

NATIONAL NUTRITIONAL SCENE - THREE DECADES

India is fast growing in all dimensions; resources, manpower, utility services and its markets. This economic growth may possibly contribute to improvement of health standards. The working man hours available for sustaining production and making materials must relate to nutrition, health and welfare of the man at work. The importance of this now needs to be brought into focus and emphasized.

The planners and managerial experts are likely to take into consideration productivity, economics and material gains while most likely to ignore factors that provide integral milieu for optimal functioning of a human being.

For convenience of housewife and increasing scope of food industry, labour saving devices are being introduced to modify food processing and its preservation. Thus created refined and packed food which may deprive the body of some essential nutrients. Such innovation may contribute directly or make possible to overtize some latent diseases that effect longevity of life, resulting from education and better living conditions.

Thus, if we evaluate food habits of our country three decades ago, and compare to the present status in context of prosperity, the information forthcoming could paradoxically indicate that new food habits and food items consumed may be promoting potential risk factors for cardiovascular disorders or diabetes mellitus or cancer.

The earlier conventional diets consisted of coarse cereals, whole lentils or some vegetables and fruits (high carbohydrate, low fat, low protein). Instead today there is greater usage of refined cereals, saturated fats, animal foods and calories far in excess to energy expenditure.

It will be thus interesting to compare the data over the last 3-4 decades and seek avenues for this transition.

TABLE-I

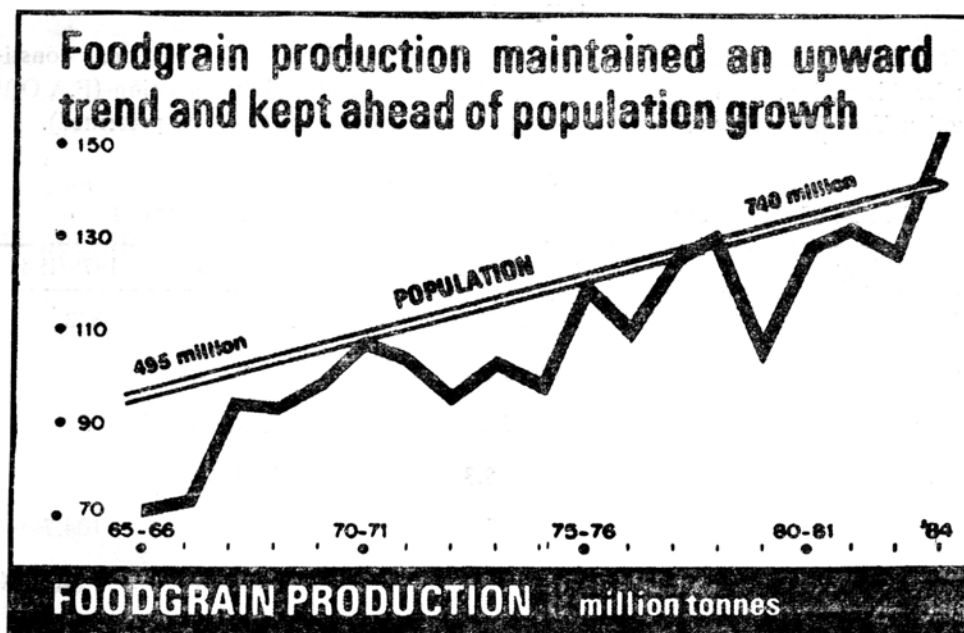
Changes in Food Production, Population and Other Relevant Parameters in the last three Decades in India.

Items	1940's	1960's	1980's
Cereals (Million tonnes) Production data	55	92	130
Sugar (thousand tonnes)	--	3510	8232
Vanaspati (thousand tonnes)	--	410	886
Census Data			
Population (Million)	359	451.7	684

