Executive Summary

GitHub Repository URL: https://github.com/kisangkay/Milestone2_Group62.git

1. Food Search

Description

The Food Search feature helps the users to quickly and easily obtain nutritional data on certain food products from the Nutritional Food Database. When users enter the name or kind of food they're looking for, the system will provide pertinent results, showing important nutritional information and letting them refine their search further depending on dietary levels.

Steps

1. Use the Food Search Function:

i. Navigate to the application's main menu.

ii. Click on the "Food Search" option to launch the search screen.

2. Enter in the food item:

Enter the name or category of the food you want to look for (for example, "cheese," "chicken," or "salad") in the search field.

3. Start the Search:

To run the search query, click the "Search" button.

4. View the results of your search:

Relevant data for every food item will be shown in a list or grid style as a consequence of the results, including:

i. Name of Food

ii. Nutrition Names

iii. Nutrition Density

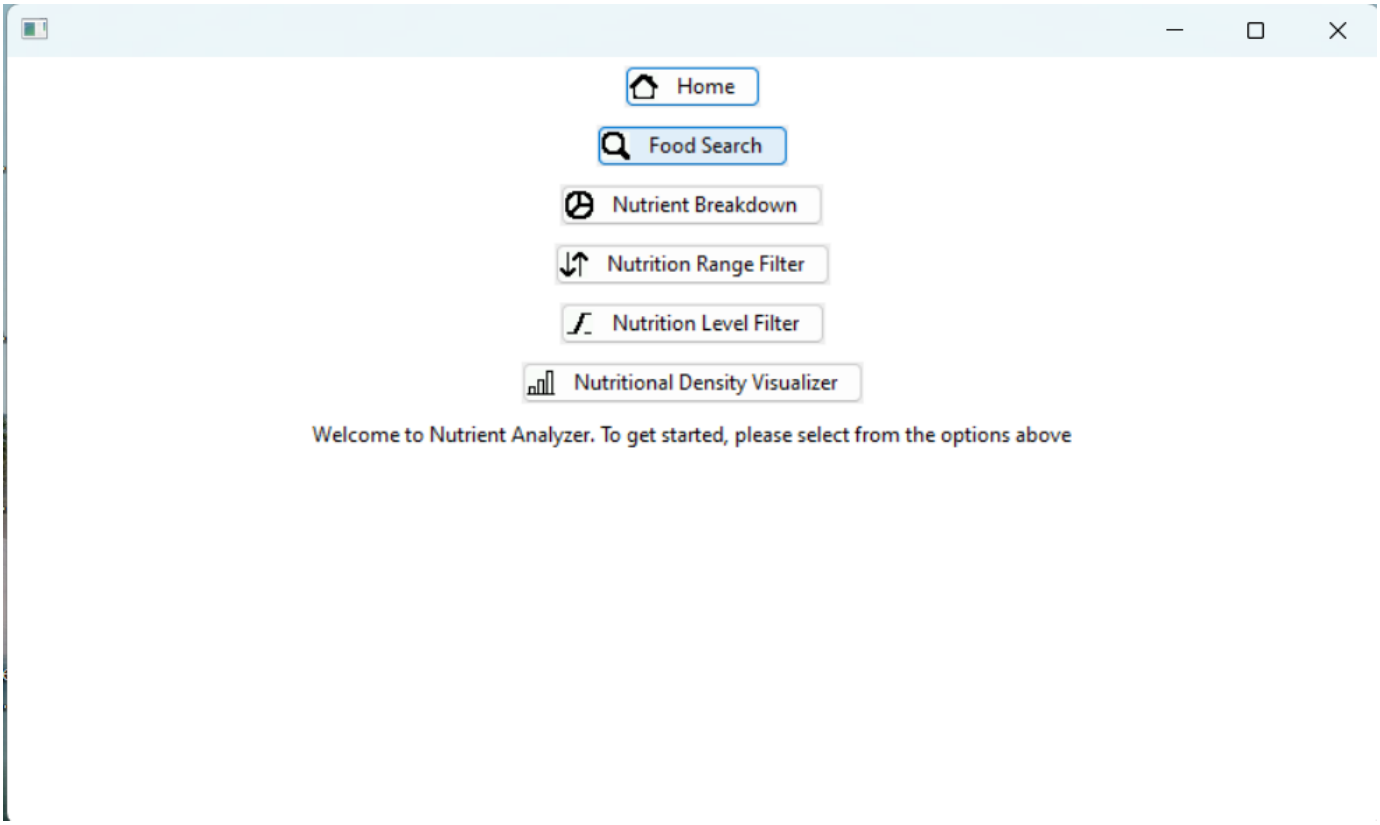
iv. Protein, Fat, and Carbohydrate and more Nutritional Values

5. Exit the Feature:

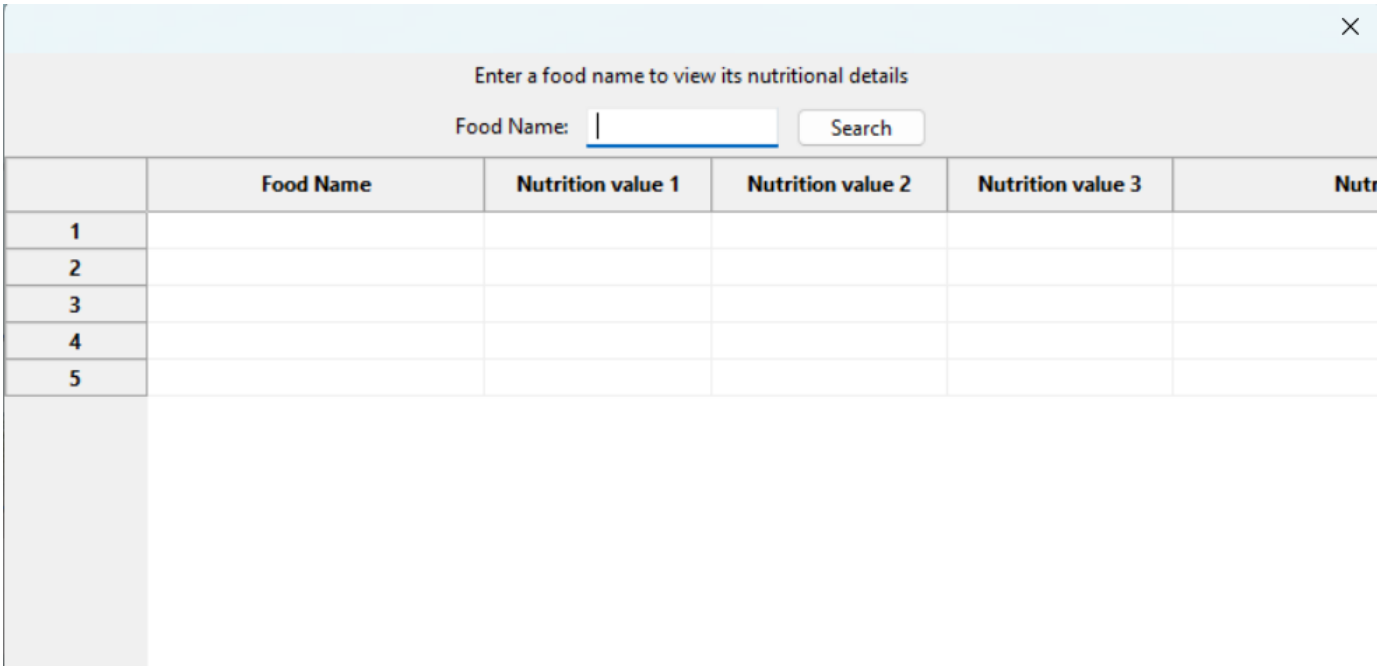
After finishing searching, click the Close button to exit the Food Search interface.

Screenshots

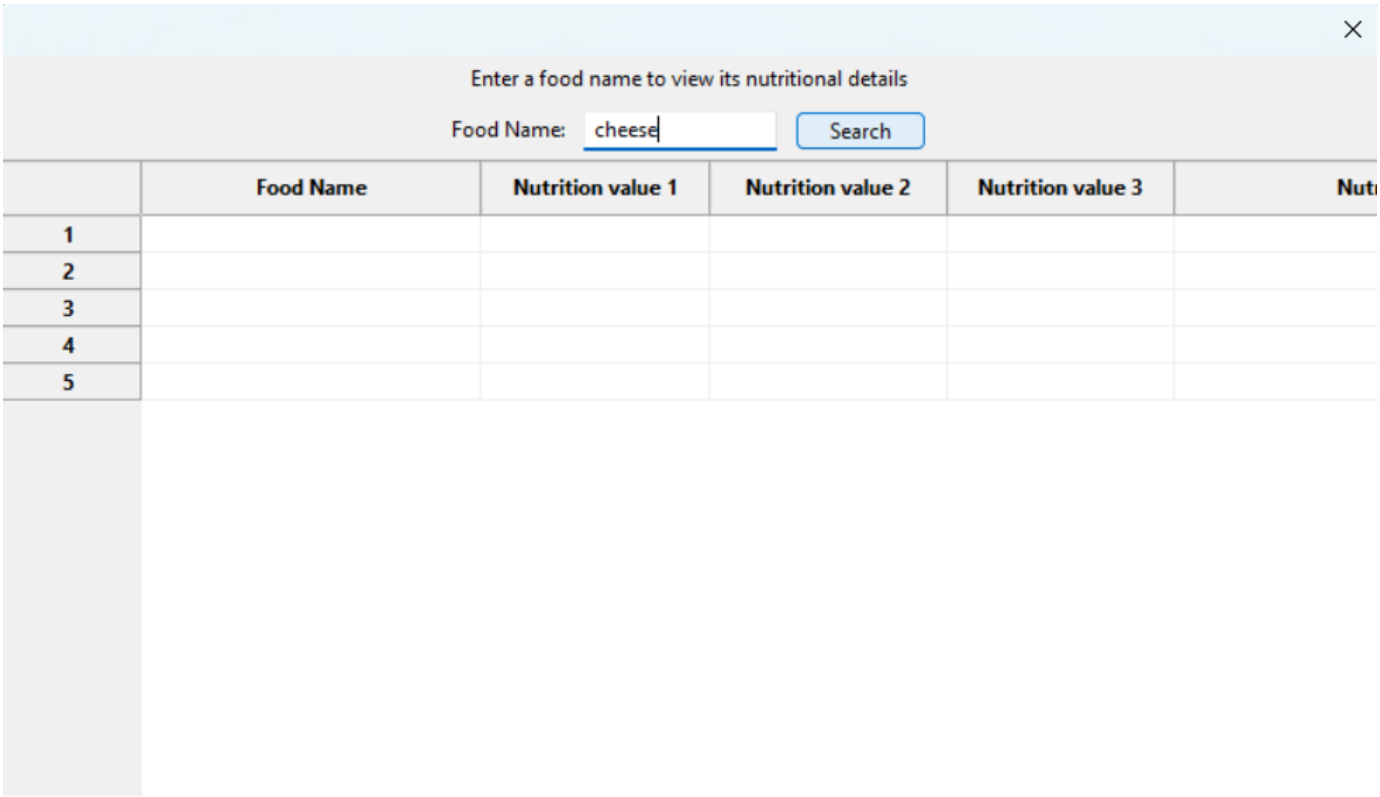
1. Navigate the Food Search Function:



