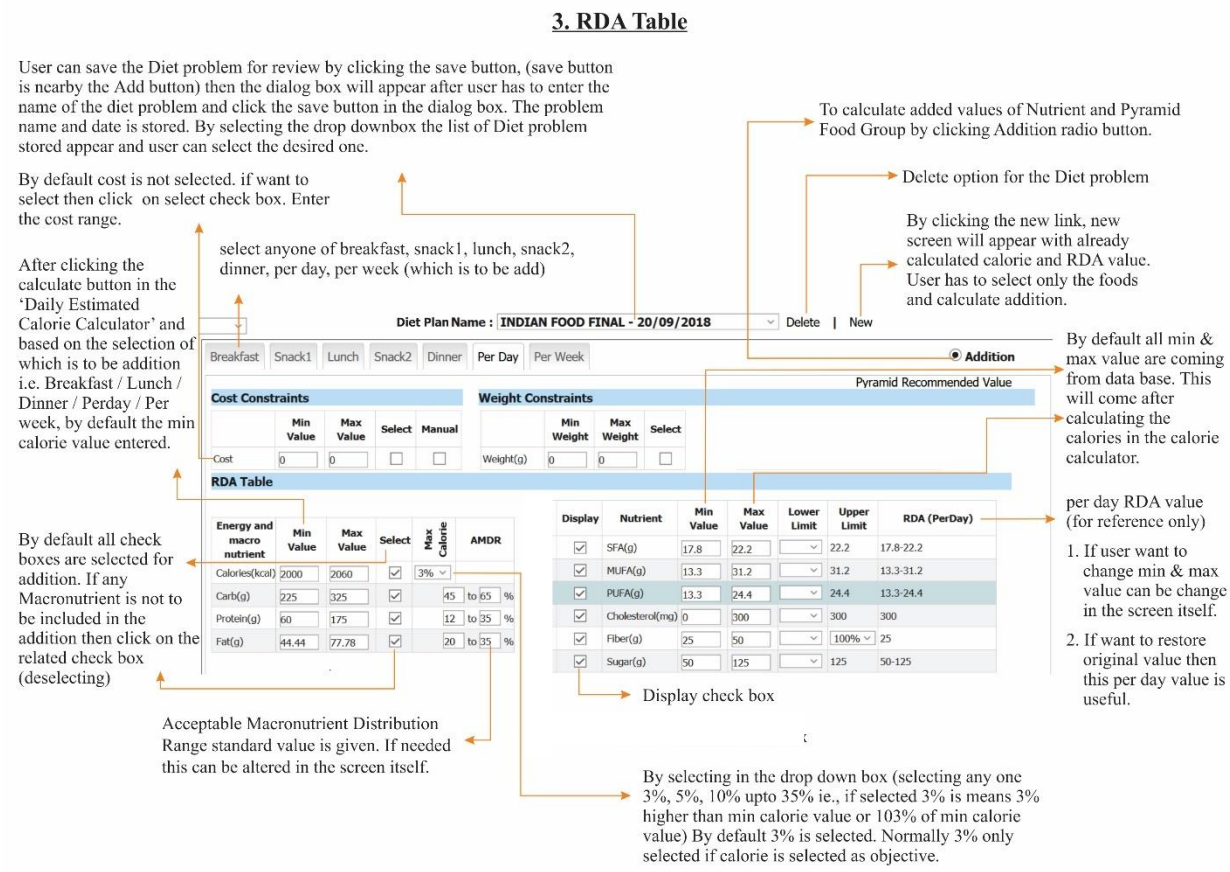
The percentage of calories displayed on the screen for “ Breakfast”, “Snack 1” , “Lunch” , “Snack2”, “Dinner” can be altered by the user as per the requirement.

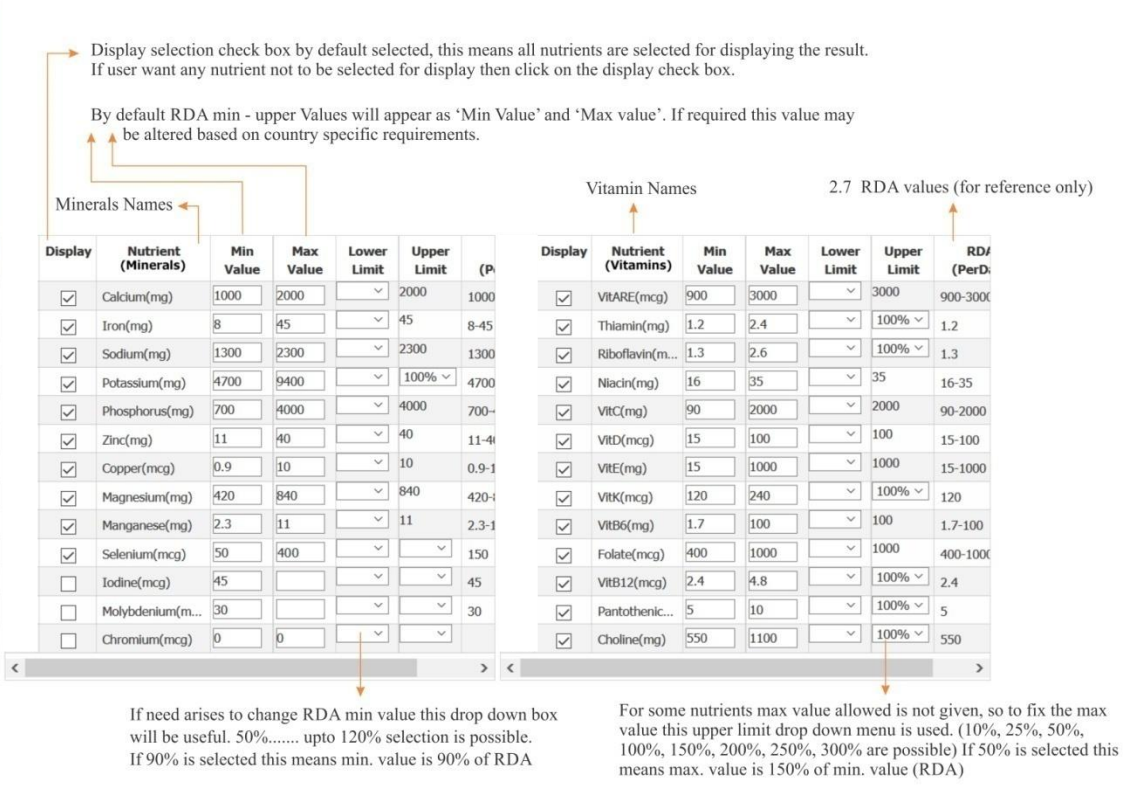
2.4 Manual setting of calories

Click the check box “Manual”, then enter the required calorie values in the “Calories required Per day” text box. It is mandatory to click “Calculate” button after the manual entry of calories.

Note: For using the “Manual” mode, data entry in text boxes of “Age, Gender, First Name and Last Name” and selection of any one of “ICMR, WHO, Harris Benedict” are mandatory for appropriate display of Nutrient values in RDA Table.

3. RDA table


3. RDA Table
User can save the Diet problem for review by clicking the save button, (save button is nearby the Add button) then the dialog box will appear after user has to enter the name of the diet problem and click the save button in the dialog box. The problem name and date is stored. By selecting the drop downbox the list of Diet problem stored appear and user can select the desired one.
To calculate added values of Nutrient and Pyramid Food Group by clicking Addition radio button.
Delete option for the Diet problem
By clicking the new link, new screen will appear with already calculated calorie and RDA value. User has to select only the foods and calculate addition.
By default cost is not selected. if want to select then click on select check box. Enter the cost range.
select anyone of breakfast, snack1, lunch, snack2, dinner, per day, per week (which is to be add)
After clicking the calculate button in the 'Daily Estimated Calorie Calculator' and based on the selection of which is to be addition i.e. Breakfast / Lunch / Dinner / Perday / Per week, by default the min calorie value entered.
Diet Plan Name : INDIAN FOOD FINAL - 20/09/2018
Delete | New
Breakfast Snack1 Lunch Snack2 Dinner Per Day Per Week
Addition
Pyramid Recommended Value
By default all min & max value are coming from data base. This will come after calculating the calories in the calorie calculator.
Cost Constraints
Min Value Max Value Select Manual
Cost 0 0
Weight Constraints
Min Weight Max Weight Select
Weight(g) 0 0
RDA Table
Energy and macro nutrient Min Value Max Value Select Max Calorie AMDR
Calories(kcal) 2000 2060 3%
Carb(g) 225 325 45 to 65 %
Protein(g) 60 175 12 to 35 %
Fat(g) 44.44 77.78 20 to 35 %
Display Nutrient Min Value Max Value Lower Limit Upper Limit RDA (PerDay)
SFA(g) 17.8 22.2 22.2 17.8-22.2
MUFA(g) 13.3 31.2 31.2 13.3-31.2
PUFA(g) 13.3 24.4 24.4 13.3-24.4
Cholesterol(mg) 0 300 300 300
Fiber(g) 25 50 100% 25
Sugar(g) 50 125 125 50-125
per day RDA value (for reference only)
1. If user want to change min & max value can be change in the screen itself.
2. If want to restore original value then this per day value is useful.
By default all check boxes are selected for addition. If any Macronutrient is not to be included in the addition then click on the related check box (deselecting)
Display check box
Acceptable Macronutrient Distribution Range standard value is given. If needed this can be altered in the screen itself.
By selecting in the drop down box (selecting any one 3%, 5%, 10% upto 35% ie., if selected 3% is means 3% higher than min calorie value or 103% of min calorie value) By default 3% is selected. Normally 3% only selected if calorie is selected as objective.



