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**THE LEVEL AND DETERMINANTS
OF NUTRITION**

by

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In an earlier report,¹ we observed the behavior of consumption of food as size and income of the family increase. The size and income elasticities were computed using data for the nation as a whole and for white and blue collar workers in rural and urban areas. In this paper we want to say something about the standard of food consumption as measured by the nutritional level reached by families at each income class and try to explain differences in nutritional sufficiency among families.

From Table 1 we find the per family consumption by income class in 1961, 1965 and 1971. For 1961, the range of food consumption per day was P1.32 to P9.74 for the corresponding income range of less than P500 to P10,000 or more. For 1965, food consumption per day ranged from P2.13 to P13.04, and for 1971, from P3.10 to P17.81. Do these levels of food consumption meet the recommended nutritional requirement?

The Food and Nutrition Research Council undertook regional surveys of food consumption. From these surveys the region's level of nutritional intake of each of ten nutrients (carbohydrates, protein, fats, riboflavin, calcium, iron, thiamine, niacin, Vitamin A and ascorbic acid, and of calories) was estimated. The actual intake of each is then compared to the recommended requirement for each of these families in the sample. This is based on the recommended require-

^{1/} Edita Tan and Gwendolyn Tecson, Consumption Patterns in the Philippines, Report submitted to the ILO, Dec. 31, 1973.

ment for Filipinos of various categories - for the adult male and adult female, classified into sedentary, moderately active, and very active and for children of ages 0-3, 4-7, 8-12, 13-18, by sex. The nutrient ratings were computed for each family in consideration of their age - sex composition. Rating is defined as the ratio of actual to recommended intake.

Filipino diet is deficient as a whole and especially in some nutrients. There are wide variations in degree of adequacy among nutrients. The degree of deficiency in calories and protein is not as high as in fats, calcium and riboflavin. In general intake of these three nutrients is very inadequate. Regional differences are also great as shown in Table .3. Region V achieves on the average 75.4 per cent while Region IV achieves only 57.9. The adequacy in each nutrient also varies by region as shown by what Region I achieved in each nutrient group. Western Visayan families for instance take in more protein, calcium, thiamine and niacin; and less of everything else than Central Luzon families. (This fact might be explained by regional difference in taste, relative prices of alternative food items, income and knowledge of nutrition.) In the following sections we tried to see how the latter two variables determine nutritional level. These variables are subject to policy consideration.

✓ I. Determinant of Nutrient Rating

We know that the preference ordering for alternative food item of an individual is influenced by many factors, among them local tra-

ditions, demonstration effect from surrounding and other areas, and nutrition education. We also know that local traditions on food are partly determined by the available variety and the state of food technology. The classic example of the effect of the latter is the Moslem and Jewish regard for pork and shellfish. In this study, we want to isolate the effects of nutrition education on taste.

Nutrition education involves the dissemination of basic knowledge of nutrition, namely the identification of major nutrients required by the body, the function of each of these nutrients and the corresponding quantities required by particular types of individuals. Such knowledge can be expected to alter the individual's preference ordering. Whereas before, preferences for alternative goods involved no scientific normative standards, food items are now valued for their contribution to health. While personal taste might at first clash with the scientific value of some food, (say camote tops, a good source of many vitamins), this dislike is not likely to remain unchanged over time with nutrition education. There will also be some dynamic impact on the production of recommended new sources of nutrients. With nutrition education, we can therefore expect a change in the eating habits of the population and therefore in the composition and level of food output and their prices.

✓ Nutritionists have identified nutrients and their functions and have arrived at a list of recommended requirements for each of these nutrients for each particular type of individual. For the

Philippines, the Food and Nutrition Research Center gave the following table of recommended requirement.

For a housewife to follow this recommendation, she must also consult the nutritionists' food table which describes the nutrient content of food commonly available in the community. To simplify the difficult calculation that would be needed in order to meet the recommended diet for a family consisting of individuals of different types, nutritionists came up with alternative food baskets that would meet the typical individual's requirement. An example of this is "Your Guide to Eating":

"This Guide to Good Eating will tell you what foods are needed by your family and the kinds and amount they should eat everyday. Our foods have been classified under six basic groups. If you include one or more foods from each group in the proper amounts everyday you can be sure you are on the way to good eating . . .

Leafy and Yellow Vegetables

One or more servings daily

(1 serving = $\frac{1}{2}$ cup, cooked, 1 cup raw)
malunggay leaves pechay
ampalaya leaves mustard
kamote tops lettuce

Vitamin C-Rich Foods

One or more servings daily

(1 medium-size fruit or 1 slice of a big fruit per serving)
cashew pomelo
guava papaya
guyabano durian

Other fruits and Vegetables

Two or more serving daily

(1 serving = $\frac{1}{2}$ cup cooked, or 1 cup raw)
okra mabulo
papaya pineapple
kadyos chico

Fat-rich Foods

(3 tablespoons daily)

butter	coconut milk
enriched margarine	coconut oil
lard	coconut

Protein-rich Foods

Whole Milk (all kinds)

for children, pregnant and nursing mothers _ _ _ _ _ 1 cup daily

Meat, fish or poultry

(1 serving = as big as a matchbox)

E g g s _ _ _ _ _ 2-3 a week

Dried beans or nuts _ _ _ _ _ 1 serving daily
(1 cup, cooked)

beef

sausage

pork (lean)

ham

Rice and other Energy Foods

Rice - 3 to 3 $\frac{1}{2}$ servings (1 serving = $\frac{1}{2}$ cup raw or 1 to 1 $\frac{1}{2}$ cup
packed, cooked)

root crops - 1 serving daily (1 small size or $\frac{1}{2}$ cup, sliced)

s u g a r - 1 serving daily (1 serving = 2 tablespoons)

enriched rice

gabi

corn

pinipig

sweet potato

bread

These requirements are recommended with less than 100 per cent confidence. Though it is true that some medical symptoms are associated with deficiency in each of these nutrients, the exact amount normally required by individuals is still unknown. The requirement also differs by individuals, not just by reason of weight, sex, age or activity.

In this paper, we ask the reader to keep this qualification in mind, and to interpret the results as based on a set of recommended nutritional allowance for the average Filipino of given age and sex.

It is to be noted that each of the recommended nutrient requirement must be met. Yet it is likely that the nutrients that

were identified earlier and those that are regarded to have major functions as tissue builder and energy source will be more known than others. Inadequacy in these nutrients will be more keenly and immediately perceived than inadequacy in other nutrients. For instance, physical weakness is immediately felt when calorie intake is below the required level whereas the effect of inadequate protein and calcium intake is observed only after some time. In the case of other nutrients the effect of inadequate intake is not even obvious to lay men. This fact would then result in varied compliance with the various nutrient requirements, even in the presence of widespread nutrition education.

✓ Income also determines the level of nutrition reached by families. Higher income families consume more food quantitatively and qualitatively. They are therefore likely to meet the recommended requirements of some nutrients more adequately than poor families. This would be true for calorie and protein requirements. It is also possible that since they consume a more varied diet, this greater variety may contain a greater variety of nutrients. It may be true on the other hand that what is popularly considered better quality food may have poor nutritional value. In this case income would have a negative effect on the level of nutrition. In general, however, income-nutrient relationship will be positive for nutrients that come from superior items and negative for nutrients that come from inferior items.

Families must meet two constraints now - income and the set of recommended nutrient requirements. The housewife's calculation becomes more complicated for she has to consider the preference ordering of her family among substitutes for a particular nutrient, and its own preference ordering for particular foods irrespective of nutrient contents. A stereotype Western meal practice is bribing a child to eat his vegetables by promising him his favorite dessert. The housewife may serve a balanced diet which includes a favorite dish, or this dish may be served on top of the balanced diet meal.

From the discussion we see that two factors may prevent the achievement of the recommended nutritional requirement : - low income and lack of knowledge of basic nutrition. Either or both can explain poor nutrition of families.

There has been some effort put into nutrition education through both formal and non-formal education media. The extent and effectiveness of the country's nutrition education may be judged from the level of nutrition attained by families who could otherwise afford to meet the nutrient requirement. With a low per capita income and very unequal income distribution it cannot be assumed that all families can afford a nutrition diet. In this regard we have to find out what would be the minimum cost of meeting the nutrient requirement of the typical family and see what proportion of families can meet the requirement. This was done by applying a linear cost-minimization program to selected localities.

1. Minimum Cost Diet for Manila, Legaspi, Roxas City and Ilocos Sur

The Food and Nutrition Survey also collected the prices of food items in the locality surveyed. There is a detailed food table for the Philippines which includes processed and fresh food items. From the raw data we tabulated the food items consumed by families in the locality studied and their corresponding prices. We assumed these items to be the available alternative in the locality. From the food table, we obtained for each of these food items, their corresponding nutrient contents. Nine nutrients were used: carbohydrates, protein, fats, calcium, iron, thiamine, riboflavin, Vitamin C; and total calories. We performed this exercise for a family of six members consisting of a moderately active couple and children, one belonging to each of the ages 0-3, 4-7, 8-12, 13-18. We estimated the recommended daily requirement of each nutrient for this model family. Given the prices of the food items available in the market and their corresponding nutrient contents (obtained from the food table), we solved for the minimum cost food combination that would meet all the nutrient requirement for this type of family. To reduce programming cost the items that were obviously expensive sources of nutrients were eliminated. Cucumber, some popular varieties of squash and cheese, for instance, were eliminated. Peripheral items such as sugar, coffee, and spices which cannot form the bulk of the diet if they happen to be rich in either principal nutrients such as calories, protein or fats were not included either. This is to avoid

getting absurd results. When we included sugar for instance, the solution showed sugar as the main source of calories, an impractical solution, obviously.

This exercise was repeated for Manila for two sets of data: 1958 and 1973 prices; Ilocos Sur 1960 prices; Roxas City 1964 prices; and Legaspi City 1962 prices. The resulting minimum cost combination of food items and the minimum cost budget for these localities are given in Table 5. The list of food items used in the program consisted of about 25 items.

The results are not encouraging in the sense that the minimum cost budget for a family of six in the province until 1969 was about P2.00 per day. In 1969, when the minimum non-farm wage was P6.00 per day, the minimum cost basket would absorb about 1/3 of the wage. In 1958 in Manila, the minimum wage was P4.00 per day. Food consumption needed to meet the recommended diet could be met by just a little above 1/3 of the minimum wage. In 1973 however, after the long stretch of great inflation since 1969, the required budget went up to P6.86. This would absorb almost 7/8 of the prevailing minimum wage of P8.00 per day. These results show the worsening of the real income as a consequence of the recent inflation.

