

Indian Research Fund Association

NOTE ON THE
RESULTS OF DIET SURVEYS

IN INDIA, BURMA AND CEYLON

by

W. R. AYKROYD, C.B.E., M.D., Sc.D.,

Ex-Director, Nutrition Research Laboratories, I.R.F.A.,
Coonoor, S. India.

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DIET SURVEYS IN INDIA

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W. R. AYKROYD, C.B.E., M.D., Sc.D.

Ex-Director, Nutrition Research Laboratories, I.R.F.A., Coonoor, (1935-1945).

To define the problem of nutrition in any country, it is necessary to obtain information about the kind of diet which the people of the country eat. Statistics of agricultural production, food imports, etc. give a rough idea of average food consumption, but average figures, even if accurate, may conceal wide variations in food intake in different areas within the country and in different economic and social groups. Diet surveys in which the food intake of representative groups is studied for varying periods provides information which is in many respects more useful and accurate.

In this publication the results obtained in some 130 surveys in India are tabulated. These cover about 4,730 families and 21,000 individuals. About 75 per cent of the surveys were made in villages, the remainder being carried out in urban and semi-urban localities. Some material from Ceylon, South Africa and Burma is included for purposes of comparison. The groups surveyed in Ceylon were labourers of Indian origin and the South African group consisted of Indians living in that country. The surveys in Burma were carried out by Dr. Maung Gale, an officer of the Burmese Health Department who attended a nutrition course in Coonoor in 1937. In 1935 the Laboratories embarked on a programme of dietary survey work and the majority of the surveys reported were conducted by members of the staff or pupils of the laboratories.

Intake of the various major food groups—cereals, pulses, leafy vegetables, etc.—per consumption unit per day is recorded, the scale of family consumption coefficients used in nearly all the surveys being that recommended by the League of Nations¹ in 1932. In the published articles and unpublished documents from which this material was derived, intake of calories, protein, etc. corresponding to the food consumption figures was given, but this has here been omitted. It is a relatively simple matter, however, to calculate the value of the various diets in terms of calories and nutrients. In the original articles information about the economic and social background of the group surveyed and their state of nutrition is usually included.

Data about the number of persons covered by the survey, and the season at which the survey was carried out, are not available in all cases. Where the average income of groups was reported, this information has been included in the summary. All the diets contained condiments and spices in small quantities in addition to the foods listed in the tables. The sign - - - implies in general that the food in question was absent from the diet, but in a few instances it may mean that the quantity consumed was so small that it was not considered worth reporting.

In a typical survey a quantitative investigation was made of all the foods consumed by a group of 10-30 families in a given area for a period of 7-30 days. In most of the surveys the period of inquiry was 7-10 days. Visits were made to households once or twice daily for the purpose of weighing the foods which were to be cooked and consumed by the family during the days in question. The food consumption figures thus refer to food "as purchased". Because of the nature of Indian diets, and the general poverty of the people, household

¹League of Nations Health Organization, Quarterly Bulletin, 1932, 1, p, 476.

waste in the usual sense of the term may be regarded as negligible. But in calculating the value of diets in calories and nutrients, allowance must be made for losses in household preparation and cooking. The loss of certain nutrients which occurs when rice is washed previous to cooking—an invariable custom among rice-eaters in India—is large.

Surveys have been made in the provinces of Assam, Bengal, Bihar, Bombay, Orissa, Punjab and Madras and in the State of Baroda, Bhopal, Hyderabad, Kashmir, Travancore and Tehri-Garhwal. The centrally-administered areas of Coorg, Delhi and Ajmer are represented. In the geographical sense, the surveys have thus covered a large part of India, though no data are available from the United Provinces and Sind. But the 4,700 families whose dietary habits were studied cannot be regarded as a true sample of the entire population of India in the true statistical sense; some method of random sampling would have to be followed in order to obtain such a sample. In practice the carrying out of surveys was dependent on the availability of trained workers and the localities and groups were chosen for investigation on various grounds, including those of accessibility, convenience, the amount of cooperation and local assistance available and so on. Further, in most instances surveys were confined to a single season of the year and the diet of poor rural population groups in India may vary considerably in the different seasons. Surveys within villages or towns did not necessarily include families in the different economic and community groups in the same proportion as in the population of the village or area as a whole.

In spite of these limitations, the surveys provide much valuable information about the diets consumed by Indian families and their defects. Most of the groups of families studied appeared to be typical of many thousands of families in the same area. It should be noted that in general the surveys were carried out in which the food situation was more or less "normal". Since the Bengal Famine in 1943, there have been serious food shortages which must have brought about a deterioration in the diet of various groups in the population. Thus, the rationing in cereals in urban areas and the high price of supplementary foods and other factors have produced dietary changes which have not yet been adequately studied. The data here presented do not reflect the menacing food situation that has led to the creation of central, provincial and state food departments and the enforcing of stringent measures of food control.

THE PICTURE.

The majority of the families surveyed belonged to the poorer classes. A high intake of cereals relative to that of other foods was characteristic of all the groups except a few of higher economic status. Cereal intake in the rural groups ranged from 13 to 34 ounces per consumption unit per day, omitting a small group in Travancore who consumed only 9 ounces of rice but double the amount of tapioca (Manioc). The average consumption of cereals in the various rural groups (unweighted) was a little over 21 ounces per consumption unit daily. Assuming that the number of adult-male consumption units per 100 of population is 75-80, average cereal intake per caput would be from 15-17 ounces daily. In other words, if the groups surveyed were representative of the country as a whole, average consumption of cereals per head daily in the rural population was about one pound. But in many groups intake was considerably below this average figure. The surveys in fact suggest that even in normal times a considerable proportion of the population does not get enough to eat. The proportion has been estimated as 30 per cent, but it should be understood that this is a mere guess not based on satisfactory statistical evidence.

The staple cereals consumed by the families surveyed were rice, wheat or millets. A single cereal formed the basis of the diet of many groups, but in many cases a mixture of cereals was eaten. The relative quantities of the different cereals consumed in any given area vary from season to season and in accordance with the price and availability of the various grains. During the recent food shortage insufficiency of one or other of the staple cereals has often of necessity led to an increase in the consumption of alternative grains in areas in which there is a general preference for a single cereal, e.g. wheat or rice.

Rice Diets.

The surveys show that the diet of the poor rice eater is much the same all over India. In addition to his staple cereal he consumes only small quantities of pulses, vegetables and meat. Intake of pulses is from 0.5 to 1.5 ounces daily; of leafy vegetables, 2-6 ounces; of vegetable oil, less than 1 ounce. Consumption of meat, fish and eggs does not often exceed 1.5 ounces and as a rule less than this amount is taken. Fruit is a rare ingredient in the diet. Leafy vegetables are eaten in small quantities, while the consumption of milk is negligible. The poor rice-eater's diet is in fact ill-balanced and does not contain enough of non-cereal foods rich in the nutrients needed for health. The preponderance of rice in the diet emphasizes the importance of the nutritive value of the staple cereal itself, which is influenced by the methods of milling and preparation followed.

Sugar and Jaggery.

The reported intake of these foods on the part of nearly all the rural groups, whether rice, wheat or millet-eating, was less than one ounce per consumption unit daily. Families in Delhi Province and Lyallpur consumed from 1 to 2 ounces, and the intake of the urban groups was in general of this order. In some of the original articles referred to intake of sugar and jaggery is omitted; this implies that these foods were unimportant articles of diet, but it is probable that the group in question consumed these irregularly in small quantities.

Millet Diets.

These are in general similar to rice diets except that millet replaces rice as the staple cereal. There is the same lack of supplementary foods. An interesting point is the rather large quantity of millets taken by some of the groups, e.g. in Closepet in Mysore and Aurangabad and Bidar in Hyderabad, whether the millets, with their somewhat hard and gritty consistency, are as completely digested as rice is a question which calls for investigation.

