Introduction

It has long been understood that optimal health depends on adequate nutrition. Dietary deficiencies can be manifested in various ways. A deficient intake of energy or nutrients can lead to malnutrition or to classic deficiency diseases such as rickets, pellagra, or iron deficiency anemia. Whatever the cause, inadequate nutrition retards normal growth, lowers resistance to infectious disease, impairs maternal and child health, and may adversely affect the ability to function at peak physical and mental capacity. Although the problems of nutritional deficiency have diminished in the United States, they have been replaced by problems of dietary imbalance and excess. These imbalances and excesses have contributed to the increased prevalence and severity of chronic diseases that are major causes of death and disability among Americans. Among them, five--coronary heart disease and generalized atherosclerosis, stroke, some types of cancer, and diabetes--have been associated with dietary excesses or imbalances, and another three--cirrhosis of the liver, accidents, and suicides--are often the result of excessive alcohol intake. Together, these conditions account for as much as 70 percent of annual deaths among Americans. Dietary imbalances and excesses have also been associated with high blood pressure, obesity, osteoporosis, dental diseases, as well as kidney and gastrointestinal diseases.

NutriGenie **Nutritionist 98** analyzes almost 30 essential nutrients in your diet and helps you devise an optimal diet for your health. NutriGenie Nutritionist 98 belongs to the software library of all health-conscious individuals.

About NutriGenie Nutritionist 98

The registered version of NutriGenie Nutritionist 98 comes with a <u>database</u> of approximately 8,000 carefully selected food items divided into convenient food groups. Users can also add in their own food items via a separate user's food database.

The program provides utilities to calculate user's ideal weight, suggested daily caloric and other nutrient intakes according to his or her personal factors.

General Dietary Guidelines

Essential nutrients must be obtained from diet in proper amounts and proportions to maintain good health and to prevent deficiency diseases. A deficiency of an essential nutrient causes signs and symptoms that can be prevented or cured by an increased intake of the nutrient.
Just as a deficiency of a nutrient can cause disease, too much of a nutrient can also lead to disease. For example, the excessive consumption of energy, fat (especially saturated fat), and alcohol have been associated with the development of specific chronic disease conditions. Excessive intake of some vitamins and most of the minerals also has been shown to result in either acute or long-term disorders.

For most nutrients, there is a safe and adequate range of dietary intake that satisfies nutritional requirements but does not cause undesirable symptoms. The need to establish goals for good nutrition in the United States led to the establishment of the Committee on Food and Nutrition, now called the Food and Nutrition Board of the National Research Council, National Academy of Sciences. The Board has established Recommended Dietary Allowances (RDAs) for energy, and other essential nutrients to sustain normal growth, development and health. For specific RDA data, please refer to the Caloric and Nutrient Requirement Dialog.

See also
Dietary guidelines for lowering high blood pressure
Dietary guidelines for diabetes
Dietary guidelines for lowering your cholesterol
Dietary guidelines for weight control

Disclaimer

The <u>data</u> and <u>nutritional guidelines</u> contained in this program are derived from research published by US government agencies and by private non-profit health organizations. The data and guidelines are compiled for your information only and must not be construed as medical advice or instruction. The decision concerning diet or medications should be made by you and your doctor. Before adopting any diet or exercise program, please discuss your condition with your doctor and obtain his/her approval. NutriGenie disclaims all liability in connection with the use of this program.

New Features and Differences among Versions

Below is a list of new features which are common to many NutriGenie products and differences among software versions. Specific new features which are applicable to a particular program are not listed. Please note that not all features are available in every program.

New features with version 6.0 or later:

1. Native 32-bit version which requires Windows 95, 98 or NT. Earlier versions from 5.0 can also be run on Windows 3.1 in addition to Windows 95, 98 or NT. Therefore if you need to run our software on Windows 3.1, please choose programs having version 5.0 or earlier.
2. Decimal values are allowed when adding new foods to personal food database.
3. Caloric need and US RDA nutrient requirement calculation is extended to include data for children from age 1. Previously, this calculation is done only for adults.
4. Additional metric measurements, such as kjoule, are included when applicable.

New features with version 5.0:

1. International version with special provision for metric measurements and local foods, menus, etc.

New features with version 4.8 or later:

1. In Super VGA display mode, user can choose to show the nutrient analysis panel using one-column or two-column mode.

New features with version 4.7 or later:

1. Width of food listbox can be expanded or contracted. Expanding the width of the listbox allows listbox to show more food entries.
2. Regardless of screen display mode (VGA or SVGA), users can now selectively display analysis of only nutrients of interest to them.

New features with version 4.6 or later:

1. Users can choose to display their nutrient intake as percentage of U.S. RDA or of their own personal preference.

New features with version 4.5a or later:

1. All foods in food listbox can be hidden at a time.

New features with version 4.4 or later:

1. The Food Exchange System developed by the American Dietetic Association and the American Diabetes Association is implemented. This feature allows automatic menu generation based on user's exchange specification and food selection.

Note:
This feature may replace the personal food groups feature in some programs.
The Zone Diet Menu Planner program has its own macronutrient Block counting system.

New features with version 4.3 or later:

1. NutriGenie foods can be hidden and unhidden to make browsing the standard food database more convenient.

2. Up to 7 <u>personal food groups</u> can now be created making it much easier to access your favorite foods.

New features with version 4.2 or later:

1. Products previously required SVGA display mode can now run on VGA. To accommodate the smaller screen display, the user specifies up to 10 nutrients for analysis in <u>VGA mode</u>.
2. <u>Adding foods and recipes to personal food database</u> is now more convenient. The dialog box for this feature automatically copies nutrient data from meal, making minor editing quite easy. The personal food database format is retained and is compatible with exported text files from standard database software.

New features with version 4.1 or later:

1. After generating a daily meal plan, NutriGenie automatically displays the Pyramid Food Guide analysis for user's evaluation of the plan just generated.

New features with version 4.0 or later:

1. <u>NutriGenie technology</u> is implemented. With this technology, user can specify a daily caloric consumption level and NutriGenie will automatically generate well-balanced daily menus that meet this requirement.
2. unique graphic <u>USDA Pyramid Food Guide Analysis</u> is available in all programs.
3. selective printing of analysis data: when the number of nutrients analyzed is large, user can select the nutrients to be printed.

New features with version 3.6 or later:

1. enhanced Body Mass Index dialog box
2. enhanced Caloric Need utility
3. Mouse Button Option dialog box
4. better automatic printer font support

New features with version 3.5 or later:

1. weight tracker utility allows you to maintain a graphic history of your weight loss progress.
2. diet tracker utility lets you keep track of your diet over time.
3. target heart rate calculator helps you get the most benefit from your exercise.

New features with version 3.2 or later:

1. percentages of calories from fat, protein and carbohydrate are now graphically displayed in addition to the nutrients' weights. Each full section of the bar represents 10%. When the percentage of calories from fat exceeds the user specified value, the bar is displayed in *white* instead of *dark gray*.
2. toggling left mouse button quick input mode: you can now turn this feature on/off as desired.
3. right mouse button quick input mode has common serving sizes as option in addition to gram and ounce.

New features with version 3.0 or later:

1. most programs come with a <u>professional food database</u> containing approximately 10,000 food items (registered version); <u>some</u> programs still use a standard food database of approximately 1,000 most commonly used foods. Please carefully evaluate this difference before ordering.
2. more sophisticated <u>food search</u> capability: 'not' and 'and' Boolean search; global and local search
3. quick <u>serving amount data entry</u>

4. quick find: locate food consumed that is highest or lowest in a particular nutrient.
5. copy, cut and paste meals: editing food data is easier and easier because you can conveniently reuse previously edited meals.

New features with version 2.x or later:

1. user's food database support,
2. printer font selection
3. screen color selection,
4. graphic analysis of nutrients,
5. RDA analysis,
6. context sensitive help,
7. set fat warning level
8. sorting based on nutrient contents, etc.

All previously available features are retained or improved.

Note:
Every NutriGenie product has been tested and is fully compatible with Windows 95, Windows NT as well as Windows 3.x. However, please make sure you download, install and evaluate our shareware on your machine before purchasing.

About NutriGenie food databases

Depending on the availability of the required nutrient data, NutriGenie uses different food databases in our programs.

The registered food database of all *NutriGenie* programs version 4.0 or later contains an 8,000-entry food database.
1. NutriGenie Fat to Fit 4.1
2. NutriGenie Pregnancy Nutrition 4.1
3. NutriGenie Calorie Counter 4.1
4. NutriGenie Fat Counter 4.1
5. NutriGenie Fat Cholesterol and Sodium Counter 4.1
6. NutriGenie Renal Diet 4.1
7. NutriGenie Immune Deficiency Nutrition 4.2
8. NutriGenie The Magical Dietitian 4.2
9. NutriGenie American Heart Diet 4.3
10. NutriGenie Diabetes Meal Planner 4.4
11. NutriGenie Lower High Blood Pressure 4.4
12. NutriGenie Zone Diet Meal Planner 4.4
13. NutriGenie Rotation Diet Meal Planner 4.5
14. NutriGenie Carbohydrate-Restricted Diet 4.5
15. NutriGenie Kidney Disease Nutrition 4.6
16. NutriGenie Weight Shedders 4.6
17. NutriGenie Zone Nutrition Professional 4.7
18. NutriGenie Nutrition for Olympians 4.7
19. NutriGenie USANA L.E.A.N Meal Planner 4.7
20. NutriGenie Total Nutrition 4.8
21. NutriGenie Glycemic Index Diet 4.8
22. NutriGenie Ketogenic Diet Meal Planner 4.8
23. NutriGenie Nutritionist 98 6.0

The registered food database of the following programs contains approximately 1,000 most commonly used food items. (See also Special Offer)
1. Fat and Cholesterol Counter 1.1
2. Control Diabetes 1.2
3. Pregnancy Nutrition 2.1
4. Pyramid Weight Loss Diet 3.4
5. Healthy Heart Nutrition 3.5

If you need a larger food database, please consider registering for any of the following programs which have a 10,000-entry food database (See also Special Offer)**:**
1. Reduce Cancer Risk 3.0
2. Weight Perfect 3.0
3. Lower Your Cholesterol 3.2
4. High Blood Pressure Nutrition 3.2
5. Diabetic Nutrition 3.3
6. Nutrition for Women 3.5
7. Eat Well, Weigh Less 3.5
8. Nutrition for Peak Performance 3.6
9. The Compleat Nutritionist 3.6
10. Managing Diabetes 3.6

The German versions of our software below use a database of approximately 1,000 items. However, all of our food databases are frequently updated or enlarged. We will send you the latest available programs and data.
- Ernährung für Frauen

- Das optimale Gewicht

Main Uses of a Typical NutriGenie Program

This NutriGenie program can do many useful things for you:

At the simplest level, it can determine your <u>ideal weight</u> and recommend the most <u>healthful levels of nutrient and caloric intake</u> to you. You can browse through the extensive <u>food database</u> and select the foods that provide the nutrients you need and avoid those that have too much fat, for example. You can view and print graphic analyses of your diet. These analyses can help you spot the nutritional weaknesses in your diet so you can improve it to enhance your health.

However, some of the more important uses of this NutriGenie program are
- to analyze your current diet for conformance with specific guidelines,
- to automatically generate menus that satisfy your dietary requirements,
- to establish a weight control plan, etc.

A typical scenario for the first use: you record the foods you eat at each meal during the day, then print out the analysis to see if your current diet is too high in fat, deficient in carbohydrate, etc.   You can also determine if your caloric intake is spread out rather evenly throughout the day or heavily concentrated at a particular meal. [Some weight control plans recommend that the caloric intake is spread out evenly throughout the day.] Using the caloric analysis dialog box, you can also determine if too many calories in your diet come from protein or fat and modify your diet accordingly. Make sure you print out a hard copy of the analysis for a comprehensive view of your day diet. Each day's food consumption can be saved for future use. You can save the files as Mon, Tue, Wed or 0925 (for September 25th) or day1, day2, etc., the program will automatically add in the file extension. Use whatever file names that you can easily remember. A convenient scheme is to name your files according to their caloric contents. For example, 1200a, 1200b, 1800a, 1800b, etc. When you need a low-calorie diet, you can easily select the appropriate files for consideration.

To establish a diet plan to lose or gain weight, you prepare the menu for each day by recording the foods you are going to eat for each meal or you can tell NutriGenie to generate these menus for you. For simplicity, let's assume you are going to repeat the menu cycle every week. In this case, you will prepare 7 files (naming them Sun, Mon, Tue, Wed, Thu, Fri and Sat). Once these files are saved, you bring up the <u>Weight Control Plan</u> dialog box. The files should show up in the right list box. You then add all 7 files to your plan. After adjusting your weight and activity level, you will have an accurate picture of how much weight you will gain or lose when you follow this plan of diet. You can go back and adjust the food data in the files if you find that you are eating more or less than what is required to achieve your weight goal.

See also
<u>How to Use NutriGenie Technology in Weight Reduction Planning</u>
<u>How to Use the USDA Pyramid Food Guide to Evaluate Your Diet</u>
<u>How to Use the ADA Food Exchange System</u>

<u>*Note*</u>: Before adopting any diet or exercise program, please obtain approval from your doctor.

RDA Analysis

The RDA figures are for the average normal and healthy people in the United States under usual environment stresses. **Your optimal personal requirements may be different**. In addition, diets should be based on a variety of common foods to provide other nutrients for which human requirements have been less well defined.

The RDA analysis is color coded as follows:

- yellow   : below RDA   i.e., too little
- green   : within RDA   i.e., just about right (91 - 130 %)
- magenta   : above RDA   i.e., more than enough
- red   : well-above RDA   i.e., much more than needed

In general, you should strive to achieve a balanced diet which is reflected by the green bars the analysis displays. Excessive consumption of certain nutrients is not desirable.

You can set your own preferred nutrient intake levels and the analysis colors are modified accordingly: a yellow bar is displayed when the current intake is below your desired range; green when within range; magenta when moderately above range and red when much higher than your preferred range.
Please note that the personal preferred nutrient intake specifications affect only the color of the analysis bars. The RDA percentage values are always based on the standard Recommended Dietary Allowances for a healthy person in your category (age, weight, life style).

Strictly speaking, there is no RDA for carbohydrates. However, the Food and Nutrition Board of the National Academy of Sciences recommends that more than half the energy requirement beyond infancy be provided by carbohydrates.

The Main NutriGenie Window

This window is where you prepare your menus for each meal of the day. Our software follows the Multiple Document Interface convention so you can have several windows open at the same time and you can copy meal from one window then paste it to another just like copying and pasting text.

There are several ways to prepare your menus. You can have the meals generated automatically by NutriGenie using the food exchange options or the calorie value you specify. Or you can prepare the menus manually. [The automatic menu generator is not available in all programs.]

Select a meal

To modify a daily food consumption document, you first select a meal you want to record the data for. There are 6 meals in a day: Breakfast, Morning Snack, Lunch, Afternoon Snack, Dinner and Evening Snack. Select one from the left pull-down list box.

Then you select a food group from the right hand side pull-down list box. (Depending on the program's database, there are approximately 30 to 50 food groups.) It is easy to get to the food group you want: once the input focus is at the food group combo box (by tabbing to or clicking the mouse on this control), you can type just the first letter of the food group and the next group name starting with that letter will be displayed. Repeating a character will cycle all the group names with that starting character through the combo box.

Browse food databases

The program lists foods in a food group by default. You can display food group names in normal order or reverse this order.

displays food group names in normal order.

displays food group names in reverse order.

You can list foods in your personal food database:

[See also use your own   food database.]

Or you can search for foods by their names:

[See also Search mode.]

Select a food item

Highlight a food item in the right listbox, click on the 'I Eat' button. This item will be recorded in the meal you selected. You can also just double-click the food item without using the 'I Eat' button.

Sort foods by nutrient content

Starting with version 2.3 of our software, you can sort the food list on any individual nutrient. Select either the

ascending or

descending order.

A floating menu will appear inside the listbox, you can then select the nutrient you would like to sort on. Once the list box is sorted, you can single click on a food item to review its nutrient's content. Please note that from version 3.0, the nutrient contents sorted on are normalized to be based on each 100g of food

item; this makes direct comparison between food items easier. A sort is valid only for the current content of the list box, this means if you move to another food group or do another food search, the new content will be listed in alphabetical order (except for the search content). When the list box is sorted, a small square appears inside a sort icon to indicate which sort sequence is in effect.

Specify the food amount

If necessary, you can <u>adjust the amount consumed</u> for this food item by typing the desired amount in the edit control above the 'Am(oun)t. OK' button. Once the right amount has been typed in, click on 'Amt. OK' to confirm and record this value. You need to use this button only when you manually enter the weight in the edit control. (*<u>Hint</u>*: Click left or right mouse button on the window's background to select a standard food amount for fast adjustment of quantity. You don't need to click on 'Amt. OK' when the portion is selected this way.)

Remove food from meal

If a food item is not what you intended to add to a meal, you can highlight it and then click on the 'Delete' button to remove it from your meal.

You can display the graphic caloric analysis of a food item in a meal by selecting an entry in your meal food consumption then click on the graph icon. A graph will appear to show you the percentages of calories of this food item that come from fat, protein and carbohydrate. To review the caloric analysis of your day food consumption, select the 'Caloric analysis...' menu item from the 'View' menu. [<u>The graph icon is not available in all programs</u>.]

Repeat the food selection process for each meal, omitting the meals where you don't eat any food.

Save your menus

When you are done, you can save the day food consumption data for later review or for use in your weight control planning. Use 'File' 'Save As...' or the diskette button on the toolbar.

<u>Hint</u>:
- You can use 'Copy Meal' and 'Paste Meal' buttons on the toolbar for fast entry of food data when the same foods are eaten at different meals.
- Use 'Find Max' and 'Find Min' buttons to quicky identify foods eaten that are high in fat or low in carbohydrate, etc.

See also the <u>Analysis Panel</u> for description of analysis data and graphic indicators at lower half of main window.

The Analysis Panel

The analysis panel is the gray panel in the lower half of your screen. The panel is divided into 6 sections except when the 2-column display mode is selected.

1. the Information section contains the names of the nutrients being analyzed and the weight or serving size of a food item.

2. the **Food Item**, **Meal Total**, and **Day Total** sections contain the numerical values of the contents of various nutrients in the food item, in a meal, and daily diet, respectively. They also show the caloric percentages from protein, carbohydrate and fat in bar graph format. Each full fraction of a bar represent 10% of caloric contribution from the nutrient. When the percentage of calories from fat exceeds that of user's specified value, the bar color is displayed in *white* instead of dark gray.
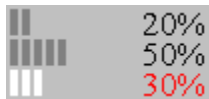
3. the %RDA section shows the percentage of Recommended Dietary Allowances for your daily diet both numerically and graphically. The color of the bar graph correspond to user's own personal Nutrient Intake Preference.

    Starting with version 4.6, users can choose to display their nutrient intake as percentage of U.S. RDA or of their own personal preference. The percentage is based on the RDA or the upper end of user's intake preference respectively.

    Nutrient intake as percentage of goal is color coded, allowing immediate visual assessment of the diet:

	below goal
	within goal
	somewhat above goal
	significantly above goal

4. the Unit section lists the unit of measurement for each analyzed nutrient.

5. Different programs offer different additional information on the analysis panel. Our Zone diet programs provide macronutrient block calculation, glycemic index indicator; some programs provide the K-factor analysis or Cholesterol-Saturated Fat Index.

Edit meals

If you would like to reuse a meal (or repeat a few food items) in your diet, here is a convenient way to do so: prepare the meal (or the food items) you plan to reuse. Copy or cut it to the clipboard; then go to another meal or open another day's file and paste to a new meal! The serving information is retained, not just the food name. When you insert a meal into a partially planned meal, the inserted food items will appear immediately below the currently selected food item in the receiving meal.
You can also delete all food items from a meal by using the Edit Clear All command or the Clear All icon.

Food Groups Mode

In this mode, the default mode, you will see a pull down listbox that contains approximately 50 food groups such as "Cookies", "Oils", "Beef", etc. By selecting any of these food groups, the food items belong to the group will be displayed in the list box immediately below. This mode is useful when you want to browse through the standard database, or when you want to do your menu planning which requires selection of foods from different food groups.

Since there are about 50 food groups and the average screen can display only 30 or so food groups at a time in a drop down list box, there are 2 icons to facilitate your viewing of the food groups. By alternating between these 2 icons, you can see the complete list of food groups in the drop down list box. You can also select a food group by typing the first character of its name when this list box has the focus.

displays food groups in normal order in drop down list box.

displays food groups in reverse order in drop down list box.

Food groups

The food groups in the NutriGenie 8,000-entry database are:

1. Milk, Yogurt, Cream, Milk Drink
2. Ice cream, Cheese, Pudding, Milk products
3. Eggs, Egg products
4. Beef
5. Pork, Ham, Bacon
6. Lamb, Veal, Game
7. Poultry
8. Liver, Organ meats
9. Sausages, Lunch meats, Hot Dog
10. Fish, Shellfish
11. Sandwiches, Burger, Pizza
12. Mixed dishes with meat
13. Mixed dishes with vegetable
14. Mixed dishes with grain products
15. Soups
16. Breads, Rolls, Flour
17. Cakes
18. Pies, Pastries
19. Cookies, Crackers, Other grain products
20. Cooked Cereals, Rice, Pasta
21. Cereals not cooked
22. Fruits, Citrus, Juices
23. Legumes, Nuts, Seeds
24. Vegetables
25. Potatoes
26. Pickles, Relishes, Olives
27. Fats, Oils, Salad dressing
28. Sugars, Sweets
29. Beverages, non-alcoholic
30. Beverages, alcoholic

The food groups in the 10,000-entry database are:

1. MILK, Milk Drinks
2. CREAM, Cream Substitutes
3. MILK DESSERTS, SAUCES, GRAVIES
4. CHEESES
5. BEEF
6. PORK
7. LAMB, VEAL, GAME
8. POULTRY
9. ORGAN MEATS
10. SAUSAGES, LUNCH MEATS
11. FISH, SHELLFISH
12. MIXED DISHES w/ sauce
13. MIXED DISHES w/ starch
14. MIXED DISHES w/ starch and vegetables
15. MIXED DISHES w/ vegetables
16. SANDWICHES
17. FROZEN MEALS, w/ meat, poultry, fish base
18. EGGS, EGG PRODUCTS

19. LEGUMES
20. NUTS, SEEDS
21. BREADS (yeast), ROLLS, FLOUR
22. BREADS, QUICK
23. CAKES
24. COOKIES
25. PIES, PASTRIES
26. CRACKERS, SNACKS from grain products
27. PANCAKES, other grain products
28. PASTAS, COOKED CEREALS, RICE
29. CEREALS not cooked or NS
30. GRAIN MIXTURES DISHES
31. GRAIN MIXTURES, Frozen Meals
32. GRAIN MIXTURES, Soups
33. FRUITS, citrus, juices
34. FRUITS, dried
35. FRUITS, other
36. FRUIT JUICES, Nectars (non-citrus)
37. VEGETABLES, starchy
38. VEGETABLES, dark green
39. VEGETABLES, deep yellow
40. TOMATOES, tomato mixtures
41. VEGETABLES, other, raw
42. VEGETABLES, other, cooked
43. PICKLES, RELISHES, OLIVES
44. VEGETABLE SOUPS
45. VEGETABLES w/ meat, poultry, fish
46. FATS
47. OILS
48. SALAD DRESSINGS
49. SUGARS, SWEETS
50. BEVERAGES, non-alcoholic
51. BEVERAGES, alcoholic

Search mode

This is one of the most convenient features of NutriGenie programs. It allows you to find any particular food items from the standard and user databases without your having to browse through different categories of food groups.