Display	Nutrient (Minerals)	Min Value	Max Value	Lower Limit	Upper Limit	(P
☑	Calcium(mg)	1000	2000		2000	1000
☑	Iron(mg)	8	45		45	8-45
☑	Sodium(mg)	1300	2300		2300	1300
☑	Potassium(mg)	4700	9400		100%	4700
☑	Phosphorus(mg)	700	4000		4000	700-
☑	Zinc(mg)	11	40		40	11-4
☑	Copper(mcg)	0.9	10		10	0.9-1
☑	Magnesium(mg)	420	840		840	420-
☑	Manganese(mg)	2.3	11		11	2.3-1
☑	Selenium(mcg)	50	400			150
☐	Iodine(mcg)	45				45
☐	Molybdenium(m...	30				30
☐	Chromium(mcg)	0	0			

Display	Nutrient (Vitamins)	Min Value	Max Value	Lower Limit	Upper Limit	RDA (PerD
☑	VitARE(mcg)	900	3000		3000	900-3000
☑	Thiamin(mg)	1.2	2.4		100%	1.2
☑	Riboflavin(m...	1.3	2.6		100%	1.3
☑	Niacin(mg)	16	35		35	16-35
☑	VitC(mg)	90	2000		2000	90-2000
☑	VitD(mcg)	15	100		100	15-100
☑	VitE(mg)	15	1000		1000	15-1000
☑	VitK(mcg)	120	240		100%	120
☑	VitB6(mg)	1.7	100		100	1.7-100
☑	Folate(mcg)	400	1000		1000	400-1000
☑	VitB12(mcg)	2.4	4.8		100%	2.4
☑	Pantothenic...	5	10		100%	5
☑	Choline(mg)	550	1100		100%	550

By default all the minimum and maximum values in the RDA are taken from the Data base and displayed in the RDA table after calculating the calories in the calorie calculator.

3.1 Selecting the Diet Plan

From the RDA table user can see the tab for "Breakfast,Snack1,Lunch,Snack2,Dinner, Per Day, Per Week".

Decide for which the diet is to be analysed by selecting anyone of "Breakfast/Lunch/Dinner/Per Day/Per Week". If per day is selected for added click on 'Per Day'. According to the selection by default the calorie values and nutrient values will be displayed in the RDA table.

3.2 Cost

Above the RDA table user can see the cost constraint selection option. By default “Cost” is not selected, if cost is to be included as a constraint, click on check box and enter the cost range and also enter the price for the selected foods. In the Result Table the total cost of the “Diet Plan” is arrived.

3.3. Weight

If Total Weight of the Foods in the Diet Plan is to be calculated, then click on ‘Select’ check box in the Weight Constraint Table and enter the Min Weight & Max Weight in the text boxes. In the Result Table ‘Total Weight’ of the Foods in the Diet Plan is arrived.

3.4 RDA values for Macro & Micro nutrients

3.4.1 Kilocalorie values

Based on the selection of Diet for Breakfast, Lunch, Dinner, Per day, Per week (Ref Sec.2) the required "Minimum value" of calorie is displayed in the RDA table.

The "Minimum value" of calorie is taken from the result given by "Daily Estimated Calorie Calculator".

3.4.2 Setting the "Maximum value" of Calories, min & max values of Macronutrients

Select the desired percentage of calories required more than the "Minimum value" using the drop down menu.(Select 3% or 5% or 10% up to 35% and if 3% selected means 3% higher than min calorie value i.e., 103% of min calorie value. By default 3% is selected.)

By default the three macronutrient Min & Max values in 'Grams' are calculated as per the AMDR's Min and Max percentages. "AMDR Min and Max percentages" displayed by default.

As per country wise the AMDR will vary, so the percentage changing option is given in the screen itself. The percentage can be changed for country wise variation.

By default all the computed values of Macronutrients, Minerals and Vitamins, SFA, MUFA, PUFA, Cholesterol, Fiber, Sugar will appear on the RDA table, after calculating kilocalories in Daily Estimated Calorie Calculator.

3.4.3 Setting "Upper limit"

1. Fiber
2. Potassium
3. Thiamin
4. Riboflavin
5. Vitamin K
6. Vitamin B12
7. Pantothenic acid
8. Choline

For above nutrients upper limit value allowed is not given by RDA standards, so for fixing the max value the 'upper limit dropdown box' is used i.e. from any one 10%, 25%, 50%, 100%, 150%, 200%, 250%, 300% is selected. Normally by default 100% more than RDA min value is selected. (i.e. 200% of RDA min value)

3.4.4 Setting "Minimum value" of micronutrients if needed

To allow changing of the "Minimum value" of micronutrients based on country specific RDA an option is provided to alter the value in the Minimum value cell of each micronutrient.

If need arises to change RDA min value this dropdown box will also be useful. From 50% to 120% selection is possible. If 90% selected this means min value is 90% of RDA.

3.4.5 RDA (Breakfast/Snack1/Lunch/Snack2/Dinner/Per Day/Per Week – Reference)

This column displays the recommended dietary allowances for Micronutrients as per US- Institute of Medicine, for reference purpose only.

RDA (Lunch) means for lunch RDA Requirement. This is fixed by the percentage for lunch calories (i.e. 35% of per day calories). The micronutrient requirement of lunch calculated as 35% of RDA

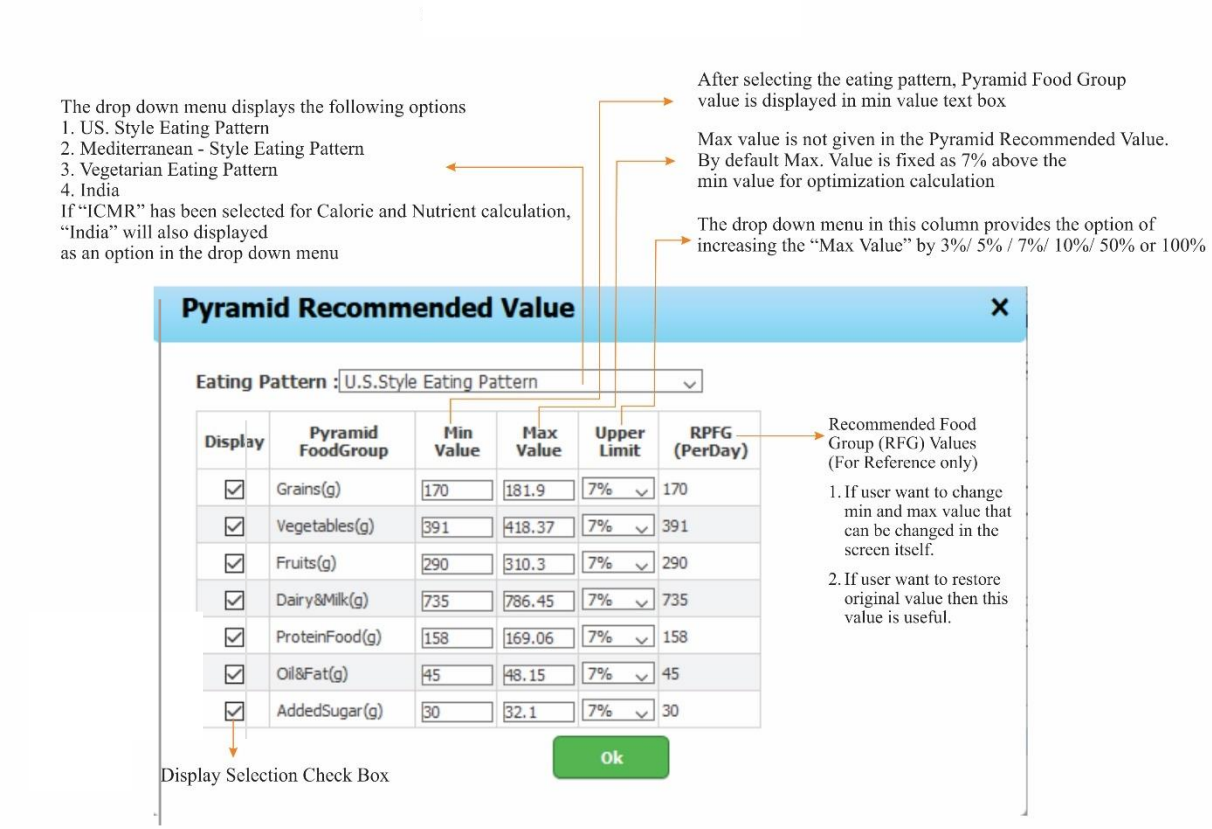
3.4.6 Selection of display

Selection of Nutrients for "display" in the "Result" can be made by clicking the checkbox in the "Display" column.

