

Step 1-Recipe Entry

The first step will be to enter in your recipe. Click on the tab “Step 1-Enter Recipe”. The blue boxes are for you to fill in. The yellow boxes show the results of the calculations.

A. Let’s say you would like to find out how your current recipe compares to guidelines for complementary feeding. You would enter your recipe in the area for “Recipe 1” by filling in the blue boxes.

1. You can enter the recipe by individual ingredient weights or by proportions (percent) of weights.
 - a. If you choose to enter by proportions, you should start **by entering the total weight of the recipe batch you want to evaluate in cell B30**. The example shows 1000 KG entered. Then you can **fill in the proportion or percent of the weight for each ingredient in column B**, which will automatically calculate the KG weight. In the example, water is 50% of the weight and that calculates to 500 KG. Once you finish the entry of the proportions, the total percent shown in cell B31 should be 100 (to represent 100%).
 - b. If you choose to enter **actual weights, just start entering the KG weights in column C**.
2. Choose the cereal/grain base ingredient by clicking on the box to show the drop-down menu. Choose the item by highlighting it and clicking on it. Choose each ingredient in the same way. The categories are:
 - a. Cereal/grain
 - b. Soy products
 - c. Other protein
 - d. Other ingredient
 - e. Unnamed ingredient
3. If you would like to determine the cost of your recipe, enter the cost per KG of each ingredient.
4. The yellow boxes will show the results for cost for the ingredient and the recipe weight.

	A	B	C	D	E	F
1	Instructions: You can choose to enter ingredients by proportion (percent of total recipe weight) or by weight of each					
2	ingredient. If you choose weight proportion, fill in % in column B and be sure to fill in the recipe total weight in cell B30 .					
3	If you choose weight, fill in KG in column C . If you would like cost comparisons, be sure to fill in the cost/KG in column E .					
4	Enter all items (numbers or click on box to choose from drop-down menu) in the light blue color boxes.					
5	A conversion chart is shown here to assist you in converting small amounts to fractions of kilograms.					
6						
7	Weight conversion chart:			(for more conversions: http://www.onlineconversion.com/weight_common.htm)		
8	<u>enter #</u>	<u>Unit</u>	<u>amount in KG</u>			
9		milligram(s)=	0			
10		gram(s)=	0			
11		metric ton(s)=	0			
12						
13	A. If you want to compare an original recipe to a new recipe, enter your original recipe here.					
14	Recipe1: Percent (Proportion) or Weight - choose one method					
15	<u>Ingredient type</u>	<u>Weight %</u>	<u>KG</u>	<u>Ingredient</u>	<u>Cost/KG</u>	<u>Cost/ingredient</u>
16	water	50	500	Water	5	2500
17	cereal/grain	10	100	Choose Cereal/Grain	25	2500
18	cereal/grain			Choose Cereal/Grain		0
19	cereal/grain			Bulgur (BW)		0
20	cereal/grain			Cassava Flour		0
21	soy product			Cornmeal		0
22	soy product			Millet, Mixed Flour		0
23	other protein			Rice		0
24	other protein			Sorghum Flour		0
25	other ingred			Tef, Mixed Flour		0
26	other ingred			Choose Other Protein		0
27	other ingred			Choose Other Ingredient		0
28	other ingred			Choose Other Ingredient		0
29	unnamed ingred			Choose Other Ingredient		0
30	unnamed ingred			Choose Unnamed Ingredient		0
31	unnamed ingred			Choose Unnamed Ingredient		0
32	recipe1 weight (KG):	1000	600			
33	% (should be 100%)	60				
34	B. Enter the new recipe here:					

B. Enter a second recipe for comparison.

1. If you would like to compare your original recipe to a new recipe, under B enter the new recipe the same way you entered the original, following the steps in part A above.