Search mode

When this mode is selected, an edit control is displayed in place of the Food Group combo box and 2 search icons are shown. You type in the name of the food item you want to find, for example "apple", then click on one of the search icons. The list box will be filled with all food items containing "apple". You don't need to type in a complete word: "app" will suffice. On the other hand, when there are too many matching food items, you might want to restrict the match by specifying longer name such as "apple juice" or do a local search after having the result of the global search. The search is not case sensitive: you can use lower or upper case letters and this won't affect the result.

To **exclude** food items, use **!** (the *exclamation point*) before the text string. Search on **!spinach** will display all items that do <u>not</u> have **'spinach'** in their names.

The program will look for matching entries not only in the standard food database that comes with your software but also in your own personal food database.

The matched food items displayed in the list box can be selected as those in any other mode.

In the registered version of the software, there is no restriction on the size of the user database on which the search will be performed. However, memory limitation of your system might prevent the display of all matched entries in the list box. In this case, a message box will appear to alert you of this situation.

In the shareware version, search will be performed on the abbreviated standard database and on the first several records of the user database.

Global search: searches both the NutriGenie and user databases for a food item containing or not containing a text string. On a 486-33 system, a global search takes just under 5 seconds.

Local search: searches only the listbox's content for food items containing or not containing a text string. This is convenient for pruning down a previous search result which might contains hundreds of food items.

Tip:
After entering the text to be searched, you can use Alt-G to do a global search or Alt-L to do a local search without having to use the mouse to click on a search icon.

Personal Food Database

Occasionally you may not find a food item in the standard database. What do you do when you've just eaten a serving of Haagen-Dazs ice cream? Or want to include a favorite ethnic TV dinner in your weekly plan? Most of these items do have nutritional information on their packaging. NutriGenie program can access and use their nutritional information once you've entered the data into your personal food database. *The registered version of the software does not set an upper limit on the number of food items in the user's personal database*.

Choosing Personal Food Database from the Options menu will display all food items from your database in the list box. This mode is convenient when your diet consists mainly of special food items or when you just want to browse the contents of your data.

See also Edit User's Food Database

Edit User's Food Database

Adding foods:

Starting with version 4.2, all of our software products offer a convenient dialog to add food to the user's food database. You will need to fill in the food name, its serving designation (1 cup, 1 fruit, etc.), its food group (for pyramid analysis, if this feature is available) and nutrient information and click the 'Add' button.

We have also made it very easy for you to customize the existing food data or add recipes without having to obtain all the nutrient information or retyping it.

Customizing existing food entries: You can copy existing food entries from the program's standard food database, modify them then add these entries to your personal database. For example the hamburger you make at home is especially low in sodium. You can create an entry for this item by selecting a similar hamburger entry from the standard database and add it to a blank meal. When you bring up the Edit Food Database dialog box, its nutrient information will have been filled in for your modification. Just reduce the sodium content, give the entry a name then click on 'Add'.

Adding recipes to user's database: Suppose your favorite snack is a glass of milk and a couple of almond cookies. Just select a blank meal, add these   items to it, then bring up the Edit Food Database dialog box. The nutrient data in the dialog box are those of all the items in this meal.

Food Group Selection:
[This item is applicable only to programs having the USDA Food Pyramid Analysis feature.]
Please select Group 1 only if an item belongs to the Sweets category. The number of Fats servings is calculated automatically for you so do not specify 1 for a Fat item.

Important: Every entry in your personal food database should reflect one serving of that food. This allows the food pyramid analysis to accurately calculate the number of servings of each food group in your diet. If you don't know the weight of one serving of your food, you should use an approximation.

Format of the user's food database

[Read this section only if you wish to edit the   personal food database   using a text editor or by exporting data from a database software.]

The user food database is a file named '**userfood.txt**'. The file can be edited using any plain text editor such as the Windows *notepad* program. You can also use a database program such as Access, FoxPro, or Paradox, etc. to create this database and export/save the database to/in the plain text format.

A sample format of each record (entry, line) in this database is:
- food name in double quotes   (e.g., "Quarter Pounder with Cheese")
- weight of 1 serving in grams   (e.g., 184)
- calories from 1 serving in Kcalories   (e.g., 560)
- protein from 1 serving in grams   (e.g., 32)
- carbohydrate from 1 serving in grams   (e.g., 37)
- total fat from 1 serving in grams   (e.g., 30)
- other nutrients ...   ...
- food group (1 to 6)   (e.g., 3)

Each food item must be stored on a single line and each nutrient information is separated from one another by a comma so the above food item is recorded as:
"Quarter Pounder with Cheese", 184, 560, 32, 37, 30, ..., 3
Space(s) before or after the commas is optional. Food group information is recorded last on line.

Water data, when available, are specified in milliliter (ml) or gram (g). One ml of water weighs one gram.

For version 5.0 or earlier, nutrient data must be entered as integers. If necessary, use an appropriate multiplier to retain accuracy. For example, doubling the weight of an entry having n.5g of a nutrient.

From version 6.0, nutrient data can be entered as decimals.

Hint:
Please print out the file **'userfood.txt'** for sample entries. The order of the nutrient data follows the order of the nutrients as displayed in the main window.
When you add new entries to userfood.txt, it's best to append the new entries to the end of the database to maintain the existing order of previously entered foods.
The current maximum length of each entry is 120 characters. The food name, therefore, should be limited to approximately 80 characters or less.

Food Group Data Entry:
Please note that there are 6 pyramid food groups:
Group 1: Fats and Sweets
Group 2: Milk, Yogurt, and Cheese
Group 3: Meats, Poultry, Fish, Dry Beans and Peas, Eggs, and Nuts
Group 4: Vegetables
Group 5: Fruits and Juices
Group 6: Breads, Cereals, Rice and Pasta

Enter 2 for items belong to Group 2. Enter 3 for Group 3, and so on.

Important:
Please enter 1 (for Group 1) only if an item belongs to the Sweets category. The number of Fats servings is calculated automatically for you so do not specify 1 for a Fat item.

If an item doesn't belong to any food group, please enter 0.

Deleting foods:

The recommended way to 'remove' foods from either the NutriGenie standard database or the user's personal database is to **hide** them. Hiding foods makes them invisible but the hidden foods still reside in the database and you can unhide them if desired. Hiding foods has no effect on food choices by the auto-menu generator because the generator has to use all foods to prepare well-balanced diet in accordance with the USDA Food Pyramid guidelines.

If you wish to actually delete foods from the personal database, you can use a plain text editor to delete unwanted foods from the file userfood.txt. Please note that because the daily menu files use indices to foods in the databases, removing foods may affect previously saved files.

Serving amount

If necessary, you can adjust the amount consumed for a food item by typing the desired amount in grams in the edit control above the 'Am(oun)t. OK' button. Once the right amount has been typed in, click on **'Amt. OK'** to confirm and record this value.

For your convenience, we have provided 2 popup menus which you can use to quickly adjust the amount of servings:

- a left mouse button click anywhere on the background of the document window will display a selection of common serving sizes. If the serving size is 1 cup (the serving size or **unit** is enclosed in square brackets, for example, **[1 cup]**), selecting .5 indicates that you consume half a cup of a particular food item. How much half a cup weighs and the nutrient contents of this amount of food are adjusted and recorded automatically for you. You can turn off this feature via the <u>Options</u> menu.

- a right mouse button click will display a selection of common servings in grams, ounces, or common serving sizes. When you release the mouse button after selecting an amount, the amount in the edit box and other data will be updated automatically. You can also choose the preferred input type via the Options menu.

Quick Serving Entry in Ounces

This option allows you to hold down the right mouse button on the main window's background and select one of the standard serving sizes in **ounces** for quick data input.

Quick Serving Entry in Grams

This option allows you to hold down the right mouse button on the main window's background and select one of the standard serving sizes in **grams** for quick data input.

Quick Serving Entry in Common Serving Sizes

This option allows you to hold down the right mouse button on the main window's background and select one of the standard serving sizes for quick data input.

Sorting:

You can quickly identify food items high or low in certain nutrients by sorting them. Since the nutrient values are those contained in 100g of each food item, you can directly compare different items and easily select the appropriate foods to meet your dietary requirement.

clicks this icon to sort the items in the listbox in ascending order. A selection menu will appear to let you specify which particular nutrient you want to sort on.

clicks this icon to sort the food items in descending order.

indicates the food items are sorted in ascending order, click on a food item in the listbox to see the nutrient's value.

indicates the food items are sorted in descending order, you can click on a food item to view the particular nutrient's content.

Desirable Weight

This utility calculates the normal weight based on a person's height, sex and age.

If you are too fat or too thin, your chances of developing health problems are increased.
Being too fat is common in the United States. It is linked with high blood pressure, heart disease, stroke, the most common type of diabetes, certain cancers, and other types of illness.
Being too thin is a less common problem. It occurs with anorexia nervosa and is linked with osteoporosis in women and greater risk of early death in both women and men.

Whether your weight is 'healthy' depends on how much of your weight is fat, where in the body the fat is located, and whether you have weight-related medical problems, such as high blood pressure, or a family history of such problems.

What is a healthy weight for you? There is no exact answer right now. Researchers are trying to develop more precise ways to describe healthy weight. In the meantime, you can use this utility to help judge if your weight is healthy. Find out if your weight is within the normal range. The range is higher for people 35 years or older than for younger adults. This is because recent research suggests that people can be a little heavier as they grow older without added risk to health. Just how much heavier is not yet clear. The weight ranges given by the utility are likely to change based on research under way. The 1989 data are derived from Diet and Health (National Research Council, 1989). In 1996, a new set of weight ranges are recommended. We provide both sets of figures for your comparison.
Ranges of weight are given by this utility because people of the same height may have equal amounts of body fat but differ in muscle and bone. The higher weights in the ranges are for people with more muscle and bone.
Weights above the range are believed to be unhealthy for most people. Weights slightly below the range may be healthy for some small-boned people but are sometimes linked to health problems, especially if sudden weight loss has occurred.
Please consult with your doctor to find out what is the optimal weight for you. Because individuals differ, your optimal weight may be lower or higher than the normal range.

Use the spin controls in the dialog box to specify your height (without shoes). Specify your sex and age by selecting the appropriate radio buttons.
To plan your weight loss use Weight Control Plan.

If you close the dialog box by clicking the OK button, the information will be saved and redisplayed next time you invoke the dialog box. Use the Esc key to close the dialog box without saving.

Set Fat Warning Level

"Because fat contains more than twice the caloric value per gram of either protein or carbohydrate, the general public would benefit from reduced fat intake."
U.S. Surgeon General

Is this food too fatty? Use this dialog box to set the threshold when the program should warn you when a food item exceeds the limit. A <u>green or red symbol</u> is displayed appropriately. You can click on the symbol to invoke the dialog box. [This indicator may not be available in all programs.]

Additionally, the fat percentage bar in the gray analysis panel will change the color from dark gray to white when the fat content exceeds the limit.

When you print out your nutritional analysis of your diet, each fatty food will also be marked with an asterisk for easy recognition.

Caloric Need and Nutrient Requirements:

This dialog box calculates your daily caloric need and recommended intakes of important nutrients according to your age, sex, ideal weight, activity level. Please note that the recommended values are for an average healthy individual, your optimal intakes may differ. If you have special nutrition requirements, please consult your physician or nutritionist.

Specify your age, ideal weight and activity level using the spin buttons. <u>Activity level</u> ranges from 1 (sedentary) to 10 (strenuous).

Suggested total fat intake is based on the **American Heart Association**'s and the **Food and Nutrition Board**'s recommendation that no more than 30% of your calories come from fat.

Recommended intakes of other nutrients are based on the **Surgeon General**'s recommendation and on the **National Research Council**'s data.

To leave the dialog box, click on the OK button or select Close from the dialog box's system menu or hit Esc. If you click OK, the current information is saved for next time you invoke the dialog box.

The dialog box must be filled out at least once: when you run the application for the first time, the dialog box is automatically presented to obtain your individual information. You can revise the information anytime.

For Ketogenic Diet Meal Planner:
This dialog box calculates the patients caloric need and recommended intakes of macronutrients according to his age, weight and ketogenic ratio.

Patients age can be entered in years or months and his weight can be in pounds or kilograms. Please select the appropriate units.

Ketogenic ratio should be determined by the healthprovider. Refer to the diet protocol for further information.

Recommended caloric intake per kg is based on the Stanford protocol, recommended protein intake is from the National Research Councils RDA. You can specify your own preferences but they should not vary significantly from the recommended values.

The calculation is updated after each change when the focus is moved from the modified edit control.

Weight Control Planner

It's hard to achieve your weight goal without planning. This utility allows you to establish a plan and estimate precisely how much weight you will gain or lose when you follow this plan.

First, please specify your current weight and activity level by clicking on the appropriate spin controls. The activity levels range from 1 (for those having sedentary lifestyle) to 10 (for those having physically strenuous occupations). The dialog box displays the number of calories required for you to maintain your current weight.

The 'Daily consumption' list box (on the right) should contain several files for you to add to your plan (the list box on the left). Please note that you must have previously saved some files before you can use this dialog box. Or you can try out the sample daily food consumption files we provide.
Let's assume you've prepared 7 daily menus and name them Sun, Mon, Tue, etc. [The program automatically adds in the standard extension for your files, please use the standard extension.] These files should appear on the right hand side list box. You add the files one by one to your plan by selecting them then click on the 'Add to Plan' button or by double-clicking the file names.
As you add in these files, the dialog box automatically calculate the amount of weight you should gain or lose if you follow your plan, the average daily caloric intake and the average fat content of your plan.

NutriGenie weight control plan is truly flexible: you can set a food plan to be repeat every week, every 3 days or every 10. You can also anticipate your future weight when your plan is repeated during this period by adjusting the number of days in the period via the spin control.

Once an entry is added into your plan, you can select it then click on the 'chart' button to review its nutritional content.
In general, you should not try to achieve significant weight loss in just a few days. Please consult your physician regarding your weight loss goal. Even an energy deficit of just 500 kcal a day should result in a loss of approximately 1 pound per week or 50 pounds a year!

After setting up your plan, print out a report to keep track of your food intake and to motivate yourself to achieve your goal.

Nutrient Analysis

Do you know which meal provides you with the most protein in your diet? With the most fat? This graph displays the percentage of each nutrient consumed during each meal of the day.

Select 'Protein' from the combo box and the graph shows the percentage of protein that comes from breakfast, morning snack, lunch, afternoon snack, dinner and evening snack in counter clockwise order.

The analyses are provided for weight, calories, protein, carbohydrate, fat, and other essential nutrients when available. These analyses are very convenient when you want to spread out your energy intake throughout the day instead of concentrate your food consumption in infrequent big meals. In addition, it is easier for the gastrointestinal tract to absorb nutrients from small amounts of food over small periods of time.

To leave the dialog box, click on the OK button or select Close from the dialog box's system menu or hit Esc. If you click OK, the currently selected nutrient will also be initially selected next time you invoke the dialog box.

Caloric Analysis

These 2 graphs provide information about the nutrient contents of your food intake for the current day or for that previously saved in a file.

The left graph shows the weight in grams of protein, carbohydrate and fat in the day's food consumption. The right graph shows the day's caloric intake and a pie chart depicting the percentages of calories from protein, carbohydrate and fat in counter clockwise order. Each nutrient is color coded for easy identification. Please note that throughout this program, the percentages of calories from fat, protein and carbohydrate are relative to one another, energy contribution from alcohol is included in the total energy figure but excluded from the percentage calculation.

You should pay particular attention to the percentage of calories from fat. The American Heart Association recommends that your total fat intake be no more than 30 percent of your total calories.

To leave the graphs click the mouse anywhere inside them or hit the escape key.

Set Fat Warning Level

This option allows you to specify the percentage of calories from fat above which you want to be alerted. For example, if you want to identify foods that has more than 50% of their calories derived from fat, you should set this value through the Set Fat Warning Level dialog box. From then on, each time a food item is consumed, a green or red symbol will be displayed to indicate whether its fat content is below or above the limit you set. When you print out your nutritional report, each food item exceeding this limit is also flagged with an asterisk before its name.

indicates food item does not exceed user-specified percentage of calories from fat.

indicates food item exceeds user-specified percentage of calories from fat.

Set Nutrient Intake Preference

How much of each nutrient do you want to consume each day? Use this dialog box to set your own preference. **The color of the RDA analysis bars will reflect your preference**. The bars are green when your consumption is within your preferred range, yellow when you are not having enough of a nutrient, magenta when your intake is somewhat above the optimal range, and red when the consumption is considerably higher than desired.

Nutrient intake as percentage of goal is color coded, allowing immediate visual assessment of the diet:

below goal

within goal

somewhat above goal

significantly above goal

Click on the *Use RDA* button if you want the Recommended Dietary Allowance value for any particular nutrient. Please note that the RDA values are for an average healthy individual. You might need to adjust your optimal intake accordingly.

Starting with version 4.6, users can choose to display their nutrient intake as percentage of U.S. RDA or of their own personal preference. The percentage is based on the RDA or the upper end of user's intake preference respectively.

Caloric Analysis

Do you need a more healthful diet? This menu item displays a graph showing the number of calories in your diet that comes from protein, carbohydrate or fat. Please note that throughout this program, the percentages of calories from fat, protein and carbohydrate are relative to one another, energy contribution from alcohol is included in the total energy figure but excluded from the percentage calculation.

Nutrient Analysis

Are you eating too much at dinner and not enough at breakfast? Check out the relative nutrient intakes of all your daily meals.

Weight Control Plan

It is now so easy to establish a sensible plan to control your weight. Your plan can be set for any number of days. Find out how much weight you will gain or lose in a week, a month or a year; and whether you are consuming too much fat in your plan.

Caloric Need

This dialog box calculates the user's caloric need and recommended intakes of nutrients according to age, weight and sex.

Find out how many calories you need a day based on your age, desirable weight and activity level. The dialog box also shows the maximum recommended fat consumption in your diet.

Desirable Weight

This menu item displays a dialog box which allows you to determine your ideal weight based on your sex, height and body frame.

Find Food Item with Lowest Content of a Nutrient

Click this button to search for food item in your day consumption that has the lowest amount of a particular nutrient. The food item is highlighted and the meal where it is consumed is selected. This is useful when you want to keep the consumption of a particular nutrient low. For example, you can find food items with lowest fat content and consume more of these items without worrying about quickly increasing your fat intake. If your day's consumption has several items with the same low fat content in different meals, the program cycles through these items each time you click on this button.

Find Food Item with Highest Content of a Nutrient

Click this button to search for food item in your day consumption that has the highest amount of a particular nutrient. The food item is highlighted and the meal where it is consumed is selected. This is very useful when you want to quickly lower or raise the consumption of a nutrient. For example, your day consumption is too high in fat. You can use this button to identify the food item that most contributes to the high fat content and adjust your consumption of this item accordingly.

Choose Printer Font

Use this option to select the printer font for your Nutritional Analysis Report and Weight Planning Report.

Choose Screen Color

Some monitors flicker noticeably when certain colors are displayed. Use this option to select the most pleasing color for your screen background.

Body Mass Index

Are you thin, or are you overweight? This dialog box uses the Body Mass Index (BMI) which is derived from your height (without shoes) and weight (without clothes) to chart your precise standing. Compare your BMI with that of an average person, or an obese individual.

Relative body weights above 100 to 109 percent of desirable are associated with increased mortality as well as morbidity from heart disease, cancer, diabetes, digestive diseases, and cardiovascular disease. The higher the relative weight, the greater the risk for these conditions. Rates of hypertension and diabetes are nearly tripled for persons 20 percent or more overweight, and hypercholesterolemia was 50 percent more common. The large American Cancer Society Study found mortality from various causes to increase according to the degree of overweight. Of all obesity-related diseases, noninsulin-dependent diabetes is most clearly and strongly associated with obesity. Many other serious conditions such as gallstones, sleep apnea, osteoarthritis, and other disabling disorders of locomotion bear a direct relationship to obesity.

Caloric Expenditure of Common Activities

This utility allows you to calculate how many calories you burn by exercising or by doing many of the usual daily activities. The registered database contains information on 130 common activities. You should select an activity and set it (via the 'Set Favorite Activity' button) as your favorite activity. Once this has been set, each time you consume a food item, its caloric equivalence in terms of your favorite activity is calculated and displayed on the status bar at the bottom of your screen. For example, you set Tennis as your favorite activity and you weigh 160 lbs.; when you drink a cup of milk, the caloric equivalence of this food item is 18 minutes of Tennis. This means it takes you 18 minutes of playing tennis to burn away the calories contained in one cup of milk!

Another interesting piece of information the Caloric Expenditure dialog box provides is how much exercise it takes to lose one pound of weight. Let's say you weigh 155 lbs. and usually play tennis for an hour each time you get to play. The dialog box figures out you need to repeat this activity (an hour of tennis) 7 times to burn away one pound of weight, everything else being equal. Please note that this is not an advice for you to go out and play tennis 7 times to achieve this weight reduction! The information is presented so that you can have another measure of the relationship between weight loss and physical exercise. Before embarking on any exercise program, you should obtain approval from your doctor.

Show CSI

This option, available in **Lower Your Cholesterol**, toggles the display of the <u>Cholesterol Saturated Fat Index</u>.

Reverse Food Groups

This command reverse the current display order of the food group names in the Food Group drop down list box.

Food Guide Pyramid

This dialog box displays the Food Guide Pyramid analysis of your current diet. If your diet is balanced and varied, the result should resemble a well-formed pyramid where the base is larger than the top.

The USDA recommended number of servings is for an average individual; you may want to consult with your doctor to design an optimal personal diet program. The RDA and caloric counters of this program can also serve as a guide.

To arrive at your ideal weight, you may need to change your current approach to eating. Permanent weight loss is most easily achieved with a varied, balanced and nutritious diet that is low in fat and in empty calories. Use this Pyramid Food Analysis to help you identify imbalanced or restrictive diet.

Please note that you can add your own favorite foods to the user's food database and specify a food group for each of these foods. The registered version of this software does not set a limit on the number of entries in the user's food database.

Note: This feature is available only in the NutriGenie series and the following program:
Pyramid Weight Loss Diet

Target Heart Rate

This utility helps you determine if your heart is fit. During your next workout, take a break from your routine and take your pulse for 10 seconds to measure the intensity of your workout. Refer to the dialog box: if this number is within your Target Heart Rate then you are heart fit and your workout is efficient. When exercise, you should aim for your Target Heart Rate because you will get the maximum benefit from your exercise.

Your heart rate typically has a maximum value according to your age. This means your heart doesn't beat faster than this rate no matter how strenuously you exercise. Normally, you should try to reach from 65 to 85% of this heart rate from your exercise. Below this range, you are not exercising hard enough; above it, you might want to take it easy while working out. The 85% maximum heart rate is for athlete in training.

User over 40 years old or those with heart problem should definitely consult with their doctors and have a stress electrocardiogram performed before adopting any exercise program.