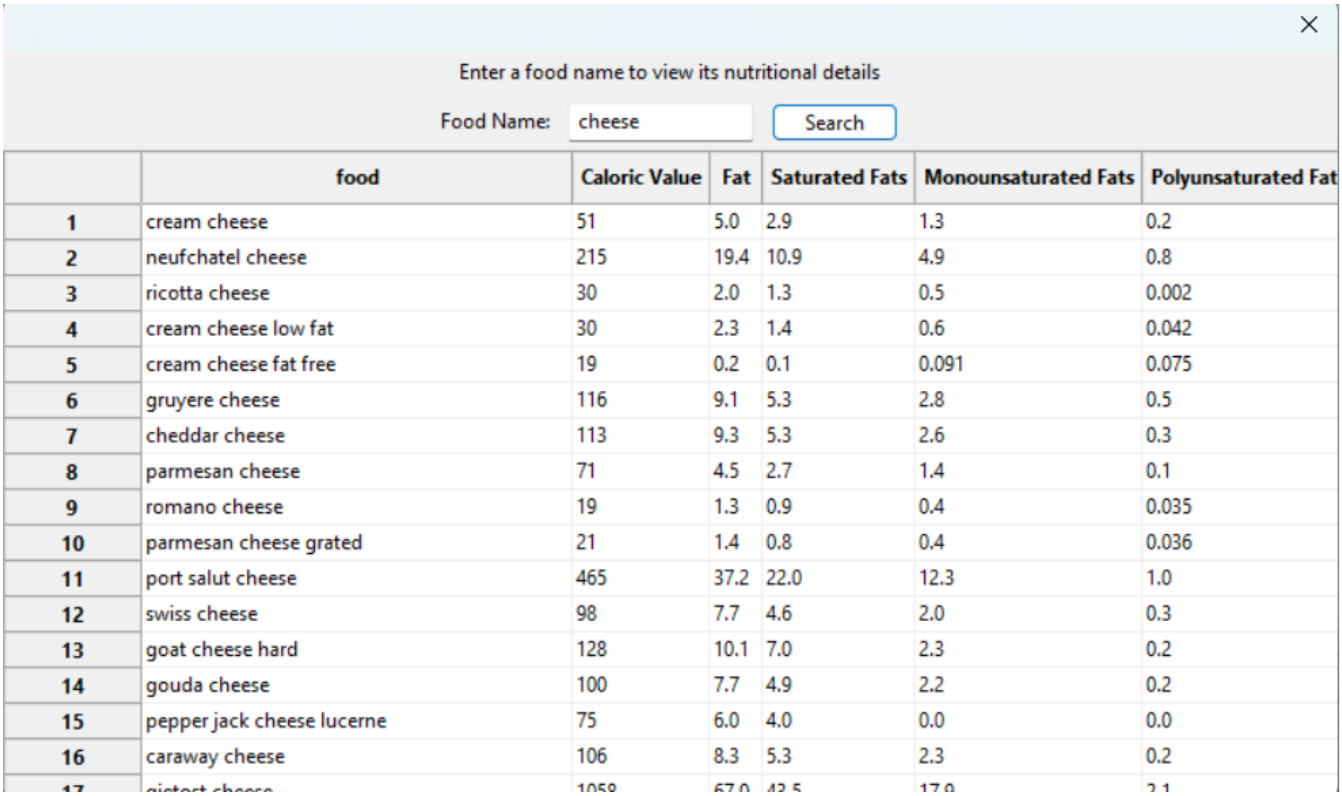
2. Enter in the food Name:



3. Start the Search:



4. View the results of the search:

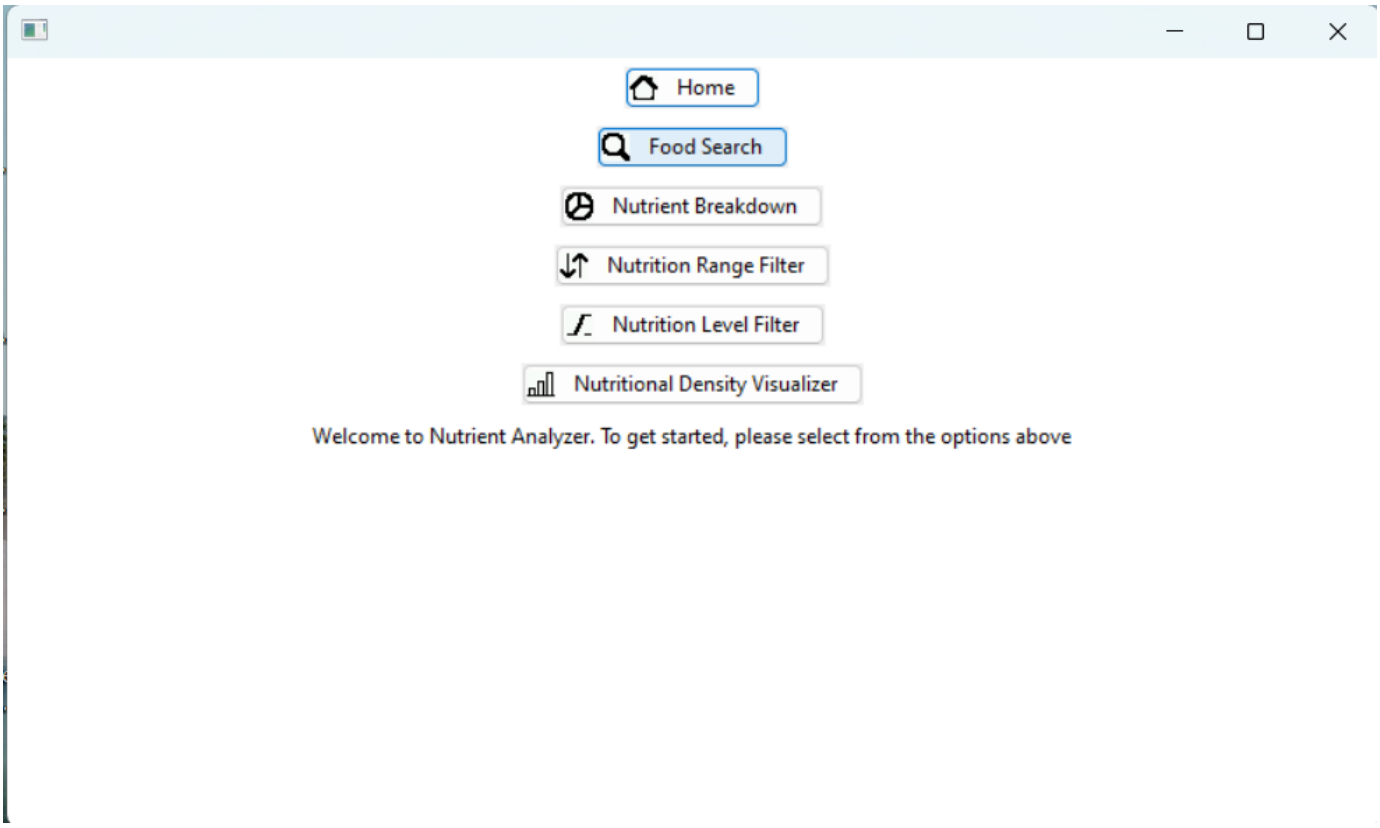


Enter a food name to view its nutritional details

Food Name: cheese Search

	food	Caloric Value	Fat	Saturated Fats	Monounsaturated Fats	Polyunsaturated Fat
1	cream cheese	51	5.0	2.9	1.3	0.2
2	neufchatel cheese	215	19.4	10.9	4.9	0.8
3	ricotta cheese	30	2.0	1.3	0.5	0.002
4	cream cheese low fat	30	2.3	1.4	0.6	0.042
5	cream cheese fat free	19	0.2	0.1	0.091	0.075
6	gruyere cheese	116	9.1	5.3	2.8	0.5
7	cheddar cheese	113	9.3	5.3	2.6	0.3
8	parmesan cheese	71	4.5	2.7	1.4	0.1
9	romano cheese	19	1.3	0.9	0.4	0.035
10	parmesan cheese grated	21	1.4	0.8	0.4	0.036
11	port salut cheese	465	37.2	22.0	12.3	1.0
12	swiss cheese	98	7.7	4.6	2.0	0.3
13	goat cheese hard	128	10.1	7.0	2.3	0.2
14	gouda cheese	100	7.7	4.9	2.2	0.2
15	pepper jack cheese lucerne	75	6.0	4.0	0.0	0.0
16	caraway cheese	106	8.3	5.3	2.3	0.2
17	[illegible]	1058	67.0	42.5	17.0	2.1

5. Exit the Feature:



2. Nutrition Breakdown

Description

Users may choose a food item from the database and explore comprehensive graphical representations of its nutritional value by using the Nutrition Breakdown function. To see the ratios of different nutrients, including carbs, proteins, fats, vitamins, and minerals, this tool offers both pie charts and bar graphs.

Steps

1. Select nutrient Breakdown Option:

Go to the main menu or select the Nutrition Breakdown function.

2. Choose a Food item:

i. All the Food Names shown in the list view.

ii. To view the food item's complete nutritional information, click on it.

3. View the breakdown of nutrients:

i. The selection of a food shows the nutritional breakdown in Pie Chart.

ii. The quantities of macronutrients like Caloric Value, Protein, Fats, and Saturated Fats are displayed in a pie chart.

4. Go back to select another food:

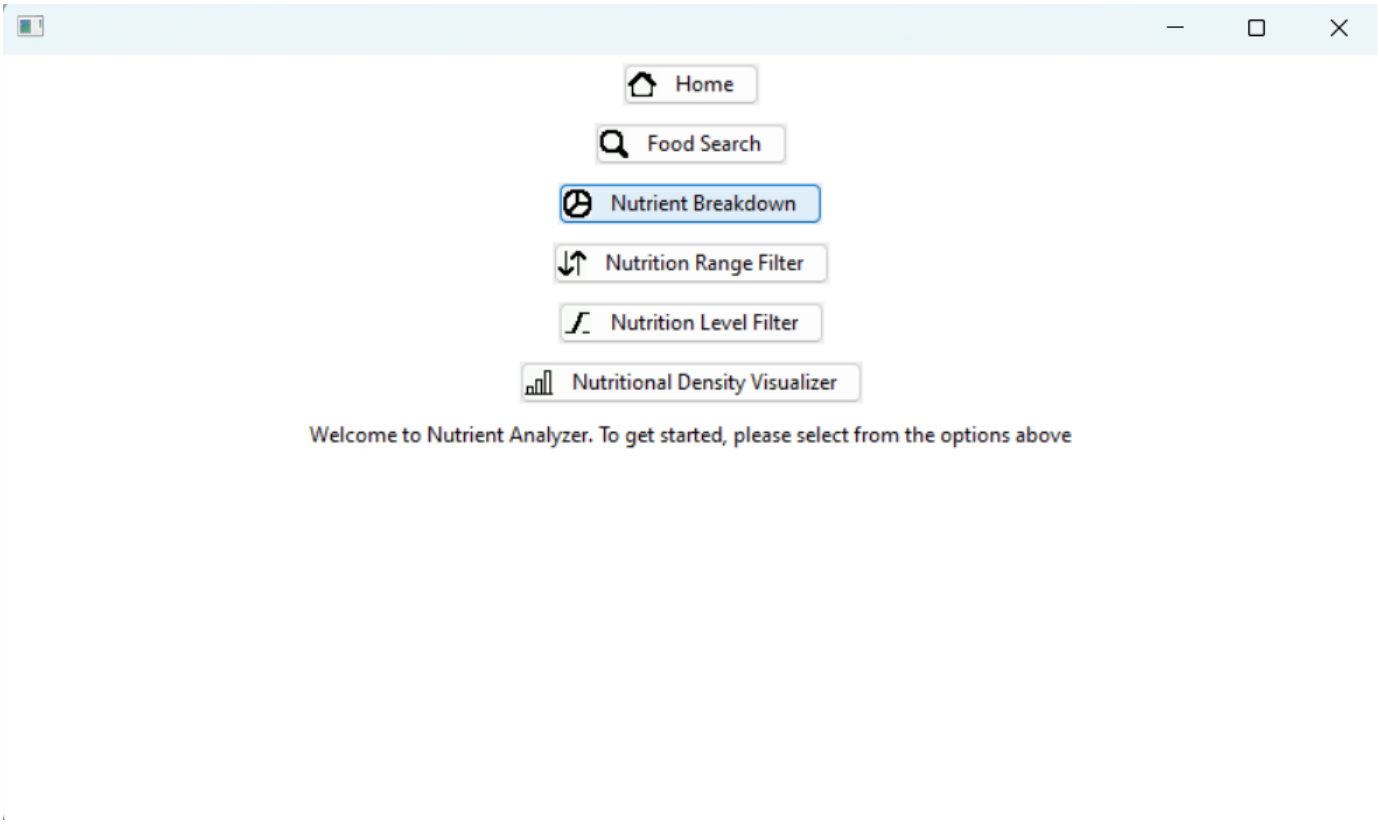
Click another food from Food List to choose a different food item after examining the nutritional information.

