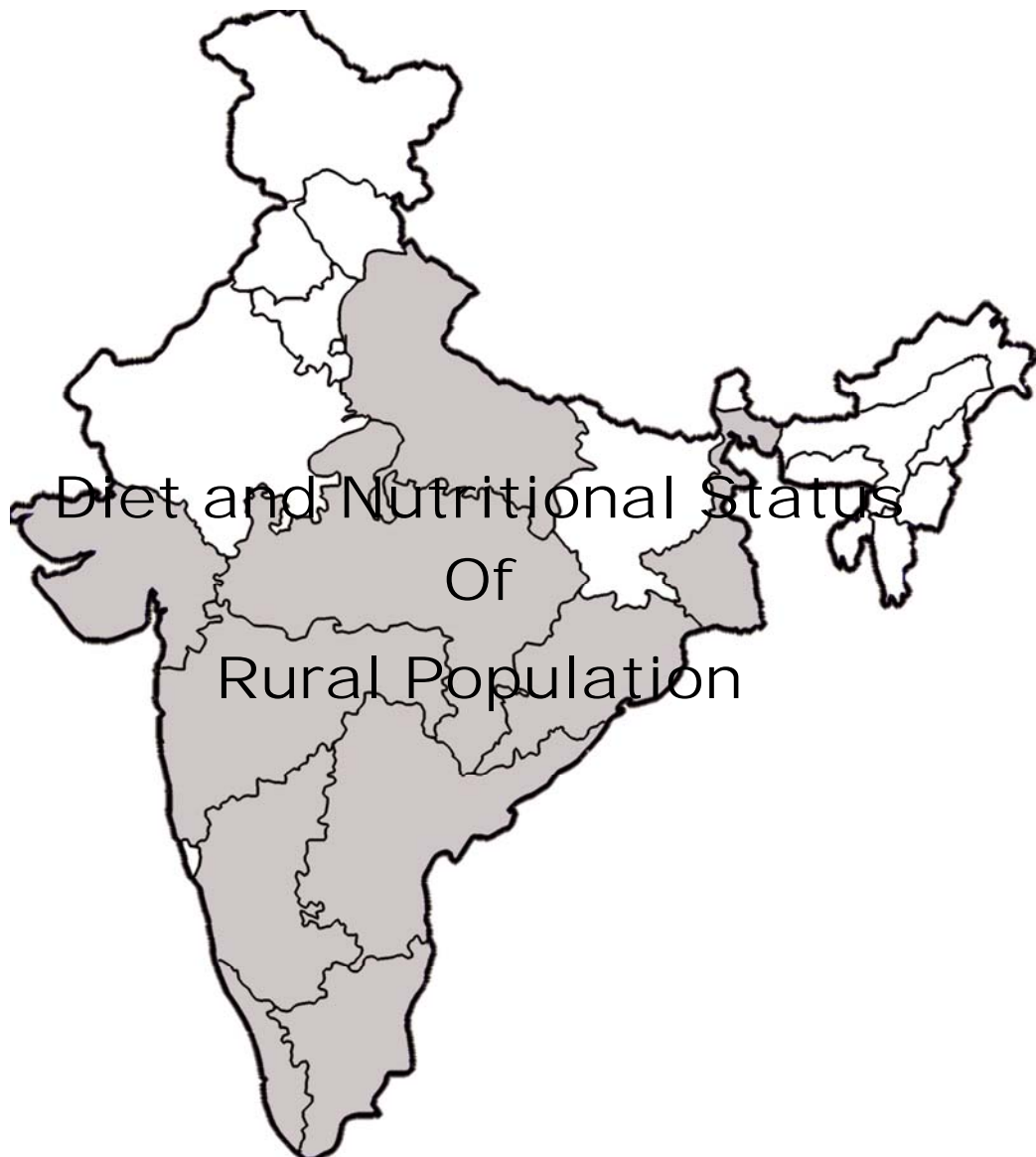


NATIONAL NUTRITION MONITORING BUREAU



NATIONAL INSTITUTE OF NUTRITION
Indian Council of Medical Research
Jamai-Osmania PO,Hyderabad-500 007

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NATIONAL NUTRITION MONITORING BUREAU

*Diet and Nutritional Status
of
Rural Population*

**NATIONAL INSTITUTE OF NUTRITION
Indian Council of Medical Research
Jamai-Osmania PO, Hyderabad-500 007**

2002

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SUMMARY

During the year 2000-2001, the NNMB carried out surveys in a sub-sample of Central quota of NSSO sample of 54th round Consumer Expenditure survey, in the States of Andhra Pradesh, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Tamil Nadu and West Bengal, to assess diet and nutritional status of individuals and prevalence of morbidity in the rural populations.

The investigations included, collection of data on demographic and socio-economic particulars of the households (HHs), nutritional anthropometry, clinical examination for nutritional deficiencies, dietary assessment and history of morbidity during the preceding 15 days.

About 51,300 individuals of different ages from 14,288 HHs in 715 villages were surveyed for anthropometry, clinical examination and prevalence of morbidity. Information on food and nutrient intake was collected from 30,968 individuals from 7,131 households.

A majority of the HHs belonged to Hindu religion (89%). About 32% of HHs belonged to backward communities, while 22% belonged to Scheduled Castes and 11% to Scheduled Tribes.

Nearly two-thirds of the HHs was living in semi-pucca houses.

The average family size was 5.0. On the average, about 16% of the families had children with birth order of ≥ 4 .

Agriculture was the major occupation in about a quarter (26%) of HHs, while about 40% were either agricultural (18%) or other labour (22%). However, about 45% of the HHs did not possess any agricultural land. About 28% of the adult males in the HHs surveyed were illiterate, as against 53% among adult females. The average monthly per capita income was Rs. 495 at the current value.

About 40% of the HHs had taps as source of drinking water, while in about 32% the drinking water source was tube wells. In general, about 26% of the HHs had sanitary latrine, about 56% of the HHs possessed separate kitchen and about two thirds of the houses were electrified.

Cereals formed the bulk of the rural dietaries, while millets were also consumed in varying quantities in the States of Gujarat, Maharashtra and Karnataka. The consumption of all foods except roots and tubers was below the RDI in all the age/sex/physiological groups. The consumption of protective foods such as pulses, GLV, milk and fruits were woefully inadequate. Consequently, the intakes of micronutrients such as iron, vitamin A, riboflavin and folic acid were far below the recommended levels in all the age groups. Only a third of the preschool and school age children were consuming diets adequate in protein and energy, the

proportion of which was higher in adolescents (about 50%) and in adults (about 70-80%).

None of the children under the age of 5 years exhibited signs of kwashiorkor, while the prevalence of marasmus was about 0.2%. The prevalence of Bitot spots, an objective sign of vitamin A deficiency and that of angular stomatitis, indicative of B-complex deficiency, was about 0.8% and 1.4% respectively among the preschool children. Among the school age children, the common deficiency signs were conjunctival xerosis (5%), Bitot spots (2.9%), angular stomatitis (2.8%); the prevalence of dental fluorosis was 3%.

The median heights, weights, in different age/sex groups were comparable to 5th centile values of NCHS standards. Nearly a half of the preschool children had moderate to severe undernutrition (<75% weight for age of NCHS). The prevalence was marginally higher among 3-5 year old children (49%) than the 1-3 year age group (47%).

In general, the proportion of preschool children with underweight (<Median - 2 SD) was about 60%, while that of severe underweight (<Median-3SD) was 21%. The proportion of under-weight among under 3 year children was comparable with that reported in NFHS-2 surveys for the country. There were no differences between sexes in the prevalence of underweight. The extent of stunting (<Median-2SD) was about 49%, while about 23% of preschool children were wasted (<Median-2SD).

The prevalence of undernutrition tended to increase from about 63% among children in 6-9 year age group to 78% in 10-13 years and then declined to 66% in 14-17 year age group.

The prevalence of overall undernutrition was relatively higher among the children of Hindus and those belonging to Scheduled Tribes. The proportion of moderate to severe undernutrition was marginally higher in those from nuclear families and in those living in kutcha houses. The extent of moderate to severe undernutrition tended to increase with decrease in average monthly per capita income (PCI), from about 31% in HHs with PCI of \geq Rs.900, to 53% in HHs with PCI of < Rs.300.

At the aggregate level, about 37% of the males and 39% of the females had chronic energy deficiency (BMI: <18.5). The prevalence of overweight was marginally higher among females (8.2%) than males (5.7%).

The most common forms of morbidities among different age groups were fever, diarrhoea, dysentery and acute respiratory infections, the prevalence of which ranged from 1 to 2%.

DIET AND NUTRITIONAL STATUS OF RURAL POPULATION

1. INTRODUCTION

The Indian Council of Medical Research (ICMR) established the National Nutrition Monitoring Bureau (NNMB) in 1972 in the States of Kerala, Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra, Gujarat, Madhya Pradesh, Orissa, West Bengal and Uttar Pradesh. It has been carrying out regularly annual surveys on diet and nutritional status of the populations for the past 30 years, the results of which are published in the form of technical reports. The results of the surveys carried out till the year 1995 were compiled as a publication entitled '25 years of National Nutrition Monitoring Bureau' (1997)¹. Until the year 1982, the bureau carried out annual surveys in four districts selected randomly from four strata formed on the basis of certain developmental criteria at the district level, from each State. Later, the bureau adopted the sample frame of National Sample Survey Organization (NSSO) developed for its Consumer Expenditure Surveys, and covered a sub-sample of villages, which provided sufficient spatial representation of the sample. Also, such an approach helped in calculating unbiased estimates of the diet and nutrition situation of the community by applying design-based multipliers obtained from the NSSO. The results of the surveys carried out by the bureau so far have been published in 20 technical reports.

During the year 2000-2001 the NNMB carried out diet and nutrition assessment of the rural population on a sub-sample of Central quota of NSSO sample frame of 54th round Consumer Expenditure survey conducted during 1998².

2. Objectives

2.1 General Objective

To assess the diet and nutritional status of rural population in NNMB States.

2.2 Specific objectives

- To assess the food and nutrient intakes of individuals in the rural areas of the States surveyed,
- To assess the nutritional status of the individuals, particularly in the vulnerable groups, in terms of anthropometry and prevalence of clinical signs of nutritional deficiency and
- To assess the prevalence of morbidity during previous fortnight among the population.

3. METHODOLOGY

3.1 Sampling Design

The NSSO adopts a two stage stratified random sampling method in which the villages formed the first stage units (FSU), while the households (HHs) formed the second stage units (SSU). For the purpose, each State is divided into different agro-economic regions. Each region within a State consists of groups of contiguous districts having similar cropping pattern and population density. A district or part of the district with rural population of less than 1.8 millions formed one stratum. Districts with rural population of more than 1.8 million are divided into two or more strata by grouping contiguous *talukas/tehsils* having similar cropping pattern and population density.

The present survey was carried out on a sub sample of villages that were surveyed by NSSO for 54th round of Consumer Expenditure carried out during 1998.

3.1.1 Selection of Strata

Keeping in view the manpower resources available with the NNMB, 16 strata were selected randomly from each State during the year.

3.1.2 Selection of Villages

From each selected stratum, five villages were selected randomly for the purpose of survey. Thus, a total of eighty villages were selected for the survey in each State.

3.1.3 Selection of Households (HHs)

In each of the selected villages a total of 20 households were surveyed from five clusters (group of HHs). For this purpose, the main village and its hamlets, if any, including the HHs of scheduled caste and scheduled tribe communities were divided into 5 natural groups, consisting of set of houses/streets/mohallas/areas. It was ensured that at least the scheduled caste and scheduled tribe communities inhabited one of 5 clusters. From each of these groups, four consecutive HHs were surveyed by ***randomly selecting the first HH***. The data was collected during the period April 2000 to March 2001.

3.2 Investigations

3.2.1. Household Particulars

Demographic and socio-economic particulars such as family size, age/sex/occupation, income and literacy level of all the individuals, in each of the selected HHs, information about possession of agricultural land and live stock, type of dwelling etc. were collected from all the 20 selected households by administering pre-coded proformae.

3.2.2. Nutrition Assessment

In each village, all the 20-selected HHs were covered for the assessment of the nutritional status of all the available individuals.

3.2.2.1 Anthropometry

Anthropometric measurements such as height, weight, mid-upper arm circumference and fat fold at triceps were taken by using standard equipment and procedures³.

3.2.2.2 Clinical Examination

All the individuals covered for anthropometry were examined clinically for the presence of signs of nutritional deficiencies.

3.2.3 Diet Survey

Dietary assessment of all the individuals was carried out by 24-hour recall method of diet survey in alternate household covered for Nutrition Assessment.

3.2.4 History of Morbidity

Information on morbidity of individuals such as fever, dysentery, diarrhoea and acute respiratory infections during the preceding 15 days was collected.

3.2.4 Quality Control

Before initiating all the staff of state units underwent reorientation in all the techniques. During the course of the survey, the Scientists from Central Reference Laboratory of National Nutrition Monitoring Bureau visited different areas collected independently same information and cross-checked.

3.3. Data Analysis

3.3.1 Food and Nutrient Intakes of Individuals

The average daily intakes of different foods by individuals were calculated according to different age/sex, physiological status and physical activity groups. The

nutrient composition of the foods consumed by the individuals was calculated using 'Nutritive value of Indian Foods'⁴. The mean and median intakes of various nutrients were computed and compared with 'Recommended Dietary Allowances for Indians'⁵ (RDI) suggested by the ICMR Expert Committee.

3.3.1.1 *Protein /Calorie Adequacy Status*

The individuals of different age/sex/physiological and activity groups were categorized according to their protein/calorie adequacy status, as was being done earlier⁶. The protein and energy requirement curves are assumed to follow Gaussian distribution, with a coefficient of variation of 15%. The Expert Committee of Indian Council of Medical Research (ICMR) has suggested requirements for energy as the recommended allowances, while in the case of protein, the recommended "allowance" corresponded to Mean \pm 2 SD of the requirements. The cut-off levels for energy/protein requirements for each group were computed, based on RDI 1990⁷.

All the individuals consuming less than Mean-2SD of requirements were considered as consuming 'inadequate' amounts of protein or energy. If the energy or protein intake was either equal to or above Mean -2SD of requirements for these nutrients, the individual was considered as consuming adequate amount of that nutrient.

3.3.2 *Anthropometry*

Mean heights, weights, mid-upper arm circumference and fat folds at triceps were calculated according to age and sex.

3.3.2.1 *Preschool Children*

The weights and heights of 1-5 year children were compared with those of National Centre for Health Statistics (NCHS) standards^{8,9} for grading their nutritional status according to Gomez Classification¹⁰, Indian Academy of Pediatrics (IAP) classification¹¹ and Standard Deviation (SD) Classification¹² as described below:

3.3.2.1.1 *Gomez Classification*

Weight for age (% of NCHS Standard)	Nutritional Grade
≥ 90	Normal
75 - 89.9	Grade I (Mild undernutrition)

60 - 74.9	Grade II (Moderate undernutrition)
< 60	Grade III (Severe undernutrition)

The NNMB has been using Gomez classification since 1975 to assess the nutritional status of pre-school children.

3.3.2.1.2 IAP Classification

Weight for age (% of Harvard Standard)	Nutritional Grade	Type of Undernutrition
≥ 80	Normal	Normal
70 – 79.9	Grade I	Mild
60 – 69.9	Grade II	Moderate
50 – 59.9	Grade III	Severe
<50	Grade IV	Very Severe

The distribution of 6-59 months children according to IAP classification is given to help comparison with ICDS data.

3.3.2.1.3 Standard Deviation (SD) Classification

The World Health Organization recommends use of SD classification to categorize the children into different grades of nutritional status. The percent distribution of preschool children according to undernutrition (weight for age), stunting (height for age) and wasting (weight for height) was computed using NCHS reference values, as given below:

SD Classification	Weight for age	Height for age	Weight for height
≥ Median	Normal	Normal	Normal
<Median to Median–1SD			
<Median –1SD to Median– 2SD			
<Median –2SD to Median–3SD	Moderate undernutrition	Moderate stunting	Moderate wasting
< Median–3 SD	Severe undernutrition	Severe stunting	Severe wasting

3.3.2.2 School age Children and Adolescents

Using the same cut-off levels of weight for age, as in Gomez classification, the school age children and adolescents were categorized into various grades of nutritional status.

3.3.2.3 Adults

The nutritional status of adults was assessed based on Body Mass Index (BMI), which is a ratio of Weight in kg to square of height in metres. The adults were categorized into different nutritional grades according to James classification¹³ as follows:

BMI	Nutritional Grade
<16.0	III degree CED
16.0 – 17.0	II degree CED
17.0 – 18.5	I degree CED
18.5 – 20.0	Low Normal
20.0 – 25.0	Normal
25.0 – 30.0	Over weight / I Degree obesity
≥ 30.0	II Degree obesity

CED: Chronic Energy Deficiency

4. RESULTS

4.1 SAMPLE COVERED

COVERAGE		
No. of States Surveyed		9
No. of Villages Surveyed		715
Diet Survey	HHs	7,131
	Individuals	30,968
Anthropometric & clinical examination	Individuals	51,239

The coverage of villages was 100% of the target in all the States, except in Gujarat (93.8%) where Kutch district could not be surveyed due to the recent earthquake. In the State of Uttar Pradesh, the survey could not be completed for want of exclusive staff in the Unit. Hence, the report presents the results of survey in nine States.

The coverage particulars for different investigations are presented in **Table 1**. A total of 715 villages were covered from 9 States. About 51,239 individuals of different ages from 14,288 HHs were covered for anthropometry, clinical examination and prevalence of morbidity. Information on food and nutrient intake was collected from 30,968 individuals from 7,131 households.

Table 1
Coverage Particulars

State	Villages	Households	Nutritional Assessment (Individuals)	Diet Survey	
				Households	Individuals
Kerala	80	1600	3942	800	3136
Tamil Nadu	80	1600	5995	800	3244
Karnataka	80	1603	6590	797	3661
Andhra Pradesh	80	1600	5908	799	3390
Maharashtra	80	1596	5744	796	3867
Gujarat	75	1488	4897	743	3155
Madhya Pradesh	80	1601	5914	799	3823
Orissa	80	1600	6569	799	3417
West Bengal	80	1600	5680	798	3275
Pooled	715	14,288	51,239	7,131	30,968

4.2 Socio-economic and Demographic Profile of the Households

SOCIO-ECONOMIC PROFILE OF HOUSEHOLDS

- 32% belonged to SC/ST
- 30% lived in kutcha houses
- Average family size was 5
- About 45% HHs did not possess any land
- The average monthly *percapita* income was Rs.495/-
- More than a Quarter of the HHs were consuming 'unsafe' drinking water
- 26% of the HHs had sanitary latrine
- 67% HHs had Electricity.

4.2.1 Religion

A majority of the HHs (88.6%) belonged to Hindu religion, while the rest were Muslims (7.4%) and Christians (3.6%). The proportion of Muslims was relatively higher in the States of Kerala (25.4%) and West Bengal (18.2%) as compared to other States (Table 2).

Table 2

Distribution (%) of Households by Religion

State	Religion			
	Hindu	Muslim	Christian	Others
Kerala	56.6	25.4	18.0	0.1
Tamilnadu	90.0	1.9	8.1	0.1
Karnataka	93.1	4.9	1.1	0.9
Andhra Pradesh	96.6	3.1	0.1	0.3

Maharashtra	92.7	6.0	0.3	1.0
Gujarat	96.6	3.0	0.1	0.3
Madhya Pradesh	95.5	2.6	0.6	1.3
Orissa	96.9	1.3	1.7	0.1
West Bengal	79.4	18.2	2.3	0.1
Pooled	88.5	7.4	3.6	0.4

4.2.2 Community

About 32% of HHs belonged to backward communities, while 22% belonged to Scheduled Castes and 11% to Scheduled Tribes. The proportion of tribal HHs was higher in Madhya Pradesh (26.8%) followed by Orissa (20.1%) and Gujarat (18.4%), while it was low in the states of Tamil Nadu (0.2%), Kerala (1.6%) and Andhra Pradesh (2.4%). The percent of scheduled caste HHs was higher in the States of Andhra Pradesh (35.6%), West Bengal (34.2%) and Tamil Nadu (24.6%) than in the other States (Fig. 1 & Table 3).

Fig.1 Distribution (%) of Households by Community

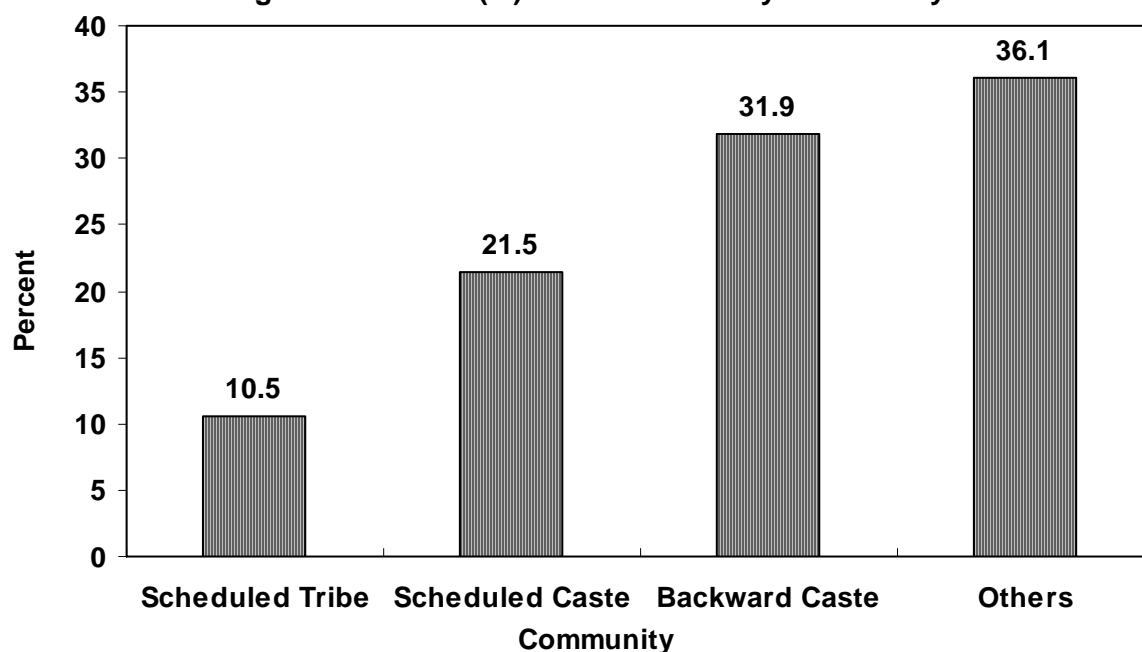


Table 3

Distribution (%) of Households by Community

State	Community			
	Scheduled Tribe	Scheduled Caste	Backward Caste	Others
Kerala	1.6	6.9	25.8	65.6
Tamilnadu	0.2	24.6	63.5	11.8
Karnataka	5.7	17.5	15.0	61.8
Andhra Pradesh	2.4	35.6	43.4	18.6

Maharashtra	11.3	14.3	43.0	31.3
Gujarat	18.4	23.1	17.2	41.3
Madhya Pradesh	26.8	17.9	43.5	11.9
Orissa	20.1	19.9	34.2	25.9
West Bengal	8.9	34.2	0.5	56.4
Pooled	10.5	21.5	31.9	36.0

4.2.3 Type of house

The type of house has been shown to be a good index of economic status of the HHs. A majority of the HHs (60%) lived in *semi-pucca* houses. The proportion of HHs living in *kutcha* houses was the highest in Orissa (66.9%), followed by Madhya Pradesh (53.3%). About a third of the HHs in Tamil Nadu (30.8%) and Andhra Pradesh (34.6%) inhabited *kutcha* houses, while it was considerably lower in the States of Maharashtra (6.7%) and Kerala (9.8%) (**Fig. 2 & Table 4**).

Fig.2 Distribution (%) of Households by Type of House

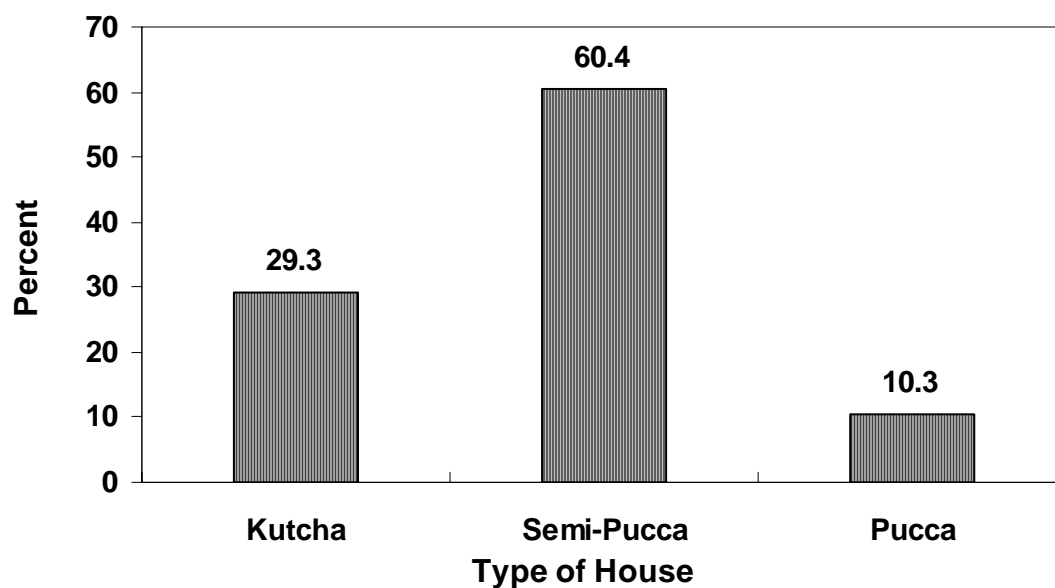


Table 4 : Distribution (%) of Households by Type of House

State	Type of House		
	Kutcha	Semi Pucca	Pucca
Kerala	9.8	59.4	30.8
Tamilnadu	30.8	52.6	16.6
Karnataka	14.2	85.0	.8
Andhra Pradesh	34.6	45.6	19.8
Maharashtra	6.7	92.2	1.1

Gujarat	17.8	71.6	10.6
Madhya Pradesh	53.3	46.2	.6
Orissa	66.9	30.4	2.7
West Bengal	29.2	60.9	9.9
Pooled	29.3	60.3	10.3

4.2.4 Type of family

A majority of the HHs was nuclear (69.8%), the proportion of which ranged from 61% in Karnataka to 78% in West Bengal. The percent of joint families was higher in Karnataka (28.7%) and Orissa (24.1%) (**Table 5**).

Table 5 : Distribution (%) of Households by Type of Family

State	Type of Family		
	Nuclear	Joint	Extended
Kerala	74.6	15.6	9.9
Tamilnadu	77.3	12.4	10.3
Karnataka	60.8	28.7	10.5
Andhra Pradesh	67.9	17.3	14.9
Maharashtra	68.5	17.1	14.4
Gujarat	76.5	9.4	14.0
Madhya Pradesh	62.8	15.0	22.2
Orissa	62.4	24.1	13.5
West Bengal	77.8	13.1	9.2
Pooled	69.8	17.0	13.2

4.2.5 Family size

The average family size was 5.0. About 48% of the HHs had family size of 5-7, while about 45% had 1-4 members. The proportion of HHs with small family size (≤ 4) ranged from a high 59% in Kerala to 32% in the State of Madhya Pradesh (**Table 6**). On the average, about 16% of the families had children with birth order of ≥ 4 . The States of Kerala and Andhra Pradesh had $<10\%$ of such families. On the other hand, in Madhya Pradesh and Orissa, nearly a fourth of the HHs had children with the birth order of 4 and above.

Table 6 : Distribution (%) of Households by Family Size

State	Family Size				
	1-4	5-7	>=8	Average	Families with Birth order >=4
Kerala	58.9	38.2	2.9	4.4	7.0
Tamilnadu	52.4	44.0	3.6	4.7	11.6
Karnataka	41.7	51.2	7.1	5.0	14.6
Andhra Pradesh	47.3	48.3	4.4	4.8	9.8
Maharashtra	36.8	53.7	9.5	5.2	19.7
Gujarat	44.7	48.6	6.7	4.8	17.8
Madhya Pradesh	31.7	51.3	17.0	5.6	23.8
Orissa	34.1	54.6	11.4	5.4	23.6
West Bengal	53.1	42.6	4.4	4.6	14.8
Pooled	44.5	48.0	7.5	5.0	15.8

4.2.6 Literacy Status of Adult Males

About 28% of the adult males in the HHs surveyed were illiterate, the proportion of which ranged from a high 47.3% in Andhra Pradesh to a low 6.5% in Kerala. Among the literates, about 14% had primary education; 22% had secondary education; 25% had higher secondary education, while only 9% had college education (**Table 7.1**).

Table: 7.1 Distribution (%) of Adult Males* by Literacy Status

State	Literacy status					
	Illiterate	Read & Write	1-4 std.	5-8 std.	9-12 std.	College
Kerala	6.5	.9	17.3	17.8	46.7	10.8
Tamilnadu	25.4	1.1	14.9	26.9	24.3	7.2
Karnataka	33.8	.3	10.3	18.2	25.5	11.8
Andhra Pradesh	47.3	3.5	7.5	16.0	19.6	6.0
Maharashtra	23.3	.8	15.1	17.2	32.4	11.1
Gujarat	23.6	1.0	12.5	31.0	20.2	11.7
Madhya Pradesh	33.1	3.2	11.8	29.7	13.5	8.8

Orissa	30.6	2.7	14.4	20.2	21.5	10.5
West Bengal	32.2	6.7	17.9	24.3	15.1	3.9
Pooled	28.2	2.2	13.6	22.2	24.6	9.2

* All the adult males in the HHs Surveyed.

4.2.7 Literacy Status of Adult Females

More than a half (53%) of the adult females in the HHs surveyed were illiterate, the proportion of which ranged from a high 69.5% in Madhya Pradesh to a low 14.6% in Kerala. About 11% had primary education, 18% had secondary education, 14% had higher secondary education and only 3% had college education (Table 7.2).

Table : 7.2 Distribution (%) of Adult Females* by Literacy Status

State	Literacy status					
	Illiterate	Read & Write	1-4 std.	5-8 std.	9-12 std.	College
Kerala	14.6	.7	18.8	16.5	39.6	9.7
Tamilnadu	46.4	.5	11.2	16.5	16.2	2.8
Karnataka	60.9	.1	7.2	14.7	13.4	3.7
Andhra Pradesh	68.3	2.4	6.2	13.6	7.5	1.9
Maharashtra	52.9	.7	10.9	17.8	15.5	2.1
Gujarat	42.3	.2	16.5	26.5	10.9	3.4
Madhya Pradesh	69.5	2.9	6.6	16.0	3.7	1.3
Orissa	62.3	.8	8.3	15.8	9.2	3.6
West Bengal	59.6	4.1	12.5	16.3	6.5	1.0
Pooled	53.1	1.4	10.8	17.6	13.8	3.3

* All the adult females in the HHs Surveyed.

4.2.8 Major occupation of the Head of the HH

Agriculture was the major occupation in about a quarter (25.6%) of HHs surveyed, while about 40% were either agricultural (18.3%) or other labour (22%). Maximum number of the cultivators was in the State of Madhya Pradesh (56%) and the least in Kerala (8.3%). Agricultural labourers was higher in Andhra Pradesh (47.4%), Karnataka (34.5%), Tamil Nadu (29%) and West Bengal (21.3%) than in the rest of the 5 States. Other labour was very high (55.3%) in Orissa and low in Karnataka (6%) (Fig. 3 & Table 8).

Fig 3. Distribution (%) of Households by Occupation

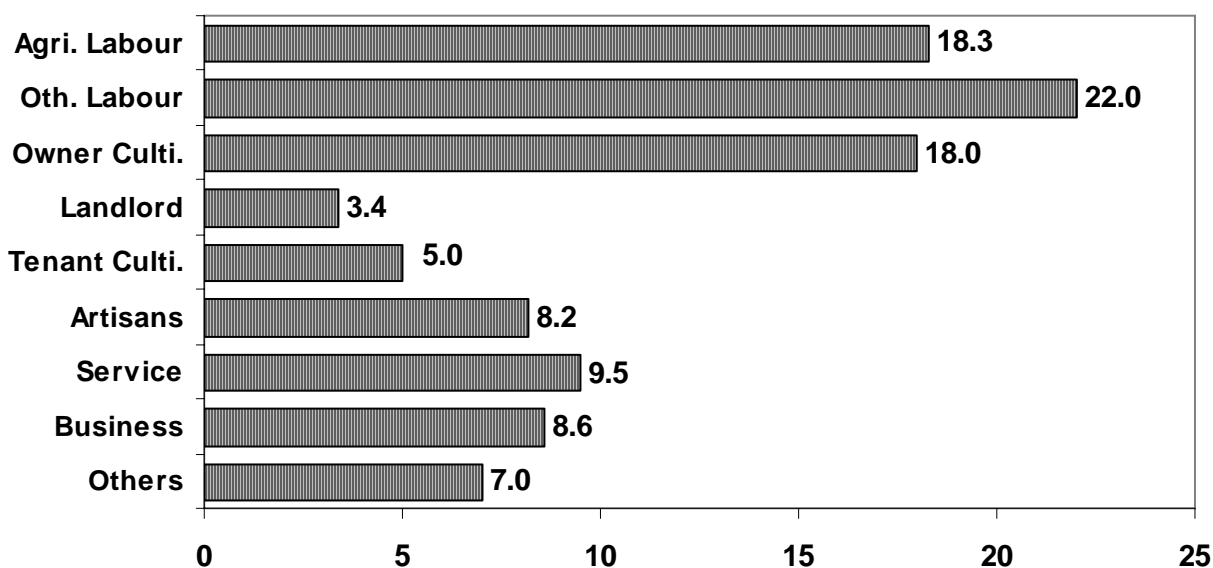


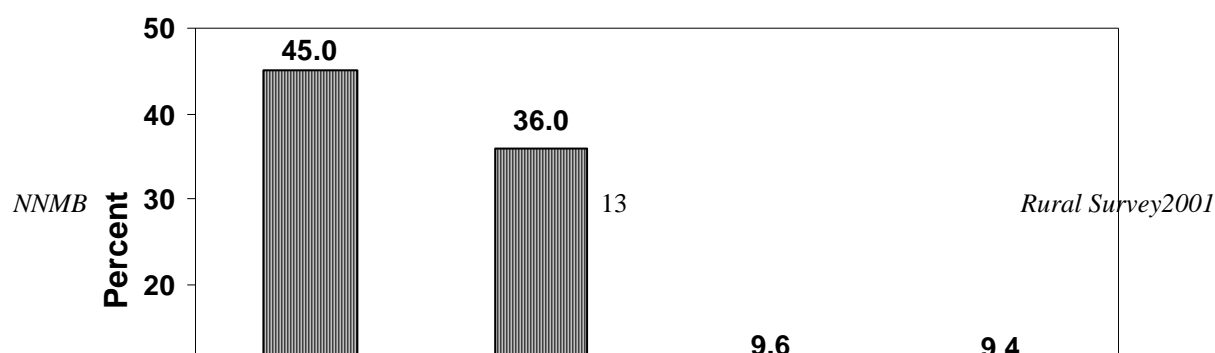
Table 8 : Distribution (%) of Households by Occupation of Head of Household

State	Occupation of Head of Household								
	Agri. Labourer	Other Labourer	Owner Cultivator	Land lord	Tenant Cultivator	Arti- sants	Ser- vice	Busi- ness	Others
Kerala	2.7	25.5	7.7	0.6	0.0	13.2	9.4	20.9	20.1
Tamilnadu	29.0	19.8	10.8	0.3	0.1	16.9	10.5	9.7	2.9
Karnataka	34.4	6.0	26.0	0.6	0.3	10.2	11.2	8.2	3.0
Andhra Pradesh	47.4	11.3	13.4	0.9	1.1	6.1	6.8	8.4	4.6
Maharashtra	20.1	12.5	39.2	1.3	1.3	4.7	11.5	3.4	6.0
Gujarat	0.9	31.2	11.9	25.9	0.5	1.8	19.0	3.1	5.6
Madhya Pradesh	5.7	20.5	14.8	1.6	39.6	5.9	4.1	6.2	1.6
Orissa	1.7	55.3	17.7	0.7	1.3	5.9	7.9	6.4	3.2
West Bengal	21.3	16.2	20.1	0.3	1.4	8.1	6.1	10.6	16.1
Pooled	18.3	22.0	18.0	3.4	5.0	8.2	9.5	8.6	7.0

4.2.9 Landholding Status of HHs

About 45% of the HHs did not possess any agricultural land, the proportion of which ranged from a high 62% in Andhra Pradesh to a low 11% in Kerala. About 36% were marginal farmers, and 10% each were small and large farmers. The State of Kerala had the highest proportion of marginal farmers (83%) (Fig. 4 & Table 9).

Fig 4. Distribution (%) of Households by Land Ownership



Land Ownership

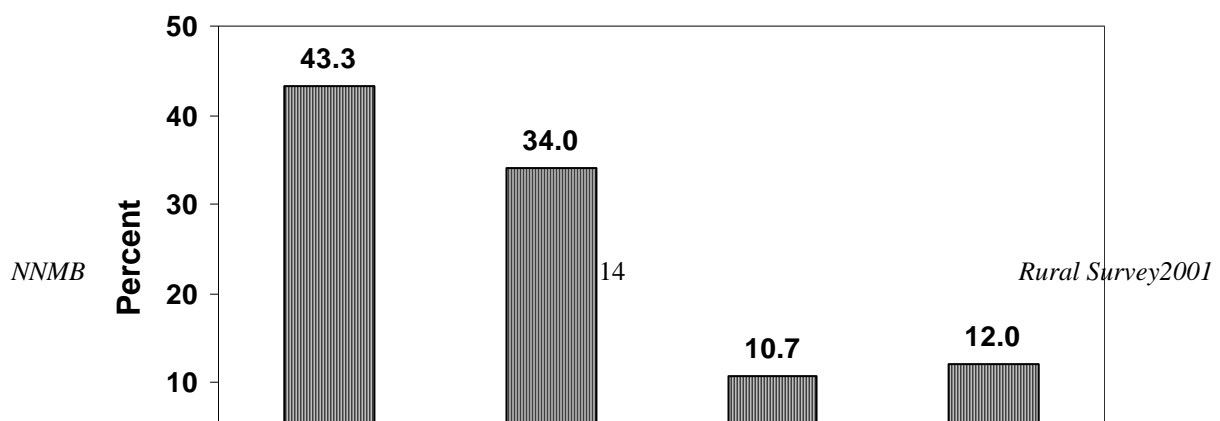
Table 9 : Distribution (%) of Households by Land Ownership

State	Land Ownership (Acres)			
	No land	Marginal farmers (<2.5)	Small farmers (2.5 - 5.0)	Large farmers (>= 5)
Kerala	10.7	82.7	5.4	1.3
Tamilnadu	60.3	27.6	6.8	5.3
Karnataka	35.7	31.1	13.8	19.4
Andhra Pradesh	61.8	25.3	7.6	5.4
Maharashtra	49.9	23.1	12.4	14.6
Gujarat	61.4	12.9	11.2	14.5
Madhya Pradesh	35.9	29.2	17.1	17.9
Orissa	34.6	51.2	9.1	5.2
West Bengal	56.3	39.2	3.3	1.3
Pooled	45.0	36.0	9.6	9.4

4.2.10 Income Status

The average monthly *percapita* income was Rs. 495 at the current Rupee value. Kerala had highest average *percapita* monthly income of Rs.774, while Orissa had lowest of Rs. 228. A majority of the HHs (43.3%) had monthly *percapita* income of less than Rs. 300 and only 12% with \geq Rs.900 (**Fig. 5 & Table 10.1, Table 10.2**).

Fig 5. Distribution (%) of Households by Per Capita Income



Per Capita Income (Rs./Month)

Table 10.1 : Distribution (%) of Households by Per Capita Income

State	Per Capita Income (Rs./month)			
	< 300	300-600	600-900	>=900
Kerala	25.3	33.1	13.3	28.3
Tamilnadu	20.5	45.4	18.7	15.4
Karnataka	42.4	35.5	10.5	11.7
Andhra Pradesh	42.4	43.3	7.8	6.5
Maharashtra	60.1	25.1	5.9	9.0
Gujarat	9.4	43.5	24.9	22.2
Madhya Pradesh	59.0	27.8	6.9	6.2
Orissa	83.9	10.2	3.4	2.5
West Bengal	43.9	43.1	6.1	6.9
Pooled	43.3	34.0	10.7	12.0

* Not adjusted

Table 10.2: Quartile Distribution of Per Capita Income (Rs. / Month) by State

State	Quartiles				Pooled Averages	
	I	II	III	IV	Mean	Median
Kerala	197	382	695	1810	774	488
Tamilnadu	243	391	570	1297	626	465
Karnataka	160	275	425	1146	502	335
Andhra Pradesh	188	282	382	831	420	325
Maharashtra	143	219	317	993	418	256
Gujarat	308	491	692	1379	718	569
Madhya Pradesh	134	216	321	812	370	257
Orissa	92	141	195	485	228	165

West Bengal	191	278	368	820	414	316
Pooled	183	296	438	1063	495	333

4.2.11 Source of Drinking Water

About 40% of HHs was getting drinking water from taps, while about 32% depended on tube wells for the same. More than a quarter of the households were consuming 'unsafe' drinking water either from open wells (26.1%) or ponds/tanks/streams/rivers (2%) (Table 11). Surprisingly, Kerala had the higher proportion of HHs surveyed consuming water from open wells.

Table 11 : Distribution (%) of Households by Source of Drinking Water

State	Source of Drinking Water				
	Open well	Tube well	Tap	Pond/ Tank	Stream/ River/ Canal
Kerala	87.8	2.4	9.2	0.1	0.6
Tamilnadu	5.1	23.6	69.2	2.1	0.0
Karnataka	7.9	12.5	79.0	0.5	0.0
Andhra Pradesh	16.9	31.4	50.3	0.3	1.1
Maharashtra	18.6	21.4	58.1	0.7	1.3
Gujarat	8.4	26.3	63.8	1.3	0.1
Madhya Pradesh	57.3	17.1	22.7	2.8	0.1
Orissa	28.8	62.9	1.8	1.8	4.8
West Bengal	3.1	93.7	2.7	0.0	0.6
Pooled	26.1	32.4	39.5	1.1	0.9

4.2.12 Other Physical Facilities

In general, about 26% of the HHs had sanitary latrine, the proportion of which was the highest in Kerala (90.6%) and the least in Orissa (2.9%). About 56% of the HHs possessed separate kitchen, the proportion ranging from a high 98% in Kerala to a low 24% in Andhra Pradesh. In general, about two thirds of the houses were electrified (67%). The percentage was higher in the States of Gujarat (93.3%), Karnataka and Kerala (85% each) and low in Orissa (20%) and West Bengal (23%) (Table 12). About 87% HHs in general used firewood as cooking fuel, followed by kerosene (7%) and LPG (6%) (Table 13). The proportion of HHs using kerosene as cooking fuel was higher in Gujarat (45%) as compared to other States (<5%).

Table 12: Distribution (%) of HHs having Sanitary Latrine, Separate Kitchen and Electrification

State	Facilities present		
	Sanitary Latrine	Separate kitchen	Electrification

Kerala	90.6	97.9	84.9
Tamilnadu	17.4	60.3	79.4
Karnataka	18.0	72.2	85.0
Andhra Pradesh	12.2	24.3	81.4
Maharashtra	12.6	34.5	69.5
Gujarat	60.1	68.2	93.3
Madhya Pradesh	6.4	26.8	71.4
Orissa	2.9	47.9	20.1
West Bengal	18.1	69.8	23.1
Pooled	26.2	55.7	67.4

Table 13 : Distribution (%) of Households by Type of Cooking Fuel

State	Type of cooking fuel			
	Fire wood	Kerosene	Bio-gas	LPG
Kerala	83.6	1.6	0.4	14.4
Tamilnadu	83.3	4.9	0.6	11.2
Karnataka	91.0	1.6	1.5	5.9
Andhra Pradesh	90.8	1.5	0.4	7.3
Maharashtra	85.4	4.9	1.6	8.1
Gujarat	49.1	44.8	0.1	6.0
Madhya Pradesh	96.8	0.6	0.9	1.8
Orissa	98.0	1.4	0.1	0.6
West Bengal	98.9	0.6	0.0	0.4
Pooled	86.6	6.6	0.6	6.2

4.3 NUTRITIONAL STATUS

4.3.1 FOOD AND NUTRIENT CONSUMPTION OF INDIVIDUALS

DIETARY PATTERN

FOODS

- Cereals are the major staple food in all the States
- Millets are consumed in Gujarat, Maharashtra and Karnataka
- Woefully inadequate consumption of Pulses, GLV, Milk, Fruits and Fats & Oils.

NUTRIENTS

- Consumption of all the nutrients was below the RDI among pre-school children
- Above RDI nutrient Intakes in all except Iron, Vit-'A' and Riboflavin.
- Nutrient Intakes were less than RDI among pregnant and Lactating

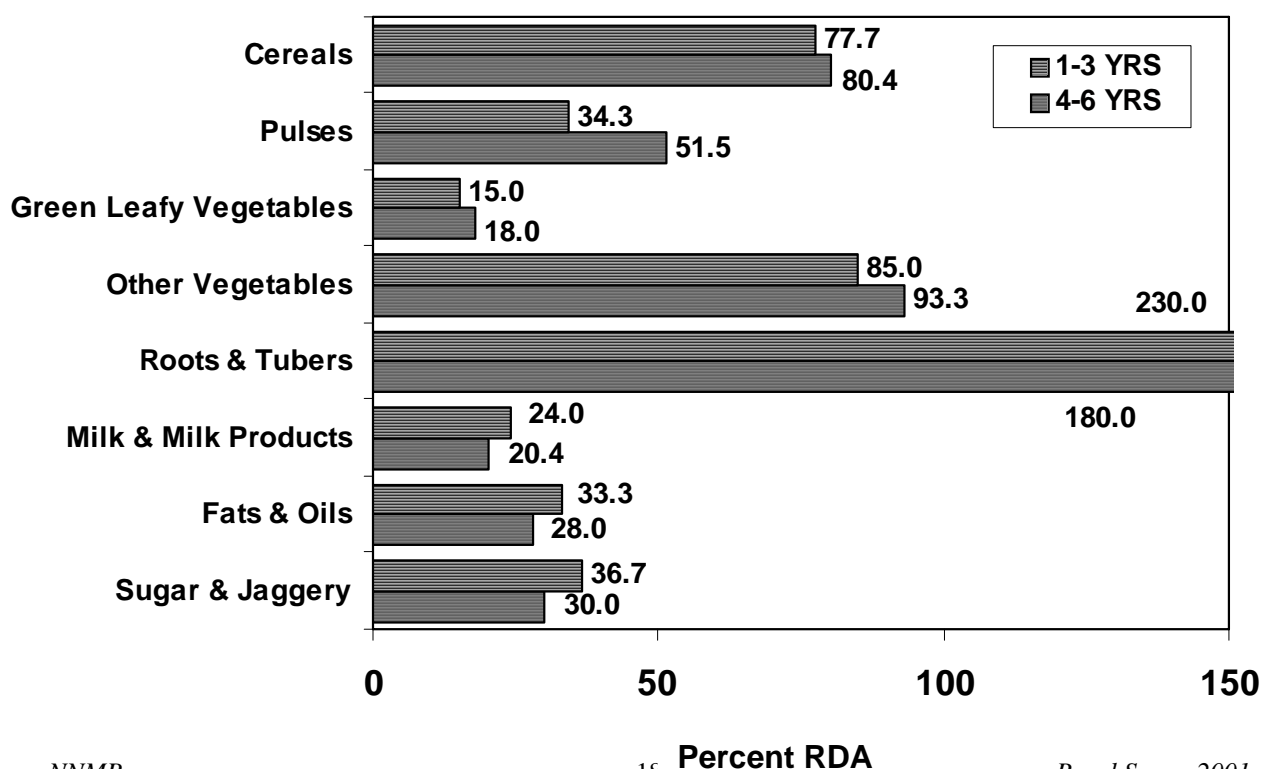
4.3.1.1 Food Consumption

The average daily intakes of food and nutrients among individuals of different age and sex groups are given in **Tables 14-26**. In general, Cereals formed the bulk of the dietaries of the rural population surveyed; millets were also consumed in small quantities. Consumption of millets was relatively higher in the States of Gujarat (maize, bajra), Maharashtra (jowar) and Karnataka (*ragi*), nuts and oil seeds in Kerala (coconuts) and milk in the State of Gujarat.

4.3.1.1.1 1-3 year children

The average daily intake of cereals and millets among 1-3 year children was 136 g forming about 78% of RDI. The intake of cereals and millets was lower than the RDI in all the States except in Madhya Pradesh (106% of RDI). The extent of deficit was the highest in Kerala and Gujarat (36%), followed by Tamil Nadu and Maharashtra (33%), Karnataka, Orissa, West Bengal (20%) and Andhra Pradesh (10%). The mean intake of pulses and legumes (12 g) was about a third of the RDI (35 g). The consumption of green leafy vegetables, a rich source of β -carotene, was negligible (8 g). The average daily intake of other protective foods like milk and milk products was 72 g, which was less than a quarter of the recommended level of 300 g. The daily intake of fats and oils, an energy dense food was observed to be a third of RDI (5 g) (Fig. 6 & Table 14).

Fig. 6 Food Intake (% RDA) among 1-6 Years Children



4.3.1.1.2 4-6 years children

The mean intake of cereals and millets among 4-6 year children was about 80% (217 g) of the RDI of 270 g. The intake was the lowest (163 g) in Kerala. The intake was, however, higher (265 g) in the States of Andhra Pradesh and Madhya Pradesh. The intake of all other foodstuffs was less than the RDA, except roots & tubers (**Fig. 6 & Table 15**).

The intake of protective foods such as pulses was about a half of the recommended allowances, while that of milk and milk products was grossly inadequate. The consumption of green leafy vegetables was negligible.

4.3.1.1.3 7-9 year children

The mean intake of cereals and millets was 275g, while that of the pulses and legumes was 19 g. The levels of consumption of other foods such as GLV (12g), milk (48ml), fats and oils (8g) were very low (**Table 16**).

Table 14 : Average Intake of Foodstuffs (g/day) 1-3 year Boys and Girls

State		Cereals	Millets	Puls. & Legu.	Leafy Veg.	Other Veg.	Roots & Tubers	Nuts & Oils	Condi. & Spices	Fruits	Fish	Other Flesh Foods	Milk & Milk Prod.	Fats & oils	Sugar & Jagg.
Kerala (n=197)	Mean	109	1	8	1	18	17	20	6	28	29	3	74	3	12
	SD	51	6	12	6	28	26	15	4	44	30	11	74	4	7
Tamil Nadu (n=408)	Mean	118	0	13	3	21	14	1	7	10	2	2	140	4	9
	SD	62	5	12	10	26	23	3	9	11	11	25	189	4	9
Karnataka (n=286)	Mean	115	25	12	3	9	16	4	7	12	2	0	79	4	15
	SD	55	49	12	10	21	21	8	6	18	8	4	104	5	17
Andhra Pradesh (n=338)	Mean	151	4	9	2	13	12	1	110	18	1	5	61	6	7
	SD	84	20	13	7	25	18	2	15	36	6	16	98	6	10
Maharashtra (n=332)	Mean	70	48	15	3	8	8	3	3	6	1	1	86	7	19
	SD	66	61	18	10	16	14	6	3	23	4	7	130	6	15
Gujarat (n=288)	Mean	51	61	13	3	12	24	0	2	2	0	0	82	3	16
	SD	55	56	13	11	21	26	0	2	15	0	2	70	2	10
Madhya Pradesh (n=292)	Mean	152	33	20	10	27	25	0	5	6	1	1	22	5	10
	SD	102	67	23	24	41	34	0	5	15	9	8	47	7	11
Orissa (n=261)	Mean	138	5	10	16	26	45	0	3	4	4	1	14	5	4
	SD	53	16	12	29	33	37	1	4	14	13	6	58	4	6
West Bengal (n=271)	Mean	138	0	3	15	24	56	0	2	5	12	7	56	4	4
	SD	66	2	6	38	40	48	0	2	24	25	46	126	4	18
Pooled (n=2673)	Mean	116	20	12	6	17	23	3	5	10	5	2	72	5	11
	SD	76	46	15	19	29	32	8	8	25	16	19	120	5	13
	RDA	175	-	35	40	20	10	-	-	-	-	-	300	15	30

Table 15 : Average Intake of Foodstuffs (g/day) 4-6 year Boys and Girls

State		Cereals	Millets	Puls. & Legu.	Leafy Veg.	Other Veg.	Roots & Tubers	Nuts & Oils	Fruits	Fish	Other Flesh Foods	Milk & Milk Prod.	Fats & oils	Sugar & Jagg.
Kerala (n=159)	Mean	163	0	12	3	31	30	34	26	39	9	76	4	14
	SD	49	0	17	12	42	38	23	40	42	25	81	5	7
Tamil Nadu (n=304)	Mean	197	1	21	3	39	19	2	16	5	2	72	6	10
	SD	63	8	15	10	33	26	4	17	17	9	101	4	11
Karnataka (n=259)	Mean	148	54	21	4	14	23	8	20	2	2	64	6	20
	SD	72	69	17	12	26	26	12	24	10	15	78	6	17
Andhra Pradesh (n=269)	Mean	255	7	17	6	22	18	1	25	1	7	53	9	7
	SD	94	30	21	34	36	21	4	36	9	22	70	6	9
Maharashtra (n=318)	Mean	111	94	22	5	13	14	5	9	2	1	63	10	23
	SD	98	97	20	16	25	20	8	31	10	6	104	7	16
Gujarat (n=245)	Mean	71	125	19	5	21	39	0	2	0	1	92	5	19
	SD	85	106	16	15	28	37	0	5	1	6	82	4	14
Madhya Pradesh (n=323)	Mean	227	38	24	12	38	31	0	7	0	1	22	7	10
	SD	122	86	25	28	52	40	0	16	5	9	50	9	12
Orissa (n=235)	Mean	216	4	13	19	39	63	0	6	4	1	2	6	3
	SD	59	16	15	28	40	48	1	15	13	7	10	5	5
West Bengal (n=294)	Mean	215	0	6	23	33	89	0	4	16	7	27	6	4
	SD	64	3	8	44	50	59	1	20	31	24	82	5	6
Pooled (n=2406)	Mean	180	37	18	9	28	36	4	12	6	3	51	7	12
	SD	101	77	19	26	39	44	11	25	21	15	83	6	13
	RDA	270	-	35	50	30	20	-	-	-	-	250	25	40

Table 16 : Average Intake of Foodstuffs (g/day) 7-9 year Boys and Girls

State		Cereals	Millets	Puls.	Leafy	Other	Roots	Nuts &	Fruits	Fish	Other	Milk &	Fats &	Sugar &
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				& Legu.	Veg.	Veg.	& Tubers	Oils			Flesh Foods	Milk Prod.	oils	Jagg.
Kerala (n=153)	Mean	199	1	17	4	23	36	39	25	43	6	65	4	14
	SD	57	7	20	17	36	51	22	47	40	25	72	6	8
Tamil Nadu (n=226)	Mean	234	1	21	5	40	23	3	17	7	2	65	7	10
	SD	68	5	15	17	37	32	5	18	25	11	75	6	13
Karnataka (n=302)	Mean	193	71	25	8	16	27	9	22	3	3	60	7	20
	SD	103	97	19	18	31	26	13	27	15	16	71	7	18
Andhra Pradesh (n=285)	Mean	311	13	18	4	22	20	1	27	2	5	47	8	7
	SD	115	49	25	11	36	23	6	39	12	18	64	5	8
Maharashtra (n=332)	Mean	136	120	23	5	16	17	5	8	3	2	56	12	23
	SD	120	125	19	16	30	23	8	25	14	10	91	9	15
Gujarat (n=243)	Mean	123	168	23	7	38	57	0	4	0	0	99	7	19
	SD	135	148	19	21	45	49	0	9	5	2	86	5	11
Madhya Pradesh (n=322)	Mean	274	40	24	10	39	33	0	7	1	3	29	6	11
	SD	145	101	26	27	53	37	0	16	7	15	79	8	13
Orissa (n=240)	Mean	283	1	15	27	43	72	0	6	5	2	5	7	4
	SD	71	10	17	38	49	49	2	18	15	13	22	4	7
West Bengal (n=296)	Mean	264	0	7	36	46	106	1	5	20	5	21	8	5
	SD	77	3	11	57	58	61	5	23	36	22	76	6	8
Pooled (n=2399)	Mean	225	50	19	12	31	43	5	13	8	3	48	8	13
	SD	124	102	21	31	44	50	13	27	23	16	78	7	14

4.3.1.1.4 10-12 year Boys

The mean intakes of cereals & millets and pulses were 329 g and 21 g as against of RDI 420g and 45g respectively. The intake of all other foods was lower than the RDI, except roots and tubers (**Table 17**).

4.3.1.1.5 10-12 year Girls

As in the case of 10-12 year old boys, the intake of cereals and millets among girls was lower (325 g) than the RDI (380 g). The intakes of pulses, GLV, milk and sugar were less than half of the suggested levels (**Table 18**).

4.3.1.1.6 13-15 year Boys

The mean intake of cereals and millets was 402 g; it ranged from a low of 287 g in the State of Kerala to a high 544 g in Gujarat. There was a wide variation in the mean intake of most of other foods among the States surveyed (**Table 19**).

4.3.1.1.7 13-15 year Girls

The mean intake of cereals and millets was 369 g, while that of pulses was 24 g. The cereals and millet intake ranged from a low of 252 g in Kerala to a high of 451 g in Andhra Pradesh. The pulse intake was lowest in West Bengal (10 g) and highest in Karnataka (35 g) (**Table 20**).

