



## **GLOBAL NEED OF NUTRITION IN SOCIETY FOR DEVELOPMENT: A COMPARATIVE STUDY OF ALLAHABAD POPULATION**

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### **ABSTRACT—**

*Nutritious food is most important to the human body. The importance of food and nutrition in human development is widely recognized in both high to low income people. Nutrition remains a concern in emergencies like conflicts or natural disasters. It has been developed to meet the needs of some people without thinking of consequences if the unhealthy meal is taken a lot. It may cause various types diseases such as diabetes, high blood pressure, tooth decay, obesity, gastrointestinal disorders etc. The paper has been taken 100 respondents of urban area. It aims to check the nutritional status among the male and female. Hypothesis of paper is that nutrition is a necessary part of society for their development. The research methodology are used in this paper like interview schedule, diet plan etc. for collecting data. Finally conclusion is found that healthy food is a necessity of societal development process which is most important part of society for development.*

**Key words- Nutrition, Health, Society, Food, Development.**

### **INTRODUCTION**

**Nutrition** is the science that interprets the interaction of nutrients and other substances in food (e.g. phytonutrients, anthocyanins, tannins, etc.) in relation to maintenance, growth, reproduction, health and disease of an organism ([www.google.com](http://www.google.com)).

Health and efficiency are dependent throughout the whole life span upon a diet that is adjusted to meet the need of the organism. This need for adjustment begins with the infant and continues to old age. Extensive health examinations of school children have shown that approximately one third of the children of the United States are suffering from malnutrition. Since the outbreak of World War II, recognition of the importance of nutrition as a factor, in the war effort has become not only nationwide but worldwide. Germany and England have realized this need and have



made every effort to see that not only their armed forces but their industrial workers engaged in defense work should be well fed. General Hershey, director of selective service of the United States, stated that out of the 1<sup>st</sup> million men examined, approximately 400,000 were found unfit for general military service, and that "probably one third of these are suffering from disabilities directly or indirectly connected with Nutrition. (**Cooper, Mitchell, 1941**)

In food habit studies, group of people such as school children, homemakers, or students in a college nutrition class- may list serving of foods or types of foods eaten during one or more days. (**Chaney, 1943**) When we look at death due to anemia in the 15-44 age gp, we find that as a complication of pregnancy it has certainly not declined, as its share has come down from 3.4percent - 1.93percent in 1988 and then again risen to 3.07percent in 1993. General anemia (without pregnancy) is an equally serious threat to women's lives. Even if the 1993 figures are treated with caution, the rising contribution of general anemia to death cannot be denied. (**ibid**)

**Aninda K. Chakravarti** in one of her articles relates diet and disease in term of culture and food use. **Chakravarti** generates some secondary data on dietary patterns of india and informs that country has about 856 food items produced and consumed in its different parts. **Levi - strauss** argues that man does not think of his foods in terms of energy and nutrients. Animals just eat food, but that for man-society has decreed what was food and what was not food and what kind of food should be eaten and on what occasions. (**Doshi**)

Women are much more likely than men to develop eating disorders. Regardless of all type, all eating disorders are rooted in emotions, often traced to problems during adolescence. Dieting is the most important predictors of new eating disorders. Differences in the incidence of eating disorders between sexes were largely accounted for by the high rates of earlier dieting and psychiatric morbidity in the female subjects. In adolescents, controlling weight by exercise rather than diet restriction seems to carry less risk of development of eating disorders. While the problem is widely found in north and south America, and Europe, it is also described in Asia as well. It is associated with a significant excess mortality in some groups. (**Aruna Goel, 2008**)



A nutritious diet while ensuring overall well being, helps to maintain a healthy Body Mass Index (BMI), reduces the risk of several debilitating diseases like cancer, cardiovascular ailments, diabetes, osteoporosis and stroke. Thus a nutritious & healthy diet is important in the prevention and cure of various diseases.

### Objective :-

- To know about the comparative picture of impact of nutrition on their health status.
- To know about the relationship between nutrition and societal development.

