

I here present a few of the numerous solutions of this problem.

Food materials	Quantity lbs	Proteids oz.	Fats oz.	Carbohy- drates oz.	Cost
Oatmeal	2	4.438	1.978	21.460	14
Graham bread	4	5.184	0.460	34.132	24
Milk-whole	5	2.730	3.030	3.920	20
Sugar	1	0	0	15.531	9
Beef (brisket)	3	9.168	5.988	0	48
Potatoes	2	0.636	0.048	6.676	11
Corn starch	1	0.192	0.002	13.618	13
Total	18	22.348	11.506	95.337	1.39

This ration show the following departures from the calculated amounts.

Proteids 2.748 oz. excess.
 Fat 2.306 " "
 Carbohydrates 0.663 " deficiency.

The energy value is :

Proteids $22.348 \times 116 = 2592.368$ calories.
 Fats $11.506 \times 264 = 3037.584$ "
 Carbohydrates $95.337 \times 116 = 11059.092$ "

Total 16689.044 "
 Calculated 15838.000 "

Excess 851.044 "

On the whole this is a sufficiently close approximation to theoretical requirements, and since a little waste is almost unavoidable in cooking and serving, it may be regarded as satisfactory.

The cost is \$1.39 for 5 people per day.

Here is another attempt at solution:

Food materials	Quantity lbs.	Proteids oz.	Fats oz.	Carbohy- drates oz.	Cost.
Ham	1	2.960	2.832	0	34
Eggs	1	2.068	1.938	0	26
Bread (fine)	4	4.360	0.344	36.992	28
Butter	1/2 lb	0.061	6.696	0.040	21
Milk	3	1.638	1.818	2.352	12
Codfish	3	8.025	0.144	0	45
Sugar	1 1/2	0	0	23.297	13 1/2
Corn starch	1	0.192	0.002	13.618	13
	15 1/2	19.304	13.774	96.298	\$1.02 1/2

This ration shows the following departures from calculated amounts.

Proteids 0.296 deficiency.
 Fats 4.574 excess
 Carbohydrates 0.298 excess

Energy value.....17046
 Calculated.....15838

Excess..... 1208 calories