NUTRITIONAL STANDARDS OF SOME WORKING-CLASS FAMILIES IN DUBLIN, 1943.

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This is an enquiry into the hving conditions of a hundred families living on a new housing estate in Dubhn. It is an endeavour to discover the extent and degree of poverty, and to correlate the degree of good or mal-nutrition of the children of these families with the actual size of the family. Information was collected from one hundred families. The families were selected at random. This gave the following distribution :—

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- 14 families with one child* under fourteen.
- 25 families with two children under fourteen
- 21 families with three children under fourteen.
- 15 families with four children under fourteen
- 25 families with five or more children under fourteen.

Total 100 families

A sample of this type whilst not representative of the estate as a whole does, however, approximately give an idea of conditions there.

The hundred families gave a total of 684 persons, an average of almost seven persons per family This is large, but it is to be expected, because the policy adopted in letting these houses is to rehouse there the large families living in one or two rooms in the city. In view of this, it can be safely assumed that on average the standard for the rest of the estate is similar

In this enquiry, the methods employed, with some variation, have been similar to those used in other surveys of social conditions in England Without plenty of assistance it was not practicable to investigate the budgets of each family. Therefore, each family was assessed on its "needs" Every family needs food, fuel, light, clothes, cleaning materials, shelter, compulsory insurance, and must pay for transport to work In the case of rent, travel expenses, and compulsory insurance each family is allowed its actual outlay For other necessities, a theoretical minimum standard was estimated

All the information regarding the constitution of the households, and the particulars of any sources of income other than wages, are based on house to house visits. Accurate figures for the weekly expenditure on milk and bread were obtained These are constant factors, the same amount being bought daily and payment being made weekly. Figures

^{*} Throughout this survey "child" means a child under 14 years of age

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for expenditure on meat were inaccurate and consequently not used. The total amount spent on food per week was also recorded. The figure for this, whilst not strictly correct, is reasonably so.

No similar survey, carried out here in Ireland, was available for comparison. The results obtained are, of course, affected by prevailing war conditions. But undoubtedly similar conditions will obtain for some time to come, and also for some years after the war. It is true to say that children are being adversely affected, over a period of years by the present war, during a most critical phase of their life with regard to health and physique.

Below is shown a specimen sheet on which the information was gathered.

Name					•
Address					
Wife :					
Number of C	hıldren —	Und	er 5	5-10	10-14
Others over 14	1		Male	Femal	e
Others over 6	5		Male	Femal	le
Wages				• Addit	ional Income
Transport	Rent	Lıght	Fuel	Clothes	{ Men Women Children
Housekeeping	Money '	Food	Bread	Meut	Milk
Hıre-purchase Furnıture—		Ň	Insurance	Ho	rusehold Sundries
Personal sund	lmes				
Kept back by	Husband				
Housekeeping	Money pays	fo1			• 、
Remarks :					
	- 				

The Minimum Standard Food.

The British Medical Association in 1933 set up a special committee "to determine the minimum weekly expenditure on foodstuffs which must be incurred by families of varying size if health and working capacity are to be maintained, and to construct specimen diets." In the report three specimen diets for an adult are given. The first is no more than a subsistence ration, which, "though perhaps palatable for one week would with longer use become monotonous and nauseous." The second diet is one "commonly used by the working classes in receipt of adequate wages." The third is a vegetarian diet.

The committee were directed to report on a minimum not on an optimum diet. This diet has been adopted without alteration. Their second diet is the one which has been used. The diet has been criticized on several grounds. It does not provide an adequate supply of milk, especially for children. Children should consume 1 to 2 pints of milk daily, and adults should consume $\frac{1}{2}$ pint daily. No extra nourishment is allowed for lactating or pregnant women. Again, the cost of feeding

children and infants who require additional vitamins in some form or other, may be just as great as an adult All proprietary brands of vitamins and infants' special food are expensive No allowance is made for special dietary requirements of illness, nor chronic invalidism. The appetites of adolescents are now recognised to frequently exceed those of the adult man or woman. No provision is made for this Minimum diets based on theoretical estimates do not allow for the fact that it is usual for the adults in the house to take the larger share of meat and other protein foods. Growing children and adolescents actually require proportionately more. No allowance is made for the fact that some members of the family may have disproportionate appetites, or peculiarities of taste or digestion

To maintain the level of nutrition represented by the British Medical Association diets a higher level of expenditure than the cost of the diets would be necessary. Not all housewives can be expected to buy at the minimum prices nor to make the most economical selection of foods.