### Hypothesis :-

- Nutrition should be play important role for development of society.
- Nutritional status should be high in male as compare women.

### Methodology & Area :-

This paper is a based on comparative study. There are several methods which are often used in data collection like sampling, observation, interview-schedule diet plan of respondents etc. Field selection criteria are based on my work and taken 100 respondents in each area of total population. I have taken middle class population from preetam nagar colony of Allahbad.

| S NO | AGE GROUP | ILLITRATE |   |   |    | PRIMARY (0-5) |      |   |      | HIGH -SCHOOL (6-10) |      |   |      | INTERMEDIAT E |      |    |       | UNDER GRADUATE |       |    |      | POST GRADUATE |      |   |      | TECHNICAL |      |   |    |
|------|-----------|-----------|---|---|----|---------------|------|---|------|---------------------|------|---|------|---------------|------|----|-------|----------------|-------|----|------|---------------|------|---|------|-----------|------|---|----|
|      |           | M         | % | F | %  | M             | %    | F | %    | M                   | %    | F | %    | M             | %    | F  | %     | M              | %     | F  | %    | M             | %    | F | %    | M         | %    | F | %  |
| 1    | 0-5       |           |   |   |    | 5             | 23.8 | 8 | 33.3 |                     |      |   |      |               |      |    |       |                |       |    |      |               |      |   |      |           |      |   |    |
| 2    | 6-10      |           |   |   |    | 1             | 76.1 | 1 | 45.8 | 6                   | 31.5 | 5 | 29.4 |               |      |    |       |                |       |    |      |               |      |   |      |           |      |   |    |
| 3    | 11-15     |           |   |   |    |               |      | 4 | 16.6 | 9                   | 47.3 | 1 | 64.7 | 2             | 40   |    |       |                |       |    |      |               |      |   |      |           |      |   |    |
| 4    | 16-20     |           |   |   |    |               |      |   |      | 2                   | 10.5 | 1 | 5.88 | 2             | 40   | 13 | 40.6  | 10             | 14.28 | 5  | 7.46 |               |      |   |      | 1         | 3.5  | 1 | 10 |
| 5    | 21-25     |           |   |   |    |               |      |   |      |                     |      |   |      |               |      |    |       | 12             | 17.14 | 9  | 13.4 | 4             | 12.5 | 1 | 28.5 | 4         | 14.3 | 3 | 30 |
| 6    | 26-30     |           |   |   |    |               |      |   |      |                     |      |   |      | 1             | 3.12 | 3  | 4.28  | 7              | 10.4  |    |      | 1             | 37.1 | 4 | 37.1 | 6         | 21.4 | 3 | 30 |
| 7    | 31-35     |           |   |   |    |               |      |   |      |                     |      |   |      | 1             | 3.12 | 5  | 7.14  | 3              | 4.47  | 3  | 9.37 | 2             | 5.71 | 1 | 3.5  |           |      |   |    |
| 8    | 36-40     |           |   |   |    |               |      |   |      |                     |      |   |      | 6             | 18.7 | 9  | 12.85 | 16             | 23.9  | 8  | 25   | 2             | 5.71 | 2 | 7.1  | 2         | 7.1  | 3 | 30 |
| 9    | 41-45     |           |   | 1 | 25 |               |      |   |      |                     |      |   |      | 1             | 20   | 5  | 15.6  | 7              | 10    | 12 | 17.9 | 6             | 18.7 | 1 | 2.85 | 3         | 10.7 |   |    |