By default all Nutrient are selected for display.

Note: Display of only important/selected Nutrients is possible because of the above selection option.

4. Pyramid Food Group Recommended Value



Eating an appropriate mix of foods from the food groups and subgroups— within an appropriate calorie level—is important to promote health. Each of the food groups and their subgroups provides an array of nutrients, and the amounts recommended reflect eating patterns that have been associated with positive health outcomes. Foods from all of the food groups should be eaten in nutrient-dense forms. Food group recommended values have been taken from Indian guidelines (National Institute of Nutrition) and Dietary Guidelines for Americans -2015-2020(USDA).

American guidelines given in Ounce / Cup equivalent have been converted into grams.

The USDA Food Patterns are designed to meet food group and nutrient recommendations while staying within calorie needs. To achieve this goal, the Patterns are based on consuming foods in their nutrient-dense forms (i.e., without added sugars and in the leanest and lowest fat forms). For nearly all calorie levels, most of the calories in the USDA Food Patterns are needed for nutrient-dense food choices, and only a limited number remain for other uses. These calories are indicated in the USDA Food Patterns as "limits on calories for other uses." In Nutrioptimizer the "Limit on Calories for Other Uses" have been allocated as 45% of calories from added sugars and 55% of calories from solid fats.

In the Addition Software the “Pyramid Recommended Value” link is displayed above the “Weight Constraints” table.

On selecting the link “Pyramid Recommended Value” a table will be displayed.

4.1 “Eating Pattern” dropdown box:

The drop down menu displays the following options and user can select any one as per the requirement.:

- US Style Eating Pattern
- Mediterranean – Style Eating Pattern
- Vegetarian Eating Pattern
- If “ICMR” has been selected for Calorie & Nutrient Calculation, “India” will be selected as an option in the drop down menu

4.2 Pyramid Food Groups

The “Pyramid Food Groups” are:

1. Grains
2. Vegetables
3. Fruits
4. Dairy & Milk
5. Protein Food
6. Oil & Fat
7. Added Sugar

4.3 Min Value

The food group value is displayed in grams under this column based on the chosen guide lines (India or USDA - US Style Eating Pattern/ Mediterranean – Style Eating Pattern / Vegetarian Eating Pattern).

4.4 PRFG (per day)

In the Pyramid Recommended Value table the option for changing the Min & Max value in the table itself is given. This option will be useful for slight changes where cup to gram conversion errors or for the changes for the country wise / region wise.

While the user change the min value in the Recommended Food Group table then the standard reference is given in the last column as PRFG (Per Day) column.

4.5 Display

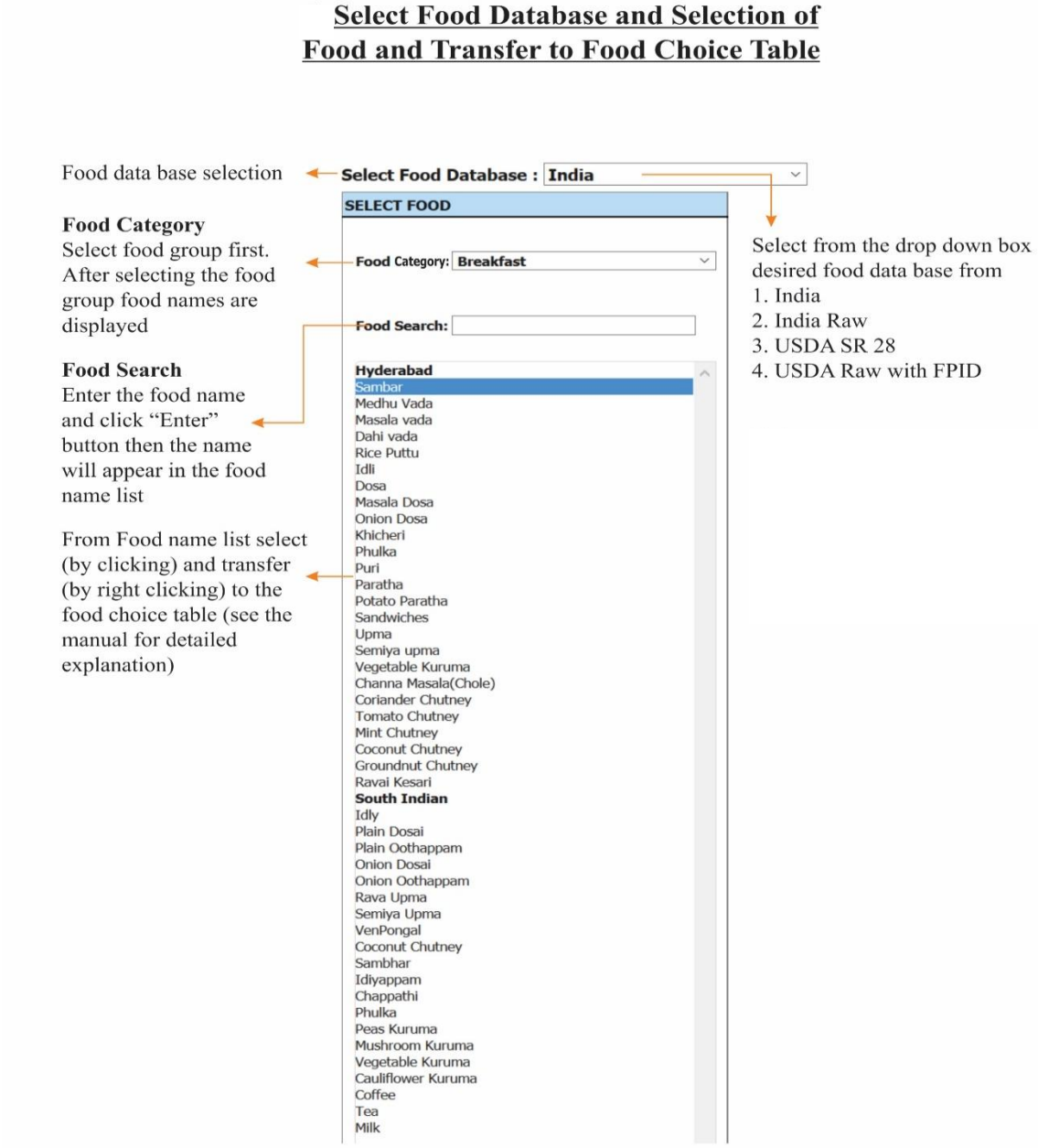
Selection of Pyramid Food Group for “Display” in the “Result Table” can made by clicking the check box in the “Display” Column

By default all the pyramid Food Group are selected for display, If any Pyramid Food Group is not needed then deselect by clicking the checkbox.

4.6 Pyramid Food Subgroups:

Food Sub Groups are not included in the software, but while selecting the foods consider subgroups and according to the Guideline recommendation for the Subgroups, the foods have to be selected. Then only the nutrient constraints will be satisfied. For example the vegetables group has five subgroups i.e. 1 Dark Green vegetables, 2. Red and Orange vegetables, 3. Legumes (Beans and Peas), 4. Starch Vegetables, 5 Other Vegetables. Recommended subgroup values are given in the Dietary Guidelines. Though not included in our software user has to select foods & their quantity considering the Dietary Guideline values of Sub Groups. Then only the nutrients values can be achieved.

