

SOME STUDIES ON THE CONSUMPTION OF FOOD AND CLOTHING

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SUMMARY. The paper presents a study on the evaluation of the consumption standard for food and clothing including foot-wear. The standards of food consumption were appraised in terms of gross intake per capita per day and also in terms of the nutritional constituents like carbohydrate, fat, protein and total calories. The major emphasis has, however, been given to studying the relative changes in the standards of consumption along with the coefficients of sampling variation.

1. INTRODUCTION

1.1. An enquiry into the consumption of food and clothing was carried out in Calcutta in the year 1957 during the months of January to March. The reference period was taken as one calendar month previous to the date of enquiry for food and the preceding one year (January to December, 1956) for clothing. The households selected for this purpose were those which had once been surveyed during the months May to December in 1952. That survey was carried out in two independent sub-samples in a two-stage sampling design, census blocks being selected in the first stage with a probability proportionate to population. It was decided to conduct the present survey in two corresponding sub-samples, with identical households being surveyed a second time in 1957. In actual field work, it was found extremely difficult to contact the households covered in the earlier survey, as after a lapse of five years, a good many of them had shifted either to another part of the city or had left the city altogether. In some cases, the head of the household was changed, the size of the household having also considerably changed in the meantime. An extensive search was, however, made through the immediate neighbours to trace the original households at their new addresses, unless they had shifted outside the city limits. With all possible efforts, only 261 common households could be traced out of 384 households surveyed in 1952. For the rest, fresh households were selected from the same house or building, thus giving a total of 133 households not common to the 1952 enquiry. Thirtyseven of the common households, i.e., 14.2%, were found to have changed their residences within the city. The data cannot therefore be regarded as a truly random sample. The special feature of this somewhat non-random sample, namely, their "commonness" to the two different enquiries at an interval of five years, is also not rigorously correct. For, as already pointed out, the size and hence the composition of the households have sometimes changed. It must be admitted that on a purely theoretical viewpoint, no household, not even an individual person, can continue to remain identical at two different points of time. These limitations were, however, ignored, our main emphasis being to study the relative changes from year to year in households which are nominally identical, and the order of sampling variation, to which the different characters are subject.

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1.2. *Investigation scheme of the 1957 enquiry.* The city of Calcutta was split up arbitrarily in five compact investigational zones, in such a way that each zone contained approximately the same number of sample households. The survey was carried out by three teams, each team consisting of one inspector and five investigators. Three investigators, one from each team, worked daily in one of the zones, while each inspector had to cover all the five zones comprising the city. It may be mentioned here, that the total sample comprised of two independent sub-samples, census blocks representing the first stage units within which households were selected in the second stage. The field organisation, however, was not made to conform to this sub-sample scheme, all units belonging to two sub-samples taken together being allotted to the three teams in more or less equal proportions. As a result, the investigation teams cut across the sub-sample partition and three workers worked within each of the individual blocks.

1.3. *Representativeness of the 'common' households.* It will be interesting to review at the very outset as to how far the partial sample of common households represents the full sample of 394 households.

The distribution given in Table 1 below indicates that the average size of the common households was somewhat higher than that in the overall population. The percentage of the lowest size class in the common households is slightly higher than in the case of the general population.

TABLE 1. FREQUENCY DISTRIBUTION OF 'COMMON' HOUSEHOLDS AND ALL HOUSEHOLDS ACCORDING TO THEIR SIZE IN 1952

household size in 1952	number of households		percentage to total over all sizes of household	
	common	total	common	total
(1)	(2)	(3)	(4)	(5)
1	95	174	37	44
2	22	30	8	8
3	32	39	12	10
4	26	37	10	9
5	19	28	7	7
6	11	12	4	3
7	22	26	8	7
8	10	16	4	4
9	7	9	3	2
10	5	6	2	2
above 10	12	17	5	4
total	261	394	100	100
average household size	3.84	3.80		

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1.4. *Commonness of the common households.* It will be interesting here to examine how the household size changed since 1952 in those cases where the heads could be traced and contacted again in 1957. Table 2 below gives a two-way distribution of the 261 households according to their size in 1952 and 1957.

TABLE 2. FREQUENCY DISTRIBUTION OF COMMON HOUSEHOLDS BY THEIR SIZE AS IN THE YEAR 1957 AGAINST THE SAME IN 1952

size of households as in 1957	size of households as in 1952											
	1	2	3	4	5	6	7	8	9	10	above 10	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	67	6	-	4	2	-	-	-	-	-	-	79
2	13	8	2	1	2	1	3	-	-	-	-	30
3	3	2	10	3	1	-	1	1	-	-	-	21
4	3	4	7	7	2	2	1	-	-	-	-	26
5	-	1	6	4	4	-	2	-	1	-	-	19
6	2	-	3	4	3	4	3	-	-	-	-	20
7	3	-	2	3	2	4	5	3	1	1	-	24
8	1	-	-	-	-	-	2	8	-	2	2	10
9	-	-	-	-	1	-	-	4	2	1	-	8
10	2	-	-	-	1	-	-	-	-	-	-	4
above 10	1	1	2	-	1	-	1	1	4	2	7	20
total	95	22	32	26	19	11	22	10	7	5	12	261

It will be seen that only 116 cases out of a total of 261 lie over the diagonal line, i.e. the size of household remains stationary. The average size has, however, gone up in 1957, being 4.46 in 1957 against 3.94 in 1952. This includes domestic servants who were found to be 0.14 per household in 1957 against 0.12 in 1952.

Although the 'common' households are not strictly identical between the two years, the conversion of the household expenses into the per capita rates should, to a large extent, eliminate the effect of changes in the household size. It is expected, therefore, that the relative changes, studied hereafter on the basis of the common households only, would not be seriously affected.

2. CONSUMPTION OF FOOD

2.1. *Consumption of individual food items.* The usual procedure for estimating the consumption of food items is to go by the gross quantities procured by a household and to divide this by the size of household, assuming that the whole of the material is consumed. It is not easy to determine as to how much of the material is actually wasted. We may, however, express the total quantity either in terms of the gross material as procured or in terms of the net quantity after removing the non-edible portions. This section will deal with the gross quantities as it is, but in the subsequent sections, net nutritive contents available for consumption have been considered. Mean quantities consumed per capita per month in seers* of gross material as procured were computed for each item of food detailed in the schedule

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TABLE 3. AVERAGE RATES OF PER CAPITA CONSUMPTION PER MONTH FOR INDIVIDUAL FOOD ITEMS BOTH IN TERMS OF QUANTITIES AND AS CORRESPONDING COSTS, BASED ON RATES COMPUTED AT THE INDIVIDUAL HOUSEHOLD LEVEL