	A	B	C	D	E	F	
33	B. Enter the new recipe here:						
34	Recipe 2:	Percent (Proportion) or Weight - choose one method					
35	<i>Ingredient type</i>	<i>Weight %</i>	<i>KG</i>	<i>Ingredient</i>	<i>Cost/KG</i>	<i>Cost/ingredient</i>	
36	water	50	500	Water	5	2500	
37	cereal/grain	7.5	75	Millet, Mixed Flour	50	3750	
38	cereal/grain		0	Choose Cereal/Grain		0	
39	cereal/grain		0	Choose Cereal/Grain		0	
40	cereal/grain		0	Choose Cereal/Grain		0	
41	soy product	2.5	25	Choose Soy Product	40	1000	
42	soy product		0	Choose Soy Product		0	
43	other protein		0	Soy Flour, Full Fat		0	
44	other protein		0	Soy Protein Concentrate		0	
45	other ingred		0	Soy Protein Isolate		0	
45	other ingred		0	Textured Soy Protein		0	
46	other ingred		0	Choose Other Ingredient		0	
47	other ingred		0	Choose Other Ingredient		0	
48	unnamed ingred		0	Choose Unnamed Ingredient		0	
49	unnamed ingred		0	Choose Unnamed Ingredient		0	
50	recipe2 weight (KG):	1000	600				
51	% (should be 100%)	60					

C. If you would like to compare your original and a new recipe to target populations of children, adults, or sets of guidelines, you can choose the targets in section C.

1. Click on the red words to show a drop down menu for “Child Beneficiary”, “Adult Beneficiary”, or “Other Requirement”.
2. You can choose one from each category, if you like.
3. Toward the right side of this set of rows, you can choose the percent of requirements you would like to have 100 grams of the recipe meet. For instance, you may want 100 grams of the recipe to provide about 25% of the daily requirements for adolescent males, 25% of the daily requirements for pregnant women, and 100% of the requirements for an F100 formulation for 100 grams.

53	C. Choose target beneficiaries:	
54	Beneficiary Child?	Choose Child Beneficiary
55	Beneficiary Adult?	Choose Adult Beneficiary
56	Other Requirements?	Choose Other Requirement
58	D. Next, click on the tab "Step 2-Results"	
59		

53	C. Choose target beneficiaries:	
54	Beneficiary Child?	Choose Child Beneficiary
55	Beneficiary Adult?	Choose Child Beneficiary
56	Other Requirements?	Infants(7-12Mo)
56		Children(1-3Y)
58	D. Next, click on the t	Children(4-6Y)
59		Children(7-9Y)
59		Adolescent(F:10-18Y)
60		Adolescent(M:10-18Y)
61		

3. Example of comparison: We will use the example filled out here to look at the results. In the second recipe, we substituted 5 kg of soy flour for cornmeal. So, the weight of the product is the same, but the cost and nutritional value will be different. The worksheet will print as you see it here.

Instructions: You can choose to enter ingredients by proportion (percent of total recipe weight) or by weight of each ingredient. If you choose **weight proportion**, fill in % in column B and be sure to fill in the recipe total weight in cell B30. If you choose **weight**, fill in KG in column C. If you would like **cost comparisons**, be sure to fill in the cost/KG in column E.

Enter all items (numbers or click on box to choose from drop-down menu) in the light blue color boxes.

A conversion chart is shown here to assist you in converting small amounts to fractions of kilograms.

Weight conversion chart: (for more conversions: http://www.onlineconversion.com/weight_common.htm)

enter #	Unit	amount in KG
	milligram(s)=	0
	gram(s)=	0
	metric ton(s)=	0

A. If you want to compare an original recipe to a new recipe, enter your original recipe here.

Recipe1: Percent (Proportion) or Weight - choose one method

Ingredient type	Weight %	KG	Ingredient	Cost/KG	Cost/ingredient
water	50	500	Water	5	2500
cereal/grain	4	40	Millet, Mixed Flour	50	2000
cereal/grain	35	350	Cornmeal	25	8750
cereal/grain		0	Choose Cereal/Grain		0
cereal/grain		0	Choose Cereal/Grain		0
soy product		0	Choose Soy Product		0
soy product		0	Choose Soy Product		0
other protein		0	Choose Other Protein		0
other prote in		0	Choose Other Protein		0
other ingred	1	10	Salt, Table	10	100
other ingred	10	100	Sugar, Granulated	50	5000
other ingred		0	Choose Other Ingredient		0
unnamed ingred		0	Choose Unnamed Ingredient		0
unnamed ingred		0	Choose Unnamed Ingredient		0
recipe1 weight (KG):	1000	1000			
% (should be 100%)	100				