5. Exit the Feature:

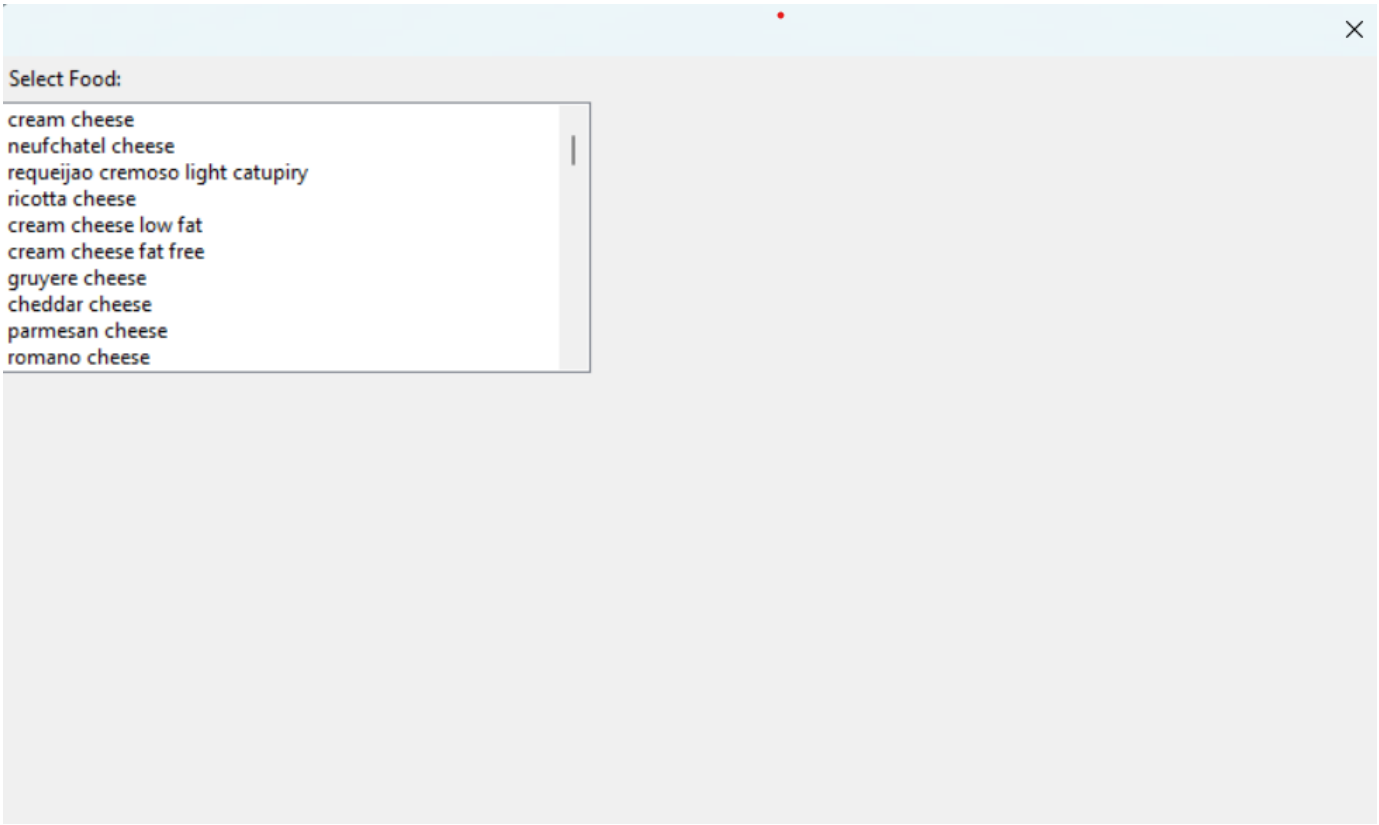
Once finished, select Close to exit or go back to the main menu.

Screenshots

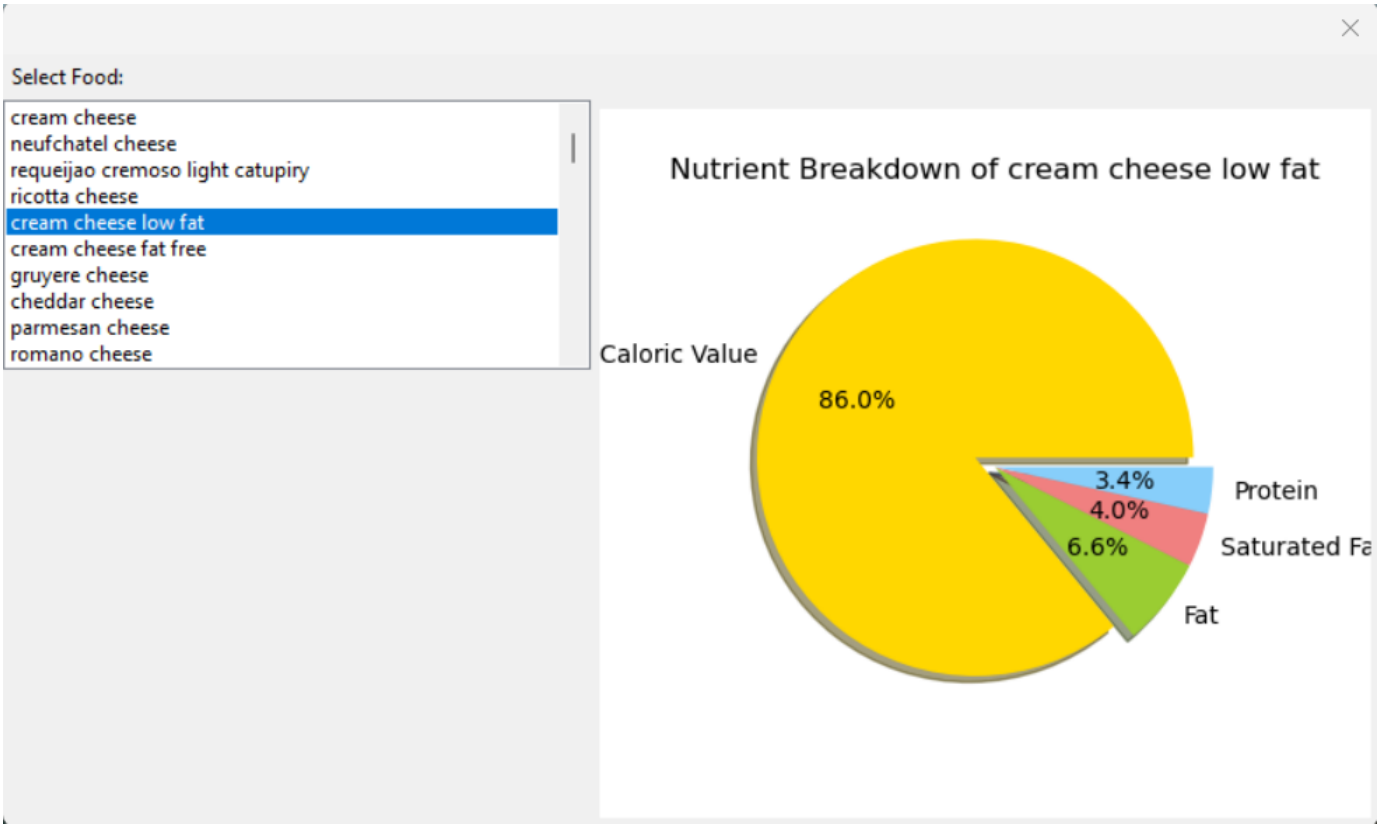
1. Select nutrient Breakdown Option:



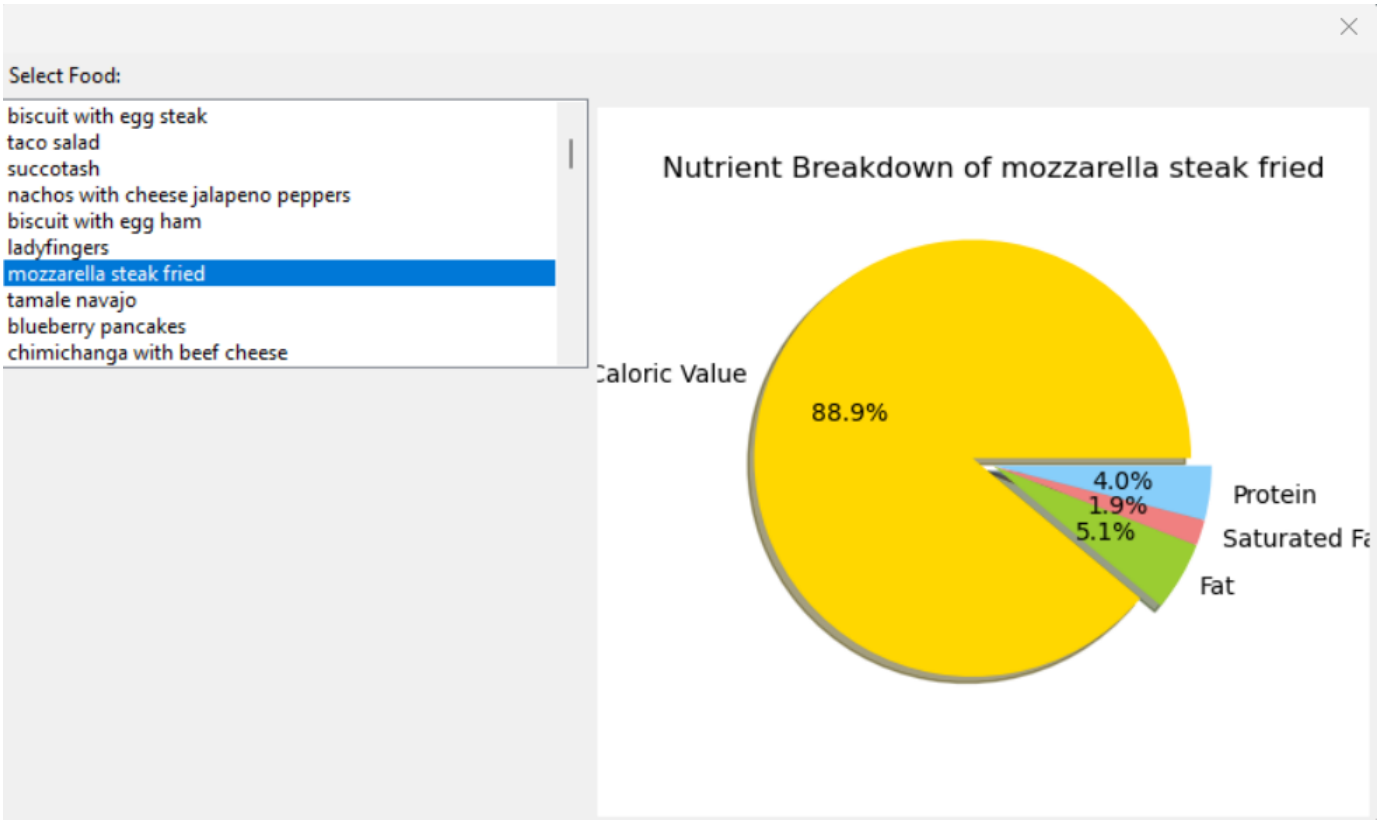
2. Choose a Food item:



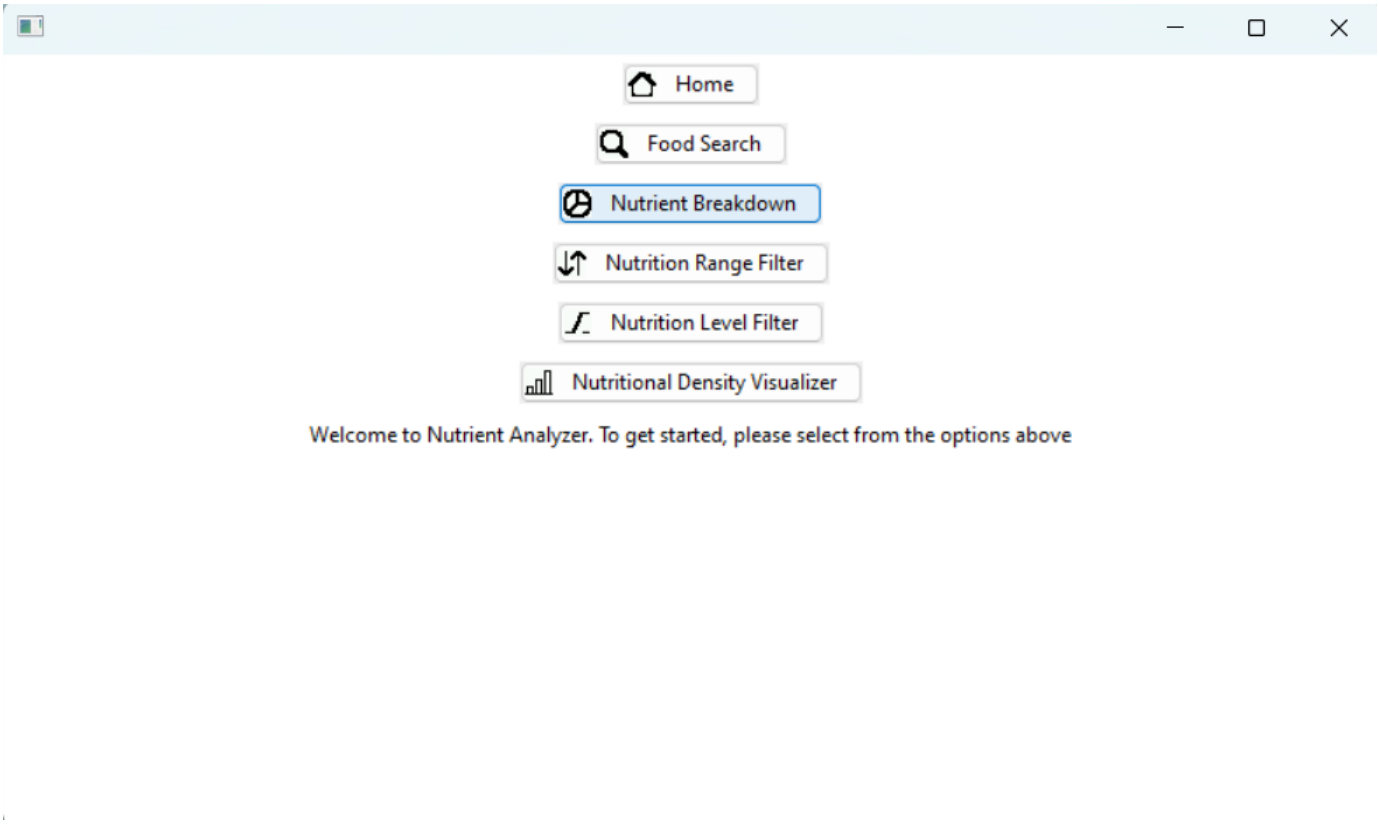
3. View the breakdown of nutrients:



4. Go back to select another food:



5. Exit the Feature:



3. Nutrition Range Filter

Description

Users may browse and filter a list of items that fall within a specific nutrient range by using the Nutrition Range Filter tool. To see items that fit the specified criteria, users can enter the lowest and maximum values for a certain nutrient (such as calories, protein, or fat). Based on their chosen nutrient preferences, this function assists users in finding meals that meet their unique dietary requirements.