Item no.	name of items	units of quantity	monthly mean				
			per capita value in rupees		per capita quantity in seers		
			1952	1957	1952	1957	difference 1957-1952
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	cereals	sr.	8.45	8.60	13.48	15.25	1.77
2.	pulses	"	1.07	0.98	1.58	1.57	0.01
3.	oil	"	1.30	1.88	0.83	0.77	0.06
4.	potato	"	0.86	0.75	1.70	2.47	0.77
5.	leafy vegetable	"	—	0.40	—	2.02	2.02
6.	other vegetable	"	1.47	1.28	3.70	4.45	0.88
7.	fruits	no.	0.51	0.56	7.18	7.55	0.38
8.	grapes and nuts	sr.	—	0.03	—	0.01	0.01
9.	meat	"	0.61	0.86	0.27	0.34	0.07
10.	fish	"	1.77	1.88	0.75	1.04	0.29
11.	eggs	no.	0.11	0.21	0.81	1.98	1.17
12.	sugar, gur and candy	sr.	0.61	0.54	0.72	0.69	0.03
13.	salt	"	0.11	0.07	0.80	0.60	0.21
14.	spices	tola	0.45	0.57	22.68	23.83	0.97
15.	tea	cup	1.34	1.42	19.84	22.08	2.84
16.	ice	lb.	0.18	0.28	0.10	0.10	0.00
17.	coffee	cup	0.01	0.01	0.03	0.04	0.02
18.	coffee	lb.	0.01	0.01	0.00	0.00	0.00
19.	horlicks, ovaltine and other beverages	bot.	0.00	0.03	0.00	0.01	0.01
20.	biscuits and cakes	lb.	0.08	0.17	0.05	0.22	0.17
21.	namki, kachuri etc.	no.	0.09	0.23	1.95	3.93	1.98
22.	fuluri etc.	no.	0.00	0.08	0.18	4.55	4.27
23.	sweets	sr.	0.06	0.48	0.02	0.18	0.16
24.	other refreshments	"	0.06	0.03	0.03	0.02	0.02
25.	pickles, jam and jelly	lb.	—	0.02	—	0.01	0.01
26.	anare, vunoger and mustard	lb.	—	0.00	—	0.01	0.01
27.	others	—	—	—	—	—	—
28.	milk (fluid)	sr.	1.77	1.50	1.80	1.73	0.16
29.	milk (fluid)	sr.	1.77	1.50	1.80	1.73	0.16
29.	milk (condensed)	"	—	0.02	—	0.01	0.01
30.	milk (powdered)	"	0.00	0.03	0.00	0.01	0.01
31.	ghee	"	0.52	0.70	0.09	0.12	0.03
32.	butter and cheese	"	0.03	0.07	0.01	0.01	0.00
33.	cheese	"	—	0.00	—	0.00	0.00
34.	shahi	"	0.12	0.15	0.07	0.10	0.03
35.	other milk products	"	0.02	—	0.01	—	0.01
36.	pan	no.	0.38	0.42	48.93	41.09	7.84
37.	supari etc.	tola	0.09	0.15	2.89	2.87	0.18
38.	opium, gajja, siddhi	tola	0.03	0.13	0.00	0.02	0.01
39.	liquor	plnt	0.06	0.00	0.04	0.11	0.07
40.	biri	no.	0.78	0.80	121.09	92.65	29.04
41.	cigarette	no.	0.24	0.31	7.06	10.21	3.14
42.	other tobacco	sr.	0.14	0.06	0.03	0.04	0.01
43.	coal, coke, charcoal	"	0.89	1.03	17.71	18.52	0.81
44.	dung-ake	no.	0.13	0.20	34.33	60.68	25.34
46.	firewood	sr.	0.74	0.32	10.35	5.15	5.20
46.	electricity and gas	std.	0.49	0.58	2.84	2.64	0.20
47.	kerosene and spirit	sr.	0.28	0.26	0.06	0.02	0.03
48.	matches	box	0.13	0.12	2.43	2.94	0.51
49.	others	sr.	0.00	0.00	0.02	0.08	0.06

* 1 seer = 80 tolas = 32.9102 oz. = 933.1040 grms.

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in individual households both for the year 1952 as well as for 1957. Mean quantities in seers along with mean expenditures in rupees per capita per month averaged over all the households, relating to 49 broad items of food, have been given in columns (4)-(7) of Table 3. The differences in the quantities consumed per capita per month have been given in column (8) of the same Table. For most of the items, consumption per capita is higher, giving positive differences in column (8). The fall in the consumption rate of salt is, however, somewhat suspicious, and throws doubt on the accuracy of ascertainment.

2.2. *Sub-sample estimates.* It will be interesting here to compare the separate estimates for a number of selected food items based on the two independent sub-samples constituting the full sample. Table 4 below gives the average rates of quantities consumed for each of the seven selected items by sub-samples along with their coefficients of variation. In estimating, the sample of common households has been treated as an unistage sample, although the sample is actually a two-stage one with blocks in the first stage. This has been done uniformly everywhere in order to save labour, as a more rigorous procedure did not seem to be worth while for a sample which was already vitiated by a casualty of about 33%.

TABLE 4. SUB-SAMPLE ESTIMATES OF THE AVERAGE OF PER CAPITA CONSUMPTION RATES BASED ON INDIVIDUAL HOUSEHOLDS FOR DIFFERENT ITEM GROUPS ALONG WITH THEIR COEFFICIENTS OF VARIATION

items	year 1952			year 1957		
	s.s. 1 (n=136)	s.s. 2 (n=126)	total (n=261)	s.s. 1 (n=136)	s.s. 2 (n=126)	total (n=261)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
(a) quantities in seers per capita per month						
1. cereals	12.63	14.40	13.47	14.81	15.72	15.25
2. pulses	1.30	1.75	1.55	1.51	1.64	1.57
3. oil	0.78	0.89	0.83	0.77	0.77	0.77
4. potato	1.38	1.90	1.63	2.57	2.30	2.47
5. fish	0.89	0.82	0.75	0.97	1.13	1.04
6. sugar-gur	0.66	0.78	0.72	0.69	0.69	0.69
7. milk (fluid)	1.63	2.17	1.89	1.75	1.70	1.72
(b) coefficients of variation						
1. cereals	28	29	29	33	29	31
2. pulses	55	62	61	93	60	78
3. oil	55	55	55	70	60	65
4. potato	89	79	78	78	66	70
5. fish	84	102	95	98	104	102
6. sugar-gur	95	92	94	94	96	94
7. milk (fluid)	182	163	172	169	171	169

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The coefficients of variation, which are of great interest, for purposes of the present study, are fairly consistent between the sub-sample estimates of each year as well as between the over-all estimates of the two years.

2.3. *Average quantities consumed for a few selected items by expenditure levels.* Average quantities consumed per capita per month were also worked out for the seven selected items of food in each of the two years, classified under five expenditure levels. Obviously, the households belonging to a particular expenditure level in 1952, may not have continued to remain at the same level in 1957. The classifications have, however, been made according to the per capita levels of expenditure per month as in the year 1952. These have been given in Table 5.

TABLE 5. AVERAGE OF THE PER CAPITA CONSUMPTION RATES IN INDIVIDUAL HOUSEHOLDS FOR DIFFERENT ITEM GROUPS BY EXPENDITURE LEVELS OF YEAR 1952

per capita expenditure in rupees per month (as in 1952)	number of households	consumption in score per capita per month						
		cereals	pulses	oil	potato	fish	sugar-gar	milk (fluid)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
year 1952								
Rs. 10-14	13	8.81	0.63	0.29	0.37	0.10	0.32	0.09
15-29	78	11.79	1.14	0.90	0.94	0.49	0.48	0.57
30-59	131	14.43	1.86	0.93	1.66	0.79	0.89	1.56
60-99	27	15.06	1.66	1.16	2.43	1.47	1.49	6.07
100-above	12	15.53	2.03	1.09	3.16	1.01	1.23	6.99
total	261	13.47	1.56	0.83	1.63	0.75	0.72	1.80
year 1957								
Rs. 10-14	18	14.11	1.02	0.54	2.45	0.83	0.36	0.49
15-29	78	14.05	1.34	0.68	1.98	0.79	0.57	1.28
30-59	131	16.23	1.81	0.76	2.55	1.03	0.70	1.40
60-99	27	15.44	1.38	1.05	3.35	1.72	0.93	4.20
100-above	12	18.10	1.55	1.12	2.80	1.58	1.25	3.02
total	261	15.25	1.57	0.77	2.47	1.04	0.69	1.73

It will be seen that the per capita rates of consumption for most of the items increase with an increase in the per capita level of total expenditure in both the years, while the over-all rates of consumption are not substantially different between these years except for cereals, potato and fish.

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2.4. *Distribution of the changes of the consumption rates in individual households.* Table 6 below gives the frequency distributions of the differences of the consumption rates in individual households for each of the seven selected items.

TABLE 6. FREQUENCY DISTRIBUTION OF HOUSEHOLDS BY CHANGES IN THE PER CAPITA MONTHLY RATES OF CONSUMPTION, 1957 MINUS 1952

differences in per capita per month in aere	number of households			differences in per capita per month in aere	number of households			
	cereals	potato	milk (fluid)		oil	fish	pulses	sugar-gur
(1.1)	(1.2)	(1.3)	(1.4)	(2.1)	(2.2)	(2.3)	(2.4)	(2.5)
0.0—0.0	—	—	89	0.0—0.0	—	21	—	20
below —7.5	8	1	7	below —3.0	—	—	3	3
—7.5 to —6.5	9	—	9	—3.0 to —2.6	2	—	1	1
—6.5 to —5.5	6	—	1	—2.6 to —2.2	1	—	2	1
—5.5 to —4.5	9	—	4	—2.2 to —1.8	—	2	4	—
—4.5 to —3.5	9	—	6	—1.8 to —1.4	—	2	9	3
—3.5 to —2.5	12	5	4	—1.4 to —1.0	7	6	13	11
—2.5 to —1.5	15	12	15	—1.0 to —0.6	25	22	37	35
—1.5 to —0.5	17	34	29	—0.6 to —0.2	65	47	35	55
—0.5 to +0.5	21	65	27	—0.2 to +0.2	88	52	57	65
+0.5 to +1.5	19	65	31	+0.2 to +0.6	48	38	38	54
+1.5 to +2.5	31	34	13	+0.6 to +1.0	16	26	25	19
+2.5 to +3.5	27	25	5	+1.0 to +1.4	6	11	17	17
+3.5 to +4.5	18	9	7	+1.4 to +1.8	2	12	10	3
+4.5 to +5.5	15	5	3	+1.8 to +2.2	1	10	2	1
+5.5 to +6.5	18	3	—	+2.2 to +2.6	—	5	3	—
+6.5 to +7.5	4	1	3	+2.6 to +3.0	1	1	2	4
+7.5 and above	29	3	8	+3.0 and above	—	5	2	—
total	261	261	261	total	261	261	261	261
mean difference	+1.78	+0.84	—0.16	mean difference	—0.06	+0.29	+0.01	—0.03

The distributions are more or less symmetrical in all the groups (except for cereals), resulting in relatively small positive or negative mean differences, which are given at the foot of the table. It may, however, be noted that milk was not returned in 89 households, fish was not returned in 21 households and sugar or gur was not returned in 20 households in either of the year for the month under reference.