4.3.1.1.8 16-17 year Boys

The average consumption of cereals and millets was 472 g. Highest intake was observed in the State of Gujarat (674 g) and the lowest in Kerala (322 g). The mean intake of pulses was 29 g. The intake of GLV ranged from a low of 3 g in Kerala to a high 31 g in West Bengal. The consumption of milk and milk products ranged from a low 8 g in Orissa to a high 121 g in Gujarat (**Table 21**).

4.3.1.1.9 16-17 year Girls

The average daily consumption of cereals and millets was 402 g and that of pulses was 25g. The intake of all other foods was comparable with their male counterparts (**Table 22**).

Table 17 : Average Intake of Foodstuffs (g/day) 10-12 year Boys

State		Cereals	Millets	Puls. & Legu.	Leafy Veg.	Other Veg.	Roots & Tubers	Nuts & Oils	Fruits	Fish	Other Flesh Foods	Milk & Milk Prod.	Fats & oils	Sugar & Jagg.
Kerala (n=122)	Mean	237	0	17	2	28	47	43	32	53	8	56	6	15
	SD	72	1	18	10	39	62	26	57	49	29	67	6	9
Tamil Nadu (n=82)	Mean	277	3	26	7	48	27	4	22	2	3	65	8	9
	SD	87	19	18	20	39	32	6	25	9	9	82	5	9
Karnataka (n=141)	Mean	253	86	30	11	22	28	11	27	1	6	66	10	22
	SD	142	104	19	23	41	29	16	29	11	33	61	8	18
Andhra Pradesh (n=121)	Mean	371	20	20	5	23	25	2	25	4	7	55	10	8
	SD	139	71	24	15	49	28	7	36	15	25	71	7	14
Maharashtra (n=181)	Mean	154	134	25	8	24	22	6	9	2	1	60	14	25
	SD	139	139	23	22	43	28	14	32	12	4	100	11	16
Gujarat (n=117)	Mean	158	248	29	8	45	70	0	5	1	1	101	9	22
	SD	176	216	29	25	50	66	0	19	10	7	90	5	13
Madhya Pradesh (n=173)	Mean	322	46	25	12	42	35	0	9	1	2	23	7	9
	SD	165	122	27	28	62	41	0	19	7	14	54	7	13
Orissa (n=121)	Mean	325	0	14	29	49	77	0	8	11	0	8	8	3
	SD	73	0	19	43	51	58	1	24	26	4	37	5	6
West Bengal (n=169)	Mean	317	0	7	45	52	117	1	8	23	6	22	9	6
	SD	100	0	9	71	65	77	5	34	44	19	70	8	10
Pooled (n=1227)	Mean	267	62	21	15	37	51	7	15	11	4	48	9	14
	SD	148	130	23	38	52	60	17	33	30	19	77	8	15
	RDA	420	-	45	50	50	30	-	-	-	-	250	40	45

Table 18 : Average Intake of Foodstuffs (g/day) 10-12 year Girls

State		Cereals	Millets	Puls. & Legu.	Leafy Veg.	Other Veg.	Roots & Tubers	Nuts & Oils	Fruits	Fish	Other Flesh Foods	Milk & Milk Prod.	Fats & oils	Sugar & Jagg.
Kerala (n=88)	Mean	225	0	18	4	38	47	48	42	43	5	69	5	16
	SD	53	0	19	20	46	57	30	70	46	18	75	6	9
Tamil Nadu (n=105)	Mean	269	4	27	4	41	21	4	19	6	3	61	8	9
	SD	71	32	18	13	39	27	7	18	18	18	75	5	10
Karnataka (n=152)	Mean	236	93	28	8	14	30	11	39	4	3	62	8	23
	SD	132	107	19	17	26	34	14	156	23	22	66	7	18
Andhra Pradesh (n=115)	Mean	391	13	22	4	23	23	1	27	2	7	49	9	7
	SD	134	53	26	12	41	29	4	38	12	24	66	6	9
Maharashtra (n=190)	Mean	141	151	26	7	17	18	8	10	1	2	40	13	24
	SD	130	152	22	21	28	26	12	33	6	10	56	9	15
Gujarat (n=131)	Mean	153	224	31	9	42	56	0	5	1	1	113	9	21
	SD	159	193	27	23	52	57	0	13	8	9	97	6	12
Madhya Pradesh (n=176)	Mean	324	42	25	14	40	34	0	9	0	1	18	6	10
	SD	158	116	22	31	53	38	0	17	4	10	48	7	10
Orissa (n=131)	Mean	320	0	15	28	45	82	0	3	8	0	5	7	4
	SD	72	0	19	40	52	57	1	8	31	3	26	4	7
West Bengal (n=130)	Mean	306	1	9	48	52	105	0	7	20	4	27	8	6
	SD	88	8	13	80	70	59	1	33	34	14	76	5	9
Pooled (n=1218)	Mean	258	67	23	14	33	45	7	17	8	3	47	8	14
	SD	146	131	22	37	48	52	16	64	25	15	73	7	14
	RDA	380	-	45	50	50	30	-	-	-	-	250	35	45

Table 19 : Average Intake of Foodstuffs (g/day) 13-15 year Boys

State		Cereals	Millets	Puls. & Legu.	Leafy Veg.	Other Veg.	Roots & Tubers	Nuts & Oils	Fruits	Fish	Other Flesh Foods	Milk & Milk Prod.	Fats & oils	Sugar & Jagg.
Kerala (n=101)	Mean	287	0	17	5	39	55	58	41	57	6	62	7	17
	SD	74	0	23	19	48	58	28	68	60	21	67	9	11
Tamil Nadu (n=72)	Mean	360	3	32	13	46	28	3	23	3	2	67	10	9
	SD	108	15	22	30	43	36	6	21	15	8	80	9	9
Karnataka (n=114)	Mean	331	77	34	10	23	42	15	24	3	4	83	11	21
	SD	174	110	24	26	49	42	19	30	13	29	73	11	18
Andhra Pradesh (n=69)	Mean	409	26	25	4	34	26	1	25	5	6	72	13	8
	SD	181	95	33	10	55	27	5	39	18	25	90	11	6
Maharashtra (n=140)	Mean	167	193	30	9	25	20	9	7	2	1	60	16	30
	SD	173	191	24	25	37	27	16	24	8	9	101	12	17
Gujarat (n=105)	Mean	238	306	35	15	55	89	0	4	0	3	110	11	22
	SD	257	287	28	37	59	86	2	13	0	21	88	7	12
Madhya Pradesh (n=118)	Mean	368	53	29	16	53	41	0	10	0	1	29	9	13
	SD	177	140	32	38	70	48	0	19	0	11	61	11	19
Orissa (n=102)	Mean	397	0	14	27	58	105	1	10	10	1	6	9	5
	SD	95	0	16	42	67	65	4	28	25	7	21	8	8
West Bengal (n=100)	Mean	409	1	9	40	72	132	1	9	34	5	37	11	8
	SD	139	9	13	66	102	80	5	33	51	20	100	6	12
Pooled (n=921)	Mean	319	83	25	15	44	60	10	16	12	3	58	11	16
	SD	184	174	26	38	63	67	22	35	34	18	84	10	16

Table 20 : Average Intake of Foodstuffs (g/day) 13-15 year Girls

State		Cereals	Millets	Puls. & Legu.	Leafy Veg.	Other Veg.	Roots & Tubers	Nuts & Oils	Fruits	Fish	Other Flesh Foods	Milk & Milk Prod.	Fats & oils	Sugar & Jagg.
Kerala (n=92)	Mean	252	0	16	7	36	51	53	34	50	9	61	6	16
	SD	63	0	19	22	50	59	30	50	51	33	88	9	6
Tamil Nadu (n=65)	Mean	326	8	31	5	49	27	5	27	6	3	64	10	11
	SD	100	45	24	13	48	31	7	24	20	17	80	7	11
Karnataka (n=115)	Mean	308	95	35	12	20	33	12	32	1	2	71	10	23
	SD	162	121	24	28	36	32	19	39	9	23	69	9	17
Andhra Pradesh (n=96)	Mean	432	19	23	2	33	23	1	29	13	4	70	11	9
	SD	139	52	26	6	55	25	4	42	32	16	94	8	10
Maharashtra (n=139)	Mean	171	155	26	7	24	24	7	9	3	1	46	15	23
	SD	157	165	22	23	47	31	9	28	17	6	70	10	15
Gujarat (n=73)	Mean	172	273	33	10	54	86	0	6	0	2	110	10	21
	SD	155	216	28	33	66	70	0	14	0	10	94	7	10
Madhya Pradesh (n=120)	Mean	329	59	26	14	50	37	0	11	1	0	24	6	10
	SD	176	144	26	32	62	40	0	21	8	1	44	6	12
Orissa (n=122)	Mean	369	0	16	31	59	89	0	9	8	0	9	8	5
	SD	73	0	21	45	55	57	1	25	22	0	29	5	7
West Bengal (n=99)	Mean	364	1	10	52	58	131	0	7	19	6	25	10	6
	SD	110	5	13	72	69	76	1	33	33	25	77	6	9
Pooled (n=921)	Mean	302	67	24	16	41	55	8	17	10	3	50	10	14
	SD	158	139	24	39	56	60	19	34	29	18	77	8	13

Table 21 : Average Intake of Foodstuffs (g/day) 16-17 year Boys

State		Cereals	Millets	Puls. & Legu.	Leafy Veg.	Other Veg.	Roots & Tubers	Nuts & Oils	Fruits	Fish	Other Flesh Foods	Milk & Milk Prod.	Fats & oils	Sugar & Jagg.
Kerala (n=50)	Mean	322	0	21	3	46	62	64	45	60	10	58	7	15
	SD	85	0	25	20	59	95	34	89	55	30	67	9	7
Tamil Nadu (n=22)	Mean	418	4	37	5	60	48	6	34	1	4	56	14	9
	SD	123	17	28	16	47	55	8	30	6	12	69	16	9
Karnataka (n=72)	Mean	387	71	42	7	28	30	21	24	4	0	88	11	23
	SD	191	122	38	18	42	28	28	28	19	0	84	10	14
Andhra Pradesh (n=48)	Mean	574	26	23	18	30	25	2	17	16	12	65	9	8
	SD	226	112	24	109	51	30	7	35	53	34	76	6	8
Maharashtra (n=66)	Mean	139	268	35	8	32	21	8	6	1	0	49	18	28
	SD	148	229	27	23	51	31	13	18	7	3	72	11	17
Gujarat (n=40)	Mean	251	423	52	13	85	115	0	9	0	5	121	12	23
	SD	293	334	96	37	83	98	1	25	0	19	103	9	10
Madhya Pradesh (n=68)	Mean	424	46	25	21	48	44	0	9	1	0	17	8	11
	SD	210	141	24	37	64	44	0	17	10	3	47	8	9
Orissa (n=68)	Mean	455	0	19	29	67	110	0	3	7	0	8	10	5
	SD	102	0	22	43	64	63	1	12	35	2	27	6	9
West Bengal (n=41)	Mean	496	0	15	31	65	138	0	19	34	3	24	10	8
	SD	157	0	19	56	79	72	1	45	60	11	82	6	12
Pooled (n=475)	Mean	379	93	29	16	49	62	11	16	13	3	51	11	15
	SD	219	201	39	48	63	72	25	40	39	17	78	9	14

Table 22 : Average Intake of Foodstuffs (g/day) 16-17 year Girls

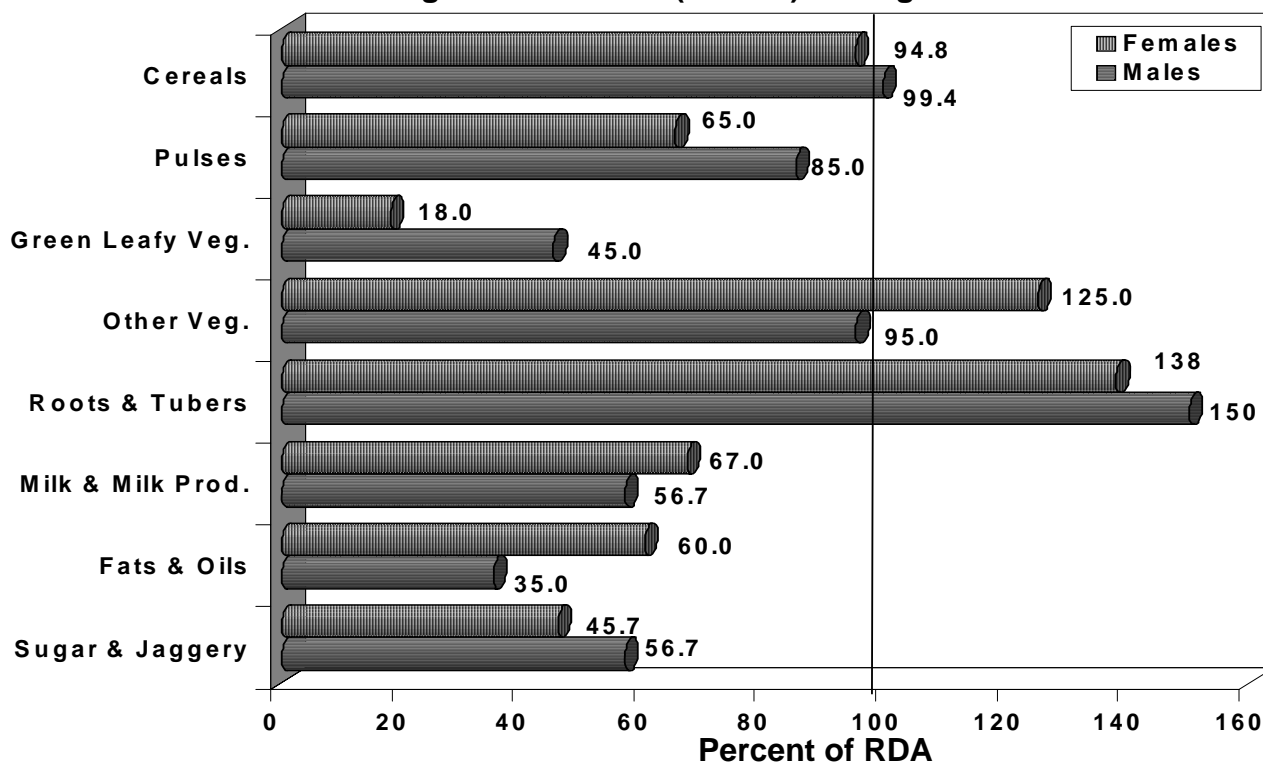
State		Cereals	Millets	Puls. &	Leafy	Other	Roots &	Nuts &	Fruits	Fish	Other	Milk &	Fats &	Sugar &
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				Legu.	Veg.	Veg.	Tubers	Oils			Flesh Foods	Milk Prod.	oils	Jagg.
Kerala (n=73)	Mean	292	0	16	4	47	61	55	30	66	7	72	7	15
	SD	66	0	18	15	63	70	25	51	57	25	74	8	10
Tamil Nadu (n=44)	Mean	343	0	32	17	41	32	4	31	3	10	93	10	15
	SD	105	0	23	43	33	27	6	35	12	40	111	7	12
Karnataka (n=54)	Mean	355	87	35	16	22	37	14	31	3	12	86	10	21
	SD	205	122	22	49	41	32	18	34	23	53	76	8	17
Andhra Pradesh (n=40)	Mean	437	25	27	8	32	26	2	21	9	11	53	12	6
	SD	150	100	30	23	61	39	5	36	35	42	56	9	7
Maharashtra (n=70)	Mean	213	120	27	4	27	25	9	4	4	0	30	15	27
	SD	179	154	34	15	45	33	15	12	12	0	36	11	14
Gujarat (n=55)	Mean	185	355	38	8	46	87	0	8	0	5	107	10	23
	SD	210	231	34	24	52	70	0	20	1	25	98	6	12
Madhya Pradesh (n=54)	Mean	407	17	28	17	40	44	0	11	1	0	16	7	9
	SD	149	70	35	32	71	47	0	19	4	0	33	8	10
Orissa (n=53)	Mean	429	0	22	35	66	102	0	7	3	0	9	10	6
	SD	90	0	19	45	58	79	1	19	14	0	34	9	9
West Bengal (n=50)	Mean	420	0	7	54	68	147	0	2	23	6	17	11	5
	SD	123	0	12	76	66	78	0	9	47	19	56	6	6
Pooled (n=493)	Mean	332	70	25	17	43	62	12	16	14	5	53	10	15
	SD	173	156	28	42	57	69	23	32	38	28	76	8	14

4.3.1.1.10 Adult Males (Sedentary)

The average intake of cereals and millets (457 g), was comparable to RDI (460 g). Except for other vegetables and roots and tubers, the intake of all other foods was lower than the suggested levels (Fig. 7 & Table 23).

Fig. 7 Food Intake (% RDA) among adults



4.3.1.1.10.1 Adult Males (Moderate)

The average intake of cereals and millets (538 g), was more than RDA (520 g). Except for Roots & tubers, the intake of all other foods was lower than the suggested levels (Table 23.1).

4.3.1.1.11 Adult Females (NPNL-Sedentary)

The consumption of cereals and millets was (389 g), was about 95% of the RDI (410 g). Barring roots & tubers and other vegetables, the intake of all the other foods was lower than the suggested levels. The extent of deficit was the highest with respect to green leafy vegetables (82%) (Fig. 7 & Table 24).

4.3.1.1.11.1 Adult Females (NPNL-Moderate)

The consumption of cereals and millets was (457 g), was about 104% of the RDI (440 g). Barring roots & tubers and other vegetables, the intake of all the other foods was lower than the suggested levels. The extent of deficit was the highest with respect to green leafy vegetables (84%) (Table 24.1).

Table 23 : Average Intake of Foodstuffs (g/day) \geq 18 year Males (Sedentary Work)

State		Cereals	Millet	Puls. & Legu.	Leafy Veg.	Other Veg.	Roots & Tubers	Nuts & Oils	Condi. & Spices	Fruits	Fish	Other Flesh Foods	Milk & Milk Prod.	Fats & oils	Sugar & Jagg.
Kerala (n=578)	Mean	345	0	23	7	59	80	76	20	43	77	14	86	9	16
	SD	87	0	30	25	70	97	43	12	58	73	46	74	9	10
Tamil Nadu (n=315)	Mean	447	1	45	10	60	48	7	20	40	4	4	115	15	13
	SD	127	11	34	30	54	55	10	17	37	19	20	115	14	12
Karnataka (n=548)	Mean	385	108	43	15	29	55	22	23	39	5	4	111	15	25
	SD	196	150	30	38	51	63	27	13	67	26	32	97	13	20
Andhra Pradesh (n=213)	Mean	447	16	30	6	40	25	8	23	38	5	10	105	16	9
	SD	155	60	46	22	57	30	36	19	52	20	34	109	12	10
Maharashtra (n=215)	Mean	189	199	32	9	33	26	10	7	7	3	2	55	20	27
	SD	175	214	29	27	47	33	14	4	22	14	15	76	14	15
Gujarat (n=264)	Mean	402	261	55	26	84	102	0	10	9	1	0	142	17	25
	SD	320	319	42	58	90	91	2	8	28	7	2	111	12	13
Madhya Pradesh (n=108)	Mean	467	27	31	24	84	53	1	8	10	2	0	30	10	13
	SD	178	105	28	45	90	51	4	5	19	12	0	49	9	14
Orissa (n=260)	Mean	469	1	32	31	84	125	1	7	9	8	1	21	14	8
	SD	119	14	28	46	68	76	4	5	21	22	11	52	8	10
West Bengal (n=270)	Mean	459	0	12	53	75	146	1	7	8	30	8	34	14	10
	SD	127	0	16	88	91	89	5	6	32	54	25	81	11	12
Pooled (n=2771)	Mean	393	64	34	18	57	75	22	16	28	22	6	85	14	17
	SD	186	162	34	46	71	82	38	14	50	50	30	97	12	15
	RDA	460	-	40	40	60	50	-	-	-	-	-	150	40	30

Table - 23.1 Average Intake of Foodstuffs (g/day) - Males (\geq 18 Years) - Moderate Workers

State		Cereals	Millets	Puls. & Legu.	Leafy Veg.	Other Veg.	Roots & Tubers	Nuts & Oils	Condi. & Spices	Fruits	Fish	Other Flesh Foods	Milk & Milk Prod.	Fats & oils	Sugar & Jagg.
Kerala (n=421)	Mean	377	0	17	5	53	90	73	23	32	93	9	57	7	18
	SD	100	0	25	22	78	125	41	24	54	80	40	68	8	9
Tamil Nadu (n=575)	Mean	539	5	42	10	58	46	6	20	38	11	1	73	12	10
	SD	151	37	35	29	60	55	10	11	34	43	11	105	8	11
Karnataka (n=499)	Mean	410	129	43	8	25	47	18	23	30	8	4	59	11	22
	SD	226	171	38	23	49	56	26	12	34	38	28	66	10	19
Andhra Pradesh (n=736)	Mean	582	22	25	9	39	31	2	27	32	7	11	69	15	7
	SD	210	95	39	68	61	37	16	20	46	28	34	102	12	10
Maharashtra (n=791)	Mean	200	219	33	10	29	27	8	7	10	3	2	55	19	29
	SD	196	220	34	26	47	35	14	4	34	15	14	83	14	19
Gujarat (n=636)	Mean	195	512	47	10	64	120	0	10	7	0	2	128	14	24
	SD	238	333	41	34	79	105	1	9	24	1	12	122	12	13
Madhya Pradesh (n=959)	Mean	473	49	32	19	53	46	0	9	10	2	2	36	9	12
	SD	219	145	35	43	72	52	0	6	23	14	15	103	10	16
Orissa (n=725)	Mean	529	1	21	39	71	110	1	9	9	8	2	7	11	5
	SD	93	11	26	59	77	74	2	9	24	27	15	28	8	9
West Bengal (n=624)	Mean	579	0	9	54	77	155	1	7	5	23	6	14	12	6
	SD	191	5	16	91	88	92	14	6	21	44	25	51	6	9
States Pooled (n=5966)	Mean	433	105	30	19	52	72	9	14	18	13	4	54	12	15
	SD	239	224	35	53	71	84	24	14	35	41	22	93	11	16
	RDA	520		50	40	70	60	45	-	-	-	-	200	-	35

Table 24 : Average Intake of Foodstuffs (g/day) ≥ 18 year Females (NPNL - Sedentary Work)

State		Cereals	Millets	Puls. &	Leafy	Other	Roots &	Nuts &	Condi. &	Fruits	Fish	Other	Milk &	Fats &	Sugar &
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				Legu.	Veg.	Veg.	Tubers	Oils	Spices			Flesh Foods	Milk Prod.	oils	Jagg.
Kerala (n=963)	Mean	293	0	17	5	48	65	62	17	31	71	9	76	7	16
	SD	71	9	22	20	63	80	35	13	49	61	33	71	8	9
Tamil Nadu (n=501)	Mean	370	3	34	7	48	38	6	16	30	9	3	100	11	14
	SD	103	54	29	21	45	43	8	15	30	32	18	97	11	12
Karnataka (n=712)	Mean	347	87	40	13	25	47	21	21	33	5	5	95	12	25
	SD	178	126	29	34	46	47	26	12	40	26	31	82	11	19
Andhra Pradesh (n=351)	Mean	425	14	24	7	39	28	3	24	29	6	8	94	14	9
	SD	157	56	31	37	54	31	16	20	43	22	31	105	11	10
Maharashtra (n=391)	Mean	176	136	28	9	24	21	10	6	7	4	3	49	18	29
	SD	151	152	26	23	37	28	15	4	21	14	14	57	13	16
Gujarat (n=345)	Mean	253	223	41	17	69	83	0	8	8	0	1	142	14	27
	SD	209	257	32	41	75	74	2	7	22	6	13	102	11	13
Madhya Pradesh (n=219)	Mean	390	27	31	22	62	47	0	9	8	1	2	49	11	16
	SD	176	97	33	45	73	51	2	6	17	12	13	85	9	17
Orissa (n=683)	Mean	422	0	20	28	67	110	1	6	7	8	1	11	11	7
	SD	97	5	22	44	64	64	3	5	21	24	11	33	7	10
West Bengal (n=634)	Mean	416	0	9	52	70	135	1	6	7	26	6	20	12	7
	SD	127	4	13	82	85	77	10	5	30	43	25	59	7	10
Pooled (n=4799)	Mean	346	43	26	18	50	69	17	13	20	21	5	67	12	16
	SD	155	120	28	45	64	72	31	13	37	45	25	85	10	15
	RDA	410	-	40	100	40	50	-	-	-	-	-	100	20	35

Table - 24.1 Average Intake of Foodstuffs (g/day) - Females (>= 18 Years) - NPNL Moderate Workers

State		Cereals	Millets	Puls. & Legu.	Leafy Veg.	Other Veg.	Roots & Tubers	Nuts & Oils	Condi. & Spices	Fruits	Fish	Other Flesh	Milk & Milk	Fats & oils	Sugar & Jagg.
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												Foods	Prod.		
Kerala (n=47)	Mean	286	0	15	2	29	72	42	15	23	58	2	28	5	16
	SD	83	0	27	13	44	106	29	9	24	60	8	50	5	6
Tamil Nadu (n=250)	Mean	421	5	32	9	39	34	3	17	30	3	0	61	9	8
	SD	116	26	33	27	42	40	7	22	30	15	0	104	9	10
Karnataka (n=303)	Mean	360	118	37	7	27	39	15	21	27	8	2	45	9	19
	SD	199	148	36	17	52	52	21	10	31	32	18	56	9	18
Andhra Pradesh (n=485)	Mean	500	19	22	7	35	27	1	24	30	6	6	62	12	7
	SD	157	82	31	39	55	32	5	18	45	23	21	89	9	9
Maharashtra (n=556)	Mean	163	188	29	10	24	23	7	7	8	3	1	48	15	29
	SD	159	188	27	28	43	30	12	3	26	14	9	72	10	16
Gujarat (n=454)	Mean	136	374	40	10	52	94	0	9	6	0	1	115	11	25
	SD	164	240	34	34	67	90	1	17	21	3	9	106	9	13
Madhya Pradesh (n=603)	Mean	422	43	29	17	49	42	0	8	9	2	1	31	7	10
	SD	203	131	31	39	67	47	0	6	19	14	9	94	7	12
Orissa (n=274)	Mean	475	1	16	39	56	78	0	8	9	6	2	3	8	4
	SD	90	14	22	56	71	63	1	9	25	18	14	16	6	8
West Bengal (n=188)	Mean	474	0	9	52	72	132	1	5	5	20	2	6	10	3
	SD	132	4	16	88	79	81	6	4	20	39	13	30	6	5
States Pooled (n=3160)	Mean	347	110	28	16	42	52	4	12	15	5	2	51	11	15
	SD	216	192	31	42	61	65	12	14	30	22	13	88	9	15
	RDA	440			45	100	40	50	25	-	-	-	-	150	-

4.3.1.1.12 Pregnant women

The intake of cereals & millets among pregnant women (408 g), was comparable to the RDI of NPNL women (410 g). Obviously, no additional amounts are consumed to meet the increased requirements due to pregnancy. The intake of all other foods was much below the levels suggested for NPNL women (**Table 25**).

4.3.1.1.13 Lactating Women

The average consumption of cereals and millets among lactating women (442 g) was higher than the intake among NPNL women (389 g) and that of pregnant women (408 g). As in the case of pregnant women, the intake of all the other foods was comparable with NPNL women (**Table 26**).

In general, the level of consumption of cereals & millets and milk & milk products was relatively better among different age groups in the State of Gujarat as compared to other States.

Table 25 : Average Intake of Foodstuffs (g/day) \geq 18 year Females (Pregnant - Sedentary Work)

State		Cereals	Millets	Puls. & Legu.	Leafy Veg.	Other Veg.	Roots & Tubers	Nuts & Oils	Condi. & Spices	Fruits	Fish	Other Flesh Foods	Milk & Milk Prod.	Fats & oils	Sugar & Jagg.
Kerala (n=17)	Mean	293	0	13	6	34	81	54	17	55	79	5	67	6	16
	SD	77	0	14	19	55	105	41	13	61	71	13	88	7	6
Tamil Nadu (n=41)	Mean	376	0	32	6	47	63	9	18	30	10	2	80	12	9
	SD	95	0	29	20	58	68	11	8	25	30	14	79	10	9
Karnataka (n=28)	Mean	375	97	35	15	25	58	21	22	31	26	0	114	14	28
	SD	229	135	30	32	46	59	27	14	32	65	0	94	12	19
Andhra Pradesh (n=22)	Mean	444	8	22	4	23	24	2	23	24	12	5	84	12	11
	SD	137	38	36	11	46	28	6	16	46	37	19	110	7	9
Maharashtra (n=17)	Mean	203	169	24	9	43	19	9	10	7	21	0	54	20	29
	SD	182	199	31	27	46	18	15	14	18	52	0	69	12	22
Gujarat (n=18)	Mean	216	251	43	32	70	96	0	8	8	0	0	133	10	29
	SD	228	195	30	49	71	61	0	4	18	0	0	122	5	25
Madhya Pradesh (n=8)	Mean	428	17	54	0	51	69	0	6	6	0	0	92	6	27
	SD	147	48	49	0	64	45	0	3	9	0	0	208	5	22
Orissa (n=22)	Mean	431	0	21	32	62	110	1	7	6	3	0	18	9	7
	SD	86	0	24	39	69	50	2	6	18	14	0	51	5	10
West Bengal (n=15)	Mean	366	0	9	38	49	128	0	6	0	33	12	34	11	6
	SD	121	0	14	99	50	72	0	7	0	47	33	62	6	7
Pooled (n=188)	Mean	353	55	28	15	44	69	11	15	21	19	2	77	12	17
	SD	169	129	31	40	57	68	23	13	34	47	14	99	9	17

Table 26 : Average Intake of Foodstuffs (g/day) \geq 18 year Females (Lactating - Sedentary Work)

State		Cereals	Millets	Puls. & Legu.	Leafy Veg.	Other Veg.	Roots & Tubers	Nuts & Oils	Condi. & Spices	Fruits	Fish	Other Flesh Foods	Milk & Milk Prod.	Fats & oils	Sugar & Jagg.
Kerala (n=58)	Mean	325	0	14	3	74	63	63	18	40	79	9	75	7	17
	SD	60	1	21	11	113	92	33	12	70	78	27	69	6	7
Tamil Nadu (n=181)	Mean	427	1	33	10	50	40	5	18	35	6	1	73	11	9
	SD	96	9	29	29	53	45	8	11	30	27	11	102	7	10
Karnataka (n=54)	Mean	341	128	46	8	29	48	15	20	38	0	1	80	13	28
	SD	207	159	34	21	51	52	21	10	39	0	4	79	11	25
Andhra Pradesh (n=88)	Mean	476	5	29	7	39	38	6	28	35	3	11	92	18	7
	SD	143	28	34	26	64	52	38	19	49	15	31	109	15	8
Maharashtra (n=46)	Mean	187	162	30	7	40	26	7	7	7	5	3	68	20	25
	SD	152	174	26	18	54	33	9	4	16	21	15	83	18	15
Gujarat (n=48)	Mean	223	335	31	15	77	120	0	9	8	0	3	153	15	26
	SD	240	298	27	35	88	95	0	5	22	0	21	126	9	13
Madhya Pradesh (n=42)	Mean	411	43	40	14	67	48	0	8	12	0	5	31	11	14
	SD	187	109	42	32	82	57	0	4	22	0	26	74	10	14
Orissa (n=72)	Mean	454	5	24	38	63	92	0	7	9	6	3	4	13	6
	SD	98	21	24	54	66	60	1	5	22	19	16	13	8	9
West Bengal (n=79)	Mean	461	1	8	57	63	171	0	7	4	19	7	17	12	5
	SD	143	6	13	90	79	86	1	6	18	39	24	53	6	7
Pooled (n=668)	Mean	392	50	28	18	54	69	9	15	24	12	5	65	13	13
	SD	167	142	30	46	72	78	25	13	38	38	20	95	11	15

4.3.1.2 Nutrient Intakes

In view of the large variation in the mean intakes of nutrients, medians were considered for comparison with RDI. The median intakes of different nutrients according to age, sex, activity and physiological groups are given in **Tables 27-39**. The means and SDs are also presented in the Tables.

4.3.1.2.1 1-3 Year children

In general, the median intakes of all the nutrients were less than RDA. The median intake of energy was 706 kcal as against RDA of 1240 kcals, which ranged from a low 651 kcal in Gujarat to a high 805 kcal in Madhya Pradesh. In all the States, the median consumption was less than RDA. The intake of protein was 18 g, and ranged between 15 g in Orissa to about 22 g in Madhya Pradesh (comparable to RDA). The extent of deficit was more with respect to micronutrients like vitamin A (88%), iron (67%) and riboflavin (71%) (**Fig. 8 & Table 27**).

4.3.1.2.2 4-6 year children

The median intakes of all the nutrients were below the RDA. The protein intake was below the recommended level, in the States of Tamil Nadu, Karnataka, Andhra Pradesh, Orissa and West Bengal. The median intake of energy (1029 kcal), was about 60% of RDA. As in the case of 1-3 year children, the extent of deficit was higher with respect to vitamin A (85%), riboflavin (70%) and iron (65%) (**Fig. 8 & Table 28**).

Fig.8 Median Nutrient Intake (%RDA) among children

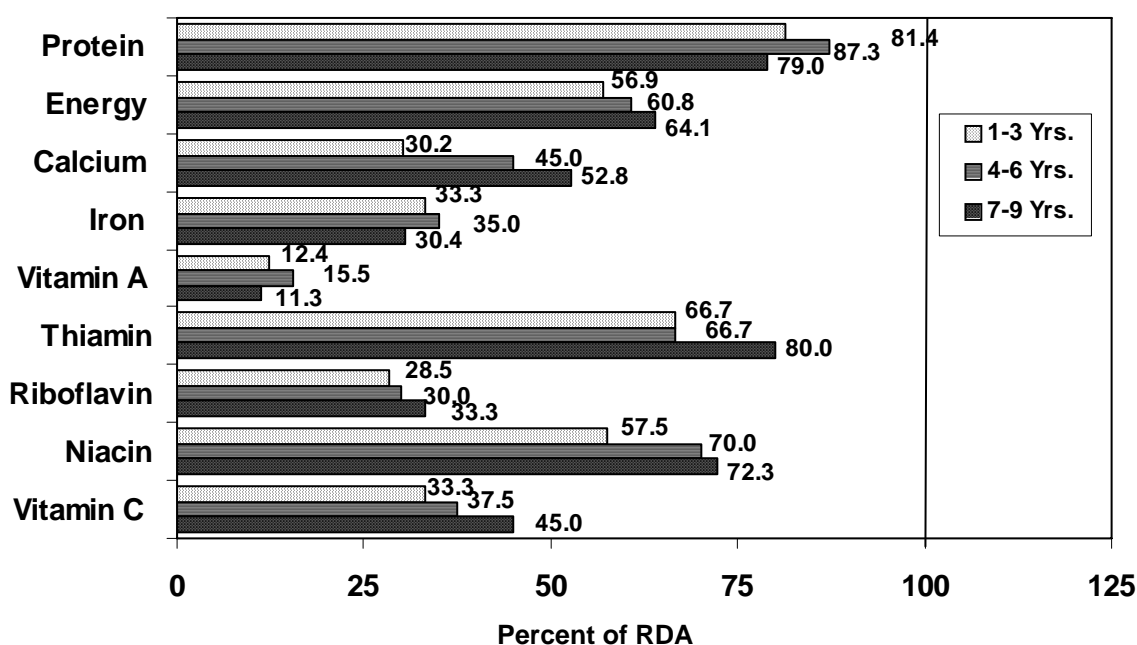


Table 27 : Intake of Nutrients (per day) 1-3 year Boys and Girls

State		Protein (g)	Total Fat (g)	Energy (Kcal)	Calcium (mg)	Iron (mg)	Vit.-A (µg)	Thiamin (mg)	Ribo. (mg)	Niacin (mg)	Vit.-C (mg)	Free Folic Acid (µg)
Kerala (n=197)	Mean	21.7	17.1	736	279	5.1	77	.4	.3	4.8	14	18.9
	Median	19.6	16.1	756	239	4.6	52	.3	.3	4.6	10	16.7
	SD	10.1	9.5	268	221	3.0	90	.2	.2	2.0	14	11.0
Tamil Nadu (n=408)	Mean	18.6	13.0	698	280	3.6	121	.4	.4	5.1	17	24.0
	Median	17.7	10.2	690	180	3.1	72	.4	.3	4.9	13	22.8
	SD	9.9	10.3	284	282	3.1	131	.2	.3	2.6	17	12.4
Karnataka (n=286)	Mean	18.4	11.1	736	202	4.4	95	.4	.3	4.2	11	18.7
	Median	17.4	9.1	732	155	3.8	60	.3	.3	3.9	9	16.6
	SD	7.8	8.4	268	163	3.2	121	.2	.2	2.0	11	13.3
Andhra Pradesh (n=338)	Mean	18.3	11.9	774	207	3.5	71	.3	.2	4.0	13	15.9
	Median	16.8	9.1	751	140	2.9	49	.2	.2	3.8	8	14.8
	SD	10.3	10.0	372	223	2.8	78	.2	.2	2.3	14	10.0
Maharashtra (n=332)	Mean	20.6	16.5	735	262	6.2	88	.5	.3	4.4	9	18.5
	Median	19.1	13.9	698	154	5.3	48	.4	.3	4.0	4	17.3
	SD	11.0	11.6	342	277	4.7	117	.3	.2	2.8	23	11.1
Gujarat (n=288)	Mean	19.1	12.0	658	215	6.5	78	.5	.3	3.8	12	20.8
	Median	18.4	10.8	651	182	5.5	58	.4	.3	3.3	7	19.9
	SD	7.4	6.5	234	148	4.1	120	.2	.1	1.9	15	9.8
Madhya Pradesh (n=292)	Mean	25.0	10.0	854	151	8.0	119	.7	.3	6.7	20	23.5
	Median	22.4	7.8	805	108	6.2	50	.6	.3	5.8	12	20.4
	SD	13.3	8.9	397	150	7.7	219	.5	.2	4.0	26	14.7
Orissa (n=261)	Mean	16.2	8.1	679	147	5.9	135	.5	.2	6.4	28	19.8
	Median	15.2	6.2	657	101	4.3	23	.4	.2	6.3	17	16.9
	SD	7.0	6.6	239	147	5.4	258	.2	.1	2.5	32	10.5
West Bengal (n=271)	Mean	18.3	9.2	693	231	5.1	171	.5	.3	6.6	27	22.1
	Median	16.8	7.1	690	123	3.8	21	.4	.2	6.6	18	18.2
	SD	11.6	7.1	293	258	6.0	413	.3	.3	3.2	30	17.0
Pooled (n=2673)	Mean	19.5	12.1	729	221	5.3	106	.4	.3	5.1	17	20.4
	Median	17.9	9.5	706	151	4.0	50	.4	.2	4.6	10	18.2
	SD	10.3	9.5	312	224	4.9	197	.3	.2	2.9	22	12.6
	RDA	22	25	1240	500	12	400	.6	.7	8	30	30

Table 28 : Intake of Nutrients (per day) 4-6 year Boys and Girls

State		Protein (g)	Total Fat (g)	Energy (Kcal)	Calcium (mg)	Iron (mg)	Vit.-A (µg)	Thiamin (mg)	Ribo. (mg)	Niacin (mg)	Vit.-C (mg)	Free Folic Acid (µg)
Kerala (n=159)	Mean	30.9	25.2	1052	326	7.1	93	0.5	0.4	7.4	22	29
	Median	31	24.3	1065	266	6.1	67	0.5	0.4	7.3	15	25.8
	SD	11	13.2	262	223	3.5	106	0.2	0.2	2.4	24	12.9
Tamil Nadu (n=304)	Mean	23.9	12.5	980	229	5.2	101	0.6	0.4	8.2	22	32.2
	Median	23.7	10.5	972	178	4.6	72	0.6	0.3	8.4	19	32.2
	SD	7.2	7.4	233	197	2.5	117	0.2	0.2	2.6	16	10.5
Karnataka (n=259)	Mean	26.7	15.4	1044	248	6.9	120	0.6	0.4	6.5	19	28
	Median	25.9	13.2	1034	188	6.1	74	0.6	0.4	6	14	25.6
	SD	8.5	9.4	274	180	3.7	152	0.3	0.2	2.5	16	14.5
Andhra Pradesh (n=269)	Mean	28.7	15	1204	217	5.4	98	0.4	0.4	6.7	23	25
	Median	27	12.3	1153	171	4.9	63	0.4	0.3	6.3	15	22.1
	SD	14.5	9.4	352	155	3.9	130	0.2	0.2	2.5	42	13.1
Maharashtra (n=318)	Mean	30.5	20.9	1098	272	10.2	108	0.8	0.4	7.6	13	29.9
	Median	29.8	17.8	1060	189	9.5	61	0.8	0.4	7.3	7	29.1
	SD	10.2	11.3	309	247	5.4	152	0.4	0.2	3	23	12.4
Gujarat (n=245)	Mean	31.3	18	1046	274	12.3	103	0.9	0.5	6.5	19	35.7
	Median	30.1	16.9	1030	244	10.9	86	0.8	0.5	6.1	12	33.5
	SD	11.3	8.8	355	170	7.3	120	0.4	0.2	2.9	20	16
Madhya Pradesh (n=323)	Mean	33.6	12.3	1165	181	11	130	0.9	0.4	9.6	24	32.6
	Median	31.7	9.9	1109	142	8.9	58	0.8	0.4	8.5	14	30
	SD	13	10.6	391	144	8.7	237	0.6	0.2	4.4	33	17.2
Orissa (n=235)	Mean	22.4	8.8	969	185	6.5	199	0.6	0.2	9.5	38	28.4
	Median	21.2	7.4	938	125	5.4	30	0.6	0.2	9.3	24	25.7
	SD	7.6	5.7	250	175	4	333	0.2	0.1	2.9	35	13.1
West Bengal (n=294)	Mean	25.7	10.9	1009	258	7.2	187	0.7	0.3	10.1	38	29.6
	Median	23.1	8.5	998	144	5.6	27	0.6	0.2	10	28	24.8
	SD	12	8.2	269	286	5.5	408	0.2	0.2	2.8	37	17.1
Pooled (n=2406)	Mean	28.2	15	1066	239	8.1	127	0.7	0.4	8.1	24	30.2
	Median	26.2	12.3	1029	180	6.3	62	0.6	0.3	7.7	15	27.7
	SD	11.4	10.4	316	206	5.9	226	0.4	0.2	3.3	30	14.6
	RDA	30	25	1690	400	18	400	0.9	1	11	40	40

4.3.1.2.3 7-9 year children

In general, the median intakes of all the nutrients were less than the RDA in all the States. The median intake of protein was 32 g and that of energy was 1251 kcals as against RDA of 41g and 1950 kcals, respectively (**Fig. 8 & Table 29**).

4.3.1.2.4 10-12 year Boys

The consumption of all the nutrients was less than RDA. The intake of protein was 38 g as against RDA of 54g. The intake of energy was 1475 kcals against RDA of 2190. The energy consumption ranged from 1260 kcals in Tamil Nadu to 1796 kcals in Gujarat. The diets were grossly deficient in micronutrients such as vitamin A (88%), iron (71%) and riboflavin (62%) (**Table 30**).

4.3.1.2.5 10-12 year Girls

As observed in the case of boys, the median intake of all the nutrients was less than the RDA. The extent of deficit was much higher in case of micronutrients such as iron (69%), riboflavin (58%) and vitamin A (39%) (**Table 31**).

4.3.1.2.6 13-15 year Boys

In general, the median intake of all the nutrients was less than the RDA in all the States, except for thiamin in the States of Karnataka and Gujarat; niacin in West Bengal, and Orissa and vitamin C in West Bengal (**Table 32**).

4.3.1.2.7 13-15 year Girls

The median intakes of all the nutrients except thiamin were less than the RDA, in all the States. The average deficit as compared to RDA in the energy intakes was 425 kcal, while in the case of protein, it was 24 g. The intakes of iron, vitamin A and riboflavin were grossly inadequate (**Table 33**).

4.3.1.2.8 16-17 year Boys

In general, the median intake of protein and energy was 50 g and 2039 kcals as compared to RDA of 78g and 2640 kcals, respectively. However, in the State of Gujarat, the intake of protein, energy, calcium, thiamin, niacin and vitamin C was above the RDA. The intake of micronutrients such as vitamin A, riboflavin and iron was deficient by more than 50% of RDA in all the States (**Table 34**).

Table 29 : Intake of Nutrients (per day) 7-9 year Boys and Girls

State		Protein (g)	Total Fat (g)	Energy (Kcal)	Calcium (mg)	Iron (mg)	Vit.-A (µg)	Thiamin (mg)	Ribo. (mg)	Niacin (mg)	Vit.-C (mg)	Free Folic Acid (µg)
Kerala (n=153)	Mean	35.1	26.9	1216	366	8.8	87	.6	.4	8.6	23	29.7
	Median	32.2	26.0	1191	314	7.6	54	.6	.4	8.3	15	26.8
	SD	13.7	13.7	311	323	5.2	150	.2	.2	2.5	23	12.6
Tamil Nadu (n=226)	Mean	27.5	14.1	1134	258	6.1	132	.7	.4	9.7	28	35.4
	Median	27.0	11.4	1124	198	5.3	79	.7	.4	9.8	21	35.0
	SD	10.9	8.5	274	251	3.5	180	.2	.2	3.1	28	11.7
Karnataka (n=302)	Mean	33.3	17.6	1288	340	9.3	137	.8	.5	8.1	21	32.9
	Median	32.3	15.0	1285	251	8.1	84	.8	.5	7.5	16	29.5
	SD	10.6	10.8	338	266	4.8	189	.4	.2	3.1	21	17.1
Andhra Pradesh (n=285)	Mean	32.7	15.2	1418	237	6.8	105	.5	.4	7.9	24	27.6
	Median	31.0	13.3	1357	188	5.5	67	.4	.4	7.6	17	25.8
	SD	13.7	8.4	400	173	4.9	135	.2	.2	2.6	22	13.2
Maharashtra (n=332)	Mean	36.3	23.8	1301	295	12.5	108	1.0	.5	9.5	13	36.0
	Median	34.5	20.7	1260	208	11.3	65	1.0	.5	9.0	8	34.6
	SD	12.0	12.6	364	257	6.8	144	.4	.2	3.5	16	15.1
Gujarat (n=243)	Mean	43.4	22.8	1437	325	17.9	140	1.3	.7	10.0	28	51.0
	Median	41.3	21.7	1365	288	17.2	111	1.2	.7	9.1	19	47.0
	SD	13.7	9.9	420	181	9.4	178	.5	.3	4.1	27	21.6
Madhya Pradesh (n=322)	Mean	38.6	12.2	1340	197	11.9	122	1.1	.5	11.3	24	37.4
	Median	36.1	10.5	1292	150	9.6	60	.9	.4	10.1	15	33.8
	SD	16.4	10.0	438	157	7.8	227	.7	.3	5.4	31	19.2
Orissa (n=240)	Mean	28.0	9.9	1229	236	9.5	244	.8	.3	12.2	45	36.5
	Median	26.7	9.1	1220	157	6.7	38	.8	.3	12.1	28	34.7
	SD	8.5	5.5	289	229	8.2	407	.3	.1	3.4	39	14.8
West Bengal (n=296)	Mean	29.6	12.8	1220	288	8.9	245	.8	.3	12.2	50	36.0
	Median	28.6	11.0	1197	187	7.0	32	.8	.3	11.8	33	31.3
	SD	9.2	8.3	302	254	7.3	523	.2	.2	3.3	50	18.5
Pooled (n=2399)	Mean	34.0	16.9	1294	278	10.3	148	.9	.4	10.0	28	35.9
	Median	31.6	14.0	1251	211	7.9	68	.8	.4	9.4	18	32.9
	SD	13.2	11.2	369	238	7.5	278	.5	.2	4.0	32	17.5
	RDA	41	25	1950	400	26	600	1.0	1.2	13	40	60

Table 30 : Intake of Nutrients (per day) 10-12 year Boys

State		Protein (g)	Total Fat (g)	Energy (Kcal)	Calcium (mg)	Iron (mg)	Vit.-A (µg)	Thiamin (mg)	Ribo. (mg)	Niacin (mg)	Vit.-C (mg)	Free Folic Acid (µg)
Kerala (n=122)	Mean	41.5	30.4	1405	367	9.9	78	.7	.5	10.4	22	35.3
	Median	40.1	29.9	1361	333	9.5	60	.7	.4	9.8	16	32.6
	SD	17.0	15.2	365	220	4.4	70	.3	.2	3.1	19	14.9
Tamil Nadu (n=82)	Mean	30.7	16.0	1308	279	7.7	127	.8	.4	10.9	30	40.4
	Median	30.7	15.7	1260	220	6.1	74	.8	.4	10.5	23	40.2
	SD	8.3	8.1	326	184	5.5	138	.3	.2	3.5	25	12.2
Karnataka (n=141)	Mean	41.6	22.4	1616	476	11.8	164	1.0	.6	9.9	23	38.9
	Median	40.4	18.6	1599	301	11.2	105	1.0	.6	9.5	18	36.7
	SD	12.2	14.3	405	370	5.1	222	.4	.3	3.5	19	14.3
Andhra Pradesh (n=121)	Mean	38.9	17.2	1691	263	7.7	123	.6	.5	9.5	22	32.1
	Median	37.1	14.5	1666	210	7.1	80	.5	.4	9.0	18	28.4
	SD	12.1	10.1	440	158	3.7	160	.3	.2	2.9	19	14.8
Maharashtra (n=181)	Mean	40.5	26.8	1456	308	13.8	152	1.2	.6	11.0	20	42.2
	Median	39.0	24.3	1437	212	12.3	72	1.1	.5	10.3	10	39.8
	SD	13.8	15.2	415	273	7.1	239	.5	.3	4.6	26	17.6
Gujarat (n=117)	Mean	58.1	27.8	1892	393	23.5	167	1.7	.9	13.3	35	68.4
	Median	56.7	26.6	1796	347	20.2	132	1.7	.8	12.4	25	63.3
	SD	18.2	12.3	529	213	13.0	140	.6	.4	5.0	34	28.5
Madhya Pradesh (n=173)	Mean	43.1	13.0	1525	203	12.9	146	1.2	.5	12.9	28	42.7
	Median	42.0	11.2	1497	173	10.4	76	1.2	.5	12.6	17	39.8
	SD	18.5	9.6	515	142	8.4	254	.8	.3	6.2	35	23.1
Orissa (n=121)	Mean	32.4	11.1	1387	308	10.6	217	.9	.3	13.9	52	39.7
	Median	30.0	10.3	1332	205	7.4	40	.9	.3	13.9	36	37.8
	SD	9.7	6.0	292	302	8.7	355	.3	.2	3.7	51	16.0
West Bengal (n=169)	Mean	35.1	14.6	1434	353	10.7	297	1.0	.4	14.5	62	42.1
	Median	32.8	12.1	1419	223	8.6	44	.9	.3	14.2	40	37.0
	SD	13.1	10.7	397	399	8.5	615	.3	.2	4.5	68	22.4
Pooled (n=1227)	Mean	40.4	19.9	1524	326	12.2	168	1.0	.5	11.9	33	42.3
	Median	37.6	16.4	1475	238	9.8	76	.9	.5	11.1	21	38.2
	SD	15.9	13.6	449	283	8.7	312	.6	.3	4.7	40	21.2
	RDA	54	22	2190	600	34	600	1.1	1.3	15	40	70

Table 31 : Intake of Nutrients (per day) 10-12 year Girls

State	Protein	Total	Energy	Calcium	Iron	Vit.-A	Thiamin	Ribo.	Niacin	Vit.-C	Free Folic
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		(g)	Fat (g)	(Kcal)	(mg)	(mg)	(µg)	(mg)	(mg)	(mg)	(mg)	Acid (µg)
Kerala (n=88)	Mean	37.2	31.8	1396	376	9.8	109	.7	.5	10.1	28	37.0
	Median	35.3	28.4	1355	308	8.3	68	.7	.5	9.7	22	35.3
	SD	13.3	17.4	380	291	6.4	167	.3	.2	2.8	25	14.2
Tamil Nadu (n=105)	Mean	31.6	15.6	1292	264	7.0	121	.8	.4	11.1	30	38.7
	Median	29.2	12.3	1234	199	6.2	80	.8	.4	11.1	20	39.4
	SD	10.3	9.1	290	188	3.5	138	.2	.2	3.4	28	10.7
Karnataka (n=152)	Mean	40.1	20.3	1563	433	11.7	181	1.0	.6	9.9	26	39.8
	Median	39.6	17.6	1591	280	11.3	93	1.1	.6	9.5	18	36.8
	SD	11.5	12.8	392	355	5.3	255	.4	.2	3.5	44	24.5
Andhra Pradesh (n=115)	Mean	40.4	16.4	1713	263	7.9	102	.6	.5	9.9	27	32.1
	Median	37.6	14.3	1675	203	6.2	68	.5	.4	9.3	20	28.1
	SD	16.3	8.8	429	185	5.6	99	.3	.2	2.9	31	13.6
Maharashtra (n=190)	Mean	40.6	25.7	1448	277	13.8	106	1.2	.5	11.1	15	41.6
	Median	38.8	22.4	1401	213	12.6	72	1.1	.5	10.5	8	39.9
	SD	13.4	12.8	392	223	7.2	119	.5	.2	4.1	22	18.1
Gujarat (n=131)	Mean	55.1	27.6	1792	372	22.2	149	1.6	.9	12.5	32	63.8
	Median	51.6	25.7	1710	338	17.4	129	1.5	.8	11.8	21	59.2
	SD	16.6	11.5	477	188	12.3	126	.6	.4	4.8	35	26.1
Madhya Pradesh (n=176)	Mean	42.6	12.3	1511	204	13.3	157	1.2	.5	12.6	28	41.5
	Median	41.0	10.0	1483	167	11.5	68	1.1	.5	11.3	17	39.2
	SD	16.4	9.1	470	148	10.6	267	.8	.3	5.7	32	21.3
Orissa (n=131)	Mean	30.4	9.9	1362	253	9.8	261	.9	.3	13.8	46	41.4
	Median	29.5	8.9	1336	157	7.4	35	.8	.3	13.8	30	39.4
	SD	8.1	4.8	266	242	7.8	412	.2	.1	3.3	41	16.7
West Bengal (n=130)	Mean	32.6	13.0	1380	332	10.0	377	.9	.4	14.0	60	42.7
	Median	32.7	11.4	1360	230	7.9	31	.9	.3	14.0	38	34.7
	SD	10.1	7.3	349	294	7.1	851	.3	.2	3.7	57	28.1
Pooled (n=1218)	Mean	39.4	18.9	1500	304	12.1	174	1.0	.5	11.7	32	42.4
	Median	36.8	15.7	1454	231	9.5	77	.9	.5	11.2	19	38.5
	SD	15.0	12.8	420	251	8.9	359	.5	.3	4.3	39	22.0
	RDA	57	22	1970	600	19	600	1.0	1.2	13	40	70

Table 32 : Intake of Nutrients (per day) 13-15 year Boys

State	Protein (g)	Total Fat (g)	Energy (Kcal)	Calcium (mg)	Iron (mg)	Vit.-A (µg)	Thiamin (mg)	Ribo. (mg)	Niacin (mg)	Vit.-C (mg)	Free Folic Acid (µg)
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Kerala (n=101)	Mean	46.8	37.7	1685	466	12.7	114	.9	.5	12.4	35	44.3
	Median	43.8	36.1	1614	391	12.3	75	.8	.5	11.5	26	42.7
	SD	18.6	17.6	446	313	7.0	157	.3	.3	3.6	31	17.7
Tamil Nadu (n=72)	Mean	38.2	18.3	1644	320	9.2	174	1.0	.5	14.3	46	49.4
	Median	37.8	14.9	1611	251	7.6	108	1.0	.5	14.6	28	49.5
	SD	9.3	10.4	388	212	4.8	209	.3	.2	4.8	48	16.8
Karnataka (n=114)	Mean	48.3	26.8	1926	653	14.9	190	1.3	.8	11.3	27	44.8
	Median	46.3	22.9	1872	471	13.0	114	1.2	.8	10.6	20	42.7
	SD	13.1	14.2	494	483	9.8	299	.5	.3	3.9	25	15.8
Andhra Pradesh (n=69)	Mean	44.6	21.6	1903	325	8.9	121	.6	.6	10.6	26	37.7
	Median	42.8	19.4	1897	265	7.5	82	.6	.5	10.4	21	33.4
	SD	15.8	12.9	617	207	6.7	123	.3	.2	3.7	18	15.6
Maharashtra (n=140)	Mean	49.0	31.7	1766	351	17.1	143	1.4	.7	13.1	20	51.2
	Median	47.0	28.1	1694	256	16.3	90	1.4	.6	12.4	11	48.7
	SD	16.5	16.1	525	287	8.7	183	.6	.3	5.3	25	22.8
Gujarat (n=105)	Mean	75.3	34.4	2465	486	32.2	230	2.2	1.2	17.8	48	86.9
	Median	71.8	34.3	2375	415	28.4	168	2.1	1.1	16.4	30	77.8
	SD	24.1	15.3	705	352	18.3	251	.9	.6	6.9	48	36.5
Madhya Pradesh (n=118)	Mean	49.6	16.5	1774	237	15.2	163	1.4	.6	14.4	35	48.7
	Median	47.5	12.6	1706	206	13.9	83	1.2	.6	13.2	19	47.5
	SD	20.1	14.4	553	155	9.6	260	.9	.3	6.4	48	26.4
Orissa (n=102)	Mean	37.0	12.9	1680	306	10.3	334	1.1	.4	16.7	58	49.9
	Median	36.1	11.2	1685	198	8.5	47	1.1	.4	16.7	34	46.7
	SD	11.9	8.6	371	343	6.0	493	.4	.2	4.5	53	20.2
West Bengal (n=100)	Mean	45.1	17.6	1832	482	12.9	290	1.2	.5	18.4	70	52.3
	Median	43.0	15.4	1814	390	10.8	53	1.1	.4	18.2	51	49.8
	SD	16.0	9.2	557	494	11.3	616	.4	.3	5.9	65	23.4
Pooled (n=921)	Mean	48.8	24.7	1856	407	15.4	196	1.3	.7	14.4	40	52.2
	Median	45.0	20.9	1779	300	12.1	93	1.1	.6	13.7	26	47.8
	SD	19.8	16.1	576	361	12.0	334	.7	.4	5.8	45	26.4
	RDA	70	22	2450	600	41	600	1.2	1.5	16	40	100

Table 33 : Intake of Nutrients (per day) 13-15 year Girls

State		Protein (g)	Total Fat (g)	Energy (Kcal)	Calcium (mg)	Iron (mg)	Vit.-A (µg)	Thiamin (mg)	Ribo. (mg)	Niacin (mg)	Vit.-C (mg)	Free Folic Acid (µg)
Kerala	Mean	43.2	34.6	1504	420	10.8	126	.8	.5	11.1	29	38.0

(n=92)	Median	40.3	31.1	1468	354	8.6	70	.7	.4	11.1	22	36.0
	SD	19.0	16.7	380	333	7.0	197	.3	.2	2.9	25	13.2
Tamil Nadu (n=65)	Mean	37.8	19.0	1560	323	9.4	148	.9	.5	12.8	32	45.4
	Median	34.9	16.5	1479	279	7.4	98	.9	.5	13.2	22	44.1
	SD	15.0	11.1	429	215	5.9	161	.3	.2	4.2	33	15.2
Karnataka (n=115)	Mean	47.0	23.7	1872	528	14.2	219	1.2	.7	11.6	29	44.8
	Median	44.9	19.5	1817	350	12.6	107	1.1	.7	10.8	20	41.0
	SD	12.1	14.7	422	436	6.6	334	.5	.3	4.5	28	18.1
Andhra Pradesh (n=96)	Mean	46.2	19.1	1951	379	9.1	96	.6	.5	10.8	24	35.1
	Median	45.0	17.3	1936	298	7.9	69	.6	.5	11.0	20	32.6
	SD	18.1	9.4	518	340	5.6	83	.2	.2	3.1	18	13.8
Maharashtra (n=139)	Mean	43.7	26.7	1578	318	14.5	125	1.2	.6	11.8	18	45.4
	Median	42.4	25.5	1576	242	14.0	79	1.2	.6	11.5	9	42.6
	SD	14.4	12.4	459	267	6.5	200	.5	.2	4.4	25	19.6
Gujarat (n=73)	Mean	62.5	30.7	2055	409	25.3	180	1.8	1.0	14.5	39	73.5
	Median	59.2	28.5	1987	351	20.6	148	1.8	.9	13.0	27	70.9
	SD	17.8	14.4	540	245	14.6	168	.6	.4	4.5	43	27.2
Madhya Pradesh (n=120)	Mean	44.3	12.7	1607	217	12.7	146	1.2	.6	12.7	31	43.6
	Median	42.6	12.1	1586	175	10.3	75	1.0	.5	11.8	18	40.5
	SD	17.5	7.9	521	164	8.3	268	.8	.3	5.9	37	22.6
Orissa (n=122)	Mean	34.7	11.9	1562	282	10.1	275	1.0	.4	15.7	55	46.4
	Median	32.8	10.9	1564	199	8.1	52	1.0	.4	15.9	36	43.1
	SD	9.8	6.1	265	344	6.0	368	.2	.2	3.6	50	17.2
West Bengal (n=99)	Mean	38.5	14.6	1620	364	11.7	286	1.1	.4	16.3	68	46.9
	Median	37.7	12.5	1581	266	9.5	48	1.0	.4	15.5	43	42.5
	SD	12.2	8.1	419	329	7.8	607	.3	.2	4.6	72	23.8
Pooled (n=921)	Mean	43.7	21.0	1689	355	12.9	180	1.1	.6	13.0	36	45.8
	Median	41.1	17.8	1635	267	10.6	84	1.0	.5	12.4	23	42.2
	SD	16.5	13.7	476	322	8.7	315	.6	.3	4.7	42	21.3
	RDA	65	22	2060	600	28	600	1.0	1.2	14	40	100

Table 34 : Intake of Nutrients (per day) 16-17 year Boys

State		Protein (g)	Total Fat (g)	Energy (Kcal)	Calcium (mg)	Iron (mg)	Vit.-A (µg)	Thiamin (mg)	Ribo. (mg)	Niacin (mg)	Vit.-C (mg)	Free Folic Acid (µg)
Kerala (n=50)	Mean	51.8	40.0	1866	515	13.5	83	1.0	.6	14.4	32	46.7
	Median	47.9	39.1	1891	442	13.1	57	.9	.5	14.1	21	40.7

	SD	19.2	17.4	430	385	5.8	76	.4	.3	3.8	29	18.6
Tamil Nadu (n=22)	Mean	44.1	23.5	1937	350	11.6	116	1.2	.6	15.9	33	53.5
	Median	44.1	17.5	1938	271	10.8	105	1.2	.6	16.8	28	52.8
	SD	13.8	18.2	544	314	6.8	80	.5	.2	5.4	20	18.5
Karnataka (n=72)	Mean	52.9	29.8	2132	756	16.1	163	1.4	.9	12.0	25	47.7
	Median	50.1	26.0	2051	643	14.1	114	1.3	.8	11.8	18	44.4
	SD	15.1	17.6	531	539	7.0	210	.6	.3	3.4	18	18.7
Andhra Pradesh (n=48)	Mean	60.9	20.0	2465	460	11.4	111	.7	.6	13.9	26	44.7
	Median	53.6	18.2	2381	334	8.4	87	.6	.6	13.7	22	37.6
	SD	38.6	10.7	761	725	12.7	112	.4	.2	4.6	21	20.0
Maharashtra (n=66)	Mean	55.1	34.3	1954	315	20.4	137	1.6	.8	14.8	19	60.2
	Median	54.8	31.1	1997	286	19.9	103	1.7	.8	14.4	11	56.0
	SD	18.6	15.4	583	187	9.8	136	.7	.3	5.2	22	27.0
Gujarat (n=40)	Mean	93.8	42.0	3005	547	41.9	281	2.6	1.6	21.2	55	111.9
	Median	85.9	42.4	2776	559	38.1	227	2.6	1.5	20.0	36	105.8
	SD	31.3	16.0	825	174	21.7	222	1.0	.6	8.1	49	37.7
Madhya Pradesh (n=68)	Mean	50.8	14.9	1914	259	14.3	233	1.4	.6	15.8	35	53.0
	Median	51.2	12.8	1843	209	12.1	76	1.2	.6	14.4	20	48.4
	SD	18.4	11.6	598	192	8.8	400	.9	.3	7.3	41	25.6
Orissa (n=68)	Mean	41.3	13.8	1910	328	11.7	257	1.2	.4	18.9	55	53.0
	Median	38.8	13.1	1872	196	9.4	51	1.2	.4	19.1	37	53.6
	SD	10.5	7.4	383	328	6.7	415	.3	.1	4.3	49	15.9
West Bengal (n=41)	Mean	49.7	16.2	2125	363	12.9	236	1.4	.5	22.3	64	58.0
	Median	46.4	15.0	2053	278	12.1	51	1.4	.4	21.6	39	56.2
	SD	16.2	8.4	601	295	6.2	403	.5	.2	6.4	62	20.9
Pooled (n=475)	Mean	54.7	25.6	2114	437	16.7	183	1.4	.7	16.2	37	57.1
	Median	50.1	21.4	2039	315	12.8	94	1.2	.6	15.4	25	51.0
	SD	24.7	17.2	663	420	12.9	283	.8	.4	6.3	40	28.7
	RDA	78	22	2640	500	50	600	1.3	1.6	17	40	100

4.3.1.2.9 16-17 year Girls

The median intake of energy was 1771 kcals, lower than the RDA of 2060 kcals, while that of protein was 45 g against the RDA of 63 g. The intake of micronutrients such as iron, vitamin A, riboflavin were not even meeting the 50% of the recommended levels (**Table 35**).