Wheat Diets.

Generally speaking, milk production is higher in the wheat-eating parts of India than elsewhere and milk and milk-products are more prominent in the diet. Intake of pulses also tends to be greater. In their content of foods other than these, wheat diets resemble rice and millet diets. It should be observed that while the milk intake of the wheat-consuming group surveyed was in general higher than that of rice-millet eaters, it was by no means large and in certain instances was quite inadequate.

The rural groups surveyed in Lyallpur stand out in respect of the high intake of wheat and the high calorie value of the diet. From 2,800 to 3,400 calories were obtained from cereals alone. Intake of milk and buttermilk was also relatively high. The rural population in this part of India is well-fed in normal times, a fact reflected in their fine physique.

Tapioca Diets.

Only one survey of a tapioca-eating group is recorded. This root is grown mainly in South-West India. In normal times, the diet of the poorer classes in many parts of Travancore is based on both rice and tapioca; tapioca is rarely or never the sole basic energy-yielding food. During recent years shortage of rice has led to an increase in the production and consumption of tapioca in Travancore, Cochin and the Malabar district of Madras.

Middle-class diets.

Middle-class diets differ from those of the poorer classes chiefly in containing more vegetables, fruit and milk products, and a smaller proportion of cereals. Non-vegetarian middle-class diets include relatively large quantities of fish, meat and eggs. The most important nutritional difference between the diets of the well-to-do and the poor throughout India is probably the greater amount of milk products included in the former.

Special attention must be drawn to the improvement in diet which is associated with increase in income. This is illustrated by the results of surveys in Bihar and Hyderabad. There is a considerable rise in the consumption of non-cereal foods, e.g. milk, vegetables and fruit as income rises. This means that, in India as in other countries, increase in income leads to an improvement *in diet in the right direction*. Any increase in the material prosperity of the country—a rise in the national *income per caput*—will *per se* tend to raise nutritional levels and improve the health of the population. But the relation between income and the quality of diet is not always clear-cut. For example, middle-class families may consume smaller quantities of leafy vegetables, which are a cheap and nutritious article of diet, than poor families. Surveys carried out in Jamshedpur in Bihar illustrated this point. Again, among ignorant and primitive groups, e.g. aboriginal tribes, an increase in prosperity may scarcely influence the consumption of the more valuable protective foods. In the groups of Hos families studied in Bihar, higher income was associated with a slightly increased intake of cereals, but not with any material change in the quality of the diet as a whole.

Ceylon, Burma and South Africa.

The diets of the groups of cultivators and fishermen in Ceylon, mainly of Indian origin, show the same characteristics as those of poor rice-eaters in India. The fishermen, however, consumed fair quantities of fish. The Burmese families ate more "meat, fish and eggs" (mainly fish) than is usual in India, but otherwise their diet resembled that of poor Indian groups. The results of the survey carried out in Durban are interesting. The diet as described includes fairly large quantity of white flour, fruit, meat and sugar. It approached the middle class Indian type, though the families studied appear to be typical of average Indian families in South Africa. It seems probable that the standard of living among Indians in South Africa is appreciably higher than the general average in India, and that greater prosperity is reflected in a more expensive diet including larger amounts of non-cereal foods. The diet of the South African group is however by no means satisfactory in nutritive value. It suggests a tendency towards a preference for white bread and sugar, foods which are no doubt cheap and accessible, but deficient in essential nutrients.

Nutrients.

While the diets of the different groups surveyed varied considerably in respect of their content of essential nutrients, certain general statements on this point may be made. Intake of total protein is usually sufficient when cereals

from the bulk of the diet and calorie yield is adequate. The proportion of animal protein was however low ; diets of many of the groups were completely devoid of animal protein or contained it in negligible quantities. Intake of fat, whether in the form of vegetable or animal fat, is almost invariably low. An insufficient supply of vitamin A and carotene, and of various factors in the vitamin B₂ complex, is characteristic of most Indian diets. Rice diets are in general deficient in calcium and this is true to a smaller extent of diets based on wheat and millets. One of the common millets, ragi (*Eleusine coracana*) is however exceptionally rich in calcium. Intake of vitamin C is low, owing to the relatively low intake of fruits and vegetables. There is also a deficiency of vitamin D in the diet which may lead to rachitic diseases when this vitamin is not obtained in sufficient quantities by the action of sunlight on the skin. Clinical observations on the incidence of deficiency diseases in general supports these conclusions.

THE IMPROVEMENT OF DIETS.

The surveys as has already been pointed out, suggest that the calorie intake of sections of the population is insufficient in normal times. The recent serious food situation has further emphasized the need to increase food supplies so that enough food is available to meet the calorie requirement of the population. With regard to improvement in quality, the Nutrition Advisory Committee, I.R.F.A. has drawn up a table of requirements in terms of nutrients which was expressed as follows in terms of intake of the various food groups per consumption unit per day.

COMPOSITION OF A BALANCED DIET.

(Adequate for the maintenance of good health).

	Ozs.		Ozs.
Cereals	14	Milk	10
Pulses	3	Sugar and Jaggery	2
Green Leafy Vegetables	4	Vegetable oil, Ghee, etc.	2
Root Vegetables	3	Fish and Meat	3
Fruits	3		
		Eggs	1 No.

The diet put forward by the Committee, containing in sufficient quantities the nutrients needed for health, contrasts sharply with the picture revealed by surveys. The "target" diet includes a smaller quantity of cereals than average Indian diets in normal times, but more of almost every other kind of food. It calls for large increases in the supply and consumption of milk, pulses, vegetables, fruit, meat, fish and eggs. The nutritional and food supply policies which should be followed to bring about desirable changes in Indian diets—in the *direction* illustrated by the "target" diet—need not be discussed in this report. They have been outlined by the N.A.C. in its report of March 1944 and considered in much greater detail in the Final Report of the Famine Inquiry Commission. It is sufficient to say that the most far-reaching developments—industrial, agricultural, social and educational—will be needed to raise nutritional levels in India. The fact that in general the diet of the population has deteriorated since the surveys reported here were carried out emphasizes the vastness of the problem.

DIET SURVEYS.

Province or State	ASSAM		BARODA	BENGAL
District	Cochar	Jorehaut	Naweari District.	Calcutta
Source	1	2	3	1
Urban or rural	Rural	Rural	Rural	Urban
No. of families	37	35	9	5
No. of persons .. ..	..	..	55	48
No. of days of survey	21	21	14	7
Season .. ..	..	March and April	February and March	..
Economic status, etc.	Industrial labourers earning Rs. 8-10 p.m.	Tea plantation labourers.	Small cultivators.	Middle class families earning Rs. 200-500/- p.m.

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	19.0	19.4	8.1	10.2
Wheat .. ..	..	..	..	3.1
Millets .. ..	..	..	11.3	..
Other cereals .. ..	..	..	..	..
Pulses	1.0	0.9	4.0	1.5
Leafy vegetables	0.2	0.8	..	0.7
Non-leafy vegetables	3.4	4.4	2.6	11.6
Fruit .. ..	..	..	..	3.3
Ghee	(no ghee)	(no ghee)	0.3	..
Vegetable oils	0.3	0.3	0.4	2.2
Milk and butter-milk	0.5	..	2.3	11.0
Meat, fish and eggs	0.2	0.7	..	5.6
Sugar and jaggery .. ..	..	..	..	..

1 Wilson, H. E. C. & Mitra, D. D. (1938) *Ind. J. Med. Res.*, 26, p. 131.2 Mitra, D. D. (1939) *Ibid*, 27, p. 441.

3 Pendse (unpublished).

Diet Surveys.