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2.5. *Relative cost of total food in 1957 compared to that in 1952.* An Index of the total food expenses for the year 1957 has also been worked out on the basis of these common households, with 1952 as the base. Single ratios were computed for units of varying size as

$$\frac{1}{k} \sum_i \left[\frac{1}{j} \sum_l \frac{1}{t} V_{ijl}^r(57) \right] / \sum_j \left[\frac{1}{t} \sum_l V_{ijl}(52) \right]$$

where, $V_{ijl}^r(57)$ = cost of the i -th item of food in the j -th household of k -th unit, calculated on the basis of quantities consumed in 1952, but valued as 1957 prices, and $V_{ijl}(52)$ is the corresponding cost in the base year 1952. The group of common households constituting an unit were selected by splitting the total sample in the sequence of original selection, and changes in household size during the interval of five years, were ignored. As the total number of households was 261, the last unit in all the sizes was incomplete, i.e., short of the full size. The individual ratios were then averaged over all the units and thus an over-all average index was arrived at.

Table 7 below gives the average indices based on units of 1 household, 5 households, 10 households, 25 households and 50 households, by sub-samples along with their coefficients of variation. Values of the mean indices indicate that there is practically no bias even with a size of unit as small as five households. Mean indices based on individual households reveal however a slightly under-estimating tendency. From columns. (8)-(10) it will be seen that the order of variation is about 23% which means that a sample of about 500 households is required for estimating the index with an error of 1%. The fall of C.V. with an increase in the size of sample appears to be normal.

TABLE 7. MEAN AND C.V. OF $\sum V(57)/\sum V(52)$ BASED ON DIFFERENT SIZES OF UNIT COMPOSED OF VARYING NUMBER OF HOUSEHOLDS (RANDOM AND NOT CLUSTERED) SEPARATELY BY TWO SUB-SAMPLES

size of unit in groups of random households	n			mean			c.v.		
	s.a. 1	s.a. 2	combined	s.a. 1	s.a. 2	combined	s.a. 1	s.a. 2	combined
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
individual household	136	126	261	0.87	0.89	0.88	19.54	25.84	22.93
groups of 5 households	27	25	52	0.93	0.97	0.95	9.68	7.22	8.42
groups of 10 households	14	13	27	0.92	0.98	0.95	6.52	6.10	6.32
groups of 25 households	6	5	11	0.93	0.98	0.95	4.30	5.10	5.26
groups of 50 households	3	3	6	0.93	0.99	0.96	—	—	—
all of the 261 households	1	1	2	0.93	-0.99	0.96	—	—	—
blocks, with an average of 0.3 households*	—	—	28	—	—	0.97	—	—	10.31

*Census blocks used as first stage sampling units.

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Ovbioualy, it would have been still more useful if units comprising of clusters of adjoining households could be sampled and the coefficients of variation with varying sizes of such clusters could be studied. Ignoring, however, the scatter of the second stage units (households) within the census blocks selected in the first stage, it is possible to get an approximate idea about the behaviour of household clusters from the variability of the block indices. The number of households per block unit, however, varies, the average being about 9.3 per block. The results are given at the foot of Table 7. A study of the enumeration cost of household clusters of different sizes would be really interesting.

2.6. *Two-stage analysis of variance for the relative index of food costs.* It may be noted that the coefficients of variation furnished in the earlier tables were calculated on the basis of an unistage sampling, although in fact the sampling was done in two stages, namely, with census blocks in the first stage and with households as the second an ultimate stage.

The relative cost indices, worked out at the individual household level, were treated as the basic elements of a two-stage sampling scheme and the analysis of variance into the two-stage components was made. The results are given in Table 8 below.

TABLE 8. ANALYSIS OF VARIANCE OF THE HOUSEHOLD INDICES OF RELATIVE COST FOR FOOD INTO THEIR STAGE COMPONENTS

stages	d.f.	variance	ratio <i>F</i>
(1)	(2)	(3)	(4)
between blocks	27	0.1411	1.52
within blocks	233	0.0928	
total between households	260	0.0978	—

It will be seen that the ratio of variances due to blocks to the same within blocks is not significant. The approximation made in treating the two-stage sample as an unistage one is therefore justified.

3. NUTRITIONAL STANDARDS OF FOOD INTAKE

3.1. *Evaluation procedure.* The rates of consumption of gross food, i.e. quantities as purchased, have been discussed in the earlier sections. In order to assess the net values of food in terms of their nutritional contents, we have first to convert the gross quantities as purchased to the net edible contents after peeling and throwing away the refuse, in a condition suitable for cooking or for direct intake without cooking. The proportion of edible quantity out of gross quantities as purchased from the market was ascertained from the *Food Composition Tables* published by the Food and Agricultural Organization of the United Nations. This publication, however, did not cover

some of the vegetable items returned by the schedules. A type study on a small sample of households had therefore to be carried out to ascertain the percentage of edible contents for a number of such items. Seven typical households belonging to different expenditure classes were selected for the purpose, and weights of the gross quantities as purchased and of the net quantities obtained after peelings were recorded. The relevant data are given in Table A.1 in the Appendix.

For a number of items, namely, eggs, and some of the fruits even gross quantities as such were not directly available. The returns were obtained in terms of the number of articles. In order to obtain the gross quantities per unit of such items, a special enquiry was carried out in several important markets of the city. Samples of the items were picked up from different stalls in the market and weighed out by our investigators on the spot. Besides, each such item was classified under small and big varieties, and two samples taken from each. The average weights per unit of each variety then pooled up, being weighted by an eye-estimated proportion of total stock under each variety. The whole sample was repeated by two independent observers from the same markets, but in different stalls. The results are given in Table A.2 in the Appendix.

For some of the prepared items like meat preparations, fries and sweets, the composition of constituents was roughly ascertained in consultation with a number of shops dealing in such commodities. These are given in Table A.3 in the Appendix.

Finally, the nutritive contents, in terms of carbohydrate, protein, fat and calories, were worked out on the basis of several publications, viz. (i) The Nutritive value of Indian Foods and the Planning of Satisfactory Diets (*Health Bulletin No. 23*) by Dr. W. R. Aykroyd, (ii) *Food Composition Tables* by the Food and Agricultural Organisation of the United Nations and (iii) *Manual of Nutrition* (1945) by the Ministry of Food, England. The extended chart compiled for this purpose has been given in Table A.4 in the Appendix along with the percentage of edible contents (to gross quantities as purchased) compiled from the different sources as given in column (3).

Using the factors given in this chart, the quantities were evaluated in terms of their nutritional contents and added over all the items. Protein and fat were, however, split up and estimated in two sub-components, namely, of animal and non-animal origin. The superiority of animal protein or animal fat to that of non-animal origin is largely admitted by nutritional authorities all over the world. In fact, most of them recommend a balanced combination of these nutrients from animal and non-animal sources.

3.2. *Intake of the basic nutrients by sub-samples in each of the two years.*
Table 9 below gives the sub-samplewise estimates of the average 'intake' of the basic nutrients per capita per day in each of the years.