4.3.1.2.10 Adult Males (Sedentary)

The median intake of energy (2144 kcal) was much below the RDA of 2425 kcals, which ranged from a low 1856 kcals in Maharashtra to a high 2969 kcals in Gujarat. The intake of protein was 55 g, as against the RDA of 60 g. The median intakes of all the micronutrients were below 50% of RDA (**Fig. 9 & Table 36.1`**).

4.3.1.2.10.1 Adult Males (Moderate)

The median intake of energy (2304 kcal) was much below the RDA of 2875 kcals, which ranged from a low 1982 kcals in Maharashtra to a high 3087 kcals in Gujarat. The intake of protein was 56 g, as against the RDA of 60 g. The median intakes of all the micronutrients were below 50% of RDA (**Table 36.2**).

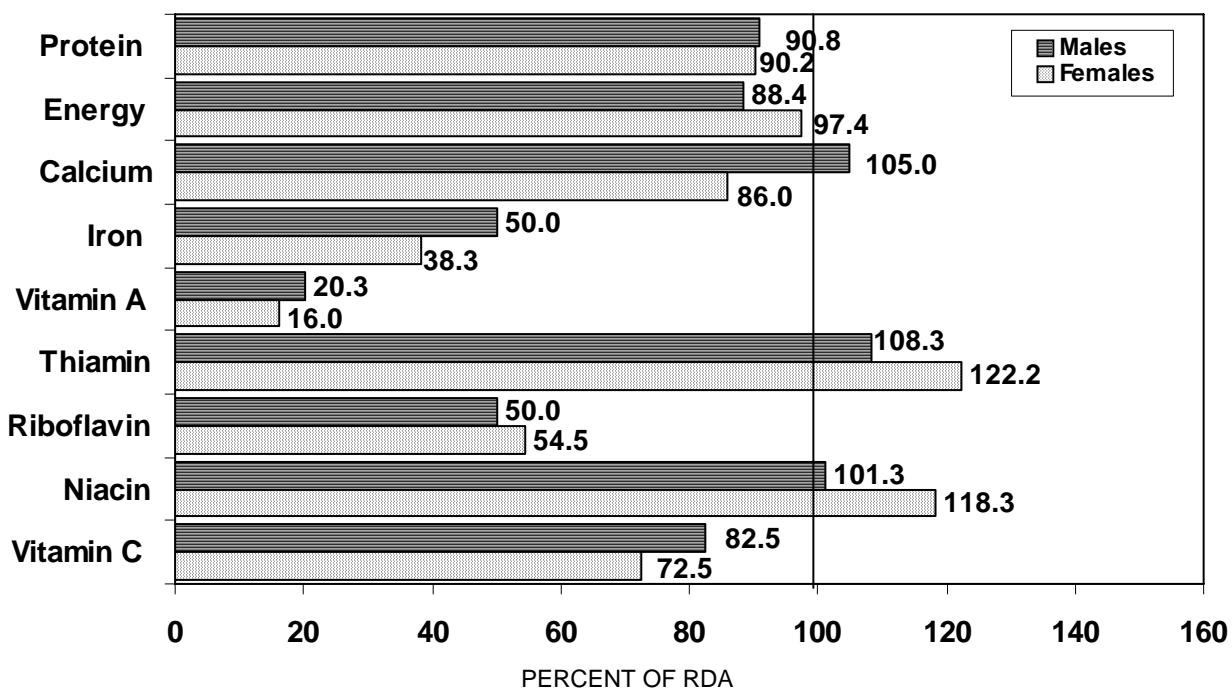
4.3.1.2.11 Adult Females (NPNL-Sedentary)

The median intakes of all the nutrients barring thiamin and niacin were below the recommended levels. The median intake of energy was 1826 kcals as against the RDA of 1875 kcal. The energy intake ranged from 1586 kcals in Maharashtra to 2228 kcals in Gujarat. The median protein intake was 45 g and was marginally lower than the RDA (50 g). The intakes of iron, vitamin A and riboflavin were grossly deficient as compared to RDA (**Fig. 9 & Table 37.1`**).

4.3.1.2.11.1 Adult Females (NPNL-Moderate)

The median intake of energy was 1976 kcals as against the RDA of 2225 kcal. The median energy intake ranged from 1517 kcals in Kerala to 2332 kcals in Gujarat. The median protein intake was 49 g and was marginally lower than the RDA (50 g). The intakes of iron and vitamin A were grossly deficient as compared to RDA (**Table 37.2**).

Fig.9 Median Nutrient Intake (% RDA) among Adults - Sedentary



4.3.1.2.12 Pregnant women

The median intake of energy and protein was 1863 kcals and 45 g as against the RDA of 2175 kcals and 65g respectively and were comparable to the intakes observed among NPWL women. The extent of deficit was relatively high in the intake of vitamin A (81%), iron (71%), free folic acid and riboflavin (50%) (**Table 38**).

4.3.1.2.13 Lactating women

The median intakes of energy (1971 kcals) and protein (47 g) were below the recommended levels of 2425 kcals and 75g respectively. The intake was much below the recommended levels with respect to other nutrients such as iron (63%), calcium (68%), vitamin A (90%), riboflavin (50%) and free folic acid (66%) (**Table 39**).

Table 35 : Intake of Nutrients (per day) 16-17 year Girls

State		Protein (g)	Total Fat (g)	Energy (Kcal)	Calcium (mg)	Iron (mg)	Vit.-A (µg)	Thiamin (mg)	Ribo. (mg)	Niacin (mg)	Vit.-C (mg)	Free Folic Acid (µg)
Kerala (n=73)	Mean	51.7	38.8	1722	521	12.9	108	.9	.5	13.2	37	44.4
	Median	46.3	38.7	1624	415	11.2	86	.8	.5	13.1	24	42.1
	SD	23.2	17.1	334	545	7.5	117	.3	.2	3.4	39	15.1
Tamil Nadu (n=44)	Mean	40.2	20.9	1658	389	11.5	173	1.0	.5	13.6	40	47.7
	Median	36.5	18.9	1610	246	8.1	109	1.0	.5	13.6	23	47.5
	SD	13.3	11.0	431	332	11.7	198	.3	.2	4.6	55	17.7
Karnataka (n=54)	Mean	53.4	25.6	2032	688	17.6	304	1.3	.9	12.2	29	46.8
	Median	47.2	22.5	1962	504	13.4	114	1.3	.8	11.7	21	44.1
	SD	23.9	12.1	608	535	16.4	801	.5	.4	4.6	28	20.4
Andhra Pradesh (n=40)	Mean	47.5	21.9	1997	365	9.8	124	.7	.5	11.4	27	38.9
	Median	44.1	17.0	1920	286	7.4	89	.5	.5	10.6	21	30.7
	SD	19.3	15.2	684	382	9.8	110	.4	.2	5.4	20	27.0
Maharashtra (n=70)	Mean	44.1	26.5	1610	292	15.0	80	1.3	.6	12.3	19	43.8
	Median	43.3	23.7	1591	214	14.6	68	1.3	.6	11.9	10	42.2
	SD	13.7	13.6	464	284	7.6	76	.6	.2	4.7	27	19.5
Gujarat (n=55)	Mean	74.2	34.4	2424	492	31.5	216	2.1	1.2	17.3	38	88.8
	Median	73.0	33.9	2347	402	31.5	158	2.0	1.2	16.0	29	86.1
	SD	19.0	15.3	602	411	14.7	229	.8	.4	6.5	34	27.0
Madhya Pradesh (n=54)	Mean	46.2	12.7	1733	219	13.0	197	1.2	.6	13.8	36	43.8
	Median	44.7	9.9	1688	199	10.8	79	1.0	.5	12.6	19	41.4
	SD	18.9	10.4	531	130	8.4	328	.8	.3	5.8	43	23.5
Orissa (n=53)	Mean	39.5	13.5	1815	283	12.7	373	1.2	.5	18.1	58	53.8
	Median	37.4	11.0	1823	204	9.7	60	1.2	.5	19.1	47	51.9
	SD	8.9	9.3	359	192	8.7	519	.3	.2	4.5	46	21.4
West Bengal (n=50)	Mean	42.8	15.3	1818	468	12.1	405	1.2	.4	18.5	83	54.2
	Median	40.9	14.6	1825	223	10.1	58	1.1	.4	18.4	62	48.4
	SD	16.8	6.9	483	812	10.8	752	.4	.2	5.2	72	22.5
Pooled (n=493)	Mean	49.1	24.2	1856	415	15.3	213	1.2	.6	14.4	40	51.3
	Median	45.4	20.6	1771	286	12.0	89	1.1	.6	13.6	24	46.3
	SD	20.6	15.7	552	465	12.4	437	.6	.4	5.6	46	25.5
	RDA	63	22	2060	500	30	600	1.0	1.2	14	40	100

Table 36.1 : Intake of Nutrients (per day) >=18 year Males (Sedentary Work)

State		Protein (g)	Total Fat (g)	Energy (Kcal)	Calcium (mg)	Iron (mg)	Vit.-A (µg)	Thiamin (mg)	Ribo. (mg)	Niacin (mg)	Vit.-C (mg)	Free Folic Acid (µg)
Kerala (n=578)	Mean	60.7	50.3	2102	588	16.0	148	1.1	.7	15.6	47	55.8
	Median	57.3	48.8	2100	510	14.5	102	1.1	.7	15.4	35	53.9
	SD	21.9	21.1	450	358	10.0	174	.4	.2	4.4	40	19.2
Tamil Nadu (n=315)	Mean	50.5	27.6	2132	442	12.0	200	1.3	.7	17.9	49	63.6
	Median	49.3	24.0	2088	368	10.2	140	1.3	.6	17.7	30	61.1
	SD	15.9	17.6	533	287	7.4	220	.4	.3	5.8	52	22.7
Karnataka (n=548)	Mean	60.0	35.9	2365	735	17.8	262	1.5	.9	14.2	40	56.9
	Median	57.6	31.2	2272	555	16.0	156	1.5	.9	13.6	29	52.9
	SD	18.0	20.6	634	523	9.5	401	.6	.3	5.0	49	24.2
Andhra Pradesh (n=213)	Mean	49.7	27.8	2114	432	9.6	148	.7	.6	12.0	33	44.1
	Median	47.2	22.9	2075	355	8.5	108	.6	.6	11.3	23	39.4
	SD	18.3	17.9	637	321	5.2	145	.4	.3	4.5	34	22.7
Maharashtra (n=215)	Mean	53.1	36.0	1912	350	18.7	170	1.5	.7	14.7	22	55.9
	Median	51.3	32.5	1856	303	17.1	90	1.6	.7	14.4	14	53.8
	SD	18.8	17.4	608	204	10.9	317	.7	.3	5.8	26	27.7
Gujarat (n=264)	Mean	92.5	42.9	3027	596	36.0	287	2.7	1.5	23.6	71	108.2
	Median	88.9	41.2	2969	566	32.4	178	2.6	1.4	22.6	42	99.9
	SD	26.9	17.8	818	264	19.0	422	1.1	.6	8.6	78	40.7
Madhya Pradesh (n=108)	Mean	57.0	18.9	2071	300	19.3	240	1.6	.7	18.2	57	53.9
	Median	56.5	17.0	1972	248	16.5	99	1.3	.7	17.2	29	50.3
	SD	19.7	12.3	587	190	11.5	359	.9	.3	7.3	64	26.8
Orissa (n=260)	Mean	48.2	19.2	2084	328	14.6	330	1.4	.5	21.0	69	63.0
	Median	46.4	17.1	2033	240	12.2	78	1.4	.5	21.0	51	61.1
	SD	14.1	10.3	481	332	7.8	476	.4	.2	5.3	52	21.3
West Bengal (n=270)	Mean	50.1	21.4	2067	464	15.4	451	1.4	.5	20.9	81	60.1
	Median	47.8	19.1	2039	342	12.4	58	1.3	.5	20.8	49	54.9
	SD	16.9	13.7	518	462	11.5	901	.4	.3	5.5	87	26.5
Pooled (n=2771)	Mean	58.7	34.4	2225	523	17.5	242	1.4	.8	17.1	51	62.0
	Median	54.5	29.9	2144	420	14.0	122	1.3	.7	16.2	33	56.9
	SD	22.8	21.0	649	400	12.5	428	.8	.4	6.6	57	29.9
	RDA	60	20	2425	400	28	600	1.2	1.4	16	40	100

Table - 36.2: Intake of Nutrients (per day) - Males (>=18 Years) Moderate Workers

State		Protein	Total Fat	Energy	Calcium	Iron	Vit.-A	Thiamin	Ribo.	Niacin	Vit.-C	Free Folic
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		(g)	(g)	(Kcal)	(mg)	(mg)	(µg)	(mg)	(mg)	(mg)	(mg)	Acid (µg)
Kerala (n=421)	Mean	61.8	45.8	2172	618	15.4	105	1.1	.6	16.9	45	53.8
	Median	61.5	44.0	2182	515	14.2	75	1.1	.6	16.6	28	51.8
	SD	23.2	21.0	524	557	7.5	148	.4	.3	4.6	44	19.0
Tamil Nadu (n=575)	Mean	55.2	23.0	2379	453	12.4	193	1.5	.7	21.1	46	67.2
	Median	53.2	19.9	2350	323	10.9	113	1.5	.6	21.2	30	65.5
	SD	17.0	12.1	584	384	6.1	287	.5	.3	6.7	47	21.9
Karnataka (n=499)	Mean	62.4	29.4	2422	740	18.6	171	1.7	.9	15.2	32	58.4
	Median	59.6	25.4	2361	439	17.7	122	1.6	.9	14.4	24	55.1
	SD	18.8	17.5	612	642	7.9	208	.7	.3	5.2	28	25.1
Andhra Pradesh (n=736)	Mean	58.6	25.3	2557	448	11.1	139	.8	.7	14.3	34	47.1
	Median	56.2	21.9	2548	317	9.5	95	.7	.6	14.1	24	42.7
	SD	24.1	15.1	757	469	8.3	164	.4	.3	4.8	41	21.7
Maharashtra (n=791)	Mean	56.5	35.4	2018	381	20.4	175	1.6	.8	15.4	23	60.8
	Median	54.7	31.9	1982	300	18.8	100	1.6	.8	14.7	13	58.5
	SD	19.3	17.8	599	308	11.4	245	.7	.3	6.1	30	27.4
Gujarat (n=636)	Mean	97.6	47.2	3182	548	43.6	285	2.8	1.6	21.2	50	116.0
	Median	94.4	44.2	3087	515	39.1	222	2.7	1.5	20.1	35	109.6
	SD	26.3	21.1	779	281	24.4	308	.9	.7	6.7	46	42.7
Madhya Pradesh (n=959)	Mean	58.8	17.6	2144	305	17.9	219	1.6	.7	18.1	37	56.4
	Median	57.0	14.5	2087	240	14.6	90	1.5	.7	16.9	21	53.3
	SD	21.8	13.2	654	271	12.5	378	1.0	.4	7.9	45	27.8
Orissa (n=725)	Mean	47.9	15.4	2196	364	13.8	381	1.4	.5	21.7	72	62.5
	Median	46.0	13.7	2195	246	11.0	57	1.4	.5	22.3	45	60.2
	SD	12.2	8.5	374	325	9.7	587	.3	.2	4.9	72	23.2
West Bengal (n=624)	Mean	54.1	17.6	2409	417	15.6	396	1.6	.5	25.3	78	69.1
	Median	51.5	15.7	2355	288	12.0	47	1.5	.5	25.2	52	62.2
	SD	18.8	8.9	700	451	13.8	843	.5	.3	7.6	72	31.6
States Pooled (n=5966)	Mean	61.0	27.3	2371	450	18.7	234	1.6	.8	18.7	46	65.3
	Median	56.3	22.4	2304	324	14.0	100	1.4	.7	18.1	28	59.4
	SD	24.4	18.8	714	423	15.5	427	.9	.5	7.2	53	33.4
	RDA	60	20	2875	400	28	600	1.4	1.6	18	40	100

Table 37.1 : Intake of Nutrients (per day) >=18 year Females - NPNL - Sedentary Workers

State		Protein (g)	Total Fat (g)	Energy (Kcal)	Calcium (mg)	Iron (mg)	Vit.-A (µg)	Thiamin (mg)	Ribo. (mg)	Niacin (mg)	Vit.-C (mg)	Free Folic Acid (µg)
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Kerala (n=963)	Mean	50.7	41.1	1766	517	13.3	120.7	.9	.6	13.2	36.6	45.9
	Median	48.5	39.3	1755	447	12.1	82.5	.9	.5	12.8	25.3	43.6
	SD	17.9	17.9	367	365	7.7	158.5	.3	.2	3.5	32.8	16.0
Tamil Nadu (n=501)	Mean	42.4	22.1	1769	388	9.5	174.6	1.1	.6	15.1	38.7	52.4
	Median	40.2	19.5	1729	315	8.1	114.4	1.1	.5	15.2	24.5	50.6
	SD	14.3	13.8	447	286	5.7	219.0	.4	.2	4.6	37.1	17.7
Karnataka (n=712)	Mean	53.3	31.4	2098	679	15.7	228.7	1.4	.8	12.6	35.1	50.5
	Median	51.7	26.0	2057	504	14.3	133.2	1.3	.8	12.0	25.3	47.5
	SD	15.0	18.0	521	510	7.8	345.4	.6	.3	4.2	40.5	19.8
Andhra Pradesh (n=351)	Mean	46.8	25.3	1985	402	9.6	147.0	.6	.6	10.9	33.4	40.5
	Median	44.0	21.3	1925	326	7.9	98.9	.6	.6	10.5	22.7	35.5
	SD	19.0	15.4	590	328	7.1	158.4	.3	.2	3.8	48.8	20.3
Maharashtra (n=391)	Mean	43.4	32.6	1619	323	15.5	137.4	1.2	.6	11.6	19.3	43.0
	Median	41.8	29.0	1586	257	14.0	78.6	1.1	.6	10.8	9.8	40.4
	SD	14.9	17.0	486	262	8.9	215.9	.6	.3	4.7	24.6	19.8
Gujarat (n=345)	Mean	69.0	35.7	2288	513	27.4	226.5	2.0	1.1	16.6	54.0	81.3
	Median	66.5	34.3	2228	477	23.2	160.4	1.9	1.0	16.0	35.0	76.1
	SD	20.8	15.2	626	269	15.9	299.0	.7	.5	5.8	55.8	34.3
Madhya Pradesh (n=219)	Mean	51.8	19.4	1828	314	17.1	247.5	1.5	.7	15.7	42.3	52.3
	Median	49.1	16.3	1773	261	14.8	97.4	1.4	.7	14.4	25.0	51.5
	SD	19.0	12.3	569	227	12.4	397.2	.9	.3	6.8	48.7	24.0
Orissa (n=683)	Mean	40.4	15.2	1822	288	11.8	307.7	1.2	.4	18.5	60.9	54.1
	Median	39.1	13.7	1824	190	9.5	55.1	1.2	.4	18.8	39.7	51.4
	SD	11.6	8.1	389	284	6.5	480.5	.3	.2	4.3	55.4	19.5
West Bengal (n=634)	Mean	43.0	17.4	1839	393	13.2	378.9	1.2	.5	18.8	73.1	53.5
	Median	40.3	15.6	1779	282	10.1	44.3	1.1	.4	18.4	48.5	45.8
	SD	14.7	9.0	484	411	12.8	773.5	.4	.3	5.3	71.2	27.0
Pooled (n=4799)	Mean	48.2	27.6	1878	445	14.1	219.8	1.2	.6	14.9	44.7	51.6
	Median	45.1	23.4	1826	344	11.5	96.2	1.1	.6	14.2	29.0	47.3
	SD	17.7	17.4	508	380	10.3	407.8	.6	.3	5.3	50.0	23.5
	RDA	50.0	20.0	1875	400	30.0	600.0	.9	1.1	12.0	40.0	100.0

Table - 37.2 Intake of Nutrients (per day) - Females (>=18 Years) - NPML Moderate Workers

State		Protein (g)	Total Fat (g)	Energy (Kcal)	Calcium (mg)	Iron (mg)	Vit.-A (µg)	Thiami n (mg)	Ribo. (mg)	Niacin (mg)	Vit.-C (mg)	Free Folic Acid (µg)
Kerala	Mean	40.5	26.8	1518	303	9.3	64	.8	.4	12.9	23	40.0

(n=38)	Median	39.7	23.7	1517	242	9.0	41	.8	.3	12.4	16	37.5
	SD	15.0	14.6	402	200	3.8	57	.3	.2	3.8	23	16.9
Tamil Nadu (n=219)	Mean	41.9	17.1	1855	358	10.3	125	1.1	.5	15.8	32	49.9
	Median	39.9	13.5	1760	224	8.2	77	1.1	.5	15.9	21	47.6
	SD	13.4	12.2	485	320	7.0	150	.4	.2	5.1	35	17.7
Karnataka (n=269)	Mean	55.1	24.3	2130	629	16.9	152	1.5	.8	13.7	29	51.5
	Median	52.6	21.7	2074	348	15.9	107	1.5	.8	13.5	21	50.8
	SD	16.8	13.0	538	566	7.4	180	.6	.3	4.5	29	21.6
Andhra Pradesh (n=433)	Mean	50.7	21.4	2212	378	9.7	126	.7	.6	12.4	30	41.2
	Median	48.2	19.0	2185	268	8.2	86	.6	.6	12.2	24	37.2
	SD	19.3	12.2	552	423	6.9	147	.4	.2	3.5	26	18.3
Maharashtra (n=480)	Mean	47.8	29.3	1732	320	17.4	161	1.4	.7	13.1	20	51.0
	Median	46.2	27.1	1696	259	15.9	88	1.4	.6	12.6	10	49.0
	SD	16.3	13.2	504	237	10.1	252	.6	.3	4.9	28	22.8
Gujarat (n=383)	Mean	73.2	36.1	2410	440	31.5	232	2.1	1.2	15.7	42	88.0
	Median	70.0	34.4	2332	427	28.1	169	2.0	1.1	15.2	28	81.6
	SD	21.3	16.3	631	211	17.9	283	.7	.5	5.2	43	33.3
Madhya Pradesh (n=446)	Mean	51.8	14.1	1929	270	15.5	182	1.4	.6	15.9	33	48.1
	Median	49.8	11.5	1903	195	12.1	78	1.2	.6	14.7	20	46.0
	SD	19.1	10.3	609	288	12.7	313	.9	.3	7.1	39	24.7
Orissa (n=258)	Mean	41.5	11.7	1932	344	11.8	322	1.2	.4	18.5	62	52.1
	Median	40.4	11.1	1941	242	9.2	43	1.2	.4	19.6	37	49.7
	SD	10.2	6.2	356	313	8.5	514	.3	.2	5.1	68	21.6
West Bengal (n=169)	Mean	45.6	15.2	1988	402	11.6	311	1.3	.5	20.8	68	57.9
	Median	43.0	13.5	1947	222	10.4	42	1.3	.4	20.2	48	51.8
	SD	14.2	7.7	481	576	6.5	685	.4	.2	5.4	64	25.9
States Pooled (n=2695)	Mean	52.0	22.4	2020	379	16.2	189	1.3	.7	15.1	36	54.6
	Median	48.9	19.1	1976	272	12.2	92	1.2	.6	14.2	22	50.0
	SD	19.8	14.6	583	373	12.8	326	.7	.4	5.7	43	27.7
	RDA	50	20	2225	400	30	600	1.1	1.3	14	40	100

Table 38 : Intake of Nutrients (per day) \geq 18 year Females (Pregnant - Sedentary Work)

State		Protein (g)	Total Fat (g)	Energy (Kcal)	Calcium (mg)	Iron (mg)	Vit.-A (μ g)	Thiamin (mg)	Ribo. (mg)	Niacin (mg)	Vit.-C (mg)	Free Folic Acid (μ g)
Kerala (n=17)	Mean	47.8	36.0	1740	496	12.3	141	.9	.6	12.9	53	43.8
	Median	51.2	42.0	1671	513	12.1	84	.8	.6	12.3	34	40.5

	SD	15.6	18.1	352	274	4.8	121	.2	.2	3.0	43	16.8
Tamil Nadu (n=41)	Mean	42.3	22.9	1780	374	9.8	217	1.1	.5	15.9	37	52.6
	Median	39.5	19.8	1758	317	8.7	113	1.1	.5	15.5	23	49.6
	SD	15.9	13.1	440	210	4.1	319	.4	.2	4.8	37	19.0
Karnataka (n=28)	Mean	59.7	35.1	2279	854	17.8	237	1.5	.9	13.9	35	54.7
	Median	55.4	25.3	2228	534	16.9	146	1.4	.8	14.0	32	51.9
	SD	19.4	20.5	724	713	8.2	225	.7	.4	4.8	25	24.4
Andhra Pradesh (n=22)	Mean	45.9	22.3	1991	398	8.4	131	.6	.6	11.0	24	39.3
	Median	43.8	18.2	2096	305	8.0	87	.6	.5	11.1	17	37.1
	SD	14.1	12.2	541	295	3.4	128	.2	.2	3.0	19	19.2
Maharashtra (n=17)	Mean	49.9	35.1	1843	446	17.0	206	1.3	.7	13.1	21	54.9
	Median	49.7	26.7	1778	289	15.4	101	1.3	.7	11.7	18	48.6
	SD	16.4	15.3	521	446	7.6	341	.7	.2	4.7	15	27.6
Gujarat (n=18)	Mean	69.6	32.5	2236	491	26.5	284	2.1	1.2	16.7	63	80.3
	Median	64.7	31.0	2147	408	23.1	180	1.8	1.1	13.9	41	71.8
	SD	23.9	9.3	651	328	14.6	307	.9	.5	8.2	67	31.1
Madhya Pradesh (n=8)	Mean	56.8	15.9	2045	339	14.6	109	1.7	.7	18.5	36	54.9
	Median	46.1	8.6	1951	164	11.9	77	1.5	.5	17.4	21	51.1
	SD	28.2	18.6	630	475	9.8	103	1.0	.6	6.8	49	27.5
Orissa (n=22)	Mean	39.7	13.3	1836	261	11.9	424	1.2	.5	18.6	72	54.2
	Median	37.1	12.6	1870	193	9.8	84	1.2	.4	19.7	41	51.9
	SD	9.1	6.7	327	177	5.6	539	.3	.2	4.1	62	20.2
West Bengal (n=15)	Mean	45.3	16.6	1664	386	12.8	196	1.0	.4	17.3	75	45.4
	Median	36.7	13.9	1524	276	10.9	57	1.0	.4	15.3	42	37.8
	SD	23.9	9.3	449	285	7.5	339	.3	.2	4.9	102	21.9
Pooled (n=188)	Mean	49.7	25.9	1933	463	14.0	227	1.2	.7	15.1	45	53.1
	Median	44.9	21.7	1863	346	11.3	114	1.1	.6	14.1	28	48.7
	SD	19.8	16.2	555	419	8.9	316	.6	.4	5.4	51	24.5
	RDA	65	30	2175	1000	38	600	1.1	1.3	14	40	400

Table 39 : Intake of Nutrients (per day) ≥ 18 year Females (Lactating - Sedentary Work)

State		Protein (g)	Total Fat (g)	Energy (Kcal)	Calcium (mg)	Iron (mg)	Vit.-A (μ g)	Thiamin (mg)	Ribo. (mg)	Niacin (mg)	Vit.-C (mg)	Free Folic Acid (μ g)
Kerala (n=58)	Mean	53.7	41.3	1894	534	13.7	98	1.0	.6	14.7	42	50.8
	Median	53.0	40.6	1901	425	13.0	85	1.0	.6	14.0	32	47.3
	SD	17.9	17.8	364	395	6.6	73	.3	.2	3.3	37	17.9

Tamil Nadu (n=181)	Mean	43.9	20.1	1911	358	10.4	172	1.2	.6	16.8	41	54.9
	Median	42.4	18.2	1887	252	8.8	88	1.2	.5	17.2	27	53.5
	SD	11.6	11.0	362	278	7.5	258	.3	.2	4.9	41	16.8
Karnataka (n=54)	Mean	57.4	29.7	2224	680	18.4	182	1.6	.9	13.6	35	59.2
	Median	56.0	26.8	2153	378	15.6	152	1.6	.9	12.4	26	51.9
	SD	17.0	14.6	574	569	10.2	132	.7	.3	4.6	31	32.5
Andhra Pradesh (n=88)	Mean	50.0	28.5	2174	368	9.6	161	.7	.6	11.9	37	44.7
	Median	50.0	25.6	2205	326	8.9	106	.7	.6	11.4	22	41.4
	SD	13.5	16.8	508	200	3.7	232	.3	.2	3.2	40	18.9
Maharashtra (n=46)	Mean	49.4	35.7	1777	363	16.7	141	1.4	.7	13.1	29	53.5
	Median	46.6	29.3	1725	317	15.2	101	1.4	.6	12.6	16	52.2
	SD	16.2	23.3	537	234	9.2	163	.6	.3	4.8	41	24.7
Gujarat (n=48)	Mean	79.3	43.3	2585	550	35.4	220	2.4	1.3	19.1	60	98.3
	Median	81.1	43.0	2557	518	32.2	194	2.3	1.2	19.2	46	88.1
	SD	24.3	14.7	699	223	18.4	106	.9	.6	7.4	51	39.7
Madhya Pradesh (n=42)	Mean	55.1	20.3	1970	261	16.2	196	1.5	.7	16.3	47	56.6
	Median	51.5	17.6	1864	228	14.6	92	1.4	.6	16.3	22	51.4
	SD	19.9	12.2	579	148	9.4	283	.8	.3	6.7	61	24.6
Orissa (n=72)	Mean	43.6	17.0	1954	320	13.6	333	1.3	.5	19.4	64	58.1
	Median	42.0	13.6	1956	215	10.6	56	1.2	.4	19.9	37	57.8
	SD	13.4	10.2	408	344	11.8	500	.4	.2	4.5	61	20.3
West Bengal (n=79)	Mean	44.2	17.3	2007	389	14.3	400	1.3	.4	20.7	75	60.0
	Median	41.8	16.2	1925	233	9.8	40	1.3	.4	20.2	51	52.0
	SD	12.1	7.6	507	383	18.9	939	.3	.2	5.6	66	32.7
Pooled (n=668)	Mean	50.3	25.9	2028	408	14.6	212	1.3	.6	16.3	48	57.6
	Median	46.5	21.5	1971	316	10.7	93	1.2	.6	15.9	31	52.5
	SD	17.8	16.5	517	340	12.7	415	.6	.4	5.7	50	27.2
	RDA	75	45	2425	1000	30	950	1.2	1.4	16	80	250

AVERAGE CONSUMPTION OF FOOD STUFFS (g/CU/Day) - 2001

		Foods											
		Cereals	Millets	Pulses	Leafy Veg	Other Veg	Roots	Fruits	Fish	Other Flesh foods	Milk & Milk Products	Fats & Oils	Sugar & Jaggery
Kerala (n=800)	Mean	316	0	18	5	53	71	39	76	10	83	8	17
	SD	66	6	24	21	71	88	56	66	35	80	8	10
T.Nadu (n=800)	Mean	395	3	35	8	51	38	32	7	2	102	11	12
	SD	92	22	28	24	47	45	29	28	14	117	9	12
Karnataka (n=797)	Mean	341	98	38	11	25	45	33	5	4	88	12	24
	SD	171	126	29	29	46	49	42	27	26	89	11	20
A.P. (n=799)	Mean	457	14	24	7	34	29	32	5	8	77	14	8
	SD	131	61	31	38	53	35	45	22	28	98	10	10
Maharashtra (n=796)	Mean	174	167	30	9	25	23	9	3	2	62	17	28
	SD	150	162	26	24	39	29	27	15	10	81	12	16
Gujarat (n=743)	Mean	197	318	39	12	58	92	7	0	1	129	13	26
	SD	212	254	33	34	69	80	24	4	11	104	9	13
M.P. (n=799)	Mean	390	46	30	17	51	43	10	1	2	33	9	12
	SD	173	121	30	38	68	49	21	11	12	84	9	14
Orissa (n=799)	Mean	434	1	20	33	66	102	9	7	1	9	11	6
	SD	79	10	24	49	69	68	23	24	12	29	7	8
W.B. (n=798)	Mean	428	0	9	49	67	135	7	25	7	27	12	6
	SD	110	3	14	81	81	77	29	45	25	71	7	11
Pooled (n=7131)	Mean	349	70	27	17	48	64	20	15	4	67	12	15
	SD	168	154	28	44	63	71	37	39	22	94	10	15

AVERAGE CONSUMPTION OF NUTRIENTS (CU/Day) - 2001

		Nutrients									
		Protien (g)	Energy (Kcals)	Calcium (mg)	Iron (mg)	Vitamin 'A' (µg)	Thiamine (mg)	Riboflavin (mg)	Niacin (mg)	Vitamin 'C' (µg)	Free Folic Acid (µg)
Kerala (n=800)	Mean	55.0	1913.6	564.4	14.2	129.9	1.0	.6	14.2	41.1	49.7
	Median	53.3	1892.4	482.0	13.0	88.8	.9	.6	13.8	29.2	46.9
	SD	19.2	398.3	402.2	7.9	162.3	.3	.2	3.4	37.2	17.6
T.Nadu (n=800)	Mean	43.8	1848.7	399.0	10.0	179.5	1.1	.6	15.9	39.8	54.9
	Median	42.1	1811.5	321.2	8.6	114.0	1.1	.5	16.0	26.8	53.8
	SD	12.6	376.5	295.6	5.6	223.7	.3	.3	4.2	38.5	16.6
Karnataka (n=797)	Mean	53.1	2082.4	634.3	15.6	210.3	1.4	.8	12.8	32.8	50.4
	Median	51.0	2022.9	436.7	14.4	126.7	1.3	.8	12.3	24.7	47.9
	SD	14.7	494.4	484.4	7.3	316.2	.5	.3	4.0	33.2	20.3
A.P. (n=799)	Mean	48.0	2072.7	390.1	9.3	137.5	.7	.6	11.5	31.7	40.0
	Median	44.9	2040.6	299.9	7.8	92.5	.6	.5	11.1	23.5	36.0
	SD	17.3	480.6	351.3	6.4	153.7	.3	.2	3.3	38.1	17.9
Maharashtra (n=796)	Mean	47.5	1714.8	356.2	16.7	159.5	1.3	.7	12.7	20.4	49.1
	Median	46.4	1689.3	285.3	15.4	92.5	1.4	.6	12.5	11.4	48.0
	SD	12.8	387.3	256.3	8.5	239.2	.5	.2	4.1	27.4	19.0
Gujarat (n=743)	Mean	73.6	2421.7	492.8	30.9	238.5	2.1	1.2	16.6	45.8	87.3
	Median	69.8	2310.5	450.4	28.4	173.9	2.0	1.1	15.5	31.6	81.0
	SD	20.8	631.7	254.2	16.8	291.1	.7	.5	6.0	47.1	33.7
M.P. (n=799)	Mean	51.0	1828.5	269.0	15.8	194.5	1.4	.6	15.4	34.9	49.5
	Median	49.9	1780.4	216.5	13.6	84.3	1.3	.6	14.7	20.1	47.8
	SD	17.5	498.5	224.7	10.5	335.4	.8	.3	6.3	42.1	23.2
Orissa (n=799)	Mean	41.2	1854.1	318.5	12.3	332.6	1.2	.4	18.3	63.4	53.7
	Median	39.2	1829.9	220.0	10.0	54.1	1.2	.4	18.6	40.9	51.1
	SD	11.1	345.5	292.3	7.8	507.0	.3	.2	4.3	59.8	20.3
W.B. (n=798)	Mean	44.4	1884.3	417.3	13.1	359.9	1.2	.5	19.2	70.9	55.2
	Median	41.8	1829.8	279.8	10.3	52.2	1.2	.4	18.7	47.5	48.7
	SD	14.2	426.4	483.5	12.5	737.0	.3	.3	4.6	66.8	26.0
Pooled (n=7131)	Mean	50.7	1954.3	426.3	15.2	215.6	1.3	.7	15.2	42.3	54.2
	Median	47.3	1896.9	327.9	11.9	100.8	1.2	.6	14.6	27.5	50.1
	SD	18.2	494.0	368.3	11.4	381.6	.6	.4	5.2	47.4	25.2
RDA		60	2425	400	28	600	1.2	1.4	16	40	100

4.3.1.3 Protein Calorie Adequacy Status of Individuals

4.3.1.3.1 1-3 years children

Only about a third (31.5%) of the children were consuming adequate amounts of both protein and energy, while about a fifth (21.6%) were consuming diets deficient in both the nutrients. About 47% of the children were consuming adequate amounts of protein but inadequate amounts of calories. Thus, it was observed that the diets were predominantly more deficient in calories than protein, with about 69% of the children consuming inadequate amounts of calories (**Fig. 10 & Table 40**).

Table 40 : Protein - Calorie Adequacy Status (%) of 1-3 year Children

State	n	P- C-	P+ C-	P+ C+
Kerala	197	18.8	48.2	33.0
Tamilnadu	408	26.0	44.1	29.9
Karnataka	286	19.2	50.7	30.1
Andhra Pradesh	338	26.3	35.2	38.5
Maharashtra	332	20.5	46.7	32.8
Gujarat	288	14.6	65.6	19.8
Madhya Pradesh	292	12.0	42.8	45.2
Orissa	261	29.1	45.6	25.3
West Bengal	271	25.5	46.5	28.0
Pooled	2673	21.6	46.9	31.5

**P-:Protein Inadequate, P+: Protein Adequate,
C+:Calorie Adequate, C-:Calorie Inadequate**

4.3.1.3.2 4-6 years children

About 29% of the children consumed adequate amounts of both protein and calories, the proportion of which ranged from a low 13.8% in Tamil Nadu to a high 45.4% in Andhra Pradesh. In general, about 71% of the children were consuming inadequate amounts of calories, highest proportion being in Tamil Nadu (86.2%) and lowest in Andhra Pradesh (54.6%) (**Fig. 10 & Table 41**).

Table 41 : Protein - Calorie Adequacy Status (%) of 4-6 year Children

State	n	P- C-	P+ C-	P+ C+
Kerala	159	6.3	69.2	24.5
Tamilnadu	304	9.5	76.6	13.8
Karnataka	259	6.6	66.4	27.0
Andhra Pradesh	269	7.8	46.8	45.4
Maharashtra	318	6.6	58.8	34.6
Gujarat	245	7.3	60.4	32.2
Madhya Pradesh	323	5.9	53.9	40.2
Orissa	235	17.4	64.3	18.3
West Bengal	294	12.9	69.0	18.0
Pooled	2406	8.9	62.5	28.6

**P-:Protein Inadequate, P+: Protein Adequate,
C+:Calorie Adequate, C-:Calorie Inadequate**

4.3.1.3.3 7-9 years children

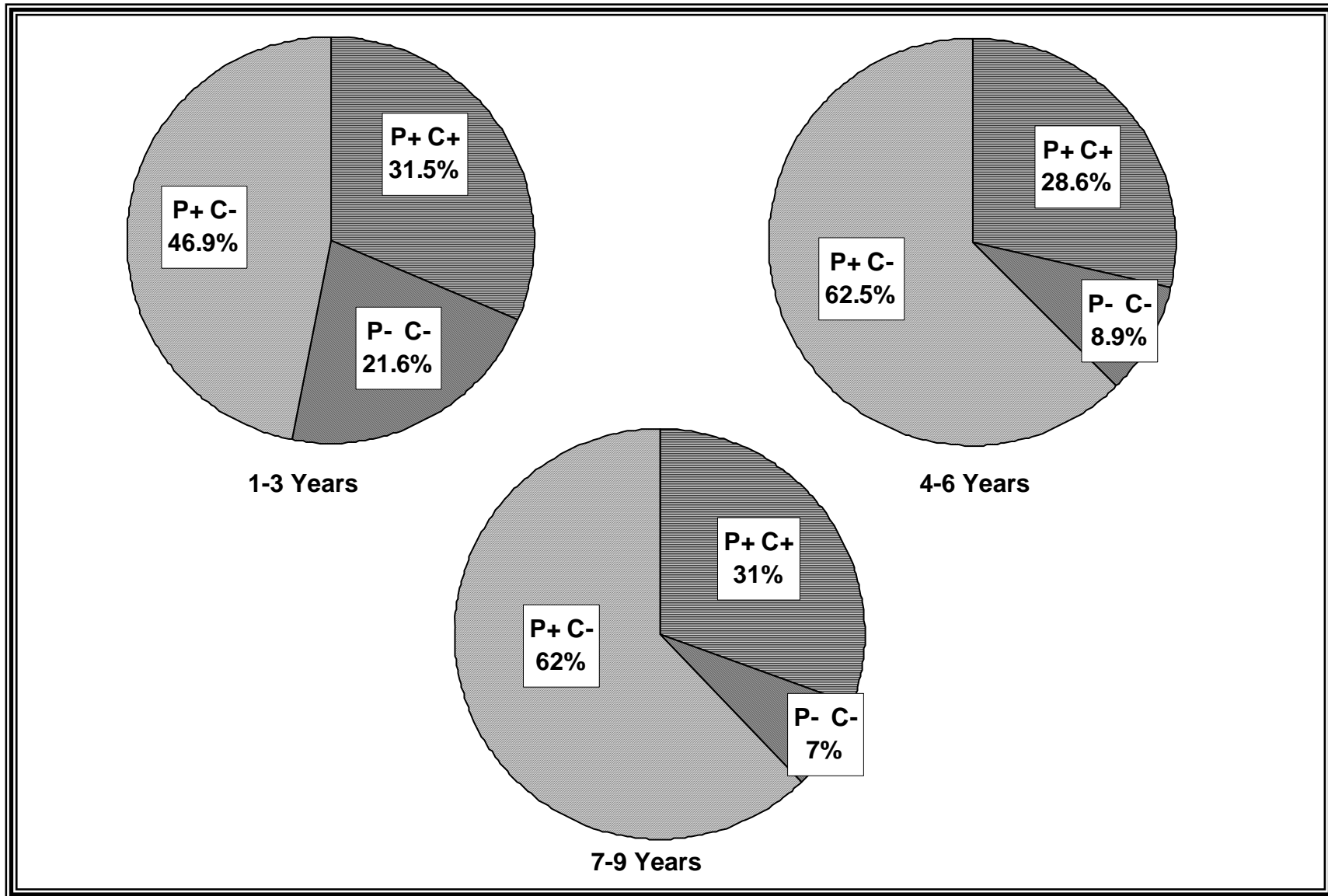
Only a third of 7-9 year children were consuming adequate amounts of both protein and energy. The proportion of children consuming inadequate calories ranged from 57% in Andhra Pradesh to 87% in Tamil Nadu (**Fig. 10 & Table 42**).

Table 42 : Protein - Calorie Adequacy Status (%) of 7-9 year Children

State	n	P- C-	P+ C-	P+ C+
Kerala	153	6.5	71.9	21.6
Tamilnadu	226	15.9	70.8	13.3
Karnataka	302	5.3	66.6	28.1
Andhra Pradesh	285	6.3	50.2	43.5
Maharashtra	332	5.1	59.9	34.9
Gujarat	243	2.5	55.1	42.4
Madhya Pradesh	322	6.2	55.9	37.9
Orissa	240	9.6	67.5	22.9
West Bengal	296	9.1	68.9	22.0
Pooled	2399	7.2	62.2	30.6

**P-: Protein Inadequate, P+: Protein Adequate,
C+: Calorie Adequate, C-:Calorie Inadequate**

Fig.10 Distribution (%) of children according to Protein - Calorie Adequacy



4.3.1.3.4 10-12 years Boys

About 32% of boys were consuming adequate amounts of both protein and calories, while 9% were consuming inadequate amounts of both the nutrients. In general, about 68% of children were consuming inadequate amounts of calories, with the proportion ranging from a low 35% in Gujarat to a high 88% in Tamil Nadu (**Table 43**).

Table 43 : Distribution (%) of 10-12 year Boys by Protein - Calorie Adequacy Status

State	n	P- C-	P+ C-	P+ C+
Kerala	122	9.8	72.1	18.0
Tamilnadu	82	13.4	74.4	12.2
Karnataka	141	3.5	56.0	40.4
Andhra Pradesh	121	7.4	43.8	48.8
Maharashtra	181	5.5	70.7	23.8
Gujarat	117	.9	34.2	65.0
Madhya Pradesh	173	15.6	47.4	37.0
Orissa	121	12.4	70.2	17.4
West Bengal	169	11.2	65.7	23.1
Pooled	1227	8.9	59.3	31.9

P-:Protein Inadequate, P+: Protein Adequate,
C+:Calorie Adequate, C-:Calorie Inadequate

4.3.1.3.5 10-12 years Girls

Nearly 37% of the girls were consuming adequate amounts of both the nutrients, while 9.8% were deficit both in protein and energy. The proportion of girls consuming adequate amounts of both the nutrients was relatively higher (36.8%) than in boys (31.9%) (**Table 44**).

Table 44 Protein - Calorie Adequacy Status: (%) of 10-12 year Girls

State	n	P- C-	P+ C-	P+ C+
Kerala	88	9.1	69.3	21.6
Tamilnadu	105	14.3	70.5	15.2
Karnataka	152	6.6	42.8	50.7
Andhra Pradesh	115	4.3	37.4	58.3
Maharashtra	190	6.8	61.1	32.1
Gujarat	131	.8	35.9	63.4
Madhya Pradesh	176	9.1	54.5	36.4
Orissa	131	18.3	58.8	22.9
West Bengal	130	20.8	55.4	23.8
Pooled	1218	9.8	53.4	36.8

P-:Protein Inadequate, P+: Protein Adequate,
C+:Calorie Adequate, C-:Calorie Inadequate

4.3.1.3.6 13-15 year boys

About 44% of 13-15 year boys were consuming adequate amounts of both protein and calories. The proportion consuming inadequate amounts of both the nutrients was 10.1%. In contrast, none of the boys in the State of Gujarat, were consuming inadequate amounts of both the nutrients (**Table 45**).

Table 45 : Protein - Calorie Adequacy Status (%) of 13-15 year Boys

State	n	P- C-	P+ C-	P+ C+
Kerala	101	12.9	51.5	35.6
Tamilnadu	72	11.1	68.1	20.8
Karnataka	114	5.3	43.0	51.8
Andhra Pradesh	69	10.1	37.7	52.2
Maharashtra	140	7.1	56.4	36.4
Gujarat	105	.0	19.0	81.0
Madhya Pradesh	118	11.9	50.8	37.3
Orissa	102	20.6	48.0	31.4
West Bengal	100	14.0	40.0	46.0
Pooled	921	10.1	46.0	43.9

P-:Protein Inadequate, P+: Protein Adequate,
C+:Calorie Adequate, C-:Calorie Inadequate

4.3.1.3.7 13-15 year girls

The proportion of girls consuming inadequate amounts of both protein and calories was low (5.2%). About 48% of the girls were consuming adequate amounts of both protein and calories. The proportion was marginally higher than that of boys (43.9%). In the States of Karnataka and Gujarat, none of the girls were found consuming inadequate amounts of both protein and calories (**Table 46**).

Table 46 : Protein - Calorie Adequacy Status (%) of 13-15 year Girls

State	n	P- C-	P+ C-	P+ C+
Kerala	92	12.0	57.6	30.4
Tamilnadu	65	9.2	55.4	35.4
Karnataka	115	.0	32.2	67.8
Andhra Pradesh	96	2.1	29.2	68.8
Maharashtra	139	5.8	52.5	41.7
Gujarat	73	.0	28.8	71.2
Madhya Pradesh	120	7.5	46.7	45.8
Orissa	122	4.1	64.8	31.1
West Bengal	99	7.1	50.5	42.4
Pooled	921	5.2	47.0	47.8

P-:Protein Inadequate, P+: Protein Adequate,
C+:Calorie Adequate, C-:Calorie Inadequate

4.3.1.3.8 16-17 years Boys

About 26% of the boys were consuming the inadequate quantities of both protein and energy. The calorie inadequacy was observed in 37.9% of boys, while protein inadequacy was observed in 31% (Table 47).

Table 47 : Protein - Calorie Adequacy Status (%) of 16-17 year Boys

State	n	P- C-	P- C+	P+ C-	P+ C+
Kerala	50	26.0	4.0	16.0	54.0
Tamilnadu	22	40.9	.0	9.1	50.0
Karnataka	72	23.6	2.8	9.7	63.9
Andhra Pradesh	48	10.4	2.1	8.3	79.2
Maharashtra	66	25.8	.0	18.2	56.1
Gujarat	40	2.5	.0	2.5	95.0
Madhya Pradesh	68	30.9	4.4	20.6	44.1
Orissa	68	44.1	20.6	5.9	29.4
West Bengal	41	22.0	7.3	14.6	56.1
Pooled	475	25.7	5.3	12.2	56.8

P-:Protein Inadequate, P+: Protein Adequate,
C+:Calorie Adequate, C-:Calorie Inadequate

4.3.1.3.9 16-17 years Girls

In about 72% of girls, the consumption of protein and calories was adequate, which was relatively more than that observed among boys (57%). In the State of Gujarat, none of the girls were observed to be consuming inadequate intake of both the nutrients (Table 48).