Province or State			BENGAL			BHOPAL
District	..	..	Calcutta	Barasat	Dinajpore	Bhopal
Source			2	1	2	4
Urban or rural	..	..	Urban	Rural	Rural	Rural
No. of families	..	..	7	10	40	17
No. of persons	..	..	..	70	..	96
No. of days of survey	..	..	21	7	21	7
Season	..	..	June	..	January and February.	March
Economic status, etc.	..	..	Marwari families Business and professional people earning Rs. 100-1000 p.m.	Agriculturists dependent on their own land.	Small agriculturists.	Lower middle class, earning Rs. 250-500 per year.

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	..	..	3.0	23.7	25.0	0.8
Wheat	..	..	10.3	..	..	17.2
Millets	..	..	..	..	..	..
Other cereals	..	..	..	..	..	..
Pulses	..	..	2.4	1.4	0.4	2.7
Leafy vegetables	..	..	..	0.8	0.2	0.2
Non-leafy vegetables	..	..	6.2	9.2	7.0	2.0
Fruit	..	..	3.1	0.6	..	..
Ghee	..	..	2.0	..	..	0.2
Vegetable oils	..	..	..	0.6	0.3	0.16
Milk and butter-milk	..	..	11.7	3.1	..	0.6
Meat, fish and eggs	..	..	..	1.8	0.7	0.91
Sugar and jaggery	..	..	0.6	..	..	0.45

Diet Surveys.

Province or State		BIHAR				
District	Jamshedpur				Bhaga village.	
Source	5	5	5	5	6	
Urban or rural ..	Urban	Urban	Urban	Urban	Rural	
No. of families ..	110	35	19	13	52	
No. of persons ..	845				279	
No. of days of survey	15				10	
Season ..	July and August					
Economic status, etc. ..	Industrial workers earning up to					
	Rs. 1/- per day.	Rs. 1/8 per day.	Rs. 3/- per day.	Over Rs. 3/- per day.	Santal	

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	23·9	24·4	22·1	21·0	16·2
Wheat .. ..	..	..	..	..	..
Millets .. ..	..	..	..	..	..
Other cereals .. ..	..	..	..	..	..
Pulses	2·4	3·1	3·8	3·4	0·4
Leafy vegetables	1·2	1·0	0·3	0·1	2·0
Non-leafy vegetables	2·3	2·7	5·5	6·2	0·5
Fruit	0·1	0·3	0·9	0·9	..
Ghee .. ..	..	..	..	..	..
Vegetable oils	0·5	0·8	1·3	1·8	..
Milk and butter-milk	0·5	1·4	2·6	5·7	0·2
Meat, fish and eggs	0·6	0·7	1·3	1·0	0·2
Sugar and jaggery	0·2	0·3	0·7	0·8	..

5 Mitra, K. (1939) Ind. J. Med. Res., 27, p. 887.

6 Mitra, K. (1940) Ibid, 28, 117.

Diet Surveys.

Province or State			BIHAR (Santal Parganas)				
District	Mahulbanana, Amui.	Kushira, Amrapara.	Mahulbanana.		Gomopahar, Boropahar, Chognidih, Amarijwala.	Jalokuri, Chotapakharia, Sidhghat.	
Source	6	6	6	6	6	6	
Urban or rural ..	Rural	Rural	Rural	Rural	Rural	Rural	
No. of families ..	36	38	7	5	39	44	
No. of persons ..	198	209	27	23	214	213	
No. of days of survey ..	10	10	10	10	10	10	
Season	October to January						
Economic status etc. ..	Aboriginal tribes practising agriculture.						
	Santal	Santal	Mahali	Dom	Malpahari	Sauriapahari.	

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	20·1	19·3	20·4	18·4	13·1	14·9
Wheat .. ..	..	..	..	..	..	..
Millets .. ..	..	..	..	..	..	..
Other cereals ..	..	..	..	..	..	..
Pulses	0·6	0·2	0·8	1·1	0·5	3·9
Leafy vegetables ..	2·0	1·6	1·6	0·3	0·9	0·4
Non-leafy vegetables ..	0·5	0·8	0·7	0·5	0·3	0·2
Fruit .. ..	..	..	..	..	..	..
Ghee .. ..	..	..	..	..	..	..
Vegetable oils ..	0·1	..	0·2	..	..	0·1
Milk and butter-milk ..	0·1	..	..	..	..	..
Meat, fish and eggs ..	0·1	..	0·4	..	..	..
Sugar and jaggery ..	..	..	..	..	..	..

Diet Surveys.

Province or state			BIHAR			
District	GAYA					
	Darbhangha			Jharia Coal Fields		
Source	7	7	7	8	8	
Urban or rural ..	Rural	Rural	Rural	Urban	Urban	
No. of families ..	100	143	20	37	41	
No. of persons ..	..	..	..	260	222
No. of days of survey ..	10	10	10	10	10	
Season .. ..	..	..	..	Winter	Winter
Economic status, etc. ..	Poor Pathan cultivators, daily income per c. u. in annas 2·8.	Lower middle class. Average income per c. u. per diem in annas 5·2.	Momins daily income per c.u. over annas 7·5	Mine worker family incomes over Rs. 50/- p.m.	Mine workers family incomes Rs. 30/- to Rs. 50/- p.m.	

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	} 16·4	20·0	} 23·2	16·9	22·8
Wheat .. ..					..
Milleta .. ..					..
Other cereals ..	..	..	..	..	..
Pulses	5·3	6·0	6·2	3·9	4·0
Leafy vegetables ..	0·2	0·7	0·7	1·4	0·9
Non-leafy vegetables ..	6·4	3·5	4·7	9·1	7·0
Fruit	Nil	0·2	0·1	2·6	0·9
Ghee	} 0·5	0·8	0·9	2·1	..
Vegetable oils ..					..	..	1·3
Milk and butter-milk ..	1·2	3·3	4·3	10·2	6·2
Meat, fish and eggs ..	1·6	1·7	1·5	2·3	1·7
Sugar and jaggery ..	0·1	0·4	0·8	1·1	0·9

7 Mitra, K., (1944) unpublished.

8 Mitra, K., (1941) Ind. J. Med. Res., 29, p. 143.

Diet Surveys.

Province or State		BIHAR			
District	Jharia Coal Fields.		Patna.	Purnea.	
Source	8	8	7	7	7
Urban or rural ..	Urban	Urban	Rural	Rural	Rural
No. of families ..	42	74	120	60	50
No. of persons ..	210	284	..	..	..
No. of days of survey ..	10	10	10	10	10
Season	Winter	Winter	..	..	..
Economic status, etc., ..	Mine workers family incomes Rs. 15/- to Rs. 30/- p.m.	Mine workers income less than Rs. 15/- p.m.	Average income in annas per c.u. per diem 8-0, upper middle class.	Sisbadhis poor cultivators, daily income per c.u. in annas 3-7.	Jute cultivators, daily income per c.u., in annas 4-4.

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	27.4	23.6	} 18.0	22.6	28.8
Wheat .. ..	..	..	
Millet .. ..	..	..	
Other cereals .. ..	..	..	..	..	..
Pulses	3.9	4.2	4.1	6.8	0.8
Leafy vegetables ..	1.1	2.5	1.2	2.2	2.4
Non-leafy vegetables ..	3.6	1.9	5.9	0.9	2.6
Fruit	0.1	..	0.6	4.6	1.5
Ghee .. ..	..	..	} 1.8	0.2	0.8
Vegetable oils ..	0.7	0.5			
Milk and butter-milk ..	1.6	0.4	4.1	1.1	0.1
Meat, fish and eggs ..	1.2	1.4	3.7	1.6	1.3
Sugar and jaggery ..	0.4	0.3	0.6	0.2	0.1

Diet Surveys.