5. Select Food Database and Selection of Food and Transfer to Food Choice Table



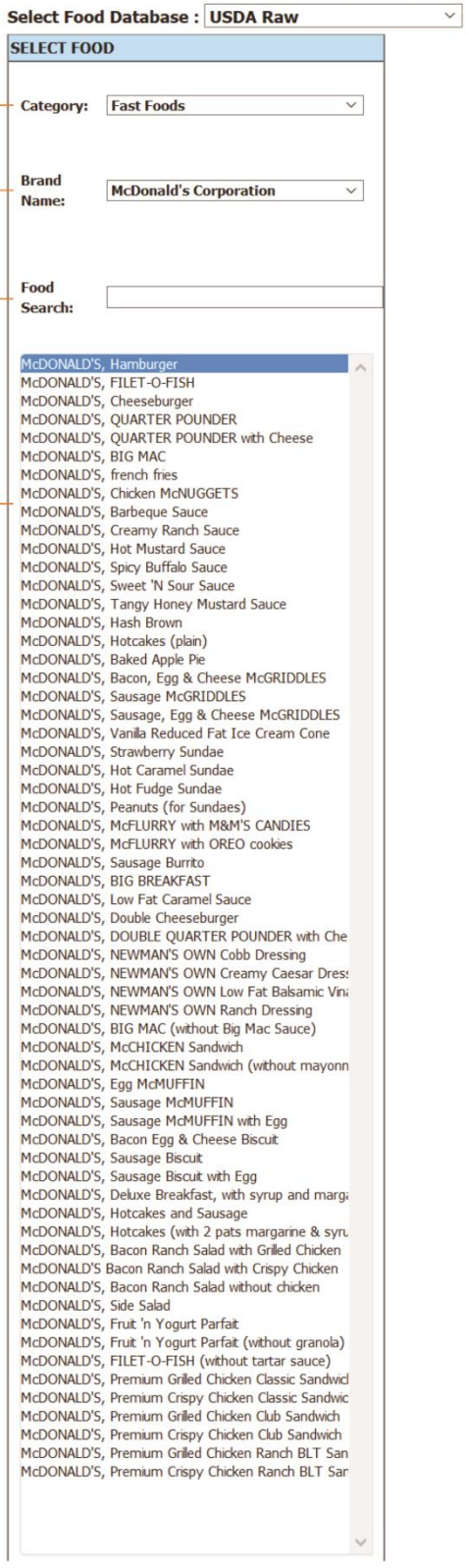
Select Food USDA

Category :
Select the category name from the category name menu list

Brand Name :
If Brand Name is there for that category name user can select the Branded Name (i.e, the manufacturer name.)

Food Search
Enter the food name and click "Enter" button then the name will appear in the food name list

From Food name list select (by clicking) and transfer (by right clicking) to the food choice table (see the manual for detailed explanation)



5.1 Select Food Database

Select preferred Food Database from the drop down menu:

- India (Database for Foods and the data includes Nutrients and Food Groups)
- USDA SR28(Nutrients only)
- India Raw – Nutrients and Food Groups
- USDA Raw with FPID

Note: USDA FPID includes Food Groups & Sub Groups. In our database only major food group values are included. The Cup equivalent and ounce equivalent has been converted into grams (conversion of cup equivalent is approximate). For accurate results it is preferable to use Pyramid food group data derived from Recipe calculator

A custom Data base which includes Nutrient and Pyramid Food group values can be built using the Recipe Calculator.

Also, Food database from any other source which contains Nutrient and Pyramid Food groups can be added using the "New Food" tab at the top of the screen.

Bulk Food Databases can also be imported using the 'Import Food Data' tab at the top of the screen.

5.2 Select the food category for India

Select food category combo box first then the food category food names are displayed, (Breakfast, Lunch, Dinner, Snacks, Supplementary food, Fruits, Leafy vegetables). From Food category names select the needed one. After selecting the food category name the food list is displayed in the food list box.

5.3 Select the food 'Category' for USDA SR28 Database

Select food category combo box first then the food category names are displayed. From the category name select the needed one and the food list is displayed in food list box.

5.4 Select the Brand name for USDA SR28 Database

Select the Brand name combo box first and then Brand names are displayed. Select the needed one then all food names under the Brand name will be displayed in the Food list box.

5.5 Food search

If needed select food search, enter the food name and click the "Enter" Button in the Key Board the name will appear in the food name list.

5.6 Select the Food & Transfer to the “Food Choice Table”

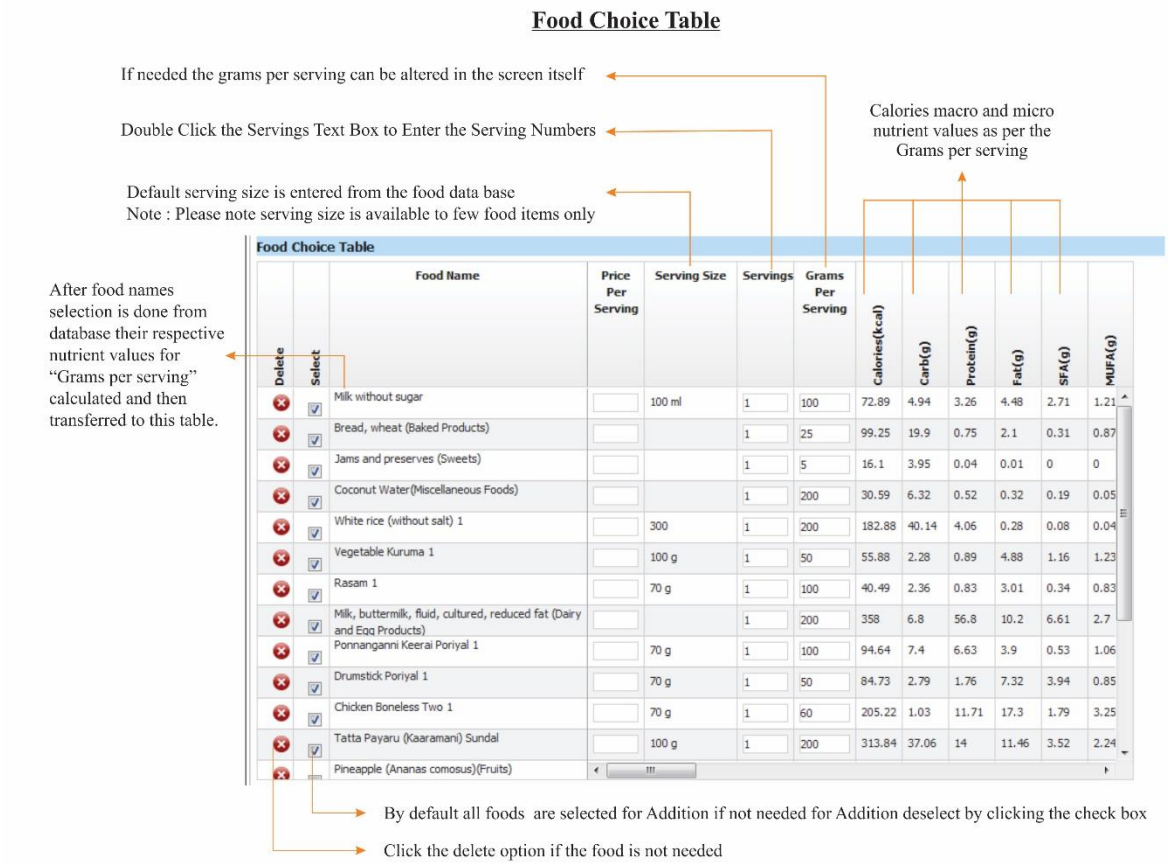
After selection of the food, from the food name list then right click on "food", a menu box will display "Add to breakfast", "Add to lunch", "Add to dinner", "Add to snack1", "Add to snack2", "Add to per day', and "Add to per week".

Suppose we are calculating for "per week basis" then click the "add to per week". The Food chosen, the grams per serving and the Nutrient values and Pyramid Food Group values are transferred to the "Food choice table" from the database. Check to see that the chosen food includes details of Pyramid Food Group Values in the transferred data. (If the foods are transferred from USDA database the user have to enter the grams per serving; for Indian foods the grams per serving already given; for any change user can edit in grams per serving text box.)