In Table 1 we could see the proportion of families which could meet the recommended requirement as determined by their food expenditure. Assuming families have the same family composition as our case and that on the average P2.00 would buy the minimum diet

in 1960, and ₱4.00 in 1970, the proportion of families that could meet the recommended diet was .90 for 1960 and 1.0 for 1970. In contrast we find in Table 2 and 3 that a substantial proportion of families do not achieve adequate diet in spite of their capacity to meet the nutritional requirement. In Charts 1 - 4, we plotted the nutrient intake against income for families of size six. The level of adequacy is shown not to be too strongly related to the budget for food.

How attractive is the solution basket likely to be for Philippine families? For Manila, for instance, it may not be very attractive. The typical basket of Manila families which belong to the lower income groups is much more varied than the solution basket. Instead of eating one kind of vegetables, Manilans usually combine a variety of them. The "singang" or "bulanglang" is a very popular recipe, a mixed vegetable stew which may contain either fish, pork, or beef, or simply a dash of fish paste as the budget permits. So we find in the baskets bought by many families a little of a number of things, but never as few items as the five items we have in our solution.

✓ In the provinces, farmers and fishermen spend on fewer items. This might be explained by the non-availability of many alternatives. But in general, families prefer mixed vegetable dishes.

Nutritionists must find a way then to substitute our solution food items as the basic items in the recipes so that instead of having a "bulanglang" or eggplant as base they can suggest kangkong, malunggay,

or camote tops; or instead of buying a smudging of pork, families can buy instead a larger quantity of anchovies or mackerel or tuna.

The approach suggested here for nutrition education is to begin with instruction on the required diet, and to find low-cost combinations that would meet this required diet. The recipes should follow the recommended combinations, not the other way around as is being done now.

The program may also be applied to increasingly more varied diet such that we specify some minimum amounts of popular items as constraints. The resulting cost minus the minimum cost combination using unconstrained selection of items could be considered the marginal cost of the more varied diet.

2. Determinants of Nutritional Levels

✓ The nutritional level achieved by a family depends on the basket of food it decided to buy. This in turn depends on the family's taste, the relative prices of available alternatives and income. As we discussed earlier, knowledge of nutrition is likely to influence the family's taste for food and push the family to attain higher rates of nutritional requirements. ~~Since~~ Since we have no information on knowledge of nutrition, we will use as a proxy variable the number of years of schooling of the household head, assuming that nutrition education is included in the content of formal education, and that learning about nutrition through non-formal education media increases with

the level of schooling.

The linear program results show that families of six members whose food expenditures fell below P2.00 per day between 1964 and 1969 simply cannot meet the nutritional requirements. But majority of families do fall above this expenditure so that families can be expected to meet the nutritional requirements if they so decide. Hence we can hypothesize the following function:

$$NR_i = f(C, E)$$

where NR_i = the nutrient rating defined as intake as a ratio of the recommended nutrient i for the particular family

C = per capita food consumption (the variable used instead of family income, the latter not being available)

E = the level of schooling of the head of the family given in number of years of schooling

$i = 1, 2, \dots, 10$ nutrient types

This equation was tested for the nine nutrients and total calories using linear regression. About 500 individual observations were used in regressing

$$R_i = a + b_1 E + b_2 C + u$$

where E is education of head of the family, C is its per capita food expenditure.

✓ Education is not found to be a significant determinant of nutritional level except for fats. The coefficients are not signi-

ficant and have the wrong sign. (Table 6)

Per capita consumption consistently explains the nutrient rating achieved by families. The positive sign for each of the 10 nutrients tested is as expected; and the t values are all very high indicating a significance level of one per cent for the regression coefficients. However the explanatory power of per capita consumption is not very high and varies among nutrients, ranging from as low as $R^2 = 0.02$ for thiamine to $R^2 = 0.41$ for protein. The income elasticities are all less than one. These results - low R^2 and low income elasticities - indicate that we cannot rely too much on changes of income to improve the level of nutrition in the Philippines. In fact there is probably a lot that nutrition education can achieve towards better nutrition. As it is, schooling does not contribute to changing taste towards one that is more consistent with nutritional requirement because of the very limited nutrition education program in education. The results of the linear program exercises undertaken in this study indicate the possibility of achieving a nutritional diet by almost all Philippine families. Table 1 shows that even families in the lowest income bracket (less than P500 per year) spent more than P2.00 per day, for food. The minimum cost solution for many provinces was about P2.00. Many rich food items such as malunggay, camote tops and kangkong are rich in all nutrients except fats and protein and which are relatively cheap in the market. But these are considered inferior items in the Philippines.

An alternative test of the hypothesis is to regress nutrient intake with the recommended allowance and income variable. The more nutrition education communities have, the closer will be the fit between actual intake and recommended intake. The results are given in Table 7.

We divided the sample into two education groups - those with 1 - 6 and those with 7 - 10 years of schooling. We would expect a stronger correlation between recommended and actual intake for families with longer years of schooling. For the more poorly educated group, the explanatory power of recommended intake is very low except for calories and niacin. We may interpret these results for calories and niacin as spurious. As argued earlier the deficiency or excess in calorie intake is manifested clearly without knowledge of nutrition. Hence we can expect a significant fit between recommended and actual intake. The stronger correlation between these two variables for those with more schooling may be due to their higher income.

For both education groups there is significant correlation between the recommended and actual intake for two unknown nutrients - thiamine and niacin. This significant correlation could be due to traditional eating habit which happens to include food rich in thiamine and niacin. The over all results seem to show a spurious relationship between recommended and actual intake. We may conclude from these results either a lack of or ineffectiveness of nutrition education.

The regression is performed with income controlled using individual observations from the surveyed Visayan region. We obtain the results in Table 6. In the Table, the recommended intake is written on top of the observed marginal intake. The observed intake is, as explained above, the regression coefficient for each age - sex group when the linear regression specification is used. By controlling the budget we are able to isolate the effect of size of a particular age - sex composition on intake.

The signs of the regression coefficients are practically all negative, the opposite of what could be expected. These results complement the regression results relating actual to recommended intake for the families in the sample.

It would seem that any addition to the family lowers the total family intake. This is true even for families with total daily food expenditure of P6.00 or more.

In this paper we investigated the nutritional content of food consumption in a number of regions surveyed by the National Food and Nutrition Research Council. As a whole the diet of majority of Filipino families is inadequate. The rate of inadequacy is particularly bad for some nutrients including calcium and fats. This finding is sad especially considering that the average expenditure of majority of families can buy a nutritious basket of food as shown by the results of our cost minimization programs applied to some localities.

3. Marginal Nutrient Intake

As we see in Table 4 the recommended requirements are set for various age groups, sex, and intensity of activity. These requirements may also be considered as the marginal required nutrients, so that if a family adds to its membership a child of age 0-3, the marginal increase in the set of recommended nutrient requirement will be 40 grams of protein, 1 gram of calcium, 1,200 grams of calories, etc..

In the nutrition survey, the age and sex composition of the family is given. If we regress the nutrient intake with the number of members in each age - sex group, we can see the actual marginal nutrient intake of families. The observed marginal intake for each age - sex group is then compared with the recommended intake for the same group. We have the following function:

$$G_i = f(S_1, S_2, S_3, S_4)$$

where G_i = the nutrient intake expressed in grams

$i = 1, 2, 3 \dots \dots \dots 10$ nutrients

S_1, S_2, S_3, S_4 = Number of ages 0-3, 4-7, 8-12, 13-18

We tried to explain the standard of nutrition by per capita consumption and education of the head of the family. This was done using individual observations for one region - Western Visayas. We wanted to see a strong explanatory power of education, but unfortunately, the coefficient of this variable is insignificant. This result seems to point to the need for an expanded and more effective nutrition education. This program may of course be complemented by the on-going green revolution.

The surveys included biological and clinical phases from which the effects of poor nutrition in particular nutrients can be studied. The work can therefore be extended to include incidence of particular diseases related to inadequacy of some substance and a cost benefit analysis of better diet. This part of the study invites students in health economics.

TABLE 1 - A

Average Family Expenditures by Expenditure Item, by Income Class
Philippines 1957 - 1971

Item	Year	under 500	500-999	1000-1499	1500-1999	2000-2499-	2500-2999	3000-3999
TOTAL	1957	415.11	755.95	1150.59	1555.70	1971.95	2410.37	3010.35
	1961	724.21	1036.51	1475.38	1822.19	2139.33	2439.46	3222.80
	1965	1153.73	1534.41	1941.31	2236.57	2706.89	2997.21	3739.15
	1971	1635.21	2006.17	2454.17	2948.73	3376.18	3789.23	4314.18
FOOD	1957	234.60 ^{2/} (56.51)	393.09 (51.99)	582.61 (50.63)	753.78 (48.45)	879.35 (44.59)	1020.87 (42.35)	1156.11 (38.40)
	1961	475.18 (65.61)	663.57 (64.02)	889.37 (60.36)	1034.55 (56.74)	1167.89 (54.19)	1278.30 (52.40)	1487.92 (46.16)
	1965	775.69 (67.23)	990.24 (64.53)	1210.90 (62.37)	1365.00 (61.03)	1638.24 (60.52)	1675.44 (55.90)	2020.15 (54.02)
	1971	1132.74 (69.27)	1326.49 (66.12)	1575.48 (64.19)	1832.50 (62.14)	2048.87 (60.68)	2250.10 (59.38)	2462.03 (57.06)
	1957 ^{1/}							
CEREALS								
PROTEIN	1961	217.00 (29.96)	298.00 (28.75)	375.48 (25.50)	395.24 (21.69)	420.61 (19.69)	456.19 (18.69)	473.43 (16.09)
	1965	397.64 (34.46)	479.79 (31.26)	536.67 (27.64)	578.62 (25.87)	680.79 (25.15)	674.37 (22.49)	738.35 (19.74)
	1971	585.60 (35.81)	662.83 (33.03)	722.68 (29.41)	746.81 (33.39)	843.03 (24.96)	881.37 (23.25)	915.04 (21.21)
	1957 ^{1/}							

1/ no data available

2/ The numbers between parentheses are percentage share of each expenditure item to average family expenditures.