Province or State		BIHAR			
District	Santal Parganas	Saran	Shahabad	Singhbhum	
Source	7	7	7	9	9
Urban or rural ..	Rural	Rural	Rural	Rural	Rural
No. of families ..	81	80	55	91	121
No. of persons ..	..	..	..	509	605
No. of days of survey ..	10	10	10	10	10
Season ..	..	..	..	Cold weather	Cold weather
Economic status, etc. ..	Poor Momins (weavers and cultivators) daily income per c.u. in annas 1·7.	Average income per c. u. per diem in annas 9·2, upper middle class.	Lower middle class. Average income per c.u. per diem in annas 5·2.	Hos. aborigines, income less than Rs. 30/- per annum per family.	Hos. aborigines, incomes between Rs. 30/- and Rs. 60/- per annum per family.

FOODSTUFFS : Ozs. per consumption unit per day.

Rice .. ..	..	..	..	17·8	19·5
Wheat	} 20·2	22·3	18·6	..	..
Millets .. ..		..	..	..	..
Other cereals .. ..		..	..	..	..
Pulses	0·7	4·8	2·8	0·6	0·8
Leafy vegetables ..	0·3	0·3	0·5	0·5	0·9
Non-leafy vegetables ..	1·2	4·6	2·5	0·4	0·5
Fruit	Nil	0·3	Nil	..	..
Ghee	} 0·2	1·3	0·9	..	..
Vegetable oils .. ..		..	..	..	..
Milk and butter-milk ..	0·4	5·2	1·1	..	..
Meat, fish and eggs ..	0·5	3·7	2·2	..	..
Sugar and jaggery ..	Nil	0·9	0·3	..	..

Diet Surveys.

Province or State	BIHAR		BOMBAY		
District	Singhbhum		Bombay City		
Source	9	9	10	10	10
Urban or rural ..	Rural	Rural	Urban .	Urban	Urban
No. of families ..	26	12	10 ..	10	10
No. of persons ..	104	53	53 ..	40	37
No. of days of survey ..	10	10	7	7	7
Season	Cold weather	Cold weather	..	..	..
Economic status, etc. ..	Hos. aborigi- nals, incomes between Rs. 80/- and Rs. 90/- per annum per family.	Hos. aborigi- nals. In- comes over Rs. 90/- per family per annum.	Gujrati fami- lies mostly Municipal sweepers with average income Rs. 36/- p.m.	Deccani families Peons and laboratory assistants family income Rs. 40/- p.m.	N. Indian Hindus : Ward-boys, etc. with average family income Rs. 55/- p.m.

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	21.2	23.0	6.5	16.2	2.0
Wheat .. ..	..	..	7.3	0.1	16.2
Millets .. ..	..	..	..	..	..
Other cereals .. ..	..	..	..	..	..
Pulses	0.8	0.9	2.4	2.6	2.0
Leafy vegetables	1.1	0.9	1.0	1.8	0.6
Non-leafy vegetables	0.5	0.7	3.2	5.7	6.5
Fruit .. ..	..	..	..	..	..
Ghee .. ..	..	..	..	..	0.5
Vegetable oils .. ..	..	..	0.8	2.1	1.1
Milk and butter-milk .. ..	..	..	1.5	0.6	1.6
Meat, fish and eggs .. ..	..	..	0.7	0.9	2.0
Sugar and jaggery .. ..	..	..	1.6	1.2	1.3

Diet Surveys.

Province or State			BOMBAY			
District			Bombay City			
Source			10	11	12	12
Urban or rural			Urban	Urban	Urban	Urban
No. of families			10	59	36	36
No. of persons			51	..	..	..
No. of days of survey			7	7	One day	One day
Season .. ..			..	July-August 1941	July 1941- Aug. 1942	July 1941- Aug. 1942
Economic status, etc.			Middle class Deccani families mostly clerks with average family income Rs. 135/- p.m.	Poor Parsi families.	Gujarati middle class families monthly in- come per c.u. Rs. 34.5.	Gujarati middle class families monthly in- come per c.u. Rs. 22.8.

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	8.2	3.7	3.3	3.6
Wheat	3.2	4.1	5.5	5.6
Millets	0.2	0.3	1.5	0.8
Other cereals .. ..	..	..	..	..
Pulses	1.1	1.7	2.1	1.8
Leafy vegetables	1.8	0.6	Nil	Nil
Non-leafy vegetables	3.2	6.0	7.7	7.0
Fruit .. ..	..	0.2	Nil	Nil
Ghee	0.9	0.9	1.4	1.6
Vegetable oils	2.0	0.7	1.1	1.0
Milk and butter-milk	7.6	7.1	11.1	10.6
Meat, fish and eggs	4.1	2.1	Nil	Nil
Sugar and jaggery	1.9	1.6	1.7	1.9

11 A. K. Boman-Behram, Dadar Parsi Welfare Centre Publication (1943).

12 V. V. Shah and M. H. Patel, (1943) Gujarat Research Society, Bombay.

Diet Surveys.

Province or State		BOMBAY			
District	Bombay city (contd.)			Bijapur	
Source	12	12	13	14	14
Urban or rural ..	Urban	Urban	Urban	Rural	Rural
No. of families ..	90	31	7	17	7
No. of persons ..	..	..	28	..	..
No. of days of survey ..	One day	One day	7	10	10
Season	July 1941- Aug. 1942.	July 1941- Aug. 1942.		December	December
Economic status, etc. ..	Gujarati middle class families, monthly income per c.u. Rs. 15-3.	Gujarati middle class families.	Indian Christian poor class families monthly in- come per c.u. Rs. 18-10	Small Agriculturist Annual income Rs. 100-300	Daily Labourers Annual income below Rs. 100

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	3.8	5.2	6.6	0.18	0.02
Wheat	4.9	6.8	5.4	1.3	0.36
Millets	1.9	1.2	..	27.2	19.5
Other cereals ..	..	..	..	..	0.7
Pulses	2.2	2.5	0.5	1.28	3.52
Leafy vegetables ..	Nil	Nil	0.3	0.81	1.5
Non-leafy vegetables ..	6.4	5.4	4.1	1.16	1.32
Fruit	Nil	Nil	Nil	..	..
Ghee	1.2	1.3	0.3	0.06	0.01
Vegetable oils ..	1.0	0.9	0.7	0.2	0.53
Milk and butter-milk ..	9.1	5.7	3.0	1.07	0.3
Meat, fish and eggs ..	Nil	Nil	4.6	Nil	Nil
Sugar and jaggery ..	1.5	1.9	1.3	0.74	0.35

13 N. G. Nhavi (unpublished)

14 T. B. Patel (1945) Ind. J. Med. Res. 33, p. 249.

Diet Surveys.

Province or State		BURMA			
District	Magwe Taungdwingyi Town	Mergui		Yamethin. Village Ela.	
		Gawgali Tin mines	Palaw Town		
Source	15	15	15	16	
Urban or rural	Urban	Rural	Rural	Rural	
No. of families	33	13	..	25	
No. of persons .. ..	..	24	..	129
No. of days of survey ..	7	7	7	7	
Season	July.	March, April and May.	March, April and May.	August and September.	
Economic status, etc. ..	Coolies, small traders and officials.	Burmese mine workers.	Fishermen, Policemen, tradesmen, etc.	Mostly small cultivators.	

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	16	28·0	15·7	17·4
Wheat .. ..	..	..	..	..
Millets .. ..	..	..	..	..
Other cereals .. ..	..	..	..	..
Pulses	0·2	1·2	..	0·5
Leafy vegetables ..	0·8	0·2	0·4	0·9
Non-leafy vegetables ..	3·3	0·3	0·9	4·9
Fruit	0·1	..	0·9	0·3
Ghee	0·1	..	..	..
Vegetable oils	1·0	0·5	0·5	1·3
Milk and butter-milk ..	0·5	..	..	1·9
Meat, fish and eggs ..	2·0	2·0	3·3	3·6
Sugar and jaggery ..	0·1	..	..	0·4

15 V. M. Gale, (1940) unpublished.

16 V. M. Gale, (1939) unpublished.

Diet Surveys.