Despite the practical drawbacks of the British Medical Association diet, it serves to give a measure by which family expenditures on food may be compared.

The diet was priced in several shops in the area, and an average price worked out Very httle differences were found. Price differences varied only from halfpenny to a penny per lb or other unit.

TABLE I.

The British Medical Association Minimum Diet (No 2) for one week for an adult Male at prices ruling in the Area (early 1943)

Bread Bacon Beef Mmced Meat Corned Beef Liver, Ox *Eggs Choese Mulk Fish Butter Suet Lard Sugar Jam Potatoes Peas Peas Tea Oatmeal Rice Syrup Cabbage Beans (Butter)	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	71 lb 1 2 oz 2 oz 1 1 b 1 2 oz 1 1 b 1 0 1 1 2 oz 1 1 b 1 0 1 1 b 1 1	·· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	$\begin{array}{c} {\rm Cost} \ {\bf m} \ {\bf pence} \\ 23 \ 5 \\ 10 \ 0 \\ 14 \ 0 \\ 7 \ 0 \\ 7 \ 0 \\ 2 \ 75 \\ 9 \ 0 \\ 6 \ 2 \ 75 \\ 9 \ 0 \\ 6 \ 2 \ 5 \\ 9 \ 0 \\ 6 \ 0 \\ 1 \ 0 \\ 1 \ 75 \\ 4 \ 5 \\ 8 \ 0 \\ 6 \ 5 \\ 3 \ 5 \\ 12 \ 0 \\ 2 \ 5 \\ 3 \ 5 \\ 5 \ 5 \\ 2 \ 5 \\ 5 \ 5 \\ 2 \ 5 \\ 3 \ 75 \\ \end{array}$
Cabbage .		•	1 ''		•	• • • •		
								160.0 - 14/1

* 2 oz = 1 large egg

The cost of the diet was 14/1. $14/\cdot$ was taken for ease in calculation. The amount allowed for tea in the diet is $\frac{1}{4}$ lb. This was left unaltered because some substitute would be used instead, such as coffee or c_1c_0a .

169.0 = 14/1

For a similar reason, and also because of its negligible effect on the total \sim cost, the amount of sugar was left unaltered

Daily Intake (based on preceding	diet)
Calories	3,386
Carbohydrates	494 grams.
Fat	101 ,,
Protein	99 ,,
First Class Protein	50 ,,

Purchasing Habits.

Very few of the women bought their week's supply of food at the one time Food is usually bought in the morning for the day There was some housewives who apparently bought only for one meal at a time. This method of buying is wasteful and most uneconomical Bread was undoubtedly the largest single item Meat was usually reserved for the week-end Tinned milk was also largely bought on account of its cheapness

Man-Equivalents.

Table II shows the scale of man-equivalents used in estimating the cost of the diet for families of different size The number of adult men and fractions of adult men to which a family is equivalent in terms of feeding costs is known as the man-equivalent

TABLE II.

Scale of Man-equivalents based on Food Requirements.

Man, 14 and under 65 years							1.00
Woman, 14 and under 65 years				•••			0.83
Child, 10 and under 14 years							0.80
Child, 5 and under 10 years	-			•••			0.63
Infant under 5 years				•		••	0.52
Man, 65 years and over, and not	work	ng			•••		0.75
Woman, 65 years and over, and	not w	orking	•••	•	• •	••	0.75

The Minimum Standard Clothing.