Average Family Expenditures by Expenditure Item, by Income Class
Philippines 1957 - 1971

Item	Year	10000 over				15000-19999	20000 +
		4000-4999	5000-5999	6000-7999	8000-9999		
TOTAL	1957	3554.55	8236.786				
	1961	3885.10	4599.22	6061.50	7038.97	10966.46	
	1965	4386.58	5502.32	6105.12	7659.32	14744.57	
	1971	5166.59	6093.21	7348.12	9006.73	11563.83	18464.54
FOOD	1957	1417.98	2138.42				
		(39.89)	(25.96)				
	1961	1839.73	2218.81	2663.50	2729.30	3556.73	
		(47.35)	(48.24)	(43.94)	(38.77)	(32.43)	
CEREALS	1965	2230.54	2654.77	2845.40	3178.62	4757.74	
		(50.84)	(48.24)	(46.60)	(41.50)	(32.26)	
	1971	2838.64	3165.21	3647.21	4102.19	5014.70	6300.28
	1957 ^{1/}						
PROTEIN	1961	558.91	620.32	663.32	656.93	835.00	
		(14.39)	(13.00)	(10.89)	(9.39)	(7.60)	
	1965	801.94	848.20	877.38	880.82	1075.28	
		(18.28)	(15.41)	(14.37)	(11.49)	(7.29)	
PROTEIN	1971	992.59	1052.89	1107.78	1147.05	1262.76	1448.65
		(19.21)	(17.27)	(15.07)	(12.73)	(9.81)	(7.84)
	1957 ^{1/}						

Average Family Expenditures by Expenditure Item, by Income Class
Philippines 1957 - 1971

Item	Year	under 500	500-999	1000-1499	1500-1999	2000-2499	2500-2999	3000-3999
PROTEIN	1961	125.00 (17.26)	192.00 (18.52)	256.32 (17.40)	320.56 (17.59)	369.37 (17.23)	397.64 (16.30)	505.78 (17.19)
	1965	299.42 (25.95)	259.06 (16.88)	352.61 (18.16)	421.00	471.94 (17.43)	482.55 (16.09)	1353.01 (36.18)
	1971	289.91 (17.72)	361.16 (18.00)	454.15 (18.50)	469.31 (20.98)	664.63 (19.68)	750.77 (19.81)	837.23 (19.40)
OTHER FOOD	1961	133.00 (18.36)	173.00 (16.69)	259.16 (17.60)	318.74 (17.50)	375.78 (17.50)	424.48 (17.40)	505.78 (17.20)
	1965	63.39 (5.49)	251.39 (16.38)	321.61 (16.56)	367.00 (16.41)	482.79 (17.83)	518.52 (17.30)	(254.86) (6.81)
	1971	257.23 (15.73)	302.49 (15.07)	398.65 (16.24)	411.95 (15.95)	541.21 (16.03)	617.96 (16.30)	709.76 (16.45)
BEVERAGE AND TOBACCO	1957	17.89 (4.03)	42.25 (5.58)	53.88 (4.68)	79.05 (5.08)	101.03 (5.12)	103.69 (4.30)	183.72 (6.10)
	1961	45.80 (6.32)	68.75 (6.63)	100.13 (6.79)	129.32 (7.09)	143.05 (6.68)	126.85 (5.19)	182.31 (5.65)
	1965	63.39 (5.49)	84.31 (5.49)	108.50 (5.58)	127.34 (5.69)	151.89 (5.61)	167.84 (5.59)	179.90 (4.81)
	1971	100.24 (6.12)	183.51 (9.14)	239.45 (9.75)	323.85 (10.98)	393.07 (11.64)	424.18 (11.19)	251.39 (5.36)
HOUSING	1957	70.38 (16.95)	129.73 (17.16)	191.12 (16.61)	272.35 (17.50)	366.70 (18.59)	444.74 (18.45)	619.03 (20.56)
	1961	100.90 (13.93)	121.88 (11.75)	180.56 (12.25)	271.38 (11.92)	339.47 (15.86)	385.43 (15.79)	805.70 (24.99)

Average Family Expenditures by Expenditure Item, by Income Class
Philippines 1957 - 1971

Item	Year	4000-4999	5000-5999	6000-7999	8000-9999	10000	
						over 14999	20000 +
PROTEIN	1961	652.07 (16.80)	967.67 (20.27)	910.07 (14.99)	987.33 (13.99)	1339.25 (12.19)	
	1965	679.26 (15.48)	842.70 (15.31)	956.59 (15.66)	1258.99 (16.42)	1708.66 (11.58)	
	1971	1010.15 (19.55)	1146.62 (18.81)	1371.85 (18.66)	1518.45 (17.96)	2045.05 (17.68)	2736.43 (16.94)
	1957 ^{1/}						2644.28 (14.32)
OTHER FOOD	1961	632.65 (16.29)	825.48 (17.29)	1092.11 (18.00)	1086.07 (15.39)	1372.21 (12.50)	
	1965	753.74 (17.18)	952.85 (17.31)	1017.52 (16.66)	1046.00 (13.65)	1973.80 (13.38)	
	1971	835.91 (16.17)	965.69 (15.84)	1167.60 (15.88)	1336.68 (14.84)	1706.89 (14.76)	2258.76 (13.98)
	1957						2207.35 (11.95)
BEVERAGE AND TOBACCO	1957	176.77 (4.97)	424.79 (5.15)				
	1961	197.93 (5.09)	238.57 (5.18)	309.42 (5.10)	282.07 (4.00)	296.38 (2.70)	
	1965	179.67 (4.09)	258.87 (4.70)	225.44 (3.69)	275.73 (3.59)	412.43 (2.79)	
	1971	265.99	337.73	320.44	349.21	165.33	491.45 550.86
HOUSING	1957	530.89 (14.93)	1994.40 (24.01)				
	1961	795.64 (20.47)	949.53 (20.64)	1286.23 (21.21)	1770.10 (25.15)	2974.89 (27.12)	

Average Family Expenditures by Expenditure Item, by Income Class
Philippines 1957 - 1971

Item	Year	under 500	500-999	1000-1499	1500-1999	2000-2499	2500-2999	3000-3999
HOUSING	1965	137.16 (11.88) ^{2/}	194.68 (12.68)	259.62 (13.37)	299.36 (13.38)	358.03 (13.22)	461.57 (15.40)	584.68 (15.63)
	1971	201.42 (12.31)	264.91 (13.20)	325.94 (13.28)	391.40 (13.27)	469.39 (13.90)	522.52 (13.78)	694.23 (16.09)
TRANS/COMM.	1957	4.77 (1.14)	11.01 (1.45)	23.90 (2.07)	32.37 (2.08)	52.39 (2.65)	78.35 (3.25)	96.11 (3.19)
	1961	7.87 (1.08)	12.50 (1.20)	23.56 (1.59)	47.36 (2.59)	40.56 (1.89)	53.67 (2.20)	67.63 (2.09)
	1965	13.83 (1.20)	19.93 (1.29)	30.9 (1.59)	42.45 (1.89)	65.10 (2.40)	65.94 (2.19)	97.45 (2.60)
	1971	21.46 (1.31)	16.14 (0.80)	24.27 (0.98)	35.17 (1.19)	36.81 (1.09)	50.75 (1.33)	105.21 (2.43)
CLOTHING	1957	31.02 (7.47)	55.78 (7.37)	91.72 (7.97)	126.97 (8.16)	147.81 (7.49)	200.48 (8.31)	288.96 (7.60)
	1961	39.36 (5.43)	72.92 (7.03)	107.49 (7.29)	131.14 (7.19)	162.27 (7.58)	204.92 (8.40)	214.66 (6.66)
	1965	63.39 (5.49)	93.51 (6.09)	123.99 (6.38)	151.92 (6.77)	168.16 (6.21)	269.80 (6.99)	254.86 (6.81)
	1971	61.59 (3.76)	22.40 (1.11)	33.62 (1.36)	37.17 (1.36)	48.23 (1.42)	54.29 (14.31)	287.31 (18.24)
MEDICARE	1957	8.35 (2.01)	14.46 (1.91)	29.08 (2.52)	33.62 (2.16)	52.39 (2.65)	64.52 (2.67)	76.32 (2.53)
	1961	8.59 (1.18)	13.54 (1.30)	23.56 (1.59)	32.78 (1.79)	44.84 (2.09)	43.91 (1.79)	55.87 (1.73)
	1965	18.44 (1.59)	22.99 (1.49)	27.12 (1.39)	35.75 (1.59)	40.69 (1.50)	44.96 (1.50)	67.46 (1.80)
	1971	25.69 (1.57)	32.49 (1.61)	39.75 (1.61)	61.79 (2.09)	69.68 (2.06)	86.10 (2.27)	75.96 (1.76)

Average Family Expenditures by Expenditure Item, by Income Class
Philippines 1957 - 1971

Item	Year	4000-4999	5000-5999	6000-7999	8000-9999	10000 over	
						14999	20000 +
HOUSING	1965	727.45 (16.58)	947.34 (17.21)	1224.67 (20.05)	1937.81 (25.30)	4448.41 (30.16)	
	1971	846.94 (16.39)	1004.46 (17.30)	1333.07 (18.14)	1942.57 (21.56)	2611.35 (22.58)	3910.01 (24.21) 4926.51 (26.68)
TRANS / COMM.	1957	147.31 (4.14)	424.80 (5.15)				
	1961	104.79 (2.69)	124.05 (2.69)	176.18 (2.90)	260.93 (3.70)	548.87 (5.00)	
	1965	96.41 (2.19)	148.71 (2.70)	213.26 (3.49)	252.76 (3.30)	810.14 (5.49)	
	1971	137.13 (6.44)	213.06 (10.38)	277.43 (6.72)	282.21 (6.62)	469.87 (6.47)	729.19 (6.75) 984.56 (6.42)
CLOTHING	1957	290.95 (8.18)	504.00 (6.11)				
	1961	271.69 (6.99)	152.03 (3.30)	436.83 (7.20)	472.50 (6.71)	647.67 (5.90)	
	1965	350.57 (7.99)	396.57 (7.20)	383.85 (6.28)	520.84 (6.80)	824.87 (5.59)	
	1971	332.94 (6.44)	633.05 (10.38)	494.28 (6.72)	596.66 (6.62)	749.26 (6.47)	1186.80 (6.42)
MEDICARE	1957	117.84 (3.31)	151.20 (1.83)				
	1961	65.98 (1.69)	81.11 (1.76)	97.07 (1.60)	119.87 (1.70)	274.43 (2.50)	
	1965	70.12 (1.59)	126.68 (2.30)	140.14 (2.29)	130.20 (1.69)	309.32 (2.09)	
	1971	109.16 (2.11)	191.53 (3.14)	149.54 (2.03)	180.17 (2.00)	242.18 (2.93)	343.18 (2.12) 401.67 (2.17)

Average Family Expenditures by Expenditure Item, by Income Class
Philippines 1957 - 1971