Table 48 : Distribution (%) of 16-17 year Girls by Protein - Calorie Adequacy Status

State	n	P- C-	P- C+	P+ C-	P+ C+
Kerala	73	9.6	12.3	11.0	67.1
Tamilnadu	44	31.8	11.4	4.5	52.3
Karnataka	54	9.3	3.7	.0	87.0
Andhra Pradesh	40	15.0	7.5	2.5	75.0
Maharashtra	70	21.4	2.9	14.3	61.4
Gujarat	55	.0	.0	5.5	94.5
Madhya Pradesh	54	25.9	1.9	5.6	66.7
Orissa	53	17.0	11.3	1.9	69.8
West Bengal	50	22.0	6.0	.0	72.0
Pooled	493	16.4	6.3	5.7	71.6

P-:Protein Inadequate, P+: Protein Adequate,
C+:Calorie Adequate, C-:Calorie Inadequate

4.3.1.3.10 Adult Males (Sedentary)

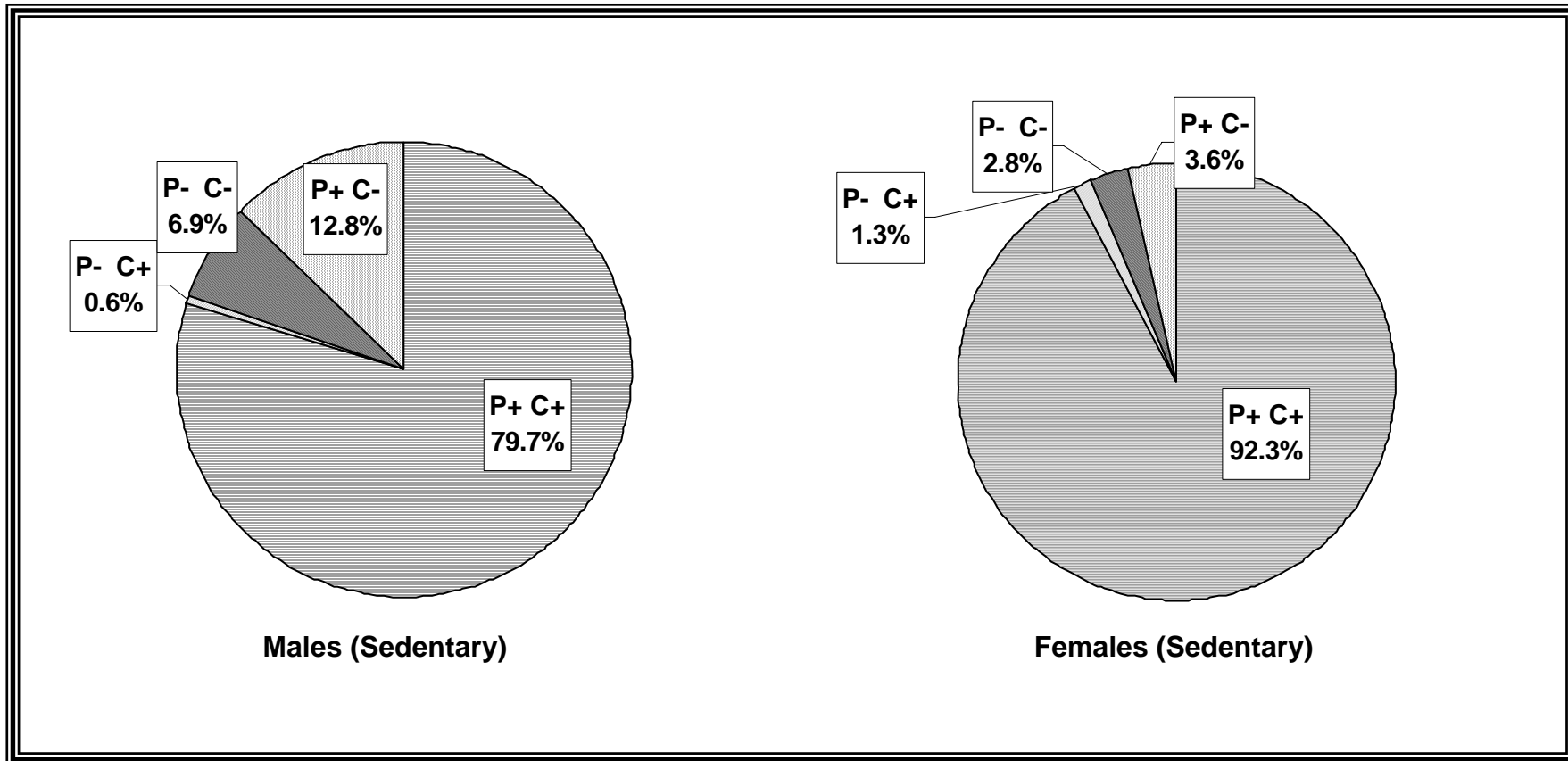
Nearly 80% of the adult males were consuming adequate amounts of both the nutrients. The proportion of individuals consuming inadequate amounts of both the nutrients ranged from a low 0.4% in Gujarat to a high 15% in the State of Andhra Pradesh (Fig. 11 & Table 49).

Table 49 : Distribution (%) of Adult Males (Sedentary) by Protein-Calorie Adequacy Status

State	n	P- C-	P- C+	P+ C-	P+ C+
Kerala	578	4.8	1.6	13.1	80.4
Tamilnadu	315	8.6	1.0	13.0	77.5
Karnataka	548	2.2	.5	10.8	86.5
Andhra Pradesh	213	15.0	.9	12.2	71.8
Maharashtra	215	11.2	.0	27.0	61.9
Gujarat	264	.4	.0	2.3	97.3
Madhya Pradesh	108	7.4	.0	18.5	74.1
Orissa	260	11.5	.4	10.4	77.7
West Bengal	270	10.7	.0	15.9	73.3
Pooled	2771	6.9	.6	12.8	79.6

**P-:Protein Inadequate, P+: Protein Adequate,
C+:Calorie Adequate, C-:Calorie Inadequate**

Fig.11 Distribution (%) of Adults according to Protein - Calorie Adequacy Status



4.3.1.3.11 Adult Females (NPNL-Sedentary)

The intake of protein and calories was adequate in about 88% of the adult females, a proportion being higher than that observed in males (79.6%). Only 5% were inadequate in both protein and calories. While in the State of Gujarat, there was not a single individual was consuming inadequate protein and energy, their proportion was observed to be about 11% in Maharashtra. A higher proportion of females as compared to males were found consuming adequate amounts of energy and protein, in all the States (Fig. 11 & Table 50).

Table 50 : by Protein-Calorie Adequacy Status (%) of Adult Females (NPNL-Sedentary)

State	n	P- C-	P- C+	P+ C-	P+ C+
Kerala	963	3.9	2.4	5.8	87.9
Tamilnadu	501	6.2	1.8	6.0	86.0
Karnataka	712	.7	.7	3.1	95.5
Andhra Pradesh	351	8.0	1.1	4.6	86.3
Maharashtra	391	10.7	.5	16.4	72.4
Gujarat	345	.0	.0	2.9	97.1
Madhya Pradesh	219	6.4	.9	12.8	79.9
Orissa	683	6.3	2.2	2.5	89.0
West Bengal	634	6.8	.6	5.5	87.1
Pooled	4799	5.1	1.3	5.8	87.8

P-:Protein Inadequate, P+: Protein Adequate,
C+:Calorie Adequate, C-:Calorie Inadequate

4.3.1.3.12 Pregnant women

The extent of protein calorie inadequacy (15.4%) was higher among pregnant women than in NPNL women (5.1%). The proportion consuming inadequate amounts of both the nutrients was maximum in West Bengal (40%), followed by Tamil Nadu (29%), Orissa and Andhra Pradesh (14%). None of the pregnant women surveyed in the States of Gujarat and Madhya Pradesh were found consuming inadequate amounts of energy and protein (Table 51).

Table 51 : Protein-Calorie Adequacy Status (%) of Pregnant Women (Sedentary)

State	n	P- C-	P- C+	P+ C-	P+ C+
Kerala	17	11.8	17.6	11.8	58.8
Tamilnadu	41	29.3	4.9	2.4	63.4
Karnataka	28	7.1	3.6	10.7	78.6
Andhra Pradesh	22	13.6	4.5	4.5	77.3
Maharashtra	17	5.9	5.9	17.6	70.6
Gujarat	18	.0	.0	5.6	94.4
Madhya Pradesh	8	.0	.0	25.0	75.0
Orissa	22	13.6	9.1	13.6	63.6
West Bengal	15	40.0	6.7	6.7	46.7
Pooled	188	15.4	5.9	9.0	69.7

P-:Protein Inadequate, P+: Protein Adequate,
C+:Calorie Adequate, C-:Calorie Inadequate

4.3.1.3.13 Lactating women

The consumption of protein and calories was found to be adequate in 67.2% of the lactating women. The inadequacy of both protein and calorie was higher in the State of Maharashtra (23.9%) and was lowest in Gujarat (4.2%) (Table 52).

Table 52 : Protein-Calorie Adequacy Status (%) Lactating Women(Sedentary)

State	n	P- C-	P- C+	P+ C-	P+ C+
Kerala	58	13.8	15.5	8.6	62.1
Tamilnadu	181	20.4	11.6	4.4	63.5
Karnataka	54	9.3	1.9	3.7	85.2
Andhra Pradesh	88	11.4	6.8	2.3	79.5
Maharashtra	46	23.9	2.2	23.9	50.0
Gujarat	48	4.2	.0	2.1	93.8
Madhya Pradesh	42	21.4	2.4	14.3	61.9
Orissa	72	19.4	20.8	1.4	58.3
West Bengal	79	17.7	19.0	5.1	58.2
Pooled	668	16.5	10.3	6.0	67.2

P-:Protein Inadequate, P+: Protein Adequate,
C+:Calorie Adequate, C-:Calorie Inadequate

4.3.1.4 Distribution of Individuals According to Intakes as % of RDA

The frequency distributions of individuals by age, sex, activity and physiological status according to intake of foods and nutrients expressed as per cent of RDA are presented in **Annexures 1-19**.

4.3.2 CLINICAL EXAMINATION

NUTRITIONAL STATUS	
NUTRITIONAL DEFICIENCY SIGNS	
<ul style="list-style-type: none">• Prevalence of Bitot Spots was 0.8% in preschool children.	
ANTHROPOMETRY	
<ul style="list-style-type: none">• About 60% preschool children were undernourished.	
CFR among males was 27% and in Females it was 20%	

Of the 1700 infants examined, 0.5% had marasmus while 0.9% were emaciated (**Table 53.1**). About 6,650 preschool children were examined in 9 States during the present survey, of which about 9% exhibited one or more clinical signs of nutritional deficiency. While there was not a single case of kwashiorkor, the prevalence of marasmus was almost negligible (0.2%). The prevalence of Bitot spots, an objective sign of vitamin A deficiency, was found to be about 0.8%. About 1.4% of the preschool children had angular stomatitis, indicative of B-complex deficiency (**Table 53.2**). It may be pointed out here that the prevalence of various nutritional deficiency signs during the present survey was comparable to that observed during the second repeat surveys.

Similarly, among the school age children, the common deficiency signs observed were conjunctival xerosis (5%), Bitot spots (2.9%), and angular stomatitis (2.8%). Dental fluorosis was observed in 3% of school children and (**Table 53.3**) 2.5% of the adolescents. About 2.1% had angular stomatitis, 2% had conjunctival xerosis, 1.2% had Bitot spots and 1.2% had visible goiter (**Table 53.4**). Among the adults, various signs observed were angular stomatitis (1.2%) and dental fluorosis (0.8%) (**Table 53.5**).

Table 53.1 : Prevalence (%) of Nutritional Deficiency Signs: Infants

Nutritional Deficiency Signs	State									
	Kerala	Tamilnadu	Karnataka	Andhra Pradesh	Maharashtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
	n=93	n=337	n=154	n=260	n=121	n=179	n=213	n=212	n=131	n=1700
Moon Face	0.0	0.3	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.1
Emaciation	0.0	0.3	0.0	0.0	0.0	1.7	4.7	0.0	0.8	0.9
Marasmus	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	3.1	0.5
Others	0.0	0.0	2.6	0.8	0.0	0.0	0.5	0.0	0.0	0.4

Table 53.2 : Prevalence (%) of Nutritional Deficiency Signs: Preschool Children

Nutritional Deficiency Signs	State									
	Kerala	Tamilnadu	Karnataka	Andhra Pradesh	Maharashtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
	n=375	n=1041	n=750	n=837	n=747	n=718	n=744	n=774	n=660	n=6646
Oedema	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Emaciation	0.3	0.0	0.0	0.4	0.5	3.2	2.8	0.3	2.9	1.1
Marasmus	0.0	0.1	0.0	0.4	0.1	0.4	0.3	0.1	0.6	0.2
Night Blindness (XN)	0.0	0.0	0.0	0.0	0.3	0.0	0.1	0.1	0.0	0.1
Conjunctival Xerosis (XIA)	0.3	3.5	5.2	0.2	3.9	0.0	0.0	1.0	1.5	1.9
Bitot Spots (XIB)	0.3	0.8	0.3	0.7	0.9	0.0	3.2	0.3	0.0	0.8
Corneal Xerosis (X2)	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.0
Keratomalacia (X3)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Angular Stomatitis	0.0	2.1	0.4	2.0	2.5	0.6	1.5	0.3	2.7	1.4
Cheilosis	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.1	0.2	0.1
Phrynoderma	0.0	0.3	0.3	0.1	0.3	0.0	0.0	0.0	0.2	0.1
Koilonychia	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.0	0.0	0.1
Dental - Fluorosis	0.0	0.0	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.1
Goitre Visible	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.0	0.4	1.2	0.8	0.0	0.0	0.4	0.3	0.0	0.4

Table 53.3 : Prevalence (%) of Nutritional Deficiency Signs : School Age Children

Nutritional Deficiency Signs	State									
	Kerala	Tamilnadu	Karnataka	Andhra Pradesh	Maharashtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
	n=350	n=1035	n=1219	n=1151	n=1164	n=800	n=1068	n=1240	n=1272	n=9299
Night Blindness (XN)	0.0	0.0	0.0	0.0	0.5	0.0	1.1	0.4	0.0	0.2
Conjunctival Xerosis (XIA)	0.3	3.9	13.5	0.7	10.9	0.0	0.3	1.7	8.3	5.0
Bitot Spots (XIB)	0.0	2.5	1.8	3.0	3.4	0.1	10.6	1.1	1.2	2.9
Angular Stomatitis	0.0	2.8	0.6	3.7	4.0	0.1	3.7	1.4	6.2	2.8
Cheilosis	0.0	0.0	0.1	0.0	0.2	0.1	1.1	0.2	0.3	0.2
Phrynoderma	0.0	0.7	0.4	0.2	4.3	0.0	0.0	0.2	0.8	0.8
Koilonychia	0.0	0.0	0.0	0.0	0.6	0.0	0.3	0.0	0.0	0.1
Dental - Fluorosis	0.0	4.3	3.0	8.9	4.8	0.8	2.8	0.1	0.4	3.0
Goitre Palpable	0.6	0.0	0.1	0.0	1.0	0.0	0.1	0.0	0.7	0.3
Goitre Visible	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0

Table 53.4 : Prevalence (%) of Nutritional Deficiency Signs : Adolescents

Nutritional Deficiency	State
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Signs	Kerala	Tamilnadu	Karnataka	Andhra Pradesh	Maharashtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
	n=309	n=453	n=830	n=531	n=714	n=441	n=572	n=728	n=623	n=5201
Night Blindness (XN)	0.0	0.0	0.0	0.0	0.1	0.0	0.9	0.0	0.0	0.1
Conjunctival Xerosis (XIA)	0.0	1.8	6.4	0.2	2.5	0.0	0.0	0.5	3.0	2.0
Bitot Spots (XIB)	0.0	3.1	0.7	1.3	1.0	0.0	3.8	0.5	0.8	1.2
Angular Stomatitis	0.0	2.0	0.4	3.0	0.4	0.0	5.1	3.3	4.2	2.1
Cheilosis	0.0	0.0	0.2	0.0	0.0	0.0	2.1	0.5	1.1	0.5
Phrynoderma	0.0	0.0	0.2	0.2	1.7	0.0	0.0	0.0	1.8	0.5
Koilonychia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Dental - Fluorosis	0.0	4.9	1.6	9.2	3.5	0.7	2.8	0.0	0.2	2.5
Goitre Palpable	1.3	0.0	0.1	1.1	0.0	0.0	0.0	0.3	5.5	0.9
Goitre Visible	1.0	0.0	0.1	0.2	0.1	0.0	0.0	0.0	1.9	0.3

Table 53.5 : Prevalence (%) of Nutritional Deficiency Signs: Adults

Nutritional Deficiency Signs	State
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	Kerala	Tamilnadu	Karnataka	Andhra Pradesh	Maharashtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
	n=100	n=3129	n=3637	n=3129	n=2998	n=2759	n=3317	n=3615	n=2994	n=28393
Emaciation	0.0	0.0	0.1	0.0	0.0	0.2	0.2	0.0	0.4	0.1
Marasmus	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Night Blindness (XN)	0.0	0.0	0.1	0.0	0.0	0.0	6.5	0.1	0.1	0.8
Conjunctival Xerosis (XIA)	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.1	0.3	0.1
Bitot Spots (XIB)	0.0	1.1	0.1	0.4	0.0	0.0	0.2	0.1	0.0	0.2
Angular Stomatitis	0.0	1.1	0.1	1.9	0.0	0.2	4.0	1.7	1.7	1.2
Cheilosis	0.0	0.0	0.1	0.0	0.0	0.0	1.7	0.1	0.3	0.3
Phrynoderma	0.5	0.0	0.1	0.0	0.1	0.0	0.0	0.1	5.4	0.7
Koilonychia	0.0	0.0	0.0	0.1	0.0	2.6	0.1	0.0	0.1	0.3
Dental - Fluorosis	0.0	0.3	0.3	5.6	0.0	0.1	0.8	0.0	0.0	0.8
Goitre Palpable	0.3	0.0	0.3	0.6	0.0	0.0	1.2	0.1	3.6	0.7
Goitre Visible	1.1	0.0	0.6	0.2	0.1	0.0	0.5	0.3	1.7	0.5

4.3.3 Anthropometry

Means and medians of anthropometric measurements viz., height, weight, mid upper arm circumference and fat fold thickness at triceps are presented according to age and sex for each State (**Annexures 20-39**). These measurements were lower than the NCHS reference values in all the age and sex groups. The distance charts for height and weights are presented in **Figs. 14 – 23**.

4.3.3.1 Preschool Children

4.3.3.1.1 Gomez Classification

The distribution of body weights of preschool children according to Gomez classification is presented in **Fig. 12 & 13 and Tables 54.1 & 54.2**. Children with moderate and severe grade undernutrition are considered as ‘at risk’ group from public health point of view. The proportion of ‘at risk’ children was 41.3 and 6.4 % respectively.

Fig.12 Distribution (%) of children (1-5 Years) according to Gomez classification and Sex

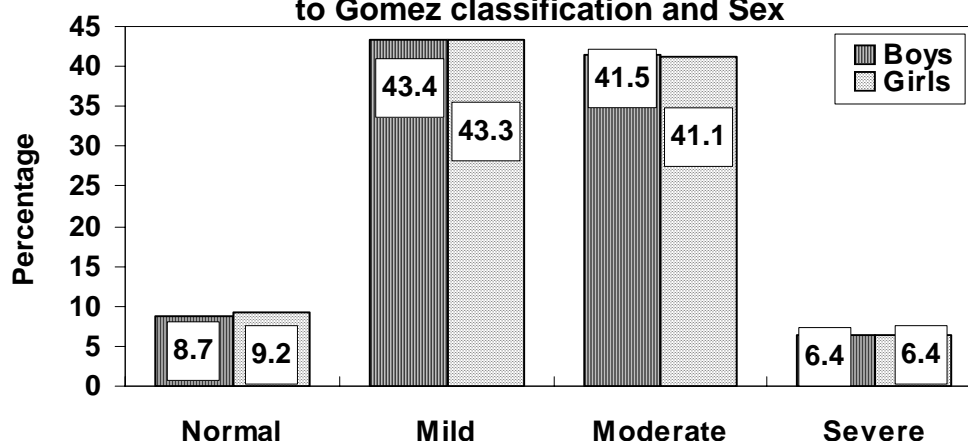


Fig.13 Distribution of Children (1-5 Years) according to Gomez Classification and Age

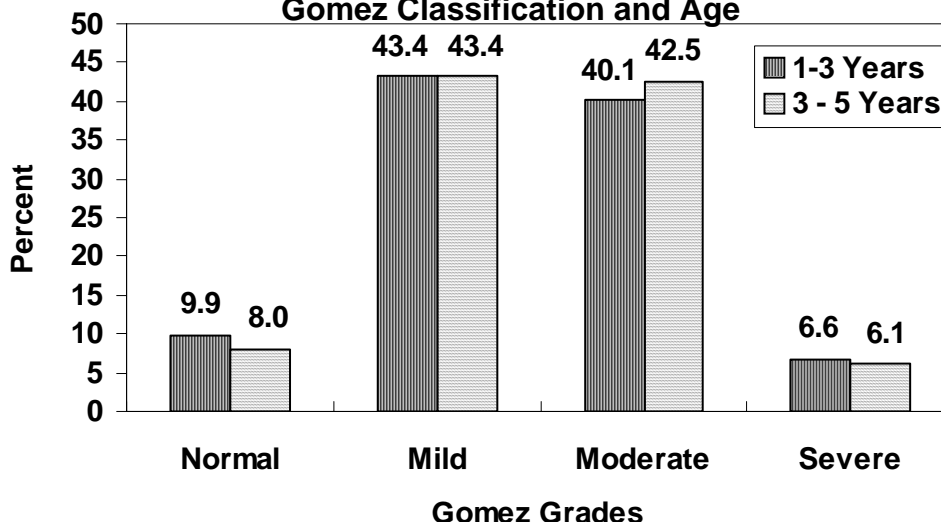


Table 54.1 : Distribution (%) of 1-5 years Children by Nutritional Status (Weight for Age) - Gomez Classification

State	Sex	N	Nutrition Grades*			
			Normal	Mild	Moderate	Severe
Kerala	Boys	191	17.3	55.0	26.2	1.6
	Girls	184	24.5	45.7	27.7	2.2
	Pooled	375	20.8	50.4	26.9	1.9
Tamilnadu	Boys	540	10.4	51.3	34.8	3.5
	Girls	501	10.6	49.9	35.7	3.8
	Pooled	1041	10.5	50.6	35.3	3.7
Karnataka	Boys	411	7.1	44.5	46.2	2.2
	Girls	339	7.4	46.0	44.0	2.7
	Pooled	750	7.2	45.2	45.2	2.4
Andhra Pradesh	Boys	439	11.8	49.0	36.0	3.2
	Girls	398	11.1	48.2	35.7	5.0
	Pooled	837	11.5	48.6	35.8	4.1
Maharashtra	Boys	406	6.2	40.6	45.3	7.9
	Girls	341	10.6	38.4	44.6	6.5
	Pooled	747	8.2	39.6	45.0	7.2
Gujarat	Boys	390	6.7	40.8	42.6	10.0
	Girls	328	8.2	47.3	36.9	7.6
	Pooled	718	7.4	43.7	40.0	8.9
Madhya Pradesh	Boys	381	5.5	29.7	49.6	15.2
	Girls	363	6.1	31.1	48.8	14.0
	Pooled	744	5.8	30.4	49.2	14.7
Orissa	Boys	382	9.2	39.0	44.2	7.6
	Girls	392	4.3	38.8	50.0	6.9
	Pooled	774	6.7	38.9	47.2	7.2
West Bengal	Boys	319	7.8	42.9	43.9	5.3
	Girls	341	7.0	43.1	41.9	7.9
	Pooled	660	7.4	43.0	42.9	6.7

Sex	n	Nutrition Grades*			
		Normal	Mild	Moderate	Severe
Boys	3459	8.7	43.5	41.5	6.4
Girls	3187	9.2	43.3	41.1	6.4
Pooled	6646	9.0	43.3	41.3	6.4

* : NCHS Standards

Table 54.2 : Distribution (%) of 1-5 years Children by

Nutritional Status (Weight for Age) - Gomez Classification according to age

State	Age (Years)	N	Nutrition Grades*			
			Normal	Mild	Moderate	Severe
Kerala	1-3	211	24.2	46.4	27.5	1.9
	3-5	164	16.5	55.5	26.2	1.8
	Pooled	375	20.8	50.4	26.9	1.9
Tamilnadu	1-3	571	10.7	51.8	33.6	3.9
	3-5	470	10.2	49.1	37.2	3.4
	Pooled	1041	10.5	50.6	35.3	3.7
Karnataka	1-3	392	9.9	43.4	44.1	2.6
	3-5	358	4.2	47.2	46.4	2.2
	Pooled	750	7.2	45.2	45.2	2.4
Andhra Pradesh	1-3	441	12.2	48.8	34.5	4.5
	3-5	396	10.6	48.5	37.4	3.5
	Pooled	837	11.5	48.6	35.8	4.1
Maharashtra	1-3	381	9.4	41.5	42.3	6.8
	3-5	366	6.8	37.7	47.8	7.7
	Pooled	747	8.2	39.6	45.0	7.2
Gujarat	1-3	375	7.2	42.7	39.5	10.7
	3-5	343	7.6	44.9	40.5	7.0
	Pooled	718	7.4	43.7	40.0	8.9
Madhya Pradesh	1-3	360	4.2	30.6	51.9	13.3
	3-5	384	7.3	30.2	46.6	15.9
	Pooled	744	5.8	30.4	49.2	14.7
Orissa	1-3	367	6.8	36.2	47.7	9.3
	3-5	407	6.6	41.3	46.7	5.4
	Pooled	774	6.7	38.9	47.2	7.2
West Bengal	1-3	310	9.4	44.5	39.0	7.1
	3-5	350	5.7	41.7	46.3	6.3
	Pooled	660	7.4	43.0	42.9	6.7

Age (Years)	n	Nutrition Grades*			
		Normal	Mild	Moderate	Severe
1-3	3408	9.9	43.4	40.1	6.6
3-5	3238	8.0	43.4	42.5	6.1
Pooled	6646	9.0	43.4	41.3	6.4

* : NCHS Standards

FIG. 14 DISTANCE CHARTS FOR HEIGHTS AND WEIGHTS OF MALES AND FEMALES - KERALA

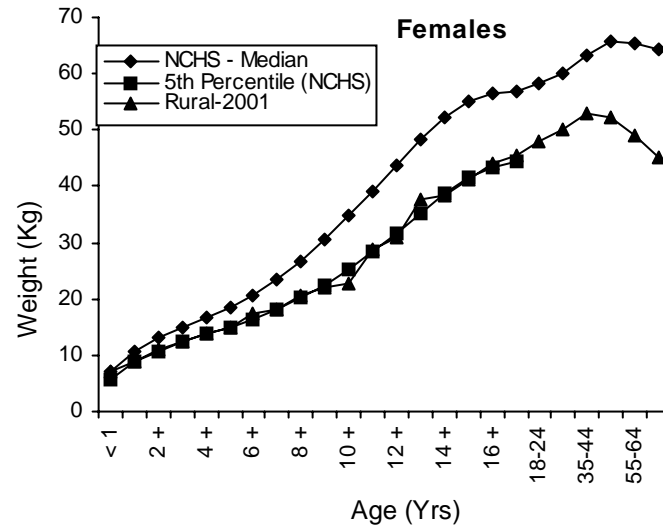
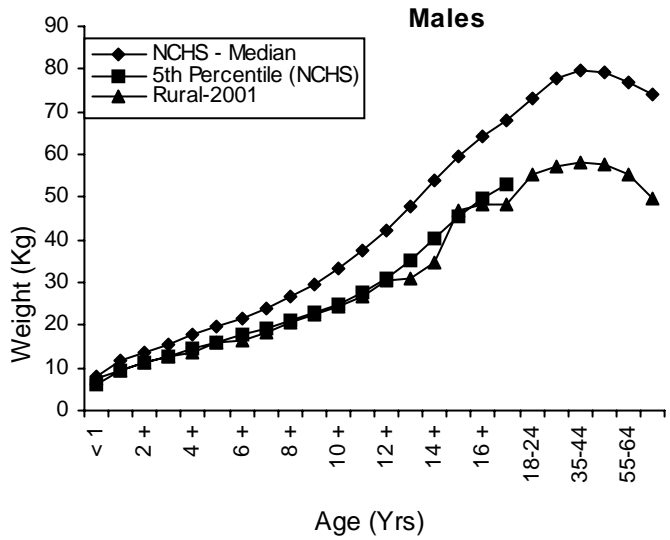
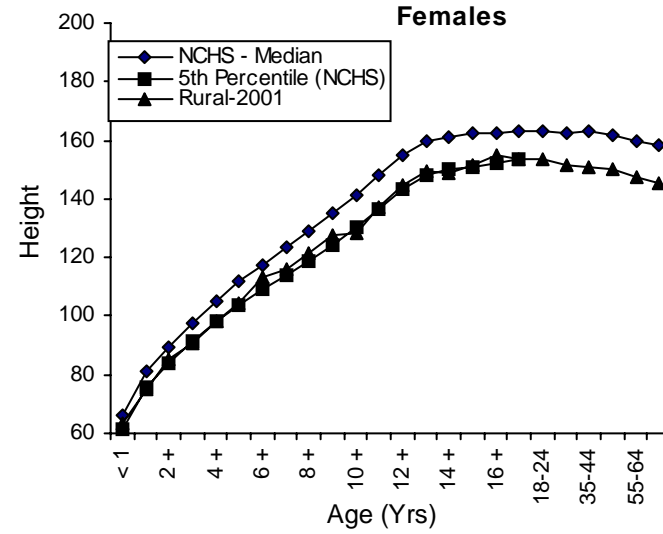
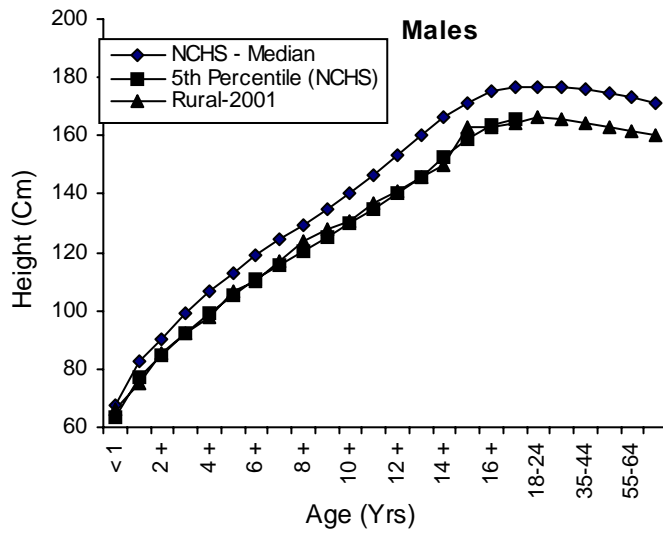


FIG. 15 DISTANCE CHARTS FOR HEIGHTS AND WEIGHTS OF MALES AND FEMALES - TAMIL NADU

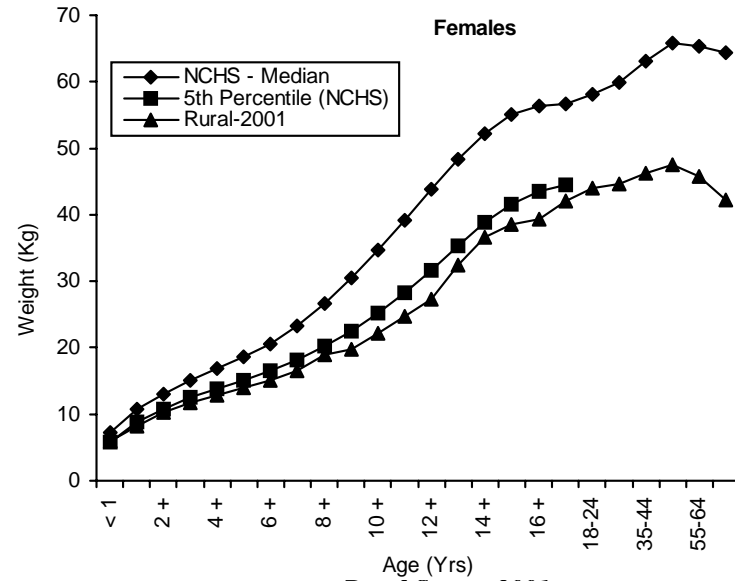
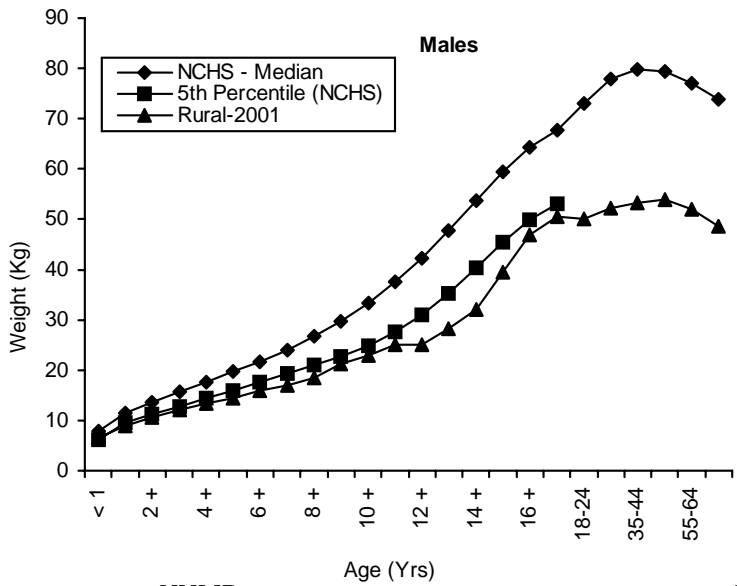
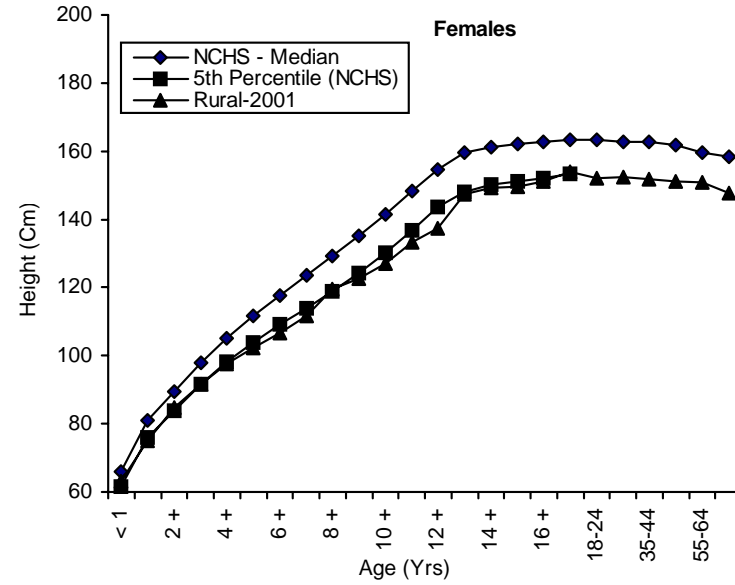
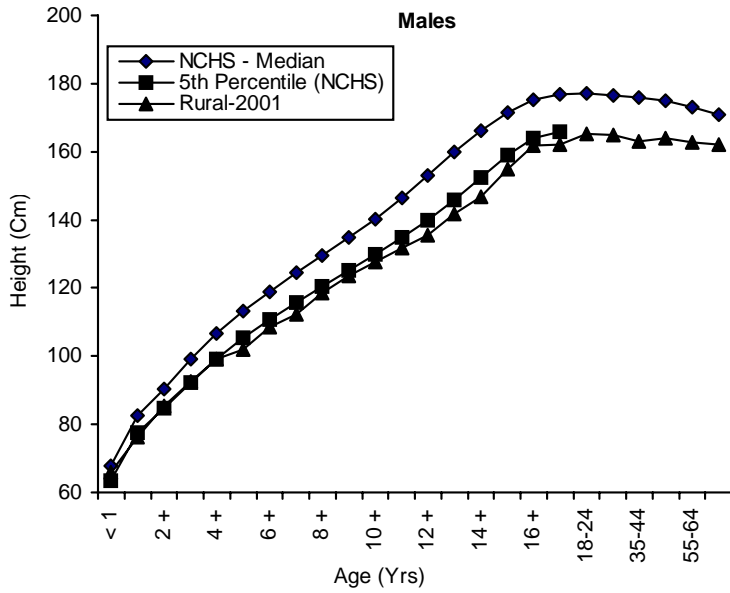


FIG. 16 DISTANCE CHARTS FOR HEIGHTS AND WEIGHTS OF MALES AND FEMALES - KARNATAKA

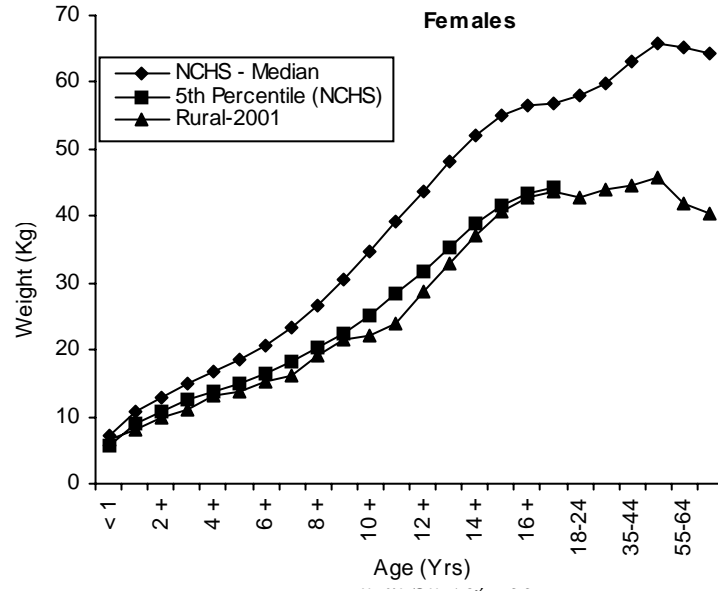
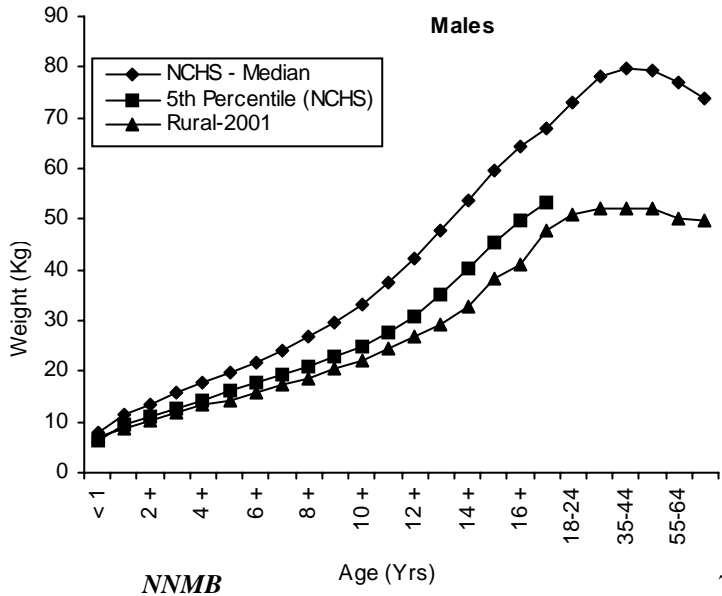
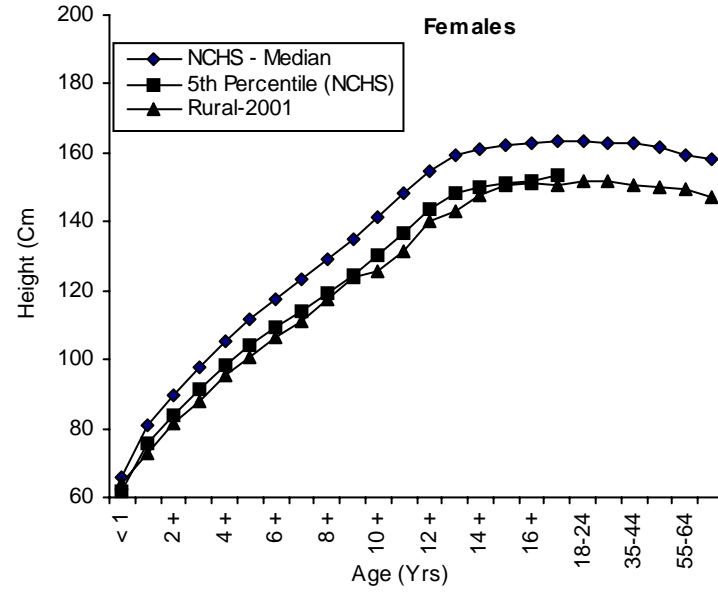
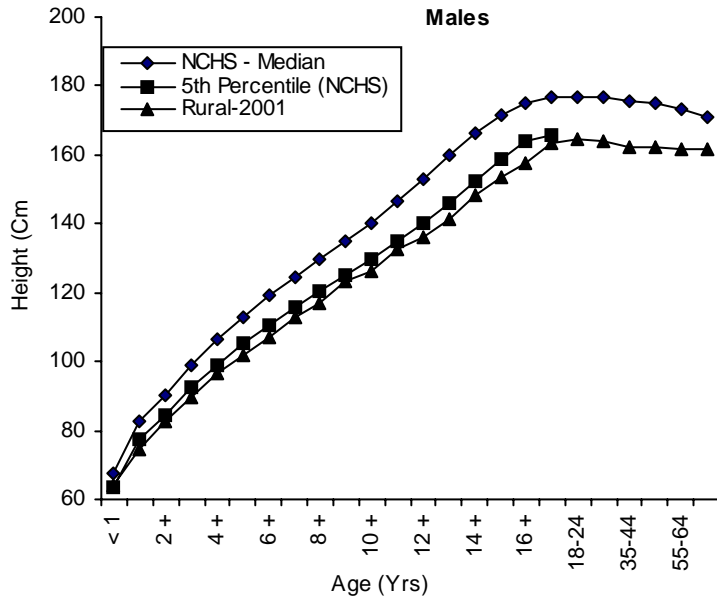


FIG. 17 DISTANCE CHARTS FOR HEIGHTS AND WEIGHTS OF MALES AND FEMALES - ANDHRA PRADESH

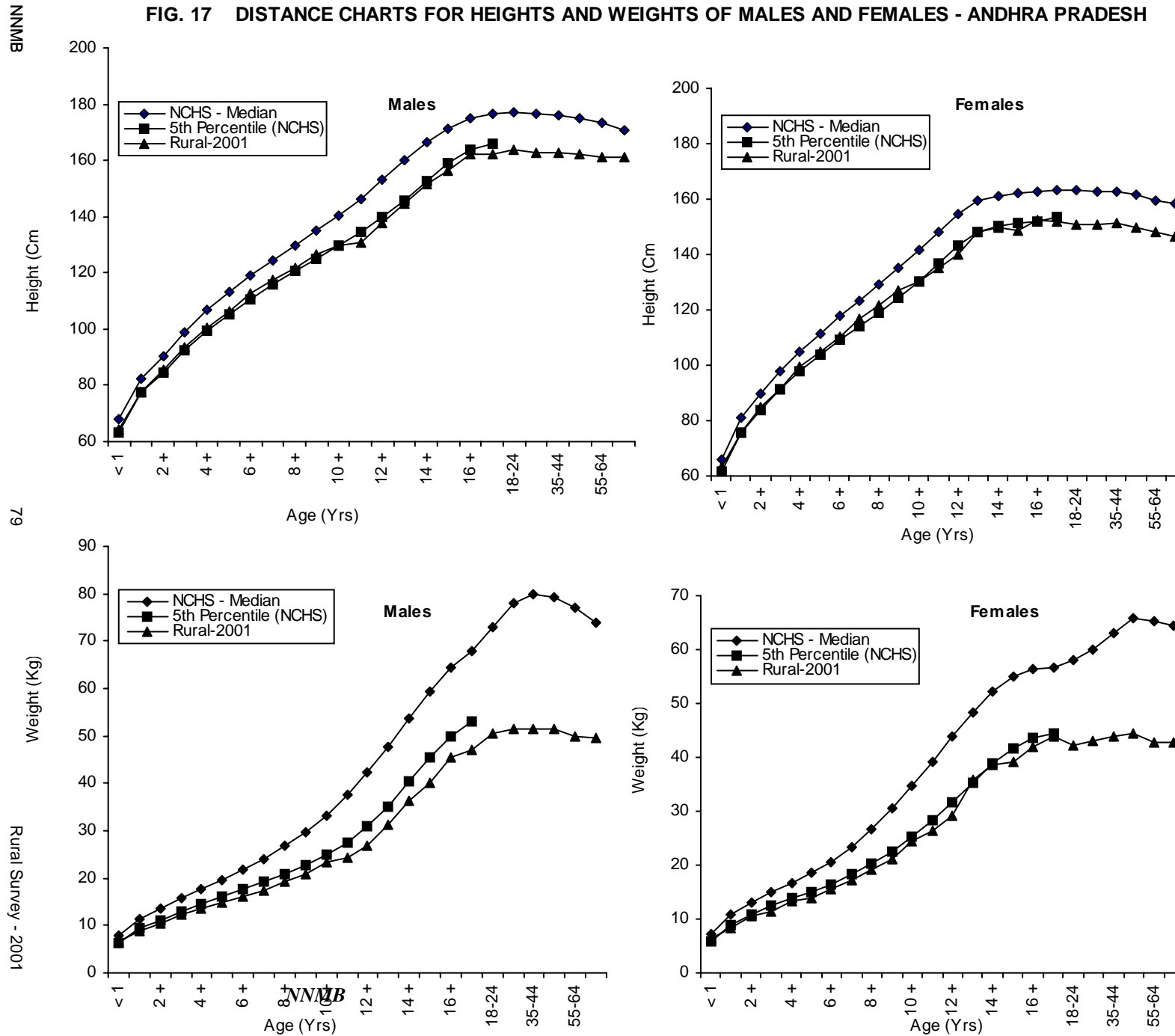


FIG. 18 DISTANCE CHARTS FOR HEIGHTS AND WEIGHTS OF MALES AND FEMALES - MAHARASHTRA

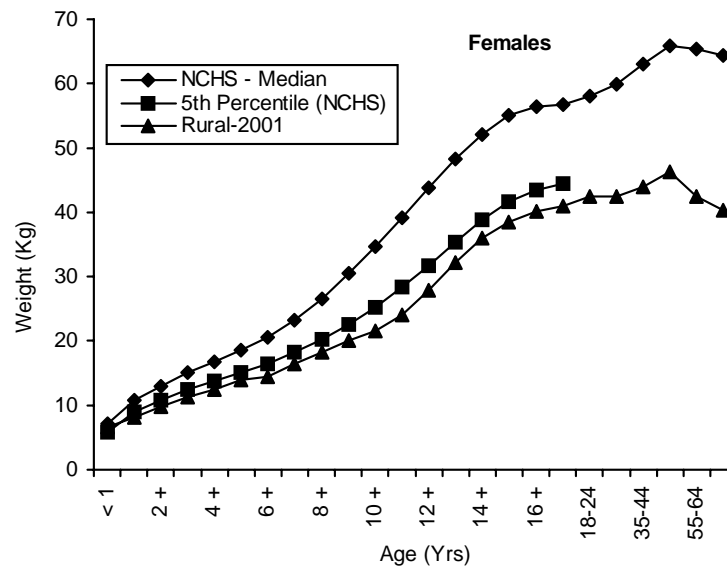
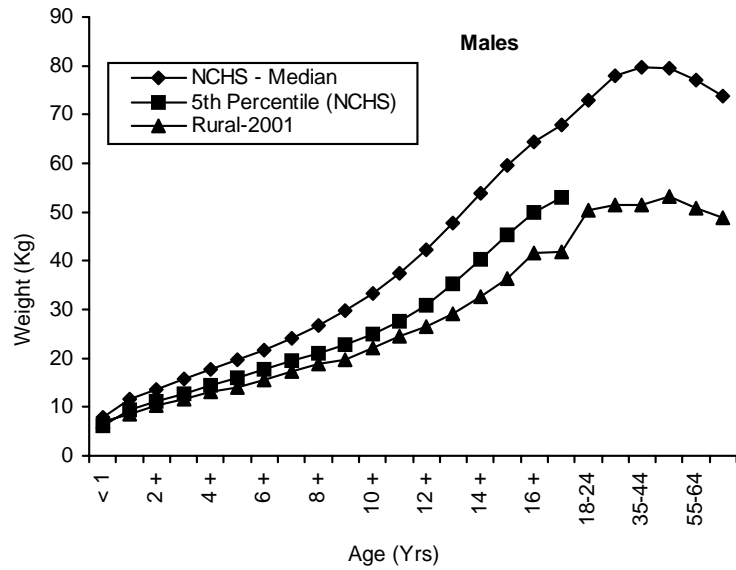
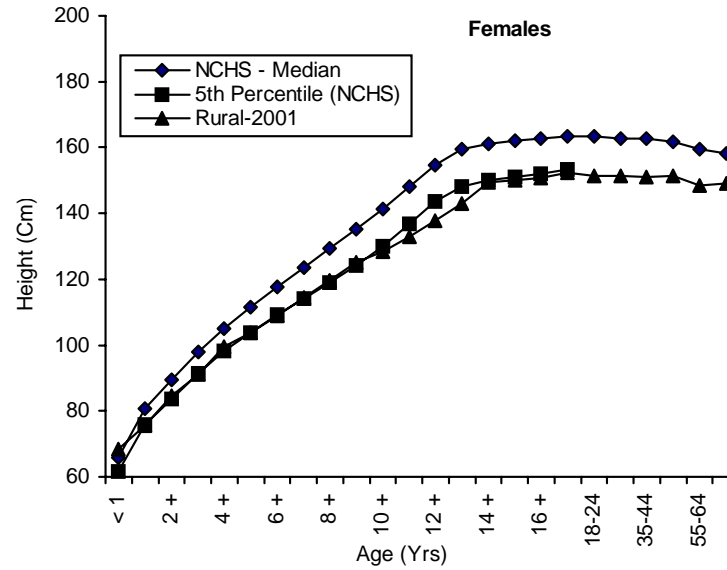
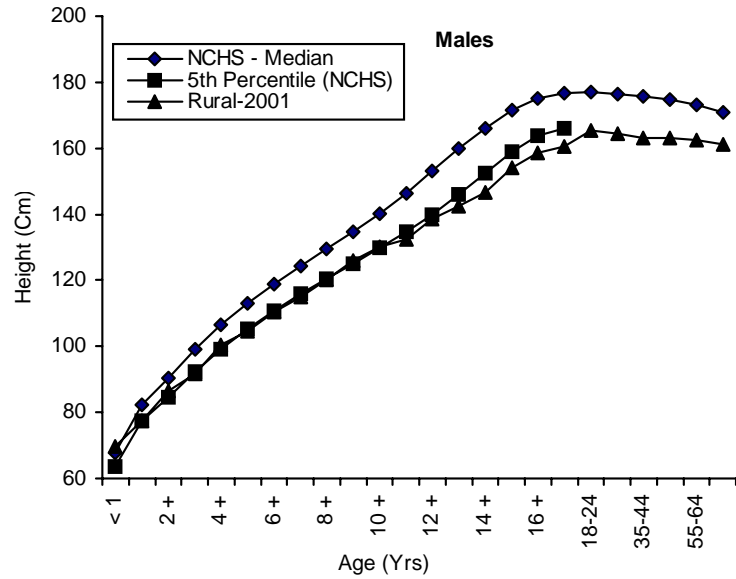


FIG. 19 DISTANCE CHARTS FOR HEIGHTS AND WEIGHTS OF MALES AND FEMALES - GUJARAT

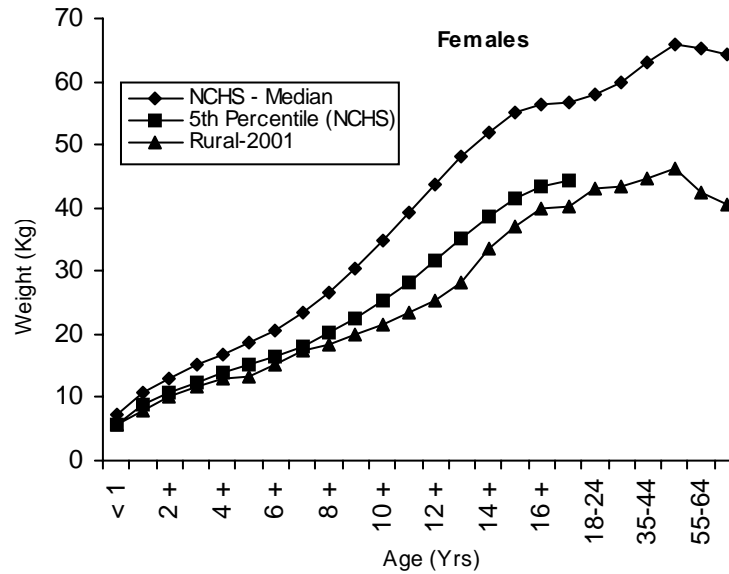
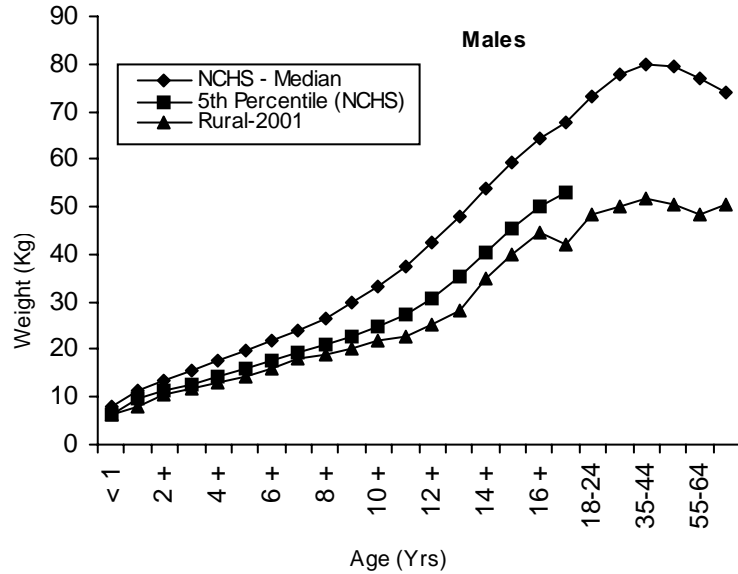
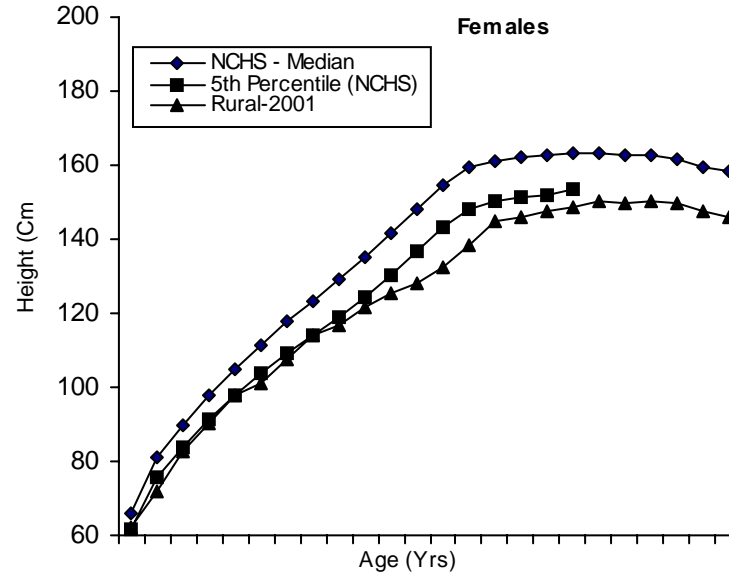
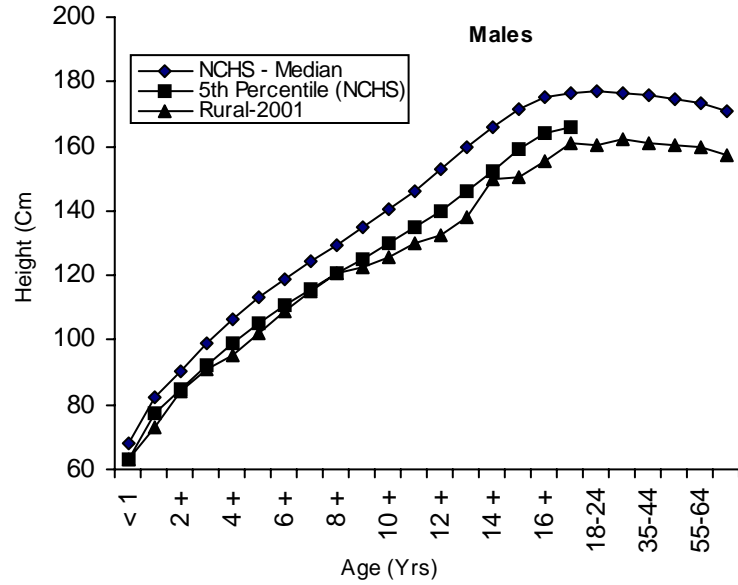