Steps

1. Select the Nutrition Range Filter Function:

Navigate the Nutrition Range Filter option from the main menu.

2.Click on Drop Down function:

Users can expand a hidden nutrient list to choose a nutrient from the drop-down list.

3. Select the Nutrients:

Click on any Nutrient from the drop-down option foe which the user wants to see the minimum and maximum value.

4. Set the range of Nutrient:

i. There are input slots for the Minimum Range and Maximum Range in a dialogue box that appears.

ii. In the Min Range text area, provide the intended minimum value.

iii. In the text section labelled "Max Range," type the desired maximum value.

5. Click on Filter:

i. A grid-style list of foods that fit within the chosen nutritional range will be displayed after "Filter" button is clicked.

ii. The grid will show:

a. Food Name: Each food item's name.
b. Nutrient Value: The actual value of the chosen nutrient for every food item is known as the nutrient value.

6. Refine the Filter

i. Return to the Min Range and Max Range fields to change the numbers and also change the nutrient.

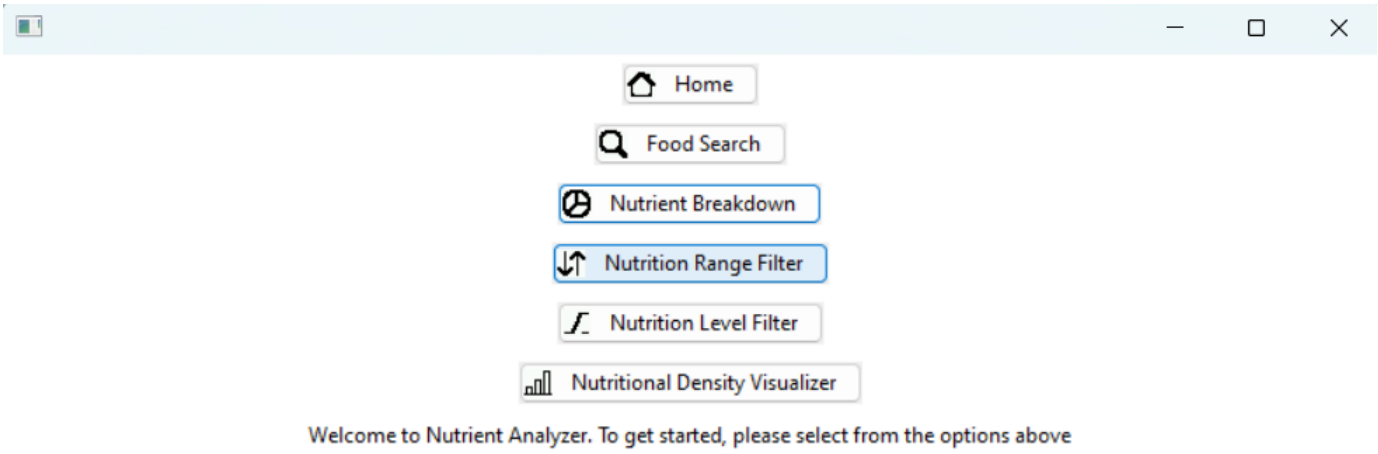
ii. Re-click Filter to refresh the results.

6. Exit the Feature:

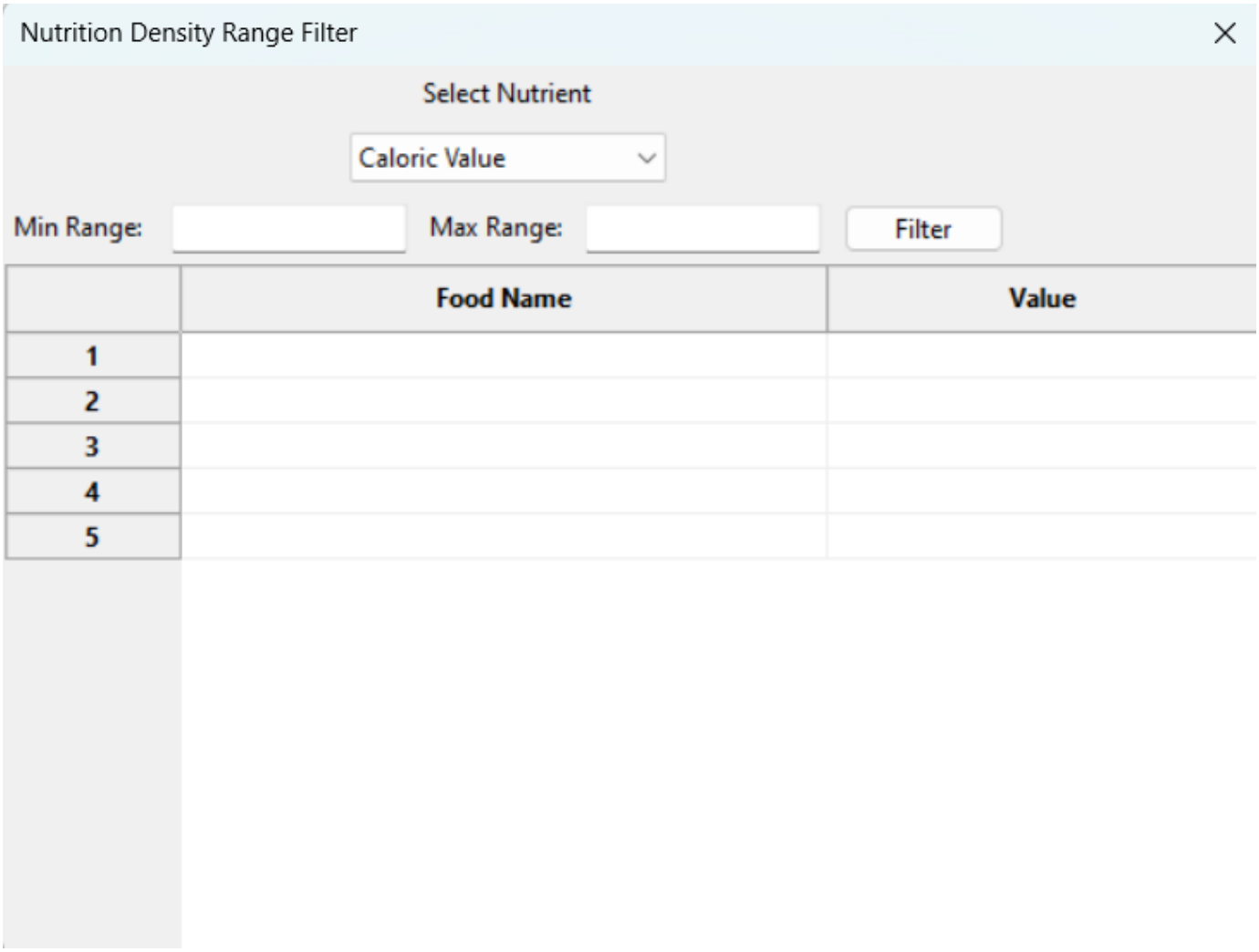
After locating the foods you want, click the Close button to close the range filter dialogue and go back to the application's main screen or other features.

Screenshots

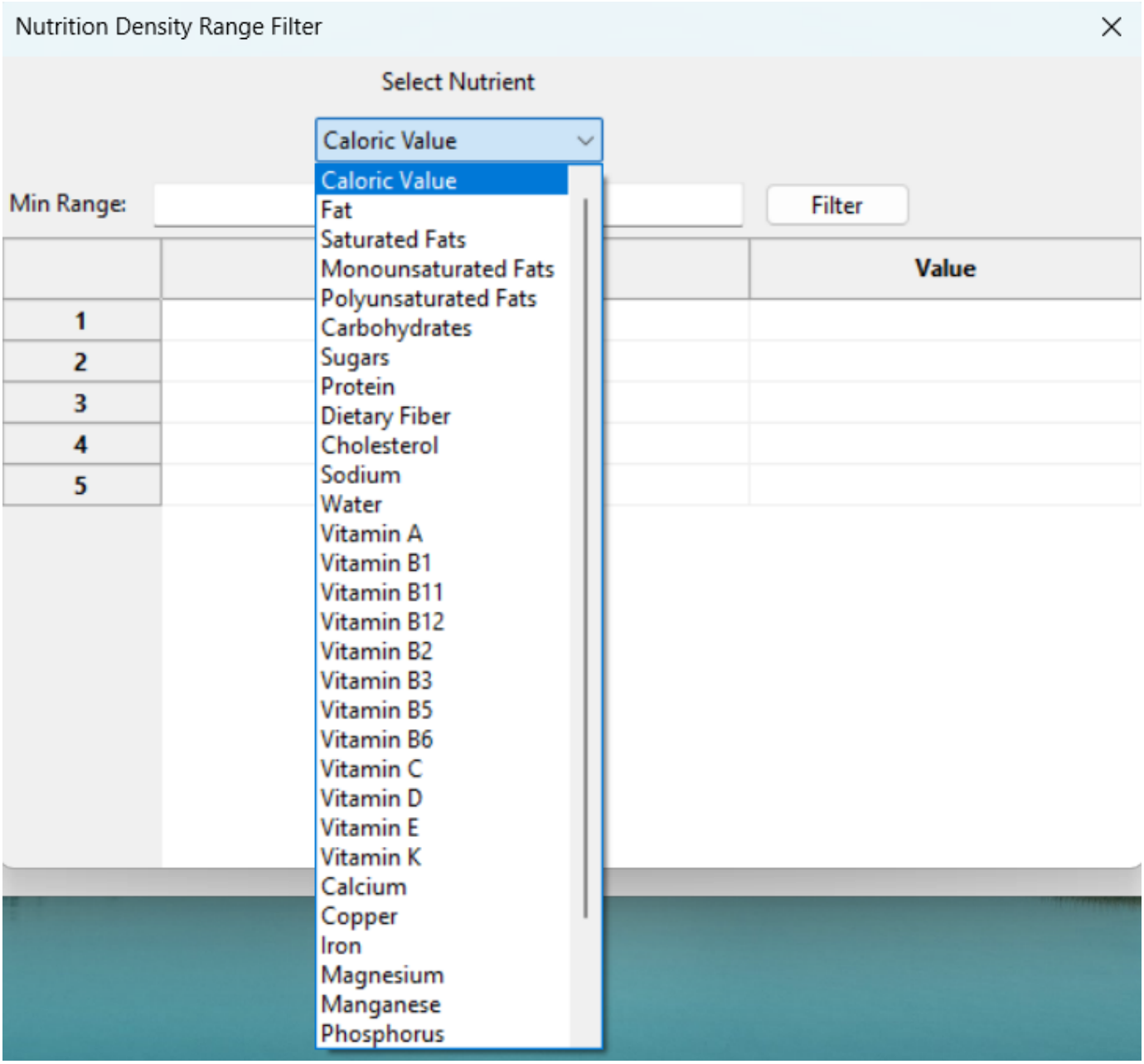
1. Select the Nutrition Range Filter Function:



