

STIGLER'S DIET PROBLEM

For a moderately active man weighing 154 pounds, in what quantities should each of 77 foods be consumed on a daily basis in order to fulfill the recommended intake of 9 different nutrients while keeping expense at a minimum.

LIST OF 77 FOODS THAT STIGLER CONSIDERED¹

	Commodity	Unit	Calories (1,000 calories)
1.	Wheat Flour (Enriched)	10 lb.	44.7
2.	Macaroni	1 lb.	11.6
3.	Wheat Cereal (Enriched)	28 oz.	11.8
4.	Corn Flakes	8 oz.	11.4
5.	Corn Meal	1 lb.	36.0
6.	Hominy Grits	24 oz.	28.6
7.	Rice	1 lb.	21.2
8.	Rolled Oats	1 lb.	25.3
9.	White Bread (Enriched)	1 lb.	15.0
10.	Whole Wheat Bread	1 lb.	12.2
11.	Rye Bread	1 lb.	12.4
12.	Pound Cake	1 lb.	8.0
13.	Soda Crackers	1 lb.	12.5
14.	Milk	1 qt.	6.1
15.	Evaporated Milk (can)	14.5 oz.	8.4
16.	Butter	1 lb.	10.8
17.	Oleomargarine	1 lb.	20.6
18.	Eggs	1 doz.	2.9
19.	Cheese (Cheddar)	1 lb.	7.4
20.	Cream	1/2 pt.	3.5
21.	Peanut Butter	1 lb.	15.7
22.	Mayonnaise	1/2 pt.	8.6
23.	Crisco	1 lb.	20.1
24.	Lard	1 lb.	41.7
25.	Sirloin Steak	1 lb.	2.9
26.	Round Steak	1 lb.	2.2
27.	Rib Roast	1 lb.	3.4
28.	Chuck Roast	1 lb.	3.6
29.	Plate	1 lb.	8.5
30.	Liver (Beef)	1 lb.	2.2
31.	Leg of Lamb	1 lb.	3.1
32.	Lamb Chops (Rib)	1 lb.	3.3
33.	Pork Chops	1 lb.	3.5
34.	Pork Loin Roast	1 lb.	4.4
35.	Bacon	1 lb.	10.4
36.	Ham - smoked	1 lb.	6.7
37.	Salt Pork	1 lb.	18.8
38.	Roasting Chicken	1 lb.	1.8
39.	Veal Cutlets	1 lb.	1.7
40.	Salmon, Pink (can)	16 oz.	5.8
41.	Apples	1 lb.	5.8

¹ George J. Stigler, "The Cost of Subsistence," *Journal of Farm Economics*, 27, 1945, pp. 303-14

42.	Bananas	1 lb.	4.9
43.	Lemons	1 doz.	1.0
44.	Oranges	1 doz.	2.2
45.	Green Beans	1 lb.	2.4
46.	Cabbage	1 lb.	2.6
47.	Carrots	1 bunch	2.7
48.	Celery	1 stalk	0.9
49.	Lettuce	1 head	0.4
50.	Onions	1 lb.	5.8
51.	Potatoes	15 lb.	14.3
52.	Spinach	1 lb.	1.1
53.	Sweet Potatoes	1 lb.	9.6
54.	Peaches (can)	No. 2 ½	3.7
55.	Pears (can)	No. 2 ½	3.0
56.	Pineapple (can)	No. 2 ½	2.4
57.	Asparagus (can)	No. 2	0.4
58.	Green Beans (can)	No. 2	1.0
59.	Pork and Beans (can)	16 oz.	7.5
60.	Corn (can)	No. 2	5.2
61.	Peas (can)	No. 2	2.3
62.	Tomatoes (can)	No. 2	1.3
63.	Tomato Soup (can)	10 1/2 oz.	1.6
64.	Peaches, Dried	1 lb.	8.5
65.	Prunes, Dried	1 lb.	12.8
66.	Raisins, Dried	15 oz.	13.5
67.	Peas, Dried	1 lb.	20.0
68.	Lima Beans, Dried	1 lb.	17.4
69.	Navy Beans, Dried	1 lb.	26.9
70.	Coffee	1 lb.	-
71.	Tea	1/4 lb.	-
72.	Cocoa	8 oz.	8.7
73.	Chocolate	8 oz.	8.0
74.	Sugar	10 lb.	34.9
75.	Corn Syrup	24 oz.	14.7
76.	Molasses	18 oz.	9.0
77.	Strawberry Preserve	1 lb.	6.4

STIGLER'S REDUCED LIST OF 15 FOODS

1. Wheat Flour
2. Evaporated Milk
3. Oleomargarine
4. Cheese (cheddar)
5. Liver (beef)
6. Green beans
7. Cabbage
8. Onions
9. Potatoes
10. Spinach
11. Sweet potatoes
12. Peaches (dried)
13. Prunes (dried)
14. Lima beans (dried)
15. Navy beans (dried)

STIGLER'S SOLUTION

Food	Annual Quantities	Annual Cost
Wheat Flour	370 lb.	\$13.33
Evaporated Milk	57 cans	\$3.84
Cabbage	111 lb.	\$4.11
Spinach	23 lb.	\$1.85
Dried Navy Beans	285 lb.	\$16.80
Total Annual Cost	---	\$39.93