5.7. Multiselection of Foods and Transfer to the “Food Choice Table” :-

Multiselection of Foods is possible from Database and all selected Food datas can be transferred to the “Food Choice Table”. This option is given for time saving. While selecting the food press the “Control (Ctrl) button in the keyboard and select needed foods and transfer to Food Choice Table as per the procedure given in 5.6

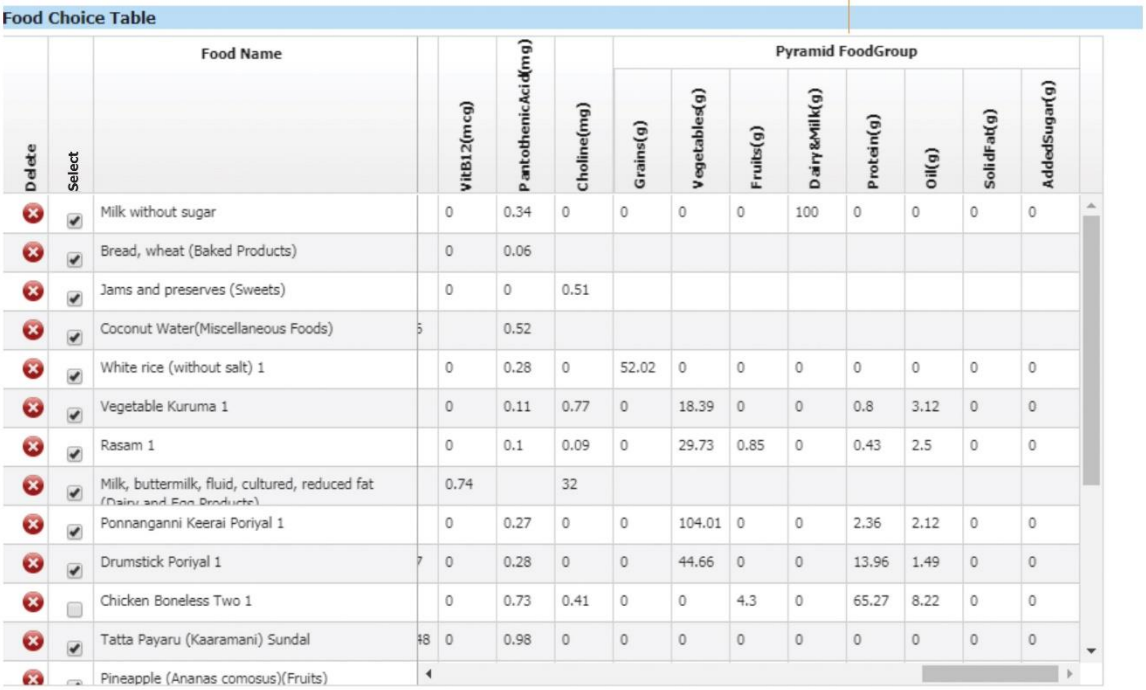
6. FOOD CHOICE TABLE



Food Choice Table

Delete	Select	Food Name	Price Per Serving	Serving Size	Servings	Grams Per Serving	Calories(kcal)	Carb(g)	Protein(g)	Fat(g)	SFA(g)	MUFA(g)
	☑	Milk without sugar		100 ml	1	100	72.89	4.94	3.26	4.48	2.71	1.21
	☑	Bread, wheat (Baked Products)			1	25	99.25	19.9	0.75	2.1	0.31	0.87
	☑	Jams and preserves (Sweets)			1	5	16.1	3.95	0.04	0.01	0	0
	☑	Coconut Water(Miscellaneous Foods)			1	200	30.59	6.32	0.52	0.32	0.19	0.05
	☑	White rice (without salt) 1		300	1	200	182.88	40.14	4.06	0.28	0.08	0.04
	☑	Vegetable Kuruma 1		100 g	1	50	55.88	2.28	0.89	4.88	1.16	1.23
	☑	Rasam 1		70 g	1	100	40.49	2.36	0.83	3.01	0.34	0.83
	☑	Milk, buttermilk, fluid, cultured, reduced fat (Dairy and Egg Products)			1	200	358	6.8	56.8	10.2	6.61	2.7
	☑	Ponnanganni Keerai Poriyal 1		70 g	1	100	94.64	7.4	6.63	3.9	0.53	1.06
	☑	Drumstick Poriyal 1		70 g	1	50	84.73	2.79	1.76	7.32	3.94	0.85
	☑	Chicken Boneless Two 1		70 g	1	60	205.22	1.03	11.71	17.3	1.79	3.25
	☑	Tatta Payaru (Kaaramani) Sundal		100 g	1	200	313.84	37.06	14	11.46	3.52	2.24
		Pineapple (Ananas comosus)(Fruits)										

Pyramid Food Group values as Grains, Vegetables, Fruits, Dairy and Milk, Protein, Oil, Solid Fat and Added Sugar values as per the Grams Per Serving



Food Choice Table

Delete	Select	Food Name	VitB12(mcg)	PantothenicAcid(mg)	Choline(mg)	Pyramid FoodGroup							
						Grains(g)	Vegetables(g)	Fruits(g)	Dairy&Milk(g)	Protein(g)	Oil(g)	SolidFat(g)	AddedSugar(g)
	☑	Milk without sugar	0	0.34	0	0	0	0	100	0	0	0	0
	☑	Bread, wheat (Baked Products)	0	0.06									
	☑	Jams and preserves (Sweets)	0	0	0.51								
	☑	Coconut Water(Miscellaneous Foods)		0.52									
	☑	White rice (without salt) 1	0	0.28	0	52.02	0	0	0	0	0	0	0
	☑	Vegetable Kuruma 1	0	0.11	0.77	0	18.39	0	0	0.8	3.12	0	0
	☑	Rasam 1	0	0.1	0.09	0	29.73	0.85	0	0.43	2.5	0	0
	☑	Milk, buttermilk, fluid, cultured, reduced fat	0.74		32								
	☑	Ponnanganni Keerai Poriyal 1	0	0.27	0	0	104.01	0	0	2.36	2.12	0	0
	☑	Drumstick Poriyal 1	0	0.28	0	0	44.66	0	0	13.96	1.49	0	0
	☐	Chicken Boneless Two 1	0	0.73	0.41	0	0	4.3	0	65.27	8.22	0	0
	☑	Tatta Payaru (Kaaramani) Sundal	0	0.98	0	0	0	0	0	0	0	0	0
		Pineapple (Ananas comosus)(Fruits)											

After all the chosen foods and their nutrient and Pyramid food group values are transferred to the food choice table, the following steps are taken

1 By default serving size is entered from the food database.

2 In the "Food Choice Table" double click the “Servings” text box to enter the serving numbers.

In case "USDA SR28" is chosen then value for "Grams Per Serving" is to be entered for the food chosen.

Note:

The nutrient values are displayed based on the value in the " Grams Per Serving " column. It is mandatory to have " Grams Per Serving " value for the nutrient values to be displayed.

6.1 Modifying "Grams Per Serving"

Grams per serving of each "Food Name" can be modified by entering the desired value in the respective "Grams Per Serving" text box.

6.2 Selection of Food Choice for inclusion in the diet

By default all foods are selected. If not needed for inclusion in the Diet deselect the specific food by clicking the checkbox. A wide range of foods can be added to the Food Choice Table and from this the required foods can be selected to achieve the target value of Calories , Nutrients and Pyramid Food Groups (By using this method Repeated access of the Data Base can be avoided).

6.3 Delete the food from the Food Choice table

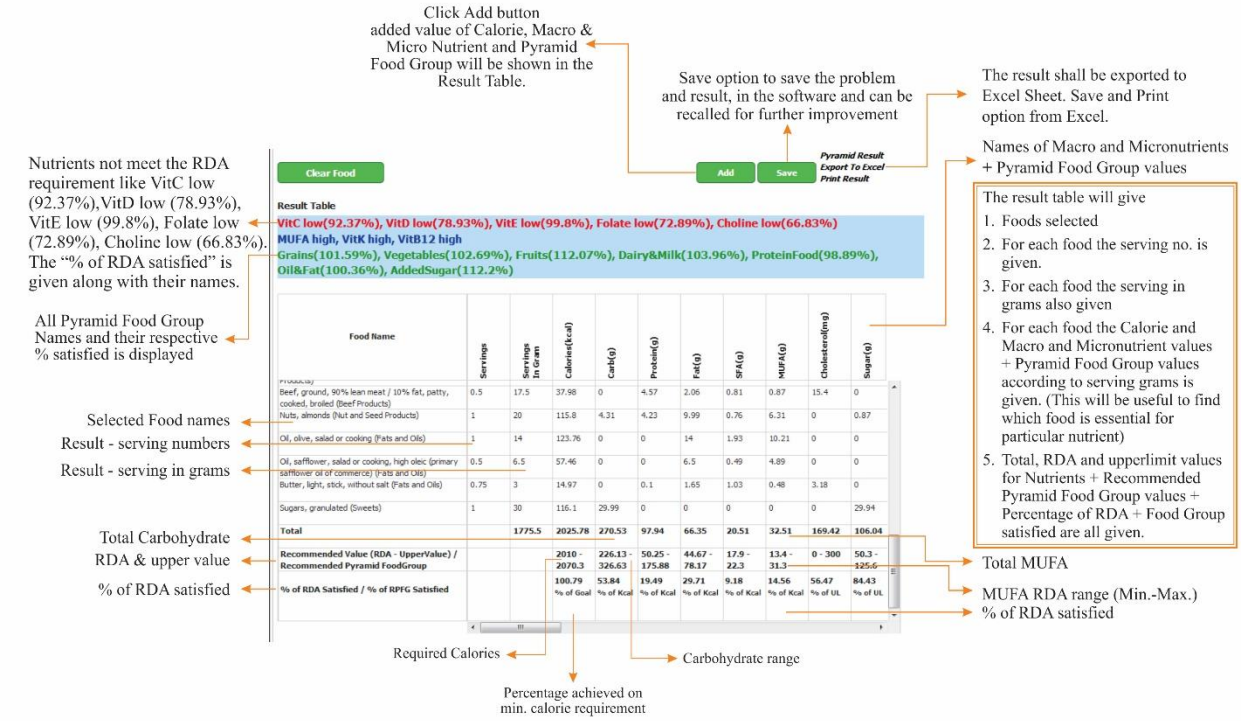
Click the delete option if the food is to be deleted from the Food Choice Table.

