

GNUtrition

for version 0.32.1, 4 February 2025

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This manual is for GNUtrition (version 0.32.1, 4 February 2025), which is an example in the Texinfo documentation.

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GNUtrition

This manual is for GNUtrition (version 0.32.1, 4 February 2025).

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This manual is derived from the manual for GNUtrition 0.32.0 and older by Ian Haywood and Edgar Denny.

1 Introduction

GNUtrition is a program designed to produce a detailed nutritional analysis of the human diet.

1.1 Downloading GNUtrition

GNUtrition can be found on the main GNU ftp server: <http://ftp.gnu.org/gnu/gnutrition/> (via HTTP/HTTPS) and <ftp://ftp.gnu.org/gnu/gnutrition/> (via FTP). It can also be found on the GNU mirrors (<http://www.gnu.org/prep/ftp.html>); please use a mirror (<http://ftpmirror.gnu.org/gnutrition/>) if possible.

1.1.1 Requirements

GNUtrition requires the Python Scripting Language, GNOME Environment, Python-to-GNOME libraries (pygnome, pygtk) and SQLite Database server. Starting with version 0.32.0, MySQL was no longer used.

1.2 Running GNUtrition for the First Time

You may start GNUtrition from the command line with:

```
$ gnutation
```

1.2.1 Installing the Database

When GNUtrition starts for the first time, it will install its nutrient database. This may take a short time, due to the size of the database.

1.2.2 Entering your Information

Once that is done, it will then ask for some personal details for calculating dietary requirements. This information includes your age, weight, and sex. For females, this includes physiology such as pregnant or lactating.

GNUtrition will then move to the main screen.

2 The Main Window

On the left hand side, three icons are visible for the three modes:

Daily Record. List of foods eaten in a day, to calculate total intake.

Recipe. Views a particular recipe.

Food. Analyses a Single Food

2.1 The Single Food

The Single Food screen is good place to start. By clicking in the “single banana” icon, a screen asking for the food, amount, and measurement unit is displayed. From here, you can see the amount of macronutrients, micronutrients, amino acids, fats, and other details about the food.

This allows you to enter a particular food and receive a report about its nutrient content.

2.1.1 Searching for a Food

GNUtrition can only analyse the foods present in its database. Press the “Search” button, to show the search window asking for a food group, and the food name text to match. This search uses regular expressions.

As the box shows, you may search by the text name or by the nutrient content.

2.1.1.1 Search by Text

In this example, I searched by the word “apple” The database produces dozens of options for this word, such as “Babyfood, fruit, applesauce, strained”, or “Pie, apple, prepared from recipe” This are displayed in a tree format, with the first word forming the header, the second the sub-header, etc. You must explore the tree to find the one you what, cicking on the little pluses, explodes the sub-hierarchy of foods. In this example I selected the food Apples > raw > with skin, so the Selected Food box would read: “Apples, raw, with skin”.

2.1.1.2 Search by Nutrient Value

In the “Search” window, “Nutrient Search” can be selected:. This asks for the food groups, to maximize/minimize nutrient composition per various measurement units, the number of foods to list, along with the nutrients to maximize and minimize. Both the maximize and minimize section asks for the name of the nutrient and constraints.

Foods are selected by their nutrient content. “Content” can be assessed by grams (weight), or calories (energy).

You can maximise nutrients, selecting foods rich in those nutrients, or minimise nutrients, selecting foods low in that nutrient.

The “constraint” refers to a weighting given to each nutrient in computing its score. So nutrient with a constraint of 3 will be three times as important in calculating the score, as one with a constraint of 1.

The minimised nutrients have a negative constraint, as they subtract from the score. The search gives the foods with the highest score by this method.

The foods are displayed in a tree as for the “Search by Name” box.

2.1.2 Back to The Main Window

When you have found the food you want, press the “OK” button, and you will return to the main screen with your food selected.

You must first select the unit you are measuring in, in this case I have selected "large" (i.e. large apple), and the amount, in this case one.

Results are then shown for lots of nutrients. Different classes of nutrients are selected by the tabs “Macro-nutrients”, “Minerals”, etc. The percentage of RDI (recommended daily intake) is also displayed for the nutrients based on your height and weight as entered when you first ran the program.

To understand what all these mean, refer to the Nutrient Notes.

2.2 The Recipe

The Recipe screen is for entering a list of foods and their quantities.

The foods are entered as described above. After you have entered all the foods in the recipe, you can press on the “Compute” icon, a nutrient report for the whole recipe is produced, again similar in format to a single food.

Recipes can be saved to disk to form a collection of recipes, by pressing on the “Save” icon. make sure you give the recipe a name and a category. These saved recipes can be retrieved by typing in the name into the “Recipe Name” box and pressing Search.

2.2.1 Submitting a Recipe

Recipes can also be saved to a central repository at by clicking on the “Submit” icon. I urge you to do this whenever you create a recipe. This way, a reasonable collection of recipes can be included with later versions of the program. Before you submit, you must click through a copyright warning, to allow the recipes to be included in future versions. Please do not submit copyrighted recipes!

2.3 The Daily Record

For the seriously keen, you can enter in the computer every food you eat at various times of the day, and GNUtrition will calculate the total nutrient intake you have for that day.

As with the Recipe screen, multiple foods are entered, corresponding to the time of day eaten, and a total recipe intake for the day is calculated.

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Version 1.3, 3 November 2008

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I

invoking `sample`..... 13

S

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