Province or State		BURMA				
District	Mergui		Mimbu			
		Kantabin Wolfram Mines	Village Ywathaya	Village Shweyanthi	Mimbu Town	
Source	15	15	16	16	16	
Urban or rural ..	Rural	Rural	Rural	Rural	Urban	
No. of families ..	20	30	35	33	32	
No. of persons ..	66	155	171	195	208	
No. of days of survey ..	7	7	7	7	7	
Season ..	March, April and May.	March, April and May.	November and Dec.	November and Dec.	November and Dec.	
Economic status, etc. ..	Telegu rubber estate coolies.	Burmese mine workers.	Small cultivators.	Small cultivators.	Small tradesmen and Govern- ment officials.	

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	30.1	18.0	17.1	9.6	14.2
Wheat .. ..	..	..	..	..	..
Milleta .. ..	..	..	..	8.7 (Mostly maize)	..
Other cereals ..	..	..	..	..	..
Pulses	4.6	..	0.1	0.5	0.3
Leafy vegetables ..	0.1	0.7	0.3	0.3	0.6
Non- leafy vegetables ..	0.6	1.8	0.7	5.3	2.5
Fruit .. ..	..	1.1	0.1	..	0.6
Ghee .. ..	..	..	..	..	..
Vegetable oils ..	1.1	0.2	0.6	0.5	1.2
Milk and butter-milk ..	..	..	..	..	3.7
Meat, fish and eggs ..	1.1	2.7	1.1	0.7	3.0
Sugar and jaggery ..	..	..	..	..	0.4

Diet Surveys.

Province or State		BURMA			
District	Thaton.			Yamethin.	
	Thaton Town	Bilin Town	Paung	Yamethin Town	Village Kantha
Source	17	17	17	16	16
Urban or rural ..	Mixed	Mixed	Rural	Urban	Rural
No. of families ..	23	33	35	31	29
No. of persons ..	150	178	234	178	146
No. of days of survey ..	7	7	7	7	7
Season	February and March.	February and March.	February and March.	August and September.	August and September.
Economic status, etc. ..	Taungthu cultivators, clerks and small traders.	Small tradesmen and cultivators.	Talaing cultivators.	Small tradesmen and middle class groups.	Mostly cultivators.

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	19.9	20.3	29.4	16.5	19.8
Wheat .. ..	..	..	..	..	..
Millets .. ..	..	..	..	..	..
Other cereals .. ..	..	..	..	..	..
Pulses	0.1	..	..	0.8	0.1
Leafy vegetables	0.3	0.3	1.0	0.6	0.9
Non-leafy vegetables	2.1	3.6	4.1	3.6	1.9
Fruit	0.2	0.1	0.7	0.2	0.1
Ghee .. ..	..	..	..	..	..
Vegetable oils	0.4	0.5	0.7	1.1	0.8
Milk and butter-milk	0.1	..	..	0.9	..
Meat, fish and eggs	3.0	3.1	4.2	2.2	2.3
Sugar and jaggery	0.1	..	..	0.2	..

Diet Surveys.

Province or State		CENTRAL PROVINCES				
District	Raipur	Nagpur Town	Raipur	Tirodi	Warud	
Source	18	19	20	19	19	
Urban or rural ..	Rural	Urban	Both	Urban	Rural	
No. of families ..	about 25	22	31	29	20	
No. of persons ..	..	121	..	81	107
No. of days of survey ..	20	15	10	18	16	
Season	December	December	Cold weather.	March.	January-February.	
Economic status, etc. ..	Agriculturists.	Cotton mill workers with incomes, Rs. 10/- to Rs. 32/- per family.	Poor and middle class Hindus.	Manganese mine workers with average income of Rs. 7/2/- per consumption unit.	Agriculturists.	

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	26.4	16.5	25.6	21.5	0.1
Wheat	0.2	2.5	0.2	1.0	1.5
Millets	::	::	::	..	16.0 (chulam)
Other cereals .. ..	::	..	..	..	..
Pulses	1.1	2.1	1.2	2.5	2.0
Leafy vegetables	1.5	0.9	1.4	0.5	..
Non-leafy vegetables	3.1	3.2	2.8	4.8	4.5
Fruit	0.1	::	0.1	..	..
Ghee .. ..	..	0.14	..	0.3	..
Vegetable oils	0.2	0.5	0.16	0.6	0.3
Milk and butter-milk	0.2	0.85	0.2	..	1.8
Meat, fish and eggs	0.1	0.27	..	0.5	..
Sugar and jaggery .. ..	..	..	..	..	..

18 Narindra Singh & Wilson, D. C. (unpublished).

19 Bhave, P. D., (1941) Ind. J. Med. Res., 29, p. 99.

20 Wilson, D. C., and Widdowson E. M., (1942) Ind. J. Med. Res., Mem. No. 34.

Diet Surveys.

Province or State		CEYLON				
District	Batticaloa		Jaffna		Mannar Village Thabrupadu	
	Village Palamir- madu	Village Veechukal- munai	Village Chulipuram	Village Navali		
Source	21	21	21	21	21	
Urban or rural ..	Rural	Rural	Rural	Rural	Rural	
No. of families ..	24	30	24	24	24	
No. of persons ..	93	148	107	104	107	
No. of days of survey ..	10	10	10	10	10	
Season	March.	March.	March.	March.	February.	
Economic status, etc. ..	Fishermen, Tamils.	Paddy cultivators, Tamils.	Paddy cultivators, Tamils.	Fishermen, Tamils.	Fishermen, Tamils.	

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	13·0	13·5	21·2	19·0	18·6
Wheat .. ..	..	..	..	..	..
Milletts	0·3 (ragi)	..	0·2 (ragi)	..	..
Other cereals ..	..	..	..	..	..
Pulses	0·1	0·1	..	0·7	..
Leafy vegetables ..	0·1	0·1	2·6	0·1	..
Non-leafy vegetables ..	2·6	4·0	2·2	1·7	1·0
Fruit .. ..	..	..	..	..	0·2
Ghee .. ..	..	..	..	..	..
Vegetable oils ..	0·7	0·6	0·9	1·3	1·0
Milk and butter-milk ..	..	0·1	..	..	..
Meat, fish and eggs ..	3·3	3·7	0·6	2·7	6·2
Sugar and jaggery ..	1·1	0·4	0·2	0·4	0·9

Diet Surveys.

Province or State	CEYLON	COORG		DELHI PROVINCE		
District	Mannar Village Naratukulan	Igodulu Village	Mercara Town	Najafgarh		
Source	21	22	22	23	23	23
Urban or rural ..	Rural	Rural	Semi-urban	Rural	Semi-urban	Rural
No. of families ..	29	18	26	25	10	14
No. of persons ..	115	..	..	85	45	82
No. of days of survey ..	10	15	15	6	14	10
Season ..	February.	March.	October.	December.	January.	February.
Economic status, etc. ..	Paddy cultivators, Tamils.	Low economic status.	Low economic status.	Labourers engaged on road making on 4 to 8 annas per day.	Small tradesmen earning Rs. 8 to 30 p.m.	Cultivators living on their own land.

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	22.2	23.3	21.5	..	..	..
Wheat .. ..	..	..	..	26.5	10.9	2.5
Millets .. ..	..	0.1	0.2	2.1	5.8	18.2
Other cereals ..	..	..	..	..	2.8	2.5
Pulses	0.2	0.7	1.0	8.4	4.2	2.6
Leafy vegetables ..	0.1	0.5	0.2	2.4	2.0	1.5
Non-leafy vegetables ..	3.9	3.8	5.2	0.5	3.0	0.5
Fruit .. ..	..	..	..	..	..	..
Ghee .. ..	..	..	0.1	..	0.3	0.5
Vegetable oils ..	0.7	0.5	0.3	..	..	..
Milk and butter-milk ..	0.4	2.0	2.8	..	5.7	13.9
Meat, fish and eggs ..	2.2	0.2	1.6	..	..	..
Sugar and jaggery ..	0.8	0.9	1.9	1.5	1.5	0.4

22 Bhave, P. D., and Bopaiya, M. S., (1942) *Ind. J. Med. Res.*, 30, p. 53.23 Shourie (1939) *Ibid.* 23, p. 907.

Diet Surveys.