Weight Tracker (also GFR or Blood Sugar Tracker)

This utility allows you to keep track of your weight loss progress over time. It can accommodate many users and although its primary purpose is for weight tracking, you can use its graphing and convenient data entry capabilities to keep track of other information too.

Begin by creating a log for yourself using your name, for example. Once a user's log has been created, you type in the initial weight in the weight recording edit control. Afterwards, the easiest way for data entry is to click and drag the mouse on the background of the dialog box to select the desired weight. Make sure you save or click OK before closing the dialog box to retain the data for next time. Or hit 'esc(ape)' to cancel the data entry. Normally you enter the data weekly. You can also enter the data every few days. Please just make sure that the data are entered regularly enough so that the shape of the graph accurately reflects your progress.

The **Glomerular Filtration Rate (GFR) and Blood Sugar Trackers** work similarly.

Note: The default unit for recording blood glucose is mg/dl. The utility is unit independent and you can use it for recording measurements in mmol/dl also. However, since the utility accepts only integer values, you might want to uniformly multiply the mmol/dl values by 10 before recording them.

Diet Tracker

This utility allows you to keep track of your diet over time. You can keep track of the diet for many users using this dialog box. Make sure you save or use the OK button to save the data when exit. Select one of the files in the combo-box and add it to your diet log.

You can view the diet history in 2 formats: absolute calories or percentage calories contributed from fat, carbohydrate and protein. The dialog box also displays a running average of percentages of calories from fat, carbohydrate and protein as well as the average daily caloric intake for the whole period.

Average Caloric Content of Diet

What is important is not a single day's diet but your cumulative diet. This dialog box shows you the average caloric content of your diet that comes from each of the following nutrients: fat, carbohydrate and protein; a relative percentage value is also given. The percentages may not add up to exactly 100% because of truncation. Please also note that throughout this program, the percentages of calories from fat, protein and carbohydrate are relative to one another, energy contribution from alcohol is included in the total energy figure but excluded from the percentage calculation.

Mouse Button Option

You can quickly input food amount by clicking either the left or right mouse button on the screen and select the desired amount by dragging the mouse then releasing its button at the appropriate selection. The selection can be set to be in serving portion, gram or ounce. You can also turn this option off. The **'Am(oun)t OK'** button needs to be used only when you want to specify an exact weight by typing the amount in the edit control above this button. Otherwise using the mouse is more convenient.

Glucose Log

This utility allows you to keep track of your blood glucose levels over time. You begin by creating a list of the times when you normally measure your glucose each day. For example, 8 AM, 10 AM, 2 PM, etc. You can also name these periods more descriptively: Fasting BG, After Lunch BG, etc. Afterwards, you add the daily glucose measurement that correspond to a period to the log. The resulting graph will show the accumulating data over time.

Initially, you should freely experiment with the log by creating and deleting different time periods and using the mouse to enter the data (by clicking on the dialog's window and selecting from the popup menu). Once you've established a regular pattern, you should record the data daily for each time period.

Blood Pressure Log

This utility allows you to keep track of your blood pressure over time. Begin by creating an entry for yourself (the dialog supports multiple users), then enter your systolic and diastolic readings in the appropriate edit controls and click on 'Add'. You should measure your blood pressure at regular time intervals (weekly or monthly, for example). The utility also classify your readings into one of the following categories: Optimal, Normal, High Normal, and Stage 1 through Stage 4 Hypertension.

Select Nutrients to Print

When the number of nutrients analyzed by the program is large, user has the option of selecting a subset of the nutrients for print output. This allows the selection of a larger font size when printing. Another option is to use the landscape print mode which provides more space per horizontal line.
In this dialog box, only the checked nutrients are printed.

Set NutriGenie Options

Use this dialog box to specify the desired caloric intake level for NutriGenie. The menus generated by NutriGenie, in almost all cases, are within +/- 10 Calories of user's specification.

Please note that the menus generated by NutriGenie are intended for an average healthy individual. If you have special dietary requirements, you may have to modify the generated menus to fit your needs.

Caloric Need of Infants

This dialog box calculates the caloric needs and essential nutrient requirements of infants in their first year.

RDA or Personal Nutrient Intake Target

Starting with version 4.6, users can choose to display their nutrient intake as percentage of U.S. RDA or of their own personal preference. The percentage is based on the RDA or the upper end of user's intake preference respectively.

See also Setting Personal Nutrient Intake Preference

Sort Foods in Listbox by Nutrient Contents

Entries in the food selection listbox can be sorted by their nutrient content. Once the listbox has been sorted, a single-click on an entry will display the value of the key nutrient per 100g of food.

Zone Filters

There are 3 filters for food selection in *Zone Nutrition Professional*: zone-favorable foods, foods containing antioxidants and foods containing co-factors.
Selecting any of these filters will leave only zone-favorable foods in the listbox, or those having at least a measurable amount (in 100g of food) of one of the antioxidants or co-factors.

Please refer to Chapter 10 in **The Zone** for discussion regarding antioxidants and co-factors and their role in controlling eicosanoids.

Resizing Food Selection Listbox

Some food entries take more than one line in the food selection listbox resulting in fewer items being visible at one time. This option expands and contracts the width of the food listbox as desired.

When the listbox is expanded, it covers the 'I Eat' button and the sort icons. You can double-click a entry instead of using 'I Eat' and the food listbox sort feature can be accessed through the menu bar.

Please note, the content of the food listbox is refreshed to that of the original selected food group each time the width is resized.

Dialog Boxes

This is a comprehensive list of dialog boxes in NutriGenie programs. Not all dialog boxes are available in every program. Please refer to each program's feature list for further information.

Add Foods or Recipes to Database
Body Mass Index
Blood Glucose Log
Blood Pressure Log
Caloric Analysis
Caloric Expenditure
Cholesterol Profiler
Choose Printer Font
Choose Screen Color
Diet Tracker
Establish Weight Reduction Plan
Exchange Options and Auto Menu Generator
Find Desirable Weight
Find Caloric and Nutrient Requirements
Food Pyramid Analysis
Glomerular Filtration Rate (GFR) Tracker
Mouse Button Option
Nutrient Analysis
Rename Personal Food Groups
Review Food Lists
Select Nutrients to Display
Select Nutrients to Print
Set Fat Warning Level
Set Nutrient Intake Preference
Target Heart Rate
Weight Tracker

Glossary

Atherosclerosis: A type of "hardening of the arteries" in which cholesterol, fat, and other blood components build up in the walls of arteries. As atherosclerosis progresses, the arteries to the heart may narrow so that oxygen-rich blood and nutrients have difficulty reaching the heart.

Carbohydrate: One of the three nutrients that supply calories (energy) to the body. Carbohydrate provides 4 calories per gram -- the same number of calories as pure protein and less than half the calories of fat. Carbohydrate is essential for normal body function. There are two basic kinds of carbohydrate -- simple carbohydrate (or sugars) and complex carbohydrate (starches and fiber). In nature, both the simple sugars and the complex starches come packaged in foods like oranges, apples, corn, wheat, and milk. Refined or processed carbohydrates are found in cookies, cakes, and pies, etc.

Cholesterol: A soft, waxy substance. It is made in sufficient quantity by the body for normal body function, including the manufacture of hormones, bile acid, and vitamin D. It is present in all parts of the body, including the nervous system, muscle, skin, liver, intestines, heart, etc.

> **Blood cholesterol**--Cholesterol that is manufactured in the liver and absorbed from the food you eat and is carried in the blood for use by all parts of the body. A high level of blood cholesterol leads to atherosclerosis and coronary heart disease.

> **Dietary cholesterol**--Cholesterol that is in the food you eat. It is present only in foods of animal origin, not in foods of plant origin. Dietary cholesterol, like dietary saturated fat, tends to raise blood cholesterol, which increases the risk for heart disease.

Coronary heart disease: Heart ailment caused by narrowing of the coronary arteries (arteries that supply oxygen and nutrients directly to the heart muscle). Coronary heart disease is caused by atherosclerosis, which decreases the blood supply to the heart muscle. The inadequate supply of oxygen-rich blood and nutrients damages the heart muscle and can lead to chest pain, heart attack, and death.

Fat: One of the three nutrients that supply calories to the body. Fat provides 9 calories per gram, more than twice the number provided by carbohydrate or protein. In addition to providing calories, fat helps in the absorption of certain vitamins. Small amount of fat are necessary for normal body function.

Total fat: The sum of saturated, monounsaturated, and polyunsaturated fats present in food. A mixture of all three in varying amounts is found in most foods.

Gram: A unit of weight. There are about 28 grams in 1 ounce. Dietary fat, protein, and carbohydrate are measured in grams.

Lipids: Fatty substances, including cholesterol and triglycerides, that are present in blood and body tissues.

Lipoproteins: Protein-coated packages that carry fat and cholesterol through the blood. Lipoproteins are classified according to their density.

> **High density lipoproteins (HDL)**--Lipoproteins that contain a small amount of cholesterol and carry cholesterol away from body cells and tissues to the liver for excretion from the body. Low levels of HDL are associated with an increased risk of coronary heart disease. Therefore, the higher the HDL level, the better.

> **Low density lipoproteins (LDL)**--Lipoproteins that contain the largest amount of cholesterol in the blood. LDL is responsible for depositing cholesterol in the artery walls. High levels of LDL are associated with an increased risk of coronary heart disease and are therefore referred to as "bad cholesterol".

Osteoporosis: a condition in which the calcium content of the bones is depleted over time such that the bones become brittle and can be fractured with even minimal trauma.

Protein: One of the three nutrients that supply calories to the body. Protein provides 4 calories per gram, which is less than half the calories of fat. Protein is an essential nutrient that becomes a component of many parts of the body, including muscle, bone, skin, and blood.

Recommended Dietary Allowances (RDAs): the levels of intake of essential nutrients that, on the basis of scientific knowledge, are judged by the Food and Nutrition Board to be adequate to meet the known nutrient needs of practically all healthy persons. [Individuals with special nutritional needs are not covered by the RDAs.]

Triglycerides: Lipids (fat-like substances) carried through the bloodstream to the tissues. The bulk of the body's fat tissue is in the form of triglycerides, stored for later use as energy. We get triglycerides primarily from the fat in our diet.

Vascular disease: An ailment of the blood vessels often caused by atherosclerosis. Vascular disease may occur in the arteries to the brain and the major leg arteries.

anorexia: loss of appetite.

ataxia: loss or lack of muscular coordination.

tachycardia: excessively rapid heartbeat.

xerosis: abnormal dryness, esp. of the skin, conjunctiva, or mucous membranes.

dermatitis: inflammation of the skin.

Proteins

The primary function of protein is to build body tissue and to synthesize enzymes, some hormones, and other complex substances that govern body processes.

Proteins are usually readily available from both animal and plant sources. Of the 20 amino acids that make up protein, 8 are considered essential because the body cannot synthesize them and must be supplied ready-made in foods. If these essential amino acids are not all present, the other amino acids cannot be used for metabolizing human protein. Therefore, a diet containing these essential amino acids is very important for sustaining growth and health. Foods from animal sources contain complete proteins because they include all the essential amino acids. In most diets, a combination of plant and animal protein is recommended.

"Where protein intake is exceptionally low, there are physical signs--stunting, poor musculature, edema, thin and fragile hair, skin lesions--and biochemical changes that include low serum albumin and hormonal imbalances." [NRC]

Minerals

Inorganic mineral nutrients are required in the structural composition of hard and soft body tissues; they also participate in such processes as the action of enzyme systems, the contraction of muscles, nerve reactions, and the clotting of blood. These mineral nutrients, all of which must be supplied in the diet, are of two classes: the major elements such as calcium, phosphorus, magnesium, iron, iodine, and potassium; and trace elements such as copper, cobalt, manganese, fluorine, and zinc. Trace elements appear in the body in minute amounts and are essential for good health. Little is known about how they function, and most knowledge about them comes from how their absence affects health.

Vitamins

Vitamins are organic compounds that mainly function in enzyme systems to enhance the metabolism of proteins, carbohydrates, and fats. Without these substances, the breakdown and assimilation of foods could not occur. Vitamins are classified into two groups, the fat-soluble and the water-soluble vitamins. Fat-soluble vitamins include vitamins A, D, E, and K. The water-soluble vitamins include vitamin C and the B-vitamin complex.

Fat-soluble vitamins are usually absorbed with foods that contain fat. Excess amounts are stored in the body's fat and in the liver and kidneys. Because fat-soluble vitamins can be stored, they do not have to be consumed every day. The water-soluble vitamins, C and B complex, cannot be stored and therefore need to be consumed daily to replenish the body's needs. The body can manufacture only vitamin D; all others must be derived from the diet. Lack of them causes a wide range of metabolic and other dysfunctions.

Carbohydrates

Carbohydrates are the human body's main source of both quick and sustained energy. Carbohydrates are burned during metabolism to produce energy, releasing carbon dioxide and water. Humans also get energy from fats and proteins in the diet, and also from alcohol.

The carbohydrates containing the most nutrients are the complex carbohydrates, such as unrefined grains, tubers, vegetables, and fruit, which also provide protein, vitamins, minerals, and fats. A less beneficial source is foods made from refined sugar, such as candy and soft drinks, which are high in calories but low in nutrients and fill the body with what nutritionists call empty calories.

Fats

Fats are essential to the body as energy sources and as a component of hormones and membranes, but excessive intake may contribute to arteriosclerosis, colon cancer, and gallstones. Fats produce more than twice as much energy as carbohydrates. Being a compact fuel, fat is efficiently stored in the body for later use when carbohydrates are in short supply. In industrial nations such as the U.S., with food always available and with machines replacing human labor, the accumulation of body fat has become a serious health concern.

Vitamin A

Vitamin A affects the formation and maintenance of skin, mucous membranes, bones, and teeth; vision; and reproduction. Vitamin A can be obtained directly in the diet from foods of animal origin such as milk, eggs, and liver. Excess vitamin A can interfere with growth, stop menstruation, damage red blood cells, and cause skin rashes, headaches, nausea, and jaundice.

Deficiency:
"Prominent clinical signs [of vitamin A deficiency] are ocular, and range from night blindness and conjunctival xerosis to corneal <u>xerosis</u>, ulceration, and sometimes liquefaction... Other less specific deficiency signs may include loss of appetite, hyperkeratosis, increased susceptibility to infections..." [NRC]
An early deficiency symptom is night blindness (difficulty in adapting to darkness); other symptoms are excessive skin dryness; lack of mucous membrane secretion, causing susceptibility to bacterial invasion; and dryness of the eyes due to a malfunctioning of the tear glands, this is a major cause of blindness in children in developing countries.

Vitamin B-6

Pyridoxine, or vitamin B6, is necessary for the absorption and metabolism of amino acids. It also plays roles in the use of fats in the body and in the formation of red blood cells. Pyridoxine is needed in proportion to the amount of protein consumed.

Deficiency:
"Clinical signs of deficiency include epileptiform convulsions, dermatitis, and anemia. Deficiency in infant leads to a variety of neurological symptoms as well as abdominal distress." [NRC]
Pyridoxine deficiency is commonly characterized by skin disorders, cracks at the mouth corners, smooth tongue, convulsions, dizziness, nausea, anemia, kidney stones, depression, extreme nervousness, water retention, lethargy.

Vitamin B-12

Vitamin B-12 is necessary in minute amounts for the formation of nucleoproteins, proteins, and red blood cells, and for the functioning of the nervous system. Vitamin B-12 is obtained only from animal sources such as liver, kidneys, meat, fish, eggs, and milk. Vegetarians should consider taking vitamin B-12 supplements.

Deficiency:
"Vitamin B-12 deficiency results in macrocytic, megaloblastic anemia, in neurological symptoms due to demyelination of the spinal cord and brain and the optic and peripheral nerves, and in other less specific symptoms (e.g., sore tongue, weakness)." [NRC]
Common symptoms of deficiency: anemia, heart palpations, sore tongue, general weakness, lethargy.

Vitamin C

Vitamin C, or ascorbic acid, is important in the synthesis and maintenance of connective tissue. It prevents scurvy, which attacks the gums, skin, and mucous membranes, and its main source is citrus fruits.
Ascorbic acid has been shown to prevent the formation of nitrosamines (compounds found to produce tumors) in laboratory animals and possibly also in humans. Although unused ascorbic acid is quickly excreted in the urine, large and prolonged doses can result in the formation of bladder and kidney stones, interference with the effects of blood-thinning drugs and the loss of calcium from bones.

Deficiency:
"Dietary deficiency leads to scurvy, a serious disease characterized by weakening of collagenous structures that results in widespread capillary hemorrhaging. In the United States, scurvy occurs primarily in infants fed diets consisting exclusively of cow's milk and in aged persons on limited diets." [NRC]
Other symptoms of vitamin C deficiency: easy bruising; spongy, bleeding gum; dental problems; slow wound healing; fatigue; listlessness; rough skin.

Iron

Iron is needed to form hemoglobin, which is the pigment in red blood cells responsible for transporting oxygen. Women of menstrual age, who need nearly twice as much iron as men do because of blood loss, often have iron deficiencies.

Deficiency:
"An association between hemoglobin concentration and work capacity is the most clearly identified functional consequence of iron deficiency. Iron deficiency has also been associated with decreased immune function as measured by changes in several components of the immune system during iron deficiency... In children, iron deficiency has been associated with apathy, short attention span, irritability, and reduced ability to learn." [NRC]
Other common signs of iron deficiency: anemia,   weakness, fatigue, headache, heart palpations, mouth soreness.

Magnesium

Magnesium is essential for human metabolism and is important for maintaining the electrical potential in nerve and muscle cells.

Deficiency:
"The most prominent and consistent signs [of magnesium deficiency are] nausea, muscle weakness, irritability, mental derangement, and myographic changes." [NRC]
A deficiency in magnesium among malnourished persons, especially alcoholics, leads to tremors and convulsions, foot and leg cramps, irregular pulse, nervousness.

Niacin

Or vitamin B3, also works as a coenzyme in the release of energy from nutrients. The best sources of niacin are liver, poultry, meat, canned tuna and salmon, whole grain and enriched cereals, dried beans and peas, and nuts.

Deficiency:
A deficiency of niacin causes pellagra, the first symptom of which is a sunburn-like eruption that breaks out where the skin is exposed to sunlight. Later symptoms are a red and swollen tongue, diarrhea, mental confusion, irritability, and, when the central nervous system is affected, depression and mental disturbances. In large amounts it reduces levels of cholesterol in the blood, and it has been used extensively in preventing and treating arteriosclerosis. However large doses over long periods can cause liver damage.

Phosphorus

Phosphorus combines with calcium in the bones and teeth. It plays an important role in energy metabolism of the cells, affecting carbohydrates, lipids, and proteins.

Deficiency:
"Serious phosphorus deficiency has been induced in patients receiving aluminum hydroxide as an antacid for prolonged periods. Aluminum hydroxide binds phosphorus, making it unavailable for absorption. Phosphorus deficiency results in bone loss and is characterized by weakness, anorexia, malaise, and pain." [NRC]

Riboflavin

Or vitamin B2 is an orange-yellow crystalline compound, the principal growth-promoting factor in the vitamin B complex, naturally occurring in milk, leafy vegetables, fresh meat, and egg yolks. Like thiamin, riboflavin serves as a coenzyme in the metabolism of carbohydrates, fats, and, especially, respiratory proteins. It also serves in the maintenance of mucous membranes.

Deficiency:

Riboflavin deficiency may be complicated by a deficiency of other B vitamins; its symptoms are skin lesions, especially around the nose and lips, and sensitivity to light resulting in burning, itchy eyes.

Thiamin

Thiamin, or vitamin B1, is a colorless, crystalline substance, it acts as a catalyst in carbohydrate metabolism, enabling pyruvic acid to be absorbed and carbohydrates to release their energy. Thiamin also plays a role in the synthesis of nerve-regulating substances.

Deficiency:
"The clinical condition associated with the prolonged intake of a diet low in thiamin is traditionally called beriberi, whose primary symptoms involve the nervous and cardiovascular systems. The characteristic signs include mental confusion, <u>anorexia</u>, muscular weakness, <u>ataxia</u>, peripheral paralysis, ophthalmoplegia, edema (wet beriberi), muscle wasting (dry beriberi), <u>tachycardia</u>, and enlarged heart."
[NRC]

Zinc

A component of enzymes that involve in most metabolic pathways, zinc is an essential element for plants, animals and humans.

Deficiency:
"The sign and symptoms of dietary zinc deficiency in humans include loss of appetite, growth retardation, skin changes, and immunological abnormalities." [NRC] Marginal zinc deficiency in apparently healthy children results in "suboptimal growth, poor appetite, and impaired taste acuity. Increasing the daily zinc intake by 0.4 to 0.8 mg/kg brought about marked improvement." [NRC]
Deficiencies of both zinc and iron can be a problem in a vegetarian diet, especially for women, these can result in slow wound healing, skin and hair problems as well as poor resistance to infection.

Frequently Asked Questions

General
Technical

Frequently Asked Questions: General

Q. What are the benefits of registering this software?
A.
1. Registered users receive an upgraded diskette having an expanded food database. Please note that we use several food databases and they differ in size. In addition, we regularly update our programs and data and will send you the most current version.

2. The registered version of the software processes all food items in the user's personal database. In the shareware version, you can prepare as large a personal food database as you have data for but the program makes use of (sorts, searches or displays) only the first several entries in this database.

3. In addition to free technical support, registered users receive significant discount on future registration of NutriGenie products. Fee for upgrading to later version of the same program is also minimal.

Q. How can I register for NutriGenie software?
A. You can register by mail, by phone using credit card, or through the CompuServe Shareware Registration Service. Please see the registration topic for more information.

Q. Is this version the latest?
A. We always send registered users the latest version of the titles they ordered. Although some minor revisions are not reuploaded to ftp sites and online services, you can always send us an email message for confirmation or visit our web sites for the current software list:
- **http://users.aimnet.com/~food/**
- **http://pages.prodigy.com/nutrigenie/**
- **http://users.aol.com/nutrigenie/**
- **http://users.aol.com/nutrisoft/**

Q. Which NutriGenie program is best for me?
A. You may want to use the following steps to select the software:
1. select the program that analyzes all the nutrients and has all the features you require, if there is more than one
2. select the program that has the larger food database, then
3. select the program that has the later version number, then
4. select the program that costs less.
To see all features offered in a program, the nutrients it analyzes and its database size, please click on the program's 'info' in the NutriGenie topic.

Q. How much does it cost to upgrade to newer versions of NutriGenie products?
A. Registered users automatically receive a free upgrade when there is a minor revision of a product. When there is a major new release, the standard upgrade cost is 20% of the registration fee. For example, registered users of Weight Perfect 2.0 can upgrade to Weight Perfect 3.0 for $7 which is 20% of the $35 registration fee of this product.

Q. Is there printed manual for this product?
A. Because of frequent updates to our programs, in general, we provide only on-line documentation: this help file. While reading this help file you can print out any topic as needed via the 'Print' command on the toolbar or 'Print topic' command from the 'File' pull-down menu.

Q. What is the best way to get in touch with NutriGenie?
A. The best way to get in touch with us is by email. Our Internet addresses are nutrisoft@aol.com, 71563.124@compuserve.com and NutriGenie@aol.com. Email is usually answered in the same day. If you have to use regular mail, please include a phone number.