Item	Year	under 500	500-999	1000-1499	1500-1999	2000-2499	2500-2999	3000-3999
MISCELLANEOUS	1957	48.11 (11.58) ^{2/}	118.42 (15.66)	178.26 (15.49)	257.55 (16.55)	372.30 (18.87)	497.71 (20.64)	650.11 (21.59)
	1961	46.52 (6.42)	83.34 (8.04)	148.72 (10.09)	176.67 (9.69)	241.25 (11.27)	346.39 (14.19)	408.71 (12.68)
	1965	81.83 (7.09)	128.76 (8.39)	180.18 (9.28)	214.47 (9.59)	284.79 (10.52)	371.65 (12.40)	535.96 (14.33)
	1971	92.06 (5.62)	150.41 (4.48)	197.40 (8.03)	255.29 (8.65)	298.74 (5.88)	401.63 (10.59)	494.37 (11.45)

Average Family Expenditures by Expenditure Item, by Income Class
Philippines 1957 - 1971

Item	Year	4000-4999	5000-5999	6000-7999	8000-9999	10000		15000-19999	20000 +
						over	14999		
MISCELLANEOUS	1957	872.80 (24.55)	2599.19 (31.55)						
	1961	609.33 (15.68)	835.11 (18.15)	1092.27 (18.01)	1403.30 (19.93)	2667.49 (24.32)			
	1965	731.83 (16.68)	969.38 (17.61)	1072.36 (17.56)	1363.35 (17.79)	3181.65 (21.57)			
	1971	635.78 (12.30)	846.04 (13.88)	1126.13 (15.32)	1553.92 (17.25)	2015.01 (17.42)	3102.69 (19.21)	4115.86 (22.27)	

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Average Family Expenditure by Expenditure Item, by Income Class
Rural 1957 - 1965

Item	Year	under 500	500-999	1000-1499	1500-1999	2000-2499	2500-2999	3000-3999
TOTAL	1957	362.63	631.75	1041.13	1422.34	1728.27	2198.56	2426.06
	1961	716.79	1030.13	1429.79	1721.51	1982.54	2339.64	2655.89
	1965	1146.65	1505.24	1866.56	2236.45	2551.05	2696.62	3409.64
FOOD	1957	234.44	362.81	568.47	749.73	850.184	1051.23	1070.50
		(64.64)	(57.42)	(54.60)	(52.71)	(49.19)	(47.81)	(44.12)
	1961	476.68	661.35	869.01	989.88	1085.39	1234.03	1380.33
	1965	(66.50)	(64.20)	(60.77)	(57.50)	(54.74)	(52.74)	(51.97)
		764.44	978.94	1180.85	1330.36	1587.77	1583.39	1929.85
		(66.67)	(65.03)	(63.26)	(59.48)	(62.23)	(58.71)	(56.60)
CEREALS	1957							
	1961	220.78	301.83	381.00	399.39	429.80	480.54	529.88
	1965	(30.80)	(29.30)	(26.64)	(23.19)	(21.67)	(26.53)	(19.95)
		397.91	484.21	539.98	582.03	707.92	694.42	763.76
		(34.70)	(32.16)	(28.92)	(26.02)	(27.75)	(25.75)	(22.40)
PROTEIN	1957							
	1961	117.56	180.27	245.44	301.27	328.78	380.23	447.74
	1965	(16.40)	(17.49)	(17.16)	(17.50)	(16.58)	(16.25)	(16.85)
		172.61	255.64	242.58	375.23	450.04	156.72	579.64
		(15.05)	(16.98)	(16.96)	(16.77)	(17.64)	(5.81)	(17.00)
OTHER FOOD	1957							
	1961	137.63	180.27	242.58	289.22	326.80	373.23	405.35
	1965	(19.20)	(17.49)	(16.96)	(16.80)	(16.48)	(15.95)	(15.26)
		193.91	240.60	297.08	373.10	427.28	445.83	586.46
		(16.91)	(15.98)	(15.91)	(16.68)	(16.74)	(16.53)	(17.20)

Average Family Expenditure by Expenditure Item, by Income Class
Rural 1957 - 1965

Item	Year	4000-4999	5000-5999	6000-7999	8000-9999	10000-14999	15000-19999	20,000 +
TOTAL	1957	3479.00	4408.5					
	1961	3614.83	3959.05	5475.71	6181.25	8514.33		
	1965	3747.41	4603.10	4581.62	5895.21	8747.63		
FOOD	1957	1403.56	1357.80					
		(40.34)	(30.79)					
	1961	1796.75	1908.67	2718.88	2615.75	3367.00		
		(49.70)	(48.21)	(49.65)	(42.31)	(39.54)		
	1965	2055.27	2320.76	2396.08	2690.43	3598.81		
		(54.84)	(50.41)	(52.30)	(45.63)	(41.14)		
CEREALS								
CEREALS	1957							
	1961	607.38	628.33	701.65	711.25	879.00		
		(16.80)	(15.87)	(12.81)	(11.50)	(10.32)		
CEREALS	1965	846.06	855.27	908.85	804.14	1120.75		
		(22.57)	(18.58)	(19.83)	(13.64)	(12.81)		
PROTEIN								
PROTEIN	1957							
	1961	567.58	659.95	855.18	964.75	1397.00		
		(15.70)	(16.67)	(15.61)	(15.60)	(16.4)		
PROTEIN	1965	664.00	696.71	716.06	780.5	1313.44		
		(17.71)	(15.73)	(15.63)	(13.23)	(15.01)		
OTHER FOOD								
OTHER FOOD	1957							
	1961	625.46	624.38	1156.65	1329.5	1091.00		
		(17.30)	(15.77)	(21.12)	(21.5)	(12.81)		
OTHER FOOD	1965	549.00	768.78	775.75	1111.64	1173.31		
		(14.65)	(16.70)	(16.93)	(18.85)	(13.41)		

Average Family Expenditure by Expenditure Item, by Income Class
Rural 1957 - 1965

Item	Year	under 500	500-999	1000-1499	1500-1999	2000-2499	2500-2999	3000-3999
BEV. AND TOBACCO	1957	17.19 (4.74)	31.94 (5.05)	46.83 (4.49)	71.95 (5.05)	89.03 (5.15)	98.33 (4.47)	103.89 (4.28)
	1961	45.16 (6.29)	67.99 (6.59)	97.03 (6.59)	134.28 (7.79)	138.64 (6.99)	114.30 (4.88)	164.24 (6.18)
	1965	60.53 (5.27)	84.21 (5.59)	102.76 (5.50)	123.66 (5.52)	128.94 (5.05)	156.72 (5.81)	170.48 (4.99)
HOUSING	1957	66.42 (18.31)	113.32 (17.93)	167.04 (16.04)	239.53 (16.84)	300.25 (17.37)	321.25 (14.61)	418.00 (17.22)
	1961	98.92 (13.79)	133.92 (13.00)	185.30 (12.97)	242.73 (14.09)	289.16 (14.58)	321.89 (13.75)	389.45 (14.66)
	1965	127.78 (11.14)	181.95 (12.08)	241.03 (12.91)	362.44 (16.20)	278.11 (10.90)	345.86 (12.82)	443.25 (13.00)
TRANS / COMM.	1957	4.69 (1.29)	9.43 (1.49)	22.89 (2.19)	27.66 (1.94)	43.64 (2.52)	65.56 (2.98)	82.15 (3.38)
	1961	7.88 (1.09)	11.33 (1.08)	24.26 (1.69)	27.54 (1.59)	37.63 (1.89)	41.99 (1.79)	55.63 (2.09)
	1965	24.66 (2.15)	19.55 (1.29)	26.16 (1.40)	36.24 (1.62)	60.68 (2.37)	51.34 (1.9)	68.19 (1.99)
CLOTHING	1957	3.16 (0.87)	50.35 (7.96)	93.81 (9.01)	130.42 (9.16)	146.64 (8.48)	207.61 (9.44)	222.32 (9.16)
	1961	40.86 (5.70)	74.17 (7.20)	109.87 (7.68)	137.72 (7.96)	168.35 (8.49)	233.27 (9.97)	235.79 (8.87)
	1965	61.65 (5.37)	93.23 (6.19)	125.18 (6.70)	151.37 (6.76)	166.87 (6.54)	208.05 (7.71)	248.90 (7.30)

Average Family Expenditure by Expenditure Item, by Income Class
Rural 1957-- 1965

Item	Year	4000-4999	5000-5999	6000-7999	8000-9999	10000-14999	15000-19999	20000 +
BEV. AND TOBACCO	1957	187.00	179.95					
		(5.37)	(4.08)					
	1961	184.33	118.48	257.59	191.25	306.00		
		(5.09)	(2.99)	(4.70)	(3.09)	(3.59)		
	1965	153.49	283.49	197.38	177.36	350.25		
		(4.09)	(6.15)	(4.30)	(3.00)	(4.00)		
HOUSING	1957	512.78	838.30					
		(14.73)	(19.01)					
	1961	600.04	695.38	707.06	1347.50	2016.50		
		(16.59)	(17.56)	(12.91)	(21.79)	(23.68)		
	1965	434.27	600.61	679.35	1194.43	1357.25		
		(11.58)	(13.04)	(14.82)	(20.26)	(15.51)		
TRANS / COMM.	1957	176.67	220.80					
		(5.07)	(5.00)					
	1961	97.58	110.62	262.77	234.75	251.00		
		(2.69)	(2.79)	(3.70)	(3.79)	(2.94)		
	1965	56.16	124.93	105.58	130.07	481.63		
		(1.49)	(2.71)	(2.31)	(2.20)	(5.50)		
CLOTHING	1957	350.00	327.15					
		(10.06)	(7.62)					
	1961	307.29	324.00	454.94	643.00	729.83		
		(8.50)	(8.10)	(8.30)	(10.40)	(8.57)		
	1965	314.47	432.44	339.67	490.79	866.88		
		(8.39)	(9.39)	(7.41)	(8.32)	(9.90)		

Average Family Expenditure by Expenditure Item, by Income Class
Rural 1957 - 1965

Item	Year	under 500	500-999	1000-1499	1500-1999	2000-2499	2500-2999	3000-3999
MEDICAL CARE	1957	7.81 (2.15)	11.94 (1.88)	27.24 (2.61)	33.24 (2.33)	43.64 (2.52)	65.56 (2.98)	82.15 (3.38)
	1961	8.60 (1.19)	14.42 (1.40)	21.40 (1.49)	30.99 (1.79)	43.57 (2.19)	46.65 (1.99)	45.04 (1.69)
	1965	16.81 (1.46)	22.56 (1.49)	26.16 (1.40)	36.24 (1.62)	35.40 (1.38)	43.23 (1.60)	68.19 (1.99)
MISCELLANEOUS	1957	28.91 (7.97)	53.31 (8.43)	114.84 (11.03)	169.81 (11.93)	254.88 (14.74)	389.02 (17.69)	447.06 (18.42)
	1961	38.70 (5.39)	66.96 (6.49)	122.71 (8.58)	158.37 (9.19)	219.82 (11.08)	347.52 (14.83)	385.40 (14.51)
	1965	90.79 (7.91)	124.81 (8.29)	164.42 (8.80)	196.14 (8.77)	293.28 (11.49)	308.03 (11.42)	480.76 (14.09)