|    |              |    |   |   |    |   |      |   |      |      |      |   |      |   |    |      |      |       |       |      |      |      |      |       |      |      |     |   |    |
|----|--------------|----|---|---|----|---|------|---|------|------|------|---|------|---|----|------|------|-------|-------|------|------|------|------|-------|------|------|-----|---|----|
| 10 | 46-50        |    |   | 2 | 50 |   |      |   |      |      |      |   |      |   | 2  | 6.25 | 9    | 12.85 | 6     | 8.95 | 5    | 15.6 | 5    | 14.28 | 7    | 25   |     |   |    |
| 11 | 51-55        |    |   |   |    |   |      |   |      |      |      |   |      |   | 4  | 12.5 | 11   | 15.71 | 6     | 8.95 | 2    | 6.25 | 2    | 5.71  | 1    | 3.57 |     |   |    |
| 12 | 56-60        |    |   | 1 | 25 |   |      |   | 1    | 5.26 |      |   |      |   |    | 4    | 5.71 | 1     | 1.49  | 3    | 9.37 |      |      |       | 3    | 10.7 |     |   |    |
| 13 | 61-65        |    |   |   |    |   |      |   |      |      |      |   |      |   |    |      |      |       | 2     | 2.98 | 1    | 3.12 |      |       |      |      |     |   |    |
| 14 | 66-70        |    |   |   |    |   |      |   |      |      |      |   |      |   |    |      |      |       |       |      |      |      |      |       |      |      |     |   |    |
| 15 | 71-ABOVE     |    |   |   |    |   |      | 1 | 4.16 | 1    | 5.26 |   |      |   |    |      |      |       |       |      |      |      |      |       |      |      |     |   |    |
|    | <b>TOTAL</b> | NI | L | 4 | 10 | 2 | 99.9 | 2 | 99.9 | 1    | 99.9 | 1 | 99.9 | 5 | 10 | 32   | 99.9 | 70    | 99.96 | 67   | 100  | 3    | 99.9 | 3     | 99.9 | 2    | 100 | 1 | 10 |

Table shows literary or educational level of middle class people according to age group. Male illiteracy rate is nil in urban middle class but females are found somewhat illiterate. Primary education is far better in females as compared to males. Males are more qualified than females in undergraduate level but males are more qualified than females in post graduation and technical education. But overall scenario shows that male education level is far better than females.

## ENERGY REQUIREMENT---

|              |         |            |
|--------------|---------|------------|
| <b>Adult</b> | 18-30 Y |            |
|              | (M) S   | 2716 Kcal. |
|              | M       | 3191 Kcal. |
|              | H       | 4078 Kcal. |
|              | (F) S   | 2220 Kcal. |
|              | M       | 2612 Kcal. |
|              | H       | 3337 Kcal. |
|              | 30-60 Y |            |
|              | (M) S   | 2526 Kcal. |
|              | M       | 2612 Kcal. |
|              | H       | 3797 Kcal. |
|              | 30-60 Y |            |
|              | (F) S   | 2095 Kcal. |
|              | M       | 2464 Kcal. |
|              | H       | 3149 Kcal. |

S - Sedentary

M - Moderate

H - Heavy



## **Recommended Allowances for Energy for Indians (I.C.M.R. 1981) -**

The I.C.M.R. advisory committee (1981) made the following recommendation for energy requirements of Indians -

### **ADULTS -**

It defined the energy requirements of adult man and woman in terms of reference man and reference woman. After discussing the limited available data on body weights of Indian adults, the committee tentatively agreed to continue to use body weights of 55kg. and 45kg. for reference man and reference woman respectively.

## **Indian Reference Man & Woman (Swaminathan)-**

### **Reference Man :-**

Reference man is between 20-39 years of age and weight 55kgs. He is assumed to be free from disease and physically fit for active work. On each working day he is employed for 8 hours in occupation that usually involves moderate activity. While not at work he spends 8 hours in bed, 4-6 hours sitting and moving around and two hours in walking and in active recreation or in house-hold duties.

### **Reference Woman:-**

It is between 20-39 years of age, healthy and weights 45kgs. She may be engaged for 8 hours in general household work, in light industry or in other moderately active work. Apart from 8 hours in bed. She spends 4-6 hours sitting or moving around only through light activity and 2 hours in walking as in active recreation or in household duties.

## **Adult Calorie Intake -**

Adults have taken rich and nutritious diet. They can manage heavy & oily food. Their digestive tracts are very strong in compare to aged people. There are three type of person like - sedentary, moderate and heavy. So, energy consumption is surely different.