Q. Where can I obtain other NutriGenie shareware products for evaluation?
A. The most current selection of our software can be downloaded from:

- **WWW**: **http://users.aimnet.com/~food/** or **http://pages.prodigy.com/nutrigenie/** or **http://users.aol.com/nutrigenie/** .
- **CompuServe**: the Windows Shareware Forum, Natural Medicine Forum (GO NATMED), and Health and Fitness Forum (please search on contributor: 71563,124)
- **America Online**: the PC Applications Forum (please search on keyword: NutriGenie or NutriSoft)
- To obtain the evaluation software on diskette, please call **Shareware** (800)-395-7797. There is a fee for this service: $8 for the first title, $4 for each additional title, or $20 for up to 10 titles.

Frequently Asked Questions: Technical

Q. How do I know if NutriGenie software runs on my computer?
A.
All NutriGenie programs version 5.0 or earlier are native 16-bit Windows 3.x software. Our programs should be compatible with different flavors of Windows such as Windows for Workgroups 3.x, Windows 95, 98 and Windows NT. If you run NT 4.0 or later and do not see food names in listboxes with our evaluation software, we can send you an updated version that corrects this problem.

All NutriGenie programs version 6.0 or later are native 32-bit Windows programs and require Windows 95, 98 or NT.

If you plan to run our software on earlier or later releases of Windows, please make sure you thoroughly verify the operations of the software on your system before purchasing.

Q. What do I do when there is problem running this program?
A. NutriGenie tests its products on several versions of Windows before releasing them. All of our 16-bit Windows 3.x software have been successfully tested in the following environments:
- Windows 3.1
- Windows for Workgroups 3.11
- Windows NT 3.5 and 4.0
- Windows 95
When there is any incompatibility, it is most likely caused by the existence of older .vbx files or libraries on your machine. To maintain the integrity of your Windows environment, our installation procedure does not overwrite or modify any existing files on your computer. In fact, all NutriGenie-related files are installed to a single directory (which you specify) to allow easy deinstallation. Therefore, you will need to take the following steps if you wish to update the .vbx files:
1. save all .vbx files that are in your windows or windows\system directories (to another directory or a diskette)
2. also save the following 2 files: gsw.exe and gswdll.dll if they exist
3. copy gsw.exe, gswdll.dll and all .vbx files from the directory where you installed this program to the windows or windows\system directory
4. restart Windows then rerun this program.
You can always revert to the original state of your Windows environment by copying back the saved .vbx files and libraries if desired.

Q. I don't see *Vegetables* in the food group combo-box, do you have vegetables in your database?
A. Yes, we do have vegetables in our food databases. Depending on the display mode of your computer (EGA, VGA, SVGA, etc.) and depending on the database used for a particular program, you may or may not see *Vegetables* in the combobox when you first click on it. There are more food groups (not visible because of the limited screen size) further down the combo-box. There are 2 basic ways to access these groups:
1. use the reverse food group icon (on the right of the food group combo-box) to show the food groups in the reverse order so you can see those at the end of the food groups first.
2. tab to the combo-box and type the first character of the food group you want to see. In this particular case, it's the letter 'v'. The food groups will cycle through all those that start with this letter v. You can use similar technique to access other food groups.

Q. When do I use the 'Am(oun)t OK' button, or the 'I Eat' button?
A. You rarely need to use these two buttons.
You use the 'Amt. OK' button when you want to accept a specific amount of food which is entered via the edit control above this button. Normally, you click the left or right mouse button on the main window to select a standardized input amount which is automatically updated for you.
You can either double-click a food item or select it then click on 'I Eat', these operations are equivalent.

Q. What does 'NFS' stand for?
A. Not Further Specified.

Where to find latest NutriGenie software for evaluation

We continuallly upgrade our existing software or release new products. For the latest version or software, please visit the following forums or internet sites.

1. WWW: Our home pages have the most up-to-date information about our software as well as the latest software for downloading. If you have difficulty locating any of these sites, please search the web for **nutrigenie** or **nutrisoft**.

- **http://pages.prodigy.com/nutrigenie/**
- **http://members.aol.com/nutrigenie/**
- **http://users.aol.com/nutrisoft/**
- **http://users.aimnet.com/~food/**

2. FTP: The following anonymous ftp sites have our evaluation software. Please search for file names beginning with 'ng' or 'ns'.

- **ftp://ftp.aimnet.com/pub/users/food**
- **ftp://ftp.cica.indiana.edu/pub/pc/win3/misc**
- **ftp://ftp.coast.net/SimTel/win3/food**

3. CompuServe: The following forums have some of our software. Please search for contributor 71563,124.

- **Windows Shareware Forum (GO WINSHARE)**
- **Natural Medicine Forum (GO NATMED)**
- **Health and Fitness Forum**

4. America Online:

- **PC Applications Forum** (please search on keyword: NutriGenie or nutrition)
- **Better Health Forum**

About NutriGenie

NutriGenie was established by a group of Stanford University researchers to provide consumers with quality software to help them achieve better health. Our products have been licensed by health organizations, universities and individual users throughout the world.

In addition to numerous top ratings by many software reviewers, in June 1995, we received the **Home PC Editors' Choice: Top 100 Products of the Year Award**. A year later, in July 1996, we received the **Computer Life: Best Home Software** award. As of this time, we have accumulated a long list of awards and recognition that are too lengthy to list here. Please visit our web site for latest update.

With users in over 40 countries, we are indisputedly the world's leading nutrition software publisher. Our products have been translated into several languages including Italian, Greek, Croatian, German, Czech and Dutch, with other international versions in development.

Your suggestions and comments on our products are much appreciated. Please write to us at the following addresses:

US Mail:	P.O. Box 8226, Stanford, CA 94309
America Online:	NutriSoft
CompuServe:	71563,124
Internet:	NutriSoft@aol.com or 71563.124@compuserve.com

We welcome inquiry from authors, institutions, and publishers who would like to distribute our products or customize our software to use with their own nutritional data. We also license our technology (including source code) and provide technical consulting services to other nutrition software companies.

For latest information about our products and evaluation software download, please visit any of our web sites:
- **http://users.aol.com/nutrigenie/**
- **http://users.aol.com/nutrisoft/**
- **http://pages.prodigy.com/nutrigenie/**
- **http://users.aimnet.com/~food/**

See also
NutriGenie Product Catalog

Product Catalog

Please visit our web site **http://users.aol.com/nutrigenie/** for latest information about our products and evaluation software download.

Partial list of software products released by NutriGenie as of June, 1998:

35. NutriGenie Nutritionist 98 *for Windows 95, 98 and NT*   v. 6.0 ($35)
A native 32-bit program, it contains several interface enhancements such as tooltips, decimal values for nutrient data, extended nutrient requirements to include children's, etc.
info

34. NutriGenie Ketogenic Diet Meal Planner *for Windows*   v. 4.8 ($49)
Ketogenic diet is a special diet for treatment of epilepsy. This program is based on the ketogenic protocol from the Stanford University Medical Center. The software is intended for physicians and dietitians to help them plan and administer the ketogenic diet.
info

33. NutriGenie Glycemic Index Diet *for Windows*   v. 4.8 ($39)
The glycemic index (GI) is a rating system of foods based on how they affect blood sugar levels. This program helps user plan their diet using GI classification. The software also analyzes users diet using the USDA food pyramid and has auto menu-generating capability.
info

32. NutriGenie Total Nutrition *for Windows*   v. 4.8 ($55)
Comprehensive nutrition software with NutriGenie technology and unique USDA Food Pyramid analysis. The program analyzes nearly 30 nutrients in your diet and has almost all utilities available in other NutriGenie products. This package includes Omega-3 Counter and is an essential tool for any health professionals.
[Registered users of The Magical Dietitian can purchase this program for $15.]
info

31. NutriGenie USANA L.E.A.N Meal Planner *for Windows*   v. 4.7 ($40)
Meal planning tool for participants in the USANA Lifestyle Education Activity Nutrition Program.
info

30. NutriGenie Nutrition for Olympians *for Windows*   v. 4.7 ($39)
Proper nutrition can mean the difference between winning and losing. This program analyzes your diet for optimal intake of nutrients that have been shown to directly affect one's mental and physical capabilities. Ideal for students, athletes, and anyone whose responsibilities demand the best from them and who need to perform at their peak potential day in and day out.
[Registered users of Nutrition for Peak Performance can purchase this program for $10.]
info

29. NutriGenie Zone Nutrition Professional *for Windows*   v. 4.7 ($52)
Ultimate tool for planning and monitoring Zone-favorable menus. Please refer to The Zone, A Dietary Road Map by Barry Sears, Ph.D. (ISBN 0-06-039150-2) for more information.
[Registered users of Zone Diet Meal Planner can purchase this program for $20.]
info

28. NutriGenie Weight Shedders *for Windows*   v. 4.6 ($35)
Award-winning nutrition software with sophisticated NutriGenie technology and unique USDA Food Pyramid analysis. Indispensable to anyone who wants to achieve a more desirable weight.
[Registered users of Fat to Fit, Weight Perfect, Eat Well Weigh Less, Pyramid Weight Loss Diet can purchase this program for $10.]
info

27. NutriGenie Kidney Disease Nutrition *for Windows*   v. 4.6 ($89)
Award-winning nutrition software with sophisticated NutriGenie technology and unique USDA Food Pyramid analysis. Based on the National Institutes of Health's and US Surgeon General's guidelines for nutritional therapy of end-stage renal disease (ESRD). Essential for health professionals in dietary management of renal failure.
This is an upgrade of Renal Diet 4.1.
info

26. NutriGenie Carbohydrate-Restricted Diet *for Windows*   v. 4.5 ($39)
Indispensable to adopters of low-carbohydrate diet. The software offers convenient filters and other tools to facilitate meal planning. It also provides dietary guidelines from US government sources for comparison.
info

25. NutriGenie Rotation Diet Meal Planner *for Windows*   v. 4.5 ($39)
Practical organization software for food allergy discovery. The program allows up to 7-day rotation cycle diet and several user-defined allergen lists. It also provides fat and calorie monitoring capability for weight watchers.
info

24. NutriGenie Zone Diet Meal Planner *for Windows*   v. 4.4 ($39)
Convenient tool for planning and monitoring Zone-favorable menus. Please refer to The Zone, A Dietary Road Map by Barry Sears, Ph.D. (ISBN 0-06-039150-2) for more information.
info

23. NutriGenie Lower High Blood Pressure *for Windows*   v. 4.4 ($49)
A non-drug dietary approach for lowering high blood pressure based on US Surgeon General's guidelines. In addition to the sophisticated NutriGenie technology and unique USDA Food Pyramid analysis, this product implements the ADA Food Exchange System for meal planning: the program can automatically generate meals according to user's exchange requirements and food selections. Unique analysis of K Factor.
This package includes Omega-3 Counter and has utilities to keep track of blood pressure as well as weight log and diet history, etc.
[Registered users of Control Hypertension and High Blood Pressure Nutrition can purchase this program for $20.]
info

22. NutriGenie Diabetes Meal Planner *for Windows*   v. 4.4 ($59)
A most comprehensive diabetes management system. The program follows the American Diabetes Association's dietary guidelines and is an excellent companion to the ADA publications. In addition to the sophisticated NutriGenie technology and unique USDA Food Pyramid analysis, this product implements the ADA Food Exchange System for meal planning. It will save hours and hours of tedious meal planning for diabetics: the program can automatically generate meals according to user's exchange requirements and food selections.
This package includes 2 other programs: Sugar Content of Foods and Omega-3 Counter and has utilities to keep track of blood glucose, blood pressure as well as weight log and diet history, etc.
[Registered users of Control Diabetes version 1.2 can purchase this program for $35.]
[Registered users of Diabetic Nutrition version 3.3 can purchase this program for $25.]
[Registered users of Managing Diabetes version 3.6 can purchase this program for $15.]
info

21. NutriGenie American Healthy Heart Diet *for Windows*   v. 4.3 ($39)
The most effective dietary strategy to lose weight, lower cholesterol and reduce heart disease risk.
[Registered users of Heart Perfect, Healthy Heart Nutrition and Lower Your Cholesterol can purchase this program for $19.]

[Registered users of any of our other products can purchase this program for $29.]
info

20. NutriGenie The Magical Dietitian *for Windows*   v. 4.2 ($49)
Comprehensive nutrition software with NutriGenie technology and unique USDA Food Pyramid analysis. The program analyzes nearly 30 nutrients in your diet and has almost all utilities available in other NutriGenie products. This package includes Omega-3 Counter and is an essential tool for any health professionals. Newer version: Total Nutrition 4.8.
[Registered users of Compleat Nutritionist version 3.6 can purchase this program for $15.]
[Registered users of any program 1 to 15 above can purchase this program for $39.]
info

19. NutriGenie Immune Deficiency Nutrition *for Windows*   v. 4.2 ($49)
Award-winning nutrition software with sophisticated NutriGenie technology and unique USDA Food Pyramid analysis. Malnutrition depresses the immune system and makes infected people more susceptible to still other infections. A nutritious diet can enhance effectiveness of medical treatment, help restore immune function and reduce the severity of infectious disease complications. Based on the US Surgeon General's guidelines.
[Registered users of The Compleat Nutritionist or Magical Dietitian can purchase this program for $15.]
[Registered users of any other programs listed above can purchase this program for $39.]
info

18. NutriGenie Renal Diet *for Windows*   v. 4.1 ($89)
Award-winning nutrition software with sophisticated NutriGenie technology and unique USDA Food Pyramid analysis. Based on the National Institutes of Health's and US Surgeon General's guidelines for nutritional therapy of end-stage renal disease (ESRD). Essential for health professionals in dietary management of renal failure.
info

17. NutriGenie Pregnancy Nutrition *for Windows*   v. 4.1 ($39)
The program, developed from the findings of the American Academy of Pediatrics and the National Academy of Sciences, is the best nutrition software for a mother's health and that of her child. Has latest information on role of folate and zinc in pregnancy.
info

16. NutriGenie Fat to Fit *for Windows*   v. 4.1 ($35)
Award-winning nutrition software with sophisticated NutriGenie technology and unique USDA Food Pyramid analysis. Indispensable to anyone who wants to achieve a more desirable weight.
[Registered users of Weight Perfect, Eat Well Weigh Less, Pyramid Weight Loss Diet can purchase this program for $10.]
[Registered users of any other programs listed above can purchase this program for $25.]
info

15. NutriGenie Calorie Counter *for Windows*   v. 4.1 ($19)
Award-winning nutrition software with sophisticated NutriGenie technology and unique USDA Food Pyramid analysis.
info

14. NutriGenie Fat Counter *for Windows*   v. 4.1 ($21)
Award-winning nutrition software with sophisticated NutriGenie technology and unique USDA Food Pyramid analysis. Most convenient for fat tracking in your diet.
info

13. NutriGenie Fat, Cholesterol and Sodium Counter   v. 4.1 ($21)
Award-winning nutrition software with sophisticated NutriGenie technology and unique USDA Food Pyramid analysis. This program is a perfect companion to American Heart Association's Fat and

Cholesterol Counter, a guide for everyone who wants a more healthful diet.
info

12. Nutrition for Peak Performance *for Windows*   v. 3.6 ($39)
Health is more than not being sick: it's being able to perform at your peak potential day in and day out.
This program analyzes your diet for optimal intake of nutrients that have been shown to directly affect
one's mental and physical capabilities. Ideal for students, athletes, and any professionals whose
responsibilities demand the best from them.
info

11. Managing Diabetes *for Windows*   v. 3.6 ($59)
The program implements the American Diabetes Association's dietary guidelines and is an excellent
companion to the ADA publications. This package includes 2 other programs: Sugar Content of Foods
and Omega-3 Counter and has utilities to keep track of blood glucose, blood pressure as well as weight
log and diet history which do not exist in Diabetic Nutrition version 3.3. This product has been replaced by
NutriGenie Diabetes Meal Planner, however, it is continued to be offered at a discount.
[Registered users of Control Diabetes version 1.2 can purchase this program for $35.]
[Registered users of Diabetic Nutrition version 3.3 can purchase this program for $25.]
info

10. Nutrition for Women *for Windows*   v. 3.6 ($39)
A complete nutrition guide for women of all ages with emphasis on weight control and prevention of
osteoporosis and iron-deficiency anemia.
info

9. Eat Well, Weigh Less *for Windows*   v. 3.6 ($37)
The program helps you design nutritious and well-balanced meals to lose weight. Has large database of
foods and new utilities such as weight log and diet tracker.
info

8. Omega-3 Counter *for Windows*   v. 3.4 ($19)
Analysis of 250 foods with highest concentration of Omega-3. Also their fat and cholesterol data.
info

7. Pyramid Weight Loss Diet *for Windows*   v. 3.4 ($29)
The program analyzes user's weight control diet for conformance with the USDA Food Guide Pyramid in
addition to the National Research Council's RDAs. Has standard database of approximately 1,000 most
commonly used food items.
info

6. Diabetic Nutrition *for Windows*   v. 3.3 ($39)
Essential tool for accurate monitoring of diabetic diet. Includes sugar analysis of common foods and
weight control planner.
[Registered users of Control Diabetes version 1.2 can purchase this program for $19.]
info

5. Sugar Content of Foods *for Windows*   v. 3.3 ($19)
Analysis of over 500 foods for glucose, lactose, fructose, galactose, sucrose, maltose and other sugars.
info

4. High Blood Pressure Nutrition *for Windows*   v. 3.2 ($39)
The program is based on the report of the Joint National Committee on Detection, Evaluation, and
Treatment of High Blood Pressure. An excellent nondrug approach to treatment for and prevention of high
blood pressure. This product has been replaced by NutriGenie Lower High Blood Pressure, however, it is
being offered at a discount.
info

3. Lower Your Cholesterol *for Windows*   v. 3.2 ($39)
More than half of all adult Americans have a blood cholesterol level that is higher than desirable. This program helps you conform to the cholesterol-lowering dietary guidelines of the National Cholesterol Education Program and National Heart, Lung, and Blood Institute.
info

2. Reduce Cancer Risk *for Windows*   v. 3.0 ($39)
Based on studies of the National Cancer Institute and US Surgeon General's dietary guidelines, this program can help you lower the risk of cancer from diet.
info

1. Weight Perfect *for Windows*   v. 3.0 ($35)
Indispensable to anyone who wants to achieve a more desirable weight. Has large food database of approximately 10,000 items.
info

Some of our products have been adapted to use a German food database:

1. Ernährung für Frauen for Windows   **v. 3.5 ($39)**
2. Das optimale Gewicht for Windows   **v. 3.5 ($35)**

See also
Order form
Order form (German products)
Where to obtain NutriGenie software for evaluation

Pregnancy Nutrition

<u>Database</u>: 8,000 items plus user's own food database

<u>Analyses</u>: RDA, calories, protein, carbohydrate, total fat, calcium, iron, folate, zinc.

<u>Features</u>: weight log, diet history, weight control planner, body mass index, caloric need and caloric expenditure calculators, childs caloric requirement, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities. Plus <u>NutriGenie auto menu generator</u> and graphic <u>Food Pyramid analysis</u>.

Reduce Cancer Risk
<u>Database</u>: 10,000 items plus user's own food database
<u>Analyses</u>: RDA, calories, protein, carbohydrate, total fat, fiber, vitamin A, vitamin C, carotenes.
<u>Features</u>: weight control planner, caloric need and caloric expenditure calculators, caloric and nutrient distribution analyzer, search and sort capabilities.

Weight Perfect

Database: 10,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat.

Features: weight control planner, body mass index, caloric need and caloric expenditure calculators, caloric and nutrient distribution analyzer, search and sort capabilities.

Lower Your Cholesterol

Database: 10,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat, saturated fat, cholesterol, fiber, mono-unsaturated fat and polyunsaturated fat, CSI (cholesterol-saturated fat index).

Features: cholesterol profiler, weight control planner, body mass index, caloric need and caloric expenditure calculators, caloric and nutrient distribution analyzer, search and sort capabilities.

Diabetic Nutrition

Database: 10,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat, cholesterol, sodium, fiber, potassium and calcium.

Features: cholesterol profiler, weight control planner, body mass index, caloric need and caloric expenditure calculators, caloric and nutrient distribution analyzer, search and sort capabilities.

Other: the program Sugar Contents of Foods is included in this product.

High Blood Pressure Nutrition
Database: 10,000 items plus user's own food database
Analyses: RDA, calories, protein, carbohydrate, total fat, cholesterol, sodium, fiber, potassium and calcium.
Features: cholesterol profiler, weight control planner, body mass index, caloric need and caloric expenditure calculators, caloric and nutrient distribution analyzer, search and sort capabilities.

Omega-3 Counter
Database: 250 items
Analyses: total fat, saturated fat, omega-3, cholesterol.
Features: nutrient distribution analyzer, search and sort capabilities.

Sugar Contents of Foods

Database: 500 items
Analyses: galactose, glucose, fructose, lactose, sucrose, maltose, other sugars, total sugars.
Features: nutrient distribution analyzer, search and sort capabilities.

Pyramid Weight Loss Diet

Database: 1,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat, USDA food pyramid conformance.

Features: weight control planner, body mass index, caloric need and caloric expenditure calculators, caloric and nutrient distribution analyzer, search and sort capabilities.

American Heart Diet
Database: 8,000 items plus user's own food database
Analyses: RDA, calories, protein, carbohydrate, total fat, saturated fat, monounsaturated fat, polyunsaturated fat, cholesterol, sodium.
Features: weight log, diet history, blood pressure log, cholesterol profiler, weight control planner, body mass index, caloric need and caloric expenditure calculators, target heart rate calculator, caloric and nutrient distribution analyzer, personal food groups, hide and unhide foods, search and sort capabilities. Plus NutriGenie auto menu generator and graphic Food Pyramid analysis.
Release date: December 1995

Nutrition for Women
Database: 10,000 items plus user's own food database
Analyses: RDA, calories, protein, carbohydrate, total fat, iron, calcium.
Features: weight control planner, body mass index, caloric need and caloric expenditure calculators, target heart rate calculator, weight log and diet history tracker, caloric and nutrient distribution analyzer, search and sort capabilities.

Eat Well, Weigh Less

Database: 10,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat, saturated fat.

Features: weight control planner, body mass index, caloric need and caloric expenditure calculators, weight log, diet history tracker, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities.

Nutrition for Peak Performance

Database: 10,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat, vitamin A, vitamin B-6, vitamin B-12, vitamin C, riboflavin, thiamin, iron, magnesium, phosphorus, zinc.

Features: weight control planner, body mass index, caloric need and caloric expenditure calculators, weight log, diet history tracker, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities.

Requirement: SVGA display mode (800 x 600 or better)

Nutritionist Office
Features: please see info on each program.

Managing Diabetes

Database: 10,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat, cholesterol, sodium, fiber, potassium and calcium.

Features: blood glucose tracker, weight log, diet history, blood pressure log, cholesterol profiler, weight control planner, body mass index, caloric need and caloric expenditure calculators, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities.

Other: the programs Sugar Content of Foods and Omega-3 Counter are included in this package.

The Magical Dietitian

Database: 8,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat, saturated fat, monounsaturated fat, polyunsaturated fat, cholesterol, fiber, vitamin A, vitamin E, vitamin C, thiamin, riboflavin, niacin, vitamin B6, folate, vitamin B12, calcium, phosphorus, magnesium, iron, zinc, copper, sodium, potassium, alcohol.