Average Family Expenditure by Expenditure Item, by Income Class
Rural 1957 - 1965

Item	Year	4000-4999	5000-5999	6000-7999	8000-9999	10000 +	20000 +
MEDICAL CARE	1957	176.67	220.80				
		(5.07)	(5.00)				
	1961	50.58	51.33	76.71	43.25	204.00	
		(1.39)	(1.29)	(1.40)	(0.69)	(2.39)	
	1965	74.88	158.56	96.40	76.96	218.94	
		(1.99)	(3.44)	(2.10)	(1.30)	(2.50)	
MISCELLANEOUS	1957	672.33	1263.70				
		(19.32)	(28.66)				
	1961	578.25	750.57	1057.77	1105.75	1640.00	
		(15.99)	(18.95)	(19.31)	(17.88)	(19.26)	
	1965	658.88	682.31	766.56	1135.29	1873.88	
		(17.58)	(14.82)	(16.73)	(19.25)	(21.42)	

**Average Family Expenditure by Expenditure Item, by Income Class
Urban 1957 - 1965**

Item	Year	under 500	500-999	1000-1499	1500-1999	2000-2499	2500-2999
TOTAL	1957	439.60	719.01	1020.02	1213.84	1381.00	1589.71
	1961	709.35	1357.23	1527.50	1957.94	2316.26	2525.87
	1965	1364.17	1686.91	2115.32	2571.67	2906.41	3316.65
FOOD	1957	224.87	382.27	491.97	551.50	600.53	631.99
		(51.15) 2/	(53.16)	(48.16)	(45.43)	(43.48)	(39.75)
	1961	468.68	674.32	936.38	1094.68	1258.62	1316.04
	1965	(66.07)	(49.68)	(61.30)	(55.90)	(54.33)	(52.10)
		840.64	1071.21	1256.93	1369.20	1680.91	1682.66
		(61.62)	(60.53)	(59.42)	(53.24)	(57.83)	(50.73)
CEREALS							
	1957 1/						
	1961	200.26	284.70	360.99	387.73	408.76	434.47
		(28.23)	(20.98)	(23.63)	(19.80)	(17.64)	(17.20)
	1965	399.91	454.84	521.17	560.82	631.96	639.69
		(29.31)	(26.96)	(24.63)	(21.80)	(21.74)	(19.28)
PROTEIN							
	1957						
	1961	145.60	201.86	283.75	346.61	415.69	411.74
		(20.44)	(14.87)	(18.57)	(17.70)	(17.94)	(16.30)
	1965	232.71	297.80	391.97	414.30	515.95	542.35
		(17.05)	(17.35)	(18.53)	(16.11)	(17.75)	(16.35)
OTHER FOOD							
	1957						
	1961	124.00	187.67	291.63	360.32	434.16	464.78
		(17.48)	(13.82)	(19.09)	(18.40)	(18.74)	(18.40)

**Average Family Expenditure by Expenditure Item, by Income Class
Urban 1957 - 1965**

Item	Year	3000-3999	4000-4999	5000-5999	6000-7999	8000-9999	10000-14999	15000-19999	20000+
TOTAL	1957	1826.76	2540.22	3069.59	6209.39	7171.42	11148.47		
	1961	3368.88	4108.21	5068.33	6641.25	6765.85	14625.77		
	1965	3928.11	4878.46	5575.08					
FOOD	1957	662.40	882.35	874.49					
		(36.26)	(34.73)	(28.43)					
	1961	1632.05	1924.62	2326.43	2647.91	2752.27	3572.98		
		(49.92)	(46.84)	(45.90)	(42.64)	(38.37)	(32.04)		
CEREALS	1965	1949.38	2202.51	2556.24	2821.31	2989.19	4269.73		
		(49.62)	(45.14)	(45.85)	(42.48)	(44.18)	(29.19)		
	1957								
	1961	442.31	563.41	618.34	652.66	653.92	836.72		
PROTEIN		(13.12)	(13.71)	(12.20)	(10.51)	(8.86)	(7.50)		
	1965	704.29	746.18	836.26	851.98	899.97	1071.32		
		(17.92)	(15.29)	(14.99)	(12.82)	(13.30)	(7.32)		
	1957								
OTHER FOOD	1961	545.09	703.23	816.03	919.94	984.5	1334.21		
		(16.18)	(17.11)	(16.10)	(14.81)	(13.72)	(11.96)		
	1965	662.37	771.91	943.01	1096.40	1108.89	1770.		
		(16.86)	(15.82)	(16.91)	(16.50)	(16.38)	(12.10)		
OTHER FOOD	1957								
	1961	566.91	662.10	902.19	1075.33	1113.85	1402.05		
		(16.82)	(16.11)	(17.80)	(17.31)	(15.53)	(12.57)		
	1965								

Average Family Expenditure by Expenditure Item, by Income Class
Urban 1957 - 1965

Item	Year	under 500	500-999	1000-1499	1500-1999	2000-2499	2500-2999
OTHER FOOD	1965	232.70 (17.05)	634.33 (37.60)	409.49 (19.35)	487.56 (18.95)	586.17 (20.16)	632.74 (19.07)
	1957	20.55 (4.67)	36.81 (5.03)	54.31 (5.32)	62.08 (5.11)	68.33 (4.94)	74.25 (4.67)
	1961	44.73 (6.30)	70.92 (5.22)	105.62 (6.91)	119.45 (6.10)	147.79 (6.38)	138.91 (5.49)
	1965	90.580 (6.63)	87.14 (5.16)	122.63 (5.79)	133.89 (5.20)	189.28 (6.51)	184.26 (5.55)
BEV. AND TOBACCO	1957	20.55 (4.67)	36.81 (5.03)	54.31 (5.32)	62.08 (5.11)	68.33 (4.94)	74.25 (4.67)
	1961	44.73 (6.30)	70.92 (5.22)	105.62 (6.91)	119.45 (6.10)	147.79 (6.38)	138.91 (5.49)
	1965	90.580 (6.63)	87.14 (5.16)	122.63 (5.79)	133.89 (5.20)	189.28 (6.51)	184.26 (5.55)
	1965	90.580 (6.63)	87.14 (5.16)	122.63 (5.79)	133.89 (5.20)	189.28 (6.51)	184.26 (5.55)
HOUSING	1957	93.12 (21.18)	125.63 (17.47)	181.69 (17.81)	215.48 (17.75)	253.59 (18.36)	289.45 (18.20)
	1961	104.38 (14.71)	163.66 (12.05)	201.77 (13.20)	315.41 (16.10)	397.20 (17.14)	439.50 (17.39)
	1965	211.80 (15.52)	264.89 (15.70)	324.08 (15.32)	421.87 (16.40)	506.79 (17.43)	653.60 (19.70)
	1965	211.80 (15.52)	264.89 (15.70)	324.08 (15.32)	421.87 (16.40)	506.79 (17.43)	653.60 (19.70)
TRANS/COMM.	1957	5.87 (1.33)	11.57 (1.60)	18.40 (1.80)	22.32 (1.83)	34.16 (2.47)	43.95 (2.76)
	1961	8.52 (1.20)	15.27 (1.12)	25.22 (1.65)	76.37 (3.90)	43.88 (1.89)	63.14 (2.49)
	1965	22.29 (1.63)	29.62 (1.75)	45.98 (2.17)	40.06 (1.55)	76.32 (2.62)	90.39 (2.72)
	1965	22.29 (1.63)	29.62 (1.75)	45.98 (2.17)	40.06 (1.55)	76.32 (2.62)	90.39 (2.72)
CLOTHING	1957	27.69 (6.29)	52.67 (7.32)	76.55 (7.50)	101.20 (8.33)	114.32 (8.27)	143.97 (9.05)
	1961	34.79 (4.90)	67.65 (4.98)	100.89 (6.60)	121.41 (6.20)	152.41 (6.58)	181.87 (7.20)
	1965	34.79 (4.90)	67.65 (4.98)	100.89 (6.60)	121.41 (6.20)	152.41 (6.58)	181.87 (7.20)
	1965	34.79 (4.90)	67.65 (4.98)	100.89 (6.60)	121.41 (6.20)	152.41 (6.58)	181.87 (7.20)

Average Family Expenditure by Expenditure Item, by Income Class
Urban 1957 - 1965

Item	Year	3000-3999	4000-4999	5000-5999	6000-7999	8000-9999	10000-14999	15000-19999	20000+
OTHER FOOD	1965	775.56 (19.74)	910.85 (18.67)	1085.36 (19.46)	1159.25 (17.45)	1277.63 (18.88)	2080.53 (14.22)		
BEV. AND TOBACCO	1957	80.18 (4.36)	111.13 (4.37)	95.18 (3.10)					
	1961	216.73 (6.43)	209.73 (5.10)	278.74 (5.49)	323.21 (5.20)	294.58 (4.10)	305.26 (2.73)		
	1965	197.49 (5.02)	210.99 (4.32)	237.24 (4.25)	237.43 (3.57)	289.28 (4.27)	434.73 (2.97)		
HOUSING	1957	385.45 (18.20)	385.22 (21.08)	487.63 (19.19)	788.22 (25.67)				
	1961	651.86 (19.34)	880.04 (21.42)	1039.00 (20.49)	1429.60 (23.02)	1846.73 (25.75)	3143.30 (28.19)		
	1965	775.56 (19.74)	1075.52 (22.04)	1174.33 (21.06)	1536.36 (23.13)	1277.63 (18.88)	4844.21 (33.12)		
TRANS/COMM.	1957	54.04 (2.95)	68.04 (2.67)	145.75 (4.74)					
	1961	81.06 (2.42)	111.03 (2.70)	126.71 (2.49)	161.60 (2.60)	244.31 (3.40)	418.35 (3.75)		
	1965	138.34 (3.52)	144.09 (2.95)	166.07 (2.97)	279.33 (4.20)	281.25 (4.15)	853.94 (4.83)		
CLOTHING	1957	153.40 (8.39)	183.72 (7.23)	205.23 (6.68)					
	1961	222.92 (6.61)	271.41 (6.60)	334.52 (6.60)	435.09 (7.00)	445.54 (6.21)	644.49 (5.61)		

Average Family Expenditure by Expenditure Item, by Income Class
Urban 1957 - 1965

