



RDA AND AVERAGE INTAKE OF FAT OF RURAL AND PRESCHOOL CHILDREN IN LATUR DISTRICT: A GEOGRAPHICAL ANALYSIS.

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Abstract

Nutritional requirement is defined as the amount required to balance nutrient expenditure consistent with long-term good health. This intake will allow for maintenance of economically necessary and socially desirable physical activity. Dietary fat (lipids) provides energy and essential fatty acids, serves as a vehicle for fat-soluble vitamins and facilitates their absorption. Since fat provides high energy value (9 kcal or 37.7kJ/g) as compared to carbohydrates or proteins (4 kcal or 16.7 kJ/g), the fat content of a diet contributes significantly to its caloric density. Fat are chemically diverse in nature. Fat consist of fatty acids attached to other chemicals like glycerol. Some fat are steroid like cholesterol fat play many important roles in our body fat stored under skin help in maintenance of temperature. This fat also gives the cushioning effect. An attempt has been made in this paper to study the average intake of fat and RDA of fat by rural and preschool children in Latur district.

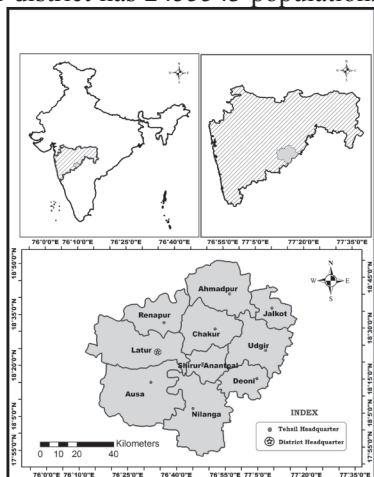
Keywords: RDA (Recommended Dietary Allowances), Fat.

Introduction:

Food sources of fat and oils include all common fats and oils like ghee, vanaspati oil, groundnut oil, soya oil, coconut oil they are almost 100 percent fats. The presence of fat is also evident in other foodstuff like milk and milk products (curd, paneer, khava), nuts and oil seeds (almond, groundnut, coconut, mustard seeds), eggs and flesh foods.

Study Region:

The present paper deals with study of RDA of Fat and average intake of Fat by rural and preschool children in the Latur district of Maharashtra state. The study region lies between 17° 52'N and 18° 51'N North Latitudes and 76° 12' E and 77° 18' E East longitudes. The study region has an area of 7157 sq. km. which contribute (2.40 % of state's area) with 10 Tahsils, 923 villages, 5 urban centers. According to census 2011 Latur district has 2455543 populations. The population density of Latur district is 343 per Sq. Km.



Objective of the Study:

1) To know daily average intake of fat by rural and preschool children in the study region.

Data Base:

The above objective has been tested by collecting primary data and applying quantitative techniques. District Health officers of the district were approached for the required secondary information to supplement first hand information.

Methodology:

This primary data are intended to unveil the physiological, environmental, economic and social aspects of health in the study area. The data thus collected were analyzed according to dietary constituents involved in each food stuff. An attempt has been made in this paper to study the consumption of fat and a comparison with RDA of fat. The obtained data have been processed, tabulated and compared and same has been depicted with help of map.

Table 1.1 ICMR Recommended dietary Allowance of Preschool Children

Nutrient	Age (in years)	
	1-3	4-6
Energy (k.cal)	1240	1690
Protein (g)	22	30
Fat (g)	25	25
Calcium (mg)	400	400
Iron (mg)	12	18