TABLE :DISTRIBUTION OF CALORIE INTAKE IN URBAN CLASS ADULTS-----

| MIDDLE CLASS     |     |             |     |             |
|------------------|-----|-------------|-----|-------------|
| AGE GROUP        | NO. | M           | NO. | F           |
| <b>18-30YR.</b>  |     |             |     |             |
| SEDENTARY        | 40  | 104580      | 40  | 85500       |
| MODERATE         | 28  | 74230       | 21  | 52580       |
| <b>30-60 YR.</b> |     |             |     |             |
| SEDENTARY        | 46  | 112800      | 46  | 91800       |
| MODERATE         | 27  | 68625       | 33  | 49544       |
| <b>TOTAL</b>     | 141 | 360235KCAL. | 140 | 279424KCAL. |
| <b>MEAN</b>      |     | 2554.85     |     | 1995.88     |

Middle class males and females burn 360235 Kcal. energy and 279424 Kcal. energy. Sedentary group of persons consume more energy in comparison to moderate group. Mean value is found high in males as compared to females. It shows calorie intake is found high in male and low in females. Above table shows that female need rich and high calorie but they are not taking whereas it is very necessary for societal development.

**\* Table shows awareness about the food habits and health**

| Category                       | Urban Class                                |                     |  |                     |
|--------------------------------|--|---------------------|--|---------------------|
|                                | Male<br>(Out of 50<br>Male<br>Respondents) | %                   | Female<br>(Out of 50<br>Female<br>Respondents) | %                   |
| Stale Food                     | 32   | 64%                 | 40   | 80%                 |
| Evil Eye                       | 25   | 50%                 | 30   | 60%                 |
| Boil Water                     | 35   | 70%                 | 10   | 20%                 |
| Common Utensils                | 22   | 44%                 | 40   | 80%                 |
| Awareness about Diff. Diseases | 38   | 76%                 | 26   | 52%                 |
| Intoxication                   | 15   | 30%                 | 32   | 64%                 |
| Quack/Govt. Hos./Private       | 8/13/29                                    | 16%/2<br>6%/58<br>% | 19/24/7  | 38%/4<br>8%/14<br>% |
| Ozhas                          | 16   | 32%                 | 38   | 76%                 |
| Junk food                      | 42   | 84%                 | 8  | 16%                 |



|                           |    |     |    |     |
|---------------------------|----|-----|----|-----|
| Non- veg                  | 32 | 64% | 12 | 24% |
| Outside food (party food) | 38 | 67% | 11 | 22% |

64 percent male of urban class take stale food whereas in females percent. It shows that they do not care about its health impact problems. 60 percent urban females are agree with Evil eye as compare to males (50 percent). So it shows their literacy level or backwardness in mentality. 70percent males prefer to take boil water in urban class whereas only 20 percent in females. It means that they do not think about health & fitness. 80 percent males take meal in common utensil as compared to females (44 percent). It means that they do not have care for health. Above table shows that 76 percent males aware about the deficiency diseases whereas in females 52 percent only. It shows that they are more educated than females. 64 percent females have addicted to take Paan, Tobacco, wine etc. whenever in males 30 percent only.

If we have compared to this issue like hospitality then find most of all males go near the private practitioners as compared to females. Females are less educated and suffer several problems. They go near to ozhas. 76 percent females follow this way till now as compared to males which is 32 percent. In case of junk food, 84 percent urban males are liked to have junk food whereas in females 16 percent only. If we see to non vegetarian males percentage is 64 and in females 24 percent only.

### **Conclusion :-**

- Urban males are better to women in food behavior due to taking in food discrimination.
- Educational status is higher in males as compare to females due to less awareness and negligence about women education.
- Health status of women should be far better than male because women do contribute major role for societal development.

### **Suggestions--**

- Health awareness plans and programmes should be implemented in that areas.
- Education should be high in reference of health education.



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