To arrive at any accurate figures for clothing was impossible A large number of families were members of Clothes Clubs, to which a fixed sum was contributed per week. This amount was never sufficient

In view of these difficulties, the figures for clothing given by B Seebohm Rowntree in *The Human Needs of Labour* were adopted. He arrived at the figure of 3/- for men, 1/9 for women, and 1/1 each for children per week. He made no allowance for any.gifts of old clothing because one has no right to assume charitable gifts. In arriving at these figures he aimed at "the minimum sum which a working class family must spend on clothing as is necessary to keep the body warm and dry, and to maintain a modest respectability" These figures for England in 1937 must without doubt be taken as absolute minimum figures for anywhere in Ireland to-day

The Minimum Standard-Fuel (Firing and Gas).

The usual practice in social surveys has been to allow $I_{\frac{1}{4}}^{\frac{1}{4}}$ cwt of coal per week for the family, and to apply local prices. This was not practicable owing to shortage of coal. Particulars were obtained from all the families in the investigation of the amount spent on turf and wood for firing.

The amounts varied from five to ten shillings per week Five shillings per week for each family irrespective of size was allowed This is the cost of two bags of turf. It is an irreducible minimum, and would not keep even one fire alight constantly for more than a few days out of each week. Certainly in regard to large families the minimum allowed is quite inadequate. It must be remembered that in this investigation the families were on average very large. This fuel was seldom used by the families for cooking purposes

Gas was used in every house visited for cooking From each household the amount spent on gas over the previous quarter, and over the previous two quarters, if the receipts were available was elicited The amounts varied from between three to six shillings per week irrespective of size of family

The present price of gas in the new area is 6/7 per 1,000 cu ft The smallest weekly amount taken from the meters is 3/. This allows not quite 500 cu. ft. of gas per week, a somewhat greater amount than allowed in other surveys, but in view of the poor heating quality of gas at present, it cannot be regarded as too much If anything the amount allowed is too little The amount allowed for fuel and gas are insufficient in actual expenditure

The Minimum Standard Light.

In the houses visited 90 per cent. of the families paid a flat rate of 1/2per week for light. This price was not dependent on the amount of electricity consumed The other 10 per cent spent sums varying from 1/- to 1/6 a week on light The standard adopted was 1/2 per week.

Cleaning.-This includes washing, cleaning, and scouring materials, washing materials for both house and occupants. 1/- per week was the minimum cost arrived at This sum is too small even for the families It has been adopted, however, irrespective of with only three persons size of family

Table III shows the cost of the "needs" for families of varying size and type.

Minimum Needs Standard of Expenditure per usek, for different ages, types of worker, and size of Family

Age and Sex	Food	Clothes	Total	
Infant under 5 5 and under 10 10 and under 14 .	s d 7 3 8 10 11 2	sd 11 11 11	s d 8 4 9 11 12 3	
Man, 14 or under 65, 65 and over if working full time for full wage	14 0	30	17 0	
Woman, 14 or under 65, 65 and over if working full time for full wage	11 7	19	13 4	-
Man, 65 and over not working	10 6	$3 \ 0$	13 6	
Woman, 65 and over not working	10 6	1.9	12 3	
	Lıght	Gas and Fuel	Cleaning	Total
All Families .	12	8 0	1 0	10 2

TABLE III

Income.—Family income consisted of the wages of the head of the family, plus any wages earned by other members This also included old-age pensions, unemployment money and any other income available. In most cases, the additional earners if young gave up all their income to their mother, who in turn provided them with pocket-money. Most of the workers were on a flat rate of pay In the case of a few pieceworkers, an average over a period of several months was taken. There were very few cases of overtime The wages of the men were ascertained from the source, and not directly from the men. They are thus strictly accurate. The wives of the men, in actual fact, did not know as a rule what their husbands were earning

Conditions of Living Measured by Relation of Net Income to a Scale of Minimum Needs.

Equipped with a scale of needs there is no difficulty in measuring the standard of living of any family by referring to it The needs of the family can be calculated when the number of persons in it, and their ages, and sex are known. The income which is compared with the needs is the net income By net income is meant the amount available after rent. cost of transport to or from work, and compulsory insurance have been deducted from the gross income of the household. This makes no allowance whatever for sickness, old age, burial, savings, holidays, tobacco, beer, newspapers, renewal of linen, pots, pans, etc. It assumes that furniture and carpets last for ever, that nothing gets broken, also that gardens require no attention and cost nothing to maintain. In actual fact families whose incomes are below the minimum do spend money on these items. The majority of them smoke, drink, and certainly go to the cinemas Even the young children can tell one all about the life history of the latest film-star. Every penny spent on these items, non-essential to existence but certainly essential to the meanest form of life, must be at the expense of either food, clothes, or the meagre allowance made for the other basic necessities. Non-essential expenditure is usually at the expense of a proper diet.