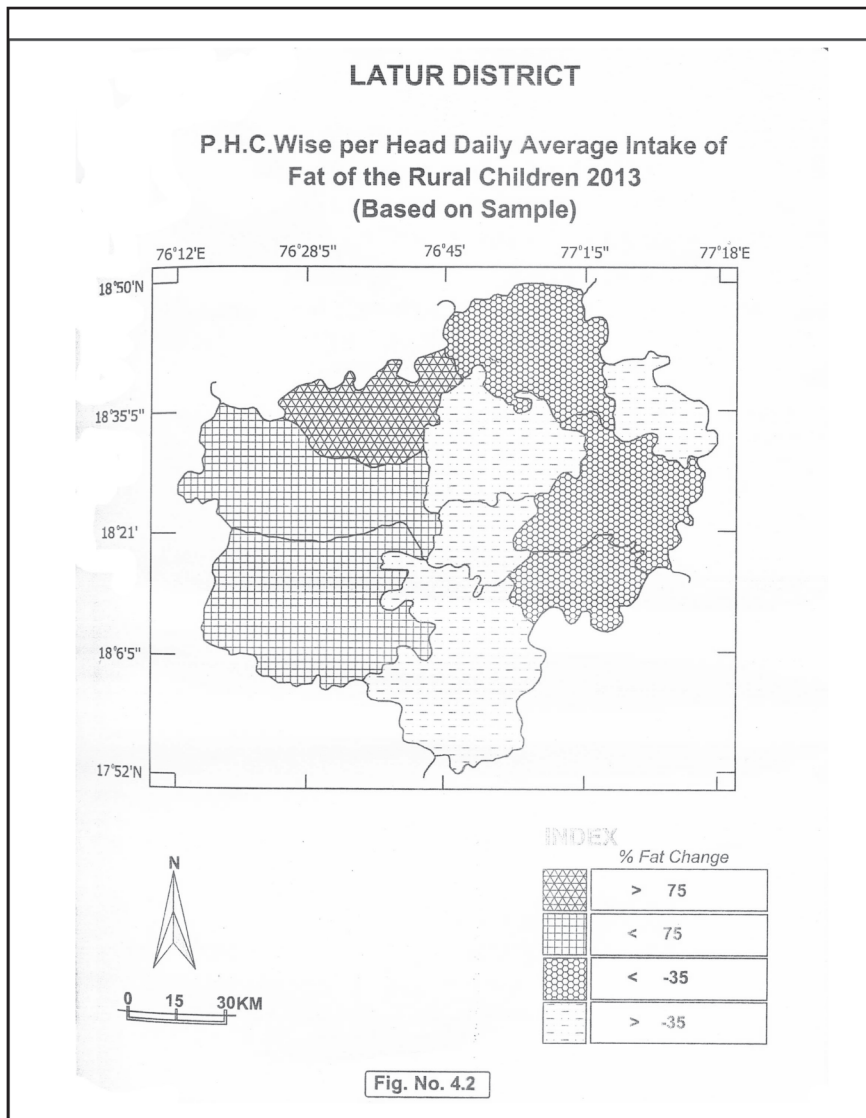
Table 1.2 P.H.C. wise Daily Average Intake of Fat by Rural and Preschool Children in Latur District 2013 (Based on sample)

Sr. No.	Tahsi Is	P.H.C.	Fat (gm)			
			Average Intake	RDA	Surplus/ Deficit	% Change
1.	Latur	Bhatangali	35.21	25	10.21	40.84
2.	Renapur	Pangaon	54.07	25	29.07	116.28
3.	Ahmadpur	Hadolti	11.33	25	-13.67	-54.68
4.	Chakur	Chapoli	21.19	25	-3.81	-15.24
5.	Jalkot	Atnoor	19.83	25	-5.17	-20.68
6.	Shirur(A)	Shirur A.	18.79	25	-6.21	-24.84
7.	Ausa	Lamjana	34.59	25	9.59	38.36
8.	Nilanga	Kasar (S)	21.47	25	-3.53	-14.12
9.	Deoni	Walandi	13.77	25	-11.23	-44.92
10.	Udgir	Nalgir	14.35	25	-10.77	-43.08

Source: Computed by Researcher

Table 1.2 shows PHC wise daily average intake of fat by rural and preschool children in Latur district. Fat intake is more than the RDA in tahsils like Renapur (116.28 percent), Latur (40.84 percent) and Ausa (38.36 percent). In remaining tahsils the fat intake is less than RDA, rather it is negative. It is more severe in Ahmadpur tahsil where fat intake in (-54.68 percent) followed by Deoni (-44.92 percent) Udgir (-43.08 percent).

It is evident from fig. 1.2 that the tahsils like Latur, Renapur and Ausa have a better and balanced nutritional diet and good economic background, high spending on grocery and food are few factors responsible for positive change in consumption of fat in the study area.



Results:

On comparing the daily intake of fat by rural and preschool children with RDA in the study region, it is found that out of ten tahsils only in three tahsils children consume more fat than the recommended level viz. Renapur, Latur and Ausa. Renapur is the only tahsil where children get fat more than double the recommended allowance. Latur and Ausa are also better positioned compared RDA. Hadolti, Walandi and Nalgir PHCs in Ahmedpur, Deoni and Udgir tahsils witnessed very less intake of fat than recommended level.

Conclusion:

Besides these, social causes like large size of family, low per capital land holding, lack of safe drinking water, poor housing, lack of general education and education on food and nutrition, illiteracy and health ignorance etc are causes for occurrence of low fat intake. Low dietary intake because of poverty and low purchasing power, high prevalence of infection because of poor access to safe-drinking water, sanitation and health care and poor utilization of available facilities due to low literacy and lack of awareness are some the major causes for the prevalence of nutrition deficiency among rural and preschool children in the study region.

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