Features: blood glucose tracker, weight log, diet history, blood pressure log, cholesterol profiler, weight control planner, body mass index, caloric need and caloric expenditure calculators, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities. Plus NutriGenie auto menu generator and graphic Food Pyramid analysis.

Other: the program Omega-3 Counter is included in this package.

Calorie Counter

Database: 8,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat.

Features: caloric need calculator, caloric and nutrient preference specifier, search and sort capabilities.

Plus NutriGenie auto menu generator and graphic Food Pyramid analysis.

Fat Counter

Database: 8,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat, saturated fat, monounsaturated fat, polyunsaturated fat.

Features: caloric need calculator, caloric and nutrient preference specifier, search and sort capabilities.

Plus NutriGenie auto menu generator and graphic Food Pyramid analysis.

Fat, Cholesterol and Sodium Counter
Database: 8,000 items plus user's own food database
Analyses: RDA, calories, protein, carbohydrate, total fat, saturated fat, cholesterol, sodium.
Features: caloric need calculator, caloric and nutrient preference specifier, search and sort capabilities.
Plus NutriGenie auto menu generator and graphic Food Pyramid analysis.

Fat to Fit

Database: 8,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat.

Features: weight log, diet history, weight control planner, body mass index, caloric need and caloric expenditure calculators, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities. Plus NutriGenie auto menu generator and graphic Food Pyramid analysis.

Renal Diet

<u>Database</u>: 8,000 items plus user's own food database

<u>Analyses</u>: RDA, calories, protein, carbohydrate, total fat, calcium, phosphorus, sodium, potassium, water.

<u>Features</u>: weight log, diet history, blood pressure log, cholesterol profiler, glomerular filtration rate (GFR) tracker, weight control planner, body mass index, caloric need and caloric expenditure calculators, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities. Plus <u>NutriGenie auto menu generator</u> and graphic <u>Food Pyramid analysis</u>.

<u>Other</u>: the program Omega-3 Counter is included in this package.

Immune Deficiency Nutrition

Database: 8,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat, saturated fat, monounsaturated fat, polyunsaturated fat, cholesterol, fiber, vitamin A, vitamin E, vitamin C, thiamin, riboflavin, niacin, vitamin B6, folate, vitamin B12, calcium, phosphorus, magnesium, iron, zinc, copper, sodium, potassium, alcohol.

Features: weight log, diet history, blood pressure log, cholesterol profiler, weight control planner, body mass index, caloric need and caloric expenditure calculators, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities. Plus NutriGenie auto menu generator and graphic Food Pyramid analysis.

Diabetes Meal Planner

<u>Database</u>: 8,000 items plus user's own food database

<u>Analyses</u>: RDA, calories, protein, carbohydrate, total fat, cholesterol, sodium, fiber, potassium, calcium, food pyramid.

<u>Features</u>: blood glucose tracker, weight log, diet history, blood pressure log, cholesterol profiler, weight control planner, body mass index, caloric need and caloric expenditure calculators, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities. Plus <u>NutriGenie auto menu generator</u>, graphic <u>Food Pyramid analysis</u>. And implementation of the <u>ADA Food Exchange System</u> for meal planning.

<u>Other</u>: the programs Sugar Content of Foods and Omega-3 Counter are included in this package.

<u>Release date</u>: January 1996

Lower High Blood Pressure

Database: 8,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat, cholesterol, sodium, fiber, potassium, calcium, food pyramid, K Factor.

Features: weight log, diet history, blood pressure log, cholesterol profiler, weight control planner, body mass index, caloric need and caloric expenditure calculators, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities. Plus NutriGenie auto menu generator, graphic Food Pyramid analysis. And implementation of the ADA Food Exchange System for meal planning.

Other: the program Omega-3 Counter is included in this package.

Release date: January 1996

Zone Diet Meal Planner

Database: 8,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat, saturated fat, monounsaturated fat, Protein Block, Carbohydrate Block, Fat Block, Zone-favorable target.

Features: weight log, diet history, cholesterol profiler, weight control planner, body mass index, caloric need and caloric expenditure calculators, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities. Plus NutriGenie automatic Zone-favorable menu generator.

Release date: February 1996

Rotation Diet Meal Planner

Database: 8,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat.

Features: body mass index, caloric need and target heart rate calculators, caloric and nutrient distribution analyzer, search and sort capabilities. Up to 7-day rotation cycle planning capability. Allergen or personal food lists.

Release date: April 1996

Carbohydrate-Restricted Diet
Database: 8,000 items plus user's own food database
Analyses: RDA, calories, protein, carbohydrate, total fat.
Features: body mass index, caloric need and target heart rate calculators, caloric and nutrient distribution analyzer, search and sort capabilities. Personal food lists. Filters for quick identification of high-protein, high-carbohydrate foods.
Release date: April 1996

Kidney Disease Nutrition
Database: 8,000 items plus user's own food database
Analyses: RDA, calories, protein, carbohydrate, total fat, calcium, phosphorus, sodium, potassium, water.
Features: weight log, diet history, blood pressure log, cholesterol profiler, weight control planner, body mass index, caloric need and caloric expenditure calculators, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities. Plus NutriGenie auto menu generator and graphic Food Pyramid analysis.
Other: the program Omega-3 Counter is included in this package.
Release date: May 1996

Weight Shedders
Database: 8,000 items plus user's own food database
Analyses: RDA, calories, protein, carbohydrate, total fat.
Features: weight log, diet history, weight control planner, body mass index, caloric need and caloric expenditure calculators, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities. Plus NutriGenie auto menu generator and graphic Food Pyramid analysis.
Release date: June 1996

Zone Nutrition Professional

Database: 8,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat, saturated fat, monounsaturated fat, fiber, co-factors, antioxidants, glycemic index, Protein Block, Carbohydrate Block, Fat Block, Zone-favorable target.

Features: weight log, diet history, cholesterol profiler, weight control planner, body mass index, caloric need and caloric expenditure calculators, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities. Co-factor, antioxidant and zone-favorable filters.

Release date: June 1996

Nutrition for Olympians

Database: 8,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat, vitamin A, vitamin B-6, vitamin B-12, vitamin C, riboflavin, thiamin, iron, magnesium, phosphorus, zinc.

Features: weight log, diet history, weight control planner, body mass index, caloric need and caloric expenditure calculators, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities. Plus NutriGenie auto menu generator and graphic Food Pyramid analysis.

Release date: July 1996

USANA L.E.A.N Meal Planner

Database: 8,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat, USANA macronutrient servings.

Features: weight log, diet history, body mass index, caloric need and caloric expenditure calculators, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities. Glycemic index of over 500 foods.

Release date: August 1996

Total Nutrition

Database: 8,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat, saturated fat, monounsaturated fat, polyunsaturated fat, cholesterol, fiber, vitamin A, vitamin E, vitamin C, thiamin, riboflavin, niacin, vitamin B6, folate, vitamin B12, calcium, phosphorus, magnesium, iron, zinc, copper, sodium, potassium, alcohol.

Features: weight log, diet history, blood pressure log, cholesterol profiler, weight control planner, body mass index, caloric need and caloric expenditure calculators, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities. Improved interface: hide and show foods, personal food groups, personal nutrient intake goals, selective nutrient display, etc. Plus NutriGenie auto menu generator and graphic Food Pyramid analysis.

Other: the program Omega-3 Counter is included in this package.

Release date: November 1996

Glycemic Index Diet

Database: 8,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat.

Features: weight log, diet history, body mass index, caloric need and caloric expenditure calculators, target heart rate calculator, caloric and nutrient distribution analyzer, search and sort capabilities. Glycemic indices of over 500 foods. Plus NutriGenie auto menu generator and graphic Food Pyramid analysis.

Release date: January 1997

Ketogenic Diet Meal Planner

Database: 8,000 items plus user's own food database

Analyses: ketogenic RDA, calories, protein, carbohydrate, total fat.

Features: caloric need and macronutrient requirements based on the Stanford University Medical Center ketogenic diet protocol, search and sort capabilities.

Release date: April 1997

Nutritionist 98

Database: 8,000 items plus user's own food database

Analyses: RDA, calories, protein, carbohydrate, total fat, saturated fat, monounsaturated fat, polyunsaturated fat, cholesterol, fiber, vitamin A, vitamin E, vitamin C, thiamin, riboflavin, niacin, vitamin B6, folate, vitamin B12, calcium, phosphorus, magnesium, iron, zinc, copper, sodium, potassium, alcohol.

Features: caloric need calculator, search and sort capabilities, high fat content alert. Improved interface: hide and show foods, personal food groups, personal nutrient intake goals, selective nutrient display, etc.

Release date: June 1998

Registration Form

[This form can be printed by selecting 'Print' or 'Print topic' from the File pull-down menu.]

Please indicate which software product(s):

1.	**NutriGenie Pregnancy Nutrition** *for Windows*	v. 4.1	$39
2.	**NutriGenie Fat to Fit** *for Windows*	v. 4.1	$35
3.	**NutriGenie Calorie Counter** *for Windows*	v. 4.1	$19
4.	**NutriGenie Fat Counter** *for Windows*	v. 4.1	$21
5.	**NutriGenie Fat, Cholesterol and Sodium Counter**	v. 4.1	$21
6.	**NutriGenie Renal Diet** *for Windows*	v. 4.1	$89
7.	**NutriGenie Immune Deficiency Nutrition** *for Windows*	v. 4.2	$49
8.	**NutriGenie The Magical Dietitian** *for Windows*	v. 4.2	$49
9.	**NutriGenie American Heart Diet** *for Windows*	v. 4.3	$39
10.	**NutriGenie Diabetes Meal Planner** *for Windows*	v. 4.4	$59
11.	**NutriGenie Lower High Blood Pressure** *for Windows*	v. 4.4	$49
12.	**NutriGenie Zone Diet Meal Planner** *for Windows*	v. 4.4	$39
13.	**NutriGenie Rotation Diet Meal Planner** *for Windows*	v. 4.5	$39
14.	**NutriGenie Carbohydrate-Restricted Diet** *for Windows*	v. 4.5	$39
15.	**NutriGenie Kidney Disease Nutrition** *for Windows*	v. 4.6	$89
16.	**NutriGenie Weight Shedders** *for Windows*	v. 4.6	$35
17.	**NutriGenie Zone Nutrition Professional** *for Windows*	v. 4.7	$52
18.	**NutriGenie Nutrition for Olympians** *for Windows*	v. 4.7	$39
19.	**NutriGenie USANA L.E.A.N Meal Planner** *for Windows*	v. 4.7	$40
20.	**NutriGenie Total Nutrition** *for Windows*	v. 4.8	$55
21.	**NutriGenie Glycemic Index Diet** *for Windows*	v. 4.8	$39
22.	**NutriGenie Ketogenic Diet Meal Planner** *for Windows*	v. 4.8	$49
23.	**NutriGenie Nutritionist 98** *for Windows 98*	v. 6.0	$35

How did you obtain this shareware?

Name:

Address:

City: **State:**   **Zip:**

NutriGenie accepts **MasterCard**, **Visa** and **American Express** payment. Holder of other credit cards, please use <u>PsL Registration Service.</u>

Credit card number: Expiration date:

Signature:

Telephone or email address:

Or please send check or money order to

NutriGenie
P.O. Box 8226
Stanford, CA 94309

International order: please remit in U.S. currency and add $3 for airmail postage. Because of high processing fee from our bank, we can no longer accept **personal** check from a **non-US** bank. Please use credit card, money order from your bank, local American Express office, or postal money order. CompuServe users should use the CIS Shareware Registration Service.

Visit any of our web sites
http://users.aol.com/nutrigenie/
http://pages.prodigy.com/nutrigenie/
http://users.aol.com/nutrisoft/
http://pages.prodigy.com/nutrisoft/
http://users.aimnet.com/~food/
for latest registration information and discount offers.

See also
Special Offer: Registration for earlier programs
German edition registration
Registration by Credit Card

Registration via CompuServe

Members of CompuServe can register for any <u>NutriGenie</u> products through its Shareware Registration Service (**GO SWREG**).

Please search for our products using "NutriGenie" as keyword or 71563,124 as contributor. You can also specify a particular filename if the search fails to list all of our software products. If for any reason, your search fails to list the desired products, please send an email message to 71563,124 or nutrisoft@aol.com for direction.

After you complete the CompuServe registration process, we will be notified and the upgraded registered software diskette(s) will be sent to you by airmail (international addresses) or first-class mail (U.S. addresses). You can also receive the software by email if you prefer. Email delivery is highly recommended for international users.

Visit our web page **http://users.aol.com/nutrigenie** for latest registration information and discount offers.

See also
<u>Special Offer: Registration for earlier programs</u>
<u>Registration by Credit Card</u>

Registration by credit card

Credit card users can register for any NutriGenie products through the **PsL** (Public software Library) **Registration Service**. There is a PsL $2 handling fee for each item ordered: a product priced at $39 will cost you $41, for example; however, you save time and postage by taking advantage of this service.

It is cheapest to order directly from NutriGenie using check, money order, MasterCard, Visa or American Express (credit card users can also order by email). Please visit our web page **http://pages.prodigy.com/nutrigenie/** or **http://users.aol.com/nutrisoft** for latest registration information and discount offers. In addition, if you wish to receive the 20% discount when ordering 3 or more items, you will need to register directly with NutriGenie. Neither PsL nor CompuServe can process this discount. The $3 airmail surcharge (for international order only) applies whether you register through PsL, CompuServe, or directly with NutriGenie.

Please call **1** - **800 - 2424 - PsL** (1-800-242-4775) or 713-524-6394
[Monday - Thursday: 7am to 6pm CST, Friday: 7am to 12:30pm CST]

PsL Registration Service can also be reached
by FAX   (713) 524-6398
by CIS Email   71355,470
by Internet Email   71355.470@compuserve.com
by mail   P.O.Box 35705, Houston, TX 77235-5705.

Please note **the above phone numbers and addresses are for registration by credit card only**. Any questions about the status of the shipment of the order, product details, technical support, volume discounts, dealer pricing, site licenses, etc., must be directed to NutriGenie. You get quickest answers by sending email directly to NutriGenie.

To insure that you get the latest version, PsL will notify NutriGenie the day of your order and NutriGenie will ship the product directly to you.

List of NutriGenie products that can be registered through the PsL Registration Service:
(please mention the number preceding the program name: its PsL registration ID)

11551 **Fat and Cholesterol Counter** for Windows   v. 1.1 ($21)

11553 **Weight Perfect** for Windows   v. 3.0 ($37)

11554 **NutriGenie Pregnancy Nutrition** for Windows   v. 4.1 ($41)

11690 **Healthy Heart Nutrition** for Windows   v. 3.5 ($37)

11557 **Reduce Cancer Risk** for Windows   v. 3.0 ($41)

11558 **Lower Your Cholesterol** for Windows   v. 3.2 ($41)

11582 **High Blood Pressure Nutrition** for Windows   v. 3.2 ($41)

11583 **Diabetic Nutrition** for Windows   v. 3.3 ($41)

11689 **Pyramid Weight Loss Diet** for Windows   v. 3.4 ($31)

11755 **Nutrition for Women** for Windows   v. 3.6 ($41)

11883 **Eat Well, Weigh Less** for Windows	v. 3.6	($39)
11884 **Omega-3 Counter** for Windows	v. 3.4	($21)
11923 **Nutrition for Peak Performance** for Windows	v. 3.6	($41)
11924 **The Compleat Nutritionist** for Windows	v. 3.6	($51)
11948 **Managing Diabetes** for Windows	v. 3.6	($61)
14119 **NutriGenie The Magical Dietitian** for Windows	v. 4.2	($51)
14155 **NutriGenie Fat to Fit** for Windows	v. 4.1	($37)
14222 **NutriGenie Calorie Counter** for Windows	v. 4.1	($21)
14224 **NutriGenie Fat Counter** for Windows	v. 4.1	($23)
14251 **NutriGenie Fat, Cholesterol and Sodium Counter**	v. 4.1	($23)
14268 **NutriGenie Renal Diet** for Windows	v. 4.1	($91)
14300 **NutriGenie Immune Deficiency Nutrition** for Windows	v. 4.2	($51)
14343 **NutriGenie American Heart Diet** for Windows	v. 4.3	($41)
14367 **NutriGenie Diabetes Meal Planner** for Windows	v. 4.4	($61)
14387 **NutriGenie Lower High Blood Pressure** for Windows	v. 4.4	($51)
14415 **NutriGenie Zone Diet Meal Planner** for Windows	v. 4.4	($41)
14481 **NutriGenie Rotation Diet Meal Planner** for Windows	v. 4.5	($41)
14573 **NutriGenie Carbohydrate-Restricted Diet** for Windows	v. 4.5	($41)
14664 **NutriGenie Kidney Disease Nutrition** for Windows	v. 4.6	($91)
14675 **NutriGenie Weight Shedders** for Windows	v. 4.6	($37)
14704 **NutriGenie Zone Nutrition Professional** for Windows	v. 4.7	($54)
14742 **NutriGenie Nutrition for Olympians** for Windows	v. 4.7	($41)
14760 **NutriGenie USANA L.E.A.N Meal Planner** for Windows	v. 4.7	($42)
14973 **NutriGenie Total Nutrition** for Windows	v. 4.8	($57)
15057 **NutriGenie Glycemic Index Diet** for Windows	v. 4.8	($41)
15213 **NutriGenie Ketogenic Diet Meal Planner** for Windows	v. 4.8	($51)
15655 **NutriGenie Nutritionist 98** for Windows	v. 6.0	($37)

See also

Registration form - German products

The following NutriGenie products are available in the German edition which uses a German food database. [This database has approximately 1.000 food items, however, we regularly update and enlarge our food databases and will send you the latest available data.] Currently these items can be registered only directly with NutriGenie or through the CompuServe Shareware Registration service. Please indicate which software product(s):

1. Ernährung für Frauen for Windows   **v. 3.5**   **$39**
2. Das optimale Gewicht for Windows   **v. 3.5**   **$35**

Name:

Address:

City: **State:**   **Postal Code:**

How did you obtain this NutriGenie   **_____**
shareware?

Your email address, if available: **_____**

NutriGenie accepts **MasterCard, Visa** and **American Express** payment. Holder of other credit cards, please use PsL Registration Service.

Credit card number: Expiration date:

Signature:

Telephone or email address:

 Or please send money order to

NutriGenie
P.O. Box 8226
Stanford, CA 94309

SPECIAL OFFER: **Registration for Earlier Programs**
[This form can be printed by selecting 'Print topic' from the File pull-down menu.]

Although NutriGenie continually updates our programs, we still offer earlier versions of our products to users when they
- don't need the new features in later products or
- are interested in different food databases or
- would like to economize.

<u>**Special offer**</u>: Deduct up to $10 from each product having version number 3.6 or earlier. Please note, none of the following programs has the <u>NutriGenie auto-menu generator technology</u>, and only one (item 9) has the graphic <u>USDA Pyramid Food Guide analysis</u>. All of our programs version 4.0 or later have these 2 unique features. To upgrade to 4.x software, you pay just the price difference plus $8 shipping and handling fee.
This offer is extended only to users who register directly with NutriGenie. Neither CompuServe nor PsL (Public Software Library) can process this special discount or other upgrade orders.
Please indicate which software product(s):

Program name	version	database	originally	you pay
1. **Fat and Cholesterol Counter** *for Windows*	v. 1.1	1,000	$19	**$15**
2. **Diabetic Nutrition** *for Windows*	v. 3.3	10,000	$39	**$29**
3. **Weight Perfect** *for Windows*	v. 3.0	10,000	$35	**$25**
4. **Pregnancy Nutrition** *for Windows*	v. 2.1	1,000	$39	**$29**
5. **High Blood Pressure Nutrition** *for Windows*	v. 3.3	10,000	$39	**$29**
6. **Healthy Heart Nutrition** *for Windows*	v. 3.5	1,000	$35	**$25**
7. **Reduce Cancer Risk** *for Windows*	v. 3.0	10,000	$39	**$29**
8. **Lower Your Cholesterol** *for Windows*	v. 3.2	10,000	$39	**$29**
9. **Pyramid Weight Loss Diet** *for Windows*	v. 3.4	1,000	$29	**$19**
10. **Omega-3 Counter** *for Windows*	v. 3.4	250	$19	**$15**
11. **Nutrition for Women** *for Windows*	v. 3.6	10,000	$39	**$29**
12. **Eat Well, Weigh Less** *for Windows*	v. 3.6	10,000	$37	**$27**
13. **Sugar Contents of Foods** *for Windows*	v. 3.3	500	$19	**$15**
14. **Nutrition for Peak Performance** *for Windows*	v. 3.6	10,000	$39	**$29**
15. **The Compleat Nutritionist** *for Windows*	v. 3.6	10,000	$49	**$39**
16. **Managing Diabetes** *for Windows*	v. 3.6	10,000	$59	**$49**

Name:

Address:

City: **State:**   **Zip:**

How did you obtain this <u>NutriGenie</u>   _____
shareware?

NutriGenie accepts **MasterCard, Visa** and **Amercan Express** payment. Holder of other credit cards, please use <u>PsL Registration Service.</u>

Credit card number: Expiration date:

Signature:

Telephone or email address:

Or please send check or money order to

NutriGenie
P.O. Box 8226
Stanford, CA 94309

International order: please remit in U.S. currency and add $2 for airmail postage. Because of high processing fee from our bank, we can no longer accept **personal** check from a **non-US** bank. Please use credit card, money order from your bank, local American Express office, or postal money order. CompuServe users can use the CIS Shareware Registration Service.

See also
German edition registration
Registration by Credit Card

Determining Activity Levels

The activity levels used in NutriGenie programs range from 1 to 10.

Level 1 corresponds to the resting state with little or no activity.

Levels 2 to 4 corresponds to a sedentary lifestyle where a 150-lbs individual would burn between 80 and 150 Calories an hour. Please refer to the <u>Caloric Expenditure</u> dialog box. Users who do mostly office work, light housework, or driving, etc., belong to this category.

Levels 5 to 7 are for those with moderately active lifestyle. If you are an office worker but play tennis or bike ride an hour or 2 a day; or your profession demands physical activities similar to those of carpenters, plasterers, etc. then you belong to this category.

Levels 8 to 10 are for very active individuals such as athletes, those who regularly do strenuous tasks such as shoveling, weight lifting, etc.

Cholesterol Profile

This utility compares your <u>cholesterol</u> levels (total cholesterol, LDL cholesterol, HDL cholesterol and <u>triglyceride</u>) with those of the general population. There are 4 bars in each graph, the first bar indicates the lowest quartile (the lowest 25% of the population have cholesterol below this value), the second bar is the average value of the population, the third bar shows the highest quartile (the top 25% of the population have their cholesterol level above this value) and the last bar is your own level.

Select your age group, your sex and use the spin controls to set your own cholesterol levels. The utility will adjust the graphs and indicate whether your level of a particular cholesterol is desirable, borderline high, or high, etc. These categories are defined by the National Institutes of Health's Adult Treatment Panel. Sometimes, LDL cholesterol is not measured directly in your test. In this case, you can tell the utility to estimate your LDL cholesterol from your total cholesterol, HDL cholesterol and triglyceride.

Your heart disease risk is categorized based on the ratio of your total cholesterol over your HDL cholesterol.

The 'Save' button will close the dialog and saves your personal values for future retrieval.