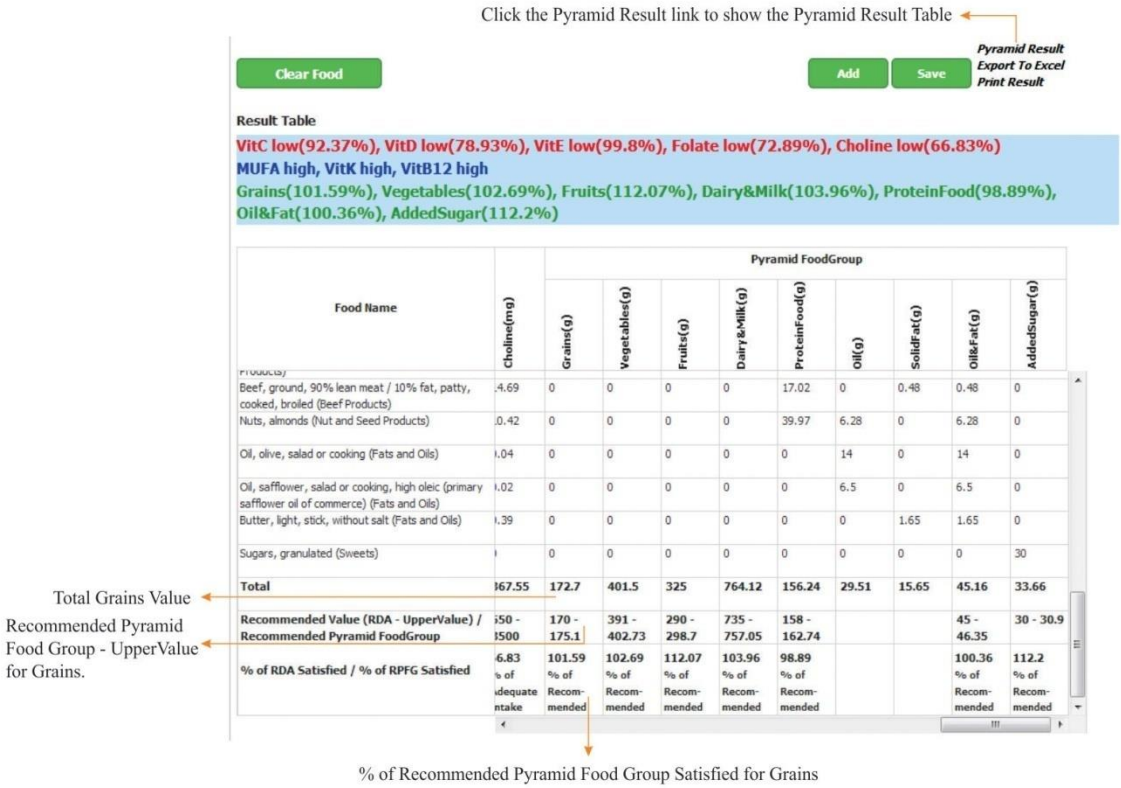
NOTE: In the case of using the NutriAdder to compute Pyramid Food Group values ensure that all the chosen foods have their corresponding Food Group values.

In the case of using the NutriAdder to compute Nutrient values only the corresponding ‘Food Group values’ for the chosen foods are not mandatory.

7. Result Table

Result Table (Addition)





An important feature of the Result Table is that the impact of addition of food items along with their Grams Per Serving and Number Of Servings can be seen simultaneously on the displayed Result.

7.1 The displayed result will contain

1. Selected foods
2. Serving number
3. Serving quantity in grams
4. Calories, Macro and Micronutrient values
5. Food Group Values

7.2The row "Total" displays the total value of calories, Macro, Micronutrients and Pyramid Food Group values.

7.3 The row "Recommended value (RDA-upper value)/ Recommended Pyramid Food Group" displays the RDA / upper value for Calories, Macro and Micronutrients / Values of Pyramid Food Group.

7.4 In the row “% of RDA satisfied / % of Pyramid Food Group satisfied” of the “Result Table” the following values are displayed.

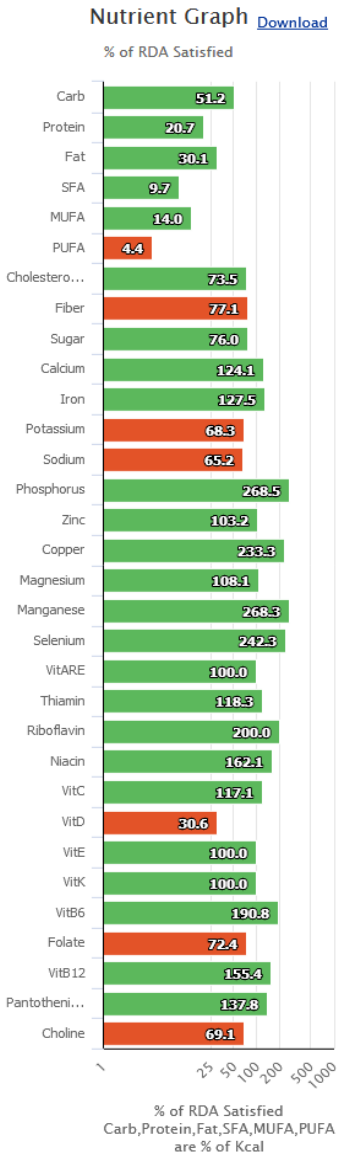
1. The total calorie value is displayed as a percentage of minimum calorie requirements.
2. The total macronutrient value is converted to calories and their value is displayed as percentage of minimum calorie requirement.
3. The total micronutrient value is displayed as the percentage of minimum RDA
4. The total value of Pyramid Food group is displayed as a percentage of Pyramid Food Group value.

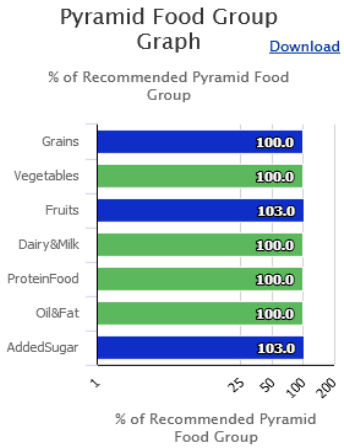
Any addition/deletion of a food item will result in a corresponding change in the 'Result Table'.

7.5 The advantages of the result table is user can easily identify the contribution of each food to that particular nutrient and Pyramid Food Group. For example if Coffee (with milk) is one of the food then its contribution to the nutrient Calcium will be more. User can see easily calcium value in the result table for Coffee (with milk) and if needed user can increase the Coffee (with milk) "Serving" quantity in 'Food Choice Table' to get the calcium percentage of RDA satisfied as 100%.

Food group/ Nutrient values which are low/high in the Result Table can be addressed by altering the corresponding food quantity or exchanging the food items with specific nutrient rich foods / Pyramid Food Group rich food.

8. Nutrient Graph





This Nutrient Graph is a bar chart which display of the results helps in quick interpretation of the results and aids in the corrective action that may be required.

The percentage of RDA satisfied for each nutrient is displayed along the X axis.

All the Nutrients chosen for “Display” in the RDA Table are displayed along the Y axis.

A nutrient with green bar indicates that this result value is within the RDA minimum and maximum value.

A nutrient with red bar indicates that this result value is below the RDA minimum value (lower limit).

A nutrient with blue bar indicates that this result exceeds the RDA maximum value (upper limit).