Province or State		HYDERABAD			
District	Aurangabad		Nizambad	Raichur	
				Taluk Alampur	Taluk Alampur
Source	24	24	25	26	26
Urban or rural ..	Rural	Rural	Rural	Rural	Rural
No. of families ..	88	105	31	105	47
No. of persons ..	..	..	198	316	212
No. of days of survey ..	7	7	7	7	7
Season ..	June & July.	June & July.	Winter.	Early summer.	Early summer.
Economic status, etc. ..	Small cultivators, income less than Rs. 3/- per man value.	Small cultivators, incomes Rs. 3/- to Rs. 6/- per man value.	Mostly small cultivators. Family incomes more than Rs. 20/- p.m.	Small cultivators, monthly family income less than Rs. 10/- p.m.	Small cultivators, monthly family income more than Rs. 10/- p.m.

FOODSTUFFS : Ozs. per consumption unit per day.

Rice .. ..	..	0.8	20.2	0.5	3.1
Wheat .. ..	..	0.1	1.4	..	0.4
Millets	23.5 (mostly jowar)	25.4 (mostly jowar)	4.8	25.8 (mostly jowar)	18.3
Other cereals ..	..	..	..	..	..
Pulses	0.6	1.1	2.0	1.3	2.8
Leafy vegetables ..	0.2	0.1	0.1	0.1	0.2
Non-leafy vegetables ..	0.1	0.2	2.3	0.1	0.4
Fruit .. ..	..	..	..	..	0.4
Ghee .. ..	..	..	0.2	..	0.2
Vegetable oils ..	0.04	0.2	0.5	0.1	0.2
Milk and butter-milk ..	..	0.74	3.9	2.1	8.9
Meat, fish and eggs ..	0.2	0.4	0.3	0.5	0.1
Sugar and jaggery ..	..	..	0.3	..	0.1

24 Daver, (1942) unpublished.

25 Naidu, G. R., (1942) unpublished.

26 Naidu, G. R., (1941) unpublished.

Diet Surveys.

Province or State		HYDERABAD			
District	Aurangabad		Bidar		
Source	24	24	24	24	24
Urban or rural ..	Rural	Rural	Rural	Rural	Rural
No. of families ..	28	7	23	50	81
No. of persons ..	..	..	164	330	475
No. of days of survey ..	7	7	10	10	10
Season ..	June & July.	June & July.	February.	February.	February.
Economic status, etc. ..	Small cultivators, income Rs. 8/- to Rs. 10/- per man value.	Small cultivators, income over Rs. 10/- per man value.	Mostly small cultivators, Telegus.	Mostly small cultivators.	Mostly small cultivators, Karnatak.

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	0·9	2·5	0·7	1·2	2·0
Wheat	2·0	8·0	0·3	0·8	1·1
Millets	22·1 (Mostly Jowar)	4·2	26·7 (Jowar)	25·7 (Jowar)	26·1 (Jowar)
Other cereals ..	..	..	..	..	..
Pulses	1·7	2·4	2·2	2·7	3·0
Leafy vegetables ..	0·2	1·1	..	0·3	0·1
Non-leafy vegetables ..	0·8	2·2	..	0·5	0·7
Fruit	0·6	1·1	..	..	..
Ghee	0·16	0·7	0·1	0·1	0·2
Vegetable oils ..	0·4	0·4	0·2	0·3	0·3
Milk and butter-milk ..	2·1	7·9	0·8	2·4	4·2
Meat, fish and eggs ..	0·3	0·1	0·4	0·1	0·2
Sugar and jaggery ..	0·6	1·1	..	0·2	0·5

Diet Surveys.

Province or State		HYDERABAD			
District	Hyderabad City (Deccan)	Mahboobnagar		Medak	
				Village Annaagar	Village Muluk
Source	20	26	26	27	27
Urban or rural ..	Urban	Rural	Rural	Rural	Rural
No. of families ..	22	101	38	11	12
No. of persons ..	..	561	331	57	73
No. of days of survey ..	10	7	7	10	9
Season ..	February.	Winter.	Winter.	September.	September.
Economic status, etc. ..	Low caste Hindus.	Small cultivators, family incomes less than Rs. 20/- p.m.	Mostly small cultivators, family incomes more than Rs. 20/- p.m.	Small cultivators.	Small cultivators.

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	14.6	6.0	12	2.7	2.1
Wheat .. ..	..	..	..	..	..
Milleta	9.5	17.6 (mixed)	13	15.8 (Mostly maize)	13.1 (Mostly ragi)
Other cereals ..	..	..	..	..	..
Pulses	1.1	0.6	1.5	0.1	..
Leafy vegetables ..	1.7	..	..	0.4	0.3
Non-leafy vegetables ..	0.7	0.2	0.6	0.9	1.0
Fruit .. ..	..	..	..	..	..
Ghee	0.03	0.1	0.3	..	..
Vegetable oils ..	0.22	0.1	0.2	0.01	0.1
Milk and butter-milk ..	..	1.1	5.3	3.9	1.0
Meat, fish and eggs ..	0.13	0.4	0.3	..	0.02
Sugar and jaggery ..	..	..	..	..	..

Diet Surveys.

Province or State.			HYDERABAD		
District	Medak. Village Palwalla	Nalgonda		Nizamabad	
Source	27	26	26	28	28
Urban or rural ..	Rural	Rural	Rural	Rural	Rural
No. of families ..	9	118	16	25	43
No. of persons ..	46	551	105	91	212
No. of days of survey ..	10	7	7	..	..
Season	September.	Rains.	Rains.	Nov. and Dec. 1941.	Nov. and Dec. 1941.
Economic status, etc. ..	Small cultivators.	Small cultiva- tors, family income less than Rs. 14/- p.m.	Mostly small cultivators, family in- come Rs. 14/- to 30/- p.m.	Daily labourers.	Daily labourers.

FOODSTUFFS : Ozs. per consumption unit per day

Rice .. ..	..	8·3	9·4	20·8	20·2
Wheat .. ..	..	..	..	..	0·01
Millets	17·1 (Mostly Jowar)	12·9	12·0	2·31	4·36
Other cereals ..	..	..	..	..	..
Pulses	1·8	0·5	0·7	0·6	0·6
Leafy vegetables ..	0·2	0·4	0·6	0·17	0·06
Non-leafy vegetables ..	0·6	0·1	0·1	0·6	0·7
Fruit	1·1	..	..	..	..
Ghee .. ..	..	..	..	..	..
Vegetable oils ..	0·1	0·15	0·3	0·1	0·1
Milk and butter-milk ..	0·1	0·5	2·6	0·34	2·4
Meat, fish and eggs ..	..	0·25	0·3	0·8	0·5
Sugar and jaggery ..	..	..	0·1	..	..

Diet Surveys.

Province or State		HYDERABAD				
District		Nizamabad				
Source		28	28	28	28	25
Urban or rural	..	Rural	Rural	Rural	Rural	Rural
No. of families	..	50	15	9	7	113
No. of persons	..	283	87	61	50	586
No. of days of survey	..	..	..	..	..	7
Season	..	Nov., and Dec., 1941.	Nov., and Dec., 1941.	Nov., and Dec., 1941.	Nov., and Dec., 1941.	Winter.
Economic status, etc.	..	Small agri- culturists.	Small agri- culturists.	Agri- culturists.	Agri- culturists.	Mostly smalls agriculturist family in- comes less than Rs. 25 /- p.m.