FIG. 20 DISTANCE CHARTS FOR HEIGHTS AND WEIGHTS OF MALES AND FEMALES - MADHYA PRADESH

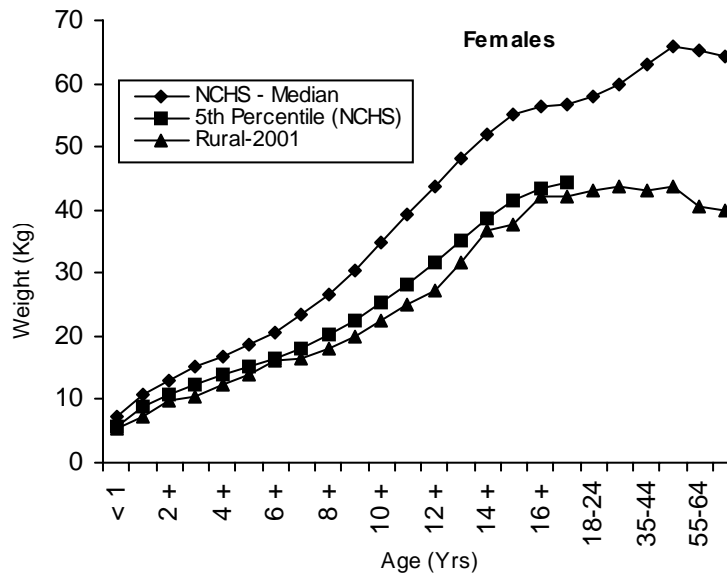
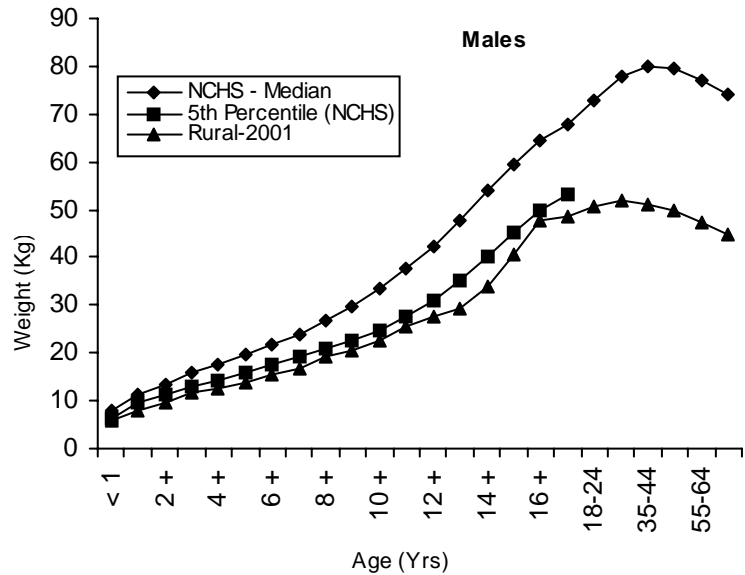
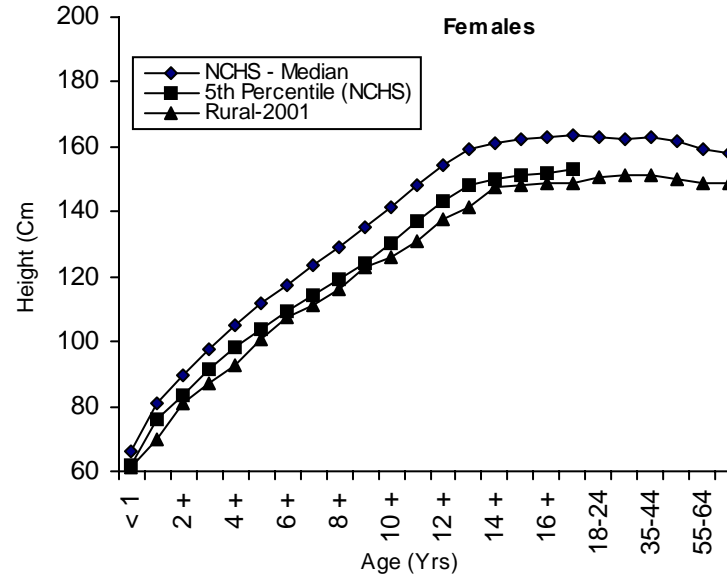
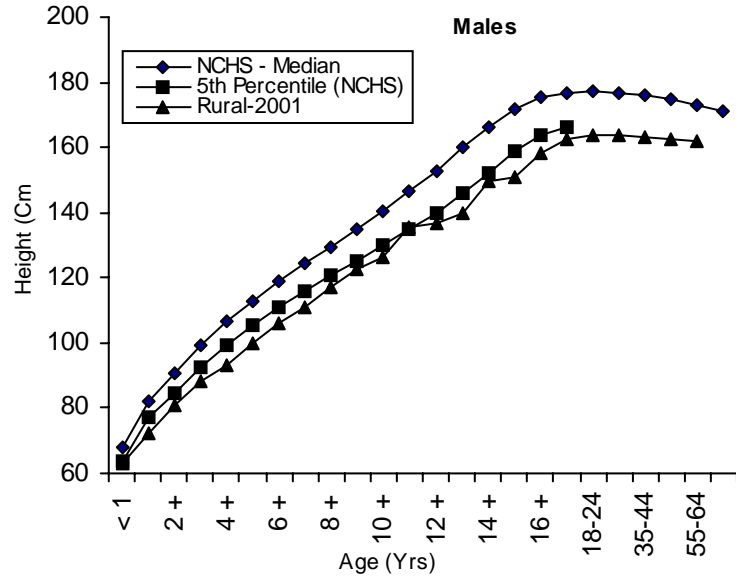


FIG. 21 DISTANCE CHARTS FOR HEIGHTS AND WEIGHTS OF MALES AND FEMALES - ORISSA

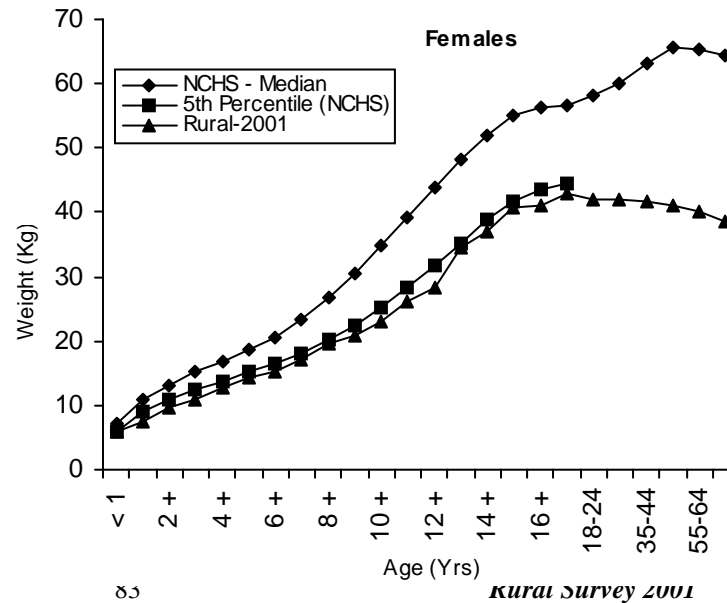
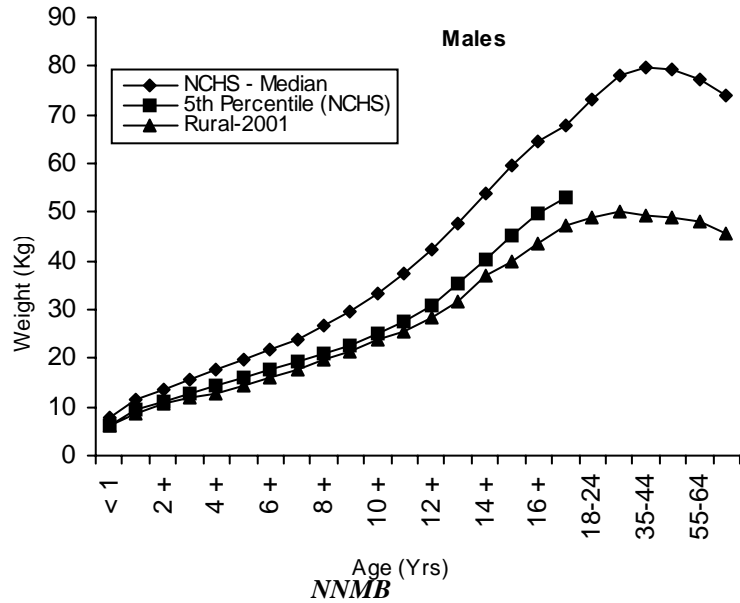
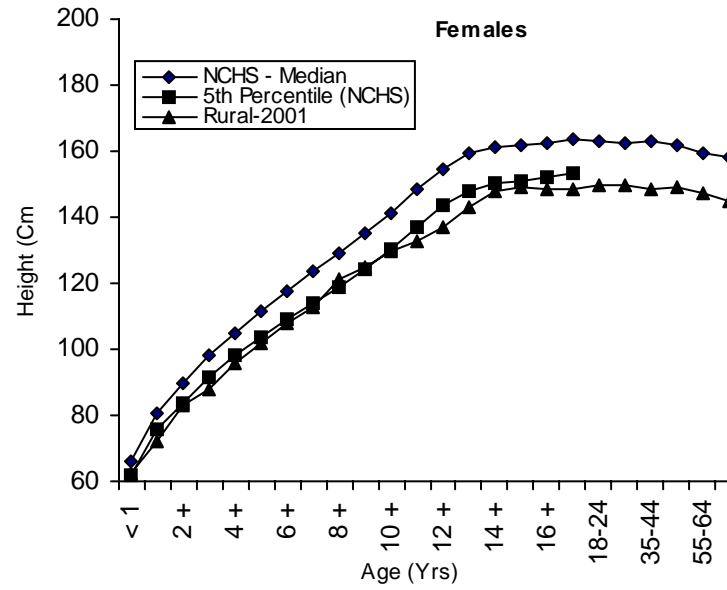
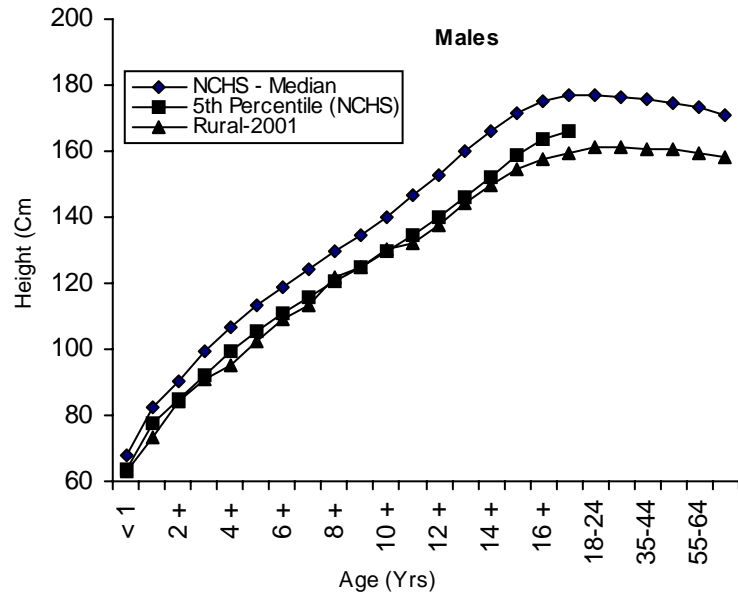


FIG. 22 DISTANCE CHARTS FOR HEIGHTS AND WEIGHTS OF MALES AND FEMALES - WEST BENGAL

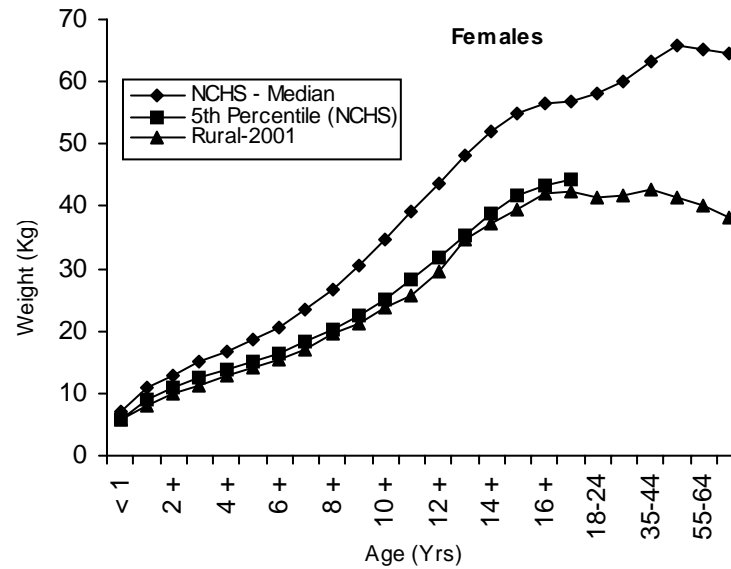
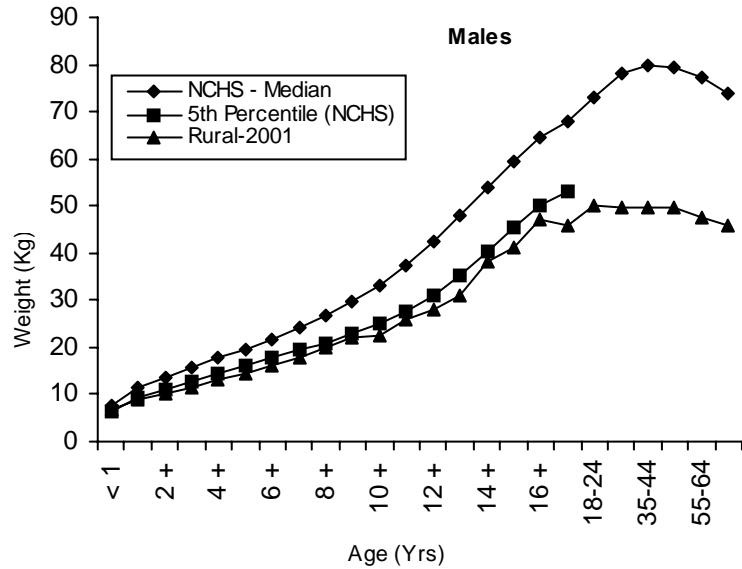
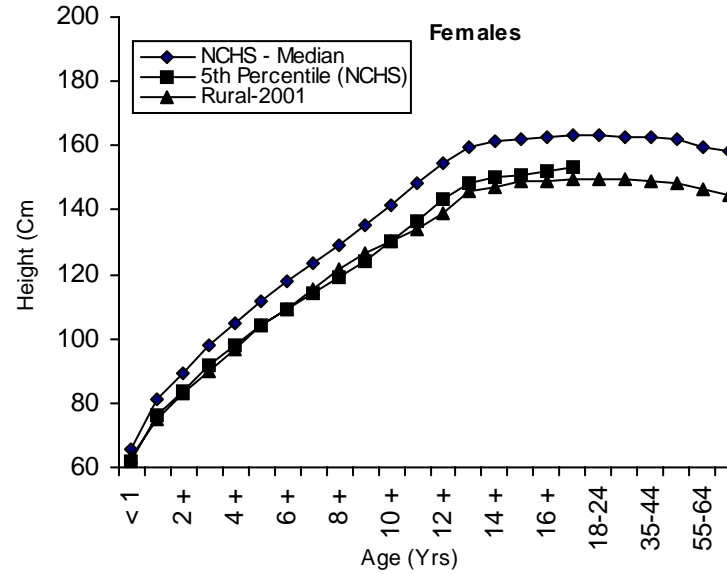
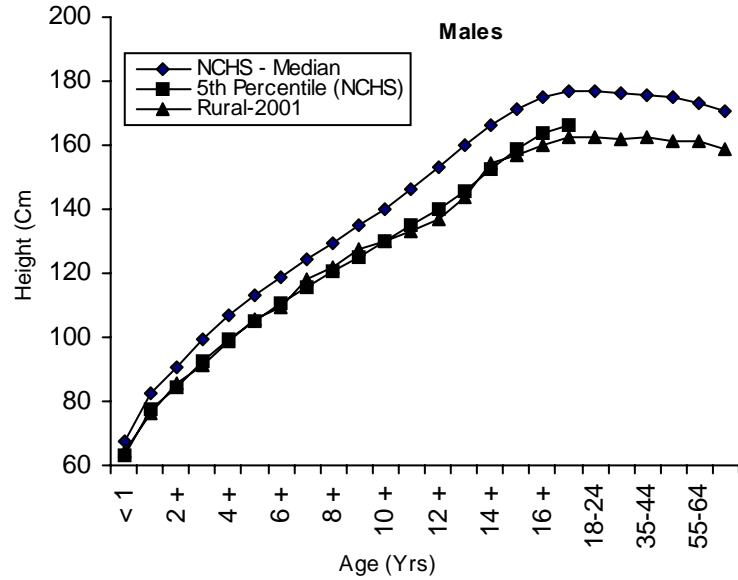
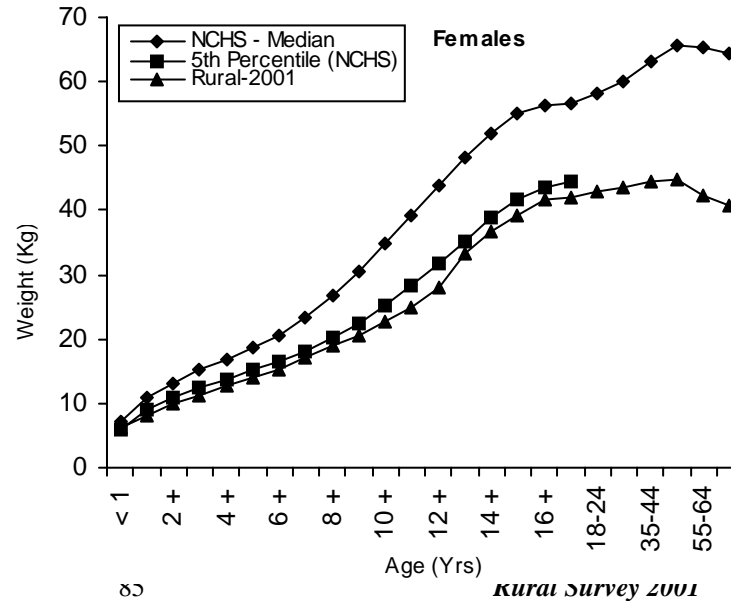
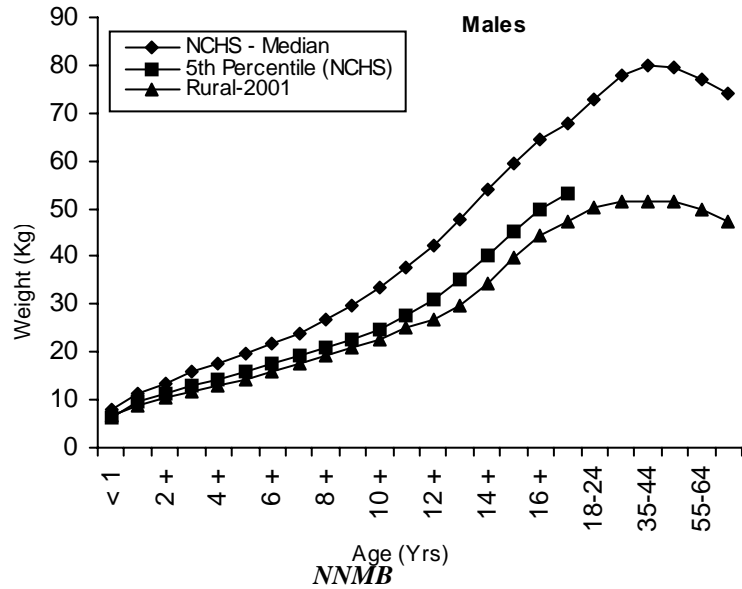
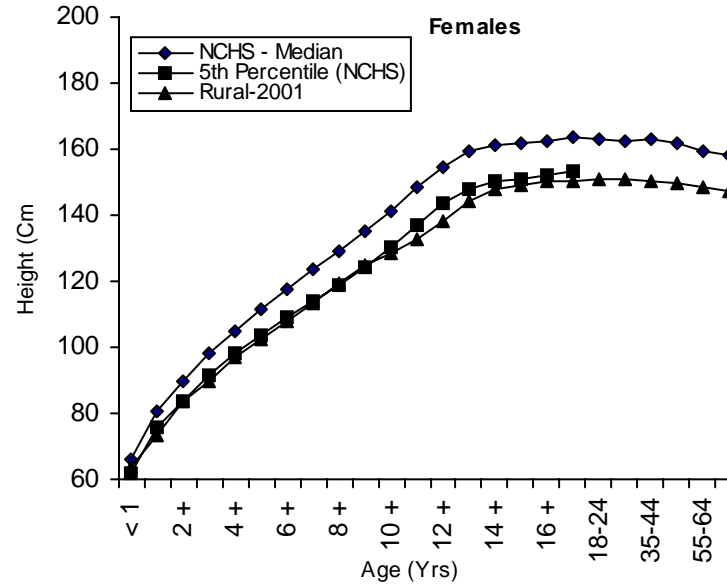
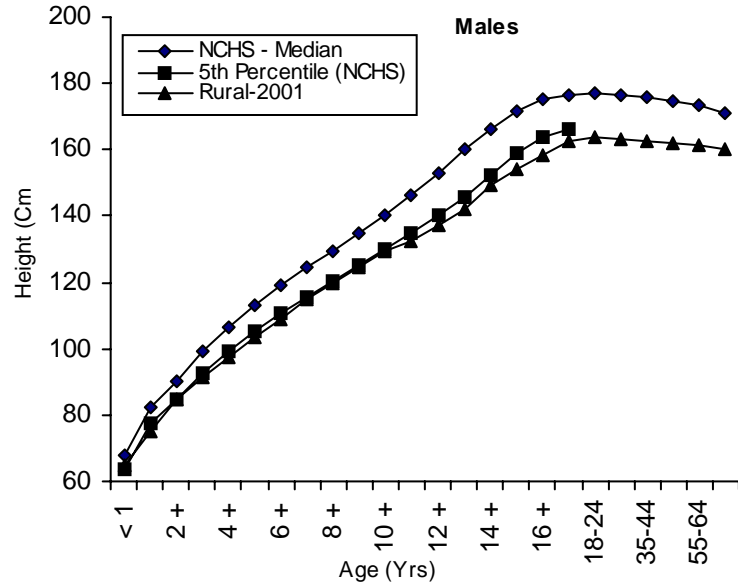


FIG. 23 DISTANCE CHARTS FOR HEIGHTS AND WEIGHTS OF MALES AND FEMALES - ALL STATES



The proportion of severe undernutrition was the highest in the State of Madhya Pradesh (14.7%) followed by Gujarat (8.9%), Maharashtra (7.2%), and Orissa (7.2%), with least prevalence of 1.9% in Kerala. The prevalence of undernutrition (<75% of weight for age) was marginally higher in the age group 3-5 years (48.6%) than the 1-3 year age group (46.7%). No sex differentials were observed in the nutritional status of preschool children.

4.3.3.1.2 IAP Classification

The prevalence of grade III & IV undernutrition among 6-59 months children was about 5.1%. It ranged from 1% in the State of Kerala, through 2-3% in Tamil Nadu, Karnataka and Andhra Pradesh, to a high 12.1% in Madhya Pradesh. The proportion of normal children tended to decrease with increase in age from 52.7% in 6-12 months to 34.9% in 48-60 month age group (Table 55).

Table 55 : Distribution (%) of 6-60 Months Children according to IAP Classification

State	Age (Months)	n	Nutrition Grades				
			Normal	Grade I	Grade II	Grade III	Grade IV
Kerala	6-12	58	79.3	17.2	1.7	1.7	0.0
	12-24	123	54.5	33.3	10.6	1.6	0.0
	24-36	88	65.9	21.6	10.2	1.1	1.1
	36-48	108	59.3	30.6	10.2	.0	0.0
	48-60	56	55.4	35.7	8.9	.0	0.0
	Pooled	433	61.4	28.4	9.0	.9	0.2
Tamilnadu	6-12	173	61.3	26.6	9.8	2.3	0.0
	12-24	301	39.2	36.2	19.9	3.3	1.3
	24-36	270	46.7	36.3	15.6	1.5	0.0
	36-48	251	43.0	41.0	13.9	2.0	0.0
	48-60	219	33.3	43.4	21.0	2.3	0.0
	Pooled	1214	43.7	37.1	16.5	2.3	0.3
Karnataka	6-12	106	58.5	31.1	8.5	.9	0.9
	12-24	192	35.4	41.7	20.3	2.6	0.0
	24-36	200	36.5	40.5	21.0	1.5	0.5
	36-48	199	33.7	40.7	21.6	3.5	0.5
	48-60	159	35.8	43.4	18.9	1.9	0.0
	Pooled	856	38.2	40.2	19.0	2.2	0.4

Table 55 : Distribution (%) of 6-60 Months Children according to IAP Classification (contd...)

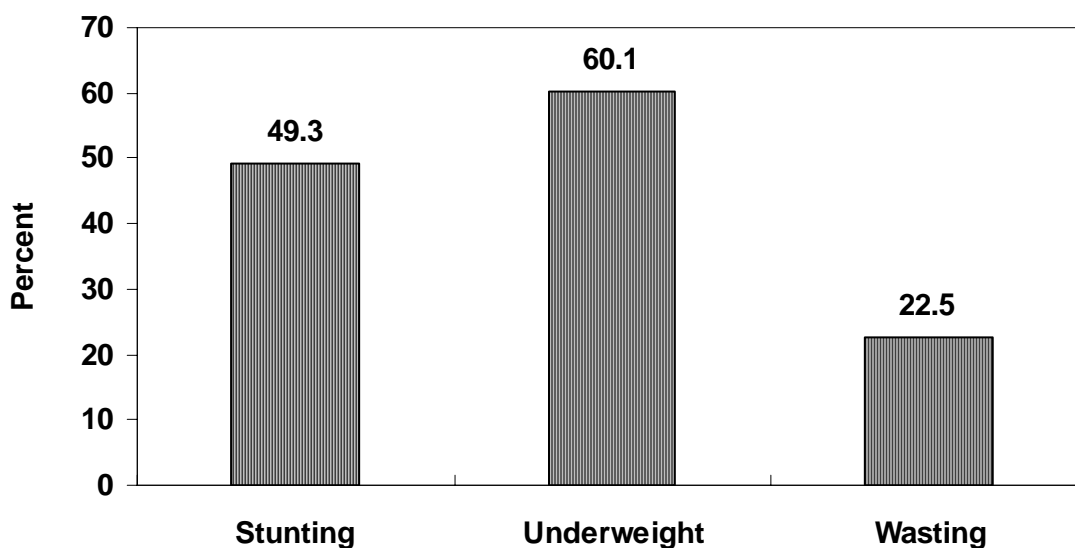
State	Age (Months)	n	Nutrition Grades				
			Normal	Grade I	Grade II	Grade III	Grade IV
Andhra Pradesh	6-12	144	57.6	28.5	10.4	3.5	0.0
	12-24	206	48.1	30.6	17.5	3.4	0.5
	24-36	235	43.0	38.3	16.2	1.3	1.3
	36-48	232	42.7	36.2	17.7	2.6	0.9
	48-60	164	43.9	39.6	15.2	1.2	0.0
	Pooled	981	46.3	35.0	15.8	2.3	0.6
Maharashtra	6-12	104	51.0	30.8	11.5	6.7	0.0
	12-24	184	32.1	40.8	22.3	3.8	1.1
	24-36	197	33.0	40.1	22.8	4.1	0.0
	36-48	196	26.0	43.4	23.0	6.1	1.5
	48-60	170	38.2	35.9	21.8	4.1	0.0
	Pooled	851	34.4	39.0	21.2	4.8	0.6
Gujarat	6-12	116	32.8	25.0	30.2	10.3	1.7
	12-24	196	26.5	39.8	21.4	10.7	1.5
	24-36	179	34.1	42.5	15.1	5.6	2.8
	36-48	208	36.5	37.0	21.6	3.8	1.0
	48-60	135	32.6	41.5	19.3	6.7	0.0
	Pooled	834	32.5	37.9	21.0	7.2	1.4
Madhya Pradesh	6-12	115	42.6	27.0	14.8	14.8	0.9
	12-24	198	19.2	37.9	32.3	8.6	2.0
	24-36	162	19.8	38.9	29.6	11.1	0.6
	36-48	216	30.6	32.9	23.1	11.1	2.3
	48-60	168	21.4	36.3	32.1	7.1	3.0
	Pooled	859	25.7	35.0	27.1	10.2	1.9
Orissa	6-12	129	51.9	21.7	20.2	6.2	0.0
	12-24	202	26.7	39.1	26.2	7.4	0.5
	24-36	165	33.9	36.4	24.8	4.8	0.0
	36-48	214	38.8	37.4	20.6	3.3	0.0
	48-60	193	32.6	45.6	20.2	1.6	0.0
	Pooled	903	35.8	37.1	22.5	4.5	0.1
West Bengal	6-12	83	45.8	30.1	21.7	1.2	1.2
	12-24	153	36.6	30.7	23.5	7.2	2.0
	24-36	157	39.5	35.7	20.4	4.5	0.0
	36-48	177	33.3	40.7	21.5	3.4	1.1
	48-60	173	34.7	38.7	22.0	4.6	0.0
	Pooled	743	37.0	35.9	21.8	4.4	0.8

Age (Months)	n	Nutrition grades				
		Normal	Grade I	Grade II	Grade III	Grade IV
6-12	1028	52.7	26.8	14.6	5.4	0.5
12-24	1755	34.8	36.9	21.9	5.4	1.0
24-36	1653	38.4	37.6	19.6	3.8	0.7
36-48	1801	37.4	38.1	19.5	4.2	0.8
48-60	1437	34.9	40.5	20.9	3.4	0.3
Pooled	7674	38.6	36.6	19.7	4.4	0.7

4.3.3.1.3 SD classification

The distribution of 1-5 year children according to weight for age (underweight), height for age (stunting) and weight for height (wasting) by SD classification using NCHS standards, is presented in **Fig. 24 & Tables 56-58**.

Fig.24 Distribution (%) of Pre-school children according to SD Classification



Weight for Age

In general, the proportion of children with underweight ($< \text{Median} - 2 \text{SD}$) was about 60%, while that of severe underweight ($< \text{Median} - 3\text{SD}$) was 21%. The proportion of children with underweight was the lowest in the State of Kerala (40.2%), followed by Tamil Nadu and Andhra Pradesh (53% each), Karnataka, West Bengal, Gujarat, Maharashtra and Orissa (60-66%). It was higher (74.2%) in Madhya Pradesh (**Table 56**).

Though the overall prevalence of underweight between sexes was comparable (boys:59.7%, girls:60.5), the proportion of severe grade of underweight was observed to be marginally higher among the girls (boys: 19.9%, girls:22.2%).

Table 56 : Distribution (%) of 1-5 years Children according Weight for Age - Standard Deviation (SD) Classification

State	Sex	n	Weight t for Age*				
			< Median -3SD	-3SD to -2SD	-2SD to -1SD	-1SD to Median	>= Median
Kerala	Boys	191	6.8	33.5	38.7	17.3	3.7
	Girls	184	8.7	31.5	33.2	18.5	8.2
	Pooled	375	7.7	32.5	36.0	17.9	5.9
Tamilnadu	Boys	540	14.8	36.5	36.3	10.6	1.9
	Girls	501	15.4	38.5	34.7	10.0	1.4
	Pooled	1041	15.1	37.5	35.5	10.3	1.6
Karnataka	Boys	411	16.8	41.4	32.1	8.8	1.0
	Girls	339	18.9	42.5	28.9	8.3	1.5
	Pooled	750	17.7	41.9	30.7	8.5	1.2
Andhra Pradesh	Boys	439	14.6	39.2	31.9	12.3	2.1
	Girls	398	16.6	35.9	34.9	9.8	2.8
	Pooled	837	15.5	37.6	33.3	11.1	2.4
Maharashtra	Boys	406	21.4	44.8	26.1	6.2	1.5
	Girls	341	25.2	38.4	24.6	8.5	3.2
	Pooled	747	23.2	41.9	25.4	7.2	2.3
Gujarat	Boys	390	23.3	41.8	27.4	6.2	1.3
	Girls	328	22.6	37.5	31.1	7.6	1.2
	Pooled	718	23.0	39.8	29.1	6.8	1.3
Madhya Pradesh	Boys	381	35.4	38.1	19.7	6.3	0.5
	Girls	363	36.1	38.8	18.2	5.0	1.9
	Pooled	744	35.8	38.4	19.0	5.6	1.2
Orissa	Boys	382	22.3	40.6	25.4	10.5	1.3
	Girls	392	27.8	41.1	25.3	5.1	0.8
	Pooled	774	25.1	40.8	25.3	7.8	1.0
West Bengal	Boys	319	19.7	40.8	30.7	7.2	1.6
	Girls	341	25.2	37.0	29.9	6.7	1.2
	Pooled	660	22.6	38.8	30.3	7.0	1.4

Weight t for Age*						
Sex	n	< -3SD	-3SD to -2SD	-2SD to -1SD	-1SD to Median	>= Median
Boys	3459	19.9	39.8	29.6	9.1	1.5
Girls	3187	22.2	38.3	29.0	8.3	2.1
Pooled	6646	21.0	39.1	29.3	8.8	1.8

* : NCHS Standards

Height for Age

The extent of stunting (<Median -2SD) among preschool children was 49.3%, while that of severely stunted (<Median-3SD) was 25.5%. The prevalence of severe stunting ranged from 13-15% in the States of Andhra Pradesh, Maharashtra and Tamil Nadu, 23% in Kerala and West Bengal to a high 48.1% in Madhya Pradesh. No significant sex differentials were observed in the prevalence of stunting (**Table 57**).

Table 57 : Distribution (%) of 1-5 years Children according to Height for Age - Standard Deviation (SD) Classification

State	Sex	n	Height for Age*				
			< Median - 3SD	-3SD to -2SD	-2SD to -1SD	-1SD to Median	>= Median
Kerala	Boys	191	25.1	18.8	30.9	16.8	8.4
	Girls	184	21.2	21.7	29.9	14.7	12.5
	Pooled	375	23.2	20.3	30.4	15.7	10.4
Tamilnadu	Boys	540	15.9	23.1	33.1	18.0	9.8
	Girls	501	14.6	24.8	30.9	20.6	9.2
	Pooled	1041	15.3	23.9	32.1	19.2	9.5
Karnataka	Boys	411	29.4	31.1	24.1	12.2	3.2
	Girls	339	33.0	29.2	22.4	10.3	5.0
	Pooled	750	31.1	30.3	23.3	11.3	4.0
Andhra Pradesh	Boys	439	10.5	21.0	27.6	27.3	13.7
	Girls	398	16.3	20.1	27.6	22.6	13.3
	Pooled	837	13.3	20.5	27.6	25.1	13.5
Maharashtra	Boys	406	13.3	23.2	25.6	25.1	12.8
	Girls	341	14.1	25.8	24.6	20.8	14.7
	Pooled	747	13.7	24.4	25.2	23.2	13.7
Gujarat	Boys	390	30.8	23.6	23.8	14.1	7.7
	Girls	328	31.7	20.1	24.7	14.6	8.8
	Pooled	718	31.2	22.0	24.2	14.3	8.2
Madhya Pradesh	Boys	381	47.5	24.7	17.1	6.8	3.9
	Girls	363	48.8	22.3	14.6	9.1	5.2
	Pooled	744	48.1	23.5	15.9	7.9	4.6
Orissa	Boys	382	34.8	24.3	18.6	13.6	8.6
	Girls	392	33.7	25.0	26.3	11.2	3.8
	Pooled	774	34.2	24.7	22.5	12.4	6.2
West Bengal	Boys	319	22.9	20.4	28.5	17.9	10.3
	Girls	341	23.8	25.5	20.8	17.0	12.9
	Pooled	660	23.3	23.0	24.5	17.4	11.7

Sex	n	Height for Age*				
		< Median -3SD	-3SD to -2SD	-2SD to -1SD	-1SD to Median	>= Median
Boys	3459	24.9	23.7	25.5	17.1	8.8
Girls	3187	26.1	23.9	24.7	16.0	9.3
Pooled	6646	25.5	23.8	25.1	16.6	9.0

* : NCHS Standards

Weight for Height

About 23% of preschool children were wasted (<Median-2SD). The prevalence ranged from 8-9% in Kerala and Karnataka, through 16-19% in Madhya Pradesh, Tamil Nadu and Orissa, 25-32% in Gujarat, Andhra Pradesh and West Bengal to a high 41.3% in Maharashtra (**Table 58**). No significant sex differentials were observed in the prevalence of Wasting.

Table 58 : Distribution (%) of 1-5 years Children according to Weight for Height - Standard Deviation (SD) Classification

State	Sex	n	Weight for Height*				
			< Median -3SD	-3SD to -2SD	-2SD to -1SD	-1SD to Median	>= Median
Kerala	Boys	191	0.0	6.3	30.4	44.5	18.8
	Girls	184	2.7	7.1	31.0	37.0	22.3
	Pooled	375	1.3	6.7	30.7	40.8	20.5
Tamilnadu	Boys	540	1.7	17.2	51.1	24.4	5.6
	Girls	501	1.8	17.6	52.7	22.6	5.4
	Pooled	1041	1.7	17.4	51.9	23.5	5.5
Karnataka	Boys	411	0.0	9.5	50.6	31.4	8.5
	Girls	339	0.3	9.1	45.7	32.7	12.1
	Pooled	750	0.1	9.3	48.4	32.0	10.1
Andhra Pradesh	Boys	439	2.7	24.1	47.4	20.7	5.0
	Girls	398	2.5	23.9	46.5	20.9	6.3
	Pooled	837	2.6	24.0	47.0	20.8	5.6
Maharashtra	Boys	406	5.7	40.6	40.4	11.3	2.0
	Girls	341	3.8	31.7	47.2	12.9	4.4
	Pooled	747	4.8	36.5	43.5	12.0	3.1
Gujarat	Boys	390	7.4	19.2	39.7	21.8	11.8
	Girls	328	7.0	16.8	35.7	26.2	14.3
	Pooled	718	7.2	18.1	37.9	23.8	13.0
Madhya Pradesh	Boys	381	3.7	14.7	44.1	29.9	7.6
	Girls	363	4.4	9.9	47.9	27.3	10.5
	Pooled	744	4.0	12.4	46.0	28.6	9.0
Orissa	Boys	382	2.6	14.9	42.9	28.0	11.5
	Girls	392	2.0	18.9	43.4	26.0	9.7
	Pooled	774	2.3	16.9	43.2	27.0	10.6
West Bengal	Boys	319	1.9	27.3	42.3	22.3	6.3
	Girls	341	5.3	29.3	37.5	22.0	5.9
	Pooled	660	3.6	28.3	39.8	22.1	6.1

Sex	n	Weight for Height*				
		< Median -3SD	-3SD to -2SD	-2SD to -1SD	-1SD to Median	>= Median
Boys	3459	3.0	19.9	44.4	24.9	7.8
Girls	3187	3.2	18.8	44.3	24.5	9.2
Pooled	6646	3.1	19.4	44.3	24.7	8.5

* : NCHS Standards

4.3.3.1.4 School-age Children and Adolescents

The prevalence of undernutrition tended to increase from about 63% among 6-9 year age group to 78% in 10-13 years and then decreased to 66% in 14-17 year age group of children (**Table 59**).

Though no significant sex differences in the prevalence of undernutrition were observed in 6-9 and 10-13 year age groups, a relatively higher proportion of boys (73%) in 14-17 year age group were found to be undernourished as compared to their female counterparts (60.4%).

Table 59 : Distribution (%) of School Age Children and Adolescents according to Nutritional Status : (Weight for Age)

Age group (Yrs.)	Sex	n	Nutrition Grades*			
			Normal	Mild	Moderate	Severe
6-9	Boys	2705	5.4	31.8	55.2	7.6
	Girls	2748	5.4	32.1	52.8	9.6
	Pooled	5453	5.4	31.9	54.0	8.6
10-13	Boys	2187	4.0	17.3	50.8	27.9
	Girls	2339	3.8	19.1	45.0	32.1
	Pooled	4526	3.9	18.2	47.8	30.1
14-17	Boys	1075	3.0	24.0	44.0	29.0
	Girls	1345	5.7	33.9	49.5	10.9
	Pooled	2420	4.5	29.5	47.1	18.9

* : NCHS Standards

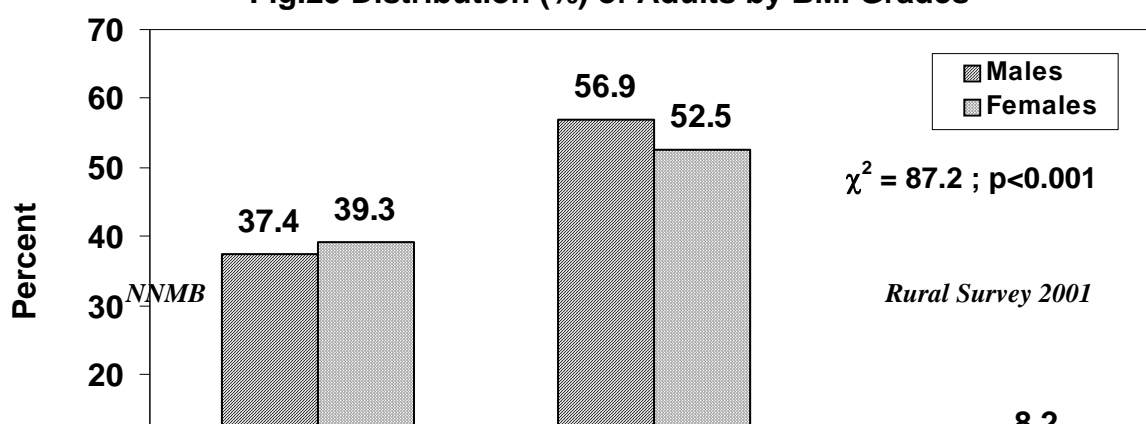
4.3.3.1.5 Adults

The distribution of adult men and women of different States according to their BMI grades is given in **Fig.25 & Tables 60 & 61**.

At the aggregate level, about 37% of the males and 39% of the females had chronic energy deficiency (CED: <18.5), while 56.9% of the males and 52.5% of females had normal BMI. The prevalence of overweight was marginally higher among females (8.2%) than males (5.7%) (**Fig. 25**). The prevalence of CED among males was relatively higher in the states of Madhya Pradesh, Maharashtra, West Bengal (40-43%) followed by Orissa, Andhra Pradesh, Gujarat, Karnataka, Tamil Nadu (35-39%) and Kerala (22.5%).

In the case of females, the prevalence ranged from a high 42-46% in the States of Orissa, West Bengal, Maharashtra, Madhya Pradesh, Andhra Pradesh, Karnataka, through 33-40% in Tamil Nadu and Gujarat to 18.7% in Kerala. The percent prevalence of overweight/obesity among males and females was the highest in the state of Kerala (males:14%, females:23.6%) and the lowest in the State of Madhya Pradesh and Orissa (males: 2%, females:4%).

Fig.25 Distribution (%) of Adults by BMI Grades



(<18.5)

(18.5 - 25)

(>=25)

Table 60 : Distribution (%) of Adult (>= 18 years) Males according to BMI Classification

State	n	BMI Grades*						
		< 16 CED III	16-17 CED II	17-18.5 CED I	18.5-20 Low Wt. Normal	20-25 Normal	25-30 Obese I	>= 30 Obese II
Kerala	902	3.4	4.3	14.7	16.5	47.0	12.7	1.2
Tamilnadu	1178	6.5	9.7	19.3	21.9	35.7	6.5	0.5
Karnataka	1506	5.3	8.3	22.6	22.1	34.5	6.8	0.3
Andhra Pradesh	1186	5.2	8.9	23.3	21.3	34.1	6.5	0.7
Maharashtra	1097	6.7	10.5	24.0	22.5	31.2	5.2	0.0
Gujarat	983	6.4	10.3	20.4	23.4	32.7	6.6	0.2
Madhya Pradesh	1378	6.7	10.5	25.6	29.0	25.8	1.9	0.4
Orissa	1546	5.1	7.7	25.8	30.5	28.6	2.0	0.3
West Bengal	1298	6.7	10.2	23.6	27.9	28.6	2.9	0.1
Pooled	11074	5.8	9.0	22.6	24.4	32.5	5.3	0.4

*BMI : Body Mass Index

Table 61 : Distribution (%) of Adult Females according to BMI Classification

State	n	BMI Grades*						
		< 16 CED III	16-17 CED II	17-18.5 CED I	18.5-20 Low Wt. Normal	20-25 Normal	25-30 Obese I	>= 30 Obese II
Kerala	1913	3.0	4.8	11.0	13.5	44.2	19.8	3.8
Tamilnadu	1951	8.0	10.0	20.2	18.4	34.4	7.3	1.6

Karnataka	2131	8.3	10.3	23.1	19.3	31.1	7.0	0.9
Andhra Pradesh	1943	8.0	11.5	22.5	19.2	31.0	6.6	1.2
Maharashtra	1901	10.6	11.1	23.4	20.6	28.7	5.2	0.4
Gujarat	1776	6.5	6.8	20.0	23.3	35.6	6.6	1.2
Madhya Pradesh	1939	7.6	11.1	23.2	23.8	30.6	3.2	0.4
Orissa	2069	7.3	11.6	27.1	24.3	26.2	3.1	0.2
West Bengal	1695	8.6	11.3	26.0	22.5	26.7	4.2	0.6
Pooled	17318	7.6	9.9	21.9	20.5	32.0	7.0	1.2

*BMI : Body Mass Index

4.3.4 Nutritional Status Vs. Socio-economic Variables

The nutritional status of preschool children (standard deviation classification - weight for age) was assessed for different demographic and socio-economic variables such as religion, community, type of house, type of family, land holding status, monthly per capita income and occupation of head of the household and the results was presented in **Tables 62-75**.

SOCIO-ECONOMIC STATUS AND NUTRITION PROFILE

- Higher severe undernutrition in children living in *Kutcha* houses and children belonged to Scheduled Tribe.
- Undernutrition decreased with increased *percapita* income and increased with increase in family size.
- Nutritional status of preschool children was positively associated with literacy status of Head of household.

4.3.4.1 Religion

The prevalence of severe undernutrition (<-3SD) was relatively more in Hindus (21.6%) compared to children of other religion viz. Muslims (17.3%), Christians (12.2%) (**Table-62**).

Table 62 - Distribution (%) of 1-5 years Children according to Weight for Age - Standard Deviation Classification and Religion

Religion	n	Nutrition Grades (Wt. for Age)
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		< -3SD	-3SD to -2SD	-2SD to -1SD	-1SD to Median	>= Median
Hindu	5961	21.6	39.3	29.0	8.4	1.7
Muslim	456	17.3	38.6	31.6	11.2	1.3
Christian	197	12.2	33.5	35.0	13.7	5.6
Others	32	21.9	43.8	31.3	3.1	0.0
Pooled	6646	21.0	39.1	29.3	8.8	1.8

$$\chi^2 = 43.7 ; p < 0.001$$

4.3.4.2 Community

A higher proportion of children belonging to scheduled tribes (30.4%) was severely undernourished followed by scheduled castes (23.0%), backward class (20.6%) and other castes (16.3%) (Fig.26 & Table 63).

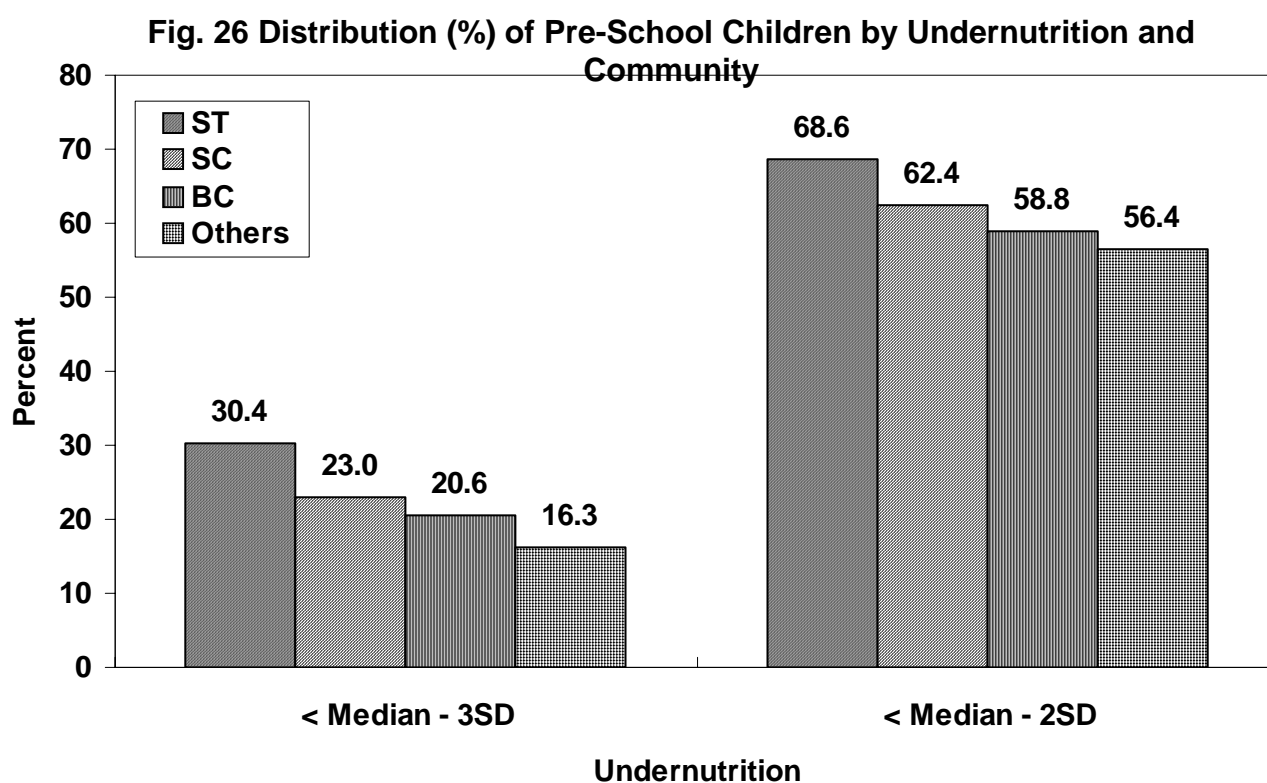


Table 63 - Distribution (%) of 1-5 years Children according to Weight for Age - Standard Deviation Classification and Community

Community	N	Nutrition Grades (Wt. for Age)				
		< -3SD	-3SD to -2SD	-2SD to -1SD	-1SD to Median	>= Median
Scheduled Tribe	792	30.4	38.3	24.4	6.1	0.9
Scheduled Caste	1598	23.0	39.4	28.3	7.8	1.5
Backward Caste	2217	20.6	38.2	30.3	8.8	2.1

Others	2039	16.3	40.1	31.0	10.5	2.1
Pooled	6646	21.0	39.1	29.3	8.8	1.8

$$\chi^2 = 91.3 ; p < 0.001$$

4.3.4.3 Type of Family

The prevalence of overall undernutrition (<-2SD) was more in nuclear families (61.1%) than joint families (57%) (Table-64).

Table 64 -Distribution (%) of 1-5 years Children according to Weight for Age - Standard Deviation Classification and Type of Family

Type of Family	n	Nutrition Grades (Wt. for Age)				
		< -3SD	- 3SD to - 2SD	- 2SD to -1SD	-1SD to Median	>= Median
Nuclear	4328	22.0	39.4	28.7	8.4	1.5
Extended Nuclear	1204	19.9	38.4	30.2	9.5	2.1
Joint	1114	18.2	38.7	30.9	9.3	2.9
Pooled	6646	21.0	39.1	29.3	8.8	1.8

$$\chi^2 = 21.4 ; p < 0.01$$

4.3.4.4 Type of House

As expected, the prevalence of undernutrition was more in families living in *kutchha* houses (24%) followed by *semi-pucca* (20%) and *pucca* houses (15%) (Fig. 27 & Table 65).

Fig. 27 Distribution (%) of Pre-School Children by Undernutrition and Type of House

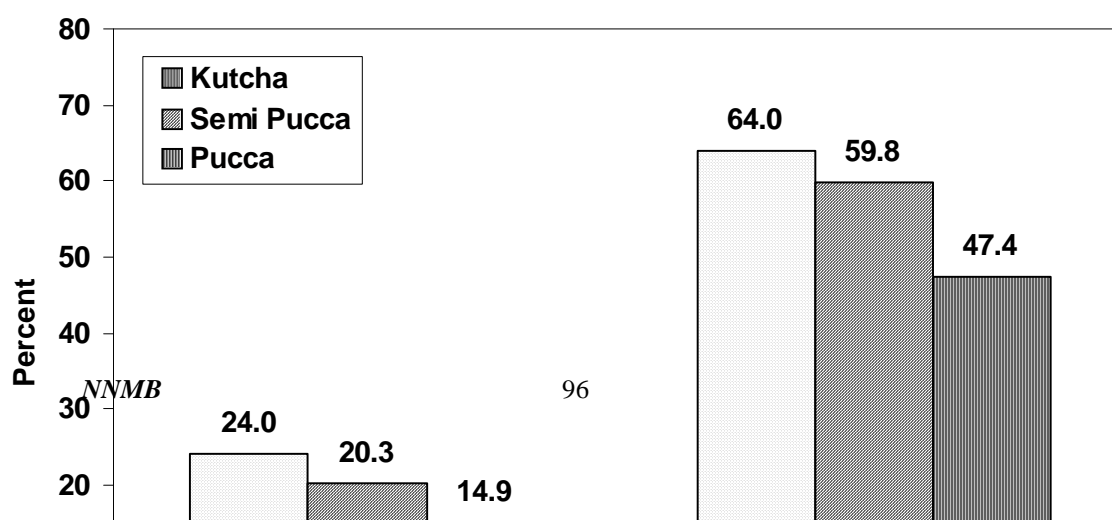


Table 65 -Distribution (%) of 1-5 years Children according to Weight for Age - Standard Deviation Classification and Type of House

Type of house	n	Nutrition Grades (Wt. for Age)				
		< -3SD	- 3SD to - 2SD	- 2SD to - 1SD	- 1SD to Median	>= Median
Kutchha	2105	24.0	40.0	26.5	7.9	1.6
Semi Pucca	3999	20.3	39.5	29.8	8.6	1.8
Pucca	542	14.9	32.5	36.9	13.1	2.6
Pooled	6646	21.0	39.1	29.3	8.8	1.8

$\chi^2 = 58.1 ; p < 0.001$

4.3.4.5 Size of Landholdings

Only marginal differences exist with regard to different grades of undernutrition and size of landholding. As the size of land holding increases, the prevalence of undernutrition decreased marginally (**Fig. 28 & Table-66**).

Fig. 28 Distribution (%) of Pre - School Children by Undernutrition and Land Ownership

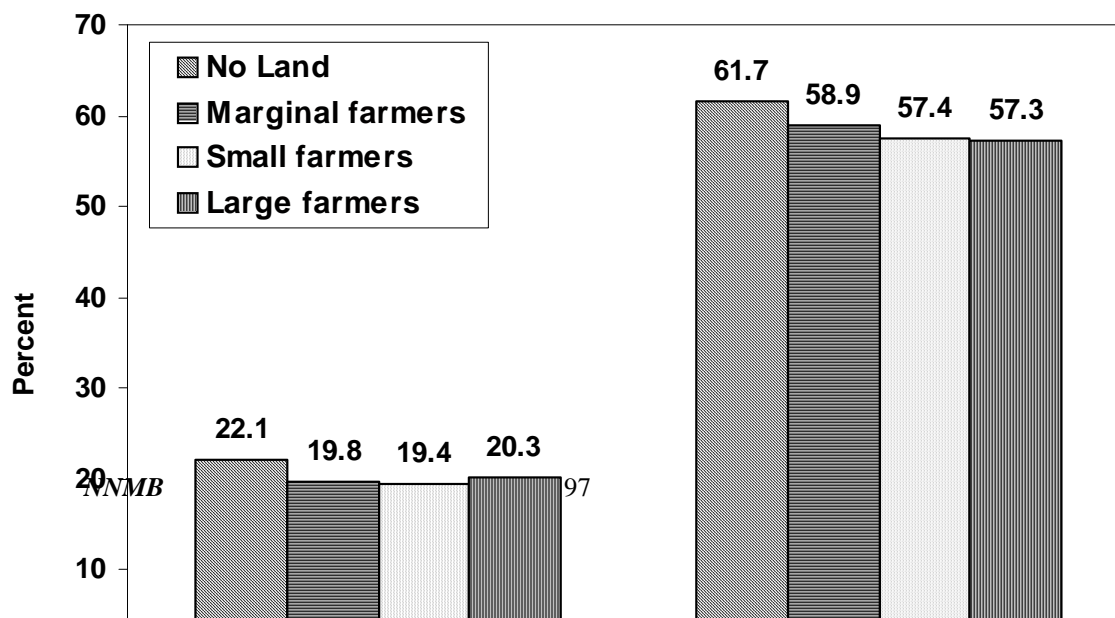


Table 66 - Distribution (%) of 1-5 years Children according to Weight for Age - Standard Deviation Classification and Land Status

Land (Acres)	n	Nutrition Grades (Wt. for Age)				
		< -3SD	- 3SD to - 2SD	- 2SD to -1SD	- 1SD to Median	>= Median
No Land	3382	22.1	39.7	28.9	8.0	1.4
Marginal farmers	2056	19.8	39.1	28.3	10.6	2.2
Small farmers	589	19.4	38.0	32.9	8.0	1.7
Large farmers	619	20.4	37.0	32.0	7.8	2.9
Pooled	6646	21.0	39.1	29.3	8.8	1.8

$\chi^2 = 32.1; p < 0.001$

4.3.4.6 Per Capita Income

In general, the proportion of undernourished were decreasing with increasing income. The prevalence of severe grade undernutrition was 25.2% in the households with per capita income of Rs.<300 was consistently decreased in different income categories and it was only 11.4% with *percapita* income more than Rs. 900/-. (Fig. 29 & Table 67).

Fig. 29 Distribution (%) of Pre-School Children by Undernutrition and Percapita Income (Rs./Month)

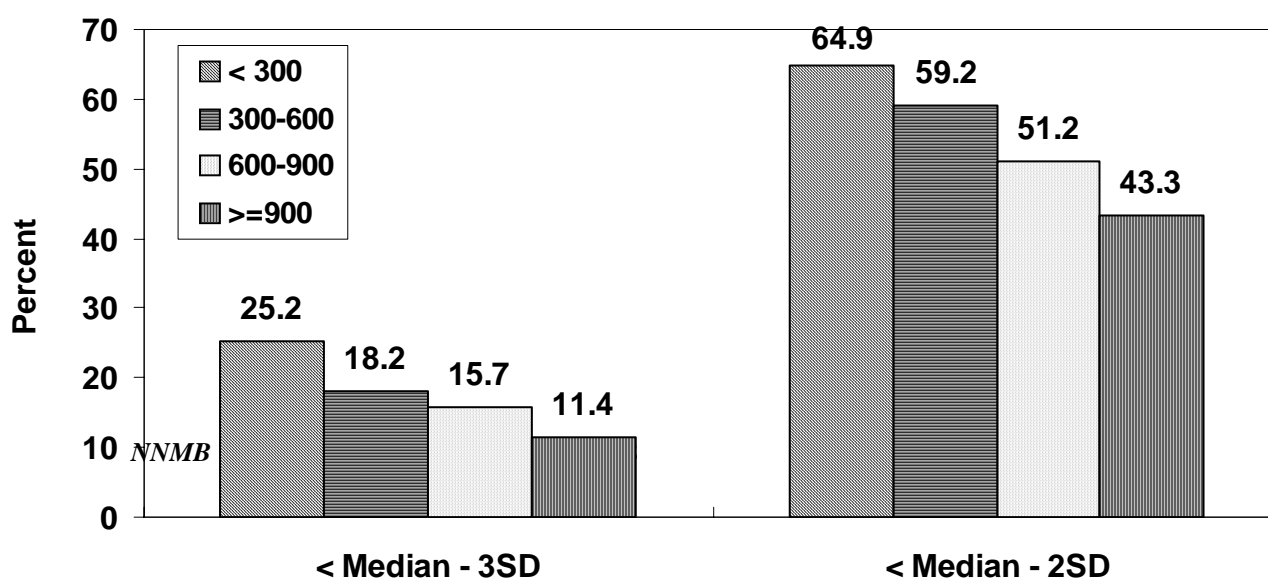


Table 67 - Distribution (%) of 1-5 years Children according to Weight for Age - Standard Deviation Classification and Per Capita Income

Per Capita Income (Rs./Month)	n	Nutrition Grades (Wt. for Age)				
		< -3SD	- 3SD to - 2SD	- 2SD to - 1SD	-1SD to Median	>= Median
< 300	3375	25.2	39.6	26.2	7.6	1.3
300-600	2175	18.2	41.0	31.4	8.0	1.4
600-900	578	15.7	35.5	34.6	11.6	2.6
>=900	518	11.4	31.9	35.1	15.8	5.8
Pooled	6646	21.0	39.1	29.3	8.8	1.8

$$\chi^2 = 199.1 ; p < 0.001$$

4.3.4.7 Major occupation of the head of the household

The overall prevalence of undernutrition was highest among households engaged in tenant cultivation (75%) followed by agriculture labourers and it was lowest in families with business and service as major occupation (**Table 68**).