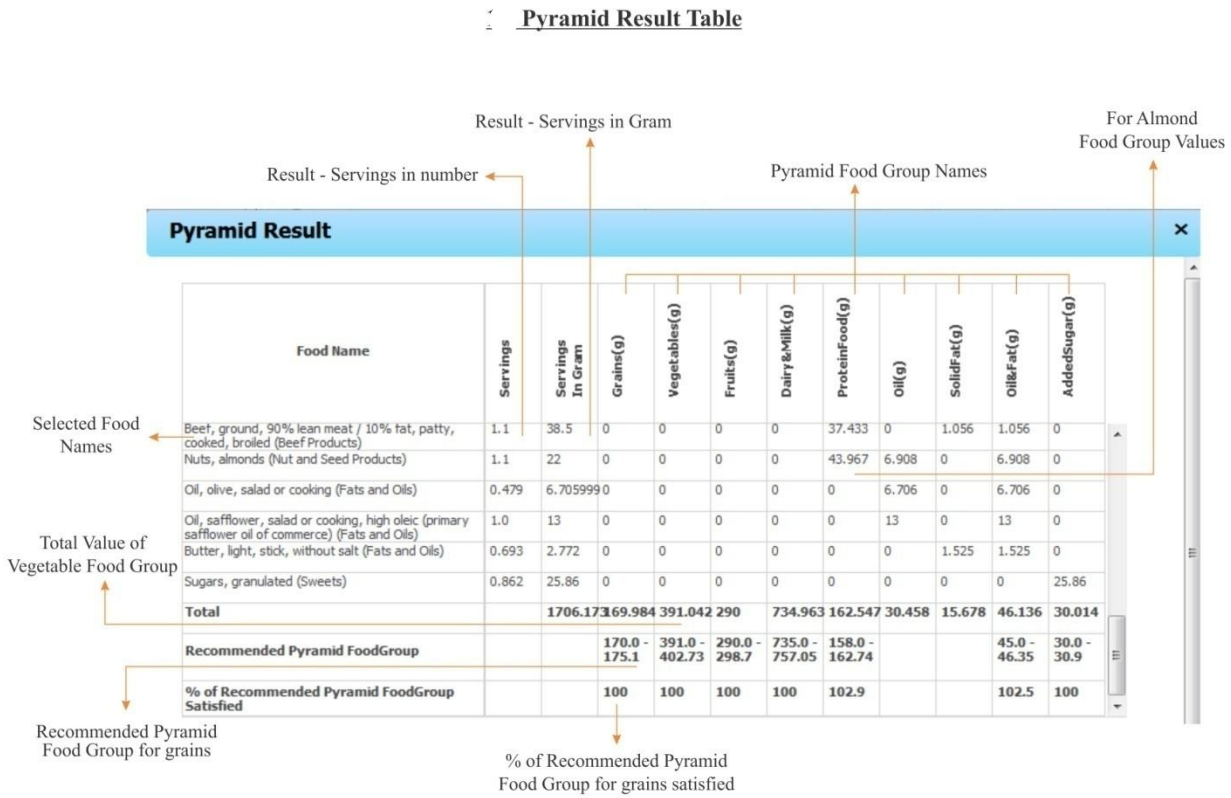
The bar against each nutrient displays the % of RDA satisfied. On pointing the cursor to the bar causes a tool tip displaying the “Name of Nutrient”, “Total” and “ Recommended Value (RDA upper value)” from the result table.

Download:

An option is available to download and print the Nutrient Graph using PNG, JPEG and PDF formats.

9 Pyramid Result in separate table & Pyramid Food Group Graph

9.1 Pyramid Result



Food Name	Servings	Servings In Gram	Grains(g)	Vegetables(g)	Fruits(g)	Dairy&Milk(g)	ProteinFood(g)	Oil(g)	SolidFat(g)	Oils&Fat(g)	AddedSugar(g)
Beef, ground, 90% lean meat / 10% fat, patty, cooked, broiled (Beef Products)	1.1	38.5	0	0	0	0	37.433	0	1.056	1.056	0
Nuts, almonds (Nut and Seed Products)	1.1	22	0	0	0	0	43.967	6.908	0	6.908	0
Oil, olive, salad or cooking (Fats and Oils)	0.479	6.705999	0	0	0	0	0	6.706	0	6.706	0
Oil, safflower, salad or cooking, high oleic (primary safflower oil of commerce) (Fats and Oils)	1.0	13	0	0	0	0	0	13	0	13	0
Butter, light, stick, without salt (Fats and Oils)	0.693	2.772	0	0	0	0	0	0	1.525	1.525	0
Sugars, granulated (Sweets)	0.862	25.86	0	0	0	0	0	0	0	0	25.86
Total		**1706.173**	**169.984**	**391.042**	**290**	**734.963**	**162.547**	**30.458**	**15.678**	**46.136**	**30.014**
Recommended Pyramid FoodGroup			**170.0 - 175.1**	**391.0 - 402.73**	**290.0 - 298.7**	**735.0 - 757.05**	**158.0 - 162.74**			**45.0 - 46.35**	**30.0 - 30.9**
% of Recommended Pyramid FoodGroup Satisfied			**100**	**100**	**100**	**100**	**102.9**			**102.5**	**100**

Click on the “Pyramid Result” link to view the Pyramid Result Table

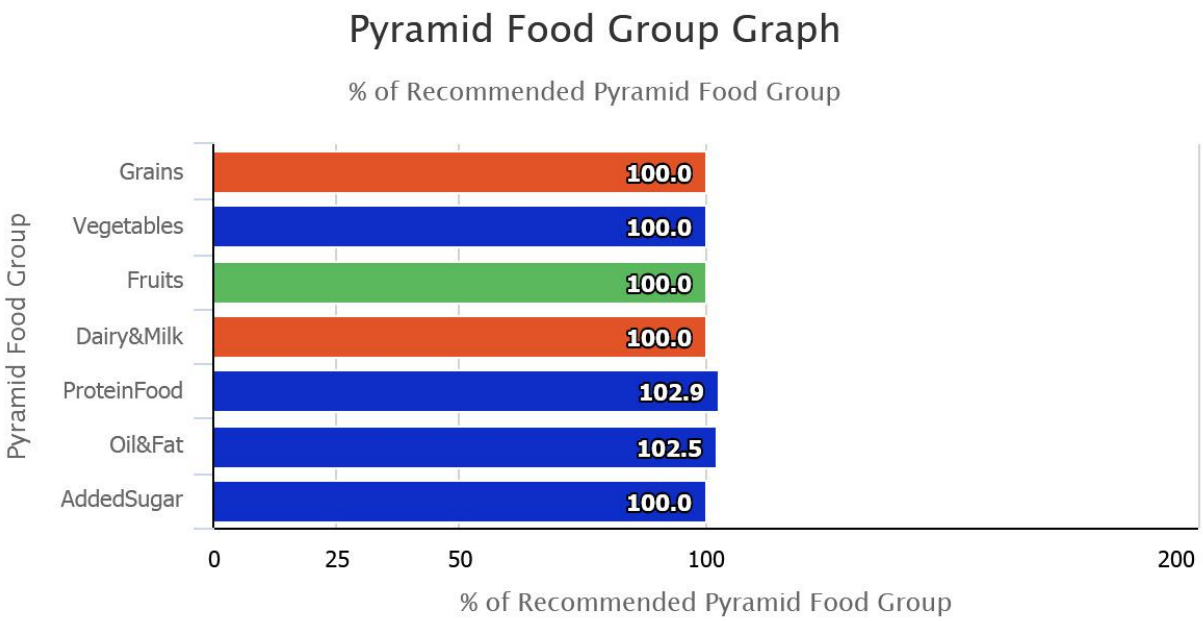
This table displays, in grams, the contribution of each food in the result to the Pyramid Food Group.

The “Total” row indicates summation of each of the Pyramid food group values.

The “Recommended Pyramid Food Group” displays the recommended food group values as per guidelines chosen for this computation.

The “% of Recommended Pyramid Food Group Satisfied” displays percentage of Recommended Pyramid Food Group Satisfied.

9.2 Pyramid Food Group Graph.



This Pyramid Food Group Graph is a bar chart which display of the results for a quick interpretation of the results.

The percentage of Recommended Pyramid Food Group Satisfied is displayed along the X axis.

All the Pyramid Food Groups chosen for “Display” are displayed along the Y axis.

A Food Group with green bar indicates that this result value is 100% of Recommended Food Group Value.