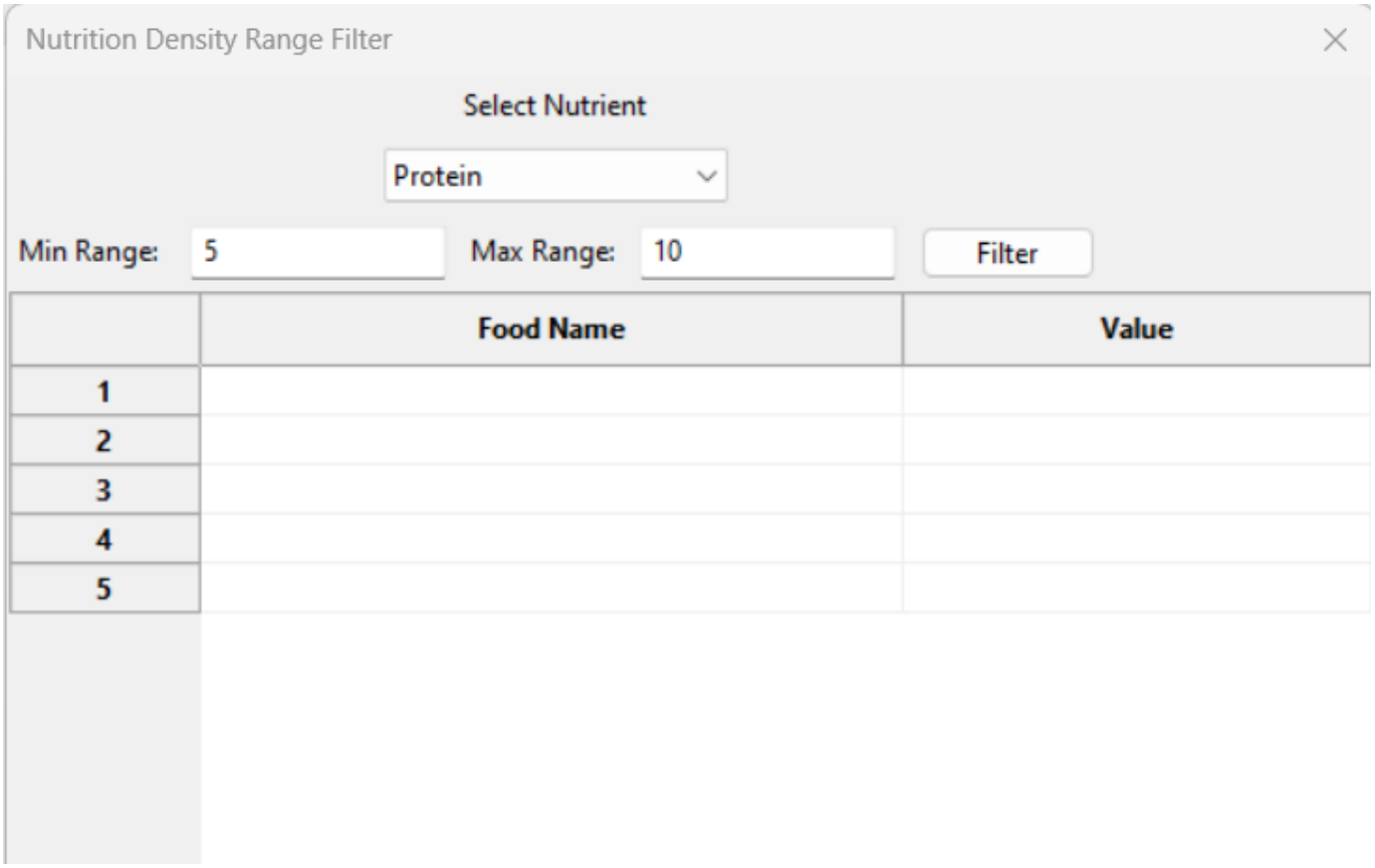
2.Click on Drop Down function:



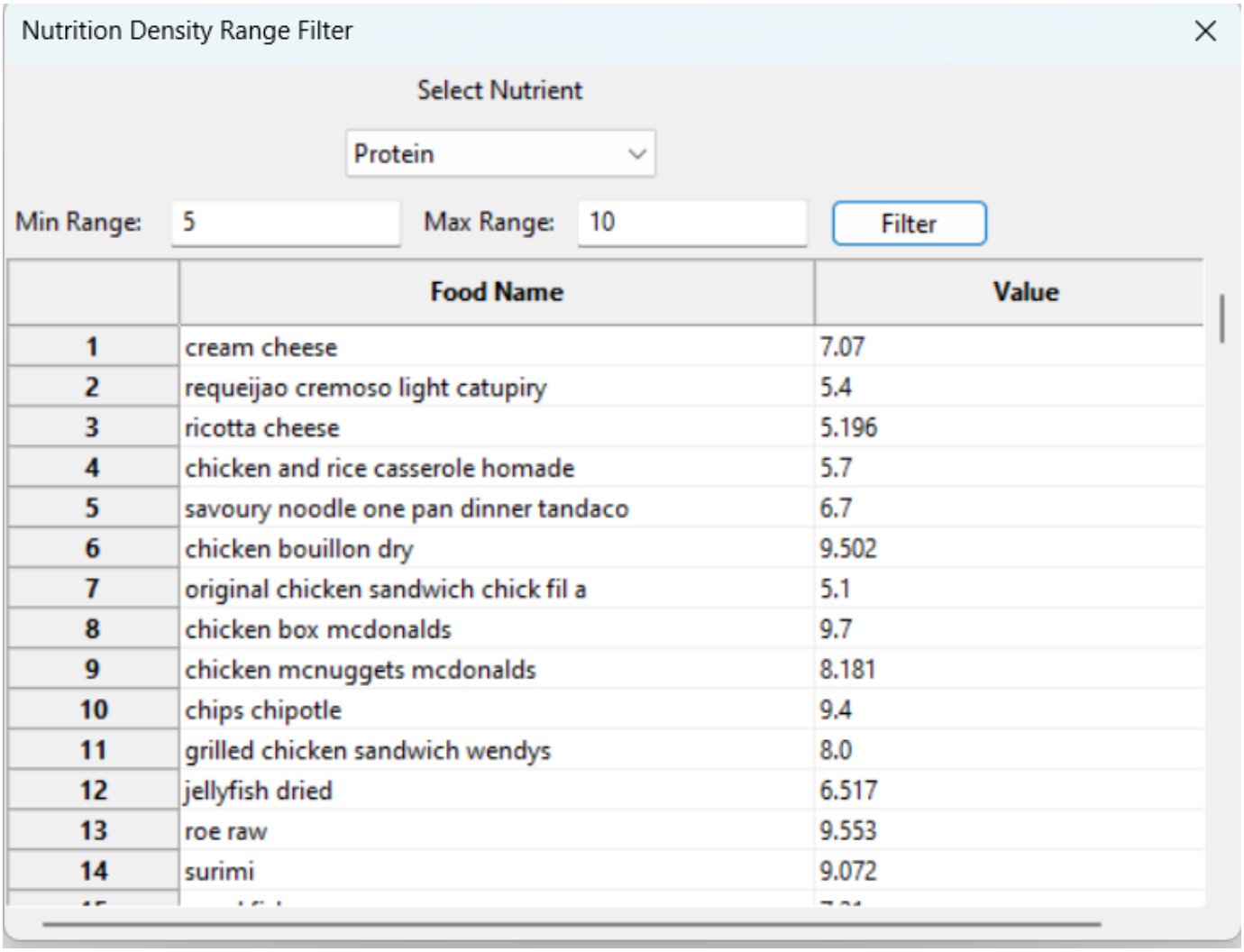
3. Select the Nutrients:



4. Set the range of Nutrient:

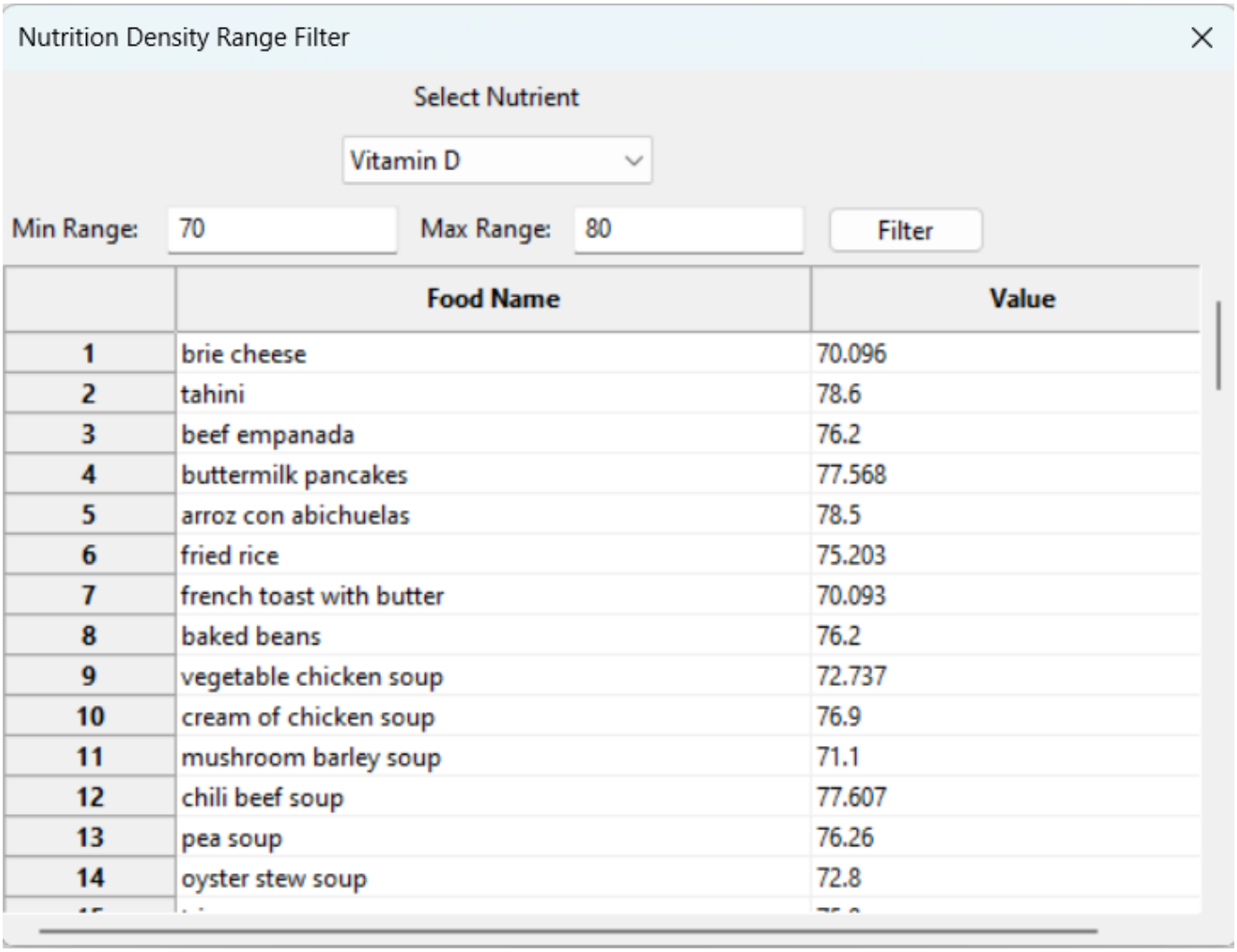


5. Click on Filter:



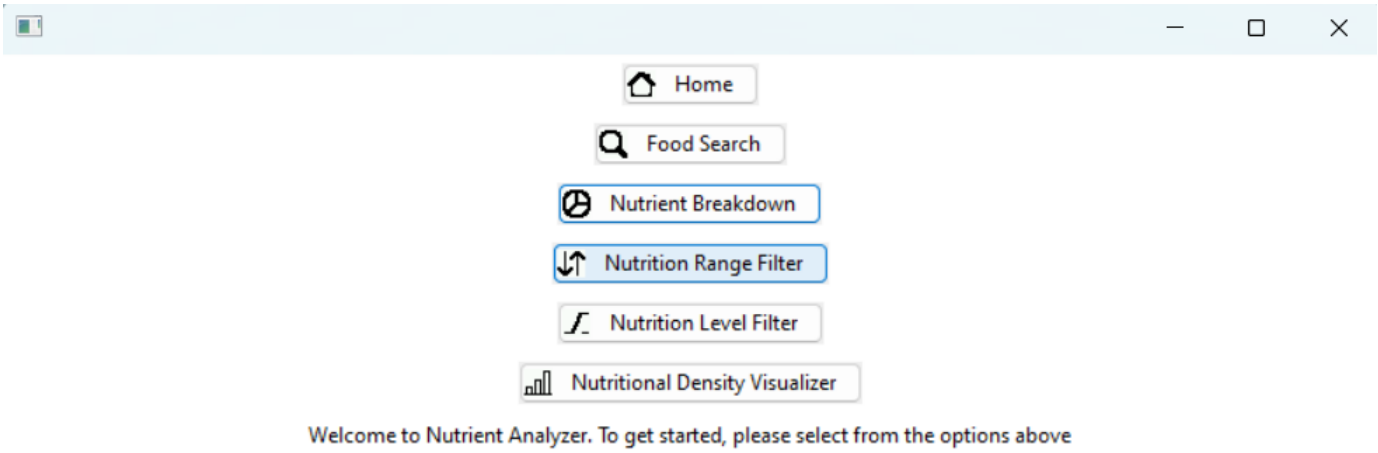
	Food Name	Value
1	cream cheese	7.07
2	requeijao cremoso light catupiry	5.4
3	ricotta cheese	5.196
4	chicken and rice casserole homade	5.7
5	savoury noodle one pan dinner tandaco	6.7
6	chicken bouillon dry	9.502
7	original chicken sandwich chick fil a	5.1
8	chicken box mcdonalds	9.7
9	chicken mcnuggets mcdonalds	8.181
10	chips chipotle	9.4
11	grilled chicken sandwich wendys	8.0
12	jellyfish dried	6.517
13	roe raw	9.553
14	surimi	9.072

6. Refine the Filter



	Food Name	Value
1	brie cheese	70.096
2	tahini	78.6
3	beef empanada	76.2
4	buttermilk pancakes	77.568
5	arroz con abichuelas	78.5
6	fried rice	75.203
7	french toast with butter	70.093
8	baked beans	76.2
9	vegetable chicken soup	72.737
10	cream of chicken soup	76.9
11	mushroom barley soup	71.1
12	chili beef soup	77.607
13	pea soup	76.26
14	oyster stew soup	72.8

6. Exit the Feature:



4. Nutrition Level Filter

Description

Users may filter items by low, mid, and high nutritional content levels for different nutrients, including fat, protein, carbs, sugar, and nutritional density, using the Nutrition Level Filter function. The following standards are used to categorise the nutritional levels:

Low: The chosen nutrient's value is less than 33% of its maximum value.