Table 68 - Distribution (%) of 1-5 years Children according to Weight for Age - Standard Deviation Classification and Occupation of Head of Household

Head Occupation	n	Nutrition Grades (Wt. for Age)				
		< -3SD	- 3SD to - 2SD	- 2SD to - 1SD	- 1SD to Median	>= Median
Landless Agri. Labourer	1376	23.0	40.1	27.8	8.0	1.1
Other Labourer	1615	25.4	38.9	27.9	6.7	1.1
Owner Cultivator	1077	18.0	40.4	29.9	9.4	2.3
Landlord	226	21.2	37.2	31.9	8.4	1.3
Tenant Cultivator	335	35.2	39.4	20.0	4.5	0.9
Artisans	611	17.2	34.4	35.4	10.8	2.3
Service	602	13.6	39.5	33.9	9.8	3.2
Business	496	13.9	41.9	27.0	13.7	3.4

Others	308	17.2	35.7	33.1	11.7	2.3
Pooled	6646	21.0	39.1	29.3	8.8	1.8

$$\chi^2 = 185.6 ; p < 0.001$$

4.3.4.8 Literary status of the head of the household

As the head of the literacy increased, the proportion of undernutrition was decreased consistently. The prevalence of severe grade undernutrition (<-3SD) was more with 25% among illiterate and 23% among who can read and write, and it was only 13% in the HHs where the literacy level is higher (college) (Fig. 30 & Table-69).

Fig. 30 Distribution (%) of Pre-School Children by Undernutrition and Literacy Status of Head of Household

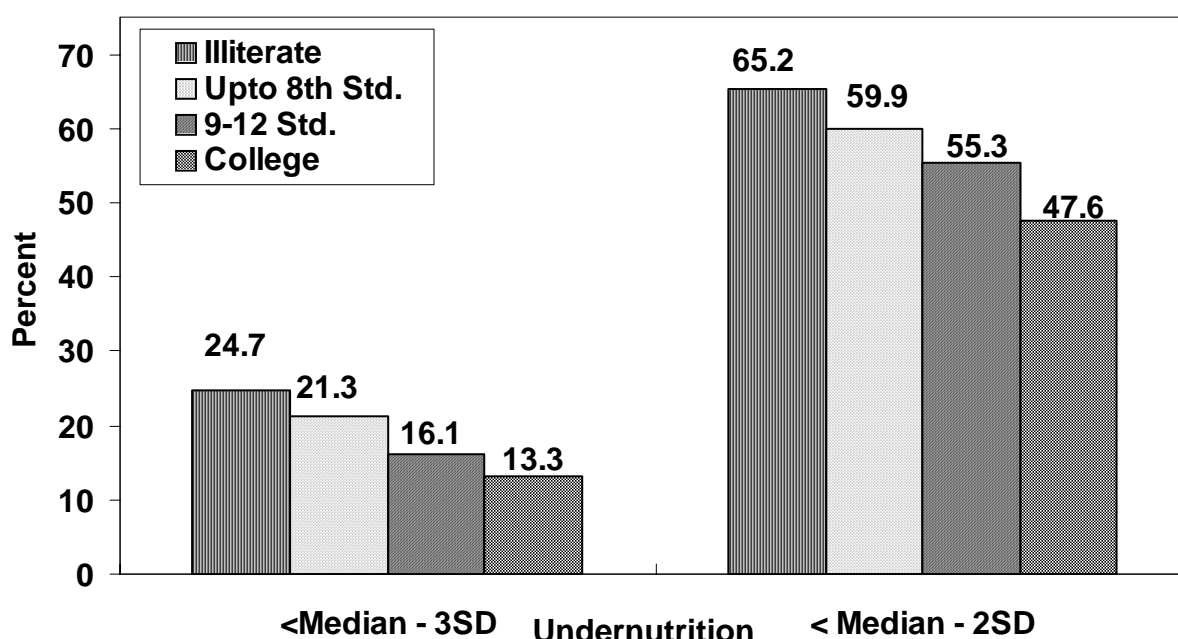


Table 69 - Distribution (%) of 1-5 years Children according to Weight for Age - Standard Deviation Classification and Education of Head of Household

Head Education	n	Nutrition Grades (Wt. for Age)				
		< -3SD	- 3SD to -2SD	- 2SD to -1SD	-1SD to Median	>= Median
Illiterate	2373	24.7	40.5	26.7	6.9	1.3
Read & Write	180	22.8	38.9	25.6	11.7	1.1
1-4 Standard	897	22.1	39.0	27.9	9.1	1.9
5-8 Standard	1510	20.7	38.2	30.7	9.0	1.4
9-12 Standard	1281	16.1	39.2	32.0	10.4	2.3
College	405	13.3	34.3	36.3	11.6	4.4
Pooled	6646	21.0	39.1	29.3	8.8	1.8

$$\chi^2 = 105.5 ; p < 0.001$$

4.3.4.9 Family size

Table 70 provides the association between family size and prevalence of undernutrition. It is evident that the proportion of undernourished children increased with increase in family size. The prevalence of undernutrition ranged from a low of about 19% in HHs with small family size (1.4) to a high 27% in HHs with family size ≥ 10 (**Table-70**).

Table 70 - Distribution (%) of 1-5 years Children according to Weight for Age - Standard Deviation Classification and Family Size

Family Size	n	Nutrition Grades (Wt. for Age)				
		< -3SD	- 3SD to -2SD	- 2SD to -1SD	-1SD to Median	>= Median
1-4	2193	19.4	39.4	30.2	9.2	1.7
5-7	3594	21.7	38.6	29.6	8.4	1.8
8-10	687	21.0	40.9	25.8	9.9	2.5
≥ 10	172	27.3	37.8	27.3	6.4	1.2
Pooled	6646	21.0	39.1	29.3	8.8	1.8

$$\chi^2 = 16.9 ; p > 0.05, \text{NS}$$

3.4.10 Household Electricity

The proportion of overall undernutrition was marginally higher (66%) in the HHs without electricity facility as compared to the HHs with electricity (57%) (**Table-71**).

Table 71 - Distribution (%) of 1-5 years Children according to Weight for Age - Standard Deviation Classification and Electrification

Electrification	n	Nutrition Grades (Wt. for Age)				
		< -3SD	- 3SD to -2SD	- 2SD to -1SD	-1SD to Median	>= Median
Present	4353	19.0	37.9	31.1	9.9	2.1
Absent	2293	24.7	41.4	26.1	6.5	1.3
Pooled	6646	21.0	39.1	29.3	8.8	1.8

$$\chi^2 = 65.7; p < 0.001$$

4.3.4.11 Source of drinking water

Though no definite trends in association of nutritional status of children with type of source of drinking water were observed, the prevalence of undernutrition was found to be marginally higher (63%) in HHs with stream/river/canal as source of drinking water (**Table-72**).

Table 72 - Distribution (%) of 1-5 years Children according to Weight for Age - Standard Deviation Classification and Source of Drinking Water

Source of Drinking water	n	Nutrition Grades (Wt. for Age)				
		< -3SD	- 3SD to - 2SD	- 2SD to -1SD	-1SD to Median	>= Median
Open well	1487	21.0	38.9	27.2	10.4	2.5
Tube well	2212	22.2	39.2	29.4	7.5	1.6
Tap	2791	20.1	39.1	30.2	9.0	1.6
Pond/Tank	72	23.6	30.6	44.4	1.4	0.0
Stream/River/Canal	84	19.0	44.0	26.2	9.5	1.2
Pooled	6646	21.0	39.1	29.3	8.8	1.8

$$\chi^2 = 33.1 ; p < 0.01$$

4.3.4.12 Sanitary Latrine

The prevalence of severe undernutrition among preschool children was relatively less (14.3%) among households which had access to sanitary latrine compared to those HHs without sanitary latrine (22.7%) (**Table 73**).

Table 73 - Distribution (%) of 1-5 years Children according to Weight for Age - Standard Deviation Classification and Presence of Sanitary Latrine

Sanitary Latrine	n	Nutrition Grades (Wt. for Age)				
		< - 3SD	- 3SD to - 2SD	- 2SD to -1SD	-1SD to Median	>= Median
Present	1349	14.3	35.0	35.7	11.9	3.2
Absent	5297	22.7	40.1	27.7	8.0	1.5
Pooled	6646	21.0	39.1	29.3	8.8	1.8

$$\chi^2 = 102.9; p < 0.001$$

4.2.4.13 Type of fuel used for cooking

The prevalence of overall undernutrition was less (38.6%) in HHs with LPG as cooking fuel as compared to households using Firewood/Kerosene or Biogas as cooking fuel (Table-74).

Table 74 - Distribution (%) of 1-5 years Children according to Weight for Age - Standard Deviation Classification and Type of Cooking Fuel

Cooking Fuel Type	n	Nutrition Grades (Wt. for Age)				
		< -3SD	- 3SD to - 2SD	- 2SD to - 1SD	-1SD to Median	>= Median
Fire wood	5855	21.8	39.7	28.4	8.5	1.7
Kerosene	444	18.9	37.6	34.2	8.1	1.1
Bio-gas	26	23.1	42.3	30.8	3.8	0.0
LPG	321	8.7	29.9	40.5	15.6	5.3
Pooled	6646	21.0	39.1	29.3	8.8	1.8

$$\chi^2 = 95.3 ; p < 0.001$$

4.3.5 Prevalence of Morbidity

The prevalence of morbidities such as fever, diarrhoea, dysentery and acute respiratory infections during the preceding 15 days, according to age group and sex are provided in Table 75.

Table 75 : Prevalence (%) of Morbidity according to Age Groups

Morbidity	Age Group				
	Infants	Pre School children	school age children	Adolescents	Adults
	n=1700	n=6646	n=9299	n=5201	n=28393
NAD	96.3	95.3	97.4	98.4	98.6
Fever	2.2	2.7	1.4	0.8	1.0
Diarrhoea	1.2	1.3	0.4	0.3	0.2
Dysentery	0.2	0.1	0.1	0.0	0.1
Acute Resp.Infection	1.0	1.2	0.8	0.5	0.3
Measles	0.1	0.0	0.0	0.0	0.0

4.3.5.1 Infants

About 2% of the infants reportedly had fever, 1.2% had diarrhoea, 1.0% had ARI and 0.2% had dysentery.

4.3.5.2 Preschool Children

About 3% of the preschoolers reportedly had fever, 1.3% had diarrhoea, 1.2% had ARI and 0.1% had dysentery.

4.3.5.3 School Age Children

About 1% of the school children reportedly had fever, 0.8% had ARI, 0.4% had diarrhoea and 0.1% had dysentery.

4.3.5.4 Adolescents

About 1% of the adolescents reportedly had fever, 0.5% had ARI, and 0.3% had diarrhoea.

4.3.5.5 Adult males and females

The prevalence of morbidities among adult males and females was observed to be similar. About 1% each reportedly had fever, followed by ARI (0.3%), diarrhoea (0.2%) and dysentery (0.1%).

5. COMMENTS

A total of 715 (out of the target of 720) villages in nine States were surveyed, covering a total of about 14,300 households. During the present survey individual oral questionnaire using 24-hour recall method was carried out in all the 10 households included for dietary assessment, in contrast to the previous method where one-day weighing was carried in 75% of the HHs.

The socio-economic profile of the households surveyed indicated that about 32% belonged to scheduled caste/scheduled tribe communities and about 30% were living in *kutcha* houses. The family size on an average was 5, with about 45% of the households having 4 or fewer members. It is interesting to note that percentage families having children of 4th or more birth order was the lowest in Kerala (7%) and highest in Madhya Pradesh (24%). On the average, in all the States, about 16% of the families had children more than 4th birth order. Andhra Pradesh, despite being socio-economically comparable with other States, had less than 10% of HHs with

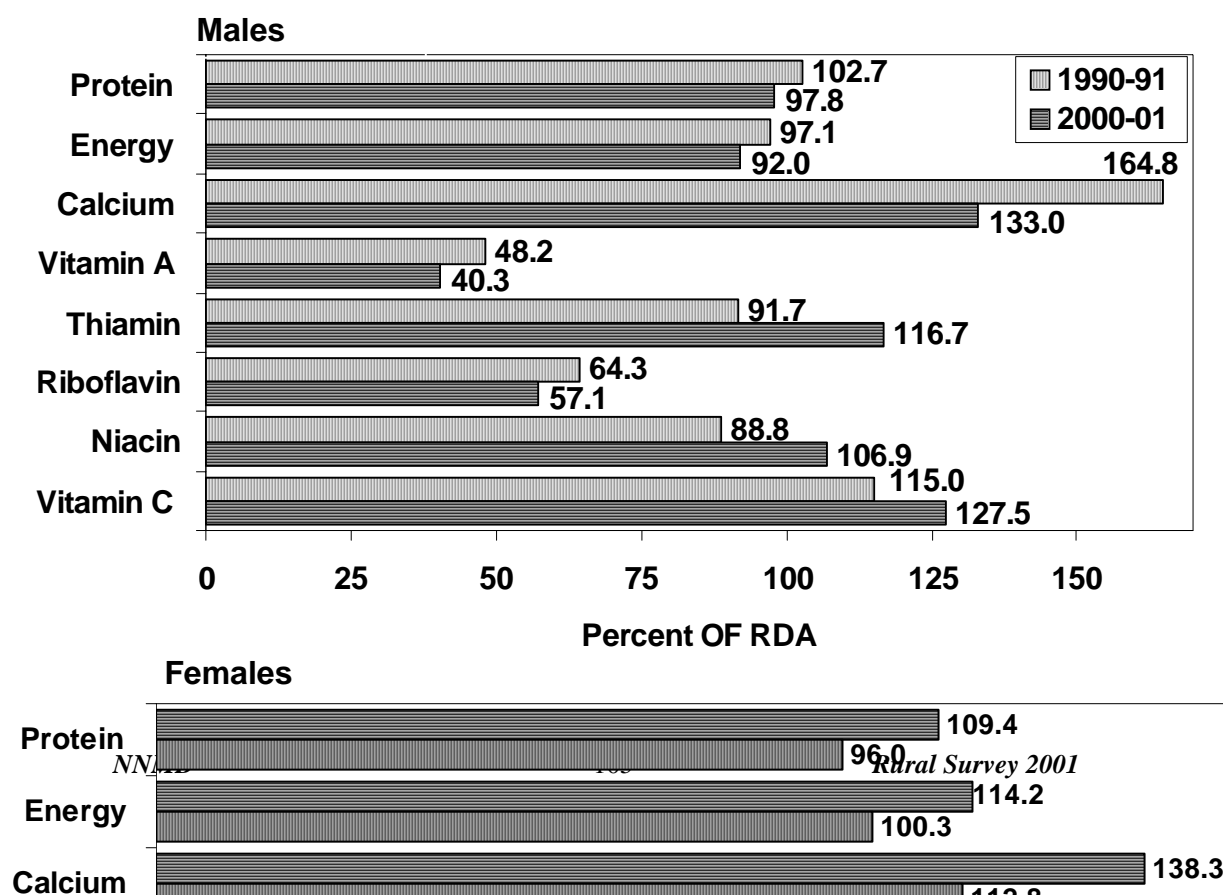
children of 4th birth order and above. Literacy status among adults indicates that for almost every one male illiterate, there were two female illiterates. About 45% of the households did not possess any land, while another 31% were marginal farmers.

As in the earlier surveys, the results indicate that by and large, the diets are cereals and millets based with woefully inadequate consumption of green leafy vegetables, milk and milk products, fruits and fats and oils. The percentage of individuals consuming inadequate amounts of micronutrients was thus very high.

The prevalence of severe undernutrition (<Median - 3SD) was relatively more in Scheduled Tribes (30%) and children living in kutcha houses (24%). The proportion of undernourished decreased with increased per capita income and decrease in family size. The nutritional status of preschool children tended to improve with increase in literacy status of head of household.

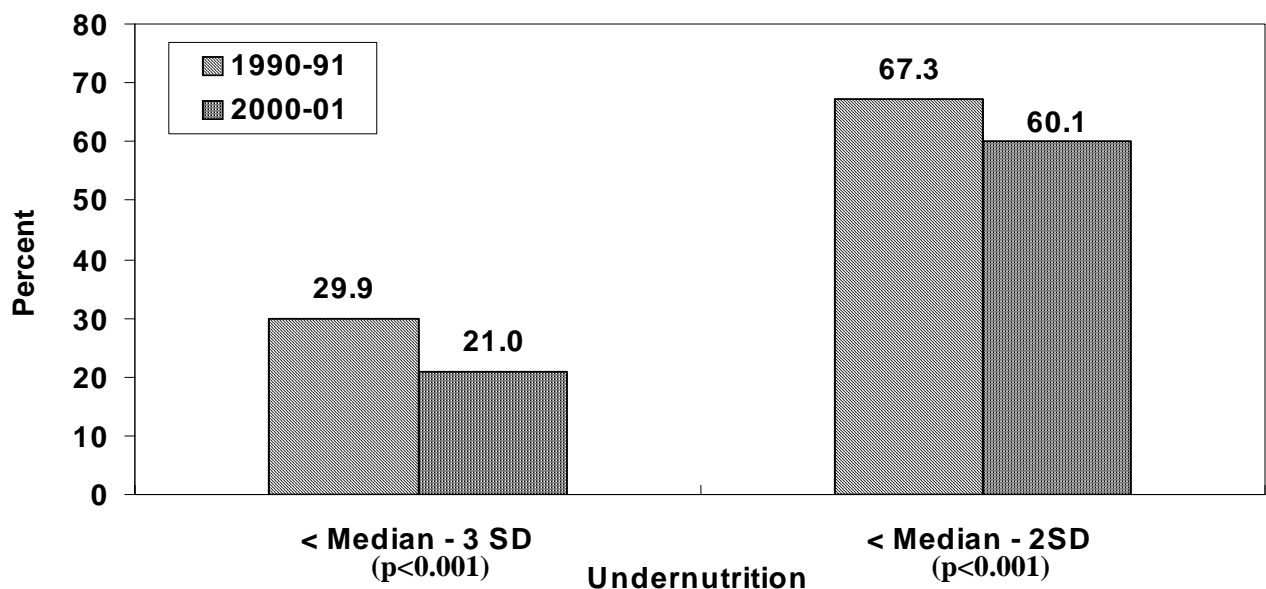
A comparison of nutrient consumption among adult males and females with a similar survey (using NSSO sampling frame) in 1990-91 indicates that the intakes are essentially similar. At both the points, the intakes of vitamin A and riboflavin are much below the RDA (**Fig. 31**).

Fig. 31 Mean Nutrient Intake (% RDA) among Adults (Sedentary) by Period of Survey



Comparison of weight for age (SD classification) indicates that there has been a significant ($P < 0.001$) reduction in the prevalence of severe grade ($< -3SD$) undernutrition from about 30% in 1990-91 to 21% in the present survey (**Fig. 32**).

Fig. 32 Distribution (%) of Children by Undernutrition and Period of Survey



In general, there was a shift in the distribution of body weights for better during the present survey. Similar results were observed with respect to the nutritional status of adults using Body Mass Index. The prevalence of chronic energy deficiency ($BMI < 18.5$) declined from about 46% in 1990-91` to about 37% in adult

males (**Fig. 33.1 & 33.2**). In the case of adult females, it declined from 46% to about 39% during the present survey. There is a marginal increase in the prevalence of overweight, in the case of both adult males and females.

Fig. 33.1 Distribution of Adult Males by BMI* Grades and Period of Survey

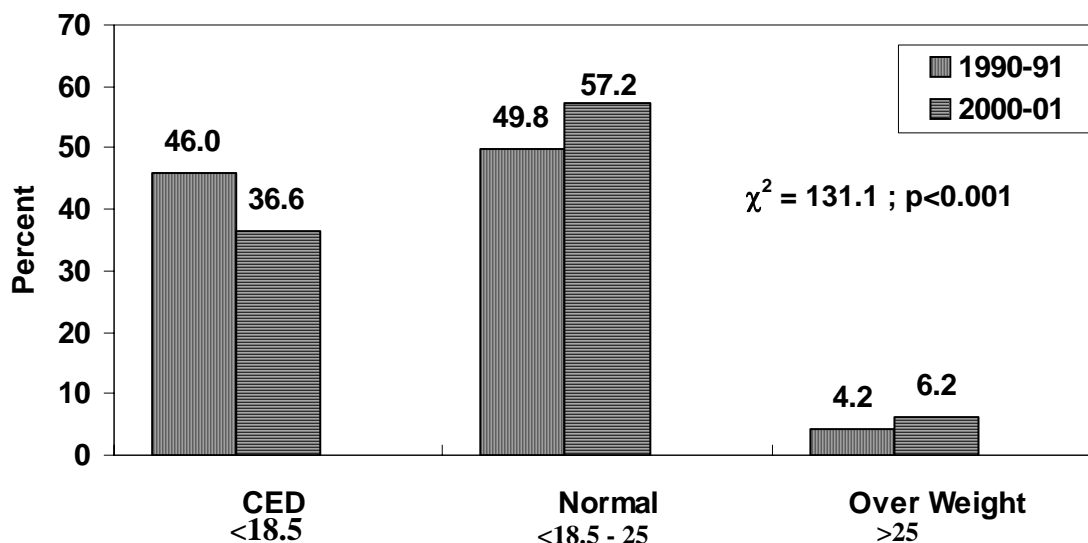
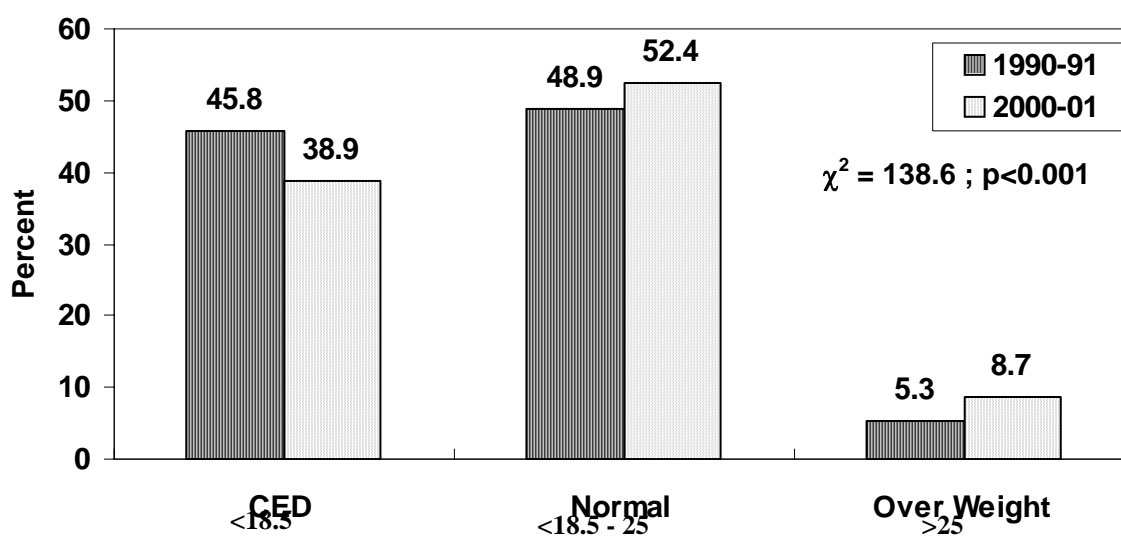


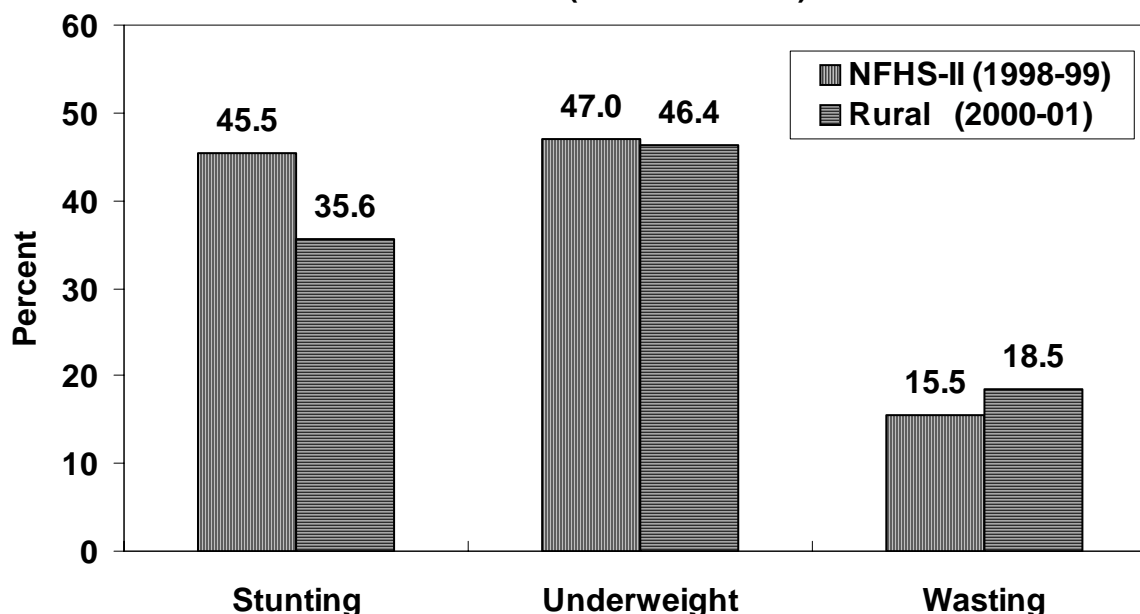
Fig. 33.2 Distribution of Adult Females by BMI* Grades and Period of Survey



*** Body Mass Index**

NFHS-II has been considered to be a large national database on child nutrition. A comparison of the results of the present survey reveals that while the extent of undernutrition in children of 36 months of age was comparable, the extent of stunting was higher in NFHS-II. Consequently, the prevalence of wasting was lower in NFHS-II survey (**Fig. 34**). During the present survey, prevalence of morbidities during the previous 15 days was also assessed. The results indicated that 1.2 -1.3% of the preschool children had diarrhoea or ARI during the previous 15 days.

Fig. 34 Distribution (%) of Under 3 Years Children According to SD Classification (<Median - 2SD)



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ANNEXURES

Table AN-1 :
Distribution (%) of 1-3 Year Children according to Intake of Foods as % of RDA

Foods	% RDA	State									
		Kerala	Tamil nadu	Karna taka	Andhra Pradesh	Mahara-shtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
		N=197	N=408	N=286	N=338	N=332	N=288	N=292	N=261	N=271	N=2673
Cereals	<50	35.5	31.1	15.0	26.0	31.9	30.2	14.0	16.5	24.0	25.1
	50-70	29.9	22.3	25.2	11.5	26.2	30.2	13.7	19.9	16.6	21.4
	>=70	34.5	46.6	59.8	62.4	41.9	39.6	72.3	63.6	59.4	53.5
Pulses	<50	84.3	69.9	75.2	75.7	63.9	76.0	51.0	80.1	95.2	73.7
	50-70	5.6	14.7	12.6	10.7	11.1	11.5	18.8	10.7	3.3	11.4
	>=70	10.2	15.4	12.2	13.6	25.0	12.5	30.1	9.2	1.5	14.9
Leafy Veg	<50	98.5	94.9	94.4	97.3	95.5	91.7	84.2	71.3	79.3	90.1
	50-70	.5	1.2	1.7	.6	1.5	3.5	2.7	5.7	.7	2.0
	>=70	1.0	3.9	3.8	2.1	3.0	4.9	13.0	23.0	19.9	7.9
Other Veg	<50	56.9	46.3	78.3	69.2	74.7	68.1	54.5	46.0	57.2	61.2
	50-70	5.6	5.9	2.4	2.7	1.2	3.8	1.0	3.1	2.6	3.1
	>=70	37.6	47.8	19.2	28.1	24.1	28.1	44.5	51.0	40.2	35.6
Roots & Tubers	<50	36.0	46.1	36.7	43.8	63.9	33.3	41.8	15.7	15.1	38.3
	50-70	10.7	10.8	5.6	12.1	5.7	2.1	4.8	.8	1.1	6.2
	>=70	53.3	43.1	57.7	44.1	30.4	64.6	53.4	83.5	83.8	55.5
Milk & Milk Prod	<50	81.2	67.6	83.2	87.6	77.4	84.7	96.9	96.6	85.6	83.7
	50-70	15.7	9.3	7.0	6.2	6.6	8.7	1.0	1.1	5.9	6.7
	>=70	3.0	23.0	9.8	6.2	16.0	6.6	2.1	2.3	8.5	9.6
Fats & Oils	<50	93.9	86.8	85.3	74.6	63.3	94.1	75.0	80.5	88.2	81.7
	50-70	1.5	5.9	7.3	12.1	14.2	4.5	9.9	8.4	7.7	8.3
	>=70	4.6	7.4	7.3	13.3	22.6	1.4	15.1	11.1	4.1	10.0
Sugar & Jaggery	<50	74.1	78.4	61.2	88.5	44.0	52.4	78.1	93.9	96.3	73.7
	50-70	20.8	13.2	11.5	5.6	22.9	20.1	11.3	4.2	1.1	12.3
	>=70	5.1	8.3	27.3	5.9	33.1	27.4	10.6	1.9	2.6	14.0

Table AN-2 :
Distribution (%) of 4-6 Year Children according to Intake of Foods as % of RDA

Foods	% RDA	State									
		Kerala	Tamil nadu	Karna taka	Andhra Pradesh	Mahara shtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
		N=159	N=304	N=259	N=269	N=318	N=245	N=323	N=235	N=294	N=2406
Cereals	<50	33.3	13.8	13.1	7.1	17.0	20.8	5.0	6.8	7.8	12.8
	50-70	40.3	33.6	30.1	18.2	23.3	24.1	16.7	23.8	28.2	25.7
	>=70	26.4	52.6	56.8	74.7	59.7	55.1	78.3	69.4	63.9	61.5
Pulses	<50	72.3	44.7	47.1	58.0	45.0	56.7	42.4	69.8	93.2	57.6
	50-70	6.3	19.1	18.9	12.6	17.0	18.4	12.4	10.2	2.4	13.3
	>=70	21.4	36.2	34.0	29.4	38.1	24.9	45.2	20.0	4.4	29.1
Leafy-Veg	<50	95.6	95.7	93.8	93.3	91.8	90.2	85.1	66.8	72.8	87.1
	50-70	1.3	1.6	3.5	2.2	2.5	3.3	1.5	7.2	.3	2.5
	>=70	3.1	2.6	2.7	4.5	5.7	6.5	13.3	26.0	26.9	10.3
Other -Veg	<50	49.1	32.6	71.0	64.3	69.8	55.9	50.5	38.3	56.8	54.6
	50-70	6.9	4.3	4.2	1.5	7.5	5.7	1.5	2.1	2.7	3.9
	>=70	44.0	63.2	24.7	34.2	22.6	38.4	48.0	59.6	40.5	41.5
Roots & Tubers	<50	30.8	54.9	39.0	45.7	61.0	29.8	47.7	13.6	5.4	37.8
	50-70	11.9	11.2	8.5	13.4	9.1	1.6	2.2	.4	.7	6.4
	>=70	57.2	33.9	52.5	40.9	29.9	68.6	50.2	86.0	93.9	55.8
Milk & Milk Prod	<50	76.1	77.6	87.3	86.2	85.2	73.1	95.7	100.0	90.1	86.2
	50-70	10.7	9.2	3.1	8.2	3.1	13.1	1.2	.0	2.7	5.4
	>=70	13.2	13.2	9.7	5.6	11.6	13.9	3.1	.0	7.1	8.4
Fats & Oils	<50	93.1	95.7	87.6	79.6	73.3	95.9	87.0	88.9	93.2	87.8
	50-70	2.5	2.6	7.7	10.8	12.9	3.3	6.5	7.7	4.8	6.8
	>=70	4.4	1.6	4.6	9.7	13.8	.8	6.5	3.4	2.0	5.4
Sugar & Jaggery	<50	84.9	86.8	59.8	94.1	51.9	60.8	88.5	99.1	98.6	80.2
	50-70	13.2	7.2	13.9	2.6	14.2	22.4	6.8	.4	.3	8.7
	>=70	1.9	5.9	26.3	3.3	34.0	16.7	4.6	.4	1.0	11.1

Table AN-3 :
Distribution (%) of 10-12 Year Boys according to Intake of Foods as % of RDA

Foods	% RDA	State									
		Kerala	Tamil nadu	Karna taka	Andhra Pradesh	Mahara shtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
		N=122	N=82	N=141	N=121	N=181	N=117	N=173	N=121	N=169	N=1227
Cereals	<50	38.5	19.5	8.5	4.1	19.3	4.3	9.8	1.7	12.4	13.0
	50-70	42.6	43.9	29.1	16.5	32.6	17.9	18.5	36.4	30.8	29.1
	>=70	18.9	36.6	62.4	79.3	48.1	77.8	71.7	62.0	56.8	57.9
Pulses	<50	60.7	40.2	37.6	56.2	53.0	41.9	48.0	69.4	94.1	57.0
	50-70	18.9	25.6	17.7	12.4	15.5	17.1	12.7	14.9	3.6	14.5
	>=70	20.5	34.1	44.7	31.4	31.5	41.0	39.3	15.7	2.4	28.5
Leafy-Veg	<50	95.9	87.8	83.0	94.2	88.4	89.7	84.4	63.6	65.1	83.0
	50-70	.8	4.9	4.3	1.7	1.7	.9	1.7	4.1	1.2	2.2
	>=70	3.3	7.3	12.8	4.1	9.9	9.4	13.9	32.2	33.7	14.8
Ohter-Veg	<50	57.4	28.0	70.9	73.6	67.4	45.3	52.0	42.1	50.3	55.7
	50-70	9.0	8.5	5.7	2.5	6.6	5.1	5.8	2.5	2.4	5.2
	>=70	33.6	63.4	23.4	24.0	26.0	49.6	42.2	55.4	47.3	39.1
Roots & Tubers	<50	33.6	53.7	41.1	52.9	57.5	24.8	47.4	19.0	5.9	37.1
	50-70	11.5	11.0	15.6	11.6	9.4	.9	4.0	1.7	1.2	7.2
	>=70	54.9	35.4	43.3	35.5	33.1	74.4	48.6	79.3	92.9	55.7
Milk & Milk Prod	<50	84.4	80.5	87.2	83.5	87.8	69.2	96.0	97.5	91.1	87.3
	50-70	10.7	4.9	6.4	5.8	3.9	11.1	1.2	1.7	3.0	5.1
	>=70	4.9	14.6	6.4	10.7	8.3	19.7	2.9	.8	5.9	7.7
Fats & Oils	<50	95.9	97.6	88.7	90.9	80.1	96.6	94.2	98.3	96.4	92.5
	50-70	4.1	1.2	5.7	7.4	11.6	3.4	4.6	1.7	1.8	5.0
	>=70	.0	1.2	5.7	1.7	8.3	.0	1.2	.0	1.8	2.5
Sugar & Jaggery	<50	86.9	96.3	55.3	94.2	48.1	52.1	93.1	98.3	95.3	78.7
	50-70	10.7	1.2	22.7	1.7	14.9	32.5	2.9	.8	2.4	10.0
	>=70	2.5	2.4	22.0	4.1	37.0	15.4	4.0	.8	2.4	11.2

Table AN-4 :

Distribution (%) of 10-12 Year Girls according to Intake of Foods as % of RDA

Foods	% RDA	State									
		Kerala	Tamil nadu	Karna taka	Andhra Pradesh	Mahara shtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
		N=88	N=105	N=152	N=115	N=190	N=131	N=176	N=131	N=130	N=1218
Cereals	<50	29.5	12.4	7.9	1.7	13.7	2.3	2.3	5.3	6.9	8.4
	50-70	47.7	36.2	21.7	10.4	32.1	14.5	22.2	14.5	27.7	24.5
	>=70	22.7	51.4	70.4	87.8	54.2	83.2	75.6	80.2	65.4	67.1
Pulses	<50	62.5	43.8	40.8	55.7	48.4	42.0	46.6	75.6	90.0	55.2
	50-70	21.6	21.0	19.7	12.2	14.2	17.6	14.8	8.4	3.8	14.5
	>=70	15.9	35.2	39.5	32.2	37.4	40.5	38.6	16.0	6.2	30.3
Leafy-Veg	<50	95.5	92.4	86.2	92.2	89.5	85.5	82.4	61.1	63.8	82.8
	50-70	.0	5.7	5.3	2.6	.0	3.1	1.7	5.3	.8	2.6
	>=70	4.5	1.9	8.6	5.2	10.5	11.5	15.9	33.6	35.4	14.6
Other -Veg	<50	52.3	41.9	76.3	70.4	70.5	49.6	55.7	44.3	51.5	58.2
	50-70	8.0	6.7	5.3	1.7	8.9	4.6	2.8	6.9	2.3	5.3
	>=70	39.8	51.4	18.4	27.8	20.5	45.8	41.5	48.9	46.2	36.5
Roots & Tubers	<50	22.7	62.9	39.5	60.0	61.1	30.5	44.3	11.5	5.4	38.7
	50-70	13.6	15.2	13.8	8.7	6.8	2.3	2.3	1.5	1.5	6.8
	>=70	63.6	21.9	46.7	31.3	32.1	67.2	53.4	87.0	93.1	54.5
Milk & Milk Prod	<50	79.5	79.0	86.8	87.8	92.6	67.2	97.2	98.5	90.8	87.7
	50-70	9.1	11.4	3.9	7.0	3.7	12.2	1.7	.8	1.5	5.2
	>=70	11.4	9.5	9.2	5.2	3.7	20.6	1.1	.8	7.7	7.1
Fats & Oils	<50	96.6	95.2	93.4	88.7	77.4	90.1	94.3	99.2	93.8	91.3
	50-70	.0	2.9	2.6	9.6	12.6	7.6	4.5	.8	5.4	5.6
	>=70	3.4	1.9	3.9	1.7	10.0	2.3	1.1	.0	.8	3.1
Sugar & Jaggery	<50	78.4	89.5	53.9	94.8	50.0	58.8	91.5	96.9	93.8	76.8
	50-70	20.5	6.7	17.8	2.6	14.7	28.2	3.4	3.1	3.1	11.0
	>=70	1.1	3.8	28.3	2.6	35.3	13.0	5.1	.0	3.1	12.2

**Table AN-5 :
Distribution (%) of Adult (>=18 Year) Males-Sedentary according to Intake of Foods as % of RDA**

Foods	%	State
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	RDA	Kerala	Tamil nadu	Karna taka	Andhra Pradesh	Mahara shtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
		N=578	N=315	N=548	N=213	N=215	N=264	N=108	N=260	N=270	N=2771
Cereals	<50	10.6	3.5	1.8	5.6	9.3	.8	5.6	1.5	2.2	4.8
	50-70	27.7	12.7	8.9	11.7	25.1	2.7	6.5	10.8	10.7	14.4
	>=70	61.8	83.8	89.2	82.6	65.6	96.6	88.0	87.7	87.0	80.8
Pulses	<50	53.5	23.8	19.5	51.2	38.6	23.1	37.0	35.4	77.8	39.2
	50-70	9.3	11.7	12.4	6.6	14.4	6.8	10.2	10.4	8.5	10.2
	>=70	37.2	64.4	68.1	42.3	47.0	70.1	52.8	54.2	13.7	50.6
Leafy-Veg	<50	92.0	86.0	81.8	92.5	86.5	78.8	75.0	60.0	66.7	81.5
	50-70	.2	1.6	1.6	1.9	.5	.0	1.9	1.2	.0	.9
	>=70	7.8	12.4	16.6	5.6	13.0	21.2	23.1	38.8	33.3	17.6
Other -Veg	<50	44.6	33.3	67.2	62.0	58.6	39.0	35.2	24.2	43.7	47.3
	50-70	7.1	7.3	5.8	1.4	5.6	2.7	6.5	5.4	3.7	5.4
	>=70	48.3	59.4	27.0	36.6	35.8	58.3	58.3	70.4	52.6	47.3
Roots & Tubers	<50	24.2	45.1	32.8	68.5	64.7	19.3	37.0	7.3	5.9	31.5
	50-70	12.5	13.7	12.4	8.5	6.5	3.4	6.5	.8	2.6	8.7
	>=70	63.3	41.3	54.7	23.0	28.8	77.3	56.5	91.9	91.5	59.8
Milk & Milk Prod	<50	45.7	43.8	45.3	54.5	80.5	35.2	91.7	93.1	86.7	58.0
	50-70	13.3	12.4	13.1	4.7	4.2	13.6	3.7	2.3	.0	9.1
	>=70	41.0	43.8	41.6	40.8	15.3	51.1	4.6	4.6	13.3	32.9
Fats & Oils	<50	88.9	80.3	76.8	74.6	61.9	67.8	84.3	80.8	85.9	79.1
	50-70	7.8	10.8	9.5	12.2	19.5	17.0	12.0	13.5	9.3	11.4
	>=70	3.3	8.9	13.7	13.1	18.6	15.2	3.7	5.8	4.8	9.5
Sugar & Jaggery	<50	46.0	58.7	31.2	84.0	20.9	24.2	68.5	76.9	81.5	50.7
	50-70	33.7	21.9	17.2	5.6	13.5	18.2	13.0	11.9	8.9	18.6
	>=70	20.2	19.4	51.6	10.3	65.6	57.6	18.5	11.2	9.6	30.7

Table AN-6 :
Distribution (%) of Adult (>=18 Year) Females-Sedentary according to Intake of Foods as % of RDA

Foods	% RDA	State									
		Kerala	Tamil nadu	Karna taka	Andhra Pradesh	Mahara shtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
		N=963	N=501	N=712	N=351	N=391	N=345	N=219	N=683	N=634	N=4799
Cereals	<50	9.1	4.2	1.5	3.7	15.9	1.2	3.7	1.3	2.2	4.8
	50-70	40.5	16.2	9.1	10.5	32.2	9.6	19.2	5.7	10.4	18.3
	>=70	50.4	79.6	89.3	85.8	51.9	89.3	77.2	93.0	87.4	76.9
Pulses	<50	62.0	33.9	22.8	54.1	40.9	26.4	40.2	52.4	82.6	48.8
	50-70	12.7	13.0	11.4	6.3	15.9	15.4	8.7	15.5	8.4	12.1
	>=70	25.3	53.1	65.9	39.6	43.2	58.3	51.1	32.1	9.0	39.1
Leafy-Veg	<50	95.0	94.8	90.2	96.6	92.8	86.4	83.1	72.8	64.8	85.9
	50-70	1.8	2.2	3.7	1.1	4.6	2.3	3.7	8.6	2.4	3.5
	>=70	3.2	3.0	6.2	2.3	2.6	11.3	13.2	18.6	32.8	10.6
Other -Veg	<50	47.6	34.3	67.8	55.6	60.9	41.7	42.5	28.6	44.3	47.1
	50-70	3.9	3.4	2.1	2.8	2.8	.0	.0	3.4	.5	2.4
	>=70	48.5	62.3	30.1	41.6	36.3	58.3	57.5	68.1	55.2	50.5
Roots & Tubers	<50	34.4	55.9	39.9	64.4	69.6	23.8	45.7	8.8	5.7	34.8
	50-70	15.6	9.2	11.9	10.3	6.4	3.2	3.7	3.4	2.7	8.4
	>=70	50.1	34.9	48.2	25.4	24.0	73.0	50.7	87.8	91.6	56.8
Milk & Milk Prod	<50	44.1	37.3	39.5	49.9	66.8	15.7	72.1	90.9	89.7	56.9
	50-70	5.1	8.2	8.7	8.8	10.7	9.3	7.8	4.2	.5	6.4
	>=70	50.8	54.5	51.8	41.3	22.5	75.1	20.1	4.8	9.8	36.7
Fats & Oils	<50	79.8	64.1	55.2	39.6	32.7	44.9	58.9	55.5	47.8	56.6
	50-70	6.9	13.6	14.7	21.7	15.3	16.8	13.7	22.3	24.1	16.0
	>=70	13.4	22.4	30.1	38.7	51.9	38.3	27.4	22.3	28.1	27.4
Sugar & Jaggery	<50	24.9	43.3	23.2	65.5	9.0	7.0	45.2	71.0	79.0	41.6
	50-70	12.6	9.8	7.2	11.1	5.9	7.2	11.0	10.0	6.8	9.2
	>=70	62.5	46.9	69.7	23.4	85.2	85.8	43.8	19.0	14.2	49.2

Table AN-7 :
Distribution (%) of 1-3 Year Children according to Intake of Nutrients as % of RDA

Nutrients	% RDA	State									
		Kerala	Tamil nadu	Karna- taka	Andhra Pradesh	Maharas h- tra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
		N=197	N=408	N=286	N=338	N=332	N=288	N=292	N=261	N=271	N=2673
Protein	<50	13.2	21.1	15.4	21.9	17.8	11.5	9.6	23.4	19.9	17.4
	50-70	17.3	20.1	23.4	21.0	14.5	22.6	13.7	27.6	23.2	20.3
	>=70	69.5	58.8	61.2	57.1	67.8	66.0	76.7	49.0	56.8	62.3
Total Fat	<50	36.0	58.6	69.9	67.5	44.9	59.0	71.6	83.5	74.5	63.1

	50-70	18.3	15.9	11.9	10.7	17.5	24.0	13.0	3.8	12.5	14.2
	>=70	45.7	25.5	18.2	21.9	37.7	17.0	15.4	12.6	12.9	22.7
Energy	<50	35.5	39.7	35.0	36.7	37.0	45.1	29.8	41.8	40.6	38.0
	50-70	35.0	32.6	36.0	26.3	31.9	36.1	26.7	36.0	34.7	32.5
	>=70	29.4	27.7	29.0	37.0	31.0	18.8	43.5	22.2	24.7	29.5
Calcium	<50	53.8	58.8	73.4	74.3	64.8	70.1	86.3	81.6	64.2	69.7
	50-70	19.3	13.7	11.5	10.1	9.0	14.2	7.2	11.1	12.2	11.8
	>=70	26.9	27.5	15.0	15.7	26.2	15.6	6.5	7.3	23.6	18.5
Iron	<50	70.1	91.2	78.3	90.2	57.2	57.3	49.3	66.3	80.1	72.1
	50-70	16.8	4.7	11.9	5.3	20.5	15.6	20.2	16.1	8.9	12.8
	>=70	13.2	4.2	9.8	4.4	22.3	27.1	30.5	17.6	11.1	15.1
Vitamin-A	<50	91.9	78.9	90.9	94.4	88.9	96.2	87.3	80.5	80.8	87.5
	50-70	4.1	9.8	3.1	2.4	6.3	1.0	3.1	2.3	5.9	4.5
	>=70	4.1	11.3	5.9	3.3	4.8	2.8	9.6	17.2	13.3	8.0
Thiamin	<50	52.8	38.0	55.2	77.8	37.3	32.3	30.5	33.7	35.1	43.7
	50-70	22.8	19.1	16.8	13.6	14.5	18.4	9.6	23.4	19.6	17.2
	>=70	24.4	42.9	28.0	8.6	48.2	49.3	59.9	42.9	45.4	39.1
Riboflavin	<50	61.4	60.0	65.7	79.9	67.8	63.9	66.1	91.2	74.5	69.8
	50-70	11.2	8.3	15.0	11.8	12.7	21.2	12.3	3.8	6.6	11.4
	>=70	27.4	31.6	19.2	8.3	19.6	14.9	21.6	5.0	18.8	18.7
Niacin	<50	37.1	36.5	54.2	55.0	50.6	66.3	26.7	21.1	22.5	41.8
	50-70	32.0	22.5	25.2	24.0	21.1	19.4	22.3	18.4	15.9	22.1
	>=70	31.0	40.9	20.6	21.0	28.3	14.2	51.0	60.5	61.6	36.2
Vitamin-C	<50	70.1	57.8	78.3	71.6	88.0	77.1	58.9	44.8	45.4	66.1
	50-70	11.7	15.4	9.4	9.2	5.1	8.0	12.0	16.5	10.7	10.9
	>=70	18.3	26.7	12.2	19.2	6.9	14.9	29.1	38.7	43.9	23.0
Free Folic acid	<50	39.1	26.2	41.6	52.1	43.1	27.1	32.2	41.0	37.6	37.5
	50-70	27.4	17.6	30.1	21.3	19.3	29.9	18.5	21.1	21.8	22.5
	>=70	33.5	56.1	28.3	26.6	37.7	43.1	49.3	37.9	40.6	40.0

Table AN-8 :
Distribution (%) of 4-6 Year Children according to Intake of Nutrients as % of RDA

Nutrients	% RDA	State									
		Kerala	Tamil nadu	Karna-taka	Andhra Pradesh	Mahara-shtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
		N=159	N=304	N=259	N=269	N=318	N=245	N=323	N=235	N=294	N=2406
Protein	<50	5.0	7.9	4.2	5.2	3.8	5.7	4.6	13.6	8.8	6.5
	50-70	17.0	25.3	22.0	19.7	13.8	13.9	9.9	35.3	26.5	20.2
	>=70	78.0	66.8	73.7	75.1	82.4	80.4	85.4	51.1	64.6	73.4
Total Fat	<50	20.1	63.2	47.5	51.3	23.6	29.0	64.1	79.6	70.7	51.2
	50-70	11.9	18.1	20.5	22.7	26.1	23.7	17.0	12.3	15.3	19.0
	>=70	67.9	18.8	32.0	26.0	50.3	47.3	18.9	8.1	13.9	29.7

Energy	<50	21.4	26.0	23.9	16.4	18.6	31.4	19.5	32.8	28.6	24.1
	50-70	51.6	57.2	46.7	36.1	45.0	34.7	38.4	48.9	50.7	45.3
	>=70	27.0	16.8	29.3	47.6	36.5	33.9	42.1	18.3	20.7	30.6
Calcium	<50	31.4	55.3	55.2	58.4	51.9	39.2	69.7	67.7	57.1	55.3
	50-70	21.4	17.4	17.0	16.7	16.7	22.4	16.4	14.9	9.5	16.6
	>=70	47.2	27.3	27.8	24.9	31.4	38.4	13.9	17.4	33.3	28.1
Iron	<50	76.7	92.4	79.5	94.4	42.1	39.2	50.8	85.1	83.0	70.7
	50-70	15.1	6.3	13.5	3.3	31.8	18.8	18.6	8.9	7.8	14.0
	>=70	8.2	1.3	6.9	2.2	26.1	42.0	30.7	6.0	9.2	15.3
Vitamin-A	<50	89.3	90.1	87.3	89.2	89.9	96.3	88.2	74.5	80.6	87.3
	50-70	5.7	4.9	4.2	4.1	2.8	1.2	2.2	.4	3.1	3.1
	>=70	5.0	4.9	8.5	6.7	7.2	2.4	9.6	25.1	16.3	9.6
Thiamin	<50	33.3	20.7	32.4	71.7	18.9	10.2	22.6	16.2	14.6	26.3
	50-70	45.9	38.5	30.1	21.6	15.4	20.0	14.9	46.4	40.5	29.1
	>=70	20.8	40.8	37.5	6.7	65.7	69.8	62.5	37.4	44.9	44.6
Riboflavin	<50	78.6	87.8	83.4	91.1	78.3	61.6	75.5	99.6	90.5	83.0
	50-70	17.0	8.2	13.1	6.3	13.5	23.3	17.0	.4	5.1	11.4
	>=70	4.4	3.9	3.5	2.6	8.2	15.1	7.4	.0	4.4	5.6
Niacin	<50	22.0	18.1	40.5	37.9	25.5	43.7	15.5	7.7	3.1	23.4
	50-70	37.7	21.4	36.7	33.8	31.1	28.2	27.6	18.7	17.0	27.5
	>=70	40.3	60.5	22.8	28.3	43.4	28.2	57.0	73.6	79.9	49.1
Vitamin-C	<50	62.9	53.3	69.1	63.2	85.5	69.8	65.0	41.3	34.0	60.7
	50-70	14.5	25.0	13.1	13.4	6.0	10.6	12.1	13.2	17.7	14.0
	>=70	22.6	21.7	17.8	23.4	8.5	19.6	22.9	45.5	48.3	25.3
Free Folic acid	<50	28.3	12.5	29.7	40.5	24.5	14.3	22.3	26.8	27.9	24.9
	50-70	30.2	20.4	28.6	30.5	21.7	18.8	23.2	31.1	33.3	26.1
	>=70	41.5	67.1	41.7	29.0	53.8	66.9	54.5	42.1	38.8	49.0

Table AN-9 :
Distribution (%) of 7-9 Year Children according to Intake of Nutrients as % of RDA

Nutrients	% RDA	State									Pooled N=2399
		Kerala N=153	Tamil nadu N=226	Karna- taka N=302	Andhra Pradesh N=285	Mahara- shtra N=332	Gujarat N=243	Madhya Pradesh N=322	Orissa N=240	West Bengal N=296	
		Protein	<50	9.2	24.8	8.9	8.8	7.2	3.3	9.3	
	50-70	24.8	34.1	26.2	33.0	21.1	8.2	23.6	44.2	36.1	27.8
	>=70	66.0	41.2	64.9	58.2	71.7	88.5	67.1	38.8	49.3	61.0
Total Fat	<50	11.8	54.9	39.1	43.9	17.2	12.8	61.8	72.5	60.8	42.8
	50-70	16.3	17.7	20.9	29.8	24.4	19.8	21.1	19.2	19.9	21.5
	>=70	71.9	27.4	40.1	26.3	58.4	67.5	17.1	8.3	19.3	35.8
Energy	<50	22.9	30.5	17.2	11.9	19.9	10.7	20.5	20.4	20.3	19.0
	50-70	47.7	49.6	46.0	38.6	39.5	39.5	34.8	49.2	50.7	43.4
	>=70	29.4	19.9	36.8	49.5	40.7	49.8	44.7	30.4	29.1	37.6
Calcium	<50	22.9	50.9	38.1	54.0	47.6	25.1	60.9	57.9	53.0	47.1

	50-70	19.0	16.4	16.6	16.5	17.8	22.2	18.0	14.6	7.8	16.3
	>=70	58.2	32.7	45.4	29.5	34.6	52.7	21.1	27.5	39.2	36.6
Iron	<50	85.6	97.3	83.1	94.7	62.0	35.8	62.7	83.8	88.2	76.2
	50-70	11.1	1.3	10.6	2.5	22.3	18.1	16.1	6.3	4.7	10.8
	>=70	3.3	1.3	6.3	2.8	15.7	46.1	21.1	10.0	7.1	13.0
Vitamin-A	<50	96.7	92.0	92.7	93.7	92.2	95.1	93.2	72.9	82.4	90.0
	50-70	1.3	2.7	2.3	2.5	4.2	2.1	1.6	2.5	2.4	2.5
	>=70	2.0	5.3	5.0	3.9	3.6	2.9	5.3	24.6	15.2	7.5
Thiamin	<50	43.1	29.2	26.8	76.8	16.9	5.3	32.3	14.2	12.5	28.2
	50-70	32.7	31.4	22.2	15.8	9.3	7.8	9.0	30.8	33.1	20.2
	>=70	24.2	39.4	51.0	7.4	73.8	86.8	58.7	55.0	54.4	51.6
Riboflavin	<50	87.6	93.8	81.1	91.9	79.5	45.3	74.8	97.9	94.6	82.7
	50-70	11.1	6.2	13.9	6.7	14.2	25.9	14.3	1.3	3.4	10.9
	>=70	1.3	.0	5.0	1.4	6.3	28.8	10.9	.8	2.0	6.5
Niacin	<50	20.3	19.0	32.8	31.2	21.1	18.1	19.9	4.2	2.0	19.0
	50-70	43.8	23.9	36.8	43.2	30.7	32.5	23.3	13.8	12.8	28.4
	>=70	35.9	57.1	30.5	25.6	48.2	49.4	56.8	82.1	85.1	52.6
Vitamin-C	<50	57.5	48.7	62.3	56.1	82.5	51.4	64.9	29.2	24.0	54.0
	50-70	9.8	15.9	17.2	15.8	7.2	17.3	12.1	20.8	13.2	14.3
	>=70	32.7	35.4	20.5	28.1	10.2	31.3	23.0	50.0	62.8	31.8
Free Folic acid	<50	59.5	35.4	52.3	68.1	37.7	11.9	41.3	34.2	45.9	42.9
	50-70	26.8	37.6	24.5	20.0	30.7	20.6	21.4	34.2	30.7	27.1
	>=70	13.7	27.0	23.2	11.9	31.6	67.5	37.3	31.7	23.3	30.0

Table AN-10 :
Distribution (%) of 10-12 Year Boys according to Intake of Nutrients as % of RDA