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TABLE 9. PER CAPITA PER DAY INTAKE OF THE BASIC NUTRIENTS IN OUNCES AND THE CORRESPONDING NUMBER OF CALORIES BY SUB-SAMPLES

nutritional content	unit	year 1952			year 1957		
		s.s. 1 (n=138)	s.s. 2 (n=126)	total (n=261)	s.s. 1 (n=180)	s.s. 2 (n=122)	total (n=261)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. protein:							
animal	oz.	0.35	0.38	0.37	0.46	0.44	0.45
non-animal	oz.	4.04	4.56	4.30	4.50	4.50	4.55
total		4.39	4.94	4.67	4.96	5.04	5.00
2. fat:							
animal	oz.	0.74	0.63	0.69	0.53	0.86	0.69
non-animal	oz.	2.68	2.98	2.83	3.55	3.38	3.52
total		3.42	3.61	3.52	4.18	4.24	4.21
3. carbohydrate	oz.	21.08	25.80	23.69	24.90	26.47	26.18
4. calories	no.	2071	2385	2218	2315	2415	2364

The agreement between the two sub-sample estimates in both the years is satisfactory. A small increase in the intake of non-animal fat over that of 1952 is to be noticed in 1957, while the increase in the consumption of carbohydrate is about 8%.

3.3. *Intake of the basic nutrients by different expenditure classes.* Table 10 below gives the daily per capita intake of the basic nutrients separately in each expenditure class for each of the two years. It will be seen that the higher expenditure classes consume not only more of proteins and fats both of animal and non-animal origin, but they also consume a much larger quantity of the carbohydrates. The total calorific value in the daily diet of the upper expenditure groups is more than double in comparison to the lowest expenditure group. The proportion of animal protein to total protein-increases from a bare 1.8% in the lowest expenditure group to as high as 12.3% in the highest group. The proportion of animal fat ranges likewise from 0.8% to 24.0%. It should be noted, however, that these quantities represent the theoretically available contents computed on the basis of gross purchases. A considerable proportion of the quantities must have been lost to the consumer through wastages, feeding of pet animals and charities, the exact magnitude of which has not yet been studied. It is believed that such wastage and other disposals would be higher in the upper expenditure classes. The results may therefore be considered to be over-estimates of quantities actually consumed. On the other hand, the servants in upper class family may not have consumed the various items in the same proportions as the basic members themselves, whose consumptions on this account are therefore likely to be higher.

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TABLE 10. PER CAPITA PER DAY INTAKE OF THE BASIC NUTRIENTS IN OUNCES AND THE CORRESPONDING NUMBER OF CALORIES IN DIFFERENT EXPENDITURE CLASSES

nutritional contents	unit	expenditure class in rupees per capita per month					
		10-14 (n=18)	15-29 (n=78)	30-59 (n=131)	60-99 (n=27)	100 and above (n=12)	total (n=261)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
year: 1952							
1. protein:							
animal	oz.	0.04	0.13	0.32	0.86	0.70	0.37
non-animal	oz.	2.54	3.46	4.79	5.81	4.89	4.30
total		2.58	3.59	5.11	6.47	5.59	4.67
2. fat:							
animal	oz.	0.01	0.09	0.27	1.11	1.98	0.69
non-animal	oz.	1.24	2.14	3.18	3.90	3.65	2.83
total		1.25	2.23	3.45	5.01	5.64	3.52
3. carbohydrate	oz.	14.45	18.64	25.76	30.98	28.62	23.69
4. calories	no.	1286	1644	2210	2693	3257	2218
year: 1957							
1. protein:							
animal	oz.	0.06	0.18	0.46	0.64	0.89	0.45
non-animal	oz.	2.24	3.36	4.88	5.87	6.38	4.65
total		2.30	3.52	5.34	6.51	7.27	5.00
2. fat:							
animal	oz.	0.02	0.12	0.54	1.08	1.70	0.69
non-animal	oz.	1.37	2.30	3.67	4.84	5.40	3.52
total		1.39	2.42	4.21	5.92	7.10	4.21
3. carbohydrate	oz.	13.98	19.78	26.38	32.24	33.54	26.18
4. calories	no.	1375	1861	2422	2928	3233	2364

4. STANDARDS OF CONSUMPTION FOR CLOTHING AND FOOT WEAR

4.1. *The enquiry in 1957.* Along with the consumption of food items, the enquiry in 1957 covered also the annual consumption, i.e., annual purchases, of clothings and foot-wears. Thus, for a sample of 261 households which were surveyed earlier in 1952, data relating to the consumption of clothings and foot-wears were available for 1951-52 as well as 1956.

In the year 1957, the number of each type of garments purchased during the year 1956 was ascertained against each individual member. To convert these into the corresponding quantities in square yards, a number of city tailors were consulted and on the basis of informations received, a standard chart giving the age-specific requirement of piece-cloth to make each kind of garment was drawn up, as given in Table A.5 in the Appendix (O).

The consumption data collected in the present enquiry were tabulated and the average number of pieces for clothing (including pairs of foot-wear) with the corresponding square yards of piece-cloth per wearer by age-groups and sex was worked out for every type of garment, made of cotton, silk or wool. These are given in

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Table A.6 in the Appendix. In arriving at the square yards for cloth from the number of pieces, the factors given in Table A.5 in the Appendix have been used. Mean quantities of cloth in square yards per capita (all persons using the garment or not) have also been summarised in Table 11 which gives the age-sex specific requirements of total clothings in cotton, silk or wool along with the number of total pairs of foot-wears.

TABLE 11. NUMBER OF PERSONS AND PER CAPITA (ALL PERSONS)
CONSUMPTION OF CLOTHINGS AND FOOT-WEARS IN THE SURVEY
YEAR 1957 BY AGE-GROUP AND SEX

age group in years	number of persons	per capita consumption			
		cotton clothing in sq. yards	silk clothing in sq. yards	woollen clothing in sq. yards	shoes and sandals in pairs
(1)	(2)	(3)	(4)	(5)	(6)
male					
0 - 2	45	3.67	—	0.06	0.40
3 - 4	27	4.54	0.06	0.11	0.59
5 - 6	20	6.46	—	0.19	0.85
7 - 9	41	8.50	0.03	0.22	1.00
10 - 12	45	0.04	—	0.09	0.80
13 - 16	47	14.78	—	0.31	0.96
17 - 20	50	27.75	0.07	0.52	1.02
21 - 30	140	29.88	0.09	0.56	1.04
31 - 40	90	35.03	0.08	0.63	1.00
41 - 50	75	38.00	0.27	0.64	1.53
51 and above	87	31.22	0.10	0.67	0.85
total	677	23.93	0.08	0.45	0.95
female					
0 - 2	36	2.03	0.07	0.07	0.28
3 - 4	27	3.73	—	0.18	0.48
5 - 6	31	5.75	0.13	0.17	0.52
7 - 9	33	5.45	0.16	0.22	0.48
10 - 12	29	0.93	0.14	0.04	0.93
13 - 16	36	26.37	0.47	0.03	0.67
17 - 20	45	30.57	1.71	0.15	0.72
21 - 30	97	37.68	1.75	0.32	0.81
31 - 40	62	29.90	0.52	0.02	0.25
41 - 50	49	38.60	2.47	0.18	0.45
51 and above	22	22.61	0.06	0.13	0.21
total	508	23.60	0.87	0.15	0.49
total					
0 - 2	81	2.96	0.03	0.07	0.36
3 - 4	64	4.20	0.03	0.14	0.55
5 - 6	51	6.02	0.06	0.18	0.65
7 - 9	74	7.14	0.09	0.21	0.77
10 - 12	74	9.42	0.05	0.07	0.73
13 - 16	83	19.70	0.21	0.19	0.83
17 - 20	95	29.10	0.88	0.34	0.88
21 - 30	237	33.07	0.78	0.46	0.86
31 - 40	152	32.04	0.20	0.38	0.70
41 - 50	124	36.23	1.14	0.45	1.10
51 and above	140	27.73	0.09	0.45	0.58
total	1185	23.70	0.42	0.33	0.76

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4.2. *Number of dhotis and saris in stock.* Data were also collected regarding stock in hand of dhotis and saris acquired by purchases at different periods in respect of each individual member of the household. The following results give the number of persons belonging to the different expenditure classes who possessed dhotis and saris in stock purchased within the last 3 months, between 3-12 months and prior to the last 12 months.