Item	Year	under 500	500-999	1000-1499	1500-1999	2000-2499	2500-2999
CLOTHING	1965	76.64 (5.61)	90.62 (5.37)	116.06 (5.48)	151.58 (5.89)	174.02 (5.98)	212.07 (6.39)
MEDICARE	1957	13.00 (2.95)	17.14 (2.38)	26.19 (2.56)	27.80 (2.29)	34.16 (2.47)	42.43 (2.66)
	1961	9.23 (1.30)	13.09 (0.96)	28.38 (1.85)	33.29 (1.70)	48.49 (2.09)	40.41 (1.59)
	1965	26.48 (1.94)	27.88 (1.65)	37.23 (1.75)	35.37 (1.37)	45.79 (1.57)	48.67 (1.46)
MISCELLANEOUS	1957	54.5 (12.39)	94.47 (13.13)	171.85 (16.84)	233.46 (19.23)	275.92 (19.97)	363.67 (23.00)
	1961	39.02 (5.50)	352.32 (25.95)	129.25 (8.46)	197.36 (10.08)	267.86 (11.56)	346.00 (13.69)
	1965	94.75 (6.94)	165.56 (9.81)	212.41 (10.04)	404.19 (15.71)	305.30 (10.50)	445.00 (13.41)

Average Family Expenditure by Expenditure Item, by Income Class
Urban 1957 - 1961

Item	Year	3000-3999	4000-4999	5000-5999	6000-7999	8000-9999	10000-14999	15000-19999	20000+
CLOTHING	1965	264.11 (6.72)	396.24 (8.12)	367.32 (6.59)	411.65 (6.19)	530.34 (7.83)	822.89 (5.62)		
MEDICARE	1957	47.07 (2.57)	83.91 (3.30)	71.38 (2.32)					
	1961	67.55 (2.00)	74.01 (1.80)	91.22 (1.79)	105.66 (1.70)	129.35 (1.80)	282.67 (2.53)		
	1965	67.08 (1.70)	66.90 (1.37)	100.82 (1.80)	167.61 (2.52)	136.60 (2.01)	310.53 (2.12)		
MISCELLANEOUS	1957	444.46 (24.33)	723.44 (28.47)	889.34 (28.97)					
	1961	446.71 (13.25)	637.37 (15.51)	871.71 (17.19)	1106.33 (17.81)	1458.65 (20.33)	2781.42 (24.94)		
	1965	536.60 (13.66)	782.20 (16.03)	972.67 (17.44)	1187.19 (17.87)	1261.57 (18.64)	3089.73 (21.12)		

Table 2
Percentage Distribution of Families by Diet Rating in Six Regions

Percentage Adequacy	Western Visayas I	Cagayan Valley Batanes Region II	Metro Manila III	Eastern Visayas IV	Ilocos Mt. Prov. V	Southern Tagalog VI
0-49	10.2	9.9	10.5	21.6	3.7	14.7
50-59	19.7	14.3	15.4	26.5	6.9	20.4
60-69	27.2	24.6	19.2	23.8	18.3	28.8
70-79	23.8	28.7	27.6	17.3	29.9	22.6
80-89	14.4	18.4	18.4	8.2	28.1	11.1
90-100	4.7	4.1	8.9	2.6	13.1	2.4

Source: Food and Nutrition Research Center

Fig. 7	p. 37, Nutrition Survey of Western Visayas Region
Fig. 8	p. 45, Nutrition Survey of the Cagayan Valley & Batanes Region
Fig. 8	p. 39, Nutrition Survey of Metro Manila
Fig. 7	p. 39, Nutrition Survey of Eastern Visayas Region
Fig. 8	p. 42, Nutrition Survey of Ilocos - Mt. Prov. Region
Fig. 7	p. 39, Nutrition Survey of Southern Tagalog Region

Table 3

Percentage Distribution of Families by Percent Distribution
in Various Nutrients, Western Visayas & Cagayan Regions

Percentage Adequacy	Vitamin										Riboflavin	Niacin	Ascorbic Acid					
	Calories	Protein	Calcium	Iron	A	Thiamine												
0-49	6.6	2.3	3.3	2.3	66.7	74.4	1.3	.3	56.9	45.0	32.9	29.0	76.9	71.3	4.2	9.8	37.1	23.2
50-59	10.3	6.5	6.6	6.4	13.2	8.5	1.3	2.0	8.3	12.9	15.8	22.8	10.9	13.9	3.7	3.0	9.1	7.8
60-69	21.0	17.0	9.9	12.2	5.6	6.4	3.3	1.0	5.8	9.8	10.1	16.0	6.0	6.4	3.7	3.0	6.4	7.5
70-79	24.0	26.9	15.3	19.4	2.9	4.0	6.4	3.0	5.8	6.8	6.4	10.9	2.1	4.0	3.5	3.0	5.0	9.2
80-89	17.5	16.0	15.6	16.3	2.1	1.3	7.8	5.8	4.4	6.8	8.8	7.1	1.7	3.4	5.8	7.8	7.2	7.8
Above 90	20.3	31.3	49.0	43.0	9.1	5.1	79.6	87.7	18.5	18.4	26.9	13.9	2.1	.6	78.9	63.4	34.9	44.3

Source: Food and Nutrition Research Center
Survey of Western Visayas
Table 8 p. 29
Survey of Cagayan Region
Table 8 p. 36

TABLE 4

RECOMMENDED DAILY ALLOWANCES FOR SPECIFIC NUTRIENTS 1/

	Calo- ries 2/	Pro- tein (GM)	Cal- cium (GM)	Iron 5/ (GM)	Vit.A (1.u.)3/	Thia- mine4/	Ascorbid Acid (MG)	Vit.D (1.u.)6/	Ribofla- vin (MG)	Niacin 4/ (MG)
Man (53 kg.)										
Sedentary	2,100	55	0.7	6	4,000	1.3	75		1.4	13
Moderately Active	2,600	55	0.7	6	4,000	1.6	75		1.4	16
Very Active . . .	3,400	55	0.7	6	4,000	2.0	75		1.4	20
Woman (45 kg.)										
Sedentary	1,900	45	0.7	10	4,000	1.1	70		1.1	11
Moderately Active	2,300	45	0.7	10	4,000	1.4	70		1.1	14
Very Active . . .	3,000	45	0.7	10	4,000	1.8	70		1.1	18
Pregnancy (later Half)										
7/ 2,300		75	1.5	21	5,000	2.0	100	300-400	1.9	20
Lactation	2,800	85	2.0	21	7,000	2.0	150	300-400	2.1	20
Children up to 12 years										
8/ under 1 yr. 9/ 100 per		3-½	1.0	5	1,500	0.6	30	300-400	0.6	6
	Kg.	Per Kg.								
1 - 3 yrs. . . .	1,200	40	1.0	5	2,000	0.5	35		1.0	5
4 - 6 yrs. . . .	1,400	45	1.0	5	2,500	0.6	50		1.1	6
7 - 9 yrs. . . .	1,800	55	1.0	5	3,000	0.8	60	300-400	1.4	8
10 - 12 yrs. . .	2,300	60	1.2	5	4,000	1.0	75		1.5	10
Children over 12 years										
Girls: 13-15 yrs.	2,500	70	1.3	12	4,500	1.1	80		1.8	11
16-20 yrs.	2,200	60	1.0	12	4,000	1.0	80		1.5	10
Boys: 13-15 yrs.	2,800	75	1.4	7	5,000	1.3	90		1.9	13
16-20 yrs.	3,600	85	1.4	7	6,500	1.6	100		2.1	16

Table 5.

Minimum Cost Basket
for Ilocos Sur, Roxas City, Legaspi City and Manila

Required Quantity in 100 g.	Carbohydrates per 100 g.	Proteins per 100 g.	Fats per 100 g.	Calories per 100 g.	total
Minimum re- quirements (grams)	1675	300	135		11600
Ilocos Sur - 1960					
X ₁ Rice	80.8	7.4	0.5	368	9777
X ₂ Malunggay	12.8	5.9	1.8	0.75	6
X ₃ Mango	66.6	24.4	1.0	356	138
X ₁₂ Cante	32.3	1.1	0.4	136	602
X ₁₇ Bagoong	0.2	14.9	1.0	73	219
X ₂₂ Oil	0.0	0	99.9	883	909
		0	102		11601
	2403	300	135		
Roxas City - 1964					
X ₁ Rice	80.6	7.4	0.5	368	5277
X ₈ Kangkong	4.4	3.4	0.6	30	631
X ₂₁ Dillia	0	17.9	1.1	86	258
X ₂₄ Milk	11.1	7.0	7.9	140	5484
			302		11600
	1686	514	325		
Legaspi City - 1969					
X ₂ Rice	80.8	7.4	0.5	368	3680
X ₇ Sitaw	8.2	2.8	0.2	38	595

TABLE 5

Minimum Cost Basket
for Ilocos Sur, Roxas City, Legaspi City and Manila

	Calcium per total 100 g.	Iron per total 100 g.	Thiamine per total 100 g.	Riboflavin per total 100 g.	Vit. C per total 100 g.	Price per total 100 g.
Minimum re- quirements (grams)	5.6	36	4.91	7.5	365	
X ₁ Rice	8	211	0.1	2.64	0	0.045
X ₃ Malunggay	353	2717	0.2	1.54	232	0.016
X ₄ Mongo	125	48	0.66	0.26	10	0.085
X ₁₂ Camote	57	252	0.10	0.44	35	0.018
X ₁₇ Bagoong	469	1407	0.01	0.03	0	0.046
X ₂₂ Oil	2.0	2	0	0	0	.115
		4637	4.91	7.50	1943	1.681
Roxas City - 1964						
X ₁ Rice	8	144	0.1	1.42	0	0.065
X ₈ Kangkong	71	1491	0.09	0.89	49	.005
X ₂₁ Dillis	469	1407	0.01	0.02	0	.053
X ₂₄ Milk	425	16660	0.04	1.57	0	.015
		19672	4.91	21.28	10.9	1.775
Legaspi City - 1969						
X ₂ Rice	8	80	0.1	8.08	0	0.075
X ₇ Sitaw	42	658	0.12	1.88	22	0.012
					345	.750
						.188