B. Enter the new recipe here:

Recipe 2: Percent (Proportion) or Weight - choose one method

Ingredient type	Weight %	KG	Ingredient	Cost/KG	Cost/ingredient
water	50	500	Water	5	2500
cereal/grain	4	40	Millet, Mixed Flour	50	2000
cereal/grain	30	300	Cornmeal	25	7500
cereal/grain		0	Choose Cereal/Grain		0
cereal/grain		0	Choose Cereal/Grain		0
soy product	5	50	Soy Flour, Full Fat	40	2000
soy product		0	Choose Soy Product		0
other protein		0	Choose Other Protein		0
other prote in		0	Choose Other Protein		0
other ingred	1	10	Salt, Table	10	100
other ingred	10	100	Sugar, Granulated	50	5000
other ingred		0	Choose Other Ingredient		0
unnamed ingred		0	Choose Unnamed Ingredient		0
unnamed ingred		0	Choose Unnamed Ingredient		0
recipe2 weight (KG):	1000	1000			
% (should be 100%)	100				

C. Choose target beneficiaries and percent you want the recipe to fulfill/100 grams:

	% to fulfill
Beneficiary Child?	25
Beneficiary Adult?	25
Other Requirements?	100

D. Next, click on the tab "Step 2-Results"

D. The next step is to look at your results. Click on the "Step 2-Results" tab.

Remember that you must enter a weight in KG for the ingredient to be included in the evaluation.

Remember that if you want a cost evaluation, you must enter the cost per KG of each ingredient.

Step 2-Results

On the Results Sheet, you will find the calculations completed for each recipe. For our example, we chose three criteria to evaluate including one in the child category (adolescent male:10-18 years old), one in the adult category (pregnant), and the World Food Program's 2008 criteria for micronutrients in fortified blended foods. The yellow boxes show the results as a percentage of the criteria met by 100 grams of the recipe. The orange boxes show the criteria for the comparison you choose (target child or adult population or other guidelines).

In addition, because we entered cost information in the Recipe Entry Sheet, the Results Sheet shows the:

1. cost per recipe as it was entered
2. cost per 100 grams of the product
3. cost per calorie
4. cost per gram of protein

Notice that there are some items with "NA" in the cell. This means that the information was "Not Applicable" or not available.