Nutrients	% RDA	State									Pooled
		Kerala	Tamil nadu	Karna-taka	Andhra Pradesh	Mahara-shtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	
		N=122	N=82	N=141	N=121	N=181	N=117	N=173	N=121	N=169	
Protein	<50	19.7	36.6	7.1	13.2	15.5	2.6	22.0	33.9	27.2	19.2
	50-70	24.6	46.3	36.9	41.3	29.8	8.5	17.3	41.3	42.0	31.4
	>=70	55.7	17.1	56.0	45.5	54.7	88.9	60.7	24.8	30.8	49.4
Total Fat	<50	6.6	35.4	15.6	28.9	8.3	6.0	48.6	55.4	42.0	27.5
	50-70	11.5	14.6	17.7	26.4	14.4	6.8	20.8	22.3	27.2	18.4
	>=70	82.0	50.0	66.7	44.6	77.3	87.2	30.6	22.3	30.8	54.0
Energy	<50	19.7	28.0	9.2	9.1	18.8	5.1	22.5	15.7	21.9	16.8
	50-70	49.2	48.8	36.2	28.1	41.4	21.4	28.9	56.2	44.4	39.0
	>=70	31.1	23.2	54.6	62.8	39.8	73.5	48.6	28.1	33.7	44.3
Calcium	<50	41.0	64.6	49.6	71.1	67.4	40.2	80.3	61.2	58.0	60.2
	50-70	23.8	17.1	11.3	14.9	13.3	23.1	11.0	19.0	12.4	15.6

	>=70	35.2	18.3	39.0	14.0	19.3	36.8	8.7	19.8	29.6	24.2
Iron	<50	95.1	96.3	83.7	98.3	75.1	37.6	71.7	88.4	87.0	80.7
	50-70	4.9	.0	13.5	.8	15.5	25.6	15.6	3.3	5.9	10.2
	>=70	.0	3.7	2.8	.8	9.4	36.8	12.7	8.3	7.1	9.1
Vitamin-A	<50	98.4	91.5	90.8	90.1	88.4	90.6	87.9	76.0	79.9	87.8
	50-70	1.6	3.7	3.5	6.6	2.8	4.3	3.5	2.5	.0	3.0
	>=70	.0	4.9	5.7	3.3	8.8	5.1	8.7	21.5	20.1	9.2
Thiamin	<50	22.1	14.6	9.2	62.0	12.7	1.7	27.7	7.4	7.1	18.0
	50-70	39.3	31.7	16.3	24.0	6.1	1.7	10.4	19.8	24.9	18.2
	>=70	38.5	53.7	74.5	14.0	81.2	96.6	61.8	72.7	68.0	63.8
Riboflavin	<50	85.2	87.8	57.4	87.6	67.4	28.2	69.9	94.2	90.5	73.8
	50-70	13.1	12.2	31.2	11.6	23.2	33.3	17.9	5.0	6.5	17.4
	>=70	1.6	.0	11.3	.8	9.4	38.5	12.1	.8	3.0	8.8
Niacin	<50	11.5	20.7	23.4	28.9	19.9	7.7	22.0	5.0	2.4	15.6
	50-70	46.7	29.3	43.3	36.4	34.8	26.5	20.2	10.7	17.2	29.1
	>=70	41.8	50.0	33.3	34.7	45.3	65.8	57.8	84.3	80.5	55.3
Vitamin-C	<50	58.2	42.7	55.3	53.7	71.3	36.8	59.0	30.6	17.8	48.1
	50-70	11.5	20.7	15.6	12.4	7.2	22.2	12.7	9.9	13.0	13.3
	>=70	30.3	36.6	29.1	33.9	21.5	41.0	28.3	59.5	69.2	38.6
Free Folic acid	<50	54.9	32.9	45.4	66.9	35.9	8.5	42.8	45.5	45.0	42.3
	50-70	27.9	41.5	35.5	21.5	32.0	13.7	20.2	28.1	29.6	27.5
	>=70	17.2	25.6	19.1	11.6	32.0	77.8	37.0	26.4	25.4	30.2

Table AN-11 :
Distribution (%) of 10-12 Year Girls according to Intake of Nutrients as % of RDA

Nutrients	% RDA	State									
		Kerala	Tamil nadu	Karna-taka	Andhra Pradesh	Mahara-shtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
		N=88	N=105	N=152	N=115	N=190	N=131	N=176	N=131	N=130	N=1218
Protein	<50	31.8	45.7	15.1	18.3	15.8	3.1	18.8	42.7	36.2	23.8
	50-70	30.7	40.0	37.5	36.5	38.9	13.7	28.4	47.3	42.3	35.1
	>=70	37.5	14.3	47.4	45.2	45.3	83.2	52.8	9.9	21.5	41.1
Total Fat	<50	3.4	41.0	23.7	31.3	4.7	3.8	51.7	64.9	48.5	30.5
	50-70	11.4	19.0	17.8	25.2	14.7	11.5	20.5	22.1	21.5	18.2
	>=70	85.2	40.0	58.6	43.5	80.5	84.7	27.8	13.0	30.0	51.3
Energy	<50	10.2	10.5	7.2	4.3	8.4	1.5	14.8	7.6	10.8	8.5
	50-70	42.0	59.0	25.7	16.5	40.0	19.8	23.9	51.1	43.8	34.9
	>=70	47.7	30.5	67.1	79.1	51.6	78.6	61.4	41.2	45.4	56.6
Calcium	<50	48.9	67.6	53.9	70.4	71.6	37.4	80.7	73.3	53.8	63.2
	50-70	12.5	17.1	10.5	14.8	13.7	29.0	12.5	11.5	13.1	14.8

	>=70	38.6	15.2	35.5	14.8	14.7	33.6	6.8	15.3	33.1	22.0
Iron	<50	92.0	99.0	79.6	94.8	67.4	41.2	70.5	86.3	84.6	77.5
	50-70	4.5	.0	16.4	1.7	20.5	16.8	13.6	7.6	8.5	11.2
	>=70	3.4	1.0	3.9	3.5	12.1	42.0	15.9	6.1	6.9	11.2
Vitamin-A	<50	95.5	92.4	86.2	93.9	93.2	95.4	87.5	71.0	76.9	87.8
	50-70	2.3	1.9	5.3	5.2	2.1	1.5	2.3	5.3	1.5	3.0
	>=70	2.3	5.7	8.6	.9	4.7	3.1	10.2	23.7	21.5	9.2
Thiamin	<50	26.1	16.2	11.8	60.0	14.7	.0	32.4	9.2	6.2	19.0
	50-70	39.8	21.9	12.5	25.2	6.3	3.8	5.7	15.3	26.2	15.4
	>=70	34.1	61.9	75.7	14.8	78.9	96.2	61.9	75.6	67.7	65.6
Riboflavin	<50	78.4	87.6	56.6	86.1	73.7	32.8	75.0	97.7	86.2	74.0
	50-70	18.2	11.4	34.2	8.7	16.8	25.2	11.4	2.3	8.5	15.5
	>=70	3.4	1.0	9.2	5.2	9.5	42.0	13.6	.0	5.4	10.5
Niacin	<50	11.4	7.6	14.5	7.0	11.6	5.3	12.5	3.1	.0	8.5
	50-70	25.0	19.0	28.3	39.1	23.7	17.6	22.2	7.6	7.7	21.1
	>=70	63.6	73.3	57.2	53.9	64.7	77.1	65.3	89.3	92.3	70.4
Vitamin-C	<50	46.6	51.4	56.6	49.6	80.0	47.3	60.2	31.3	25.4	51.9
	50-70	13.6	15.2	15.8	18.3	5.3	17.6	10.8	14.5	12.3	13.1
	>=70	39.8	33.3	27.6	32.2	14.7	35.1	29.0	54.2	62.3	35.0
Free Folic acid	<50	50.0	35.2	44.7	64.3	40.5	8.4	45.5	39.7	52.3	42.0
	50-70	31.8	51.4	33.6	25.2	24.7	21.4	22.2	33.6	26.2	29.1
	>=70	18.2	13.3	21.7	10.4	34.7	70.2	32.4	26.7	21.5	29.0

Table AN-12 :
Distribution (%) of 13-15 Year Boys according to Intake of Nutrients as % of RDA

Nutrients	% RDA	State									
		Kerala	Tamil nadu	Karna-taka	Andhra Pradesh	Mahara-shtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
		N=101	N=72	N=114	N=69	N=140	N=105	N=118	N=102	N=100	N=921
Protein	<50	29.7	40.3	14.0	21.7	22.1	2.9	23.7	45.1	27.0	24.4
	50-70	27.7	47.2	43.9	50.7	34.3	5.7	31.4	47.1	40.0	35.4
	>=70	42.6	12.5	42.1	27.5	43.6	91.4	44.9	7.8	33.0	40.2
Total Fat	<50	2.0	23.6	6.1	20.3	2.9	2.9	42.4	48.0	27.0	18.8
	50-70	5.9	29.2	10.5	20.3	10.7	4.8	19.5	23.5	24.0	15.6
	>=70	92.1	47.2	83.3	59.4	86.4	92.4	38.1	28.4	49.0	65.6
Energy	<50	13.9	13.9	3.5	8.7	11.4	1.9	12.7	10.8	17.0	10.3
	50-70	43.6	45.8	29.8	24.6	40.0	11.4	38.1	44.1	27.0	34.0
	>=70	42.6	40.3	66.7	66.7	48.6	86.7	49.2	45.1	56.0	55.7
Calcium	<50	32.7	59.7	28.9	56.5	62.1	23.8	72.9	65.7	48.0	50.1
	50-70	21.8	18.1	14.0	20.3	14.3	28.6	16.9	13.7	8.0	17.0
	>=70	45.5	22.2	57.0	23.2	23.6	47.6	10.2	20.6	44.0	32.9

Iron	<50	94.1	95.8	85.1	95.7	70.7	32.4	74.6	93.1	90.0	79.6
	50-70	2.0	4.2	11.4	1.4	18.6	19.0	15.3	3.9	6.0	10.1
	>=70	4.0	.0	3.5	2.9	10.7	48.6	10.2	2.9	4.0	10.3
Vitamin-A	<50	93.1	87.5	89.5	94.2	88.6	82.9	89.8	69.6	83.0	86.3
	50-70	4.0	4.2	2.6	1.4	2.9	8.6	.8	2.0	.0	2.9
	>=70	3.0	8.3	7.9	4.3	8.6	8.6	9.3	28.4	17.0	10.7
Thiamin	<50	26.7	15.3	9.6	63.8	12.9	1.9	30.5	9.8	5.0	17.8
	50-70	28.7	15.3	6.1	20.3	7.9	2.9	9.3	11.8	21.0	12.9
	>=70	44.6	69.4	84.2	15.9	79.3	95.2	60.2	78.4	74.0	69.3
Riboflavin	<50	84.2	91.7	50.0	89.9	66.4	21.0	72.9	96.1	86.0	71.1
	50-70	13.9	8.3	34.2	4.3	17.9	24.8	16.9	2.9	10.0	15.9
	>=70	2.0	.0	15.8	5.8	15.7	54.3	10.2	1.0	4.0	13.0
Niacin	<50	9.9	5.6	20.2	21.7	16.4	1.0	11.9	2.0	1.0	10.1
	50-70	36.6	26.4	34.2	43.5	26.4	12.4	26.3	9.8	11.0	24.6
	>=70	53.5	68.1	45.6	34.8	57.1	86.7	61.9	88.2	88.0	65.3
Vitamin-C	<50	39.6	38.9	50.0	46.4	67.9	26.7	54.2	21.6	18.0	41.7
	50-70	11.9	11.1	16.7	15.9	7.9	16.2	11.0	11.8	5.0	11.7
	>=70	48.5	50.0	33.3	37.7	24.3	57.1	34.7	66.7	77.0	46.6
Free Folic acid	<50	72.3	51.4	65.8	78.3	52.9	10.5	53.4	55.9	52.0	53.9
	50-70	18.8	40.3	26.3	15.9	30.7	26.7	24.6	30.4	28.0	26.9
	>=70	8.9	8.3	7.9	5.8	16.4	62.9	22.0	13.7	20.0	19.2

Table AN-13 :
Distribution (%) of 13-15 Year Girls according to Intake of Nutrients as % of RDA

Nutrients	% RDA	State									Pooled
		Kerala	Tamil nadu	Karna-taka	Andhra Pradesh	Mahara-shtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	
		N=92	N=65	N=115	N=96	N=139	N=73	N=120	N=122	N=99	
Protein	<50	33.7	36.9	7.0	15.6	18.7	.0	29.2	48.4	31.3	24.9
	50-70	25.0	44.6	47.0	36.5	38.1	17.8	27.5	42.6	44.4	36.5
	>=70	41.3	18.5	46.1	47.9	43.2	82.2	43.3	9.0	24.2	38.7
Total Fat	<50	3.3	26.2	14.8	15.6	7.9	4.1	45.8	50.8	37.4	23.9
	50-70	8.7	20.0	16.5	26.0	10.8	4.1	18.3	27.0	27.3	17.9
	>=70	88.0	53.8	68.7	58.3	81.3	91.8	35.8	22.1	35.4	58.2
Energy	<50	8.7	10.8	.9	2.1	9.4	.0	9.2	2.5	8.1	5.8
	50-70	38.0	32.3	11.3	9.4	28.1	9.6	30.8	30.3	23.2	24.0
	>=70	53.3	56.9	87.8	88.5	62.6	90.4	60.0	67.2	68.7	70.2
Calcium	<50	42.4	58.5	43.5	53.1	62.6	27.4	79.2	68.9	53.5	56.1
	50-70	19.6	23.1	17.4	18.8	15.8	35.6	13.3	17.2	14.1	18.5
	>=70	38.0	18.5	39.1	28.1	21.6	37.0	7.5	13.9	32.3	25.4
Iron	<50	75.0	89.2	57.4	88.5	50.4	26.0	65.8	82.8	79.8	68.0
	50-70	18.5	4.6	23.5	8.3	31.7	21.9	12.5	12.3	9.1	16.7
	>=70	6.5	6.2	19.1	3.1	18.0	52.1	21.7	4.9	11.1	15.3

Vitamin-A	<50	93.5	89.2	88.7	96.9	92.1	91.8	91.7	67.2	82.8	87.7
	50-70	2.2	6.2	1.7	2.1	2.9	4.1	1.7	6.6	.0	2.9
	>=70	4.3	4.6	9.6	1.0	5.0	4.1	6.7	26.2	17.2	9.3
Thiamin	<50	20.7	12.3	7.8	46.9	12.2	.0	29.2	3.3	4.0	15.3
	50-70	32.6	16.9	11.3	32.3	2.9	1.4	10.8	7.4	12.1	13.5
	>=70	46.7	70.8	80.9	20.8	84.9	98.6	60.0	89.3	83.8	71.2
Riboflavin	<50	82.6	80.0	37.4	78.1	59.7	19.2	67.5	95.1	87.9	68.1
	50-70	13.0	16.9	39.1	15.6	30.9	28.8	15.0	2.5	7.1	19.0
	>=70	4.3	3.1	23.5	6.3	9.4	52.1	17.5	2.5	5.1	12.9
Niacin	<50	5.4	6.2	8.7	9.4	11.5	.0	14.2	.8	1.0	6.8
	50-70	23.9	21.5	27.8	28.1	20.1	9.6	20.0	4.9	7.1	18.1
	>=70	70.7	72.3	63.5	62.5	68.3	90.4	65.8	94.3	91.9	75.0
Vitamin-C	<50	45.7	43.1	51.3	51.0	73.4	32.9	55.0	16.4	19.2	44.4
	50-70	20.7	15.4	17.4	20.8	5.8	19.2	15.8	14.8	9.1	14.9
	>=70	33.7	41.5	31.3	28.1	20.9	47.9	29.2	68.9	71.7	40.7
Free Folic acid	<50	81.5	67.7	66.1	85.4	61.9	19.2	65.0	61.5	68.7	64.9
	50-70	17.4	26.2	24.3	12.5	28.1	28.8	20.8	28.7	22.2	23.3
	>=70	1.1	6.2	9.6	2.1	10.1	52.1	14.2	9.8	9.1	11.7

Table AN-14 :
Distribution (%) of 16-17 Year Boys according to Intake of Nutrients as % of RDA

Nutrients	% RDA	State									Pooled
		Kerala	Tamil nadu	Karna-taka	Andhra Pradesh	Mahara-shtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	
		N=142	N=87	N=187	N=144	N=205	N=113	N=188	N=190	N=140	
Protein	<50	30.3	37.9	10.2	13.9	19.5	.0	28.7	50.0	29.3	24.7
	50-70	30.3	42.5	47.1	38.9	35.1	13.3	28.2	40.0	45.0	36.0
	>=70	39.4	19.5	42.8	47.2	45.4	86.7	43.1	10.0	25.7	39.3
Total Fat	<50	2.8	24.1	11.8	16.0	5.4	2.7	45.7	46.3	33.6	21.8
	50-70	7.7	21.8	14.4	22.9	9.3	3.5	19.7	27.4	27.9	17.3
	>=70	89.4	54.0	73.8	61.1	85.4	93.8	34.6	26.3	38.6	60.9
Energy	<50	9.2	12.6	1.6	2.8	11.7	.0	10.1	3.7	7.9	6.6
	50-70	35.9	32.2	18.7	11.1	27.8	8.0	34.0	35.3	25.0	25.9
	>=70	54.9	55.2	79.7	86.1	60.5	92.0	55.9	61.1	67.1	67.5
Calcium	<50	36.6	55.2	33.7	49.3	54.6	19.5	71.8	65.3	50.7	50.0
	50-70	15.5	23.0	15.0	16.0	21.5	25.7	15.4	14.7	14.3	17.4
	>=70	47.9	21.8	51.3	34.7	23.9	54.9	12.8	20.0	35.0	32.6
Iron	<50	82.4	90.8	69.5	91.0	56.1	25.7	72.9	87.4	85.0	73.3
	50-70	13.4	4.6	18.2	5.6	29.3	21.2	12.8	8.9	6.4	14.3
	>=70	4.2	4.6	12.3	3.5	14.6	53.1	14.4	3.7	8.6	12.5
Vitamin-A	<50	95.1	90.8	91.4	96.5	92.7	85.0	88.8	70.5	82.1	87.8
	50-70	2.1	5.7	1.6	1.4	2.9	8.8	1.6	4.2	.0	2.9

	>=70	2.8	3.4	7.0	2.1	4.4	6.2	9.6	25.3	17.9	9.3
Thiamin	<50	18.3	12.6	5.9	50.0	11.2	.9	29.3	3.7	2.9	15.0
	50-70	36.6	17.2	12.8	30.6	5.4	.9	10.6	8.9	12.1	14.4
	>=70	45.1	70.1	81.3	19.4	83.4	98.2	60.1	87.4	85.0	70.6
Riboflavin	<50	83.8	81.6	44.4	80.6	60.5	15.9	72.3	96.3	88.6	69.8
	50-70	11.3	16.1	33.7	13.9	29.3	24.8	13.8	2.1	7.1	17.3
	>=70	4.9	2.3	21.9	5.6	10.2	59.3	13.8	1.6	4.3	13.0
Niacin	<50	4.9	5.7	10.2	10.4	11.7	.9	14.4	1.6	.7	7.3
	50-70	22.5	24.1	32.1	25.0	21.0	6.2	19.1	4.7	6.4	18.1
	>=70	72.5	70.1	57.8	64.6	67.3	92.9	66.5	93.7	92.9	74.6
Vitamin-C	<50	46.5	40.2	51.9	50.0	73.2	28.3	53.2	14.7	20.0	43.6
	50-70	16.9	16.1	16.0	18.8	4.9	17.7	13.8	15.3	7.9	13.7
	>=70	36.6	43.7	32.1	31.3	22.0	54.0	33.0	70.0	72.1	42.8
Free Folic acid	<50	76.8	63.2	64.7	78.5	56.1	13.3	60.1	54.2	59.3	59.2
	50-70	16.9	26.4	24.6	16.7	24.4	21.2	20.7	35.3	25.7	23.9
	>=70	6.3	10.3	10.7	4.9	19.5	65.5	19.1	10.5	15.0	16.9

Table AN-15 :
Distribution (%) of 16-17 Year Girls according to Intake of Nutrients as % of RDA

Nutrients	% RDA	State									
		Kerala	Tamil nadu	Karna taka	Andhra Pradesh	Mahara -shtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
		N=215	N=131	N=241	N=184	N=275	N=168	N=242	N=243	N=190	N=1889
Protein	<50	25.6	33.6	9.5	14.7	19.3	.0	26.9	44.0	28.4	22.7
	50-70	29.8	42.7	42.3	38.0	34.5	10.7	28.1	41.2	41.6	34.5
	>=70	44.7	23.7	48.1	47.3	46.2	89.3	45.0	14.8	30.0	42.8
Total Fat	<50	3.3	22.1	11.6	16.8	5.8	1.8	47.9	47.3	33.2	21.6
	50-70	6.5	21.4	14.1	22.8	10.5	5.4	18.2	25.9	26.8	16.6
	>=70	90.2	56.5	74.3	60.3	83.6	92.9	33.9	26.7	40.0	61.8
Energy	<50	6.0	9.2	2.1	3.3	11.6	.0	9.5	2.9	6.8	5.9
	50-70	30.7	32.8	15.8	11.4	26.9	7.1	31.8	31.7	23.2	23.9
	>=70	63.3	58.0	82.2	85.3	61.5	92.9	58.7	65.4	70.0	70.2
Calcium	<50	31.2	54.2	31.1	47.8	56.7	18.5	70.7	63.8	51.6	48.3
	50-70	15.3	19.8	14.9	19.0	21.5	22.6	15.3	13.6	12.1	16.9
	>=70	53.5	26.0	53.9	33.2	21.8	58.9	14.0	22.6	36.3	34.8
Iron	<50	79.5	88.5	68.9	91.8	54.9	22.0	69.8	84.4	84.7	71.2
	50-70	14.9	4.6	19.1	4.3	30.5	19.6	15.3	9.1	6.8	14.9
	>=70	5.6	6.9	12.0	3.8	14.5	58.3	14.9	6.6	8.4	13.9
Vitamin-A	<50	95.3	90.8	91.7	95.1	93.8	86.9	88.0	69.5	80.0	87.8
	50-70	1.4	4.6	1.2	2.7	2.2	7.1	1.7	4.1	.5	2.6
	>=70	3.3	4.6	7.1	2.2	4.0	6.0	10.3	26.3	19.5	9.6
Thiamin	<50	13.0	13.0	5.4	51.1	11.3	.6	30.2	3.3	2.6	14.3
	50-70	34.0	16.0	12.4	28.3	6.5	1.2	11.2	8.2	11.6	14.0

	>=70	53.0	71.0	82.2	20.7	82.2	98.2	58.7	88.5	85.8	71.7
Riboflavin	<50	79.5	80.2	39.8	81.5	63.3	11.3	70.2	94.7	87.4	67.8
	50-70	13.5	16.0	34.0	12.5	26.5	25.6	15.7	3.7	8.9	17.7
	>=70	7.0	3.8	26.1	6.0	10.2	63.1	14.0	1.6	3.7	14.5
Niacin	<50	3.7	5.3	10.0	11.4	11.6	.6	14.0	1.6	.5	7.0
	50-70	20.5	22.1	29.9	24.5	20.0	4.8	19.0	4.5	5.8	17.0
	>=70	75.8	72.5	60.2	64.1	68.4	94.6	66.9	93.8	93.7	76.0
Vitamin-C	<50	43.3	41.2	50.2	50.0	72.7	28.6	53.7	16.5	17.4	42.9
	50-70	17.7	15.3	17.4	16.8	5.8	18.5	13.6	13.6	7.4	13.7
	>=70	39.1	43.5	32.4	33.2	21.5	53.0	32.6	70.0	75.3	43.4
Free Folic acid	<50	73.5	61.1	63.9	79.3	58.9	10.7	59.9	52.3	57.4	58.2
	50-70	20.0	29.8	24.9	15.8	24.7	20.2	21.9	35.0	25.3	24.3
	>=70	6.5	9.2	11.2	4.9	16.4	69.0	18.2	12.8	17.4	17.5

Table AN-16 :
Distribution (%) of Adult(>=18 Year) Males-Sedentary according to Intake of Nutrients as % of RDA

Nutrients	% RDA	State									
		Kerala	Tamil nadu	Karna-taka	Andhra Pradesh	Mahara-shtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
		N=578	N=315	N=548	N=213	N=215	N=264	N=108	N=260	N=270	N=2771
Protein	<50	5.0	6.7	1.5	12.2	7.9	.4	5.6	6.9	8.5	5.4
	50-70	13.8	23.5	12.2	23.5	20.9	.4	19.4	28.8	25.9	17.4
	>=70	81.1	69.8	86.3	64.3	71.2	99.2	75.0	64.2	65.6	77.2
Total Fat	<50	1.0	6.3	3.5	10.3	3.7	.0	28.7	18.8	12.6	6.8
	50-70	1.7	14.3	6.0	9.4	.9	1.9	14.8	17.3	15.6	7.9
	>=70	97.2	79.4	90.5	80.3	95.3	98.1	56.5	63.8	71.9	85.3
Energy	<50	2.4	2.5	.9	5.6	7.9	.8	6.5	2.3	4.4	3.0
	50-70	15.6	19.0	12.0	21.6	30.2	1.9	19.4	19.6	22.2	16.7
	>=70	82.0	78.4	87.0	72.8	61.9	97.3	74.1	78.1	73.3	80.3
Calcium	<50	8.8	13.3	6.6	20.7	19.1	3.8	34.3	40.8	31.9	16.3
	50-70	8.5	17.8	11.5	13.6	24.2	4.5	23.1	18.1	11.5	13.1
	>=70	82.7	68.9	81.9	65.7	56.7	91.7	42.6	41.2	56.7	70.5
Iron	<50	45.8	81.9	37.4	84.5	37.2	11.0	47.2	59.6	61.1	50.1
	50-70	29.6	8.3	29.7	12.2	24.7	8.0	10.2	17.7	21.1	20.7
	>=70	24.6	9.8	32.8	3.3	38.1	81.1	42.6	22.7	17.8	29.2
Vitamin-A	<50	90.7	85.1	81.6	90.6	90.2	76.5	85.2	72.7	75.6	83.5
	50-70	3.8	6.3	6.4	6.1	2.8	14.4	1.9	1.2	2.6	5.3
	>=70	5.5	8.6	12.0	3.3	7.0	9.1	13.0	26.2	21.9	11.3
Thiamin	<50	9.2	4.8	6.2	54.5	11.2	.0	13.9	1.9	1.9	9.6
	50-70	16.6	9.2	6.2	17.8	6.5	3.0	9.3	5.8	8.1	9.6

	>=70	74.2	86.0	87.6	27.7	82.3	97.0	76.9	92.3	90.0	80.8
Riboflavin	<50	60.9	68.3	30.1	72.8	56.3	5.7	55.6	84.2	81.9	55.0
	50-70	27.9	15.9	25.9	16.0	19.1	11.4	14.8	10.4	7.4	18.8
	>=70	11.2	15.9	44.0	11.3	24.7	83.0	29.6	5.4	10.7	26.2
Niacin	<50	2.1	2.9	6.2	18.8	11.6	1.1	2.8	.4	.4	4.6
	50-70	14.4	9.5	24.5	31.0	18.6	3.4	15.7	1.5	2.6	14.1
	>=70	83.6	87.6	69.3	50.2	69.8	95.5	81.5	98.1	97.0	81.3
Vitamin-C	<50	26.1	26.7	28.3	43.7	67.4	14.8	41.7	12.7	14.4	28.3
	50-70	13.7	19.0	19.7	13.1	8.8	15.5	7.4	8.1	9.3	14.0
	>=70	60.2	54.3	52.0	43.2	23.7	69.7	50.9	79.2	76.3	57.7
Free Folic acid	<50	42.4	26.7	44.2	66.2	41.4	4.2	49.1	29.2	39.3	37.8
	50-70	35.8	36.5	30.8	22.5	34.4	12.9	23.1	36.9	31.5	30.8
	>=70	21.8	36.8	25.0	11.3	24.2	83.0	27.8	33.8	29.3	31.4

Table AN-17 :
Distribution (%) of Adult (>=18 Year) Females-NPNL- Sedentary according to Intake of Nutrients as % of RDA

Nutrients	% RDA	State									
		Kerala	Tamil nadu	Karna - taka	Andhra Pradesh	Mahara- shtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	Pooled
		N=963	N=501	N=712	N=351	N=391	N=345	N=219	N=683	N=634	N=4799
Protein	<50	4.8	5.0	.8	6.3	10.0	.0	5.0	5.9	6.0	4.7
	50-70	12.9	24.0	7.4	19.4	21.5	2.0	15.5	26.2	23.0	17.0
	>=70	82.3	71.1	91.7	74.4	68.5	98.0	79.5	67.9	71.0	78.3
Total Fat	<50	2.1	12.6	3.9	9.4	3.8	2.6	23.7	25.8	19.9	10.9
	50-70	2.1	18.4	7.9	12.3	5.6	2.3	14.6	26.1	20.7	12.1
	>=70	95.8	69.1	88.2	78.3	90.5	95.1	61.6	48.2	59.5	77.0
Energy	<50	.6	1.4	.4	1.1	5.6	.0	2.7	1.3	1.4	1.4
	50-70	9.1	10.8	3.4	11.4	21.5	2.9	16.4	7.5	10.9	9.5
	>=70	90.2	87.8	96.2	87.5	72.9	97.1	80.8	91.2	87.7	89.1
Calcium	<50	12.7	19.8	9.0	23.9	30.7	4.3	32.4	51.5	39.6	24.5
	50-70	9.6	23.2	15.2	17.4	23.5	7.8	21.5	13.3	10.3	14.6
	>=70	77.8	57.1	75.8	58.7	45.8	87.8	46.1	35.1	50.2	60.9
Iron	<50	69.4	92.0	53.9	89.2	55.2	21.4	50.7	77.3	79.5	67.9
	50-70	22.1	4.6	28.9	6.6	25.6	22.0	19.2	13.2	9.8	17.4
	>=70	8.5	3.4	17.1	4.3	19.2	56.5	30.1	9.5	10.7	14.7
Vitamin-A	<50	94.0	88.4	85.8	90.6	90.3	87.0	83.6	73.8	78.2	85.7
	50-70	2.4	4.8	4.1	4.3	2.8	6.4	1.8	1.6	1.4	3.1
	>=70	3.6	6.8	10.1	5.1	6.9	6.7	14.6	24.6	20.3	11.2
Thiamin	<50	2.9	1.6	2.2	27.6	10.5	.3	10.5	.3	.0	4.5
	50-70	13.6	8.0	6.5	35.6	8.4	2.6	12.3	2.6	3.2	9.4
	>=70	83.5	90.4	91.3	36.8	81.1	97.1	77.2	97.1	96.8	86.1
Riboflavin	<50	50.4	52.3	12.5	49.9	45.3	5.2	35.2	79.6	74.6	47.9

	50-70	32.5	30.3	29.6	32.2	30.7	14.8	22.4	15.5	16.1	25.4
	>=70	17.1	17.4	57.9	17.9	24.0	80.0	42.5	4.8	9.3	26.7
Niacin	<50	.6	.8	1.4	6.6	9.7	.3	3.7	.0	.0	1.9
	50-70	4.8	5.4	11.4	19.9	17.4	3.2	10.5	1.0	.8	7.0
	>=70	94.6	93.8	87.2	73.5	72.9	96.5	85.8	99.0	99.2	91.1
Vitamin-C	<50	39.3	38.1	36.2	42.2	71.4	22.9	44.3	16.0	16.6	34.3
	50-70	14.7	17.2	19.2	16.5	7.2	19.4	9.6	13.5	9.1	14.4
	>=70	46.0	44.7	44.5	41.3	21.5	57.7	46.1	70.6	74.3	51.4
Free Folic acid	<50	66.5	47.9	55.8	72.9	69.3	17.7	48.4	46.0	58.5	55.3
	50-70	25.4	38.7	29.1	19.4	19.7	24.9	29.2	35.0	23.0	27.6
	>=70	8.1	13.4	15.2	7.7	11.0	57.4	22.4	19.0	18.5	17.0

Table AN-18 :
Distribution (%) of Adult (>=18 Year) Females-Pregnant-Sedentary according to Intake of
Nutrients as % of RDA

Nutrients	% RDA	State									Pooled
		Kerala	Tamil nadu	Karna-taka	Andhra Pradesh	Mahara-shtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	
		N=17	N=41	N=28	N=22	N=17	N=18	N=8	N=22	N=15	
Protein	<50	23.5	31.7	3.6	13.6	11.8	.0	.0	13.6	20.0	15.4
	50-70	23.5	36.6	21.4	45.5	35.3	11.1	25.0	68.2	53.3	36.2
	>=70	52.9	31.7	75.0	40.9	52.9	88.9	75.0	18.2	26.7	48.4
Total Fat	<50	11.8	12.2	.0	.0	.0	.0	62.5	36.4	26.7	12.8
	50-70	5.9	9.8	.0	36.4	.0	.0	12.5	22.7	26.7	12.2
	>=70	82.4	78.0	100.0	63.6	100.0	100.0	25.0	40.9	46.7	75.0
Energy	<50	.0	.0	.0	9.1	5.9	.0	.0	.0	.0	1.6
	50-70	23.5	31.7	17.9	9.1	17.6	5.6	25.0	27.3	46.7	22.9
	>=70	76.5	68.3	82.1	81.8	76.5	94.4	75.0	72.7	53.3	75.5
Calcium	<50	17.6	22.0	7.1	27.3	17.6	5.6	62.5	50.0	40.0	24.5
	50-70	5.9	22.0	7.1	22.7	29.4	.0	12.5	9.1	13.3	14.4
	>=70	76.5	56.1	85.7	50.0	52.9	94.4	25.0	40.9	46.7	61.2
Iron	<50	70.6	90.2	42.9	100.0	41.2	27.8	75.0	72.7	73.3	68.1
	50-70	23.5	7.3	35.7	.0	29.4	22.2	.0	13.6	13.3	16.5
	>=70	5.9	2.4	21.4	.0	29.4	50.0	25.0	13.6	13.3	15.4
Vitamin-A	<50	94.1	80.5	78.6	90.9	94.1	83.3	87.5	59.1	86.7	82.4
	50-70	.0	7.3	10.7	4.5	.0	.0	12.5	.0	.0	4.3
	>=70	5.9	12.2	10.7	4.5	5.9	16.7	.0	40.9	13.3	13.3
Thiamin	<50	.0	2.4	3.6	45.5	17.6	.0	12.5	.0	.0	8.5
	50-70	23.5	4.9	7.1	31.8	.0	.0	.0	4.5	6.7	9.0
	>=70	76.5	92.7	89.3	22.7	82.4	100.0	87.5	95.5	93.3	82.4
Riboflavin	<50	58.8	78.0	14.3	72.7	29.4	5.6	62.5	81.8	80.0	54.8
	50-70	41.2	14.6	53.6	13.6	52.9	33.3	25.0	18.2	20.0	29.3
	>=70	.0	7.3	32.1	13.6	17.6	61.1	12.5	.0	.0	16.0

Niacin	<50	.0	.0	10.7	9.1	.0	5.6	.0	.0	.0	3.2
	50-70	17.6	4.9	10.7	13.6	23.5	5.6	.0	4.5	.0	9.0
	>=70	82.4	95.1	78.6	77.3	76.5	88.9	100.0	95.5	100.0	87.8
Vitamin-C	<50	35.3	39.0	39.3	54.5	52.9	33.3	37.5	13.6	13.3	36.2
	50-70	5.9	19.5	3.6	4.5	17.6	5.6	50.0	13.6	20.0	13.3
	>=70	58.8	41.5	57.1	40.9	29.4	61.1	12.5	72.7	66.7	50.5
Free Folic acid	<50	76.5	53.7	42.9	81.8	52.9	22.2	50.0	45.5	80.0	55.3
	50-70	17.6	34.1	28.6	4.5	23.5	22.2	37.5	27.3	.0	22.9
	>=70	5.9	12.2	28.6	13.6	23.5	55.6	12.5	27.3	20.0	21.8

Table AN-19 :
Distribution (%) of Adult(>=18 Year) Females- Lactating-Sedentary according to
Intake of Nutrients as % of RDA

Nutrients	% RDA	State									Pooled N=668
		Kerala	Tamil nadu	Karna- taka	Andhra Pradesh	Mahara- shtra	Gujarat	Madhya Pradesh	Orissa	West Bengal	
		N=58	N=181	N=54	N=88	N=46	N=48	N=42	N=72	N=79	
Protein	<50	15.5	17.1	7.4	10.2	13.0	2.1	14.3	20.8	15.2	13.9
	50-70	24.1	51.9	27.8	34.1	41.3	4.2	31.0	48.6	50.6	39.2
	>=70	60.3	30.9	64.8	55.7	45.7	93.8	54.8	30.6	34.2	46.9
Total Fat	<50	3.4	18.8	5.6	4.5	6.5	.0	21.4	26.4	17.7	13.2
	50-70	1.7	13.8	5.6	10.2	4.3	.0	11.9	25.0	21.5	12.0
	>=70	94.8	67.4	88.9	85.2	89.1	100.0	66.7	48.6	60.8	74.9
Energy	<50	.0	1.1	.0	3.4	2.2	.0	4.8	1.4	.0	1.3
	50-70	20.7	16.6	9.3	4.5	39.1	6.3	23.8	15.3	20.3	16.3
	>=70	79.3	82.3	90.7	92.0	58.7	93.8	71.4	83.3	79.7	82.3
Calcium	<50	15.5	34.8	7.4	18.2	17.4	4.2	38.1	47.2	39.2	27.4
	50-70	8.6	20.4	14.8	21.6	26.1	8.3	23.8	16.7	13.9	17.7
	>=70	75.9	44.8	77.8	60.2	56.5	87.5	38.1	36.1	46.8	54.9
Iron	<50	65.5	90.1	46.3	92.0	47.8	10.4	52.4	73.6	83.5	71.1
	50-70	24.1	4.4	24.1	8.0	28.3	16.7	26.2	18.1	5.1	13.6
	>=70	10.3	5.5	29.6	.0	23.9	72.9	21.4	8.3	11.4	15.3
Vitamin-A	<50	96.6	89.5	88.9	89.8	91.3	77.1	85.7	72.2	84.8	86.7
	50-70	3.4	2.8	5.6	5.7	2.2	16.7	2.4	2.8	.0	4.0
	>=70	.0	7.7	5.6	4.5	6.5	6.3	11.9	25.0	15.2	9.3
Thiamin	<50	3.4	5.5	3.7	31.8	10.9	.0	11.9	.0	.0	7.8
	50-70	12.1	5.0	5.6	31.8	2.2	.0	4.8	8.3	.0	8.4
	>=70	84.5	89.5	90.7	36.4	87.0	100.0	83.3	91.7	100.0	83.8
Riboflavin	<50	65.5	75.7	31.5	58.0	56.5	6.3	52.4	87.5	89.9	64.1
	50-70	27.6	16.6	31.5	34.1	23.9	20.8	26.2	11.1	7.6	20.8
	>=70	6.9	7.7	37.0	8.0	19.6	72.9	21.4	1.4	2.5	15.1
Niacin	<50	.0	.0	5.6	8.0	13.0	2.1	7.1	.0	.0	3.0

	50-70	5.2	13.3	24.1	29.5	17.4	8.3	16.7	4.2	.0	13.2
	>=70	94.8	86.7	70.4	62.5	69.6	89.6	76.2	95.8	100.0	83.8
Vitamin-C	<50	31.0	34.8	33.3	45.5	58.7	18.8	47.6	16.7	11.4	32.3
	50-70	17.2	16.0	18.5	13.6	8.7	10.4	9.5	18.1	6.3	13.8
	>=70	51.7	49.2	48.1	40.9	32.6	70.8	42.9	65.3	82.3	53.9
Free Folic acid	<50	60.3	39.8	46.3	69.3	47.8	4.2	50.0	40.3	45.6	45.4
	50-70	24.1	44.2	25.9	21.6	28.3	22.9	16.7	34.7	32.9	31.3
	>=70	15.5	16.0	27.8	9.1	23.9	72.9	33.3	25.0	21.5	23.4

Table AN-20 : Anthropometric Measurements

State : Kerala

Sex : Males

Age (Years)	Height (Cm)				Weight (Kg)				Arm Circumference (Cm)				Fatfold at Triceps (Mm)			
	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	48	65.8	65.9	5.1	48	7.2	7.4	1.6	48	13.0	13.2	1.4	48	9.7	10.2	2.3
1+	60	74.9	75.2	4.5	60	9.3	9.3	1.2	60	14.2	14.2	1.1	60	9.3	9.2	1.7
2+	44	83.8	85.5	8.8	44	11.4	11.4	1.3	44	14.6	14.6	1.2	44	9.5	9.6	1.8
3+	56	91.8	92.3	4.8	56	12.8	12.7	1.7	56	14.8	14.6	1.2	56	9.2	9.2	1.7
4+	31	98.0	97.9	5.5	31	13.9	13.8	1.6	31	15.1	15.0	1.1	31	8.8	8.8	2.1
5+	29	105.0	106.5	7.2	29	16.1	16.1	1.8	29	15.8	16.0	1.3	29	8.3	8.4	1.7
6+	30	109.8	109.8	6.4	30	16.5	16.4	2.2	30	15.0	14.8	1.1	30	7.4	7.0	2.1
7+	25	118.0	117.0	7.4	25	19.9	18.3	4.8	25	16.0	15.8	1.7	25	7.8	7.0	3.0
8+	20	123.1	123.7	6.4	20	21.1	20.6	3.5	20	16.4	16.3	1.9	20	6.8	6.4	1.9
9+	22	128.7	127.8	8.0	22	23.6	22.6	5.1	22	16.7	16.2	2.1	22	6.8	6.2	2.3
10+	37	130.7	130.7	7.2	37	24.8	24.5	4.0	37	17.2	17.4	1.8	37	7.4	7.0	2.2
11+	20	136.0	136.8	5.4	20	27.8	26.7	4.3	20	17.8	17.5	1.8	20	7.4	6.9	2.7
12+	32	141.5	140.9	6.9	32	31.2	30.4	6.6	32	18.9	18.4	3.1	32	8.7	7.2	3.8
13+	25	145.4	145.5	9.9	25	33.8	31.1	8.7	25	18.8	18.2	2.5	25	8.8	6.8	5.0
14+	27	149.8	150.0	8.0	27	36.2	34.7	6.6	27	19.8	19.4	1.9	27	7.3	7.2	2.4
15+	23	161.9	162.6	7.5	23	46.9	47.0	10.3	23	22.4	22.5	2.9	23	8.2	7.4	3.9
16+	16	163.4	163.0	8.5	16	47.8	48.5	8.7	16	22.0	22.1	2.8	16	6.7	5.7	3.1
17+	19	164.0	164.0	5.7	19	50.1	48.2	7.1	19	23.8	23.2	2.3	19	8.9	8.2	3.6
18-24	153	166.1	166.6	7.0	153	56.6	55.4	9.1	153	25.4	25.4	2.6	153	8.5	7.2	4.1
25-34	155	165.1	165.5	7.3	155	59.2	57.4	11.0	155	26.4	26.3	2.5	155	9.0	7.2	5.2
35-44	177	163.6	164.0	7.3	177	58.7	58.0	10.9	177	26.4	26.5	2.7	177	8.4	7.0	4.4
45-54	145	162.9	162.6	6.8	145	58.5	57.7	11.7	145	26.0	26.0	2.9	145	8.1	7.4	3.8
55-64	125	161.2	161.4	6.2	125	56.0	55.2	10.5	125	25.5	25.2	3.1	125	8.2	7.0	3.8
65-74	94	160.1	160.2	5.5	94	50.9	49.9	8.4	94	23.8	24.0	3.0	94	7.4	7.2	2.6
>= 75	53	157.5	158.5	6.8	53	50.9	49.0	9.8	53	23.8	23.6	2.9	53	8.5	8.0	3.2

Table An-21 : Anthropometric Measurements

State : Kerala

Sex : Females

Age (Years)	Height (Cm)				Weight (Kg)				Arm Circumference (Cm)				Fatfold at Triceps (Mm)			
	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	45	64.0	63.7	5.5	45	6.7	7.1	1.5	45	13.2	13.4	1.3	45	10.4	10.4	2.1
1+	63	74.9	74.9	4.7	63	8.9	8.8	1.5	63	13.8	13.8	1.4	63	9.3	9.0	2.3
2+	44	85.0	85.0	5.1	44	10.8	10.9	1.9	44	14.3	14.2	1.2	44	9.1	9.4	2.0
3+	52	90.1	91.0	5.6	52	12.3	12.5	1.5	52	14.8	14.9	1.0	52	9.9	9.7	1.7
4+	25	97.3	98.3	5.7	25	13.9	13.8	1.5	25	14.9	14.8	1.7	25	9.6	9.0	2.9
5+	31	104.0	104.3	5.1	31	15.3	15.1	2.2	31	15.2	15.0	1.4	31	8.4	8.2	1.6
6+	24	111.3	113.3	8.1	24	17.1	17.3	3.2	24	15.7	15.6	1.5	24	8.4	8.1	1.9
7+	30	115.0	116.3	8.1	30	18.5	18.0	3.4	30	15.8	16.2	1.8	30	8.1	8.0	2.1
8+	23	120.7	121.6	5.6	23	20.4	20.6	2.8	23	16.5	16.0	1.5	23	8.4	8.2	2.3
9+	27	125.4	127.6	8.3	27	22.9	22.1	4.9	27	17.1	16.8	1.9	27	8.6	7.8	2.4
10+	16	129.3	128.6	6.4	16	23.7	22.7	3.6	16	17.2	16.7	1.7	16	8.3	9.0	2.6
11+	16	137.1	137.3	7.1	16	28.8	28.9	5.1	16	18.1	18.0	2.0	16	8.6	8.1	2.5
12+	24	142.9	144.4	8.1	24	33.1	30.8	7.8	24	18.6	18.3	2.0	24	9.0	9.0	2.2
13+	25	148.3	149.4	7.5	25	38.9	37.8	9.6	25	20.9	20.0	3.5	25	10.6	8.8	4.3
14+	19	149.5	148.8	5.2	19	38.4	38.4	6.4	19	20.9	20.4	2.9	19	9.8	9.6	3.5
15+	25	151.8	151.2	5.9	25	42.7	41.3	7.0	25	21.6	21.6	2.0	25	12.3	11.4	3.0
16+	37	154.8	154.6	4.5	37	46.5	44.0	6.8	37	22.8	22.1	2.7	37	13.0	12.2	4.7
17+	37	153.9	153.4	5.1	37	46.5	45.5	8.1	37	22.8	23.0	2.6	37	13.0	13.2	4.6
18-24	299	153.3	153.3	6.1	299	48.8	48.1	8.1	299	23.7	23.5	2.8	299	14.0	13.4	5.6
25-34	526	152.0	151.7	6.1	526	50.9	50.1	9.7	526	24.9	24.5	3.4	526	15.3	14.7	6.3
35-44	407	151.0	151.0	5.7	407	53.3	52.8	10.1	407	25.8	25.6	3.4	407	17.5	17.4	6.8
45-54	286	149.8	149.9	6.0	286	52.5	52.1	10.6	286	25.7	25.9	3.5	286	17.7	17.3	6.8
55-64	200	148.0	147.6	5.9	200	49.4	49.1	10.0	200	25.2	25.0	3.2	200	16.1	16.1	6.0
65-74	145	145.5	145.4	5.3	145	45.6	45.1	9.9	145	23.8	23.6	3.5	145	14.0	13.6	5.6
>= 75	50	143.8	143.5	6.2	50	43.3	40.2	10.1	50	22.5	21.8	3.3	50	12.4	11.4	5.7

Table An-22 : Anthropometric Measurements

State : Tamilnadu

Sex : Males

Age (Years)	Height (Cm)				Weight (Kg)				Arm Circumference (Cm)				Fatfold at Triceps (Mm)			
	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	181	65.5	66.0	5.4	181	6.5	6.6	1.5	181	12.7	12.8	1.3	181	8.0	8.0	1.7
1+	164	76.5	76.3	4.1	164	8.8	8.9	1.3	164	13.3	13.0	1.0	164	7.9	7.6	1.8
2+	140	85.5	85.3	4.4	140	10.7	10.7	1.3	140	13.8	14.0	.9	140	8.9	8.6	1.7
3+	131	92.4	92.7	4.8	131	12.2	12.2	1.5	131	14.1	14.0	.9	131	9.0	8.8	1.8
4+	105	98.5	99.1	5.7	105	13.7	13.4	1.6	105	14.3	14.2	1.4	105	9.5	8.8	8.7
5+	85	102.5	102.1	4.7	85	14.3	14.4	1.7	85	14.1	14.0	1.0	85	7.9	7.6	1.8
6+	96	108.5	108.6	5.2	96	15.8	15.9	1.7	96	14.3	14.0	.9	96	7.4	7.2	1.7
7+	70	112.6	112.3	7.9	70	17.3	17.0	2.4	70	14.5	14.4	1.1	70	6.9	6.4	1.8
8+	81	119.2	118.5	6.6	81	19.1	18.4	3.4	81	14.9	14.8	1.4	81	7.0	6.6	2.0
9+	52	124.2	123.6	6.0	52	21.4	21.2	3.3	52	15.5	15.5	1.3	52	6.9	6.8	2.5
10+	59	127.8	127.6	6.1	59	22.7	23.0	2.9	59	15.9	15.6	1.2	59	7.1	6.8	2.3
11+	43	132.5	131.8	6.1	43	24.5	25.1	3.0	43	16.1	16.0	1.1	43	7.3	7.0	1.5
12+	54	135.2	135.4	7.0	54	25.2	25.0	3.4	54	16.3	16.2	1.3	54	6.8	6.3	2.0
13+	37	141.2	141.6	7.7	37	29.3	28.3	6.3	37	17.9	17.0	2.8	37	8.7	7.4	4.0
14+	30	147.1	146.9	7.2	30	32.3	32.1	5.0	30	17.9	17.8	1.7	30	7.4	6.6	3.3
15+	30	154.9	154.9	8.2	30	38.9	39.4	8.1	30	19.7	20.0	2.8	30	8.7	7.9	4.0
16+	20	161.3	161.9	9.6	20	44.4	46.9	7.5	20	21.1	21.2	2.3	20	9.1	8.6	3.0
17+	17	162.0	162.1	9.6	17	48.3	50.5	10.1	17	23.2	23.4	3.2	17	9.9	7.8	6.0
18-24	149	165.0	165.2	6.9	149	50.9	50.2	7.3	149	23.4	23.0	2.6	149	8.2	7.0	3.8
25-34	407	165.4	165.0	6.5	407	54.3	52.3	9.1	407	24.8	24.8	2.8	407	9.6	7.6	5.3
35-44	332	163.6	163.1	6.1	332	55.1	53.3	9.4	332	25.1	25.0	3.0	332	10.2	9.0	5.2
45-54	141	164.2	164.0	5.8	141	55.3	54.0	9.8	141	24.7	25.0	3.0	141	10.5	8.8	5.6
55-64	91	162.8	162.6	6.0	91	52.6	52.0	10.1	91	23.6	24.0	2.8	91	9.8	9.2	4.3
65-74	40	162.4	162.0	7.6	40	51.0	48.6	10.3	40	23.0	23.0	2.8	40	9.0	7.8	4.0
>= 75	18	161.0	160.8	5.3	18	50.1	49.7	8.5	18	22.7	22.8	2.8	18	10.6	10.3	4.5

Table An-23 : Anthropometric Measurements

State : Tamilnadu

Sex : Females

Age (Years)	Height (Cm)				Weight (Kg)				Arm Circumference (Cm)				Fatfold at Triceps (Mm)			
	n	Mean	Median	SD	N	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	156	63.1	63.2	5.4	156	5.8	6.0	1.4	156	12.0	12.0	1.2	156	7.9	7.8	1.7
1+	137	75.0	75.1	4.3	137	8.1	8.2	1.1	137	12.9	13.0	1.2	137	8.0	7.8	1.8
2+	130	85.1	84.6	4.6	130	10.4	10.3	1.3	130	13.7	13.6	1.0	130	9.1	9.0	1.6
3+	120	91.9	91.7	4.5	120	11.9	11.8	1.5	120	14.1	14.0	1.0	120	9.5	9.4	1.9
4+	114	97.0	97.6	5.0	114	12.8	12.9	1.5	114	14.1	14.0	1.4	114	9.2	9.2	1.7
5+	85	102.1	102.3	5.2	85	14.1	14.0	1.6	85	14.2	14.0	.8	85	8.6	8.4	1.7
6+	67	107.1	106.8	4.4	67	15.2	15.1	1.7	67	14.3	14.0	1.0	67	8.2	8.0	1.6
7+	103	112.2	111.7	6.0	103	16.7	16.5	2.3	103	14.5	14.6	1.0	103	7.9	7.4	1.8
8+	98	119.0	119.5	6.1	98	19.0	18.9	2.7	98	15.1	15.0	1.2	98	7.8	7.2	2.5
9+	65	122.9	122.7	6.3	65	20.3	19.7	2.5	65	15.5	15.0	1.8	65	8.1	8.0	2.2
10+	70	127.5	126.9	7.2	70	22.2	22.2	3.6	70	15.9	16.0	1.5	70	8.2	7.6	2.5
11+	61	133.6	133.3	7.8	61	25.5	24.8	4.3	61	16.6	16.8	1.3	61	8.2	8.0	1.9
12+	58	137.5	137.4	8.1	58	28.2	27.3	5.9	58	17.5	17.2	1.8	58	9.4	8.9	2.7
13+	48	145.7	147.4	7.9	48	32.9	32.4	6.3	48	18.4	18.0	2.1	48	9.7	8.6	3.6
14+	49	148.5	149.3	6.3	49	36.4	36.6	5.4	49	19.5	19.4	2.0	49	11.4	10.0	4.5
15+	28	150.8	149.7	4.7	28	39.8	38.5	6.3	28	20.6	20.3	2.2	28	11.8	11.3	4.3
16+	43	151.3	151.1	6.1	43	40.2	39.4	5.5	43	20.8	21.0	1.7	43	12.5	11.8	3.8
17+	39	153.2	154.0	5.6	39	43.1	42.1	5.3	39	21.6	21.4	1.7	39	12.8	12.0	3.3
18-24	524	152.5	152.2	5.3	524	44.8	44.0	6.9	524	22.1	22.0	2.4	524	13.6	12.5	5.1
25-34	805	152.5	152.3	5.5	805	46.8	44.7	8.9	805	23.1	22.8	3.0	805	15.2	14.0	6.8
35-44	294	152.0	151.8	5.4	294	48.0	46.3	9.4	294	23.8	23.2	3.4	294	17.0	16.0	7.3
45-54	140	151.4	151.1	5.7	140	48.7	47.6	10.1	140	24.1	23.8	3.6	140	17.6	17.0	7.4
55-64	111	150.8	150.8	5.4	111	46.5	45.7	8.6	111	23.4	23.0	3.2	111	16.1	16.0	6.1
65-74	58	147.6	147.6	5.4	58	44.3	42.3	9.7	58	22.4	21.8	3.3	58	14.1	12.9	6.2
>= 75	19	148.4	148.0	4.9	19	44.8	44.4	8.0	19	22.4	22.0	2.4	19	12.3	11.4	5.3

Table An-24 : Anthropometric Measurements

State : Karnataka

Sex : Males

Age (Years)	Height (Cm)				Weight (Kg)				Arm Circumference (Cm)				Fatfold at Triceps (Mm)			
	n	Mean	Median	SD	N	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	74	63.7	64.2	4.1	74	6.9	7.0	1.2	74	12.9	12.9	1.0	74	7.6	7.4	1.4
1+	109	74.6	74.6	3.9	109	8.8	8.6	1.3	109	13.6	13.3	2.6	109	7.9	7.8	1.7
2+	113	83.0	82.7	4.7	113	10.4	10.4	1.2	113	13.8	13.7	1.0	113	8.2	8.2	1.5
3+	106	89.3	89.9	5.1	106	11.8	11.7	1.4	106	14.2	14.2	.9	106	8.8	9.1	1.8
4+	83	96.8	96.4	4.9	83	13.4	13.3	1.5	83	14.2	14.1	1.0	83	8.1	8.2	1.6
5+	77	101.2	101.8	5.9	77	14.5	14.3	1.7	77	14.3	14.2	1.0	77	7.6	7.2	1.6
6+	85	107.2	106.8	5.3	85	15.7	15.6	1.7	85	14.4	14.3	.9	85	7.2	7.2	1.6
7+	93	113.4	112.7	6.3	93	17.5	17.5	2.3	93	14.7	14.8	1.0	93	6.8	6.4	1.5
8+	102	117.8	117.1	6.1	102	19.0	18.5	2.6	102	15.0	14.9	1.2	102	6.6	6.2	1.5
9+	96	123.3	123.4	5.5	96	20.9	20.6	3.0	96	15.6	15.4	1.3	96	6.8	6.4	1.6
10+	89	127.2	126.5	5.7	89	22.4	22.0	2.9	89	15.9	15.8	1.2	89	6.8	6.4	1.5
11+	61	132.6	132.4	5.3	61	24.9	24.3	3.9	61	16.7	16.5	1.5	61	7.3	7.0	2.3
12+	99	136.9	136.3	8.1	99	27.5	26.7	5.6	99	17.0	16.8	1.6	99	6.9	6.4	1.9
13+	81	141.1	141.4	7.7	81	30.3	29.2	5.5	81	18.1	17.8	2.0	81	7.5	6.8	2.6
14+	63	148.9	148.2	9.5	63	34.8	32.9	8.8	63	18.9	18.2	2.3	63	7.3	6.6	2.5
15+	46	154.3	153.3	8.0	46	38.5	38.3	6.9	46	19.9	19.5	1.9	46	7.1	6.4	1.9
16+	61	157.2	157.5	8.1	61	41.2	41.0	6.8	61	20.8	20.8	2.1	61	7.2	7.0	1.9
17+	49	163.3	163.5	6.7	49	48.7	47.9	6.9	49	22.8	22.8	2.0	49	7.4	6.8	2.3
18-24	251	164.3	164.4	6.9	251	51.4	50.8	7.6	251	24.1	24.0	2.4	251	7.4	6.4	2.8
25-34	399	163.8	164.2	6.3	399	53.6	52.1	8.4	399	25.2	25.0	2.6	399	8.1	7.0	3.5
35-44	346	162.3	162.3	6.5	346	53.6	52.1	9.5	346	25.2	25.0	2.7	346	8.5	7.4	3.6
45-54	255	162.4	162.4	6.2	255	53.7	52.0	10.1	255	24.8	24.6	3.2	255	8.9	7.8	4.1
55-64	150	161.3	161.4	6.3	150	52.2	50.2	10.3	150	24.3	24.2	3.1	150	8.7	7.8	3.7
65-74	76	160.6	161.6	6.6	76	50.8	49.7	9.4	76	23.4	23.4	2.7	76	8.0	7.7	2.5
>= 75	29	160.2	160.2	6.0	29	50.7	51.5	7.8	29	23.2	23.0	2.3	29	9.1	9.2	2.7