TABLE 12. NUMBER OF PERSONS WITH DHOTIS AND SARIS IN STOCK, PURCHASED WITHIN LAST 3 MONTHS, BETWEEN 3-12 MONTHS OR PRIOR TO LAST 12 MONTHS

expenditure levels	total persons in the sample	frequency of persons with dhotis and saris in stock			percentages of persons with dhotis and saris in stock to total persons in the expenditure class		
		purchased within last 3 months	purchased between 3-12 months	purchased prior to last 12 months	purchased within last 3 months	purchased between 3-12 months	purchased prior to last 12 months
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Ra. 10 - 14	90	8	28	21	8.9	31.1	23.3
15 - 29	586	140	328	207	23.9	56.6	35.3
30 - 59	380	141	273	176	37.1	71.8	46.3
60 - 99	94	37	61	34	39.4	64.9	36.2
100 and above	35	20	32	21	57.1	91.4	60.0
total	1185	348	720	469	29.2	60.8	38.7

Table 13 below gives the distribution of persons by the number of dhotis or saris in stock acquired by purchases made at different periods. The total number of pieces purchased at different times and their respective percentages to the total number now in stock have been given at the foot of the table. It will be seen that while 64% is purchased within the year, a balance of 36% represents the number purchased beyond one year.

4.3. *The enquiry in 1952.* In the earlier survey over May to December in 1952, the number of shirts, coats etc., purchased during one year preceding the date of enquiry was ascertained for the household as a whole, and not by individual members. For garments like dhotis, saris etc., the quantities were returned in linear yards, assuming that the breadth would be more or less a standard one.

To convert the number of shirts, coats etc., into the corresponding square yards, information collected in 1957 was utilised. A weighted average of the standard requirements of cloth per piece of garment over persons of all ages in the 1952 sample was computed for each type of garment, as $\bar{x} = \sum(n_i x_i) / \sum n_i$, where

n_i = number of pieces in i -th age-group,

x_i = standard requirement of square yards per piece of garment for the i -th age-group, vide Appendix Table A. 5

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TABLE 13. FREQUENCY DISTRIBUTION OF PERSONS HAVING DHOTIS AND SARIS IN STOCK ACQUIRED BY PURCHASES AT DIFFERENT PERIODS BY THE NUMBER OF PIECES PURCHASED

number of dhotis or saris	frequency of persons with dhotis and saris in stock purchased			total number of pieces in stock
	within last 3 months	between 3-12 months	prior to last 12 months	
(1)	(2)	(3)	(4)	(5)
1	224	148	138	505
2	97	290	149	1072
3	11	122	74	621
4	8	108	37	612
5	—	14	18	180
6	4	16	16	210
7	—	1	4	35
8	1	7	4	96
9	—	3	—	27
10	—	5	8	130
11	—	1	—	11
12	—	8	2	84
13	—	1	—	13
15	—	—	2	30
16	—	2	3	80
20	—	—	3	60
25	1	—	2	75
30	—	—	2	60
total persons	348	720	459	
total pieces in stock	640	1945	1398	3881
per cent to total stock	14%	50%	36%	100%

The number of garments like shirts, coats etc., was then converted into square yards on the basis of these weighted averages.

For dhotis, saris etc., where the linear yards only were reported in 1952, information regarding age-specific breadth was collected in 1957 from the tailoring house, and average breadth for garments of each type was worked out as $\bar{b} = \Sigma(n_i b_i) / \Sigma n_i$, where

n_i = number of pieces in the i -th age-group,

b_i = standard breadth of the items for the i -th age-group.

This average breadth multiplied with the linear yards returned against each type of garment gave the corresponding square yards to cloth.

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4.4. *Relative consumption for cloth and foot-wear in the survey years 1952 and 1957.* The data now converted into square yards for both the years were summarised and mean quantities purchased per capita in the year along with costs were obtained for the three major groups, namely, cotton, silk and wool. Foot-wear was likewise tabulated as the average number of all types per capita with the corresponding costs.

4.5. *Sub-sample estimates.* It may be remembered that the enquiries in both the years were made in two independent and interpenetrating sub-samples with two independent teams of field investigators. Table 14 below gives the sub-samplewise estimates for the major sub-totals both in terms of quantities as well as in rupees per capita for each of the two years.

TABLE 14. (a) MEAN QUANTITIES PURCHASED AND (b) THE CORRESPONDING COST IN RUPEES PER CAPITA ALONG WITH THE COEFFICIENTS OF VARIATION BY SUB-SAMPLES FOR BOTH THE YEARS

major item sub-totals	units	survey year 1952			survey year 1957		
		s.s. 1 (n=136)	s.s. 2 (n=126)	total (n=261)	s.s. 1 (n=136)	s.s. 2 (n=126)	total (n=261)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) quantities per capita							
cotton clothing	sq. yards	26.33	24.62	25.51	27.62	28.14	27.90
silk clothing	..	0.16	0.18	0.17	0.27	0.44	0.35
woollen clothing	..	0.11	0.10	0.11	0.44	0.41	0.43
foot-wear	number	0.58	0.61	0.59	0.83	0.94	0.88
(b) expenditure in rupees per capita							
cotton clothing	rupees	33.07	29.39	31.30	33.80	35.28	34.51
silk clothing	..	1.10	1.19	1.14	0.91	1.80	1.34
woollen clothing	..	1.09	1.17	1.13	3.00	3.33	3.19
foot-wear	..	4.41	5.01	4.70	5.39	5.83	5.60

It will be soon that the sub-sample estimates are on the whole in satisfactory agreement in each of the years. The major object for carrying out these studies was to obtain at least an approximate pattern of consumption and some knowledge regarding the variabilities of the different characters, which would be helpful for the planning of sampling schemes. The results obtained seem to have thrown considerable information towards this end.

4.6. *Consumption by expenditure levels.* Table 15 below gives the per capita quantities for the major groups of clothing and foot-wear under five different levels of household expenditure.

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TABLE 16. MEAN AND C.V. OF THE QUANTITIES PURCHASED PER CAPITA (ALL PERSONS) AS IN THE SURVEY YEARS 1952 AND 1957 BY DIFFERENT EXPENDITURE LEVELS OF HOUSEHOLDS

monthly per capita expenditure levels in rupees	mean		c.v.	
	1952	1957	1952	1957
(1)	(2)	(3)	(4)	(5)
<i>cotton clothings in sq. yards</i>				
Rs. 10 - 14	12.29	22.02	42	48
15 - 29	17.54	23.29	38	47
30 - 59	26.24	26.40	47	45
60 - 99	33.21	38.90	47	57
100 and above	40.02	55.63	40	48
total	25.51	27.90	54	57
<i>silk clothings in sq. yards</i>				
Rs. 10 - 14	—	0.10	—	350
15 - 29	—	0.11	—	345
30 - 59	0.14	0.18	414	444
60 - 99	0.73	0.77	182	245
100 and above	0.48	3.16	154	169
total	0.17	0.35	378	437
<i>woollen clothing in sq. yards</i>				
Rs. 10 - 14	—	0.22	—	255
15 - 29	0.01	0.28	600	400
30 - 59	0.07	0.43	529	249
60 - 99	0.51	0.70	214	179
100 and above	0.32	1.00	284	138
total	0.11	0.43	445	258
<i>foot-wears in number of pairs</i>				
Rs. 10 - 14	0.17	0.44	100	84
15 - 29	0.34	0.69	112	93
30 - 59	0.67	0.91	91	82
60 - 99	0.91	1.10	62	84
100 and above	1.17	1.86	28	63
total	0.69	0.88	97	90

The coefficients of variation in case of cotton clothing, as expected, are much smaller being of the order of 60%, while those for silk clothing and woollen clothing are very high being of the order of 400% and 250% respectively. The coefficient of variation for the number of foot-wears is much lower being of the order of 100%.

4.7. *Per capita quantities of consumption per month.* Per capita quantities in square yards for the individual clothing items and the average number for the foot-wear items were then computed for both the years with all expenditure levels combined. Table 16 gives the results for clothing and foot-wear itemised as below :

- (a) lower garments : (1) dhuti, sari etc., (2) lungi, payjama, trousers etc.
- (b) upper garments : (1) shirt, kurta etc., (2) coat, overcoat etc.
- (c) miscellaneous
- (d) foot wears : (1) sandals etc, (2) shoes etc.