	A	B	C	D	E	F	G	H	I	J
1	Instructions: This sheet will provide a comparison of one or two recipes to guidelines. Red values mean it does not fulfill requirements you set. Note: if NA is in the cell, it means that the information is Not Applicable or Not Available .									
2										
3	Nutrient/100 grams*	Recipe 1:	Adolescent (M:10-18Y)	R1 Meets %:	Pregnant (highest)	R1 Meets %:	F100	R1 Meets %:	Total Cost-R1	
4	Energy	181.31	2770	6.55	2455	7.39	414	43.80	18350	
5	Protein	3.30	52	6.34	71	4.64	2.5	131.84		
6	Lipid	0.64	92	0.70	82	0.78	5	12.83	Cost/100g	
7	Carbohydrate	40.34	130	31.03	175	23.05	0	NA	1.8350	
8	Fiber, total dietary	2.89	38	7.61	28	10.32	0	NA		
9	Calcium	2.41	1300	0.19	1200	0.20	58	4.16	Cost/kcal	
10	Iron	2.01	11	18.30	27	7.46	0.4	503.33	0.0101	
11	Magnesium	18.56	230	8.07	220	8.44	15	123.73		
12	Phosphorus	40.28	1055	3.82	580	6.94	58	69.45	Cost/g pro	
13	Potassium	64.70	4700	1.38	4700	1.38	212	30.52	0.5567	
14	Sodium	388.83	1500	25.92	1500	25.92	0	NA		
15	Zinc	0.32	8.6	3.72	10	3.20	2.1	15.25	Child % to fulfill	
16	Copper	0.07	890	0.01	1000	0.01	0.3	21.77	25	
17	Manganese	0.10	2.2	4.66	2	5.13	0	NA		
18	Selenium	2.84	32	8.87	30	9.46	4	70.98	Adult % to fulfill	
19	Vitamin C	0.00	40	0.00	55	0.00	0	NA	25	
20	Thiamin	0.05	1.2	4.42	1.4	3.79	0.1	53.00		
21	Riboflavin	0.02	1.3	1.80	1.4	1.67	0.3	7.80	Other % to fulfill	
22	Niacin	0.38	16	2.36	18	2.10	1	37.80	100	
23	Pantothenic acid	0.14	5	2.86	6	2.39	0.6	23.85		
24	Vitamin B-6	0.11	1.3	8.10	1.9	5.54	0.1	105.31		
25	Folate	20.20	400	5.05	600	3.37	39	51.79		
26	Vitamin B-12	0.00	25	0.00	30	0.00	0.3	0.00		
27	Vitamin A	74.90	600	12.48	800	9.36	154	48.64		
28	Vitamin E	0.12	10	1.18	7.5	1.57	3.9	3.01		
29	Vitamin D	0.00	200	0.00	200	0.00	2.9	0.00		
30	Iodine	0.00	150	0.00	220	0.00	14	0.00		
31										
32	*Not all nutrients are available for all products; this doesn't mean that it doesn't have the nutrient - it just means that there is no record of chemical analysis of the nutrient for the particular product. Some information may, therefore, be incomplete.									
33										
34										
35	To change any ingredients, costs, or requirements, enter new values on the "Step 1-Recipe Entry" worksheet (see worksheet tabs at the bottom of the sheets).									
36										
37	Nutrient/100 grams*	Recipe 2:	Adolescent (M:10-18Y)	R2 Meets %:	Pregnant (highest)	R2 Meets %:	F100	R2 Meets %:	Total Cost-R2	
38	Energy	184.36	2770	6.66	2455	7.51	414	44.53	17950	
39	Protein	4.49	52	8.64	71	6.33	2.5	179.66		
40	Lipid	1.45	92	1.58	82	1.77	5	29.04	Cost/100g	
41	Carbohydrate	38.40	130	29.54	175	21.94	0	NA	1.7950	
42	Fiber, total dietary	3.23	38	8.50	28	11.54	0	NA		
43	Calcium	9.61	1300	0.74	1200	0.80	58	16.57	Cost/kcal	
44	Iron	0.62	11	5.66	27	2.30	0.4	155.53	0.0097	
45	Magnesium	28.76	230	12.50	220	13.07	15	191.73		
46	Phosphorus	48.44	1055	4.59	580	8.35	58	83.52	Cost/g pro	
47	Potassium	138.54	4700	2.95	4700	2.95	212	65.35	0.3996	
48	Sodium	389.11	1500	25.94	1500	25.94	0	NA		
49	Zinc	0.40	8.6	4.61	10	3.96	2.1	18.87	Child % to fulfill	
50	Copper	0.12	890	0.01	1000	0.01	0.3	41.38	25	
51	Manganese	0.12	2.2	5.47	2	6.02	0	NA		
52	Selenium	3.03	32	9.47	30	10.10	4	75.78	Adult % to fulfill	
53	Vitamin C	0.00	40	0.00	55	0.00	0	NA	25	
54	Thiamin	0.07	1.2	5.46	1.4	4.68	0.1	65.48		
55	Riboflavin	0.06	1.3	4.39	1.4	4.07	0.3	19.01	Other % to fulfill	
56	Niacin	0.48	16	3.01	18	2.67	1	48.14	100	
57	Pantothenic acid	0.16	5	3.15	6	2.63	0.6	26.26		
58	Vitamin B-6	0.10	1.3	8.00	1.9	5.47	0.1	103.99		
59	Folate	25.88	400	6.47	600	4.31	39	66.36		
60	Vitamin B-12	0.00	25	0.00	30	0.00	0.3	0.00		
61	Vitamin A	79.30	600	13.22	800	9.91	154	51.49		
62	Vitamin E	0.14	10	1.38	7.5	1.83	3.9	3.53		
63	Vitamin D	0.00	200	0.00	200	0.00	2.9	0.00		
64	Iodine	0.00	150	0.00	220	0.00	14	0.00		
65										
66	*Not all nutrients are available for all products; this doesn't mean that it doesn't have the nutrient - it just means that there is no record of chemical analysis of the nutrient for the particular product. Some information may, therefore, be incomplete.									
67										
68										

Remember that not all nutrient composition is complete in the published resources.

In this example, we substituted 4 kg of soy flour for the same amount of millet flour.