Minimum Cost Basket
for Ilocos Sur, Roxas City, Legaspi City, and Manila

Required Quantity in 100 g.	Carbohydrates		Proteins		Fats		Calories	
	per 100 g.	total	per 100 g.	total	per 100 g.	total	per 100 g.	total
Legaspi City - 1969								
X8 Kangkong	4.4	62	3.4	48	0.6	8	30	426
X9 Camote	32.3	400	1.1	14	0.4	5	136	1683
X18 Galunggong	0	0	18.7	56	1.5	4	93	279
X25 Coconut	16.8	277	3.9	64	26.1	429	300	4937
(mature)		1675		300		454		11600
Manila - 1958								
X1 Rice	80.8	808	7.4	74	0.5	5	368	3680
X8 Camote Tops	10.3	178	2.8	48	0.5	9	33	915
X18 Banana	29.0	683	1.4	33	0.2	5	111	2614
X31 Sardines	0.3	2	19.2	145	13.3	100	202	1522
X34 Margarine	1.1	4	0	0	91.9	32	817	2869
		1675		300		151		11600
Manila - 1973								
X1 Rice	80.8	1979	7.4	181	0.5	12	368	9013
X8 Camote Tops	10.3	267	2.8	73	0.5	13	53	1372
X26 Galunggong	0	0	18.7	56	1.5	4	93	279
X34 Margarine	1.1	1	0.0	0	91.9	106	817	936
		2247		310		135		2706

Table 5

Minimum Cost Basket
for Ilocos Sur, Roxas City, Legaspi City, and Manila

	Calcium per 100 g.	Iron per 100 g.	Thiamine per 100 g.	Riboflavin per 100g.	Vit. C per 100 g.	Price per 100 g.	total
Legaspi City - 1969							
X8 Kangkong	71	3.2	0.09	0.24	49	0.013	.184
X9 Camote	57	0.7	0.10	0.04	35	0.020	.247
X18 Galunggong	75	0.9	0.14	0.19	0	0.070	.210
X25 Coconut	28	1.5	0.04	0.03	3.0	0.020	.329
(mature)	3136	107	13.56	7.50	1522		1.909
Manila - 1958							
X1 Rice	8	1.2	0.10	0.05	0	0.057	.570
X8 Camote Tops	107	6.0	0.12	0.20	32	0.015	.259
X18 Banana	15	0.8	0.03	0.05	35	0.020	.471
X31 Sardines	359	2.2	0.01	0.10	0	0.020	.150
X34 Margarine	13	0.0	5.57	0.46	0	0.040	.140
	6031	152	23.42	7.50	1376		1.591
Manila - 1973							
X1 Rice	8	1.2	0.10	0.05	0	0.180	4.408
X8 Camote Tops	107	6.0	0.12	0.20	32	0.040	1.035
X26 Galunggong	75	0.9	0.14	0.19	0	0.251	.753
X34 Margarine	13	0	5.59	0.46	0	0.575	.652
	2706	187	12.46	7.50	728		6.856

TABLE 6

Regression Parameters of Determinants of Nutrient Rating

Nutrient	a	b ₁ (E)	b ₂ ($\frac{C}{N}$)	E ₁	E ₂	² R
Calories	58.534	-0.289 (-0.766)	33.996 (11.954)	-0.016	0.250	0.272
Protein	58.265	-0.387 (-0.718)	65.652 (16.146)	-0.018	0.394	0.411
Calcium	28.077	1.364 (1.663)	23.837 (3.855)	0.124	0.283	0.065
Iron	91.876	-0.916 (-0.676)	87.458 (8.562)	-0.029	0.358	0.159
Vitamin A	33.352	0.791 (0.619)	38.525 (3.998)	0.058	0.370	0.051
Thiamine	66.838	-2.512 (-2.947)	28.529 (4.441)	-0.150	0.222	0.038
Riboflavin	16.890	0.781 (1.753)	35.428 (10.548)	0.084	0.495	0.274
Niacin	83.119	-1.832 (-1.843)	96.434 (12.867)	-0.061	0.418	0.286
Ascorbic	58.743	-1.980 (-1.276)	58.311 (4.982)	-0.103	0.394	0.052
Fats	-2.211	1.697 (2.146)	36.246 (6.080)	0.287	0.800	0.135

Table 7
Regression Parameters of the Relationship
between Actual Intake and Required Intake

Variable	Intercept A	Regression Coefficient B	R ²	E
Schooling: 7-10				
Calories	142.43	0.769 (6.372)	0.340	0.925
Protein	38.811	0.390 (1.303)	0.021	0.354
Fats	28.664	0.021 (0.695)	0.006	0.060
Calcium	1.114	-0.600 (-2.299)	0.063	-1.037
Iron	8.635	0.405 (1.008)	0.013	0.281
Vitamins	3554.987	-0.209 (-0.448)	0.403	-0.298
Thiamine	-0.909	0.671 (3.503)	0.134	1.011
Riboflavin	0.660	0.030 (0.138)	0.00024	0.058
Niacin	32.995	1.096 (4.133)	0.178	0.775
Ascorbic	32.772	0.467 (88.517)	0.990	0.716
Schooling: 1-6				
Calories	301.719	0.610 (8.822)	0.155	0.817
Protein	39.27	0.169 (1.627)	0.006	0.190
Fats	13.950	0.013 (2.621)	0.016	0.067
Calcium	0.788	-0.348 (-2.988)	0.021	-0.807
Iron	5.929	0.556 (2.459)	0.014	0.417
Vitamins	857.006	0.320 (1.716)	0.007	0.583
Thiamine	-0.102	0.819 (5.649)	0.070	1.110
Riboflavin	0.420	0.065 (0.526)	0.001	0.173
Niacin	-3.249	1.547 (7.930)	0.129	1.216
Ascorbic	38.503	0.256 (0.979)	0.002	0.319

Table 8

REGRESSION ESTIMATES OF MARGINAL
NUTRIENT INTAKE FOR EACH AGE GROUP

NUTRIENTS	Consumption Per Capita	Intercept A	Regression Coefficient for			Elasticity R ²
			Number in age 1-6	Number in age 9-12	Number in age 13-26	
Calories	required amount		1200	2050	2800	2450
	0 - 1.99	1930.40	-148.77	-157.29	37.60	-30.47
	2.00 - 2.99	2154.25	-154.58	-110.96	-53.67	-56.86
	3.00 - 3.99	2447.68	-222.92	-86.15	-65.72	-51.17
	4.00 - 4.99	2370.79	-198.05	-77.03	-79.64	-32.39
	5.00 - 5.99	2359.43	-133.81	-126.45	-27.34	-45.73
Protein	6.00 - above	2531.06	-121.95	-130.97	-29.55	-41.45
	required amount		42.5	51.5	72.5	50.0
	0 - 1.99	56.01	-4.61	-5.16	0.29	-0.02
	2.00 - 2.99	67.86	-5.42	-4.84	-3.34	-1.82
	3.00 - 3.99	76.42	-7.68	-2.56	-3.43	-1.83
	4.00 - 4.99	82.45	-6.51	-4.06	-2.82	-2.99
Fats	5.00 - 5.99	67.71	-3.06	-3.93	-1.29	-0.52
	6.00 - above	81.58	-4.08	-4.16	-1.57	-1.16
	required amount		12.5	35.0	97.5	40.0
	0 - 1.99	16.22	-1.78	-1.79	-0.97	-0.67
	2.00 - 2.99	25.54	-2.30	-3.67	-2.31	-0.92
	3.00 - 3.99	27.18	-2.65	-2.39	-1.32	-0.72
	4.00 - 4.99	49.36	-3.33	-4.69	-5.59	-3.26
	5.00 - 5.99	56.99	-4.78	-3.74	-3.27	-4.43
	6.00 - above	58.48	-5.58	-6.41	-1.55	-0.60
	required amount		12.5	35.0	97.5	40.0
	0 - 1.99	16.22	-1.78	-1.79	-0.97	-0.67
	2.00 - 2.99	25.54	-2.30	-3.67	-2.31	-0.92
	3.00 - 3.99	27.18	-2.65	-2.39	-1.32	-0.72
	4.00 - 4.99	49.36	-3.33	-4.69	-5.59	-3.26
	5.00 - 5.99	56.99	-4.78	-3.74	-3.27	-4.43
	6.00 - above	58.48	-5.58	-6.41	-1.55	-0.60
	required amount		12.5	35.0	97.5	40.0
	0 - 1.99	16.22	-1.78	-1.79	-0.97	-0.67
	2.00 - 2.99	25.54	-2.30	-3.67	-2.31	-0.92
	3.00 - 3.99	27.18	-2.65	-2.39	-1.32	-0.72
	4.00 - 4.99	49.36	-3.33	-4.69	-5.59	-3.26
	5.00 - 5.99	56.99	-4.78	-3.74	-3.27	-4.43
	6.00 - above	58.48	-5.58	-6.41	-1.55	-0.60
	required amount		12.5	35.0	97.5	40.0
	0 - 1.99	16.22	-1.78	-1.79	-0.97	-0.67
	2.00 - 2.99	25.54	-2.30	-3.67	-2.31	-0.92
	3.00 - 3.99	27.18	-2.65	-2.39	-1.32	-0.72
	4.00 - 4.99	49.36	-3.33	-4.69	-5.59	-3.26
	5.00 - 5.99	56.99	-4.78	-3.74	-3.27	-4.43
	6.00 - above	58.48	-5.58	-6.41	-1.55	-0.60

NUTRIENTS	Consumption Per Capita	Intercept A	Regression Coefficient for			Adults	Elasticity R ²
			age 1-6	age 9-12	age 13-26		
Calcium	required amount		1.0	1.1	1.25	7.0	
	0 - 1.99	0.52	-0.07	-0.03	0.02	0.04	0.08
	2.00 - 2.99	0.61	-0.06	-0.04	-0.06	0.001	0.09
	3.00 - 3.99	0.54	-0.05	0.01	-0.06	0.02	0.13
	4.00 - 4.99	0.66	-0.03	-0.05	-0.05	0.001	0.09
	5.00 - 5.99	0.71	0.01	-0.10	-0.002	-0.04	0.29
	6.00 - above	0.69	-0.02	-0.05	-0.01	-0.02	0.16
Iron	required amount		5.0	5.0	9.5	8.0	
	0 - 1.99	11.42	-1.34	-0.65	0.04	0.39	0.23
	2.00 - 2.99	15.63	-1.35	-1.29	-0.67	-0.73	0.15
	3.00 - 3.99	18.59	-2.22	-0.34	-1.43	-0.85	0.31
	4.00 - 4.99	16.72	-1.36	-0.68	-1.12	-0.72	0.45
	5.00 - 5.99	16.74	-0.83	-0.85	0.27	-0.91	0.17
	6.00 - above	17.72	-0.65	-1.55	0.41	-0.30	0.25
Thiamine	required amount		0.5	0.9	1.25	1.5	
	0 - 1.99	1.12	-0.13	-0.12	-0.08	0.01	0.19
	2.00 - 2.99	0.90	-0.04	-0.003	-0.04	0.02	0.03
	3.00 - 3.99	1.00	-0.06	0.00005	0.04	-0.02	0.06
	4.00 - 4.99	0.99	-0.05	-0.05	0.04	0.03	0.07
	5.00 - 5.99	0.73	-0.05	0.02	0.12	0.03	0.09
	6.00 - above	1.00	-0.05	-0.02	-0.004	0.005	0.10
Riboflavin	required amount		1.0	1.5	1.8	1.25	
	0 - 1.99	0.54	-0.05	-0.06	0.01	0.005	0.17
	2.00 - 2.99	0.87	-0.07	-0.11	-0.05	-0.05	0.15
	3.00 - 3.99	0.73	-0.06	-0.03	-0.04	-0.01	0.20