Table An-25 : Anthropometric Measurements

State : Karnataka

Sex : Females

Age (Years)	Height (Cm)				Weight (Kg)				Arm Circumference (Cm)				Fatfold at Triceps (Mm)			
	n	Mean	Median	SD	N	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	80	63.4	63.8	4.4	80	6.5	6.6	1.3	80	12.8	12.8	1.0	80	7.7	7.8	1.5
1+	83	73.3	72.6	4.3	83	8.2	8.0	1.1	83	13.0	13.0	.8	83	7.7	7.4	1.6
2+	87	81.5	81.6	4.3	87	10.0	10.0	1.2	87	13.6	13.7	1.0	87	8.7	8.4	2.0
3+	93	88.1	87.6	5.6	93	11.3	11.2	1.6	93	14.1	14.1	1.1	93	9.3	9.4	1.9
4+	76	95.4	95.7	5.5	76	13.1	13.2	1.3	76	14.4	14.4	1.0	76	9.1	9.2	1.8
5+	79	101.0	100.7	5.9	79	14.2	13.9	1.9	79	14.4	14.3	1.0	79	8.7	8.4	1.8
6+	89	106.1	106.2	5.0	89	15.2	15.4	1.8	89	14.5	14.6	1.0	89	7.6	7.4	1.5
7+	90	111.4	111.1	5.9	90	16.6	16.3	2.1	90	14.7	14.8	1.0	90	7.7	7.8	1.6
8+	113	117.4	117.4	5.8	113	19.0	19.0	3.3	113	15.5	15.4	1.3	113	7.7	7.4	1.7
9+	71	124.2	123.7	5.8	71	21.4	21.5	2.6	71	16.0	16.0	1.1	71	8.0	7.8	1.9
10+	96	127.3	125.8	7.0	96	22.7	22.1	3.5	96	16.4	16.3	1.4	96	7.7	7.4	2.0
11+	78	131.3	131.3	5.8	78	25.0	24.0	4.8	78	16.8	16.8	1.5	78	7.7	7.6	2.0
12+	91	139.8	140.0	6.7	91	29.6	28.6	5.4	91	18.1	18.1	1.9	91	8.6	8.4	2.5
13+	78	142.8	143.3	7.2	78	33.0	33.0	6.1	78	19.0	18.8	2.0	78	9.4	9.2	2.5
14+	75	148.0	148.0	4.8	75	37.8	37.1	5.5	75	20.5	20.3	2.3	75	10.3	9.6	3.3
15+	75	149.9	150.6	5.5	75	40.5	40.6	6.3	75	21.5	21.8	2.3	75	11.7	11.4	3.5
16+	70	150.9	151.4	5.1	70	41.9	42.7	5.0	70	22.1	22.1	2.1	70	11.9	11.2	3.0
17+	42	151.5	150.8	7.4	42	45.0	43.6	7.9	42	22.9	23.0	2.5	42	13.1	12.8	3.8
18-24	456	151.9	151.8	5.6	456	43.5	42.8	6.0	456	22.1	22.0	2.0	456	11.0	10.4	3.6
25-34	674	151.4	151.5	5.7	674	44.9	44.1	7.1	674	22.9	22.6	2.5	674	11.2	10.2	4.1
35-44	437	151.0	150.8	5.5	437	46.1	44.7	8.8	437	23.6	23.2	2.8	437	12.4	11.4	4.6
45-54	289	150.2	150.0	5.3	289	47.4	45.9	9.9	289	24.1	23.8	3.3	289	13.5	12.4	5.0
55-64	166	149.7	149.6	5.9	166	43.9	42.0	8.7	166	23.1	22.8	3.4	166	11.7	10.6	4.4
65-74	80	147.8	147.0	6.1	80	41.5	40.4	8.4	80	22.0	22.0	3.4	80	10.7	10.2	4.5
>= 75	29	145.4	145.4	7.3	29	41.2	39.5	7.1	29	22.1	21.8	2.9	29	11.1	10.4	4.9

Table An-26 : Anthropometric Measurements

State : Andhra Pradesh

Sex : Males

Age (Years)	Height (Cm)				Weight (Kg)				Arm Circumference (Cm)				Fatfold at Triceps (Mm)			
	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	139	64.1	64.4	5.5	139	6.4	6.5	1.5	139	13.0	13.0	1.3	139	9.6	10.0	1.9
1+	110	77.6	77.5	4.6	110	9.0	9.0	1.2	110	13.8	13.8	.9	110	8.5	8.0	1.6
2+	125	86.0	85.6	4.3	125	10.6	10.5	1.5	125	14.1	14.0	.9	125	8.7	8.4	1.5
3+	119	93.1	93.6	5.6	119	12.2	12.3	1.7	119	14.4	14.4	.9	119	8.6	8.6	1.8
4+	85	100.4	100.6	5.2	85	13.6	13.5	1.6	85	14.3	14.2	1.0	85	8.0	8.0	1.5
5+	95	106.2	106.4	5.3	95	14.8	14.7	1.6	95	14.5	14.4	.8	95	7.4	7.2	1.5
6+	84	112.4	112.5	6.5	84	16.3	16.2	2.2	84	14.6	14.6	.9	84	7.0	7.0	1.5
7+	83	117.4	117.7	6.5	83	17.7	17.3	3.0	83	14.8	15.0	1.0	83	6.7	6.4	1.6
8+	73	122.1	121.6	6.0	73	19.3	19.2	2.3	73	15.2	15.0	1.0	73	6.5	6.0	1.6
9+	79	125.1	126.7	5.5	79	20.8	20.8	2.8	79	15.4	15.0	1.2	79	6.6	6.0	1.8
10+	74	130.3	130.0	5.3	74	23.1	23.4	3.2	74	16.1	16.0	1.2	74	6.5	6.0	1.7
11+	49	133.1	131.0	6.0	49	25.1	24.2	4.0	49	16.7	16.4	1.6	49	6.8	6.0	2.2
12+	56	137.8	137.8	6.4	56	28.0	26.7	4.3	56	17.3	17.0	1.6	56	6.7	6.8	1.8
13+	30	144.4	144.8	7.9	30	32.1	31.4	5.4	30	18.8	18.2	1.8	30	7.0	7.0	1.8
14+	32	150.2	151.4	8.2	32	35.3	36.3	6.7	32	19.5	19.6	2.2	32	6.5	6.2	1.3
15+	31	153.7	156.3	11.5	31	39.3	40.0	7.4	31	20.7	21.0	2.0	31	7.0	6.6	2.4
16+	35	161.0	162.3	8.5	35	45.9	45.5	7.1	35	22.3	22.4	2.4	35	6.8	6.4	2.1
17+	27	160.8	162.1	8.7	27	45.6	47.1	6.8	27	22.2	23.0	2.2	27	7.3	7.0	2.2
18-24	194	163.2	163.8	6.3	194	50.9	50.4	7.5	194	24.1	24.0	2.3	194	7.3	6.4	3.0
25-34	388	162.9	163.0	6.4	388	52.7	51.5	9.1	388	25.0	25.0	2.5	388	7.5	6.4	3.3
35-44	296	162.6	162.5	6.3	296	54.1	51.6	9.7	296	25.3	25.0	2.8	296	8.2	7.2	3.6
45-54	166	161.5	162.0	6.4	166	53.6	51.6	10.3	166	24.9	25.0	2.8	166	8.2	7.0	3.7
55-64	93	161.9	161.3	5.8	93	52.6	50.0	11.8	93	24.2	24.0	3.3	93	9.0	8.0	4.2
65-74	43	160.3	161.0	6.5	43	49.9	49.5	9.3	43	23.2	22.5	2.6	43	8.6	8.0	3.8
>= 75	6	160.9	162.2	9.8	6	45.5	45.4	11.2	6	21.4	21.3	3.3	6	8.7	6.7	5.1

Table An-27 : Anthropometric Measurements

State : Andhra Pradesh

Sex : Females

Age (Years)	Height (Cm)				Weight (Kg)				Arm Circumference (Cm)				Fatfold at Triceps (Mm)			
	n	Mean	Median	SD	N	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	121	63.5	63.3	5.3	121	6.2	6.3	1.4	121	12.6	13.0	1.1	121	9.2	9.0	1.8
1+	96	75.2	75.5	4.4	96	8.3	8.3	1.4	96	13.3	13.2	1.0	96	8.7	8.2	1.7
2+	110	84.6	85.0	5.9	110	10.3	10.5	1.4	110	13.9	14.0	.9	110	9.4	9.4	2.0
3+	113	91.4	91.5	5.4	113	11.5	11.5	1.6	113	14.1	14.0	1.1	113	9.0	9.0	1.9
4+	79	99.5	99.7	6.1	79	13.4	13.3	1.6	79	14.4	14.2	1.1	79	8.9	9.0	1.9
5+	100	104.6	105.1	6.3	100	14.2	14.0	1.8	100	14.4	14.0	1.0	100	8.1	8.0	1.9
6+	78	110.7	110.5	6.7	78	15.9	15.5	2.2	78	14.7	14.6	1.1	78	7.8	8.0	1.8
7+	103	116.7	117.0	5.7	103	17.6	17.2	2.4	103	15.1	15.0	1.1	103	7.7	7.4	1.8
8+	89	120.4	121.6	7.2	89	19.2	19.2	2.9	89	15.4	15.2	1.1	89	7.5	7.4	1.6
9+	98	126.5	127.2	6.5	98	21.7	21.0	3.5	98	16.0	16.0	1.3	98	7.6	7.4	1.8
10+	85	131.8	130.5	6.8	85	24.8	24.5	4.3	85	17.1	17.0	1.6	85	8.1	8.0	2.3
11+	61	135.0	135.0	5.8	61	26.9	26.5	4.3	61	17.7	17.6	1.9	61	8.0	7.4	2.0
12+	69	139.8	140.0	8.8	69	29.6	29.3	6.3	69	18.0	18.0	2.2	69	8.3	8.0	2.4
13+	67	146.8	148.0	5.9	67	35.2	35.7	4.9	67	19.9	20.0	2.3	67	9.6	9.0	2.6
14+	37	149.9	149.8	4.5	37	38.6	38.6	4.6	37	20.8	21.0	2.0	37	10.3	10.0	2.9
15+	72	148.4	148.9	6.8	72	38.6	39.3	5.8	72	21.0	21.0	1.8	72	10.5	10.1	2.7
16+	37	151.6	152.3	4.8	37	42.3	42.0	5.5	37	22.0	21.6	1.9	37	11.7	12.0	2.7
17+	38	152.0	151.7	5.2	38	44.6	43.8	6.5	38	22.6	22.1	2.4	38	12.6	12.0	3.5
18-24	536	151.1	151.0	5.6	536	43.4	42.3	6.5	536	22.2	22.0	2.2	536	10.6	10.0	3.6
25-34	706	151.1	151.0	5.5	706	44.5	43.0	8.0	706	22.8	22.5	2.6	706	10.7	10.0	4.1
35-44	316	151.2	151.3	5.6	316	47.1	44.0	9.5	316	23.9	23.0	3.1	316	11.4	10.4	4.4
45-54	224	149.7	149.8	6.6	224	46.9	44.5	9.9	224	23.9	23.5	3.4	224	11.5	11.0	4.3
55-64	105	148.6	148.3	5.5	105	45.1	42.7	9.9	105	23.3	23.0	3.1	105	11.1	11.0	3.8
65-74	45	146.4	146.7	7.3	45	44.6	42.7	11.1	45	23.4	22.5	3.4	45	10.4	10.0	3.9
>= 75	11	148.2	151.2	7.9	11	42.7	42.6	5.5	11	22.3	22.0	1.9	11	8.9	9.0	2.4

Table An-28 : Anthropometric Measurements

State : Maharashtra

Sex : Males

Age (Years)	Height (Cm)				Weight (Kg)				Arm Circumference (Cm)				Fatfold at Triceps (Mm)			
	n	Mean	Median	SD	N	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	54	69.2	69.8	4.1	54	7.3	7.1	1.3	54	13.2	13.0	.9	54	9.3	9.0	2.1
1+	103	77.8	77.5	4.7	103	8.5	8.5	1.2	103	13.1	13.0	1.0	103	8.3	8.0	1.6
2+	104	85.9	86.4	5.9	104	10.2	10.3	1.4	104	13.6	13.6	1.0	104	8.6	8.0	1.9
3+	96	91.9	91.7	5.0	96	11.5	11.5	1.4	96	14.1	14.0	1.0	96	9.3	9.4	1.7
4+	103	99.7	100.4	5.6	103	13.3	13.2	1.9	103	14.3	14.2	1.1	103	8.6	8.4	1.9
5+	89	104.1	104.5	6.2	89	14.1	14.0	1.8	89	14.2	14.0	1.1	89	7.8	7.8	1.8
6+	95	110.3	110.5	6.3	95	15.5	15.5	2.0	95	14.4	14.4	.9	95	7.0	7.0	1.4
7+	95	116.2	115.0	5.0	95	17.5	17.3	2.1	95	14.9	15.0	1.1	95	6.5	6.4	1.5
8+	89	121.1	120.0	6.3	89	19.0	18.8	2.4	89	15.2	15.4	1.2	89	6.8	6.4	2.0
9+	69	125.5	126.0	5.8	69	20.2	19.7	3.0	69	15.2	15.0	1.2	69	6.0	6.0	1.5
10+	94	129.4	130.2	5.4	94	22.3	22.2	3.0	94	16.1	16.0	1.3	94	6.5	6.0	2.1
11+	78	133.2	132.5	5.6	78	25.0	24.6	4.1	78	16.8	16.4	1.6	78	6.9	6.2	2.6
12+	68	138.7	138.6	7.0	68	27.2	26.6	4.3	68	17.1	17.0	1.5	68	6.5	6.4	1.8
13+	58	142.3	142.3	8.5	58	29.9	29.1	6.0	58	17.9	17.6	2.0	58	6.7	6.0	2.4
14+	59	147.0	146.5	8.3	59	32.4	32.7	5.5	59	18.5	18.4	2.3	59	6.4	6.0	2.1
15+	55	154.0	154.0	9.0	55	37.8	36.4	7.7	55	19.7	19.8	2.1	55	6.3	6.0	1.9
16+	36	158.4	158.6	8.2	36	41.6	41.7	6.6	36	21.0	21.0	2.0	36	6.2	6.0	2.3
17+	32	159.7	160.5	10.0	32	43.9	41.9	10.2	32	21.5	21.0	2.9	32	6.7	6.0	2.3
18-24	219	165.5	165.4	6.9	219	50.6	50.3	7.3	219	23.5	23.0	2.2	219	6.7	5.6	4.9
25-34	286	164.5	164.5	6.3	286	53.0	51.5	8.4	286	24.6	24.5	2.6	286	6.6	6.0	3.2
35-44	256	163.4	163.2	6.2	256	53.3	51.5	8.9	256	24.8	25.0	2.5	256	7.0	6.0	3.4
45-54	141	162.9	163.0	6.1	141	55.1	53.3	9.1	141	25.2	25.0	2.5	141	7.9	7.0	3.3
55-64	80	162.8	162.5	6.2	80	53.4	50.9	10.0	80	24.0	23.6	3.0	80	7.5	6.4	3.8
65-74	100	161.1	161.2	5.6	100	50.1	48.9	7.9	100	23.6	23.6	2.3	100	7.0	6.7	2.5
>= 75	15	161.8	164.0	7.0	15	50.0	48.2	11.7	15	22.7	22.6	3.0	15	7.4	7.0	3.9

Table An-29 : Anthropometric Measurements

State : Maharashtra

Sex : Females

Age (Years)	Height (Cm)				Weight (Kg)				Arm Circumference (Cm)				Fatfold at Triceps (Mm)			
	N	Mean	Median	SD	N	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	67	68.3	68.5	4.1	67	6.6	6.6	1.2	67	12.4	12.4	1.2	67	8.8	9.0	1.9
1+	81	75.7	75.6	4.5	81	8.2	8.2	1.5	81	12.9	13.0	1.0	81	8.8	9.0	2.0
2+	93	84.8	84.5	4.9	93	10.0	9.8	1.3	93	13.6	13.6	1.0	93	10.2	10.0	2.0
3+	100	91.3	91.0	6.5	100	11.1	11.2	1.7	100	13.6	13.6	1.0	100	9.7	9.6	2.1
4+	67	98.2	99.5	5.9	67	12.8	12.4	1.9	67	14.3	14.0	1.0	67	9.4	9.6	2.0
5+	83	104.1	103.7	6.1	83	14.0	13.9	2.0	83	14.3	14.2	.9	83	8.4	8.4	2.1
6+	79	108.5	108.8	4.7	79	14.8	14.5	1.7	79	14.3	14.2	1.0	79	7.7	8.0	1.7
7+	74	114.0	114.4	6.1	74	16.5	16.4	2.0	74	14.7	14.6	.9	74	7.4	7.2	1.5
8+	73	119.9	119.7	5.4	73	18.4	18.2	2.6	73	15.1	15.0	1.2	73	7.3	7.0	2.2
9+	73	125.3	125.0	5.7	73	20.4	20.1	3.2	73	15.8	16.0	1.3	73	7.3	7.0	2.0
10+	104	128.3	128.4	5.2	104	21.8	21.5	2.8	104	16.2	16.2	1.4	104	7.6	7.1	2.0
11+	69	133.5	133.0	6.0	69	24.4	24.0	4.2	69	16.8	16.6	1.4	69	7.6	7.0	2.2
12+	98	139.0	137.8	7.1	98	28.4	27.8	4.7	98	18.0	18.0	1.4	98	8.1	8.0	2.1
13+	79	143.2	143.0	7.5	79	31.7	32.2	6.0	79	18.8	19.0	1.7	79	8.4	8.0	2.7
14+	61	149.1	149.5	6.0	61	36.8	36.0	6.1	61	20.4	20.0	2.1	61	9.5	9.0	3.3
15+	54	149.9	150.0	5.6	54	38.5	38.5	5.1	54	20.5	20.3	1.6	54	9.7	9.0	2.8
16+	59	151.5	150.9	5.6	59	40.3	40.1	5.2	59	21.1	21.4	1.7	59	10.2	10.0	2.7
17+	55	151.6	152.5	5.5	55	41.5	41.0	5.6	55	21.4	21.2	1.9	55	10.5	10.0	3.2
18-24	468	151.5	151.5	5.4	468	43.0	42.5	5.8	468	22.0	22.0	1.9	468	10.8	11.0	3.4
25-34	642	151.6	151.5	5.3	642	43.6	42.5	7.1	642	22.7	22.4	2.4	642	11.1	10.3	4.2
35-44	346	150.8	151.0	5.4	346	45.3	43.9	8.3	346	23.5	23.0	2.9	346	13.1	13.0	4.9
45-54	205	150.8	151.4	5.5	205	46.6	46.2	9.7	205	24.0	24.0	3.2	205	13.5	14.0	5.0
55-64	167	148.7	148.5	5.5	167	44.3	42.5	9.4	167	23.5	23.0	3.0	167	12.8	12.6	4.8
65-74	68	148.6	149.2	4.6	68	42.2	40.3	9.3	68	22.8	22.0	3.5	68	11.0	10.0	5.2
>= 75	5	145.3	147.0	6.1	5	43.0	43.0	8.0	5	24.0	23.0	2.2	5	12.4	13.0	2.9

Table An-30 : Anthropometric Measurements

State : Gujarat

Sex : Males

Age (Years)	Height (Cm)				Weight (Kg)				Arm Circumference (Cm)				Fatfold at Triceps (Mm)			
	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	90	63.2	63.1	5.4	90	6.0	6.1	1.5	90	13.9	14.1	1.8	90	9.1	9.2	2.6
1+	104	73.6	73.1	6.5	104	8.2	8.1	1.3	104	15.0	15.1	1.5	104	8.9	8.9	2.6
2+	102	84.5	84.1	6.1	102	10.3	10.4	1.5	102	15.5	15.3	2.8	102	9.5	9.2	3.2
3+	106	91.4	91.2	5.5	106	11.8	11.9	1.7	106	15.9	16.0	1.2	106	9.6	9.7	2.3
4+	78	95.9	95.5	5.3	78	12.9	13.0	1.8	78	16.1	16.1	1.3	78	8.8	9.0	2.1
5+	67	102.5	102.3	6.3	67	14.6	14.4	2.1	67	16.6	16.4	1.3	67	8.2	8.2	2.2
6+	64	107.7	109.2	6.4	64	15.8	15.9	1.8	64	16.6	16.5	1.3	64	7.7	7.6	1.8
7+	75	114.4	115.1	6.4	75	17.9	18.0	2.3	75	17.2	17.3	1.5	75	7.3	7.2	1.6
8+	54	119.5	120.4	7.4	54	19.6	19.0	3.1	54	17.5	17.3	1.9	54	7.4	7.3	1.5
9+	39	122.9	122.3	6.0	39	20.6	20.3	2.2	39	17.6	17.5	1.8	39	7.3	7.2	1.7
10+	46	126.2	125.9	8.6	46	22.5	21.7	3.4	46	18.2	18.1	1.9	46	7.1	6.8	1.8
11+	40	128.7	129.7	7.2	40	23.6	22.7	4.2	40	18.9	18.6	2.4	40	7.5	7.2	2.0
12+	46	134.5	132.7	8.3	46	26.5	25.4	4.7	46	19.6	19.6	2.5	46	7.7	7.2	2.0
13+	43	138.6	137.8	8.8	43	28.8	28.1	5.2	43	20.1	20.2	2.1	43	7.3	7.2	1.7
14+	26	146.8	150.0	8.2	26	36.1	35.0	7.2	26	22.6	22.8	2.7	26	8.0	7.3	3.2
15+	42	151.3	150.5	8.1	42	38.5	39.8	6.8	42	23.1	23.5	2.7	42	7.3	6.5	2.7
16+	31	154.3	155.7	8.8	31	42.9	44.4	7.2	31	24.2	24.3	2.8	31	7.4	6.4	2.8
17+	20	159.6	160.7	6.0	20	43.3	42.1	4.6	20	23.4	24.0	1.8	20	6.3	5.8	1.7
18-24	230	160.5	160.6	6.8	230	49.0	48.5	6.9	230	25.7	25.4	2.4	230	7.3	6.2	3.5
25-34	255	162.2	162.1	6.3	255	51.8	50.2	8.2	255	26.5	26.4	2.8	255	7.9	6.8	3.8
35-44	236	161.4	160.9	5.9	236	53.7	51.6	9.5	236	27.2	26.6	3.3	236	8.6	6.6	4.8
45-54	140	160.9	160.4	6.0	140	52.1	50.3	9.6	140	26.8	26.3	3.2	140	7.9	6.9	4.0
55-64	90	160.1	159.8	6.9	90	49.2	48.4	8.6	90	26.1	26.1	3.2	90	7.5	6.6	3.2
65-74	29	157.9	157.3	8.8	29	49.2	50.3	11.2	29	25.8	26.0	3.6	29	7.2	6.2	3.6
>= 75	3	157.2	158.9	8.2	3	44.0	43.4	4.4	3	25.1	26.1	1.8	3	7.5	8.2	1.9

Table An-31 : Anthropometric Measurements

State : Gujarat

Sex : Females

Age (Years)	Height (Cm)				Weight (Kg)				Arm Circumference (Cm)				Fatfold at Triceps (Mm)			
	n	Mean	Median	SD	N	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	89	62.9	62.2	5.4	89	5.7	5.7	1.5	89	13.7	14.0	1.4	89	8.9	9.0	2.5
1+	92	72.5	71.9	5.8	92	7.9	7.9	1.2	92	14.9	15.0	1.0	92	9.0	9.0	2.3
2+	77	82.6	82.9	6.7	77	9.8	10.1	1.6	77	15.3	15.3	1.2	77	9.7	9.8	2.1
3+	102	90.0	90.4	6.3	102	11.6	11.8	1.5	102	15.8	16.1	1.4	102	9.9	10.0	2.5
4+	57	96.5	97.6	6.2	57	12.9	12.9	1.6	57	16.0	16.2	1.1	57	9.0	9.2	2.3
5+	71	102.0	101.3	7.0	71	13.5	13.3	1.7	71	16.3	16.3	1.4	71	8.5	8.2	2.4
6+	58	107.7	107.4	6.7	58	15.4	15.3	2.0	58	16.6	16.4	1.1	58	8.5	8.2	2.1
7+	75	114.3	113.8	5.3	75	17.3	17.3	2.3	75	17.2	17.2	1.2	75	8.1	8.2	2.1
8+	51	116.9	116.7	6.2	51	18.3	18.3	2.6	51	17.7	18.0	1.9	51	7.7	7.6	1.8
9+	46	120.9	121.5	6.8	46	20.1	20.0	3.0	46	18.1	18.1	1.9	46	7.8	8.0	1.9
10+	76	125.7	125.4	6.9	76	21.9	21.4	3.5	76	18.3	18.3	1.6	76	7.9	7.2	1.9
11+	38	126.8	128.2	7.2	38	23.7	23.3	3.4	38	19.3	19.1	2.0	38	8.1	8.0	2.2
12+	49	132.7	132.6	8.7	49	26.8	25.3	5.4	49	20.1	20.1	2.0	49	8.2	8.2	1.9
13+	24	137.6	138.5	7.9	24	29.2	28.2	5.9	24	20.3	20.3	2.6	24	8.1	7.2	2.7
14+	33	144.8	144.7	5.6	33	36.0	33.7	5.8	33	23.0	23.0	2.9	33	9.9	9.2	2.9
15+	43	144.8	146.0	9.0	43	37.3	37.2	6.3	43	23.5	23.4	2.4	43	9.2	8.8	3.0
16+	34	147.2	147.4	6.7	34	40.1	40.0	7.0	34	24.3	24.2	2.3	34	10.6	9.8	3.3
17+	50	148.7	148.5	6.8	50	41.1	40.3	5.7	50	24.9	25.3	2.1	50	10.5	10.3	3.3
18-24	412	150.4	150.2	5.7	412	43.9	43.1	6.2	412	25.6	25.5	2.6	412	10.2	9.4	3.9
25-34	572	149.9	149.9	5.3	572	44.9	43.5	7.7	572	26.0	25.7	2.8	572	10.1	9.2	4.3
35-44	382	150.3	150.1	6.0	382	46.0	44.7	8.7	382	26.4	26.1	3.1	382	10.7	9.4	4.8
45-54	221	150.1	149.9	5.6	221	47.8	46.1	10.1	221	27.0	26.3	3.8	221	11.3	10.2	5.2
55-64	121	148.2	147.3	6.4	121	44.1	42.3	9.2	121	25.4	25.0	4.1	121	10.3	9.4	4.6
65-74	58	146.8	146.2	6.8	58	42.6	40.6	9.5	58	25.6	25.1	3.5	58	9.6	8.8	4.3
>= 75	10	146.5	145.7	9.0	10	42.0	40.3	10.6	10	24.7	23.9	4.2	10	9.9	7.6	5.5

Table - An-32: Anthropometric Measurements

State : Madhya Pradesh

Sex : Males

Age (Years)	Height (Cm)				Weight (Kg)				Arm Circumference (Cm)				Fatfold at Triceps (Mm)			
	n	Mean	Median	SD	N	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	110	62.7	63.2	5.8	110	6.0	5.7	1.7	110	12.7	13.0	1.5	110	8.4	8.4	1.7
1+	96	72.2	72.0	5.4	96	8.0	8.0	1.2	96	13.6	14.0	1.1	96	7.9	8.2	1.4
2+	84	80.3	80.6	5.5	84	9.4	9.5	1.4	84	13.9	14.0	.9	84	8.1	8.0	1.6
3+	106	88.0	88.0	6.4	106	11.7	11.7	1.8	106	14.6	14.5	1.0	106	8.2	8.2	1.6
4+	95	93.7	93.0	7.3	95	12.5	12.5	2.2	95	14.6	15.0	1.1	95	7.7	8.0	1.6
5+	102	100.6	100.0	6.8	102	13.9	13.9	2.1	102	14.8	15.0	1.0	102	6.9	7.0	1.8
6+	107	105.2	106.0	9.1	107	15.3	15.3	2.4	107	15.0	15.0	1.0	107	6.8	6.4	1.8
7+	61	111.3	111.0	7.0	61	16.5	16.7	2.7	61	15.2	15.0	1.2	61	5.6	5.0	1.7
8+	102	117.7	117.1	7.4	102	19.3	19.2	2.9	102	15.8	16.0	1.2	102	5.2	5.0	1.3
9+	59	123.2	122.8	7.1	59	21.0	20.5	3.5	59	16.1	16.0	1.6	59	5.2	5.0	1.4
10+	86	127.1	126.1	7.9	86	22.7	22.5	3.6	86	16.6	17.0	1.3	86	5.2	5.0	1.5
11+	45	134.1	135.8	7.9	45	25.8	25.7	3.9	45	17.4	17.0	1.4	45	5.6	5.4	1.6
12+	64	137.5	137.0	9.6	64	28.5	27.8	6.0	64	18.2	18.0	1.9	64	5.5	5.2	2.0
13+	51	140.5	140.0	7.9	51	30.2	29.5	5.2	51	18.6	19.0	1.8	51	5.3	5.0	1.5
14+	34	149.3	149.4	9.6	34	36.1	33.8	7.7	34	19.7	20.0	2.1	34	5.2	5.0	1.4
15+	44	151.6	150.9	10.2	44	40.4	40.5	8.8	44	21.0	21.0	2.4	44	6.0	6.0	2.0
16+	40	158.3	158.1	7.3	40	46.4	47.8	6.8	40	22.4	22.6	2.0	40	6.4	6.2	1.9
17+	28	160.8	162.4	6.0	28	47.4	48.4	4.7	28	22.8	22.0	2.0	28	6.2	5.9	2.0
18-24	224	164.1	164.0	5.7	224	50.9	50.8	6.1	224	24.4	24.0	1.8	224	5.8	5.2	2.0
25-34	410	163.8	164.0	6.2	410	52.2	52.0	7.2	410	25.1	25.0	2.2	410	5.7	5.0	2.3
35-44	277	163.0	163.0	6.6	277	52.0	51.0	8.1	277	25.1	25.0	2.5	277	5.8	5.0	2.5
45-54	188	162.1	162.7	6.3	188	50.5	49.8	8.2	188	24.4	24.0	2.4	188	5.7	5.0	2.7
55-64	175	161.5	161.8	6.4	175	47.9	47.5	7.4	175	23.4	23.0	2.5	175	5.5	5.0	2.0
65-74	90	160.5	161.1	6.9	90	46.3	44.6	7.8	90	22.8	22.5	2.5	90	5.6	5.1	2.2
>= 75	14	160.5	159.8	6.1	14	47.5	46.7	8.0	14	23.5	23.3	2.7	14	7.2	6.7	3.6

Table An-33: Anthropometric Measurements

State : Madhya Pradesh

Sex : Females

Age (Years)	Height (Cm)				Weight (Kg)				Arm Circumference (Cm)				Fatfold at Triceps (Mm)			
	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	103	61.6	61.5	5.6	103	5.5	5.5	1.5	103	12.4	12.6	1.5	103	7.9	8.0	1.9
1+	102	71.0	70.1	5.0	102	7.6	7.4	1.2	102	13.3	13.0	1.0	102	7.9	8.0	1.6
2+	78	80.5	81.0	6.8	78	9.7	9.8	1.5	78	14.1	14.0	1.2	78	8.3	8.2	1.6
3+	110	86.7	87.0	7.1	110	10.7	10.6	2.0	110	14.4	14.0	1.1	110	8.3	8.3	1.4
4+	73	93.0	92.5	7.2	73	12.2	12.2	2.0	73	14.6	14.4	.9	73	7.7	8.0	1.7
5+	92	100.4	101.0	8.4	92	13.7	13.9	2.1	92	14.9	15.0	.9	92	7.1	7.0	1.8
6+	67	107.4	107.7	7.8	67	15.6	16.0	2.7	67	15.1	15.0	1.1	67	6.4	6.4	1.3
7+	72	111.2	111.0	7.6	72	16.8	16.4	2.5	72	15.4	15.0	1.1	72	6.1	6.2	1.4
8+	82	116.1	116.0	7.7	82	18.5	17.9	3.1	82	16.0	16.0	1.3	82	5.9	5.6	1.5
9+	60	122.1	122.7	8.3	60	20.8	19.9	3.8	60	16.6	16.5	1.4	60	5.9	5.6	1.6
10+	89	126.7	126.0	8.2	89	23.0	22.5	4.3	89	17.0	17.0	1.7	89	6.1	5.8	1.9
11+	44	132.5	131.1	8.3	44	26.1	25.0	5.6	44	17.8	17.1	1.7	44	6.6	6.4	1.6
12+	73	136.5	137.6	9.8	73	27.7	27.2	5.7	73	18.5	18.5	1.7	73	6.6	6.2	2.0
13+	48	142.0	141.6	7.5	48	32.3	31.8	6.5	48	19.4	19.0	2.0	48	7.5	7.3	2.6
14+	52	146.9	147.8	5.9	52	36.2	36.6	5.6	52	20.7	20.4	2.2	52	8.2	7.6	3.0
15+	59	147.5	148.2	6.3	59	37.7	37.7	6.1	59	21.4	22.0	2.3	59	8.1	8.2	2.2
16+	44	149.5	149.0	3.9	44	42.1	42.2	4.5	44	22.7	23.0	2.2	44	9.4	9.4	2.3
17+	35	149.6	149.0	6.2	35	41.4	42.0	6.0	35	22.4	22.0	2.0	35	9.7	10.0	3.3
18-24	347	150.5	150.4	5.0	347	43.1	43.0	5.3	347	22.5	22.2	1.8	347	8.7	8.4	2.8
25-34	636	151.3	151.2	5.0	636	44.0	43.7	6.0	636	22.9	23.0	2.0	636	8.6	8.4	3.0
35-44	332	151.0	151.0	5.4	332	44.2	43.2	7.3	332	23.3	23.0	2.4	332	9.3	9.0	3.9
45-54	275	149.8	150.0	5.3	275	45.1	43.7	8.1	275	23.7	23.6	2.6	275	9.9	9.2	4.1
55-64	204	148.9	149.0	5.3	204	42.3	40.6	8.0	204	22.9	22.6	2.9	204	8.7	8.2	3.6
65-74	131	148.4	148.8	6.0	131	41.3	40.0	7.6	131	22.4	22.0	2.5	131	8.6	7.4	4.1
>= 75	14	145.9	147.0	5.7	14	39.7	38.3	7.9	14	23.4	23.0	3.7	14	9.4	9.0	4.4

Table An-34 : Anthropometric Measurements

State : Orissa

Sex : Males

Age	Height (Cm)	Weight (Kg)	Arm Circumference (Cm)	Fatfold at Triceps (Mm)
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(Years)	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	104	62.7	63.2	6.0	104	6.1	6.3	1.6	104	12.4	12.6	1.4	104	5.7	5.9	1.1
1+	111	73.8	73.2	4.8	111	8.4	8.5	1.4	111	13.0	13.0	1.1	111	5.9	6.0	1.0
2+	78	83.9	84.2	5.2	78	10.4	10.5	1.3	78	13.4	13.4	.9	78	6.0	6.0	1.0
3+	102	91.1	91.0	6.4	102	12.2	12.0	1.7	102	13.9	14.0	.9	102	6.1	6.0	.9
4+	91	95.7	95.4	5.7	91	13.0	12.8	1.6	91	13.7	13.6	.9	91	5.9	6.0	.9
5+	104	102.6	102.4	5.6	104	14.8	14.5	1.8	104	14.1	14.1	.9	104	5.7	5.6	1.0
6+	101	109.1	109.0	6.0	101	16.5	16.2	2.1	101	14.2	14.4	1.0	101	5.2	5.0	1.0
7+	92	114.3	113.3	5.5	92	17.9	17.8	2.2	92	14.7	14.6	1.1	92	5.2	5.2	1.1
8+	92	121.2	121.8	5.7	92	19.8	19.8	2.5	92	14.9	14.8	1.0	92	4.9	5.0	.8
9+	69	125.2	125.0	5.0	69	21.7	21.5	2.5	69	15.5	15.4	1.1	69	5.0	5.0	1.0
10+	102	129.7	130.1	5.5	102	23.9	23.8	3.5	102	16.1	16.0	1.3	102	5.2	5.2	1.1
11+	55	132.5	132.0	5.5	55	25.5	25.6	3.6	55	16.8	16.6	1.2	55	5.4	5.2	1.0
12+	74	137.8	137.3	5.9	74	28.6	28.2	4.2	74	17.4	17.1	1.5	74	5.4	5.2	1.4
13+	49	143.9	144.0	7.1	49	32.8	31.8	5.7	49	18.4	18.0	1.7	49	5.5	5.2	1.4
14+	55	149.4	149.5	7.6	55	36.5	36.8	5.5	55	19.5	19.2	2.0	55	5.6	5.0	1.5
15+	65	154.0	154.4	7.9	65	41.2	40.0	6.3	65	20.8	21.0	1.9	65	5.8	5.4	1.4
16+	41	158.4	157.6	6.5	41	43.6	43.4	6.0	41	21.2	21.0	2.0	41	5.4	5.2	1.4
17+	35	160.6	159.2	6.7	35	47.5	47.3	6.3	35	22.7	22.5	2.1	35	6.0	6.0	1.9
18-24	247	160.9	161.0	6.1	247	48.8	49.0	6.1	247	23.3	23.2	1.8	247	5.6	5.2	1.5
25-34	396	161.3	161.4	6.0	396	50.8	50.1	6.8	396	24.2	24.2	1.9	396	5.5	5.0	2.0
35-44	385	160.9	160.8	6.0	385	50.7	49.5	7.5	385	24.2	24.0	2.1	385	5.5	5.0	1.9
45-54	248	160.2	160.4	6.2	248	49.7	49.1	7.1	248	23.8	23.7	2.2	248	5.8	5.5	1.8
55-64	164	159.4	159.6	6.6	164	49.0	48.0	7.4	164	23.6	23.4	2.2	164	6.0	5.4	2.1
65-74	92	158.5	158.4	6.9	92	46.2	45.5	7.5	92	22.2	22.4	2.4	92	5.7	5.2	2.0
>= 75	14	156.6	156.3	5.8	14	43.1	45.4	6.5	14	21.5	21.2	3.1	14	5.5	5.5	1.0

Table An - 35 : Anthropometric Measurements

State : Orissa

Sex : Females

	Height (Cm)	Weight (Kg)	Arm Circumference (Cm)	Fatfold at Triceps (Mm)
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Age (Years)	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	108	62.0	62.2	5.9	108	5.7	5.8	1.5	108	12.0	12.0	1.3	108	5.4	5.2	1.2
1+	91	72.5	72.2	5.4	91	7.7	7.6	1.2	91	12.5	12.6	.9	91	5.6	5.6	1.0
2+	87	81.8	82.9	5.0	87	9.5	9.5	1.4	87	13.0	13.2	1.0	87	6.0	6.0	1.4
3+	112	88.1	87.8	5.3	112	11.1	11.0	1.4	112	13.6	13.5	1.1	112	6.3	6.2	1.0
4+	102	95.7	95.9	4.5	102	12.9	12.8	1.3	102	13.8	13.8	.9	102	6.2	6.2	1.1
5+	100	101.8	101.8	5.6	100	14.2	14.4	1.6	100	14.1	14.1	.8	100	5.9	6.0	1.0
6+	94	108.2	108.0	4.8	94	15.4	15.2	1.6	94	14.0	14.0	.8	94	5.5	5.4	1.0
7+	102	113.3	112.5	6.2	102	17.5	17.2	2.3	102	14.7	14.6	1.0	102	5.4	5.4	.8
8+	107	121.0	121.4	5.7	107	19.8	19.6	2.7	107	15.3	15.2	1.1	107	5.3	5.2	.9
9+	71	124.6	124.8	5.9	71	21.3	20.8	2.7	71	15.5	15.6	1.2	71	5.2	5.2	1.0
10+	93	128.6	129.5	5.8	93	23.2	23.0	3.1	93	16.2	16.2	1.2	93	5.6	5.6	1.1
11+	58	133.8	132.8	5.9	58	26.5	26.2	4.3	58	17.1	17.0	1.6	58	5.7	5.7	1.0
12+	84	137.0	137.1	6.4	84	28.5	28.4	4.1	84	17.5	17.4	1.3	84	5.8	5.7	1.1
13+	76	142.7	143.2	6.2	76	34.8	34.5	6.6	76	19.3	19.2	2.2	76	6.9	6.7	1.7
14+	46	147.5	147.8	4.3	46	37.4	37.1	5.0	46	19.9	19.8	1.7	46	7.5	7.0	2.1
15+	87	148.6	149.0	5.2	87	41.1	40.8	6.0	87	21.3	21.3	2.0	87	8.5	8.0	2.5
16+	64	148.9	148.6	6.3	64	42.1	41.2	5.0	64	21.7	21.6	1.9	64	7.9	7.2	2.3
17+	52	149.0	148.2	5.3	52	43.3	42.9	4.2	52	22.1	21.8	1.7	52	9.3	8.6	2.9
18-24	475	149.6	149.6	5.8	475	42.7	42.0	5.6	475	21.7	21.6	1.9	475	8.0	7.8	2.4
25-34	615	149.6	149.5	5.1	615	42.8	42.0	5.8	615	21.9	21.7	2.0	615	7.6	7.0	2.6
35-44	415	149.1	148.7	5.5	415	42.8	41.8	6.7	415	22.2	21.8	2.5	415	8.1	7.4	3.2
45-54	309	148.3	149.0	5.7	309	42.5	41.1	8.1	309	22.2	21.8	2.8	309	8.0	7.2	3.3
55-64	158	147.2	147.5	5.8	158	41.0	40.0	7.8	158	21.6	21.2	2.6	158	7.1	6.8	2.5
65-74	83	145.7	145.0	5.3	83	38.8	38.5	6.6	83	20.9	20.6	2.4	83	6.4	6.0	2.1
>= 75	14	144.7	143.6	6.4	14	36.3	36.6	5.1	14	19.5	20.2	1.9	14	5.2	5.3	1.2

Table An - 36 : Anthropometric Measurements

State : West Bengal

Sex : Males

	Height (Cm)	Weight (Kg)	Arm Circumference (Cm)	Fatfold at Triceps (Mm)
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Age (Years)	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	64	64.1	64.2	6.2	64	6.4	6.6	1.6	64	13.0	13.1	1.6	64	8.5	8.6	1.8
1+	63	76.1	76.2	5.4	63	8.9	8.9	1.3	63	13.5	13.4	1.0	63	7.6	7.6	1.2
2+	77	85.5	85.6	5.8	77	10.5	10.4	1.5	77	13.9	13.8	.8	77	8.3	8.2	1.5
3+	94	90.5	91.3	5.5	94	11.6	11.6	1.4	94	14.0	14.2	1.0	94	7.9	7.7	1.7
4+	85	98.3	98.6	5.9	85	13.2	13.1	1.7	85	14.4	14.4	.9	85	7.7	7.8	1.5
5+	99	105.3	105.7	5.8	99	15.0	14.6	1.8	99	14.5	14.4	1.0	99	6.6	6.4	1.4
6+	86	109.3	109.5	6.7	86	16.1	16.2	1.9	86	14.6	14.8	.9	86	6.2	6.2	1.4
7+	92	117.5	118.1	6.2	92	18.1	17.8	2.3	92	15.0	15.1	1.0	92	5.4	5.4	1.1
8+	96	122.1	122.0	7.0	96	20.4	20.0	3.1	96	15.6	15.4	1.3	96	5.4	5.2	1.4
9+	77	127.4	127.2	6.3	77	22.4	22.0	3.4	77	16.1	16.0	1.5	77	5.5	5.4	1.4
10+	122	129.4	130.3	6.4	122	23.5	22.7	3.7	122	16.3	16.1	1.4	122	5.3	5.2	1.3
11+	61	135.1	133.3	8.5	61	26.9	26.1	4.8	61	17.3	17.2	1.7	61	5.7	5.4	1.8
12+	102	137.9	136.9	10.1	102	28.9	27.9	6.5	102	17.6	17.4	2.0	102	5.8	5.4	1.9
13+	57	143.7	143.9	9.9	57	31.7	31.1	6.0	57	18.2	18.0	1.8	57	5.3	5.4	1.0
14+	39	152.2	154.4	9.9	39	38.6	38.4	7.3	39	20.2	20.4	2.2	39	5.6	4.8	2.4
15+	58	156.3	157.0	9.1	58	41.2	41.3	6.7	58	20.6	20.3	2.0	58	5.4	4.8	1.8
16+	36	160.1	160.3	6.7	36	46.4	47.3	5.9	36	22.3	22.5	1.9	36	5.3	5.1	1.2
17+	32	161.9	162.7	5.3	32	47.0	46.0	5.1	32	22.8	22.8	1.8	32	5.2	5.4	1.0
18-24	237	162.2	162.3	6.9	237	50.8	50.1	7.5	237	23.8	23.6	2.1	237	5.7	5.2	2.3
25-34	333	161.8	162.1	6.1	333	51.3	49.8	7.6	333	24.4	24.2	2.2	333	5.8	4.8	2.7
35-44	339	161.8	162.2	6.4	339	50.8	49.8	8.4	339	24.3	24.2	2.3	339	5.5	4.8	2.4
45-54	177	161.3	161.1	6.5	177	50.2	49.8	7.6	177	24.1	24.0	2.2	177	5.8	5.4	2.0
55-64	123	160.1	161.2	6.6	123	48.5	47.7	8.8	123	23.3	23.2	2.9	123	6.0	5.2	2.4
65-74	64	158.4	159.0	6.4	64	46.3	46.0	7.6	64	22.1	22.0	2.6	64	6.2	5.6	2.6
>= 75	26	157.2	157.0	5.3	26	48.9	46.9	9.1	26	22.5	22.6	2.5	26	6.9	6.8	3.0

Table An - 37 : Anthropometric Measurements

State : West Bengal

Sex : Females

	Height (Cm)	Weight (Kg)	Arm Circumference (Cm)	Fatfold at Triceps (Mm)
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Age (Years)	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	67	62.6	63.4	5.6	67	5.8	5.9	1.3	67	12.3	12.4	1.4	67	8.2	8.4	2.0
1+	90	74.7	74.7	5.6	90	8.0	8.1	1.3	90	13.0	13.2	1.2	90	7.7	7.8	1.7
2+	80	83.2	83.2	5.1	80	9.7	9.8	1.4	80	13.5	13.6	1.0	80	8.0	7.8	1.7
3+	83	90.4	89.7	5.9	83	11.3	11.2	1.7	83	14.0	14.0	.9	83	8.5	8.4	1.5
4+	88	97.8	96.7	6.1	88	12.7	12.8	1.5	88	14.1	14.2	1.1	88	7.6	7.4	1.6
5+	77	103.7	104.1	8.2	77	14.1	14.0	2.1	77	14.4	14.2	1.0	77	6.9	6.8	1.7
6+	115	109.1	108.9	6.4	115	15.5	15.3	2.1	115	14.6	14.4	1.1	115	6.3	6.2	1.6
7+	113	115.5	115.4	7.0	113	17.2	16.9	2.4	113	15.0	14.8	1.1	113	5.9	5.8	1.3
8+	86	121.5	121.7	6.8	86	19.6	19.5	3.4	86	15.6	15.5	1.6	86	6.0	5.8	1.8
9+	82	125.5	126.5	7.2	82	21.5	21.1	3.5	82	16.2	16.2	1.2	82	5.8	5.7	1.0
10+	105	131.2	130.5	7.3	105	24.5	23.8	4.9	105	17.0	16.8	1.6	105	6.5	6.2	1.9
11+	61	134.5	133.8	6.4	61	26.3	25.8	4.2	61	17.2	17.2	1.4	61	6.4	6.2	1.7
12+	70	138.5	139.2	8.4	70	29.6	29.4	6.0	70	18.0	17.8	2.1	70	6.8	6.2	2.3
13+	58	145.4	145.9	6.7	58	35.5	34.6	6.2	58	19.6	19.6	2.0	58	7.6	7.4	2.6
14+	54	147.8	147.4	6.2	54	37.6	37.3	5.3	54	20.2	20.4	1.9	54	8.2	7.6	2.8
15+	48	148.5	148.9	5.7	48	40.4	39.5	6.3	48	21.0	21.0	2.3	48	8.9	7.8	3.5
16+	40	149.6	149.0	6.2	40	42.1	42.1	6.0	40	21.6	21.6	1.8	40	9.7	9.4	2.6
17+	29	149.3	149.3	6.1	29	43.1	42.3	5.5	29	21.7	21.6	1.8	29	9.9	9.2	3.3
18-24	353	149.4	149.5	5.3	353	42.5	41.5	6.1	353	21.7	21.6	1.9	353	8.6	7.8	3.4
25-34	564	149.7	149.6	5.4	564	42.9	41.8	6.9	564	22.2	21.8	2.3	564	9.0	7.8	4.2
35-44	378	149.2	149.2	5.3	378	44.3	42.8	8.6	378	22.9	22.4	2.7	378	10.5	9.0	5.3
45-54	214	148.0	148.6	5.7	214	42.5	41.3	7.6	214	22.5	22.2	2.5	214	9.9	9.2	4.6
55-64	117	146.4	146.3	5.8	117	41.1	40.0	8.8	117	22.1	22.2	2.6	117	10.2	9.0	4.6
65-74	60	144.4	144.5	5.4	60	39.3	38.3	7.7	60	21.7	21.3	3.2	60	9.5	8.6	4.7
>= 75	9	140.5	140.2	3.6	9	33.6	32.7	6.6	9	19.6	18.8	2.6	9	6.9	5.8	3.1

Table An -38 : Anthropometric Measurements -

All States Pooled

Sex : Males

Age	Height (Cm)	Weight (Kg)	Arm Circumference (Cm)	Fatfold at Triceps (Mm)
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(Years)	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	864	64.4	64.7	5.6	864	6.4	6.6	1.6	864	12.9	13.0	1.4	864	8.3	8.2	2.2
1+	920	75.3	75.2	5.2	920	8.6	8.6	1.3	920	13.6	13.4	1.5	920	7.9	8.0	1.9
2+	867	84.4	84.5	5.7	867	10.4	10.4	1.4	867	14.0	14.0	1.4	867	8.4	8.2	2.1
3+	916	91.1	91.2	5.7	916	11.9	11.9	1.6	916	14.4	14.2	1.2	916	8.5	8.4	2.0
4+	756	97.4	97.7	6.1	756	13.2	13.1	1.8	756	14.5	14.4	1.3	756	8.1	8.0	3.7
5+	747	103.2	103.2	6.2	747	14.6	14.4	1.9	747	14.6	14.5	1.2	747	7.2	7.0	1.8
6+	748	108.7	109.0	6.9	748	15.9	15.9	2.0	748	14.7	14.6	1.1	748	6.8	6.6	1.7
7+	686	114.9	114.8	6.7	686	17.7	17.4	2.6	686	15.1	15.0	1.4	686	6.3	6.0	1.7
8+	709	120.1	119.8	6.8	709	19.5	19.1	2.8	709	15.4	15.2	1.4	709	6.1	6.0	1.8
9+	562	124.9	124.7	6.1	562	21.3	20.8	3.2	562	15.8	15.6	1.5	562	6.1	6.0	1.8
10+	709	128.7	129.2	6.5	709	23.1	22.8	3.4	709	16.3	16.2	1.5	709	6.1	5.8	1.9
11+	452	133.0	132.5	6.6	452	25.3	25.1	4.1	452	17.1	16.9	1.7	452	6.6	6.2	2.2
12+	595	137.4	137.0	8.1	595	27.9	27.0	5.4	595	17.6	17.2	2.0	595	6.5	6.0	2.2
13+	431	142.1	141.8	8.5	431	30.8	29.6	6.0	431	18.5	18.0	2.1	431	6.7	6.2	2.7
14+	365	148.9	149.3	8.7	365	35.2	34.3	7.0	365	19.4	19.0	2.4	365	6.5	6.0	2.4
15+	394	154.3	154.4	9.1	394	40.1	39.8	7.7	394	20.8	20.5	2.5	394	6.6	6.0	2.5
16+	316	158.7	158.5	8.1	316	44.0	44.2	7.1	316	21.8	21.8	2.4	316	6.6	6.2	2.3
17+	259	161.5	162.3	7.3	259	46.9	47.1	7.2	259	22.7	22.7	2.3	259	6.9	6.2	2.8
18-24	1904	163.3	163.5	6.9	1904	50.9	50.2	7.5	1904	24.2	24.0	2.4	1904	6.8	6.0	3.3
25-34	3029	163.4	163.4	6.4	3029	52.9	51.5	8.5	3029	25.0	25.0	2.5	3029	7.2	6.0	3.8
35-44	2644	162.4	162.3	6.4	2644	53.2	51.5	9.2	2644	25.1	25.0	2.8	2644	7.4	6.2	3.9
45-54	1601	161.9	162.2	6.4	1601	52.9	51.3	9.6	1601	24.9	24.6	2.9	1601	7.5	6.2	3.8
55-64	1091	161.1	161.2	6.4	1091	50.9	49.7	9.7	1091	24.1	24.0	3.0	1091	7.4	6.2	3.5
65-74	628	160.0	160.0	6.6	628	48.8	47.4	8.7	628	23.2	23.0	2.8	628	7.0	6.2	2.9
>= 75	178	158.9	159.0	6.5	178	49.2	48.0	9.2	178	23.0	23.0	2.8	178	8.1	7.4	3.5

Table An - 39: Anthropometric Measurements

All States Pooled

Sex : Females

Age (Years)	Height (Cm)				Weight (Kg)				Arm Circumference (Cm)				Fatfold at Triceps (Mm)			
	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD	n	Mean	Median	SD
0+	836	63.3	63.5	5.5	836	6.0	6.1	1.5	836	12.5	12.6	1.4	836	8.1	8.0	2.2
1+	835	73.8	73.5	5.1	835	8.1	8.0	1.3	835	13.3	13.0	1.2	835	8.0	8.0	2.0
2+	786	83.3	83.5	5.6	786	10.0	10.0	1.5	786	13.8	13.8	1.2	786	8.8	8.8	2.2
3+	885	89.8	90.0	6.1	885	11.4	11.3	1.7	885	14.2	14.0	1.3	885	8.9	8.8	2.1
4+	681	96.7	96.8	6.0	681	12.9	12.8	1.6	681	14.4	14.2	1.3	681	8.4	8.2	2.1
5+	718	102.5	102.6	6.7	718	14.1	14.0	1.9	718	14.6	14.4	1.2	718	7.8	7.5	2.0
6+	671	108.3	108.0	6.1	671	15.4	15.3	2.1	671	14.7	14.6	1.3	671	7.2	7.0	1.9
7+	762	113.7	113.5	6.6	762	17.1	17.0	2.4	762	15.1	15.0	1.3	762	7.0	7.0	1.9
8+	722	119.2	119.4	6.6	722	19.1	18.9	3.0	722	15.6	15.4	1.5	722	6.9	6.4	2.0
9+	593	124.4	124.8	6.8	593	21.1	20.6	3.3	593	16.2	16.0	1.6	593	7.0	6.8	2.1
10+	734	128.5	128.6	7.0	734	23.1	22.6	3.9	734	16.8	16.6	1.6	734	7.2	6.8	2.2
11+	486	133.0	132.6	6.9	486	25.7	25.0	4.6	486	17.3	17.0	1.8	486	7.3	7.0	2.1
12+	616	138.1	138.0	8.2	616	28.8	28.0	5.6	616	18.2	18.0	1.9	616	7.7	7.2	2.4
13+	503	143.9	144.1	7.4	503	33.7	33.3	6.6	503	19.4	19.0	2.2	503	8.5	8.0	2.9
14+	426	148.0	148.1	5.6	426	37.2	36.8	5.5	426	20.5	20.3	2.3	426	9.4	8.8	3.4
15+	491	148.7	149.2	6.3	491	39.6	39.3	6.2	491	21.3	21.2	2.2	491	9.8	9.4	3.3
16+	428	150.5	150.4	5.8	428	41.9	41.8	5.7	428	22.0	21.9	2.2	428	10.6	10.0	3.4
17+	377	150.9	150.6	6.2	377	43.2	42.1	6.3	377	22.5	22.2	2.3	377	11.2	10.4	3.7
18-24	3870	151.1	151.1	5.7	3870	43.8	43.0	6.5	3870	22.6	22.2	2.4	3870	10.6	9.8	4.3
25-34	5740	151.1	151.0	5.5	5740	45.0	43.6	7.9	5740	23.2	23.0	2.9	5740	11.1	9.8	5.3
35-44	3307	150.6	150.4	5.6	3307	46.3	44.5	9.1	3307	23.9	23.4	3.2	3307	12.2	10.6	5.9
45-54	2163	149.7	149.9	5.8	2163	46.6	44.8	9.8	2163	24.1	23.7	3.5	2163	12.3	11.0	6.0
55-64	1349	148.5	148.2	5.8	1349	44.3	42.4	9.3	1349	23.4	23.0	3.4	1349	11.6	10.2	5.5
65-74	728	146.8	147.0	5.9	728	42.4	40.8	9.1	728	22.8	22.2	3.4	728	10.6	9.2	5.3
>= 75	161	145.2	144.7	6.6	161	41.5	40.0	8.7	161	22.2	21.8	3.2	161	10.6	9.0	5.2