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	..	16.2	18.5	22.5	19.7	18.8
Wheat	..	..	0.8	0.15	2.2	..
Millet	..	8.0	5.8	3.9	2.8	4.9
Other cereals	..	..	..	..	..	..
Pulses	..	1.03	2.1	2.00	2.00	0.7
Leafy vegetables	..	0.09	0.06	0.11	0.03	0.1
Non-leafy vegetables	..	1.38	1.30	1.90	2.7	0.9
Fruit	..	..	..	..	..	..
Ghee	..	0.08	0.16	0.2	0.4	..
Vegetable oils	..	0.27	0.4	0.4	0.6	0.15
Milk and butter-milk	..	1.90	2.8	3.9	4.1	1.5
Meat, fish and eggs	..	0.2	0.2	0.1	0.6	0.3
Sugar and jaggery	..	0.17	0.2	0.25	0.6	..

Diet Surveys.

Province or State	KASHMIR			MADRAS	
District	Srinagar		Chingleput	Trichinopoly District.	
Source	29	20	30	Mayanur.	
				30	31
Urban or rural ..	Rural and urban	Mostly urban	Rural	Rural	Rural
No. of families ..	23	23	12	32	25
No. of persons ..	..	..	..	274	129
No. of days of survey ..	..	10	20	20	15-20
Season	October.	October.	January	July, August.	February.
Economic status, etc. ..	..	Poor middle class. Hindus and Muslims.	Cultivators & labourers.	Small cultivators.	

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	25.6	25.6	15	10	14
Wheat	1.3	1.3	..	..	..
Millets ....	..	..	2	9	6
Other cereals ..	..	..	..	..	..
Pulses	0.6	0.6	0.5	1.4	1.4
Leafy vegetables ..	5.2	5.2	0.3	0.3	0.3
Non-leafy vegetables ..	1.5	1.5	0.9	1.5	3.4
Fruit .. ..	..	..	..	..	..
Ghee .. ..	..	..	..	..	..
Vegetable oils	0.9	0.9	0.1	0.6	0.5
Milk and butter-milk ..	2.2	2.2	..	..	..
Meat, fish and eggs ..	0.2	0.2	0.8	0.1	0.2
Sugar and jaggery ..	0.5	0.5	..	..	..

29 Shourie and Wilson, D. C. (unpublished).

30 Aykroyd & Krishnan (1937) *Ind. J. Med. Res.*, 24, p. 687.31 Aykroyd & Krishnan (1937) *Ibid.*, 25, p. 1.

Diet Surveys.

Province or State		MADRAS					
District	Nilgiris	Madras City Saidapet	Godavari	Godavari	Madras City Saidapet Mambalam		
Source	32	33	34	34	33	35	
Urban or rural ..	Rural	Urban	Rural	Rural	Urban	Semi-urban	
No. of families ..	16	14	34	16	25	20	
No. of persons ..	90	83	..	..	144	110
No. of days of survey ..	7	18-20	10	..	20	20	
Season ..	June.	January	January.	September.	July.	July.	
Economic status, etc. ..	Tea plantation labourers.	Weavers. Leprosy in 13 families.	Poor agri- culturists.	Poor agri- culturists.	Weavers, leprosy in 16/25 families.	Labourers.	

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	18	14.2	21.5	21.9	15.5	16.3
Wheat .. ..	..	..	..	..	..	..
Millets .. ..	..	..	..	..	..	..
Other cereals .. ..	..	..	..	..	..	..
Pulses	1.0	0.9	0.7	0.8	1.25	0.75
Leafy vegetables .. ..	..	0.6	0.1	0.4	1.0	0.2
Non-leafy vegetables	3.0	2.8	3.3	2.9	2.5	1.8
Fruit	0.1	0.1	..	..	..	..
Ghee .. ..	..	..	..	..	..	..
Vegetable oils	0.4	0.5	0.9	1.2	0.5	..
Milk and butter-milk ¹ .. ..	..	1.1	9.6	5.2	3.7	..
Meat, fish and eggs .. ..	..	1.5	0.4	0.1	0.7	0.9
Sugar and jaggery .. ..	..	..	0.2	0.1	..	..

32 Krishnan (1939) Ind. J. Med. Res., 26, p. 901.

33 Aykroyd & Krishnan (1939) Ibid., 26, p. 897.

34 Aykroyd and Krishnan (1941) Ibid., 29, p. 551.

35 Nutrition Research Laboratories (unpublished).

Diet Surveys.

Province or State		MYSORE			ORISSA			
District		Closepet.		Cuttack.	Puri	Puri	Puri	Puri
Source		36	36	18	37	37	37	37
Urban or rural .. ..	..	Rural	Rural	Urban	Urban	Urban	Rural	Rural
No. of families .. ..	..	27	32	63	33			
No. of persons .. ..	..	203	232	..	163			
No. of days of survey ..	..	20	20	18	7-10.			
Season .. ..	..	July, August.	June, July.	January.	January and February.			
Economic status, etc. ..	..	Small cultivators.	Small cultivators.	..	Tradesmen, etc. (relatively well-to-do.)	Labourers, fishermen, etc.	Agriculturists free from leprosy.	Agriculturist families with leprosy

FOODSTUFFS : Ozs. per consumption unit per day.

Rice .. ..	..	2.4	1.7	18.9	16	17	24.6	21.1
Wheat .. ..	..	..	..	0.6	2.0	..	..	..
Milleta .. ..	..	24.9	24.2	..	..	..	..	..
Other cereals .. ..	..	..	..	..	..	..	..	..
Pulses .. ..	..	2.1	1.5	1.0	1.5	0.9	0.9	0.6
Leafy vegetables .. ..	..	1.3	0.5	1.4	2.0	0.9	0.3	0.4
Non-leafy vegetables ..	..	0.9	0.8	5.8	8.7	1.9	7.7	6.0
Fruit .. ..	..	..	..	..	..	..	..	..
Ghee .. ..	..	..	0.1	..	0.2	..	..	..
Vegetable oils .. ..	..	0.1	0.1	0.3	0.6	0.2	0.1	0.1
Milk and butter milk ..	..	1.9	1.0	0.8	6.5	..	..	..
Meat, fish and eggs .. ..	..	..	..	0.6	1.5	1.4	0.6	1.1
Sugar and jaggery .. ..	..	..	..	..	..	..	..	..

36 Nutrition Res. Labs. & Health Unit, Closepet (unpublished).

37 Narindra Singh, (1939) Ind. J. Med. Res., 27, p. 453.

Diet Surveys.

Province or State		ORISSA	PUNJAB			
District		Cuttack	Ferozporè			
Source		20	38	38	38	38
Urban or rural	..	Both	Rural	Urban	Urban	Urban
No. of families	..	63	16	19	8	8
No. of persons	..	..	..	..	245	7-10
No. of days of survey	..	10	7-10	7-10	7-10	..
Season	..	Cold weather	April and May.			
Economic status, etc.	..	Poor Hindus.	Middle class Hindus.	Middle class Moham-medans.	Middle class Sikhs.	Sweepers.

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	..	19.1	..	..	..	..
Wheat	..	0.2	17.4	19.8	17.8	22.4
Millets	..	..	..	..	..	..
Other cereals	..	..	..	..	..	..
Pulses	..	0.9	1.9	1.0	1.6	2.7
Leafy vegetables	..	1.3	} 4.6	5.1	4.2	3.3
Non-leafy vegetables	..	5.4				
Fruit	..	0.1	2.5	1.6	1.0	0.0
Ghee	..	..	1.2	1.3	1.5	0.4
Vegetable oils	..	0.2	..	..	..	..
Milk and butter-milk	..	0.3	8.7	7.8	12.3	2.4
Meat, fish and eggs	..	0.7	0.0	1.5	0.1	0.7
Sugar and jaggery	..	0.1	..	..	..	..

Diet Surveys.