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TABLE 16. MEAN AND Q.V. OF THE QUANTITIES PURCHASED PER CAPITA
(ALL PERSONS) AS IN THE SURVEY YEARS 1952 AND 1957
FOR INDIVIDUAL CLOTHING AND FOOT-WEAR ITEMS

item-groups	mean		c.v.	
	1952	1957	1952	1957
(1)	(2)	(3)	(4)	(5)
(a) cotton clothing in sq. yards				
dhuti, sari etc.	14.83	14.33	81	70
lungi etc.	2.26	3.81	129	118
shirt etc.	2.51	5.88	113	90
coat etc.	0.18	0.09	640	866
miscellaneous	5.76	3.79	120	166
total	25.51	27.90	84	67
(b) silk clothing in sq. yards				
dhuti, sari etc.	0.13	0.23	415	526
shirt etc.	—	0.08	—	488
miscellaneous	0.04	0.04	600	925
total	0.17	0.35	376	437
(c) woolen clothing in sq. yards				
trousers etc.	0.01	0.05	900	840
shirt etc.	0.03	0.09	533	378
coat etc.	0.01	0.08	1000	562
miscellaneous	0.06	0.21	683	367
total	0.11	0.43	445	258
(d) foot-wear in number of pairs				
sandals etc.	0.25	0.45	114	124
shoes etc.	0.34	0.43	126	116
total	0.59	0.88	97	90

The large differences between the consumptions of the two years may have been due to many factors. Of them, the most important one is likely to be the difference in the methods of ascertainment employed in the two years. In the earlier survey, the enquiry was made for the household as a whole, but in the survey of 1957, the data were collected in respect of each individual member and thus had a greater scope for deeper probing. The inaccuracies due to the application of approximate technological ratios, i.e., the requirements of piece-cloth per garment at different ages, may as well be responsible for some of the discrepancies. Above all, there is also a large sampling error as is apparent from the high coefficients of variation for most of the items.

4.8. *Relative cost of clothing and foot-wear in the survey year 1957 compared to that in 1952.* Similar to the treatment made in the section on food items, the relative costs for clothings were worked out on the basis of 1956 prices and on quantities as consumed in 1951-52. The results are given in Table 17.

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TABLE 17. MEAN INDEX OF CLOTHING COST, ESTIMATED AS AN AVERAGE OF INDICES COMPUTED AT THE LEVEL OF UNITS OF DIFFERENT SIZES

size of unit	n			mean			c.v.		
	s.s. 1	s.s. 2	total	s.s. 1	s.s. 2	total	s.s. 1	s.s. 2	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. individual households	136	125	261	0.85	0.91	0.88	34.1	38.5	36.4
2. five households	27	25	52	0.89	0.95	0.92	16.8	17.9	17.4
3. ten households	14	13	27	0.89	0.91	0.90	14.6	13.2	14.4
4. twenty-five households	6	5	11	0.89	0.94	0.92	7.9	9.8	8.7
5. fifty households	3	3	6	0.89	0.93	0.91	11.2	9.7	9.9
6. all households (130)	1	1	2	0.88	0.92	0.90	—	—	—
7. blocks, as an average of 9.3 households*	—	—	28	—	—	0.91	—	—	16.5

* Census blocks used as first stage units

It will be seen that the index of clothing cost has gone down in 1956 by 10%. The estimated mean indices exhibit no marked bias in relation to the size of units except with individual households which show some tendency of under estimation. The coefficients of variation are, however, somewhat higher than in the index of food cost, an estimate based on a sample of 25 households being subject to a margin of error of 8.7%. As in the case of the food cost index, an attempt has been made here to get an approximate idea of the mean and c.v. of indices based on household clusters, the first stage units, i.e. the census blocks with an average of 9.3 households in each, being treated as practically a cluster of households. The results are given at the foot of Table 17.

4.9 *Two-stage analysis of variance for the relative cost of clothing and foot-wear.* The variances of relative costs for clothing based on individual households have also been analysed into their two-stage components, namely, between blocks and within blocks between households. Similar to the food index, the block variances are not significant in relation to the 'within' component. The results are given in Table 18.

TABLE 18. ANALYSIS OF VARIANCE OF THE HOUSEHOLD INDICES OF RELATIVE COST FOR CLOTHING INTO THEIR STAGE COMPONENTS

stage	d.f.	variance	ratio
(1)	(2)	(3)	(4)
between blocks	27	0.2300	0.61
within blocks	233	0.3783	—
total between households	260	0.3610	—

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Appendix

TABLE A.1. PERCENTAGE OF EDIBLE WEIGHT TO GROSS WEIGHT AS PURCHASED FROM THE MARKET, FOR A FEW SELECTED VEGETABLES

Items	number of observations								percentage of edible weight to gross							
	h.h. 1	h.h. 2	h.h. 3	h.h. 4	h.h. 5	h.h. 6	h.h. 7	total (8)	h.h. 1	h.h. 2	h.h. 3	h.h. 4	h.h. 5	h.h. 6	h.h. 7	total (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. leafy vegetables	6	5	8	1	8	6	-	32	67	54	68	88	80	78	-	68
2. brinjal	0	1	3	2	1	2	7	23	90	93	84	90	82	90	90	90
3. kaobu	3	-	1	1	2	1	-	8	74	-	76	66	76	68	-	72
4. oohar	2	-	1	1	2	1	-	7	52	-	55	59	66	52	-	58
5. patal	2	2	5	6	3	1	1	20	84	84	83	86	89	87	95	87
6. jhinga	0	3	3	1	2	3	4	22	71	75	89	82	81	92	92	83
7. lady's finger	2	1	2	1	1	-	-	7	82	92	83	71	82	-	-	83
8. pan leaf	-	-	-	2	4	3	-	9	-	-	-	69	67	80	-	72

TABLE A.2. AVERAGE WEIGHT IN TOLAS PER UNIT OF SPECIFIED FOOD ITEMS, WEIGHTED IN DUE PROPORTION OVER BIG AND SMALL VARIETIES IN STOCK IN THE SELECTED MARKET STALLS

Items	total number of units weighed				weighted average in tolas per unit of items						
	College St. market		Hogg market		College St. market		Hogg market		combined		total
	obsr- ver 1	obsr- ver 2	obsr- ver 1	obsr- ver 2	obsr- ver 1	obsr- ver 2	obsr- ver 1	obsr- ver 2	obsr- ver 1	obsr- ver 2	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1. cauliflower	3	3	3	3	45.1	51.3	44.8	31.8	45.0	41.8	43.3
2. apple	10	10	10	10	12.4	10.9	13.0	9.2	12.7	10.1	11.4
3. banana	10	10	10	10	4.4	4.8	6.8	4.8	5.6	4.8	5.2
4. orange	10	10	10	10	8.5	9.2	5.6	9.8	7.0	9.4	8.2
5. lemon	10	10	10	10	2.5	2.5	2.2	2.8	2.3	2.7	2.5
6. mango	10	10	10	10	13.9	12.9	13.2	22.2	13.5	17.5	15.5
7. guava	10	10	10	10	10.3	9.9	-	6.9	10.3	8.4	9.3
8. coconut (green)	3	3	3	3	137.1	114.4	99.8	131.9	118.4	123.2	120.8
9. coconut (dry)	3	3	3	3	36.9	39.8	45.5	31.6	41.2	35.7	38.5
10. jack-fruit	3	3	3	3	583.8	613.2	147.0	-	365.7	613.2	489.5
11. pine apple	3	3	3	3	45.0	47.6	59.2	39.7	52.1	43.2	47.6
12. egg (bean)	10	10	10	10	3.0	3.0	2.8	-	2.9	3.0	3.0
13. egg (duck)	10	10	10	10	4.3	5.4	4.5	4.6	4.4	5.0	4.7
14. pan leaf	10	10	10	10	0.1	0.3	0.3	0.3	0.2	0.3	0.2

SOME STUDIES ON THE CONSUMPTION OF FOOD AND CLOTHING

TABLE A.3. APPROXIMATE WEIGHTS AND COMPOSITIONS OF CERTAIN PREPARED FOOD-STUFFS

item	weight (in tolas)	composition
(1)	(2)	(3)
1. meat chop, outlet, etc. (no.)	7.20	50% potato, 30% mutton and 20% oil.
2. fish chop, outlet, etc. (no.)	7.20	50% potato, 30% fish and 20% oil.
3. nimki, kachuri etc. (no.)	2.40	75% maids and 25% daida.
4. fuluri etc. (no.)	2.40	75% gram chatu and 25% oil.
5. sweets :-		
(a) chhana		70% chhana and 30% sugar.
(b) khos		80% khos and 20% sugar.
(c) maids etc.		70% maids and 30% sugar.
6. pan finished (no.)	0.30	75% pan leaf and 25 supari.