<u>NutriGenie</u> "Nutritionist 98" Help Index

Some topics in this help file contains comprehensive information about features and utilities offered in all NutriGenie programs. Nutritionist 98 does not offer all features described in this help file.

General Information

<u>Introduction</u>
<u>Basic Operations</u>
<u>NutriGenie food databases</u>
<u>User's food database</u>
<u>Personal food groups</u>
<u>Program's icons and buttons</u> [**Please read this topic**.]
<u>Dialog boxes</u>
<u>New Features and Differences among Versions</u>
<u>Frequently Asked Questions</u>
<u>How To Choose Nutrition Software</u>
<u>Top Tips</u>
<u>About NutriGenie</u>
<u>Product Catalog</u>

Registration

<u>Registration Form</u>
<u>Registration via CompuServe</u>
<u>Registration using credit card</u>
<u>Registration - German products</u>
<u>Disclaimer</u>

Commands

<u>File menu</u>
<u>View menu</u>
<u>Tools menu</u>
<u>Options menu</u>
<u>Window menu</u>
<u>Help menu</u>

You can obtain specific help for the current task by pressing F1 at any window or dialog box.
To obtain a hard-copy of a help topic, choose '**Print topic**' from the **File** pull-down menu.

Program's Icons and Buttons

This is a list of some common shortcuts via icons and buttons to all NutriGenie utilities, **some icons may not be accessible in this program because their utilities are not available**. If an icon is not described in this list, you can obtain its description via the context-sensitive help button (the last button) on the application toolbar.

NutriGenie auto menu generator:

instructs NutriGenie to generate a well-balanced daily menu at your specified caloric intake level. (Use 'Set NutriGenie Options ...' to specify the caloric requirement.)

instructs NutriGenie to generate a daily menu according to your food exchange requirement. (Use 'Set Exchange Options ...' to specify the exchange requirement.)

USDA Pyramid analysis:

brings up a dialog box which uses the USDA Food Guide Pyramid to analyze your diet.

Fat content:

indicates food item does not exceed user-specified percentage of calories from fat.

indicates food item exceeds user-specified percentage of calories from fat.

Click on either of these icons to specify the fat percentage where you want to be warned when exceeded.

Caloric analysis:

clicks this icon to see graphic analysis of calories from fat, protein and carbohydrate for selected food item.

Sorting:
Nutrients are sorted based on values in 100g of food.

clicks this icon to sort the items in the listbox in ascending order.

clicks this icon to sort the food items in descending order.

indicates the food items are sorted in ascending order, click on a food item in the listbox to see the

nutrient's value.

indicates the food items are sorted in descending order.

Food groups viewing:
Since there can be more than 50 food groups in our database and an average screen can display only about 30 food groups at a time, these buttons make it more convenient to view the food groups (when you hold down the mouse on the drop down listbox) by displaying them in normal order (first group first) or reverse order (last group first). You can select a food group by the mouse or by typing in the first letter of the food group's name.

displays food groups in normal order in drop down list box. Instead of clicking on this icon, you can use alt-n (Normal).

displays food groups in reverse order in drop down list box. Instead of clicking on this icon, you can use alt-r (Reverse).

indicates food groups are displayed in normal order.

indicates food groups are displayed in reverse order.

Searching:
Since there can be up to approximately 10,000 food items in our food database in addition to other items in user's database, this search facility makes it easy for you to locate any particular food by name. [Some of our programs come with a standard database of about 1,000 food items. Please see the *readme.txt* file for the database size of a particular program.] You can do a global or a local search. You can specify that the result include or exclude certain food items.
Example: to find all foods containing 'yogurt', you type this string (without the quotes) into the edit control and click the global search icon. [*If you don't see the search icons, you need to select Options then Search mode from the main menu first.*] The result is displayed in the listbox below when the search is completed. To exclude all vanilla yogurt, you type the string '!vanilla' (without the quotes) into the edit control and click the local search icon. [*Don't leave a space before your search text or after the exclamation point because blank space is significant in the search.*] To narrow the result further, you can do another local search on the non-vanilla yogurt items; or you can proceed to another global search.

Enter search mode

Global search: searches both the NutriGenie and user databases for a food item containing or not containing a text string. You can use alt-g (Global) instead of clicking on this icon.

Local search: searches only the listbox's content for food items containing or not containing a text string. This is convenient for pruning down a previous search result which might contains hundreds of food items. You can use alt-l (Local) instead of clicking on this icon.

Quick Find:
If your current day's diet is too high in fat, for example, you can use this feature to quickly locate the item most contribute to this problem and adjust your consumption accordingly.

locates the food item in the current day's consumption that has the highest content of a particular nutrient.

locates the food item in the current day's consumption that has the lowest content of a particular nutrient.

View menu commands

The View menu may have the following commands:

Caloric Analysis | Shows graphic analysis of percentage of calories from protein, carbohydrate and fat.
Nutrient Analysis | Shows graphic analysis of the individual nutrient contents from your daily food consumption.
Toolbar | Shows or hides the toolbar.
Status Bar | Shows or hides the status bar.

Tools menu commands

The Tools menu may have the following commands:

Cholesterol Profile | Analyze your blood cholesterol levels and your heart disease risk
Weight Control Plan | Use this dialog box to set short and long-term plan for weight control.
Desirable Weight | Determine your ideal weight based on your sex, height and body frame.
Body Mass Index | Compare your body mass index with the general population's
Caloric Need | Find out your daily caloric need.
Caloric Expenditure | Find out how much energy is used in common activities

Options menu commands

The Options menu may have the following commands:

<u>Search Mode</u>	Allow you to search for any specific food from the standard and personal food databases.
<u>Food Groups Mode</u>	Display food items according to food groups.
<u>Personal Food Database</u>	Display food items from your personal food database.
<u>Show CSI</u>	Toggle the display of Cholesterol Saturated Fat Index
<u>Reverse Food Groups</u>	Reverse the display order of food group names
<u>Choose Printer Font</u>	Select your favorite printer font for your nutritional and weight planning report.
<u>Choose Screen Color</u>	Select your favorite color for your screen background.
<u>Set Nutrient Intake Preference</u>	Set your preferred ranges of nutrient intakes. The color of the RDA analysis bars will reflect your preference.
<u>Set Fat Warning Level</u>	Set threshold beyond which you are alerted when a food item has more than certain percentage of calories from fat.
<u>Left Mouse Button Quick Input</u>	Toggle the use of left mouse button for quick serving input
<u>Right Button: Gram Quick Input Mode</u>	Hold down the right mouse button on the window background will display serving amount in *grams* for quick selection.
<u>Right Button: Ounce Quick Input Mode</u>	Hold down the right mouse button on the window background will display serving amount in *ounces* for quick selection.
<u>Right Button: Serving Quick Input Mode</u>	Hold down the right mouse button on the window background will display *common serving* sizes for quick selection.

Obesity

Excess weight or overweight occurs when too few calories are expended and too many consumed for individual metabolic requirements. If you eat more than you need, the surplus energy is stored in your body as fat. When the amount of your body fat is excessive and unsightly, you are overweight. More specifically, if your weight exceeds the desirable weight by 20% or more, you are considered obese. The extraordinarily high prevalence of obesity in the United States -- *one-fourth of American adults are overweight and nearly one-tenth are severely overweight* -- coupled with its role as a risk factor for diabetes, hypertension, coronary artery disease and stroke, gallbladder disease, and some types of cancer, suggests that a reduction in the average weight of the general population would improve the Nation's health.

Americans, in general, would benefit from a lifestyle that includes more physical activity and a diet containing fewer calories and less fat.

Treatment of Obesity

> *If you wish to grow thinner, diminish your dinner,*
> *And take to light claret instead of pale ale;*
> *Look down with an utter contempt upon butter,*
> *And never touch bread till it's toasted--or stale*
> **H. S. Leigh** (1837-83), English author. ***A Day for Wishing***.

To lose weight, one must decrease caloric intake, increase caloric expenditure, or do both. Thus, the chief approaches to weight reduction involve behavior change related to diet and exercise, drugs to decrease hunger or increase satiety, and surgical or mechanical intervention designed to reduce food intake.

Thus far, no drug therapy has induced long-term weight loss. Drugs are aimed at decreasing hunger or increasing satiety, usually by mimicking certain neurotransmitters or hormones that play a physiologic role in feeding behavior. One problem is that weight lost with drug therapy is more often regained than with other methods, suggesting that appetite-suppressant drugs lower the set point level at which body weight is regulated and only secondarily suppress appetite. Regardless, weight loss would be expected to occur only during the period of drug therapy, suggesting the need for chronic treatment.

Surgical intervention appears appropriate only for selected persons with massive obesity or with its severe complications who have not responded to more conservative treatment. Jejunoileal bypass has been largely abandoned because of unfavorable side effects. Other procedures such as gastric balloons and gastric surgery, which reportedly cause substantial weight loss -- although rarely to ideal weight -- in morbidly obese persons, require further study before their long-term effects are known.

Weight loss reduces health risks in the obese. A combination of diet and exercise seems to be the most sensible approach to treatment. However, fad weight loss regimens of unscientific merit have been estimated, in 1981, to cost consumers $5 billion annually. While such diets attract many people's attention they may be dangerous, especially when they provide less than the full complement of essential nutrients.

NutriGenie program is based on the US Surgeon General's Report on Nutrition and Health and dietary guidelines for weight reduction and prevention of obesity. It is an excellent tool to help you analyze your food intake and obtain a more desirable weight. This program allows you to enjoy varied, balanced, flexible, healthful and pleasant meals while you are on a weight loss diet. The program can be used by itself, or in conjunction with diet programs from your favorite authors. Whether you are vegetarian, or follow a macrobiotic diet, or enroll in a weight-loss club, etc., you will find that our software gives you better insight into your diet and helps you make informed dietary decisions.

"Four of the six leading causes of death

-- diabetes, heart disease, cancer and obesity -- are related to nutrition
... [but] many doctors don't ask questions about diet
until the patient has a heart attack."
Dr. Steve Zeisel,
Chairman, Nutrition Department, University of North Carolina
(Associated Press)

Dietary guidelines for weight control:

•	To lose weight, one must decrease caloric intake, increase caloric expenditure, or do both.

•	Because <u>fat</u> contains more than twice the caloric value per gram of either protein or carbohydrate, the general public would benefit from reduced fat intake. The Food and Nutrition Board's Committee on Diet and Health recommended that the fat content of the U.S. diet not exceed 30% of caloric intake. Our software calculates and displays graphic analysis of fat content for every food entry (approximately 10,000 items in our professional database and also those from user's database) as well as for your daily food consumption. The program also lets you set a <u>fat warning level</u> to easily identify high-fat foods: when the specified percentage of energy from fat is exceeded, a <u>red icon</u> is displayed and associated with a food item.

•	Sugar and alcohol provide calories from <u>carbohydrate</u> but no other nutrients, individuals seeking to attain and maintain desirable body weight should use these substances sparingly. Our program separates these items into their own <u>food groups</u> for easy identification and avoidance.

•	In addition, extremely low calorie diets (300 to 400 kcal per day) should be avoided because it may be difficult to meet essential vitamin and mineral requirements on low-calorie diets. Crash diets seldom work if your objective is to lose weight permanently. First, when the weight you lose is mostly body water, it will come back when you return to your normal routines. Second, severely restrictive diets are not sustainable for most people on a long-term basis. Our software helps you identify inadequate diets. It also helps you design those that are healthy, varied and balanced because the program lets you choose wisely from thousands of foods.

•	Evidence indicates that exercise burns calories, increases the proportion of lean to fat body mass, and, therefore, raises the metabolic rate. Increased levels of physical activity are important for attaining desirable body weights among the general population. The rule regarding exercising is to go slow and steady. Our software provides a convenient utility to help you determine how much energy you expend through common activities and exercises. As a result, you can identify those activities that may be ineffective or those that are too strenuous. In consultation with your physician, you can devise an exercise program that is suitable to your physical condition.

•	When you design a diet for yourself, make sure that it is varied and balanced. [You can use the Food Pyramid Analysis tool (available in our Pyramid Weight Loss Diet program and the NutriGenie series) to determine if your diet conforms with the USDA's Food Guide Pyramid.] In general, you should choose the foods that you like so long as they are low in fat. Diet doesn't mean deprivation. The one simple adjustment you most likely need to make is: reduce fat intake.

•	It is better to have several small meals than few big ones. People who have large, infrequent meals tend to gain more weight than those who eat smaller quantities (but the same total) at regular intervals. Our graphic analysis allows you to inspect and distribute your nutrient intake evenly throughout the day as desired.

See also <u>Obesity</u>

Important: The dietary guidelines contained in this program are derived from research published by US government agencies and by private non-profit health organizations. The nutritional guidelines in this section are for your information only. Before adopting any diet, please obtain approval from your physician.

File menu commands

The File menu offers the following commands:

New	Creates a new document.
Open	Opens an existing document.
Close	Closes an opened document.
Save	Saves an opened document using the same file name.
Save As	Saves an opened document to a specified file name.
Print	Prints a document.
Print Setup	Selects a printer and printer connection.
Exit	Exits program.

Window menu commands

The Window menu offers the following commands, which enable you to arrange multiple views of multiple documents in the application window:

Cascade	Arranges windows in an overlapped fashion.
Tile	Arranges windows in non-overlapped tiles.
Arrange Icons	Arranges icons of closed windows.
Window 1, 2, ...	Goes to specified window.

Help menu commands

The Help menu offers the following commands, which provide you assistance with this application:

Index   Offers you an index to topics on which you can get help.
Using   Provides general instructions on using help.
Help
About   Displays the version number of this application.

New command (File menu)

Use this command to create a new document (file) in "Reduce Cancer Risk". A document (file) contains all the information regarding the foods you consume during a day. You can open an existing document with the Open command.

Shortcuts

Toolbar:

Keys: CTRL+N

Open command (File menu)

Use this command to open an existing document in a new window.   You can open multiple documents at once.   Use the Window menu to switch among the multiple open documents.   See Window 1, 2, ... command.

You can create new documents with the New command.

Shortcuts

   Toolbar:
Keys: CTRL+O

File Open dialog box

The following options allow you to specify which file to open:

File Name
    Type or select the filename you want to open.   This box lists files with the extension you select in the List Files of Type box.

List Files of Type
    Select the type of file you want to open.

Drives
    Select the drive in which "Reduce Cancer Risk" stores the file that you want to open.

Directories
    Select the directory in which "Reduce Cancer Risk" stores the file that you want to open.

Network...
    Choose this button to connect to a network location, assigning it a new drive letter.

Close command (File menu)

Use this command to close all windows containing the active document.   "Reduce Cancer Risk" suggests that you save changes to your document before you close it.   If you close a document without saving, you lose all changes made since the last time you saved it.   Before closing an untitled document, "Reduce Cancer Risk" displays the <u>Save As dialog box</u> and suggests that you name and save the document.

You can also close a document by using the Close icon on the document's window, as shown below:

Save command (File menu)

Use this command to save the active document to its current name and directory.   When you save a document for the first time, "Reduce Cancer Risk" displays the Save As dialog box so you can name your document.   If you want to change the name and directory of an existing document before you save it, choose the Save As command.

Shortcuts

Toolbar: 🖬
Keys: CTRL+S

Save As command (File menu)

Use this command to save and name the active document.   "Reduce Cancer Risk" displays the <u>Save As dialog box</u> so you can name your document.

<u>**Important:**</u>
You should save all your files in the directory where you install "Reduce Cancer Risk". The Weigh Control planner will look for them in this directory.

To save a document with its existing name and directory, use the <u>Save command</u>.

File Save As dialog box

The following options allow you to specify the name and location of the file you're about to save:

File Name

Type a new filename to save a document with a different name.   A filename can contain up to eight characters and an extension of up to three characters.   "Reduce Cancer Risk" adds the extension you specify in the Save File As Type box.

Drives

Select the drive in which you want to store the document.

Directories

Select the directory in which you want to store the document.

<u>**Important:**</u>

You should save all your files in the directory where you install "Reduce Cancer Risk". The Weigh Control planner will look for them in this directory.

Network...

Choose this button to connect to a network location, assigning it a new drive letter.

1, 2, 3, 4 command (File menu)

Use the numbers and filenames listed at the bottom of the File menu to open the last four documents you closed.   Choose the number that corresponds with the document you want to open.

Exit command (File menu)

Use this command to end your "Reduce Cancer Risk" session.   You can also use the Close command on the application Control menu.   "Reduce Cancer Risk" prompts you to save documents with unsaved changes.

Shortcuts
   Mouse: Double-click the application's Control menu button.

Keys: ALT+F4

Toolbar command (View menu)

Use this command to display and hide the Toolbar, which includes buttons for some of the most common commands in "Reduce Cancer Risk", such as File Open.   A check mark appears next to the menu item when the Toolbar is displayed.

See Toolbar for help on using the toolbar.

Toolbar

The toolbar is displayed across the top of the application window, below the menu bar.   The toolbar provides quick mouse access to many tools used in "Reduce Cancer Risk",

To hide or display the Toolbar, choose Toolbar from the View menu (ALT, V, T).

Click	**To**

   Open a new document.

   Open an existing document.   "Reduce Cancer Risk" displays the Open dialog box, in which you can locate and open the desired file.

   Save the active document or template with its current name.   If you have not named the document, "Reduce Cancer Risk" displays the Save As dialog box.

   Print the active document.

Status Bar command (View menu)

Use this command to display and hide the Status Bar, which describes the action to be executed by the selected menu item or depressed toolbar button, and keyboard latch state. A check mark appears next to the menu item when the Status Bar is displayed.

See Status Bar for help on using the status bar.

Status Bar

```
                                                    CAP  [    ] [    ]
```

The status bar is displayed at the bottom of the "Reduce Cancer Risk" window.   To display or hide the status bar, use the Status Bar command in the View menu.

The left area of the status bar describes actions of menu items as you use the arrow keys to navigate through menus.   This area similarly shows messages that describe the actions of toolbar buttons as you depress them, before releasing them.   If after viewing the description of the toolbar button command you wish not to execute the command, then release the mouse button while the pointer is off the toolbar button.

The right areas of the status bar indicate which of the following keys are latched down:

Indicator	Description
CAP	The Caps Lock key is latched down.
NUM	The Num Lock key is latched down.
SCRL	The Scroll Lock key is latched down.

Cascade command (Window menu)

Use this command to arrange multiple opened windows in an overlapped fashion.

Tile command (Window menu)

Use this command to arrange multiple opened windows in a non-overlapped fashion.

Tile Horizontal command (Window menu)

Use this command to vertically arrange multiple opened windows in a non-overlapped fashion.

Tile Vertical command (Window menu)

Use this command to arrange multiple opened windows side by side.

Window Arrange Icons Command

Use this command to arrange the icons for minimized windows at the bottom of the main window.   If there is an open document window at the bottom of the main window, then some or all of the icons may not be visible because they will be underneath this document window.

1, 2, ... command (Window menu)

"Reduce Cancer Risk" displays a list of currently open document windows at the bottom of the Window menu.   A check mark appears in front of the document name of the active window.   Choose a document from this list to make its window active.

Index command (Help menu)

Use this command to display the opening screen of Help.   From the opening screen, you can jump to step-by-step instructions for using "Reduce Cancer Risk" and various types of reference information.

Once you open Help, you can click the Contents button whenever you want to return to the opening screen.

Using Help command (Help menu)

Use this command for instructions about using Help.

Context Help command

Use the Context Help command to obtain help on some portion of "Reduce Cancer Risk".   When you choose the Toolbar's Context Help button, the mouse pointer will change to an arrow and question mark. Then click somewhere in the "Reduce Cancer Risk" window, such as another Toolbar button.   The Help topic will be shown for the item you clicked.

Shortcut
Keys: SHIFT+F1

Title Bar

The title bar is located along the top of a window.   It contains the name of the application and document.

To move the window, drag the title bar.   Note: You can also move dialog boxes by dragging their title bars.

A title bar may contain the following elements:
- Application Control-menu button
- Document Control-menu button
- Maximize button
- Minimize button
- Name of the application
- Name of the document
- Restore button

Scroll bars

Displayed at the right and bottom edges of the document window.   The scroll boxes inside the scroll bars indicate your vertical and horizontal location in the document.   You can use the mouse to scroll to other parts of the document.

Size command (System menu)

Use this command to display a four-headed arrow so you can size the active window with the arrow keys.

After the pointer changes to the four-headed arrow:
1. Press one of the DIRECTION keys (left, right, up, or down arrow key) to move the pointer to the border you want to move.
2. Press a DIRECTION key to move the border.
3. Press ENTER when the window is the size you want.

Note: This command is unavailable if you maximize the window.

Shortcut
   Mouse: Drag the size bars at the corners or edges of the window.

Move command (Control menu)

Use this command to display a four-headed arrow so you can move the active window or dialog box with the arrow keys.

Note: This command is unavailable if you maximize the window.

Shortcut
　 Keys:　　　　CTRL+F7

Minimize command (application Control menu)

Use this command to reduce the "Reduce Cancer Risk" window to an icon.

Shortcut

    Mouse: Click the minimize icon on the title bar.
Keys: ALT+F9

Maximize command (System menu)

Use this command to enlarge the active window to fill the available space.

Shortcut

Mouse: Click the maximize icon on the title bar; or double-click the title bar.
Keys: CTRL+F10 enlarges a document window.

Next Window command (document Control menu)

Use this command to switch to the next open document window.   "Reduce Cancer Risk" determines which window is next according to the order in which you opened the windows.

Shortcut
Keys: CTRL+F6

Previous Window command (document Control menu)

Use this command to switch to the previous open document window.   "Reduce Cancer Risk" determines which window is previous according to the order in which you opened the windows.

Shortcut
    Keys: SHIFT+CTRL+F6

Close command (Control menus)

Use this command to close the active window or dialog box.

Double-clicking a Control-menu box is the same as choosing the Close command.

Note: If you have multiple windows open for a single document, the Close command on the document Control menu closes only one window at a time.   You can close all windows at once with the Close command on the File menu.

Shortcuts
Keys: CTRL+F4 closes a document window
ALT+F4 closes the window or dialog box

Restore command (Control menu)

Use this command to return the active window to its size and position before you chose the Maximize or Minimize command.

Switch to command (application Control menu)

Use this command to display a list of all open applications.   Use this "Task List" to switch to or close an application on the list.

Shortcut
    Keys: CTRL+ESC

Dialog Box Options
When you choose the Switch To command, you will be presented with a dialog box with the following options:

Task List
    Select the application you want to switch to or close.

Switch To
    Makes the selected application active.

End Task
    Closes the selected application.

Cancel
    Closes the Task List box.

Cascade
    Arranges open applications so they overlap and you can see each title bar.   This option does not affect applications reduced to icons.

Tile
    Arranges open applications into windows that do not overlap.   This option does not affect applications reduced to icons.

Arrange Icons
    Arranges the icons of all minimized applications across the bottom of the screen.

Choose Font dialog box

Select your favorite font for printed report of nutritional analysis or weight control plan.

No Help Available

No help is available for this area of the window.

No Help Available

No help is available for this message box.

Print command (File menu)

Use this command to print a document.   This command presents a <u>Print dialog box</u>, where you may specify the range of pages to be printed, the number of copies, the destination printer, and other printer setup options.