Each recipe is compared to the requirements that we chose in the recipe entry page. On that page we also chose how much of the requirement 100 grams of the recipes should try to meet. Any nutrient that does not meet the requirements you set is highlighted in red. For this example, we wanted 100 grams to meet 25% of the requirements for both adolescent males and for pregnant women. The numbers so that recipe 1 and 2 both meet the requirements for carbohydrates for adolescent males, but it just below the requirement for pregnant women.

To the right of the nutrients are cost evaluations. Because the millet flour was more expensive, the price for the recipe was reduced. At the same time, the cost per 100 grams, cost per calorie, and cost per gram of protein was also reduced.

This set of results will highlight cost items in column J that are lower. With this example, you can see that the cost items for the second recipe are lower cost for the total recipe, per 100 grams, per calorie, and per gram of protein.

This worksheet will print with one recipe result per page.

The next three charts show more specific comparisons between the two recipes and the requirements you choose. There is a chart for a “Child Criteria Comparison”, the “Adult Criteria Comparison”, and the “Other Criteria Comparison” along with cost information at the top of each chart. Below is an example.

The cost comparison repeats cost information and shows the lower cost of the two recipes. Next to the column labeled “Lowest” there is a column that calculates how much lower the cost will be. In this example, recipe 2 is lower for each of the items listed. When you look at the % of savings, you see that the significant saving is in the cost per gram of protein at 28.22% lower cost than recipe 1.

The nutrient comparisons are below the cost chart. Recipe 1 and recipe 2 show information about how well the recipe meets the percentage of requirements per 100 grams of the product that you set (in this case it is 25% of the adolescent male nutrient requirements). To the right is an evaluation of which recipe contains the most of each nutrient and how much higher it is. For instance, recipe 2 is higher in calories, but not by much (1.68%). Recipe 1 is higher in iron by more than 200%. This information can help you to make a decision about the ingredients you choose to include.

	A	B	C	D	E	F	G
68							
69	Cost Comparison of Recipe 1 to Recipe 2				<u>Child Criteria Comparison</u>		
70		Recipe 1	Recipe 2	Lowest	Lower by (%)	% criteria for 100 g to fulfill	
71	Cost per recipe	18350	17950	Recipe 2	2.18%		25
72	Cost per 100 grams	1.8350	1.7950	Recipe 2	2.18%		
73	Cost per calorie	0.0101	0.0097	Recipe 2	3.80%		
74	Cost/gram of protein	0.5567	0.3996	Recipe 2	28.22%		
75	<u>Child Requirement Comparisons</u>		Meets % of Adolescent		Meets % of Adolescent		
76	Nutrient/100 grams*	Recipe 1	(M:10-18Y) Recipe 2		(M:10-18Y) Highest		Higher by (%)
77	Energy	181.31	6.55	184.36	6.66	Recipe 2	1.68%
78	Protein	3.30	6.34	4.49	8.64	Recipe 2	36.27%
79	Lipid	0.64	0.70	1.45	1.58	Recipe 2	126.33%
80	Carbohydrate	40.34	31.03	38.40	29.54	Recipe 1	5.05%
81	Fiber, total dietary	2.89	7.61	3.23	8.50	Recipe 2	11.76%
82	Calcium	2.41	0.19	9.61	0.74	Recipe 2	298.76%
83	Iron	2.01	18.30	0.62	5.66	Recipe 1	223.63%
84	Magnesium	18.56	8.07	28.76	12.50	Recipe 2	54.96%
85	Phosphorus	40.28	3.82	48.44	4.59	Recipe 2	20.26%
86	Potassium	64.70	1.38	138.54	2.95	Recipe 2	114.13%
87	Sodium	388.83	25.92	389.11	25.94	Recipe 2	0.07%
88	Zinc	0.32	3.72	0.40	4.61	Recipe 2	23.74%
89	Copper	0.07	0.01	0.12	0.01	Recipe 2	90.11%
90	Manganese	0.10	4.66	0.12	5.47	Recipe 2	17.35%
91	Selenium	2.84	8.87	3.03	9.47	Recipe 2	6.76%
92	Vitamin C	0.00	0.00	0.00	0.00	NA	NA
93	Thiamin	0.05	4.42	0.07	5.46	Recipe 2	23.55%
94	Riboflavin	0.02	1.80	0.06	4.39	Recipe 2	143.76%
95	Niacin	0.38	2.36	0.48	3.01	Recipe 2	27.37%
96	Pantothenic acid	0.14	2.86	0.16	3.15	Recipe 2	10.09%
97	Vitamin B-6	0.11	8.10	0.10	8.00	Recipe 1	1.27%
98	Folate	20.20	5.05	25.88	6.47	Recipe 2	28.12%
99	Vitamin B-12	0.00	0.00	0.00	0.00	NA	NA
100	Vitamin A	74.90	12.48	79.30	13.22	Recipe 2	5.87%
101	Vitamin E	0.12	1.18	0.14	1.38	Recipe 2	17.02%
102	Vitamin D	0.00	0.00	0.00	0.00	NA	NA
103	Iodine	0.00	0.00	0.00	0.00	NA	NA

