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## Food Consumption in Rural Indian Households

### Has it increased in recent years?

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In two recent issues of *Nutrition News* (Vol.7, No.2, and Vol.7, No.5, 1986) published by the National Institute of Nutrition (NIN), Hyderabad, the National Nutrition Monitoring Bureau (NNMB) of the Indian Council of Medical Research presented data on estimates of energy intakes in India during 1975 to 1980 and drew two major conclusions, namely,

(i) "during the period from 1975 to 1980, there has been an increase in average calorie consumption levels of rural populations at the household level" and (ii) "the average intake of calories in the lowest income group (less than Re.1 per person per day) shows a definite increasing trend."

Both the above conclusions seem to

be a typical instance of 'drawing conclusions *in spite of the data!*' Table 1 presents the average calorie (Kcal) intake as reported by the NNMB in the two issues of *Nutrition News* referred to above, and in its annual reports for 1981 and 1982.

The four bottom rows of the table present averages of calorie intake as reported by the NNMB first, and in three other modified ways as mentioned in the table. The averages reported by NNMB are unweighted averages, in spite of the number of households surveyed (and hence the number of consumption units) differing substantially between the States. Since the number of consumption units in the different States are not

**Table 1**  
Average calorie (Kcal) intake in rural areas during 1975-82

States	1975	1976	1977	1978	1979	1980	1981**	1982**
Kerala	1926	2052	1722	1805	2019	2158	NC	2203
Tamil Nadu	NC*	2249	2477	2411	2537	2196	2346	1964
Karnataka	2911	3058	2588	3008	2751	2992	2873	2711
Andhra Pradesh	2394	2569	2665	2527	2600	2391	2238	2061
Maharashtra	2203	2315	2407	2295	2282	NC	2472	2120
Gujarat	2203	2146	2177	2131	2327	2333	2162	2306
Madhya Pradesh	NC	2393	2045	2180	2205	NC	NC	NC
West Bengal	2144	2473	2381	2584	2177	2580	2477	2426
Uttar Pradesh	2283	2064	2292	1956	1983	2115	2193	NC
Average (As reported by NNMB)	2296	2369	2306	2341	2366	2404	2408	2243
Average (Excluding Orissa)	2296	2369	2306	2322	2320	2395	2394	2256
Average (Excluding Maharashtra and Madhya Pradesh)	-	2373	2329	2346	2342	2404	2356***	-
Average (Excluding Kerala, Maharashtra and Madhya Pradesh)	-	2427	2430	2436	2396	2434	2382	-

\*NC = Not covered

\*\*Estimates reproduced from NNMB mimeographed reports brought out in 1984.

\*\*\*Estimates for Kerala assumed to be same as in 1982.

readily available, the other averages presented here are also unweighted averages.

The averages presented by NNMB include estimates for Orissa for the years 1978 to 1982 though estimates for Orissa are not presented in the body of the table. The averages excluding Orissa are presented in the third row from the bottom. There is little evidence of an increasing trend in average calorie intake between 1975 and 1979. The suggestive increase seen in 1980 and 1981 is belied by the average intake in 1982. This average excludes Uttar Pradesh which shows in *all* the years from 1975 to 1981, a calorie intake lower than the average intake for the respective year. If data for Uttar Pradesh had been available, probably, the average intake for 1982 would have fallen even below 2256!

To examine the possibility that the apparent increase in average calorie intake seen in 1980 could be due to the

**Table 2**  
Year wise coverage (%) of households according to daily per capita income

Year	Income Category (Rs.)			
	Less than 1	1-2	2-5	5
1975	41.6	32.2	20.9	5.3
1976	33.4	34.3	25.2	7.1
1977	32.3	34.5	26.2	7.0
1978	33.2	31.7	25.5	9.6
1979	35.0	35.5	23.3	6.2
1980	32.8	36.5	24.0	6.7
1981	24.0	36.9	29.6	9.5

non-availability of estimates for Maharashtra and Madhya Pradesh for that year, the averages have been recalculated excluding estimates for these two States from 1976 to 1979 and presented in the second row from the bottom. Again there is little evidence of an increasing trend in average calorie intake between 1976 to 1981. The 1981 figure has been worked out assuming that the intake in Kerala was the same as in 1982, which is the maximum for

Kerala during 1975 to 1982. The last row presents averages excluding Kerala also, bringing out clearly the absence of any increasing trend in average calorie intake during 1976 to 1982.

It is also of crucial interest to note that during 1976 to 1981, the coverage of households in the NNMB surveys according to daily per capita income shows a decline in the proportion of households with less than Re.1 income and an increase in the proportion of households

**Table 3**  
Three-year moving average of calories (Kcal) intake in rural areas

States	1976	1977	1978	1979	1980	1981
Kerala	1900	1860	1849	1994	-	-
Tamil Nadu	-	2379	2475	2381	2350	2169
Karnataka	2852	2885	2782	2917	2872	2859
Andhra Pradesh	2543	2587	2597	2506	2410	2230
Maharashtra	2310	2339	2328	-	-	-
Gujarat	2175	2151	2212	2264	2274	2267
West Bengal	2333	2479	2381	2447	2411	2494
Uttar Pradesh	2213	2104	2077	2018	2097	-

**Table 4**  
Average calorie (Kcal) intake in less than Re. 1 per capita income group during 1975-80

States	1975	1976	1977	1978	1979	1980
Kerala	1559	1759	1439	1673	1650	2040
Tamil Nadu	NC	1865	2213	1809	2084	2009
Karnataka	2648	2838	2439	2715	2471	2812
Andhra Pradesh	2087	2462	2428	2501	2485	2213
Maharashtra	1954	2132	2209	2210	2130	NC
Gujarat	1900	2019	1795	1951	2233	2247
Uttar Pradesh	2161	1917	2284	1849	1857	1887
Madhya Pradesh	NC	2224	1862	2023	1829	NC
West Bengal	NC	2208	1904	2373	1951	2204
Average (All States)	2052*	2158*	2063	2123**	2077**	2202**
Average (Excluding Maharashtra and Madhya Pradesh)		2153	2072	2124	2104	2202

\*The figure reported by NNMB is 1770 and 2047, respectively, for 1975 and 1976.

\*\*Excluding Orissa State