An example of the calculation necessary to standarduse a family, consisting of man, wife and 2 children under 5, into its correct group, is as follows:—

,	s	d	Needs	s	d
Gross Income '	76	0	Man—Clothes	3 14	0
Less Rent	10	8	Woman-Clothes .	14	- 9
Insurance	• 1	5	Food	11	7
Travel	0	7	Child under 5-Clothes	1	Ī
			Food	7	3
Net Income	. 63	4	Child under 5—Clothes	l	1
			Food	7	3
			Fuel and Gas .	8	- 0
			Cleanmg .	l	- 0
			Lighting	1	2
			Total Needs	57	2
	Net Inco Needs Excess ou		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		

Thus the family is living between 5%-25% above the needs standard.

The results of applying minimum standard needs to the net incomes are shown in full in Table IV

TABLE IV

Relation of Net Income to Minimum Needs for Families of different Size

Relation of net income to		NUMBEP OF PERSONS IN FAMILY								To	DTAL		
Standard Minimum Needs	3	4	5	6	7	8	9	10	11 or more	Adults	Children	Total	
50% and less than 100% above	6	8		6	_	_				13	7	20	
25% and less than 50% above	6	12	10			8				19	17	36	
5% and les-than 25% above	_	32	40	18	7	8	9			66	48	114	
Between 5% aboveand 5% below	_	4	20	12			9	10	_	27	28	55	
5% andless than 25% below	_	-	10	36	70	40	27	10]	97	96	193	
25% and less than 50% below				12	21	40	45	70	47	106	129	235	
50% and less than 75% below	_	-	_		7			10	14	8	23	31	
TOIAL	12	56	80	84	105	96	90	100	61	336	348	684	

From this table it is quite obvious that there is a marked difference in the economic position of the large and small families This table shows the actual number of person in the family No persons in this table are 100% or more above their needs. The total number of persons above then needs is 170, representing 98 adults and 72 children. The number which is on the border line is 55 persons, representing 27 adults and 28 children, whilst below their minimum standard needs are 459 persons, i.e., 248 children and 211 adults Thus out of a total of 348 children, 21% are above, 8% marginal and 71% are definitely below the standard It can be seen that the factor determining the standard of hving largely depends on the size of the family In the case of a large family consisting mainly of adults, the cause is due entirely to unemployment On looking at the table it can readily be seen that as the number of persons in the family increases, the family is lower down the scale

This detailed table may be summarised by bracketing all sizes of family into two sizes, those with 3, 4, 5 and 6 persons, and those with more than that number in family and making only three groupings, (1) 5% or more above minimum standard needs, (2) marginal, i.e., between 5% above and 5% below, (3) more than 5% below standard needs

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Dilatan of Nat	NUM					
Relation of Net Income to minimum Standard Needs	3, 4,	5 or 6	7 m	Total Number		
	Adults	Children	Adults	Children	of Persons	
More than 5% above	80	/ 58	18	14	170	
Between 5% above and 5% below	18	18	9	10	55	
More than 5% below	36	22	175	226	459	
TOTAL	134	98	202	250	684	

TABLE	v
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The above summary brings out the fact that the larger the number of persons in the family the greater are the chances of the net income of that family falling below the minimum standard needs than does the net income of the smaller family The person below sufficiency in these tables are so placed because of an insufficiency of means This insufficiency of means cannot be overcome by the housewife. It can only be overcome by an increase in income or some type of supplemental allowance

The interpretation of these tables is entirely a matter for the individual Those below the standard may certainly be regarded as living in poverty, whilst those above have difficulty in making ends meet at the present time Tout in the University of Bristol Social Survey suggested the following interpretation —

Poverty	Below the Standard
Insufficiency (fam.hes with scanty means, but not in poverty, which have a struggle to make ends meet)	Probably above and 0 and under 50% above
Sufficiency (families able to enjoy the ordinary standard of a working family) \bullet	Certamly above and 50 and under 200% above
Comfort (families with a margin for holidays, savings, luxuries	200% or more above

Housekeeping Money.