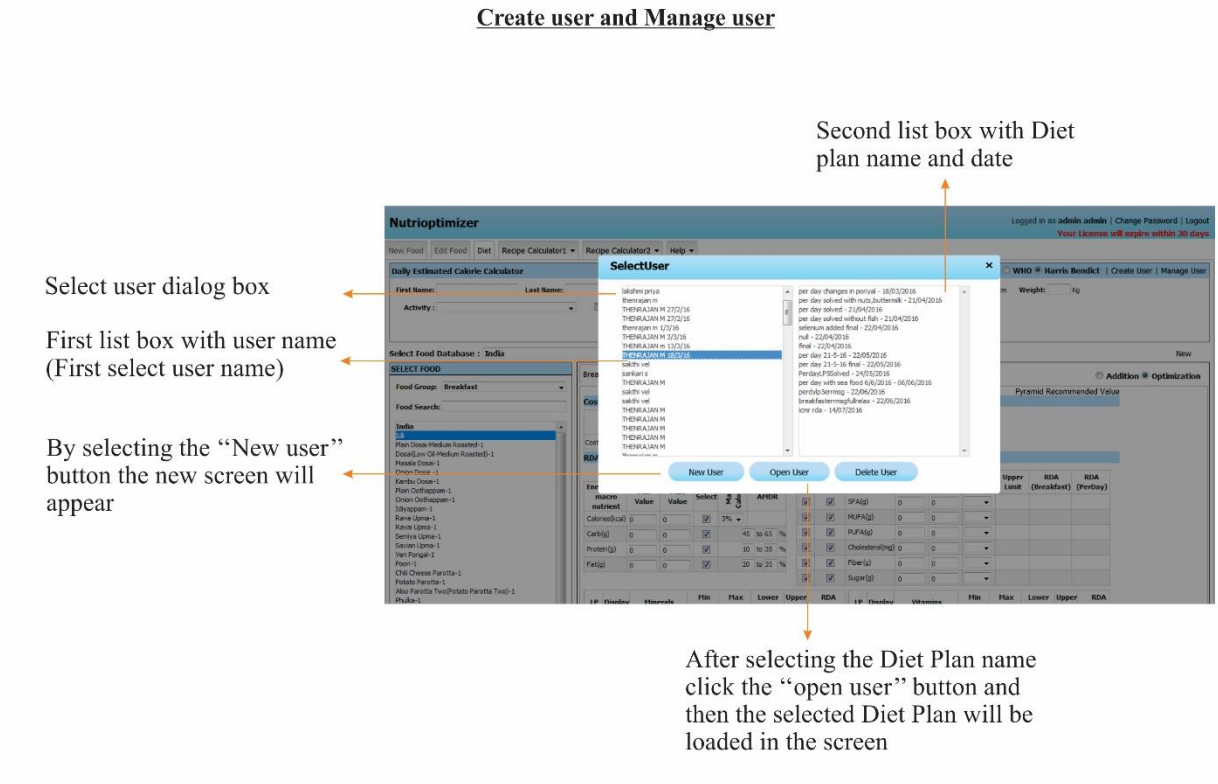
A Food Group with red bar indicates that this result value is below 100% of the Recommended Food Group Value.

A Food Group with blue bar indicates that this result exceeds the 100% of Recommended Food Group Value.

The bar against each Food Group displays the % of Recommended Pyramid Food Group.

On pointing the cursor to the bar causes a tool tip displaying Food Group Name, “ Total” value (as per the result), the “Recommended Pyramid Food Group Value”.

10. Create User



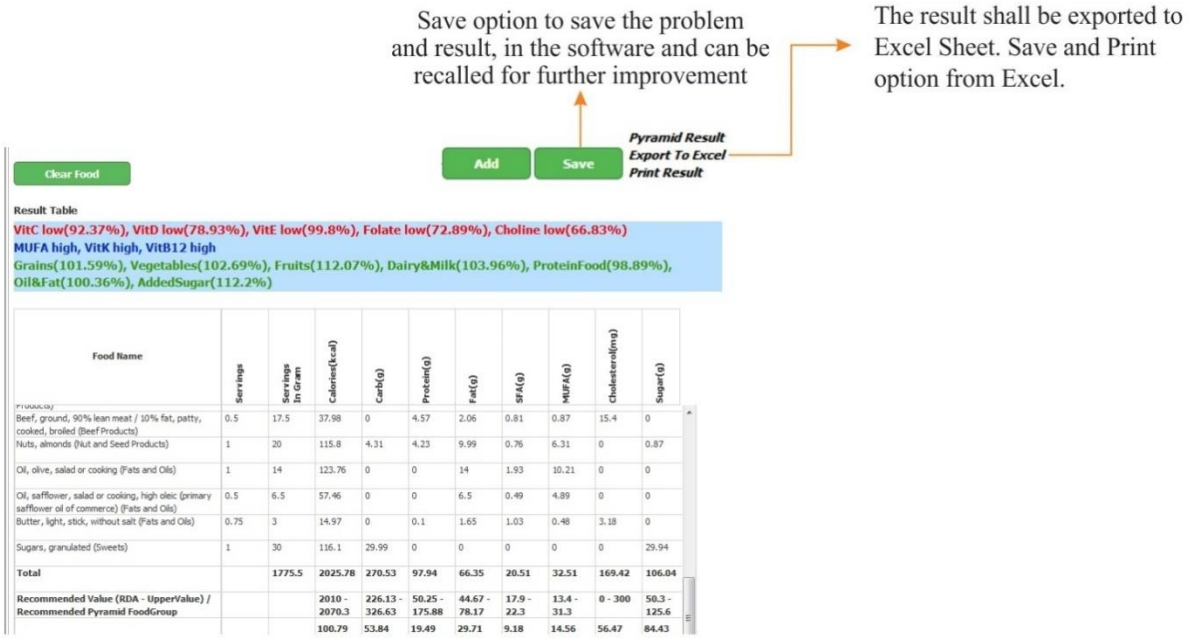
By clicking the 'Create User' link new screen will appear for new user. User can create a new diet plan by entering the user name in calorie calculator

11.Manage User

By clicking the 'Manage User' link, the "select user" dialog box will appear. It shows “User Name" in first list box. After selecting the user name, its corresponding saved "Diet plan names" listed in the second list box. First the "Diet plan name" is selected then by clicking the "open user" button the diet plan will be loaded in the screen. (It is used to recall the saved Diet Plan Name and further improvement of the solution)

By clicking 'New User' button in the 'Select User' dialog box, new Diet Plan screen will appear.

12. Save Option



Food Name	Servings	Servings In Gram	Calories(kcal)	Carb(g)	Protein(g)	Fat(g)	SFA(g)	MUFA(g)	Cholesterol(mg)	Sugar(g)
Beef, ground, 90% lean meat / 10% fat, patty, cooked, broiled (Beef Products)	0.5	17.5	37.98	0	4.57	2.06	0.81	0.87	15.4	0
Nuts, almonds (Nut and Seed Products)	1	20	115.8	4.31	4.23	9.99	0.76	6.31	0	0.87
Oil, olive, salad or cooking (Fats and Oils)	1	14	123.76	0	0	14	1.93	10.21	0	0
Oil, safflower, salad or cooking, high oleic (primary safflower oil of commerce) (Fats and Oils)	0.5	6.5	57.46	0	0	6.5	0.49	4.89	0	0
Butter, light, stick, without salt (Fats and Oils)	0.75	3	14.97	0	0.1	1.65	1.03	0.48	3.18	0
Sugars, granulated (Sweets)	1	30	116.1	29.99	0	0	0	0	0	29.94
Total		**1775.5**	**2025.78**	**270.53**	**97.94**	**66.35**	**20.51**	**32.51**	**169.42**	**106.04**
Recommended Value (RDA - UpperValue) / Recommended Pyramid FoodGroup			**2010 - 2070.3**	**226.13 - 326.63**	**50.25 - 175.88**	**44.67 - 78.17**	**17.9 - 22.3**	**13.4 - 31.3**	**0 - 300**	**50.3 - 125.6**
			100.79	**53.84**	**19.49**	**29.71**	**9.18**	**14.56**	**56.47**	**84.43**

"Save" button is adjacent to the "Add" button and above the Result Table. By clicking the 'save' button, the dialog box will appear. The user can enter the 'Diet Plan Name' and "click" the save button. Now the Diet Plan Name will be saved along with the same user name initially entered in the calorie calculator. The Diet Plan is saved by Diet Plan Name and date and User Name. Under one user name many Diet Plans can be saved. The save option stores all the Data (RDA Table, Food Choice Table, Result Table and Added Food Value Table) for that Diet Plan. (This save option can also be used to recall the diet plan for any further improvement of the solution.)

Note:

Before starting with a new “Diet Plan” the active diet plan on screen must be saved or else the existing Diet Plan data will be lost.

12.1 Recall of Saved Diet Plans (Diet Plan Name Drop down Box) :-

The ‘Diet Plan Name’ drop down box is located above the ‘RDA Table’.

This drop down box displays all the names of all saved Diet Plan Names along with date. From this dropdown list a Diet Plan Name can be chosen to

1. Recall for further Analysis / Improvement
2. Delete (Using the delete button adjacent to ‘Diet Plan Name’)

3. By clicking the ‘New’ Link a new screen with already calculated Calorie & RDA values will appear. This screen can be used to create a new Diet Plan for the same user name.

13. Export Result into Excel - Save / Print

The "Result Table" data can be exported to 'Excel' format by clicking the 'Export to Excel' link, file download dialog box will appear in the screen. For save in the excel file user has to click the "Save File" radio button and click 'ok' button. Then the 'Result Table' will be stored in Excel file.

By default "Open" with radio button is selected click 'ok' button the 'Result Table' can be seen in the excel sheet in the user computer. User can print the result by using the Excel file.