Ingredients

The following ingredients are included in the original spreadsheet. To add or change ingredients, see the instructions below.

Cereals/Grains							
Bulgur (BW)	Cassava Flour	Cornmeal	Millet, Mixed Flour	Rice	Sorghum Flour	Tef, Mixed Flour	Wheat Flour
Soy Products							
Soy Flour, Defatted	Soy Protein Concentrate	Soy Protein Isolate	Textured Soy Protein				
Other Protein							
Beans, Black	Beans, Pinto	Chick Peas	Beans, Black	Beans, Pinto	Chick Peas	Beans, Black	Beans, Pinto
Other Ingredients							
Groundnut	Salt, Table	Sim Sim	Soybean Oil	Sugar, Granulated			
Unnamed Ingredients							
1Unnamed	2Unnamed	3Unnamed	4Unnamed				

Target Beneficiaries, Guidelines, and Criteria

The following target beneficiaries and guidelines are included in the original spreadsheet. To add or change beneficiary types, guidelines, and other criteria, see the instructions below.

Target Beneficiaries: Children					
Infants(7-12Mo)	Children(1-3Y)	Children(4-6Y)	Children(7-9Y)	Adolescent(F:10-18Y)	Adolescent(M:10-18Y)
Target Beneficiaries: Adults					
Adult(F:19-50Y)	Adult(M:19-65Y)	Pregnant(highest)	Lactating(highest)		
Guidelines or Other Criteria					
FBF micronutrient specifications (WFP)	1Other	2Other	3Other	4Other	

Tailoring the Recipe Development Spreadsheet to Processor Needs

Changing or Adding Ingredients:

Any of the ingredients can be changed. There are spaces for 4 additional ingredients. If a processor uses a pre-mix of vitamins and minerals, for instance, click on “1Unnamed” and change the name to the product (eg, V/M Premix). Then enter all of the nutrient information into the rows.

Remember: nutrient information should be per 100 grams in order for the calculations to work correctly.

The spreadsheet will automatically update the pull-down list in the “Step 1- Enter Recipe” worksheet and will automatically include the product information in calculations.