Shortcuts

   Toolbar:
Keys: CTRL+P

Print dialog box

The following options allow you to specify how the document should be printed:

Printer
    This is the active printer and printer connection.   Choose the Setup option to change the printer and printer connection.

Setup
    Displays a <u>Print Setup dialog box</u>, so   you can select a printer and printer connection.

Print Range
    Specify the pages you want to print:

All	Prints the entire document.
Selection	Prints the currently selected text.
Pages	Prints the range of pages you specify in the From and To boxes.

Copies
    Specify the number of copies you want to print for the above page range.

Collate Copies
    Prints copies in page number order, instead of separated multiple copies of each page.

Print Quality
    Select the quality of the printing.   Generally, lower quality printing takes less time to produce.

Print Progress Dialog

The Printing dialog box is shown during the time that <<YourApp>> is sending output to the printer.   The page number indicates the progress of the printing.

To abort printing, choose Cancel.

Print Setup command (File menu)

Use this command to select a printer and a printer connection.   This command presents a Print Setup dialog box, where you specify the printer and its connection.

Print Setup dialog box

The following options allow you to select the destination printer and its connection.

Printer
Select the printer you want to use.   Choose the Default Printer; or choose the Specific Printer option and select one of the current installed printers shown in the box.   You install printers and configure ports using the Windows Control Panel.

Orientation
Choose Portrait or Landscape.

Paper Size
Select the size of paper that the document is to be printed on.

Paper Source
Some printers offer multiple trays for different paper sources.   Specify the tray here.

Options
Displays a dialog box where you can make additional choices about printing, specific to the type of printer you have selected.

Network...
Choose this button to connect to a network location, assigning it a new drive letter.

Page Setup command (File menu)

<< Write application-specific help here. >>

Cholesterol-Saturated fat Index (CSI)

Foods high in cholesterol and saturated fat raise blood cholesterol level and increase the risk of heart attacks and strokes. To facilitate the direct comparison of foods, researchers have developed an index, the **C**holesterol-**S**aturated Fat **I**ndex, which provides an easy way to compare foods.
In general, the lower the CSI of a food item, the lower the risk it is to your health. The program displays the CSI value in dark blue if the food is relatively low in CSI and dark red otherwise. When your diet exceeds the recommended daily CSI value, the total CSI value for the day is also displayed in dark red.

You can choose to show or not to show the CSI calculation by toggling the 'Show CSI' menu item under the Options pull-down menu.
This index is available in **Lower Your Cholesterol** only.

To obtain more information about CSI, please refer to '*The New American Diet System*' by S. L. Connor and W. E. Connor, ISBN 0-671-68705-0.

Food Guide Pyramid

The **Food Guide Pyramid** was published by the United States Department of Agriculture (USDA) in 1992. This is a new approach for managing one's diet which replaces the older basic four (or five) food groups approach.

The new food groups are organized into the shape of a pyramid. The fundamental ideas behind the Food Guide Pyramid approach are: one should eat a variety of foods and more from the lower food groups than from the upper food groups which translates into "Choose a diet with plenty of vegetables, fruits, and grain products."

Many nutrition programs do an excellent job in helping users keep track of their calorie consumption, fat intake, etc. **NutriGenie programs** provides an additional important feature: its users can quickly check to see if their diet conform to the USDA **Food Guide Pyramid**. Planning your weight loss diet this way is desirable because you can lose weight and, at the same time, adequately obtain the necessary nutrients through your balanced diet. You can achieve similar result using other programs and approaches, however, our graphic pyramid food analysis makes the process much simpler and enjoyable to use.

A Daily Food Guide
You need more than 40 different nutrients for good health. Essential nutrients include vitamins, minerals, etc. These nutrients should come from a variety of foods, not from a few highly fortified foods or supplements. Any food that supplies calories and nutrients can be part of a nutritious diet. The content of the total diet over a day or more is what counts.

No single food can supply all nutrients in the amount you need. For example, milk provides calcium but little iron; meat supplies iron but little calcium. To have a nutritious diet, you must eat a variety of foods. One way to assure variety--and with it, an enjoyable and nutritious diet--is to choose foods each day from the five major food groups described below. Individuals who do not eat foods from one or more of the food groups may want to contact a dietitian for help in planning how to meet nutritional needs.

Most people should have at least the lower number of servings suggested from each food group. Some people may need more because of their body size and activity level. Those who are on a weight loss diet should also have a variety of foods but will need fewer or smaller servings. They also need to eat less foods high in calories and low in essential nutrients, such as fats and oils, sugars, and alcoholic beverages.

Supplements of some nutrients taken regularly in large amounts can be harmful. Vitamin and mineral supplements at or below the Recommended Dietary Allowances (RDA) are safe, but are rarely needed if you eat a variety of foods.

Food Group	Suggested servings
Fats and sweets	Eat sparingly
Milk, yogurt and cheese	2 - 3 servings
Meats, poultry, fish, dry beans and peas, eggs, and nuts	2 - 3 servings
Vegetables	3 - 5 servings
Fruits	2 - 4 servings
Breads, cereals, rice, and pasta	6 - 11 servings

What counts as a serving?

The following table approximates what counts as a serving for each food group. NutriGenie analysis takes into account the precise nutrient contribution from each food and therefore generates more accurate serving calculation in our programs.

Group 1: Sweet

a.   an ounce of hard candies
b.   a medium bar of chocolate

Group 2: Milk
a.   one cup of milk or yogurt
b.   one and a half ounces of cheese

Group 3: Meat
a.   two to three ounces of cooked meat, poultry or fish
b.   half a cup of cooked dry beans counts as an ounce of meat or 1 serving of vegetables
c.   one egg counts as an ounce of meat

Please note that in NutriGenie software, we assign half of the amount of cooked dry beans consumed to the meat group and the other half to the vegetable group.

Group 4: Vegetable
a.   one cup of raw leafy vegetables
b.   half a cup of other vegetables, cooked or chopped raw
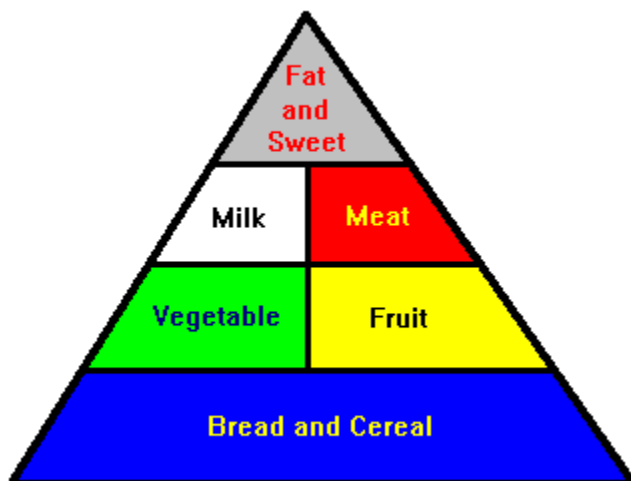c.   three quarters of a cup of vegetable juice

Group 5: Fruit
a.   a medium apple or banana
b.   three quarters of a cup of fruit juice
c.   half a cup of sliced fruit

NutriGenie takes into account both the weight and nutrient contribution from a fruit.

Group 6: Cereal
a.   a slice of bread
b.   an ounce of ready-to-eat cereal
c.   half a cup of rice or pasta

This guideline is expressed in the shape of a pyramid. The pyramid analysis of your diet should result in a well-balanced pyramid where the lower groups are wider than the upper groups. While you are on a weight loss diet, it may not matter significantly if you do not consume the same number of servings for each food group as recommended to an average individual. You may actually eat fewer servings;

however, if your pyramid is balanced you will have a healthful, varied diet to help you lose weight safely. In any event, before adopting any diet, you should discuss it with your physician and obtain his/her approval.

See also
The ADA Food Exchange System

NutriGenie Technology

Starting with version 4.0 of our software, we incorporate a unique technology into <u>most</u> of our nutrition software products: the **NutriGenie** technology. With this technology, the user can   specify a daily caloric consumption level and instruct the program to automatically generate menus that are well-balanced and meet the desired caloric requirement.

The task of menu preparation can be quite tedious to health professionals who need to recommend different diets to a large number of people; or to individual users who have to follow certain restrictive diet but don't know what and how much they can eat.

NutriGenie technology removes this difficulty: with a click of a button
, a well-balanced menu is freshly created each time. None of the menus are pre-generated, and with a food database of approximately 8,000 items, users have literally millions of nutritious menus to choose from. [The menus generated for the shareware version are not as varied because of the much smaller shareware food database.]

The daily menus generated by NutriGenie, in almost all cases, are exactly at or within a few (+/- 10) Calories of the requested caloric level. In addition, with the occasional exceptions in highly restrictive diets (below 1000 Calories/day), the menus generated are well-balanced and conform with the <u>USDA Food </u>

<u>Pyramid</u> guidelines.

Please note that regardless of how balanced the NutriGenie menus are, if your caloric specification level is too low, you may not adequately obtain all necessary nutrients in your diet and may need to use supplements to satisfy their RDAs.
Please also pay special attention to the amount of each suggested food in the generated menus. We associate a standard unit with each food item, for example, '1 slice' with bread, '1 cup' with milk. These units are modified by a multiplier to indicate the recommended amount. E.g., Bread, 1 slice x 2 or Milk, 1 cup x .5. These mean 2 slices of bread and half a cup of milk, respectively.

Characteristics of NutriGenie Menus

The generated menus are intended to show you the large variety of foods that you can eat even when you are on a diet. The menus also illustrate what a well-balanced diet should look like at different caloric intake levels.

In general, you don't have to deprive yourself of any particular food category so long as the amount you eat is appropriate for your optimal caloric consumption target. For example, even a low-calorie diet can include ice cream for dessert although the amount is more likely half a cup instead of a cup of ice cream. For this precise reason, occasionally, you will see suggested food amount as 1 cup x .7. This just means for the specified caloric intake, you should consume about 3 quarters of a cup of the food instead of one whole cup.

NutriGenie menus are suggestions, not rigid prescriptions. Although we use a standard food database appropriate for the US population, our database also contains a number of food products from other parts of the world. This reflects the diversity of the American population as well as the culinary sophistication of our users. So you will see fruits like kiwi or mango; cheese like Camembert or Gruyere; etc. on our suggested menus. Feel free to substitute them by comparable foods that are readily available in your area.

Another characteristic of NutriGenie generated menus is that they are biased towards offering choices to user. For example, a very high-calorie diet may very well have both a meat main dish and a fish main dish at dinner instead of just one main dish with a larger serving size. This allows the user to choose either to

actually have both meat and fish or to keep his preferred dish, remove the other and adjust the serving size accordingly.

How to Use NutriGenie Menus for Weight Control

NutriGenie menus are perfectly suited for use with our <u>Weight Control Planner</u> utility. You can use the Planner to determine the caloric intake level that maintains your current weight. If you desire to lose some weight, for example, you can tell NutriGenie to generate several menus at different lower caloric levels. Using these test menus in the Planner, you can find out the caloric intake level that helps you achieve your weight goal at the optimal rate. Once this figure has been obtained, NutriGenie can generate a week's or month's worth of menus for you to review and edit. The printed copies of these menus are a most convenient tool for you to monitor your diet.

Similarly, if you wish to gain weight, you can use the <u>Caloric Need</u> utility to determine the caloric and nutrient requirements for your ideal weight and generate appropriate NutriGenie menus for monitoring.

<u>**Limitations**</u>**:**

- NutriGenie auto-generated menus are intended for use by **healthy** individuals. If you have special nutritional requirements, you will need to modify the generated menus so they can optimally satisfy your requirements.

- Currently, NutriGenie can only generate balanced menus based on user's **caloric** specification. It cannot generate menus based on any specific nutrient or combination of nutrients.

See also
<u>Using Food Exchange System and the Automatic Menu Generator</u>

VGA Mode and Selective Nutrient Analysis Display

The diet analysis in some of our programs may include many more nutrients than can all be shown on the VGA display. To enable these programs to run under VGA mode, we have implemented a feature that allows users to specify the several nutrients of most interest to them. Only these nutrients are shown on the analysis panel when the program is run on machine without the SVGA (800 x 600 or higher) capability.

Starting with version 4.7, user can also select nutrients for display in SVGA mode.

Starting with version 4.8, in SVGA mode, the nutrient analysis panel can be displayed in one- or two-column mode.

Choosing a Diet Program

"Combining exercise and a proper diet is the only healthy path to a lean body."
Dr. Jeffrey Friedman, Rockefeller University
Dr. Friedman's lab at Rockefeller University is credited
as the first to produce the genetically obese mice
which leads to the isolation of the protein leptin
that controls production of body fat.

What to look for in a diet program?

Although there are many nutrition and diet software products on the market. Some of them may not be particularly useful. You may want to ask the following questions when choosing your software:

1. What kind of analyses does the software provide? Do they offer insight for good dietary decision?

It's good to know that your diet has 19.4% calories from saturated fat; or that it exceeds the RDA for vitamin A by 27%. But statistics like these do not engender insight or good dietary decision. Most existing diet software can only generate raw numbers and simple charts.

NutriGenie software provides unique analyses such as the **USDA Food Pyramid analysis** where in one glance you can tell if your diet is varied and balanced (pure number of fat or protein grams in your diet can't tell you this).
Besides showing you whether your diet satisfies the **National Research Council's RDA**, NutriGenie programs let you specify your own **personal nutrient intake preferences** and using intuitive color-coding let you quickly determine if your goals are met or exceeded.
Similarly, our automatic **fat content analysis** incorporates your own fat limit preference and the subtle color variation (from gray to white on the fat percentage indicator) alerts you when your threshold is exceeded.
In addition, the **caloric and nutrient distribution** in your diet throughout the day can be a factor that affects the efficiency of your metabolism and the absorption of nutrients. NutriGenie programs offer this important analysis.

Some of our programs offer special analyses such as the K Factor (potassium / sodium ratio) for hypertension diet, Cholesterol-Saturated Fat Index for healthy heart diet, and various unique calculations for adopters of the Zone Diet.

As you can see, a good diet analysis is more than just some numbers and percentages. No existing diet software offers such comprehensive and insightful view of your diet as our NutriGenie series.

2. Is the software smart enough to help me in the tedious task of menu preparation?

One problem many dieters face is figuring out what and how much they can eat to achieve their weight goal. A common solution is to buy a diet book where a few limited menus are presented.
Some meal-planning software products don't do much better than these books; the rest are simply incapable. As a result, dieters tend to choose from a small selection of foods making their eating experience unnecessarily boring while it should be truly enjoyable.

The NutriGenie series uses sophisticated techniques to generate nutritious and well-balanced meals for you. With a database of approximately 8,000 foods, NutriGenie can generate literally millions of menus that meet a wide range of caloric requirement: whether it's a 900- or 2,345-calorie diet. The menus generated by NutriGenie are always within a few calories or your specification and are almost always well-balanced as seen through the USDA Food Guide Pyramid analysis which is displayed immediately after the menu has been prepared.

Starting with version 4.4, NutriGenie incorporates the Food Exchange System into our programs. With this feature, our users have even more flexibility in meal planning: not only can they specify exactly how

many and what exchanges they want to have at each meal, but they can also specify exactly what foods the program may use to generate their meals.

3. Does the software help me plan my weight loss?
It's hard to achieve one's weight goal without planning. But most diet and nutrition programs are not planning tools. In fact, they are no more than log books: they only help you record what you eat and automate some simple calculations.

NutriGenie programs are planning tool. With the *Weight Control Planner* utility, you can determine the caloric requirement to maintain your current weight; you can devise flexible diet cycles and test them; you can predict how much you will weigh a week or several months into the future. The what-if analysis capability and the detailed menus allow you to take concrete steps towards achieving your weight goal. When you just passively record what you've already eaten, the progress can be quite unpredictable.

4. How is the food database organized? Does it facilitate decision making?
Many nutrition programs arrange their foods in groups, some don't. Most provide some searching ability. Few go beyond this feature.

NutriGenie program organizes its food database in groups but also allows viewing the whole or partial food database by including or excluding foods based on user's specification.
Equally important, our program lets the user sort items within a food group, a partial or the whole food database.

Starting with version 4.3, user can create personal food groups as well as hide and unhide foods from NutriGenie database. These features make it even more convenient to access foods and browse the food database.

Organizing foods into food groups allows you to identify substitutes, presents alternatives which you may not be aware of. Sorting foods on different nutrients lets you make better food choices.
NutriGenie programs are for the educated users who want and can evaluate information to make informed decision.

5. Does the software provide relevant and useful tools?
Again, many diet programs don't do more than record keeping.

On the other hand, once you've selected your favorite exercise, NutriGenie automatically displays its caloric equivalence for each food item you eat thus showing vividly the relationship between exercise and diet.
NutriGenie software provides utilities to calculate your ideal weight, your caloric and nutrient requirement and comes with an extensive exercise database. It calculates your target heart rate so you can get the most benefit out of exercising. Its body mass index (BMI) calculator matches your BMI against those in the general population and supplies statistics regarding health risk associated with your BMI such as mortality, heart disease, diabetes, etc. Some of our products have utilities for you to keep track of your cholesterol, blood pressure, etc. But more than just record keepers, your cholesterol and blood pressure levels are compared and contrasted with others' giving you insight which mere numbers don't.

6. Has the software received any legitimate recognition or award?
In June 1995, **Home PC** Magazine awarded our *Pyramid Weight Loss Diet* the prestigious **Editors' Choice: Top 100 Products of the Year Award**. We are the only nutrition software publisher ever to receive this distinction from a major publication. [The NutriGenie series contains all features in Pyramid Weight Loss Diet with significant enhancements such as a much larger food database and the auto menu-generator capability.]

In May 1996, the **Shareware Industry Conference** nominated our *Compleat Nutritionist* for the **1996 Shareware Industry Awards: Best Lifestyles Program**. [This product has been upgraded to The Magical Dietitian with significant enhancements.]

In July 1996, we won the **Computer Life: Best Home and Hobby Program Award**.

In addition, **Ziff-Davis Interactive** has given our products the **5-star** highest ratings and

Noah Matthews, **Knight-Ridder News Service** columnist, wrote that our nutrition software are "***the best***."

For the latest list of awards and evaluation software, please visit our web sites:
- **http://pages.prodigy.com/nutrigenie/**
- **http://users.aol.com/nutrigenie/**
- **http://pages.prodigy.com/nutrisoft/**
- **http://users.aol.com/nutrisoft/**

or search the web for either keyword **nutrigenie** or **nutrisoft**.

Does the software provide authoritative dietary guidelines?

How easy is it to adjust my meal plan? what if analysis
convenient data input: edit copy meal, identify bad/good foods, quick data entry

Fit in with your diet plan

Hide and Unhide Foods

Starting with version 4.3, foods in the standard NutriGenie database can be hidden and unhidden to allow convenient browsing of the food database. You might want to hide all foods that you don't normally use to reduce the number of foods to scroll through in the food listbox. Foods that are hidden will not show up in a search.

Hide foods
There are 3 ways to hide foods:
1. *one food at a time*: select a food entry in the listbox under the NutriGenie food groups combobox. Then choose the 'hide food' menu item to hide this food. The food is automatically removed from the listbox and will not show up again.
2. *a whole meal at a time*: if there are NutriGenie foods in a meal, all of them can be hidden at your request. You can use any meal to accumulate the various foods you wish to hide and hide them all at the same time.
3. *all foods in food listbox* (from version 4.5a): this method is most convenient for hiding whole categories of foods you don't eat. For example, if you are allergic to cashew, you can do a global search for 'cashew' then hide all the found foods.

Show hidden foods
You can review the hidden food list and unhide any items you wish to restore.

Unhide food
You can unhide foods one item at a time. You must first show the hidden foods, then select the item you wish to restore to the database.

See also
Organizing foods using personal food groups or exchange groups

Personal Food Groups or Food Exchange Groups

Starting with version 4.3, users can create personal food groups to facilitate their accessing frequently used food items.

Adding foods to personal food groups
There are 3 ways to add foods to personal food groups:

1. *one food at a time*: select a food entry in the listbox under the NutriGenie food groups combobox. Then choose the 'add' menu item to add this food to desired food groups. A food can be added to more than one personal food groups.

2. *a whole meal at a time*: if there are NutriGenie foods in a meal, all of them will be added to the desired group at your request. You can use any meal to accumulate all the foods you wish to group together and add them all at once.

3. *all foods in the right-side food selection listbox at a time*.

Showing foods in personal food groups
If a group contains at least 1 item, this command will be enabled.

Removing foods from a group
You can remove foods one item at a time. All the groups that an item belongs to are highlighted on the pulldown menu.

Review Food Lists Dialog
This dialog box provides a summary of food counts in exchange and meal groups. You can clear all food items from a list by clicking on the 'Clear' button.

Note:
In programs that incorporate the ADA Exchange System, the Personal Food Groups are replaced by the Food Exchange Groups and the Meal Groups. [When a food item is assigned to an exchange groups, its serving size should be that of 1 exchange in this group.]

Specific program note:
• **Zone Diet Meal Planner**: the macronutrient blocks (Protein Blocks, Carbohydrate Blocks, and Fat Block) replace the personal food groups. Operations on these blocks are similar to those on the Personal Food Groups or Food Exchange Groups.
• **Rotation Diet Meal Planner**: the personal food groups can be used to organize allergen lists or they can be used to extend the number of days in user's rotation cycle.

See also
Hide and unhide foods

Filter Current Food Listbox

The filtering function lets user quickly identify foods high in protein, fat, or carbohydrate.

Protein foods are defined as those having 80% or higher caloric content from protein. Similar definitions apply to fat and carbohydrate foods. Protein-and-fat foods are those having 80% or higher of their calories from both protein and fat.

Foods and Meals: What You Want to Eat When or Special Food Lists

Starting with version 4.4, users can assign foods to any of the 6 meal groups to facilitate their accessing frequently used food items at each meal.

Starting with version 4.7, the meal groups are used to accommodate special food lists such as Glycemic Index lists. The operations on these lists are similar. Please see the Introduction for discussion regarding NutriGenie glycemic index indicator.

In programs that incorporate the ADA Exchange System, the Meal Groups are also used to generate menus using the foods the users want only when specified. [This means a particular food has to be assigned to both an exchange group and to at least one meal group to be considered for selection when NutriGenie is asked to generate daily menus based on your exchange requirements.]

Adding foods to meal groups
There are 2 ways to add foods to a meal group:
1. *one food at a time*: select a food entry in the listbox under the NutriGenie food groups combobox. Then choose the 'add' menu item to add this food to desired meal groups. A food can be added to more than one meal groups.
2. *a whole meal at a time*: if there are NutriGenie foods in a meal, all of them will be added to the desired group at your request. You can use any meal to accumulate all the foods you wish to group together and add them all at once.

Showing foods in meal groups
If a group contains at least 1 item, this command will be enabled.

Removing foods from a group
You can remove foods one item at a time. All the groups that an item belongs to are highlighted on the pulldown menu.

See also
Hide and unhide foods
Assign foods to exchange groups

Top Tips

Please note that some features are not available in all programs.

1. **Try all buttons, icons and menu commands** at least once to see what features the program offers.

2. **Use F1 to bring up the help screen** whenever you want more information about a window or dialog box.

3.
Use Search function to find foods Try both global (*alt-g*) and local (*alt-l*) searches as well as 'exclude' search (using !). Global search find foods in both NutriGenie and user's personal database. Local search looks for foods only in listbox.