NUTRIENTS	Consumption : Per Capita :	Intercept : A :	Regression Coefficient for			Adults :	Elasticity R ² :
			Number in age 1-6 :	Number in age 9-12 :	Number in age 13-26 :		
Riboflavin	4.00 - 4.99	1.02	-0.06	-0.09	-0.06	-0.05	0.39
	5.00 - 5.99	1.03	-0.05	-0.05	-0.03	-0.05	0.14
	6.00 - above	1.11	-0.06	-0.11	-0.01	-0.03	0.43
Niacin	required amount		5.0	19.0	12.5	15.0	
	0 - 1.99	21.02	-3.19	-2.07	-2.16	-0.75	0.43
	2.00 - 2.99	22.43	-2.14	-0.70	-1.24	-1.23	0.26
	3.00 - 3.99	25.54	-2.62	-0.95	-1.33	-0.95	0.34
	4.00 - 4.99	24.36	-2.03	-1.13	-0.25	-0.20	0.29
	5.00 - 5.99	19.64	-0.90	-0.96	0.49	0.10	0.16
	6.00 - above	24.07	-1.31	-0.91	-0.36	-0.35	0.24
Ascorbic	required amount		42.0	67.5	87.5	76.5	
	0 - 1.99	47.68	-0.84	2.22	16.45	5.54	0.07
	2.00 - 2.99	39.88	30.47	-37.41	-13.98	18.54	0.03
	3.00 - 3.99	86.77	-4.80	-4.45	-5.70	-6.44	0.07
	4.00 - 4.99	102.30	-6.12	-5.10	-6.72	-6.99	0.07
	5.00 - 5.99	123.01	-10.85	-5.53	-0.61	-9.86	0.23
	6.00 - above	137.42	-10.04	-15.59	-2.10	-4.56	0.26

The scatter plot displays the relationship between the number of species (Y-axis) and the number of individuals (X-axis). The Y-axis ranges from 50 to 110, and the X-axis ranges from 100 to 1000. The data points are scattered, with a notable cluster of points at low species counts (around 50-60) and low individual counts (around 100-200). A vertical line is drawn at approximately 100 individuals, and a horizontal line is drawn at approximately 60 species.

1944

PROTEIN RATINGS

160

140

120

100

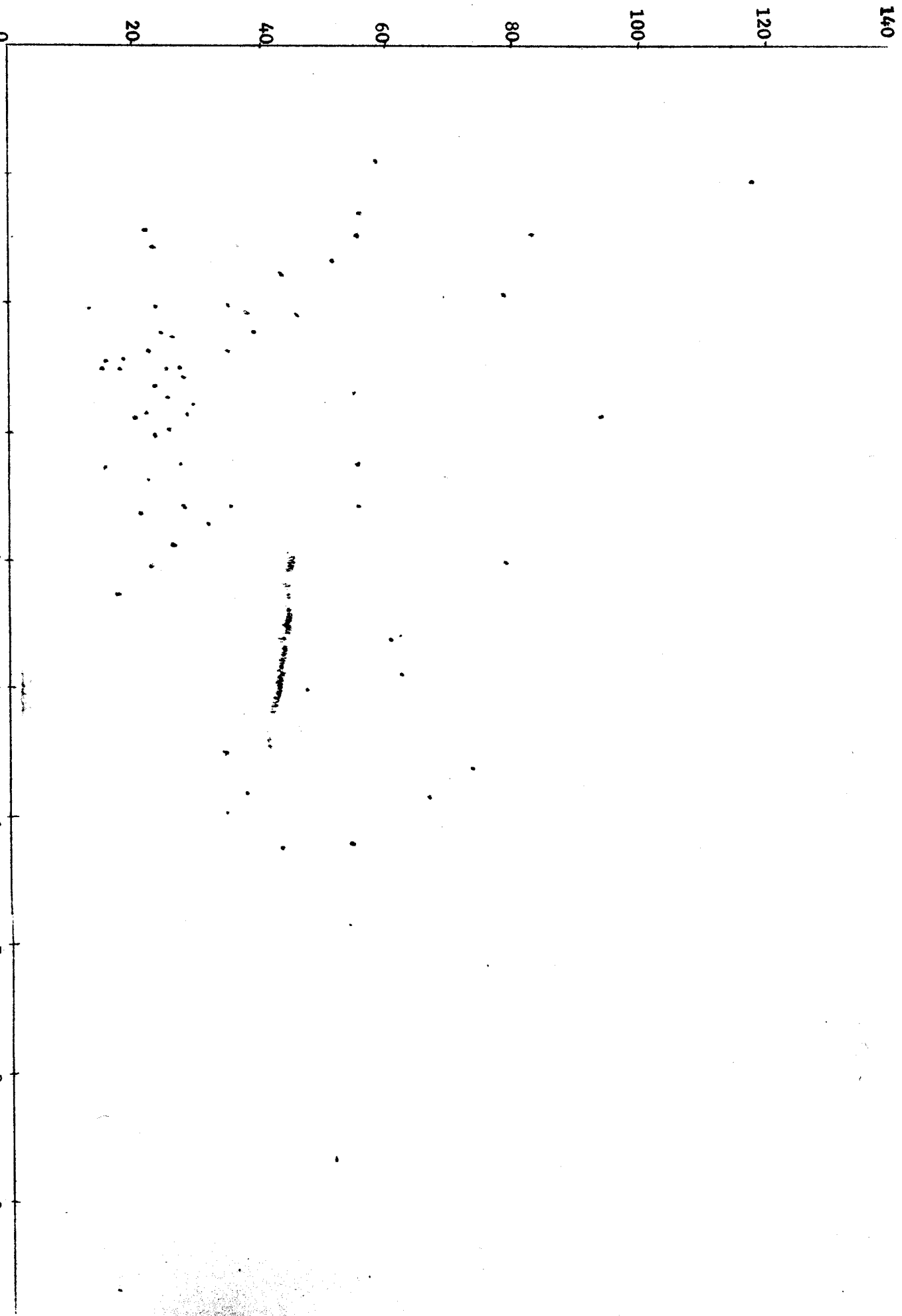
80

60

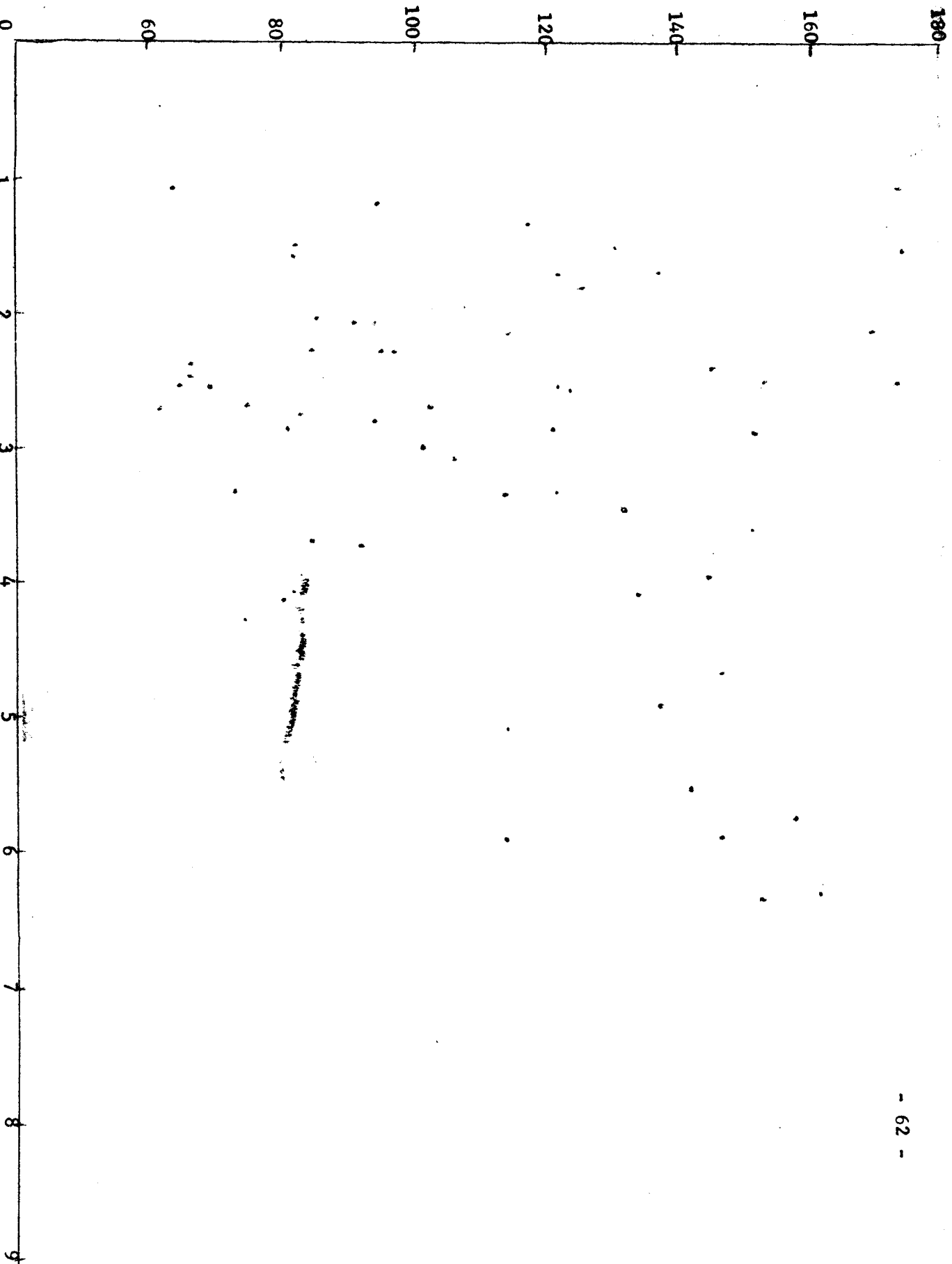
40



CALCIUM RATINGS



IRON RATINGS





THIAMINE RATINGS

140

120

100

80

60

40

20