The amount of money given to the housewife, to maintain the household, is a constant factor, and does not vary from week to week From this money, the wife pays for rent, light, fuel, cleaning materials, clothing, insurance, hire-purchase, and food The amount of money kept back by the husband is usually spent on drink, cigarettes, football, cinemas, etc A table may be drawn up to compare the cost of the standard minimum diet with the money which is apparently available for food The expenditure of the housewife on items other then food is deducted from the housekeeping money The items deducted are the actual expenditure on rent, compulsory insurance, fares to and from work and the minimum standard figures for fuel, light, cleaning materials and clothing, together with the actual amounts spent on voluntary insurance and hire-purchase Since a large number of families spend less on clothes than allowed for, this method under-estimates the amount of money available for food, and over-estimates it in so far as it does not take into account many minor sundry expenditures It does, however, exclude money spent on entertainment, for which the husband usually pays out of his own pocket-money. It was also possible to ascertain with a reasonable degree of accuracy, the actual amount of money spent on food per week. The amount of money spent on food as ascertained from the housewife and the housekeeping balance available for food closely concided

It is often pointed out that the money available is an unsatisfactory method of measuring the living conditions of a family The reason being, that some housewifes are more thrifty and economical than others This is quite true There are large families living with a better measure of success than small families on a similar income, simply because the housewife is a better and more competent manager These factors, however, cannot be objectively measured Also, it would require a high degree of ability, beyond the scope of the average housewife, to maintain at the minimum cost, the level of nutrition represented by the British Medical Association diet

In each family the housekeeping balance available for focd is divided by the "Man-equivalent" of the family, and the resulting figure may be compared with the figure 14/- which was the cost of the British Medical Association minimum diet for an adult in the new district early in 1943

In Table VI families are classified according to the number of persons, and to the housekeeping balance available for food per man-equivalent per week A thick line denotes the level of food adequacy per manequivalent

TABLE	VI
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Housekeeping Balance available for Food per Man for Families of Different Size

Balance			т о									
available for Food per Min	3	•	5	6	7	8	9	10	11 or more	Adults	Children	Tot a ,
14/- ind more	·	8	5				9			10	12	22
12/- to 18/11	9	12	15	6		8				26	24	50
10/- to 11/11	3	12	10	6		8		_	—	25	14	39
8/- to 9/11	-	20	30	12	28		9	10		57	5.2	109
6/- to 7/11		4	10	36	28	24	27	10		73	66	139
4/- to 5/11			10	8	42	20	27	40	22	100	116	216
2/- to 3/11		-		6	7		18	40	38	45	64	109
1071	12	56	80	84	105	96	90	100	61	336	348	684

Only 22 persons have sufficient money available per man-equivalent, ten of these are adults, twelve are children One family of nine persons is above the level of adequacy, due to the fact that the wage-earner is In the British Army, his wife meanwhile receiving army separation allowance in addition to half-pay from her husband's employers. The large families are again most severely affected. At the lowest end of the scale are 109 persons with between 2/- to 3/11 per male-equivalent for food. Of these 109 persons, 64 are children. The largest group of persons are to be found on the level between 4/- to 5/11 per male-equivalent for food per week

Out of a total 348 children, only 12 were above the level of adequacy, the remainder being below

A similar table is shown below and is based on what the housewife said she spent on food per week. This table is, of course, open to objection in so far as one may not have been given the correct expenditure on food per week. In each family the actual expenditure on food, as ascertained from the housewife, has been divided by the male-equivalent of the family, and the resulting amount tabulated as shown