4. **Click and drag mouse for quick food amount input** Try both left and right mouse buttons, set them to different common quantities using

5.
Use Find Max to locate food that causes excessive nutrient intake

6. **Copy and paste meals**

7.
Use NutriGenie Pyramid for suggestions of well-balanced daily menus that meet your caloric requirement

8.
Use NutriGenie Exchange for suggestions of daily menus that meet your exchange requirement and use only the foods you selected

9.
Use Pyramid Analysis to see if your diet is well-balanced

10. **Hide foods** you don't use and copy frequently used foods to **personal food groups or exchange groups**

Lower Cholesterol Diet

The Recommended Treatment: A Blood Cholesterol Lowering Diet

Whatever the reasons may be for your high blood cholesterol level -- diet, heredity, or both -- the treatment your doctor will prescribe first is a diet. If your blood cholesterol level has not decreased sufficiently after carefully following the diet for 6 months, your doctor may consider adding cholesterol-lowering medication to your dietary treatment. Remember, diet is a very essential step in the treatment of high blood cholesterol. Cholesterol-lowering medications are more effective when combined with diet. Thus medications are meant to supplement, not replace, a low-saturated fat, low-cholesterol diet.

What changes should you make in your diet?
Your new diet should be low in saturated fat and low in cholesterol and be adequate in all nutrients, including protein, carbohydrate, fat, vitamins, and minerals.

1. **Eat less high-fat food**
   There are two major types of dietary fat: saturated and unsaturated. Unsaturated fats are further classified as either polyunsaturated or monounsaturated fats. Together, saturated and unsaturated fats equal total fat. All foods containing fat contain a mixture of these fats.
   One of the goals in your blood cholesterol-lowering diet is to eat less total fat, because this is an effective way to eat less saturated fat. Because fat is the richest source of calories, this will also help reduce the number of calories you eat every day. If you are overweight, weight loss is another important step in lowering blood cholesterol levels. If you are not overweight, be sure to replace the fat calories by eating more food high in complex carbohydrates.

2. **Eat less saturated fat**
   Saturated fat raises your blood cholesterol level more than anything else in your diet. The best way to reduce your blood cholesterol level is to reduce the amount of saturated fat that you eat.
   Animal products as a group are a major source of saturated fat in the average American diet.

3. **Substitute unsaturated fat for saturated fat**
   Unsaturated fat actually helps to lower cholesterol levels when it is substituted for saturated fat. Therefore, health professionals recommend that, when you do eat fats, unsaturated fats (polyunsaturated and monounsaturated fats) be substituted for part of the saturated fat whenever possible.

4. **Eat less high-cholesterol food**
   Dietary cholesterol is a waxy, fat-like substance found in foods that come from animals. Although it is not the same as saturated fat, dietary cholesterol can also raise you blood cholesterol level. Therefore, it is important to eat less food that is high in cholesterol. While cholesterol is needed for normal body function, your liver makes enough for your body's needs so that you don't need to eat any cholesterol at all.

5. **Substitute complex carbohydrates for saturated fat**
   Contrary to popular belief, high-carbohydrate foods (like pasta, rice, potatoes) are lower in calories than foods high in fat. In addition, they are good sources of vitamins and minerals. What adds calories to these foods is the addition of butter, rich sauces, whole milk, or cream, which are high in fat, especially saturated fat. It is important not to add these to the high-carbohydrate foods you are substituting for foods high in fat.

In addition, you should:
6. **Maintain a desirable weight**
   People who are overweight frequently have higher blood cholesterol levels than people of desirable weight. You can reduce your weight by eating fewer calories and by increasing your physical activity on a regular basis. Research has shown that on average, each 2 pounds of excess body fat

contributes 1 mg/dl to your total blood cholesterol.

See also

Important: The dietary guidelines contained in this program are derived from research published by US government agencies and by private non-profit health organizations. The nutritional guidelines in this section are for your information only. Before adopting any diet, please obtain approval from your physician.

Dietary Guidelines for Diabetes

Role of Specific Dietary Factors in Diabetes

Calories

Caloric intake should be adequate to achieve and maintain a desirable weight. Obesity is strongly associated with the onset and severity of Type II diabetes. At least 80 percent of persons with the Type II disease are more than 15 percent in excess of their desirable weight at the time of diagnosis. Some estimates suggest that new cases of this condition could be reduced by nearly half by preventing obesity in middle-aged adults.

Fat

The traditional restriction of carbohydrate intake in persons with diabetes leads to an increased fat intake (and, usually, saturated fat) because the percent of protein in human diets typically does not vary much. This high saturated fat consumption may have contributed to the frequent cardiovascular complications seen in past years among persons with diabetes. To help reduce this increased risk for coronary heart disease, a diet low in total fat, saturated fat, and cholesterol has been recommended (American Diabetes Association Task Force 1987). Fat intake should comprise 30 percent or less of total calories. Because dietary fat contains more than twice the calories of either protein or carbohydrate, a reduction in fat intake should lead to a more favorable caloric balance, especially when this dietary change is accompanied by appropriate levels of physical activity. Controlling obesity by reducing dietary fat intake should help reduce the prevalence of Type II diabetes and is also consistent with dietary recommendations for the prevention of coronary heart disease, hypertension, and some types of cancer.

Carbohydrates

A diet containing 50 to 60 percent of total calories as carbohydrate is now recommended for individuals with diabetes (American Diabetes Association Task Force 1987), not only because high-carbohydrate diets improve glucose tolerance and insulin sensitivity, but also because the reduced fat--especially saturated fat--intake that accompanies a high-carbohydrate diet lowers cardiovascular risk.

One type of meal planning techniques used for diabetes management is **carbohydrate counting**. There are two basic types of carbohydrates: simple and complex. The simple carbohydrates are commonly called sugars. Starches and fiber are complex carbohydrates. Both sugars and starches are broken down by the body into glucose. The American Diabetes Association has determined that it is the total amount of carbohydrate you eat that is important and there is little evidence to support restricting sugar-containing foods. You can use NutriGenie software to monitor your carbohydrate consumption.

Protein

The protein requirements of individuals with diabetes under good control seem to be the same as those of healthy individuals; that is, a daily intake of 0.8 g/kg of body weight for adults and somewhat higher intakes for infants, children, and pregnant or lactating women (NRC 1980). When insulin levels are normal, protein is conserved in the body and the use of amino acids for glucose synthesis is limited. In persons with poorly controlled diabetes, dietary requirements may be increased because protein is used to synthesize glucose.

Individuals with diabetes and concurrent renal insufficiency should avoid excessive protein intake. Glomerular hyperfiltration (increased blood flow and filtration across the renal glomerular capillary bed) leads to impaired renal function in persons with diabetes, and increased protein intake may exacerbate renal damage. Furthermore, protein restriction slows the rate of decline in renal function in individuals with diabetic nephropathy. Because past dietary recommendations for persons with diabetes sometimes emphasized protein, and because the average American eats more protein than is necessary to maintain health, current recommendations suggest that people with diabetes should reduce protein intake below the level consumed by Americans (ADA Task Force 1987).

Cholesterol

Cholesterol consumption should be restricted to 300 mg/day or less to reduce cardiovascular risk.

Calcium

High serum cholesterol levels have been observed in calcium-deficient lab animals. In humans, an uncontrolled study of 10 hyperlipidemic subjects showed that the addition of 800 mg of calcium daily over 1 year reduced blood cholesterol levels by 25 percent. For diabetic people, calcium supplements may be necessary under special circumstances.

Potassium

The minimum RDA for potassium is approximately 1,600 to 2,000 mg per day. However, since there is considerable evidence that dietary potassium exerts a beneficial effect in hypertension, the National Research Council recommends that intake of fruits and vegetables be increased to raise potassium intake of adults to about 3,500 mg a day.

Sodium

Sodium should be restricted to 1,000 mg/1,000 kcal, not to exceed 3,000 mg/day, to minimize symptoms of hypertension.

Fiber

Recent studies have suggested that a higher intake of dietary fiber than is typical for Americans might improve many clinical conditions, including the abnormal glucose tolerance of diabetes. Some studies have demonstrated that diets containing higher amounts of fiber (particularly water-soluble fiber) and carbohydrate are associated with lower blood glucose and serum lipid levels.
Very high-carbohydrate, high-fiber diets, providing 70 percent of calories as carbohydrate and 35 g of plant fiber per 1,000 calories, consistently improve glucose tolerance, decrease fasting plasma glucose levels, lower insulin needs, and decrease serum cholesterol concentrations. These results have been confirmed in longer term studies comparing a more moderate diet that provides 55 to 60 percent of calories as carbohydrates and 25 g of plant fiber per 1,000 calories.

Alternative Sweeteners

Nutritive alternative sweeteners are sugars such as fructose and sorbitol that can be used as sources of calories. Aspartame, strictly speaking, is a nutritive sweetener, but it is used in such small quantities that its caloric contribution is minimal. Non-nutritive alternative sweeteners, such as saccharin and cyclamate, provide virtually no calories in relation to their sweetness. Alternative sweeteners may be useful for persons with diabetes consuming sugar-restricted diets, both to provide sweetness without associated hyperglycemia and, in some cases, to help reduce caloric intake in overweight individuals.

See also How to Lose Weight

Important: The dietary guidelines contained in this program are derived from research published by US government agencies and by private non-profit health organizations. The nutritional guidelines in this section are for your information only. Before adopting any diet, please obtain approval from your physician.

Dietary Guidelines for Lowering High Blood Pressure

Dietary Guidance from U.S. Surgeon General

Dietary factors that clearly contribute to high blood pressure include obesity and excessive intake of sodium and alcohol. The average daily sodium consumption of 4000 to 6000 mg by adult Americans is substantially above the National Research Council's recommended range of 1100 mg to 3300 mg for safe and adequate intake and is 5 to 10 times higher than the amount required.

The strong association between obesity and hypertension and the demonstrated reduction in blood pressure that occurs with weight loss suggest that maintenance of desirable body weight should be a goal for the population.

Similarly, there is a direct association between blood pressure and alcohol consumption beyond about two standard-sized drinks daily.

Some evidence indicates that a reduction in blood pressure is associated with increased dietary intake of potassium, calcium, magnesium and fiber.

Achieving and maintaining desirable body weight and moderating sodium and alcohol intake can lower blood pressure in patients with mild and moderate hypertension and reduce the need for antihypertensive medications. Such patients should be informed of the likely benefit of these dietary practices, along with the importance of adequate caloric expenditure through exercise, and the moderation of fat intake to reduce high blood cholesterol levels and the risk for heart attack.

Food Exchange System

Starting with version 4.4, NutriGenie incorporates the ADA Food Exchange System into some of our software products. The Food Exchange System was developed by the American Dietetic Association and the American Diabetes Association for people with diabetes and others on special diets to help them with meal planning. The system is based on sound nutrition principles and can be used by everyone, however. In particular, it can be used as a weight management alternative to calorie or fat gram counting.

The basic idea is that, within each food exchange category, you can choose among a variety of foods with similar calorie and nutrient values. If you stay within your food exchange allowance, you are assured of a well-balanced diet that satisfies your calorie restriction.

Exchange Groups

1. Meat exchange:
Besides red meat, this exchange group includes fish, poultry, eggs, cheese, peanut butter and items that are high in protein. One meat exchange provides about 7 grams of protein. Most meat exchanges are based on one ounce of cooked meat.

One choice	Calories	Protein (g)	Carbohydrate (g)	Fat (g)
Non-fat	30	7	0	0
Low-fat	55	7	0	3
Medium-fat	75	7	0	5
High-fat	100	7	0	8

2. Bread / Starch exchange:
This exchange group includes cereals, grains, pastas, dried beans, starchy vegetables and breads. One exchange is equal to 1 ounce of bread or 1/2 cup of cereal or cooked pasta.

One choice	Calories	Protein (g)	Carbohydrate (g)	Fat (g)
	80	3	15	trace

3. Vegetable exchange:
Vegetables are low-calorie and good sources of vitamins, minerals and fiber. One vegetable exchange is equal to 1/2 cup of cooked vegetables or 1 cup of raw vegetables.

One choice	Calories	Protein (g)	Carbohydrate (g)	Fat (g)
	28	2	5	0

4. Fruit exchange:
Most fruit exchanges equal 1/2 cup fresh or canned fruit or fruit juice, or 1/4 cup dried fruit.

One choice	Calories	Protein (g)	Carbohydrate (g)	Fat (g)
	60	0	15	0

5. Milk exchange:
Milk and milk products are excellent sources of calcium. If you are watching your weight, choose non-fat or low-fat milk products.

One choice	Calories	Protein (g)	Carbohydrate (g)	Fat (g)
Non-fat	80	8	12	0
Low-fat	107	8	12	3

	Calories	Protein (g)	Carbohydrate (g)	Fat (g)
Medium-fat	125	8	12	5
High-fat	150	8	12	8

6. Fat exchange:

A fat exchange is equal to 1 teaspoon of margarine or oil, or 1 tablespoon of salad dressing.

One choice	Calories	Protein (g)	Carbohydrate (g)	Fat (g)
	45	0	0	5

7. Free exchange:

Foods in this group contain very few calories and can be used freely. They include salad greens, some vegetables and fruits, most condiments and beverages such as coffee, tea, mineral water.

Sample meal plans based on food exchanges

1,200 calories: 4 meat exchanges, 6 bread exchanges, 2 vegetable exchanges, 3 fruit exchanges, 2 milk exchanges and 2 fat exchanges.

1,500 calories: 5 meat exchanges, 8 bread exchanges, 3 vegetable exchanges, 4 fruit exchanges, 2 milk exchanges and 3 fat exchanges.

1,800 calories: 6 meat exchanges, 9 bread exchanges, 4 vegetable exchanges, 5 fruit exchanges, 2 milk exchanges and 4 fat exchanges.

The K Factor

Population studies have shown that
- **higher** dietary sodium intake correlates to **higher** blood pressure and
- **higher** potassium intake corresponds to **lower** blood pressure.

Because sodium and especially potassium intakes have been shown to correlate more strongly than any other dietary factor to blood pressure, researchers have devised a concept called the **K Factor** to help evaluate diet with regard to its beneficial effect on lowering high blood pressure.

The K Factor is simply the ratio of potassium to sodium (K is the chemical symbol for potassium). This value denotes the relative balance of potassium and sodium in your diet: a value higher than 3 (potassium intake more than 3 times that of sodium) may indicate a diet beneficial to lowering blood pressure while a low value such as less than 1 may indicate the reverse.

NutriGenie automatically calculates the K Factor for your meal and your daily food intake. However, you can choose to display or not to display this value by toggling the '**Show K Factor**' menu item.

A graphic symbol is associated with the K Factor:

indicates a K Factor less than 2.

indicates a K Factor from 2 to 2.5

indicates a K Factor from 2.5 to 3.

indicates a K Factor greater than 3.

Specifying Food Blocks for Automatic Menu Generator [topic specific to the Zone Diet Meal Planner 4.4]

To use the NutriGenie Automatic Zone-Favorable Menu Generator, you bring up the **Food Block Options** dialog to specify the number of food blocks you wish to allocate for each meal. The dialog box will tally the blocks you entered and give you an approximate caloric value of your diet.

In preparation, use *The Zone, A Dietary Road Map* to
1. Calculate your Lean Body Mass (Appendix B)
2. Determine your Activity Factor (Table 8-1)

You can then:
3. Calculate your daily protein requirement using this dialog box. The protein gram and block values are updated when the input focus is moved from the Lean Body Mass or Activity Factor edit controls.

4. Distribute the Protein block consumption as you desire. You need to specify only the Protein blocks for each meal. The software assume the 1:1:1 ratio of Protein:Carbohydrate:Fat blocks.

Regarding the distribution of the macronutrient blocks, please note that the Zone diet advises:
"[keep] the total calories at any one meal to 500 or less--100 or less for snacks. This means you should never eat more than six protein blocks per meal, as these would exceed this calorie limit. (A typical meal with four protein blocks and of course the same number of carbohydrate blocks and   fat blocks would total less than 400 calories." (p. 89-90)

5. Next, you need to assign your preferred foods to appropriate block and meal groups. The reason for this is that *NutriGenie Menu Generator will use only the foods you want and only when you want them*. For example, if you assign Scrambled Egg to a Protein Block and Breakfast groups, then Scrambled Egg will be considered a Protein Block option only at breakfast. It will not be selected as a Protein item at dinner or other meals. If you haven't assigned any food to Protein blocks and to appropriate meals, NutriGenie will not generate menus for those meals.

The above step needs to be done only once and can be refined as often as desired. Again, please note the following requirement: to be selectable, a food item must be assigned to at least one food block AND to at least one meal group. If you assign a meat item to a Protein block, for example, but do not assign it to any meal, the software doesn't know when it is appropriate to use this food (at breakfast? dinner? or lunch? etc.) and therefore will not use this item at all.

Assigning foods to food blocks
There are 4 protein blocks and 3 carbohydrate blocks for your food assignment. During the automatic menu generating process, the software will pick a food from Protein Block 1, then Protein Block 2 (if necessary), etc., to meet your protein requirement. Similar selection process applies to choosing the carbohydrate blocks. What this means is that you should assign to Protein Block 1 food items you most likely eat if the meal requires little protein; assign to Protein Block 2 foods that you would eat if a second protein block should be needed, and so on. You can consider Block 1 as the first course, Block 2 as second course, etc.
When assigning foods to a block, please use your own preferred serving portions for all food items. For example, if you normally drink half a glass of milk each time you drink milk, then you should create an entry for half a glass of milk, add this entry to your personal food database, then assign it to the desired block(s) and meal(s). Similarly, if you always eat 2 fried eggs at breakfast, look up 'fried egg' in the NutriGenie database, add it to an empty meal, double its quantity, then bring up the Add Food/Recipe to Personal Food Database and create an entry for Two Fried Eggs. Entries assigned to various food blocks don't themselves have to be exactly one macronutrient block unit. The software will calculate the exact block value of each item for you.

6. Finally, click on this icon <u>on the toolbar</u> **Z**
each time you want NutriGenie to generate a daily menu that meets your block requirements. Or you can prepare the menus manually.

Note:
When generating Zone-favorable menus, the software does check for the basic validity of food items that you assigned to various food blocks. For example, if you assign an item with no protein to a Protein block, the food item will not be considered valid or selectable. As a result, the software may not generate your menus.

The software will generate as Zone-favorable a menu as possible (ratio of protein to carbohydrate between .6 and 1.0) based on your preferred foods. However, this is not always achievable because it must prepare the menus based on the foods you specify. Therefore sometimes you will need to fine tune the menus by hand.

The **Fat block** you specify in the Food Block Options Dialog are only used to determine the approximate calorie level of your diet. No actual Fat items are generated for your menus.

Preparing Food Lists for Automatic Zone-Favorable Menu Generator

This program is designed for Zone diet planning and evaluation. It has the ability to generate Zone-favorable menus for you. However, to use this automatic menu generator effectively, you will need to understand how the program goes about choosing the foods and its limitations. <u>Because the software has very little control over the foods you tell it to choose from, there is no guarantee that the menus generated are always Zone-favorable or that they can be generated at all. If you don't feel comfortable with the software's limitations, or find the rules too complicated and the hints unclear, please do not purchase this program.</u>

Rules:
- NutriGenie uses only the foods you specify. Therefore, if you don't specify appropriate foods, menus won't be generated.
- Foods assigned to Protein blocks should contain some protein. Those having no protein will be ignored.
- Foods assigned to Carbohydrate blocks should contain some carbohydrate and no protein. Those having protein will be ignored.
- A food item must be assigned to BOTH a macronutrient block (Protein or Carbohydrate block) AND to at least a meal list before it can be selected.

Hints:
- Browse through the NutriGenie food database, double-click all food items you may eat at breakfast. Go to **'Meal Preferences' - 'Add meal foods to' - 'Breakfast list'**. Now the Breakfast list has the foods you usually eat. Do this step for other meals and refine the lists as you wish. Clear the meal listbox after each step.
- Go to **'Meal Preferences' - 'Show foods in' - 'Breakfast list'**. All breakfast foods are listed. Double-click on all first choice protein items [see next 2 bullet items for further explanation] then go to **'Food Blocks' - 'Add meal foods to' - 'Protein block 1'**. Now all first choice dishes for breakfast have been identified. Repeat this step for other blocks as necessary. Clear the   meal listbox after each step. Follow this procedure for other meals.
- There are 4 Protein block choices. You may assign any foods to these lists so long as they contain some protein. It's OK to assign non-protein foods to these lists, the foods will just be ignored during the menu generation process. You can think about these 4 lists as Food Priority lists: If you can eat only one dish in this meal, what dishes would you choose from? Assign these foods to Protein block 1. If you can have a second dish, what dishes would you consider? Assign these to Protein block 2, and so on. The program picks one food from each of these blocks sequentially until your protein requirement is met.

You will most likely need to refine these lists a few times so that the pattern of foods selected fits your personal preference.

•   There are 3 Carbohydrate blocks. You should assign foods having carbohydrate and no protein to these blocks. Foods not satisfying these conditions will be ignored. You can think about Carbohydrate block 1 as Vegetable list, Carbohydrate block 2 as Fruit list, etc., and assign appropriate foods to these lists. After selecting foods from the Protein blocks to meet your protein requirement, the program choose foods from these carbohydrate blocks (if necessary) to satisfy the optimal carbohydrate for Zone-favorable meal.

•   Remember you can assign foods with high carbohydrate content to protein blocks so long as they have some amount of protein. The quality of the meals generated depends mostly on your appropriate assignment of foods to food lists, this process can entail much trial and error. You can always create your favorite meals manually.

•   If you assign some foods to a macronutrient block or to a meal by mistake, you can remove these items one by one from the wrong list. To quickly clear all food items from a meal list or macronutrient list, go to the **'Food Blocks'** menu item - **'Review Food Lists**...' to bring up the summary of all food lists. Here you can clear any food list with just one mouse click.

•   Because the Zone Diet recommends no more than 6 protein blocks per meal. The dialog box **'Food Block Options'** accepts specification up to 6 blocks per meal. If you need 8 protein blocks, for example, you can specify 4, then double the food intake.

Limitations:
•   NutriGenie will not generate menus for meals where protein requirement is too small (below .5 blocks or 3g of protein).

•   In rare cases, NutriGenie will not generate menus when food choices available are inappropriate. For example, if you need 5 protein blocks for a meal (35g of protein) and each eligible food choice contains only 1g of protein each. A meal satisfying the protein requirement may contain 35 food entries or more.

•   NutriGenie cannot always generate Zone-favorable menus if food choices are inadequate. An example: when all selectable foods contain only protein and you don't specify any carbohydrate block foods; or when all selectable foods are high in carbohydrate.

•   In summary, the menu generator is only as good as the food choices you make available to it. If the software doesn't generate the kind of menus you expect after you have been refining the food selection a few times, you should think very carefully before paying for the registered version: the limitations are the same as in the evaluation version.

•   **Design note**: It would have been fairly simple to generate Zone-favorable meals every time had we decided to use all foods from the NutriGenie database. We used this approach in earlier programs to generate well-balanced diet based on the USDA Food Pyramid guideline. However a number of users stated strong preference for restricting food selection to those they specify. If there is sufficient interest, we will make the former approach an option in future versions of this software.

See also:
Introduction