TABLE A.4. NUTRITIVE VALUES IN FOOD ITEMS AS PURCHASED

sri. no.	name of item	per cent of edible contents to 'gross' as purchased	unit	nutritive values per unit			
				protein (oz.)	fat (oz.)	carbo-hydrate (oz.)	calories (no.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	rice	—	sr.	2.40	0.16	25.54	3229
2.	chira	—	"	2.40	0.16	25.54	3229
3.	khal, lawa	—	"	2.47	0.03	24.46	3044
4.	muri	—	"	2.47	0.03	24.46	3044
5.	others	—	"	2.44	0.10	25.00	3136
6.	wheat ata	—	"	3.98	0.66	23.76	3276
7.	maids	—	"	3.62	0.30	24.39	3239
8.	leaf	—	"	3.01	0.46	15.99	2288
9.	others	—	"	3.74	0.39	24.18	3251
10.	jowar	—	"	3.42	0.63	24.38	3295
11.	bajra	—	"	3.82	1.66	22.09	3341
12.	maize	38*	"	1.39	0.46	8.28	1206
13.	maize ata	—	"	0.20	0.16	28.64	3296
14.	milleta	—	"	4.05	1.55	19.95	3100
15.	barley	—	"	3.79	0.43	22.81	3109
16.	gram	—	"	5.63	1.74	20.14	3360
17.	gram (powdered)	—	"	7.41	1.71	19.39	3452
18.	ragi	—	"	2.34	0.43	25.11	3202
19.	sago	—	"	0.07	0.07	28.67	3258
20.	others	—	"	2.37	0.66	21.02	2884

*Indicates figures based on Food Composition Tables (FAO Nutritional Studies, No. 11) by the Food and Agricultural Organisation of the United Nations in March, 1954.

**Indicates figures based on Purposive Sampling in Calcutta.

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TABLE A.4 (Contd.). NUTRITIVE VALUES IN FOOD ITEMS AS PURCHASED

ser. no.	name of item	per cent of edible contents to 'gross' as purchased	unit	nutritive values per unit			
				protein (oz.)	fat (oz.)	carbohydrate (oz.)	calories (no.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
21.	arhar	ar.	"	7.34	0.56	18.83	3090
22.	gram	—	"	7.41	1.71	19.39	3462
23.	moong	—	"	7.90	0.43	18.63	3100
24.	matar	—	"	8.28	0.23	19.85	3211
25.	khesari	—	"	9.28	0.20	19.09	3258
26.	matar, kalai etc.	—	"	7.21	0.33	19.12	3063
27.	others	—	"	8.88	1.37	17.68	3332
28.	mustard oil	—	sr.	—	32.91	—	8204
29.	coconut oil	—	"	—	32.91	—	8204
30.	til oil	—	"	—	32.91	—	8204
31.	ground-nut oil	—	"	—	32.91	—	8204
32.	vanaspati	—	"	—	32.91	—	8204
33.	others	—	"	—	32.91	—	8204
34.	potato	86*	"	0.46	0.03	6.41	781
35.	onion	93*	"	0.46	0.03	3.80	483
36.	garlic	93*	"	1.93	0.03	8.88	1226
37.	brinjal	90**	"	0.39	0.09	1.90	284
38.	cabbage	89*	"	0.41	0.02	1.43	211
39.	beans	91*	"	0.81	0.06	1.92	321
40.	tomato	87*	"	0.61	0.03	1.44	243
41.	beet, gajar etc.	74*	"	0.32	0.05	2.97	374
42.	ruula	66*	"	0.12	0.04	1.07	146
43.	kaohu	73**	"	0.45	0.02	5.33	657
44.	sohar	66**	"	0.50	0.06	1.79	276
45.	patal	87**	"	0.57	0.09	0.54	145
46.	jhinga	83**	"	0.14	0.03	1.01	139
47.	papaya	86**	"	0.11	0.02	2.06	184
48.	lau, kumra	76*	"	0.20	0.03	1.03	146
49.	cauli-flower	53*	no.	0.33	0.04	0.50	104
50.	lady's finger	83**	sr.	0.60	0.06	2.10	316
51.	leafy vegetable	88**	"	1.13	0.17	2.33	433
52.	others	68**	"	0.44	0.06	2.08	298
53.	naspati, apple	84*	no.	0.02	0.01	0.60	6
54.	banana	89*	"	0.02	0.00	0.29	35
55.	orange, lemon etc.	87*	no.	0.01	0.01	0.16	22

SOME STUDIES ON THE CONSUMPTION OF FOOD AND CLOTHING

TABLE A.4 (Contd.). NUTRITIVE VALUES IN FOOD ITEMS AS PURCHASED

srl. no.	name of item	per cent of edible contents to 'grams' as purchased	unit	nutritive values per unit			
				protein (oz.)	fat (oz.)	carbo-hydrate (oz.)	calories (ca.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
56.	mango	62*	no.	0.02	0.00	0.47	58
57.	guava	78*	"	0.02	0.01	0.34	44
58.	coconut	40*	"	0.59	5.45	1.70	1640
59.	jack-fruit	28*	"	1.07	0.06	10.66	1335
60.	sugarcane	50*	"	0.02	0.02	3.79	432
61.	pineapple	64*	"	0.08	0.01	1.50	177
62.	nuts etc.	75*	sr.	7.77	9.83	4.77	3905
63.	grapes etc.	92*	"	0.24	0.03	3.09	384
64.	others	76*	no.	0.23	0.09	1.96	414
65.	meat (fowls)	62*	sr.	5.29	0.12	—	627
66.	meat (mutton etc.)	80*	"	5.41	2.09	—	1148
67.	meat (purchased chop, cutlet etc.)	—	no.	0.21	0.66	0.34	228
68.	fish (prawn etc.)	37*	sr.	2.63	0.04	—	265
69.	fish big (> 1 sr.)	70*	"	5.21	0.14	—	591
70.	fish medium (0.25—1.00 sr.)	70*	"	5.09	0.26	—	620
71.	fish small (< 0.25 sr.)	70*	"	4.96	0.37	—	650
72.	fish purchased chop, cutlet etc.	—	no.	0.22	0.60	0.34	212
73.	egg (hen)	89*	"	0.16	0.16	—	66
74.	egg (duck)	87*	"	0.23	0.23	0.01	86
75.	egg purchased omelet etc.	—	"	0.23	0.23	0.01	86
76.	sugar	—	sr.	—	—	32.91	3592
77.	gur	—	"	0.13	0.03	31.27	3555
78.	sugarcandy	—	"	—	—	32.91	3592
79.	salt	—	"	—	—	—	—
80.	turmeric	—	tola	2.07	1.68	22.84	40
81.	black pepper	—	"	3.79	2.24	16.29	35
82.	mustard	—	tola	7.24	13.07	7.83	63
83.	posto	—	"	5.46	6.39	10.62	43
84.	chillies	82*	"	2.64	0.92	5.08	14
85.	ginger	—	"	0.76	0.30	4.06	8
86.	dhania	—	"	4.64	5.30	7.11	33
87.	jeera	—	"	6.16	4.94	12.05	41
88.	tamarind	—	"	1.02	0.03	22.18	33
89.	others	—	"	3.56	2.63	16.97	38

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TABLE A.4 (Contd.): NUTRITIVE VALUES IN FOOD ITEMS AS PURCHASED