TABLE VII

Actual amount spent on food per Man		NUMBER OF PERSONS IN FAULL.										
	3	4	5	6	7	8	9	10	11 oi more	*A	†C	- Tota
14/- and more	3	4	5					_		5	7	12
12/- to 13/11	3	20	10	12		8	9	-		35	27	62
10/- to 11/11	6	24	20	6	7			10		39	34	73
8/- to 9/11		8	15	21	14	16	9			47	39	86
6/- to 7/11			30	36	63	48	27	30	-	123	111	234
4/- to 5/11				5	21	24	45	60	36	81	111	192
2/- to 3/11			-						25	6	19	۰,
TOTAL	12	56	80	>4	105	96	90	100	61	336	348	654

Actual Expenditure on Food per Man for Families of Different Size

A = Adults † C = Children

Judged by this table, only twelve persons spend sufficient on food per man as recognised by the cost of the British Medical Association diet Of these twelve persons, five are adults, seven are children. This table tallies very closely with the previous one, and would lead to the behef, that what the housewife stated she spent on food, she did so in actual fact. The main difference between the two tables is, that in this one there are fewer persons in the lowest scale, i.e., between 2/- to 3/11per man. The table again shows, that families with large numbers are the chief sufferers

In Table VIII the two measures of poverty are compared The families are classified according to the relation of their net income to the minimum standard needs on the one hand, and according to the balance of housekeeping money available for food per man-equivalent on the other

TABLE VIII

Deleten of Net In one		BALANCE AVAILABLE FOR FOOD														
Relation of Net Income to Minimum Stundard Needs	14/- and more		12/- to 13/11		10/- to 11/11		8/- t.0 9/11		6/- to 7/11		4/- to 5/11		2/- to 3/11		'Total	
	*A	†C	*1	tC	*A	†C	*A	†C	*A	tC	*A.	†C	*A	tC	*A	tC
100% and more above	-		,-		_			-	-	-	-		-			-
50°, and less than 100% above	2	2	6	4	5	1		-	_				_	_	13	7
25%, and less than 50% above	2	2	õ	7	12	8					_	, 	_		19	1
5% and less than 25% above	6	8	1,	13	5	3	34	19	6	5					66	48
Betweer 5% above and 5% below			-		3	2	7	13	7	8	10	5		_	27	28
5% and less than 25% below		-					16	20	45	43	32	31	4	2	97	96
25% and less than 50% below								-	15	10	58	80	33	39	106	129
50% and less than 75% below			-							_			8	23	8	23
Тотлі	10	ι2	26	24	25	14	57	52	73	66	100	116	45	64	336	348

Relation of Net Income to Minimum Standard Needs compared with Housekeeping Balance available for Food per Man

* Adults - r Children

By this table 211 adults and 248 children are certainly inadequate on both counts To these may be added 27 adults and 28 children who are on the border-line by the net income measure and certainly below as regards housekeeping balance Only 10 adults and 12 children are above the level of adequacy on both courts There remain 88 adults and 60 children who are above the level of adequacy when net income is compared with minimum needs, but when the balance of housekeeping money left over after other regular payments are made, these persons do not reach the minimum food per man requirement The main reason for this fact is due to the husband keeping a proportion of his wages for his own personal use The majority of the men smoke and drink packet of cigarettes and a pint or two of beer per day would mean the retention by the male earner of about twenty shillings a week Attendance at football matches, cinemas, etc., must also be taken into account No man can be expected to hand over all his wages for general family Subsidiary reasons are voluntary insurance and hire-purchase. use The persons inadequate when judged by the housekeeping balance are not necessarily below standard because of their own mismanagement This method takes into account more expenditures than the net income in relation to standard needs measure which makes no allowance for The housekeeping balance available for food is the non-essentials more realistic measure

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In Table IX families are divided into four groups (a) three or four persons, (b) five or six persons, (c) seven or eight persons, and (d) nine or more persons in family. The total weekly income and expenditure on the named articles for the various groups are shown. These are also expressed as percentage of total wages. The expenditure on bread as a percentage of the total expenditure on food is calculated. The money spent on food, bread, mik and also the wages are divided by the man-equivalent and tabulated.