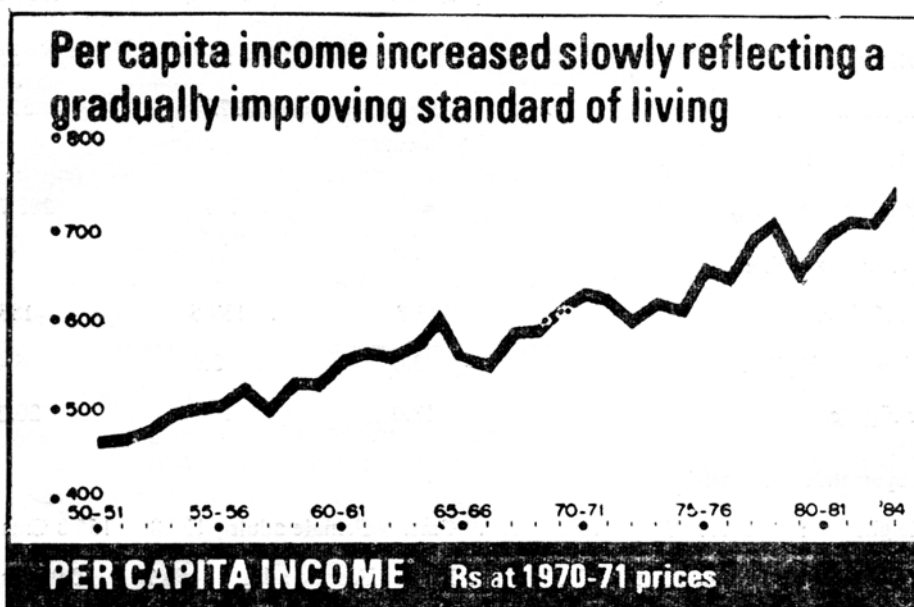
	1940's	1960's	1980's
Expectation of life (Yrs.)	30	50	55
Per capita income	250	375	500
Price Index data			
Wholesale prices (Rs.)	-	101	283.7
Food Grain available			
Cereal Kg/Yr.	112.8	139.5	183
Cooking fats Kg/Yr.	3.0	3.9	6.4
Sugar Kg/Yr.	13.0	19.6	20.2

Anthropometric Parameters³

Height :	Male adult	165.5	169.9 Cms.	Female adult	150.8	156.8 Cms.
Weight :	Male adult	58.0	62.1 Kgs.	Female adult	50.7	60.9 Kgs.



Graph I



Graph II

It will also be interesting to compare changes in the individual nutritional constituents for this period. This is provided by the Food & Agricultural Organisation (P.A.O.)¹ Production Year Book for various countries (only major items for India are presented).

TABLE-II
Profile of Food Consumption in the Last Three Decades (F.A.O. Data)

G percapita/day	1949/1950	1962/1963	1979/1981
Cereals	272	382	342
Pulses	27.5	31.1	34.3
Sugars/sweets	31.1	53.6	55.3
Fats/oils	8.3	10.5	17.5
Milk	27	62.0	104.7
Meat/fish	--	3.9/5.5	3.7/8.4
Egg	--	0.6	2.6
Total calories	1650	2020	2056

Thus, there is a trend for increase in consumption of more fats/oils, sweets/sugars, milk and animal foods which contribute significantly towards total calories.

The physical status of an average individual is better and average span of life is increased. However, this shift is inducing greater prevalence and consequent mortality of degenerative and metabolic diseases as atherosclerosis, coronary artery disease or diabetes mellitus. With urbanization and changes in food habits, prevalence of diabetes is already about twice as much in the urban areas compared to the rural areas.² Though, there is not substantial difference in total calories, the fat content in urban population however has increased average 30-45 g, in relation to total carbohydrate that is now reduced on average by 75-100 g.

It is, therefore, very necessary that the country needs to evolve a National Nutritional Policy. This aspect needs co-operation between Ministry of Agriculture, Industry, Health & Social Welfare. Physical development and its relationship to health, to a large extent, is nutrition based. There is a need for a national policy and directives that with the increase in food production, economic prosperity, there should be avenues for proper health standards and prophylaxis against certain diseases.

Western countries have already recognized the price for overlooking this aspect of providing impetus to commercial agencies in the food industry which undermines health safeguards. We have thus enough warning as not to repeat the same errors and burden ourselves with increasing plethora and scourages of arterial, metabolic or degenerative diseases with new economic changes. A national nutritional policy could thus lay down restraints over type of food production and food industry in greater interest of national health and thereby prevent the nutrition related diseases.

References

1. F.A.O., Food Balance Sheets, Rome, 1960, 1966, 1984.
2. Ahuja, M.M.S., Shivaji, L., Garg, V.K. Mitro, P. (1972). Prevalence of Diabetes in Northern India (Delhi area), *Horm. Metab. Res.* 4, 321.
3. Annual Report National Institute of Nutrition, Hyderabad, 1982. p. 184.