sr. no.	name of item	per cent of edible contents to 'gross' as purchased	unit	nutritive values per unit			
				protein (oz.)	fat (oz.)	carbo-hydrate (oz.)	calories (no.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
90.	tea	—	cup (18 tolas)	0.02	0.02	0.17	31
91.	tea	—	pound	—	—	—	—
92.	coffee	—	cup (18 tolas)	0.04	0.04	0.35	61
93.	coffee	—	pound	—	—	—	—
94.	horlicks	—	bottle (38.78 tolas)	4.98	0.10	9.44	1651
95.	ovaltine	—	tin (38.78 tolas)	2.28	1.18	10.40	537
96.	other beverage	—	bottle (38.78 tolas)	1.19	0.65	5.71	500
97.	biscuits etc.	—	pound	1.39	1.74	11.82	1077
98.	cakes etc.	—	"	1.62	0.81	9.39	1454
99.	nimki, kachuri etc.	—	no.	0.08	0.25	0.55	124
100.	fuluri etc.	—	"	0.08	0.25	0.55	134
101.	sweets (i) chhana	—	sr.	7.00	11.43	9.87	3330
102.	(ii) khoa	—	"	4.88	4.32	12.67	3039
103.	(iii) maida, dal etc.	—	"	2.53	0.21	26.95	3689
104.	other refreshments	—	"	3.99	5.42	18.36	3219
105.	pickles	—	pound	0.06	—	10.20	1160
106.	jam and jelly	—	"	0.20	—	6.52	760
107.	sauce	—	"	0.64	1.62	1.45	654
108.	vinegar	—	"	—	—	—	—
109.	mustard	—	"	3.62	6.63	3.92	2510
110.	others	—	"	0.92	1.62	4.42	1017
111.	milk (fluid)	—	sr.	1.25	2.04	1.63	845
112.	milk (condensed)	—	pound	1.33	1.38	9.02	1485
113.	milk (powdered)	—	"	6.25	0.02	8.30	1667
114.	ghee	—	sr.	—	32.91	0.00	8158
115.	butter	—	pound	0.10	13.33	0.07	3323
116.	cheese	—	"	3.97	4.13	1.04	1616
117.	chhana	—	sr.	10.01	16.33	—	3230
118.	dahi	—	"	0.95	0.95	1.09	473
119.	ghol etc.	—	"	0.26	0.36	0.16	139
120.	other milk products	—	"	3.23	14.25	0.58	3107
121.	pan (finished)	72**	no.	0.35	0.17	1.62	3
122.	pan (loaf)	—	"	0.18	0.05	0.35	1
123.	supari	—	tola	1.61	1.45	15.54	29
124.	country liquor	—	pint	—	0.08	0.40	88
125.	foreign liquor	—	"	—	—	7.07	1540

SOME STUDIES ON THE CONSUMPTION OF FOOD AND CLOTHING
TABLE A.6. STANDARD REQUIREMENT IN SQUARE YARDS PER PIECE OF GARMENT
BY AGE-GROUP OF THE WEARER

name of item	standard square yards under different age groups							
	0-2	3-4	5-6	7-9	10-12	13-16	17-20	above 20
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(A) cotton clothing								
1. half pant	0.66	0.76	0.85	0.94	1.12	1.31	1.96	2.16
2. dhuti	1.53	1.63	2.62	2.62	4.00	5.25	6.11	6.39
3. sari	—	—	2.62	2.62	4.00	6.11	6.11	6.39
4. shirt, kurta etc.	0.63	0.93	1.04	1.25	1.67	2.08	2.50	2.71
5. panjabi	0.83	0.93	1.04	1.25	1.67	2.08	2.75	2.88
6. coat, overcoat etc.	0.84	0.93	1.12	1.60	1.97	2.44	2.91	3.38
7. lungi	—	—	—	—	2.33	2.44	2.44	3.00
8. pyjama	0.62	0.83	1.04	1.25	1.67	1.77	1.88	2.04
9. trousers	—	1.03	1.22	1.40	1.69	1.96	2.53	2.90
10. chaddar	—	1.31	2.00	2.00	3.12	3.12	4.50	4.50
11. salwar	0.62	0.83	1.04	1.25	1.67	2.08	2.60	2.60
12. petticoat	—	—	—	—	1.25	1.48	2.00	2.00
13. chemise	—	—	—	1.48	1.67	1.88	2.50	2.50
14. blouse, frock etc.	0.62	0.83	0.94	1.04	1.14	1.25	1.39	1.39
15. dopatta	—	—	1.12	2.00	2.00	2.00	3.75	3.75
16. vest, underwear etc.	0.31	0.36	0.42	0.62	0.69	0.79	0.97	0.97
17. sock, stocking etc.	0.02	0.02	0.03	0.04	0.06	0.08	0.10	0.10
18. towel, napkin	0.37	0.44	0.51	0.58	0.68	0.79	0.91	0.91
19. others	0.71	0.86	1.21	1.39	1.80	2.16	2.68	2.81
(B) silk clothing								
1. sari	—	—	2.62	2.62	4.00	6.11	6.11	6.39
2. chaddar	—	1.31	2.00	2.00	3.12	3.12	4.50	4.50
3. shirt and panjabi	0.83	0.93	1.04	1.25	1.67	2.08	2.62	2.72
4. blouse, frock etc.	0.62	0.83	0.94	1.04	1.14	1.25	1.39	1.39
5. others	0.73	1.03	1.68	1.78	2.46	3.12	3.66	3.77
(C) woollen clothing								
1. chaddar	—	1.31	2.00	2.00	3.12	3.12	4.50	4.50
2. coat	0.76	0.84	0.94	1.31	1.69	2.25	2.62	3.00
3. trousers	—	1.03	1.22	1.40	1.69	1.96	2.53	2.90
4. shirt and panjabi	0.83	0.93	1.04	1.25	1.67	2.08	2.62	2.79
5. blouse, frock etc.	0.62	0.83	0.94	1.04	1.14	1.25	1.39	1.39
6. knitted garments	0.16	0.20	0.24	0.29	0.36	0.46	0.55	0.60
7. sock, stockings etc.	0.02	0.02	0.03	0.04	0.06	0.08	0.10	0.10
8. others	0.47	0.74	0.93	1.08	1.40	1.59	2.04	2.18

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TABLE A.6. NUMBER OF PIECES OF VARIOUS GARMENTS AND FOOT-WEARS ALONG WITH THE QUANTITY OF CLOTH IN SQUARE YARDS PER USER BY SEX

garments and foot-wears	number of users			number of pieces per user			square yards per user		
	male	female	total	male	female	total	male	female	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>cotton clothings</i>									
1. dhoti	384	53	437	3.00	2.79	2.97	18.92	17.49	18.75
2. sari	—	291	291	—	3.77	3.77	—	23.56	23.56
3. half-pant	197	36	233	2.95	2.66	2.89	3.32	2.18	3.14
4. lungi	185	—	185	1.86	—	1.86	5.43	—	5.43
5. pyjama	83	4	87	1.78	1.25	1.76	3.41	3.18	3.40
6. trousers	71	3	74	2.24	2.07	2.26	6.00	4.87	5.95
7. salwar	1	10	11	2.00	1.40	1.45	2.50	1.70	1.77
8. potticoat	—	224	224	—	2.67	2.67	—	5.19	5.19
9. chemise	—	62	62	—	1.76	1.76	—	4.31	4.31
10. shirt, kurta etc.	606	4	610	2.61	1.50	2.60	5.71	1.98	5.09
11. panjabi	112	—	112	1.49	—	1.49	3.92	—	3.92
12. coat, overcoat	15	—	15	1.33	—	1.33	4.13	—	4.13
13. blouse, frocks etc.	9	433	442	2.33	3.40	3.38	1.81	4.23	4.18
14. dopatta	—	1	1	—	1.00	1.00	—	1.13	1.13
15. vest, underwear	504	119	623	2.63	2.92	2.60	2.21	1.70	2.11
16. sock, stockings	123	15	138	2.33	2.07	2.30	—	—	—
17. chaddar	69	9	78	1.00	1.00	1.00	4.25	3.56	4.17
18. towel, napkin	369	118	487	2.19	1.91	2.12	1.71	1.31	1.91
19. others	88	36	124	2.56	4.44	3.11	6.18	11.76	7.80
<i>silk clothings</i>									
1. sari	—	29	29	—	1.79	1.79	—	11.14	11.14
2. panjabi-shirt	10	3	13	1.10	1.33	1.15	2.73	3.72	2.96
3. blouse, frock	—	30	30	—	2.33	2.33	—	3.05	3.05
4. chaddar	2	1	3	1.00	2.00	1.33	4.50	9.00	6.00
5. others	3	1	4	2.00	1.00	1.75	6.59	3.77	5.88
<i>woollen clothings</i>									
1. trousers	9	1	10	2.00	1.00	1.90	5.72	2.90	5.44
2. coat, overcoat	18	3	21	1.22	1.00	1.19	3.18	1.59	2.95
3. socks and stockings	11	1	12	1.91	2.00	1.92	0.18	0.12	0.18
4. chaddar	26	4	29	1.04	1.00	1.03	4.52	4.50	4.52
5. knitted garments	36	5	41	1.03	1.00	1.03	0.49	0.44	0.48
6. panjabi-shirt	12	—	12	1.42	—	1.42	2.45	—	2.45
7. blouse, frocks	—	27	27	—	1.26	1.26	—	1.50	1.50
8. others	18	8	26	1.00	1.00	1.00	1.87	1.20	1.66
<i>foot-wears (pairs)</i>									
1. sandals	254	177	431	1.06	1.09	1.07	×	×	×
2. shoe	310	58	368	1.15	1.19	1.16	×	×	×

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