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	
1																															
2	Unit	Bulgar (BW)	Cassava Flour	Cornmeal	Millet, Mixed Flour	Rice	Sorghum	Tef, Mixed Flour	Wheat Flour	Soy Flour, Defatted	Soy Protein Concentrate	Soy Protein Isolate	Textured Soy Protein	Beans, Black	Beans, Pinto	Chick Peas	Peas, Dry/Split	Green Grams, Dry	Lentils	Non Fat Dry Milk (NFD)	Pigeon Peas	Groundnut	Salt, Table	Sim Sim	Soybean Oil	Sugar, Granulated	1Unnamed	2Unnamed	3Unnamed	4Unnamed	
3	(per 100 g)																														
4	g	9	12	11.6	7.6	11.6	9.2	10.7	11.9	7.25	5.8	4.98		11.02	11	9.9	11.3	11.05	11.2	3.16	12.13	6.07	0.2	5.66	0	0.03					
5	Kcal	342	349	366	362.8	365	339	358.9	364	330	331	338	286.1	341	318	347	341	231	338	362	399	554	0	544	684	387					
6	g	12.3	3	8.48	8.2	7.1	11.3	8.4	10.3	47	58.13	80.83	85	21.6	20.7	15.9	24.95	22.43	28.06	36.16	22.94	9.77	0	19.84	0	0					
7	g	1.3	0.6	1.65	1.6	0.66	3.3	2.5	0.98	1.22	0.46	3.39	0.5	1.42	1.35	4.2	1.16	2.08	0.96	0.77	1.86	43.33	0	42.22	100	0					
8	g	75.9	83.1	77.68	78.9	79.95	74.63	75.7	76.31	38.37	30.91	7.36	23.4	62.37	27.76	60.47	60.37	60.38	57.9	51.98	60.52	37.3	0	27.12	0	99.96					
9	g	18.3	3.9	7.4	7.5	1.3	0	3.2	2.7	17.5	5.5	5.6	22	15.2	15.5	5.77	25.5	0	30.5	0	8.91	0	0	3.8	0	0					
10	g	1.5	0	0.6	3.7	0.6	1.57	2.7	0.5	6.15	4.7	3.98	0	3.6	3.65	3.13	2.65	5.2	2.7	7.93	3.81	3.54	99.8	5.12	0	0					
11	mg	110	35	5	457	28	28	126	110	241	363	178	350	123	107	234.67	55	264.82	51	1257	215.46	83.85	24	1429.47	0	1					
12	mg	2.9	0.6	1.1	40.6	0.8	4.4	35.3	4.4	9.24	10.78	14.5	12	5.02	5.15	10.79	4.4	11.15	9.02	0.32	18.99	5.52	0.33	9.7	0.02	0.01					
13	mg	164	46	40	0	25	0	0	22	290	315	39	140	171	176	0	115	287.46	107	110	127.95	383.33	0	459.5	0.03	0					
14	mg	300	92	84	272	115	287	392	108	674	839	776	650	352	401	284.33	366	279.69	454	368	272.14	231.67	0	817.5	0	0					
15	mg	410	591	162	0	115	350	0	107	2384	2202	81	450	1483	1413	1025	891	712.39	905	1794	1196.07	675	0	299	0	0					
16	mg	17	31	3	0	5	6	0	2	20	3	1005	970	5	17	25	15	25.86	10	535	20.54	1.25	38758	4.21	0	0					
17	mg	19	0.74	0.72	0	1.1	0	0	0.7	2.46	4.4	4.03	3	3.6	2.56	0	3	0	3.61	4.08	0	0	0.1	0	0	0					
18	mg	0.3	0.22	0.1	0	0.2	0	0	0.1	4.065	0.277	1.59	1.5	0.841	0.78	0	0.9	0	0.85	0.04	0	0	0.03	0	0	0					
19	mg	3	0.84	0.078	0	1.1	0	0	0.7	3.018	4.19	1.493	0	1.06	1.67	0	1.391	0	1.4	0.02	0	0	1	0	0	0					
20	mcg	2	1.5	7.8	0	15.1	0	0	34	1.7	0.8	0.8	0	3.2	27.9	0	1.6	0	8.2	27.3	0	0	0.1	0	0	0					
21	mg	0	45	0	0	0	0	0	0	0	0	0	0	0	6.3	8	1.8	0	6.2	6.8	0	1	0	0	0	0					
22	mg	0.44	0.19	0.14	0.1	0.07	0.237	0.35	0.64	0.698	0.316	0.176	0.4	0.8	0.512	0.48	0.7	0.52	4.75	0.42	0.72	0.85	0	1.01	0	0					
23	mg	0.26	0.1	0.05	0.1	0.05	0.142	0.26	0.4	0.253	0.142	0.1	0.1	0.193	0.339	0.16	0.2	0.2	0.245	1.95	0.14	0.14	0	0.34	0	0.019					
24	mg	3.53	1.9	1	0.7	1.6	2.927	1.8	5.29	2.612	0.716	1.438	0.9	1.955	1.447	1.8	2.9	2.4	2.62	0.95	2.9	17.7	0	4.4	0	0					
25	mg	1	0.2	0.312	0	1	0	0	0.4	1.99	0.057	0.06	0.1	0.899	0.485	0	1.8	0	1.849	3.57	0	0	0	0	0	0					
26	mg	0.3	0.19	0.257	0	0.2	0	0	0	0.574	0.134	0.1	0.1	0.286	0.553	0	0.2	0	0.535	0.36	0	0	0	0	0	0					
27	mcg	150	59	48	0	17	0	0	150	305	340	176	0.3	444.3	506.1	180	273.8	120	433	50	100	110	0	0	0	0					
28	mcg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.03	0	0	0	0	0	0					
29	IU	2205	2	214	0	0	0	0	2205	40	0	0	0	17	0	0	0	149	0	39	3000	0	0	0	0	6000	0				
30	mg-ATE	0.2	0	0.33	0	0.1	0	0	0.1	0.195	0	0	0	0	0.21	0	0.3	0	0.33	0.02	0	0	0	0	18.19	0					
31	IU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	600	0	0	0	0	0	0				
32	mcg	0	0	0	0	0	0	0	0	0	0	0	517	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