Province or State		PUNJAB				
District	KANGRA VALLEY					
	Launa	Tharl	Launa	Gorra	Chilali	Bhadwar
Source	29	29	39	39	39	39
Urban or rural ..	Rural	Rural	Rural	Rural	Rural	Rural
No. of families ..	19		15	15	15	15
No. of persons ..			87	80	97	108
No. of days of survey ..	28	28	28	28	28	28
Season	April to October					
Economic status, etc. ..	Agriculturists and casual labourers.					

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	14·9	3·1	14·4	15·4	0·4	1·6
Wheat	5·6	0·2	7·4	10·8	18·2	24·3
Millets .. ..	..	..	..	..	..	..
Other cereals (Chiefly maize)	6·2	23·9	1·1	0·9	8·7	6·4
Pulses	1·7	2·7	0·9	1·8	1·8	2·1
Leafy vegetables ..	0·6	0·2	0·4	0·9	..	..
Non-leafy vegetables ..	1·9	0·8	0·7	1·2	1·5	1·9
Fruit .. ..	..	..	..	..	..	..
Ghee .. ..	..	..	..	0·1	..	0·2
Vegetable oils ..	0·3	0·1	0·1	0·2	..	0·1
Milk and butter-milk ..	1·6	3·4	0·8	4·0	1·7	2·2
Meat, fish and eggs ..	0·5	0·1	0·1	0·1	..	0·1
Sugar and jaggery ..	0·6	0·1	0·1	0·1	..	0·1

Diet Surveys.

Province or State		PUNJAB				
District	Ferozepore	Launa	Launa	Lyalpur		
Source	38	20	20	40	40	40
Urban or rural ..	Urban	Rural	Rural	Rural	Rural	Rural
No. of families ..	8	19	13	15	15	15
No. of persons ..	..	..	..	151	158	130
No. of days of survey ..	7-10	28	28	7	7	7
Season ..	April & May	Autumn	Spring	..	..	..
Economic status, etc. ..	Middle class Sikhs.	Small cultivators.	Small cultivators.	Cultivator Sikh Jats.	Cultivators, Janglis.	Cultivators, Muslim Jats.

FOODSTUFFS : Ozs. per consumption unit per day.

Rice .. ..	..	14.0	14.7	0.4	1.4	0.6
Wheat	22.4	3.3	3.0	26.6	32.6	33.7
Milleta .. ..	..	..	..	..	..	..
Other cereals .. ..	..	10.5	8.9	0.7	..	..
Pulses	2.7	(Maize) 1.8	(Maize) 1.9	(Maize) 3.4	0.4	1.9
Leafy vegetables ..	4.2	0.4	1.6	2.1	0.1	0.8
Non-leafy vegetables ..		1.6	1.1	5.7	1.6	2.3
Fruit	1.0	..	..	3.1	0.03	0.01
Ghee	1.5	..	0.05	3.5	0.5	1.3
Vegetable oils .. ..	..	0.35	0.34	..	..	..
Milk and butter-milk ..	12.3	2.0	1.4	Milk 15.0 Butter-milk 10.1	Milk 3.5 Butter-milk 11.1	Milk 8.1 Butter-milk 10.4
Meat, fish and eggs ..	0.1	..	0.1	0.03	0.1	0.1
Sugar and jaggery .. ..	..	0.5	1.1	4.1	0.4	1.6

Diet Surveys.

Province or State		PUNJAB			
District	Lyallpur		Sialkot		
Source	40	40	20	20	20
Urban or rural ..	Rural	Rural	Both	Both	Both
No. of families ..	15	15	18	16	16
No. of persons ..	148	121	..	..	..
No. of days of survey ..	7	7	10	10	10
Season .. ..	..	..	Cold weather.	Cold weather.	Cold weather.
Economic status, etc. ..	Cultivators Aranis B.	Aranis A cultivators.	Middle class Hindus.	Poor Hindus.	Middle class Muslims.

FOODSTUFFS : Ozs. per consumption unit per day.

Rice .. ..	..	..	1·5	2·2	4·1
Wheat	32·6	32·1	10·9	12·7	11·6
Millets .. ..	..	..	..	1·8	0·7
Other cereals .. ..	..	..	4·5 (Maize)	..	..
Pulses	2·6	1·1	1·8	2·0	1·2
Leafy vegetables .. ..	..	0·97	4·0	2·5	3·0
Non-leafy vegetables	2·2	3·3	4·5	3·7	3·0
Fruit .. ..	..	0·07	0·7	0·1	..
Ghee	1·3	1·0	1·3	0·6	1·3
Vegetable oils	0·03	0·03	0·03	0·02	0·08
Milk and butter-milk	Milk 2·5 Butter- milk 8·5	Milk 3·1 Butter- milk 8·5	10·7	2·5	7·0
Meat, fish and eggs	0·2	0·14	0·1	..	2·2
Sugar and jaggery	1·0	1·3	2·2	0·7	1·1

Diet Surveys.

Province or State	PUNJAB			RAJPUTANA		
District	Sialkot			Ajmer		
Source	20	20	20	41	41	41
Urban or rural ..	Both	Both	Both	Rural	Rural	Rural
No. of families ..	22	23	14	24	19	23
No. of persons ..	..	..	..	127	99	114
No. of days of survey ..	10	10	10	7	7	7
Season	Cold weather.	Cold weather.	Cold weather.	..	..	..
Economic status, etc. ..	Poor Muslims.	Middle class Sikhs.	Poor Sikhs.	Famine Camp at Gegal	Famine Camp at Jawaja	Famine Camp at Bijainagar

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	3·7	1·3	1·8	..	..	..
Wheat	12·4	15·0	17·3	29·8 mainly wheat	30·3 mainly wheat	30·1 mainly wheat
Millet	0·8	..	..	..	..	..
Others cereals ..	..	2·5 (maize)	3·7 (maize)	..	..	..
Pulses	0·9	1·6	2·0	0·5	0·6	0·8
Leafy vegetables ..	2·9	2·2	3·2	..	..	..
Non-leafy vegetables ..	2·5	6·5	3·3	0·8	0·6	0·8
Fruit	0·1	0·2	..	..	..	..
Ghee	0·5	1·3	0·7	..	..	..
Vegetable oils ..	0·1	..	0·04	..	0·03	..
Milk and butter-milk ..	3·5	11·4	5·9	..	1·5	..
Meat, fish and eggs ..	0·9	0·5	..	..	..	..
Sugar and jaggery ..	1·0	1·9	1·4	..	..	..

Diet Surveys.

Province or State	TRAVAN-CORE	TEHRI-GARHWAL STATE (United Provinces)		SOUTH AFRICA (Indian Families)
District	Oollannoor	Barkot	Narendra-nagar	Durban
Source	32	42	42	43
Urban or rural ..	Rural	Rural	Rural	Urban
No. of families ..	9	20	20	40
No. of persons ..	47	..	..	366
No. of days of survey ..	10	10	10 ¹	7
Season	January	July and August		
Economic status, etc. ..	Small cultivators.	Cultivators Area in which leprosy is common.	Cultivators Area in which leprosy is rare.	Shop workers and factory workers. Semiskilled employees only single visits were paid in many households and the housewife asked how much food she brought. No food was weighed.

FOODSTUFFS : Ozs. per consumption unit per day.

Rice	9	15.6	6.8	10.8
Wheat .. ..	..	0.7	17.0	6.0 (white bread)
Millets .. ..	..	..	..	..
Other cereals ..	18 (tapioca)	3.9	..	..
Pulses	1	1.8	2.4	1.4
Leafy vegetables ..	..	0.5	1.6	..
Non-leafy vegetables ..	8 (75% yam)	4.7	2.3	7.7
Fruit	5	..	..	2.6
Ghee .. ..	..	..	0.4	0.5
Vegetable oils ..	1.1	0.2	0.1	1.1
Milk and butter-milk ..	2	0.9	6.4	4.6,
Meat, fish and eggs ..	1.5	3.0
Sugar and jaggery	0.2	3.2

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