TABLE IX

Weekly Total	Three or Four	Five or Six	Seven or Eight	Nine or more
	s d	s d	s d	s d
Income	1,556 3	2,882 8	2,604 6	2,526 6
Average Income per Family	86 5	96 1	96 5	101 0
Rent	274 5	379 9	272 10	279 2
Food	587 7	1,120 10	1,050 2	965 3
Bread	135 0	384 5	465 3	471 2
Mılk	104 2	182 9	152 1	160 1
Insurance	51 9	114 >	90 4	89 6
Hire Purchase	15 6	34 8	23 6	24 6
Balance (Wages less Food)	968 8	1,761 10	1,554 4	1,561 3
Man Equivalent	518	132 2	156 6	1891
As percentage of Way s			/	
Wages	100	100	100	100
Rent	17 6	13 1	10 5	110
Food	37.8	38.9	40 3	38.2
Bread	87	133	17 8	187
Milk	67	63	58	63
Insurance	33	4.0	3 5	35
Hire Purchase	10	1 2	0.9	10
Balance (Wages less Food)	62.2	61 1	597	618
Expenditure on Bread as percentage				1
of Total Expenditure on Food	23 0	34-3	44 3	48.8
Per Man equivalent	s d	s d	s d	s d
Wages	30 0 1	21 9	16 5	13 4
Food	11 4	8 5	6 8	5 1
Bread	2 7	2 11	2 11	2 6
Mılk	2 1	14	0 11	0 10

Number of persons in Family

One of the most instructive facts to be gleaned from this table is the manner in which the expenditure on bread as a percentage of total expenditure on food increases as the family increases in size A similar increase of the expenditure on bread as a percentage of wages is also shown This is what one would expect In the larger families bread is taking the place of other more nutritive, but less filling, foods The expenditure on food as a percentage of wages increases until the last group The reason why the last group is spending a smaller percentage of the wages on food is probably due to increased expenditure on non-food The expenditure on food per man-equivalent shows a steady items diminution in amount as the families are larger, ranging from 11/4 to The expenditure on milk as a percentage of total 5/1 per man wages shows no significant valiation, but when expressed per man shows a diminution as the size of family increases, ranging from 2/1to 10d per week per man The expenditure of the larger families on milk is hopelessly inadequate

The expenditure on insurance as a percentage of wages does not vary with the size of family and averages about 3.5 shillings Hire-purchase is small, being on average about 1 per cent of the wages This table summarises the expenditure It also shows that if the entire income of those with nine or more in family was devoted to food, it would fall short, by a few shillings per week, of the necessary expenditure Those families with seven or eight persons could buy sufficient food and pay their rent No money would remain for other expenditures

Conclusion

One hundred families, consisting of 348 children and 336 adults, living on a new housing estate, have been investigated with regard to income and expenditure The degree of sufficiency or otherwise of income has been determined by four methods —

l Total family income less rent, compulsory insurance, and fares to and from work has been compared with an assumed minimum standard of expenditure on food, fuel, light, clothing, and cleaning materials

2 The housekeeping balance theoretically available for food, after paying the assumed minimum on non-food items in (1), above, plus voluntary insurance and regular hire-purchase has been compared with the cost of an assumed minimum diet

3 By finding the weekly expenditure on food and comparing it with a minimum standard of expenditure on food

4 By working out the percentage of the wages of the family groups spent on various items and the percentage of the total money available for food spent on bread, by estimating the weekly expenditure per man equivalent on food and bread amongst the family groups

Methods	Suffic	iency	or de	der Line finitely ifficiency	Total persons		
•)	A %	С %	A %	С %	A	С	
First Method	29	21	71	79	336	348	
Second Method	3	3	97	97	336	348	
Third Method	1	2	99	98	336	348	
Fourth Method							

The results are summarized below

The standard of living of these families is obviously low. This may be due entirely to prevailing war conditions causing the very marked increase in the cost of living. In peace time it is probable that the smaller families would have adequate incomes. At the moment it is possible, only for these smaller families, to maintain with difficulty a reasonable standard of living. It is, however, absolutely impossible for the larger families to provide adequately for themselves, at present The figures presented in this survey bear out what is, by ordinary observation, known to be true