Resources for online nutrient evaluations of ingredients:

USDA nutrient database: <http://www.nal.usda.gov/fnic/foodcomp/search/>

Canadian nutrient database: <http://webprod.hc-sc.gc.ca/cnf-fce/start-debuter.do?lang=eng>

Changing or Adding Target Populations, Guidelines, or other Criteria:

Just as with the ingredient list, any of the beneficiary or guidelines can be changed and there are spaces for 4 additional guidelines. If a processor wants to match specific requirements given to them for nutrition, for instance, click on “1Unnamed” and change the name to the guideline (eg, RUTF). Then enter all of the nutrient guideline/requirement information into the rows.

The spreadsheet will automatically update the pull-down list in the “Step 1- Enter Recipe” worksheet and will automatically include the product information in calculations.

12																			
13	Type:	Infants(7-12Mo)	Children(1-3Y)	Children(4-6Y)	Children(7-9Y)	Adolescent(F:10-18Y)	Adolescent(M:10-18Y)	Adult(F:19-50Y)	Adult(M:19-65Y)	Pregnant(t	Lactating(t	FBF micro	1Other	2Other	3Other	4Other			
14	Nutrient											per 100 g							
15	Energy	775	1250	1710	1830	2250	2770	2170	2430	2455	2955	0							
16	Protein	11	23	26	19	46	52	46	56	71	71	0							
17	Lipid	30	42	57	61	75	92	72	81	82	65	0							
18	Carbohydrate	95	130	130	130	130	130	130	130	175	210	0							
19	Fiber, total dietary	ND	19	25	25	26	38	25	38	28	29	0							
20	Calcium	400	500	600	700	1300	1300	1000	1000	1200	1000	600							
21	Iron	11	7	10	10	15	11	18	8	27	10	8							
22	Magnesium	54	60	76	100	220	230	220	260	220	270	0							
23	Phosphorus	NA	380	405	1055	1055	1055	580	580	580	580	0							
24	Potassium	700	3000	3800	4500	4500	4700	4700	4700	4700	5100	400							
25	Sodium	370	1000	1200	1500	1500	1500	1500	1500	1500	1500	0							
26	Zinc	4.1	4.1	4.8	5.6	7.2	8.6	4.9	7	10	9.5	5							
27	Copper	220	340	440	440	890	890	900	900	1000	1300	0							
28	Manganese	0.6	1.2	1.5	1.9	1.6	2.2	1.8	2.3	2	2.6	0							
29	Selenium	10	17	22	21	26	32	26	34	30	42	0							
30	Vitamin C	30	30	30	35	40	40	45	45	55	70	100							
31	Thiamin	0.3	0.5	0.6	0.9	1.1	1.2	1.1	1.2	1.4	1.5	0.128							
32	Riboflavin	0.4	0.5	0.6	0.9	1	1.3	1.1	1.3	1.4	1.6	0.448							
33	Niacin	4	6	8	12	16	16	14	16	18	17	4.8							
34	Pantothenic acid	1.8	2	3	4	5	5	5	5	6	7	6.7							
35	Vitamin B-6	0.3	0.5	0.6	1	1.2	1.3	1.3	1.3	1.9	2	1.7							
36	Folate	80	150	200	300	400	400	400	400	600	500	60							
37	Vitamin B-12	6	8	12	20	25	25	30	30	30	35	2							
38	Vitamin A	400	400	450	500	600	600	500	600	800	850	261.2							
39	Vitamin E	2.7	5	5	7	7.5	10	7.5	10	7.5	7.5	8.3							
40	Vitamin D	200	200	200	200	200	200	200	200	200	200	200							
41	Iodine	130	90	90	90	150	150	150	150	220	290	0							
42																			