Mid: From 33% to 66% of the maximum amount.

High: Exceeding 66% of the maximum amount.

This function lets users filter items according to their nutritional composition, which makes it easier for them to choose foods that fit their dietary needs.

Steps

1. Navigate the Nutrition Level Feature:

Launch the app, then use the main menu to find the Nutrition Level Filter option and click on it to open.

2. Choose Your Nutritional Levels:

i. There will be radio button for each level—Low, Medium, and High—in the dialogue box that displays.

ii. To filter for certain nutritional values, check the corresponding boxes:

i. Low: Choose this choice to incorporate foods with a nutritional value of less than 33%.

ii. Medium: Choose this option to include items that range from 33% to 66% in terms of nutritional value.

iii. High: Choose this choice to incorporate meals with a nutritional value more than 66%.

3. Click on the Filter button:

i. Click the Filter button once the required nutritional values have been chosen.

ii. Based on the levels that have been chosen, the system will filter foods and update the grid with the filtered results.

4. View Results Filtered and again adjust the level:

i. The filtered items will be shown in a grid with their quantities values. **ii.** The grid will have the following items:

i. Food Name: Each food item's name.

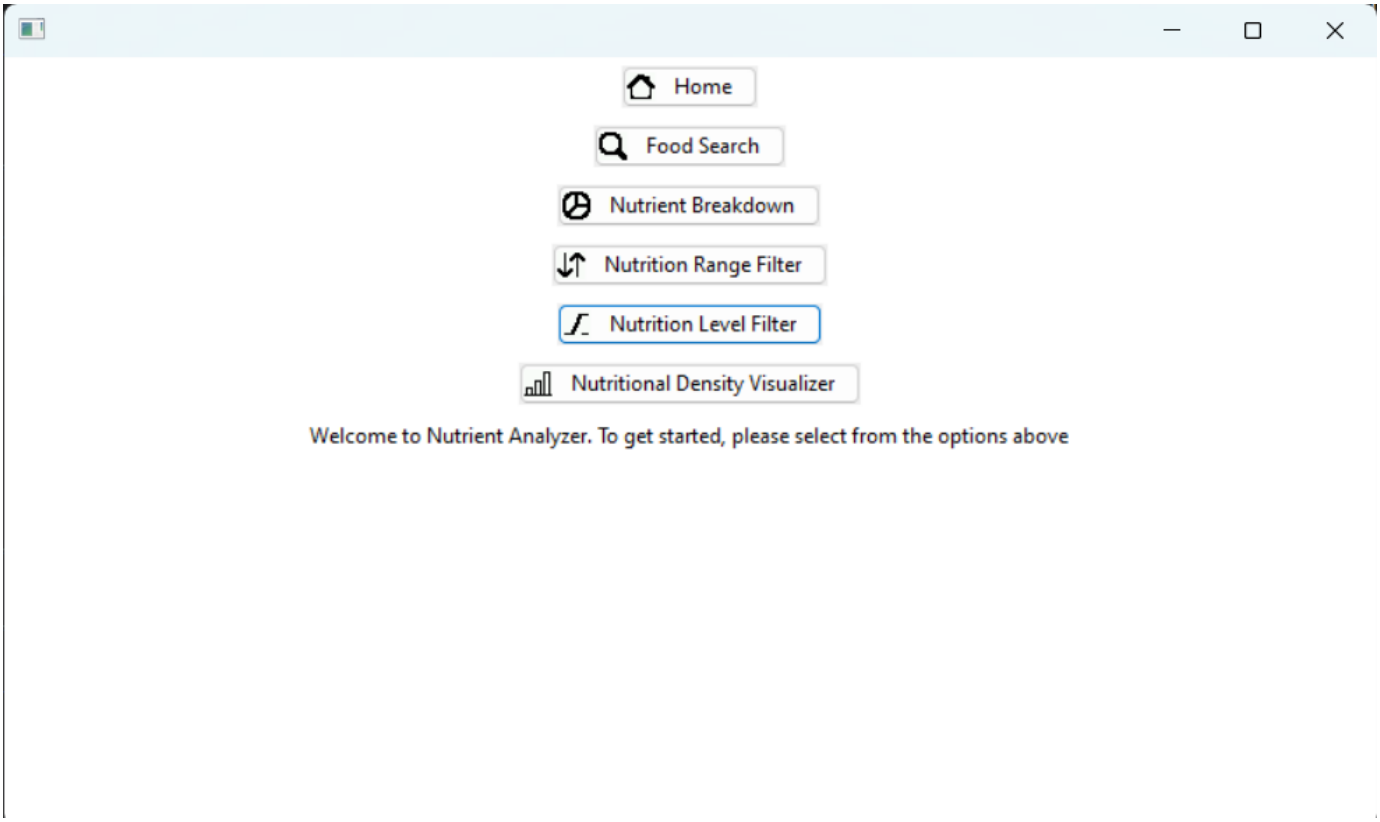
ii. Levels of Nutrients: The particular concentration of every nutrient in every food item.

5. Exit the Feature:

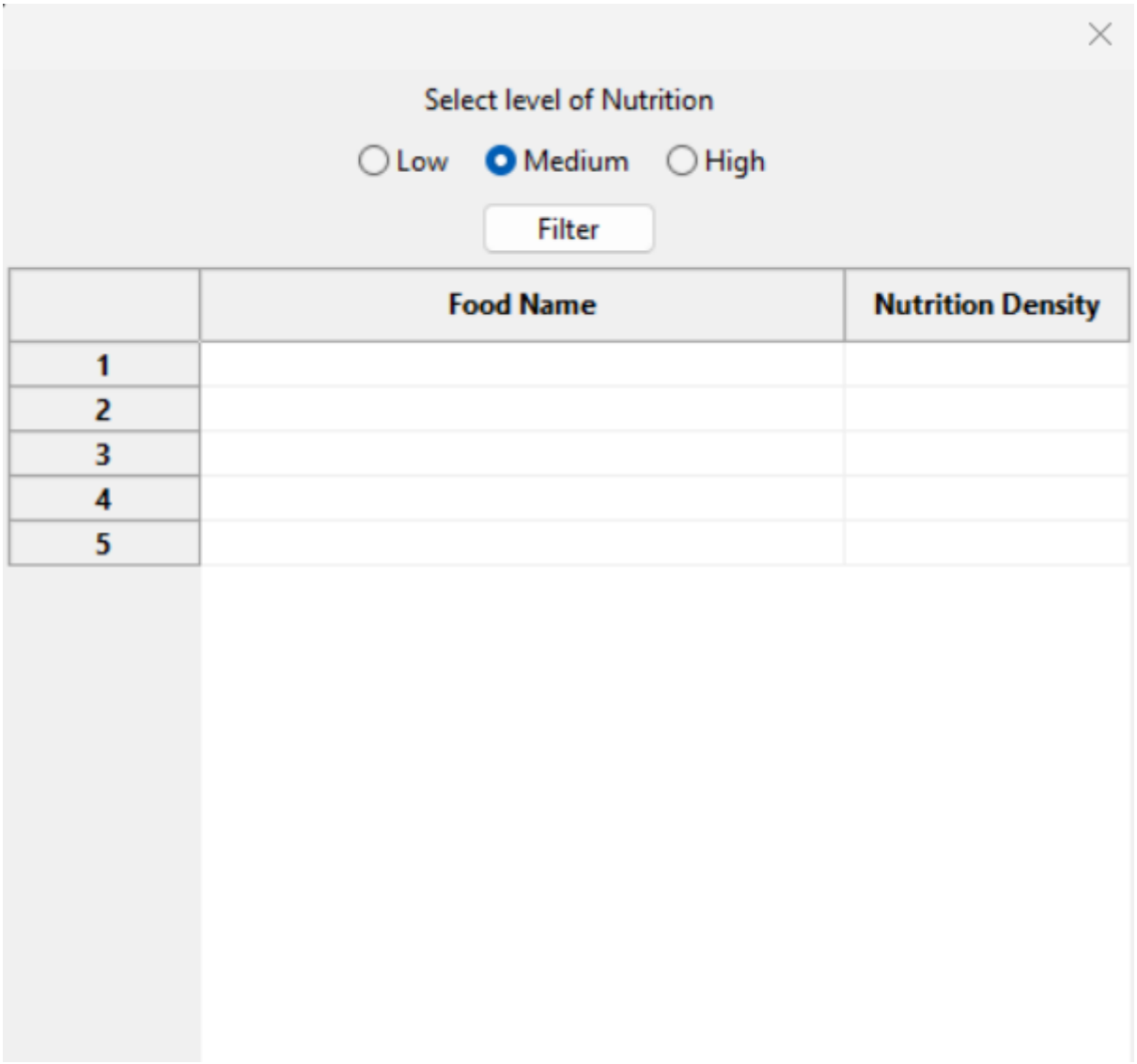
After locating the items you want, select Close to close the nutrition level filter dialogue and go back to the main program.

Screenshots

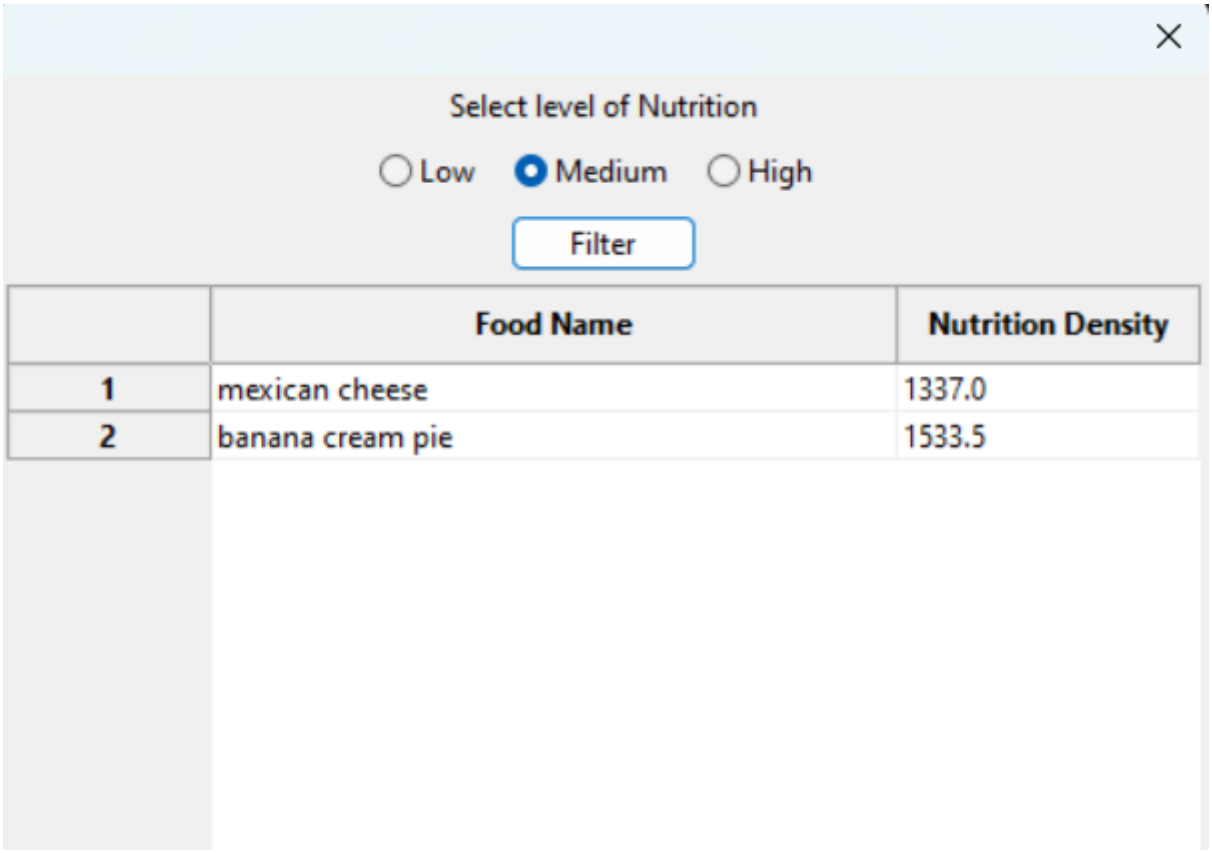
1. Navigate the Nutrition Level Feature:



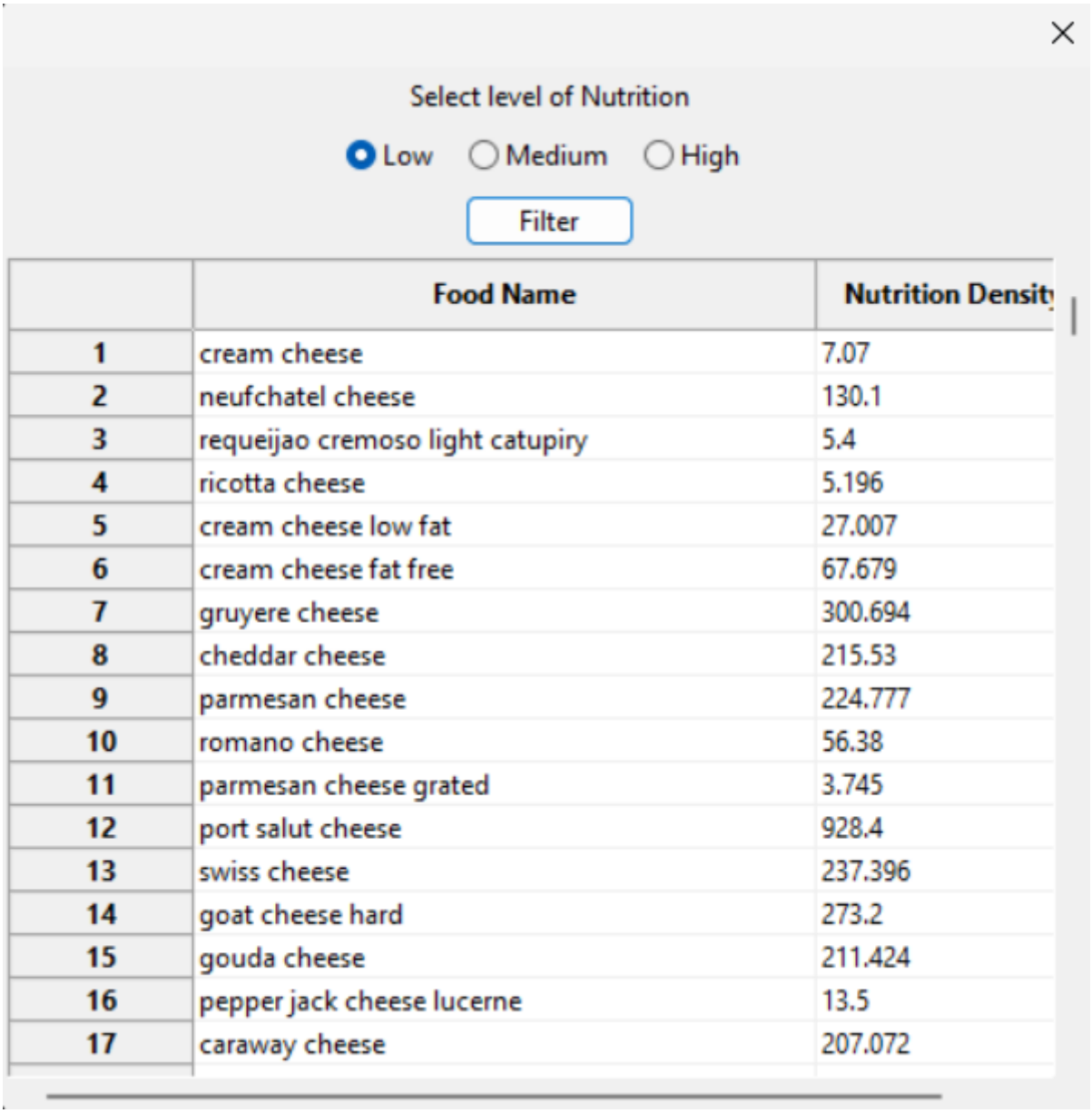
2. Choose Your Nutritional Levels:



3. Click on the Filter button:

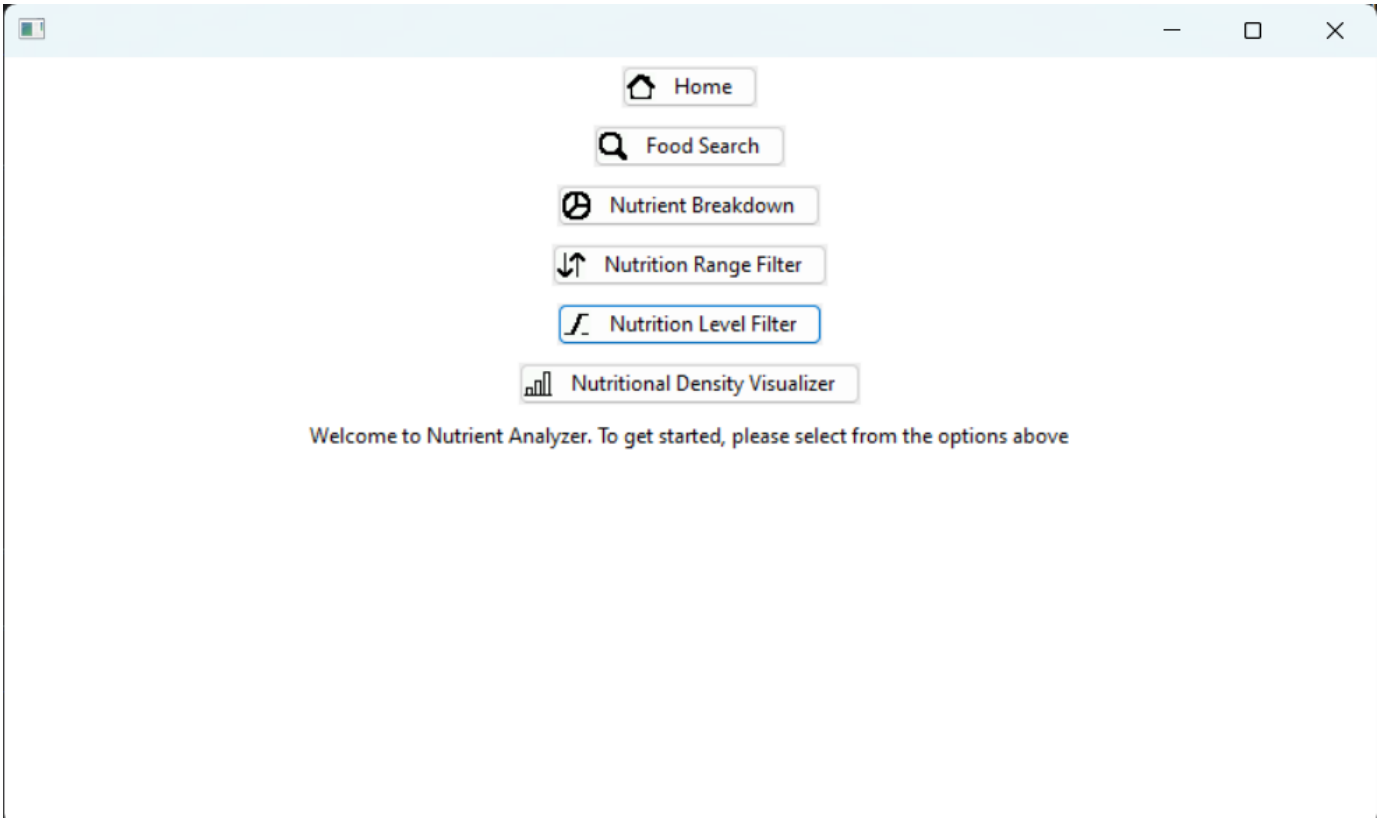


4. View Results Filtered and again adjust the level:



	Food Name	Nutrition Density
1	cream cheese	7.07
2	neufchatel cheese	130.1
3	requeijao cremoso light catupiry	5.4
4	ricotta cheese	5.196
5	cream cheese low fat	27.007
6	cream cheese fat free	67.679
7	gruyere cheese	300.694
8	cheddar cheese	215.53
9	parmesan cheese	224.777
10	romano cheese	56.38
11	parmesan cheese grated	3.745
12	port salut cheese	928.4
13	swiss cheese	237.396
14	goat cheese hard	273.2
15	gouda cheese	211.424
16	pepper jack cheese lucerne	13.5
17	caraway cheese	207.072

5. Exit the Feature:



5. Nutritional Density Visualizer

Description

Through a visual representation, users may compare the nutritional density of different food products with the Nutritional Density Visualizer tool. Users are presented with a bar chart that compares important elements including fats, proteins, carbs, and sugars when they pick three food products. This tool helps users make educated decisions on their dietary choices by giving a straightforward and interactive method to explore the nutritional value of different meals.

Steps

1. Navigate the Nutritional Density Visualizer.

Open the visualiser by selecting it from the dialogue window or application menu.

2. Choose the Nutrient

Users choose nutrient from the drop-down list that they want to do food comparison for that nutrient.

3. Choose the Food to compare

Users choose three food items from the drop-down list by selecting the ones they want in the selection box.

4. Press the 'Visualize' button.

To produce the comparison, choose the food products and then click the 'Visualize' option.

Re-define the findings

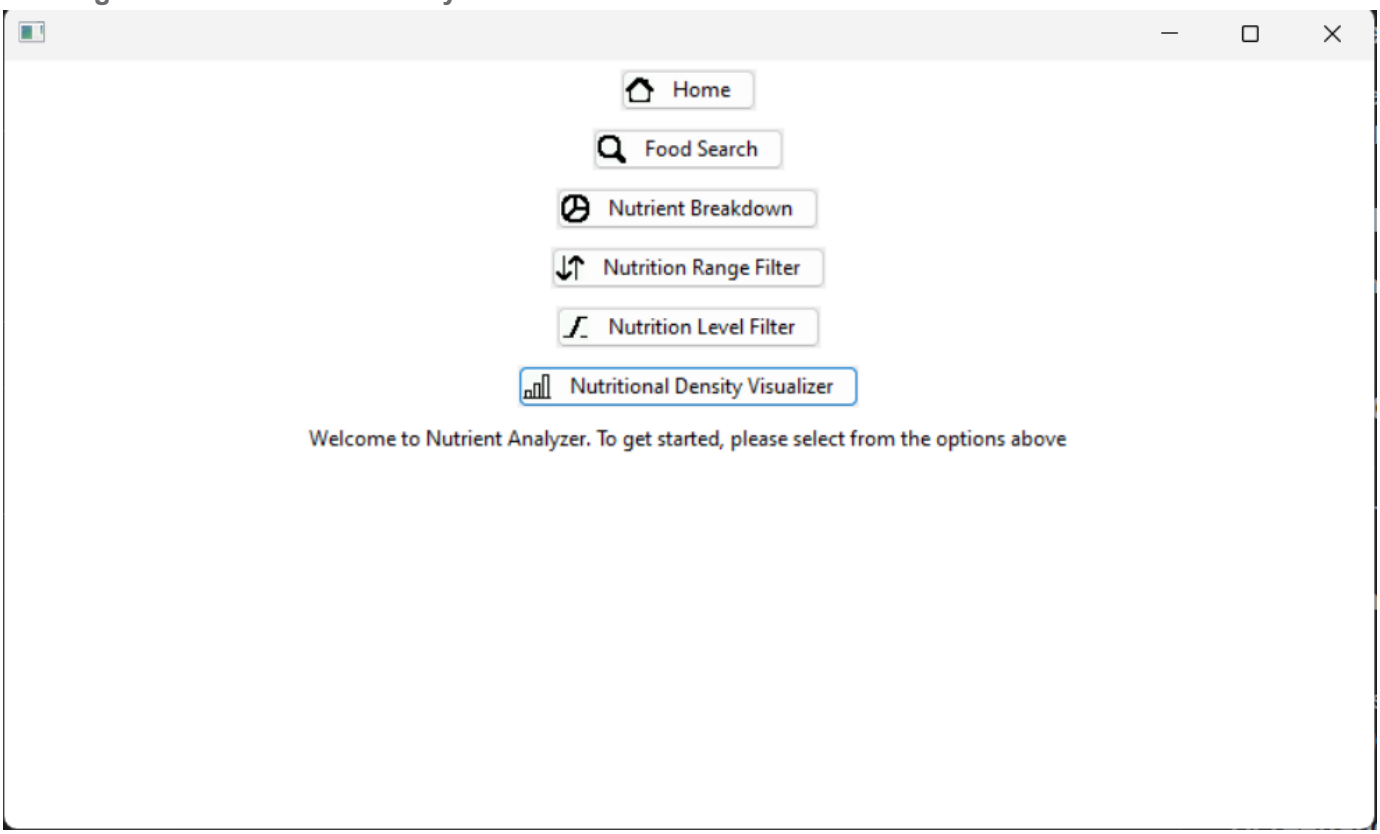
The data can be re-define, by selecting the another food to do comparisons.

5. Exit the Feature:

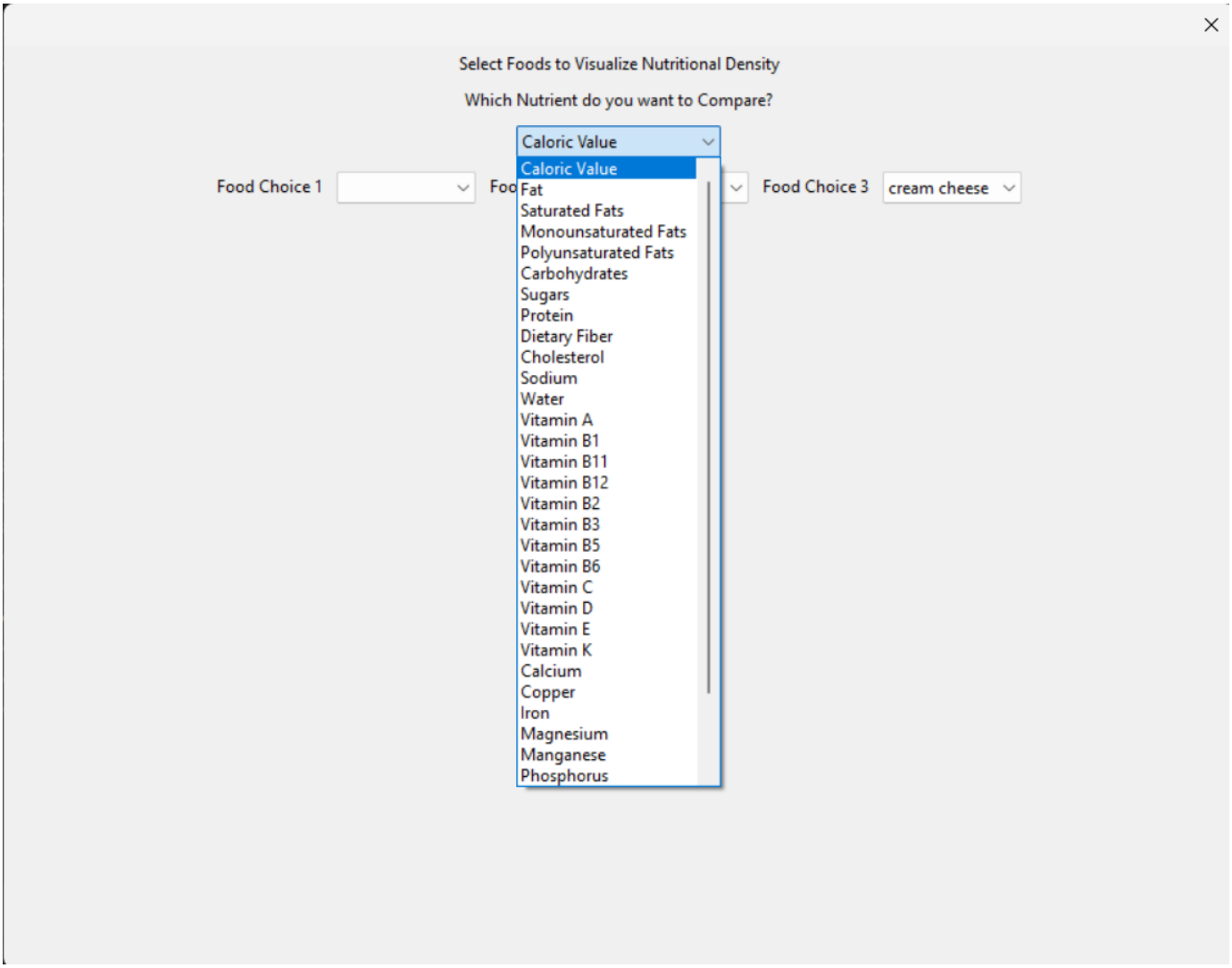
After visualize the items you want, select Close to close the nutrition level filter dialogue and go back to the main program.

Screenshots

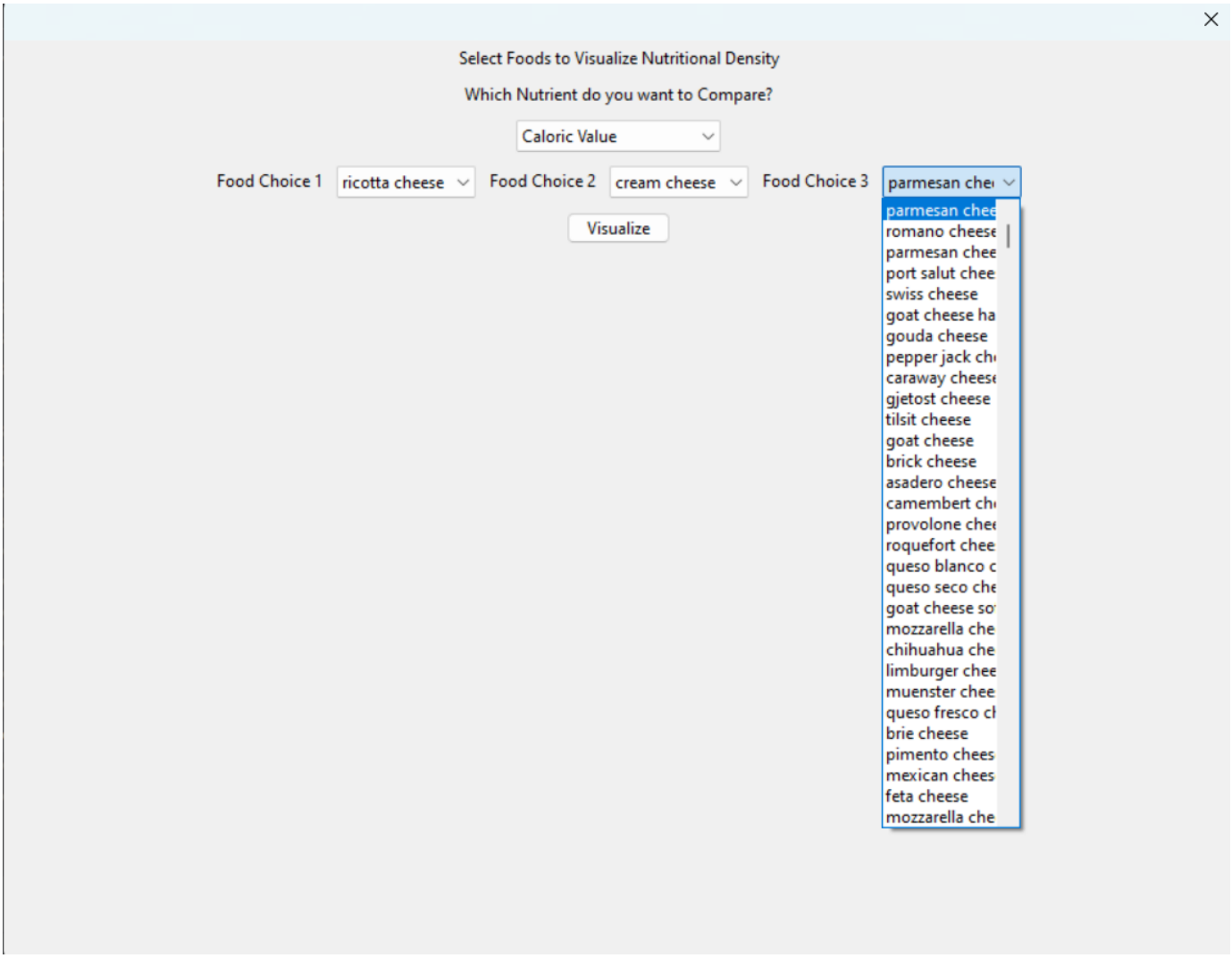
1. Navigate the Nutritional Density Visualizer.



2. Choose the Nutrient

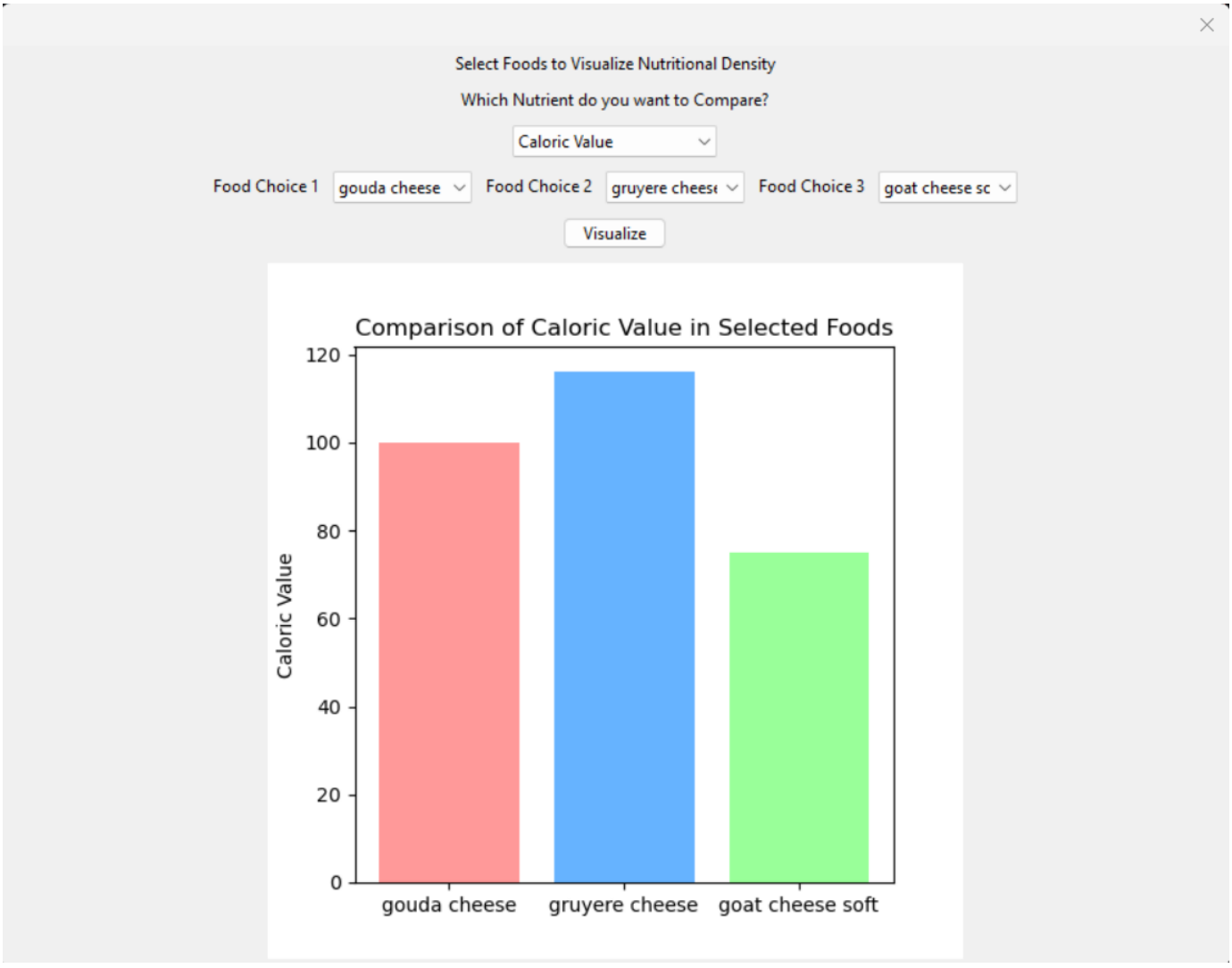


3. Choose the Food to compare



4. Press the 'Visualize' button.

Re-define the findings



5. Exit the Feature: