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## Status of Female Nutrition Security in India

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Abstract:

Nutrition security is achieved when all the people have consistent and equitable access to healthy, safe, affordable foods required for optimal health and well-being. Women represent slightly less than 50 per cent of the population of India. Their health, well being and development is essential for the country's development. The evidences suggest that they are the worst sufferers in terms of food and nutrition security. They have innumerable responsibilities in the family and in some cases, they have to support their male members economically also. The study attempts to explore the status of female nutrition security in India by taking secondary data taken from different sources. The study uses different variables such as consumption of some specific food items, Body Mass Index (BMI), and Anaemia among the women. For the better understanding rural female and urban female data about nutrition have also been taken and for the comparative analysis male nutrition data has also been taken. The analysis of the study reveals that compared to male female are more undernourished. Female are more nutritionally insecure in rural areas than the urban areas. The study led stress on the need for addressing gender-based problems and issues effectively and efficiently by the government in order to achieve better female nutrition security.

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### 1. Introduction:

Nutrition security is consistent access, availability, and affordability of foods and beverages that promote well-being, prevent disease, and, if needed, treat disease, particularly among the underprivileged groups of the society (USDA, <https://www.usda.gov/nutrition-security#:~:text=Nutrition%20security%20is%20consistent%20access,Tribal%20communities%20and%20insular%20areas.>). There is a strong link between good nutrition and gender. A gender approach to nutrition security can enable shifts in gender power relations and assure that all people, regardless of gender, benefit from, and are empowered by development policies and practices to improve nutrition security (Sida, 2005). Malnutrition, especially undernutrition is prevalent in developing countries and the adverse effects of poor nutrition on pregnancy outcomes have been well documented. Reproductive-aged women are at risk of iron deficiency because of blood loss from menstruation, poor diet, and frequent pregnancies.

Despite significant growth and change in India over the past two decades, some public health indicators have failed to keep pace. One such indicator is food insecurity. India is home to the largest number of people experiencing hunger and food insecurity (McKay et al. 2020). A sizeable proportion of food and nutrition insecure population belongs to women in India. Improper management of resources in India affects the nutritional status of women of reproductive age exacerbated by prevailing cultural and traditional practices (Rao, K. M. et al. 2010). Women are the worst sufferers in terms of inadequate micronutrient intakes as their diets are of low-quality, lacking diversity and are dominated by staple foods. In India, like other low resource settings, women are vulnerable to undernutrition for social and biological reasons throughout their life-cycle (Mastiholi et al., 2018).

World Health Organization suggests that the nutritional status of women of reproductive age is important, as effects of undernutrition are propagated to future generations. More than one-third of Indian women in the reproductive age group are in a state of chronic nutritional deficiency during the preconception period leading to poor health and likely resulting in low birth weight babies (Mastiholi et al., 2018). It is essential to give the adequate attention to women's health and nutrition from the childhood itself to break the intergenerational aspect of malnutrition. To achieve a better nutrition for women and their children, there is a need of greater involvement and empowerment of women (Rampal, & Swain 2019). Inadequate food, health and care and a lack of WASH (Water, Sanitation and Hygiene), leads to the growth of more malnourished women (UNICEF, 1990).

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### 2. Literature Review:

The literature about the female nutrition has been chosen to find out the status nutrition in female and also the issues and challenges faced by them in achieving the proper nutrition.

Fox et al. (2019) in their study showed that there is a major research and programming gaps relative to targeting overweight, obesity, and noncommunicable disease. They revealed that focused efforts on women during pregnancy and in the first couple of years postpartum fail to address the interrelation and compounding nature of nutritional disadvantages that are perpetuated across many women's lives.

**Vemireddy & Pingali, (2021)** highlighted that there should be several strategies to reduce women's time and work burdens by promoting labour-saving technologies for women are extremely important for better nutrition in the women. They also stressed on that the women's wages are significantly lower, and there is enough evidence to suggest that improved incomes of women lead to the household's better well-being and improved nutrition status of women.

**Narayanan et al. (2019)** in their study revealed that policies aimed at empowering women must therefore not focus merely on providing knowledge or seek to strengthen women's decision-making roles in the family. Rather, they should prioritize providing health resources to women in constrained settings.

**Melesse, (2021)** examined the nutrition knowledge of women in improving the health status of family. The study revealed that the empowering women in decision making and increasing their access to and control of the economic resources are the key factor in improving the health status of family members particularly children. The study suggested to take necessary steps to improve the women's nutrition knowledge and for empowering the women in economic resources for overall improvement of the health status of family.

### 3. Objectives of the study:

The followings are the primary objectives proposed for the present study.

- (i) To examine the nutritional status of women.
- (ii) To compare the nutritional status of women with the men.
- (iii) To assess the issues and challenges faced by women in achieving the nutritional security.
- (iv) To suggest the measures to improve the existing situation of female nutrition.

### 4. Database and Methodology:

The present study is entirely based on the secondary sources of the data collected from the books, journals and government reports. To show the trends and patterns of female nutritional status the study uses different years of data. In order to have a better understanding of the female nutritional status, the study uses male nutritional data also. The tables and graphs have been used for the interpretation of the data.

### 5. Result and Discussions:

#### 5.1 Consumption Pattern of Specific Food Consumption of Women:

Consumption of nutritious food at consistent level is a key to the nutrition security. The consumption of qualitative food at daily basis is prerequisite not only for the nutrition security but also for the proper and adequate mental and physical development. Thus, the food intake should not only include carbohydrates but also protein, vitamins, fats, minerals and other nutrients to have an active and healthy life. Consumption pattern of qualitative food is directly related to the economic conditions of the family. Education particularly about the nutrition play a vital role in the consumption pattern of qualitative foods and to be saved from different diseases occurring due to malnutrition. Further, nutritious food for women is prerequisite for the overall well being of the family, particularly to the children.

**Table 1: Percent Distribution of Women Age 15-49 by Frequency of Consumption of Specific Foods, India, 2019-21**

S. No.	Types of Food	Frequency of Consumption				
		Daily	Weekly	Occasionally	Never	Total
1	Milk or Curd	48.8	23.5	21.9	5.8	100.0
2	Pulses or Beans Dark Green	49.6	43.3	6.7	0.4	100.0
3	Leafy Vegetables	52.0	38.8	8.9	0.3	100.0
4	Fruits	12.5	37.1	48.7	1.6	100.0
5	Eggs	5.2	39.9	26.9	28.0	100.0
6	Fish	5.1	30.6	29.9	34.4	100.0
7	Chicken, Meat	1.4	34.5	32.6	31.5	100.0
8	Fish, Chicken or Meat	5.9	39.3	25.4	29.4	100.0
9	Fried Foods	7.4	35.6	52.6	4.4	100.0
10	Aerated Drinks	2.7	12.9	68.7	15.7	100.0

Source: National Family Health Survey – 5 (2019-21)

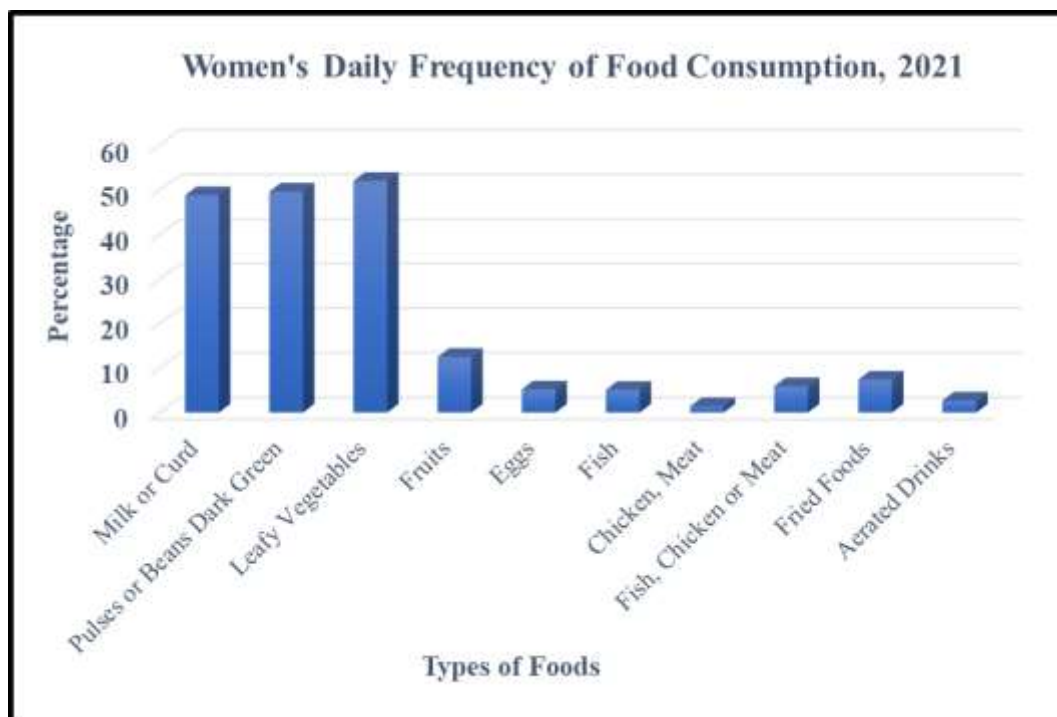


Fig. 1

Table 1 and Figure 1 indicate the percent distribution of frequency of consumption of specific foods by adult women. The above table clearly shows that there is some proportion of women who have never consumed some of the specific foods especially the consumption of eggs, fishes, chicken and meat. It may be because of the non-vegetarian nature of people and in some of the cases the people may not be able to afford these food items. It may also be observed from the above table that nearly 50 per cent of women consumes milk or curd, pulses and leafy vegetables daily whereas the proportion of female who consumes fruits, eggs, fishes, meat, fried foods and aerated drinks daily is considerably low. The reason behind to such a low percent of consumption of these foods may be attributed to the high cost of these foods, low purchasing power of the people, poor socio-economic conditions of the people and also the preference in the consumption of qualitative foods given to male in the family.

## 5.2 Nutritional Status of Women

Nutritional status of women is one of the key factors for the well-being of the family. For the proper nutrition of the women, educational and economic status of women play a crucial role. Table 2 and Fig 2 indicate the Body Mass Index (BMI) adult female. The BMI has been calculated by the division of the value of an individual's weight in kg and the square of value of an individual's height in metre. The value of BMI shows the nutritional status of female. The data have been taken from the National Family Health Survey – 5 conducted by the government of India. For the better understanding and clear picture of the nutritional status of women, the urban and rural female nutrition has also been taken. Moreover, for the comparative analysis, male nutritional status data has also been taken, so as to know that what is the situation of women nutritional status with regard to men.

The analysis of the data reveals that the women are outnumbered as compared to men in underweight and overweight population. This indicates that they are vulnerable to undernutrition due to different socio-economic factors. In terms of overweight population also women have high proportion as compared to men. The reason behind could be their lack of nutritional knowledge and low accessibility of quality treatment as well as physical training centre. The overweight population of men and women is significantly high in urban areas, almost a quarter of population is overweight. The reason mainly behind is the consumption of junk and fatty foods by men and women and also the urban lifestyle where people tend to do less physical activity.

**Table: 2 Nutritional Status of Women and Men in India**

(Adult 15-49 years) 2021 (in Percentage)

S. No.	Indicators	Urban	Rural	Total
1.	Women whose Body Mass Index (BMI) is below normal (BMI <18.5 kg/m <sup>2</sup> ) ( <b>Underweight</b> )	13.2	21.2	18.7
2.	Men whose Body Mass Index (BMI) is below normal (BMI <18.5 kg/m <sup>2</sup> ) ( <b>Underweight</b> )	13.0	17.8	16.2
3.	Women whose Body Mass Index (BMI) is normal (BMI 18.5 and 24.9 kg/m <sup>2</sup> ) ( <b>Healthy</b> )	53.6	59.5	57.3

4.	Men whose Body Mass Index (BMI) is normal (BMI 18.5 and 24.9 kg/m <sup>2</sup> ) ( <b>Healthy</b> )	57.2	62.9	<b>60.9</b>
5.	Women who are overweight or obese (BMI ≥25.0 kg/m <sup>2</sup> ) ( <b>Overweight</b> )	33.2	19.7	<b>24.0</b>
6.	Men who are overweight or obese (BMI ≥25.0 kg/m <sup>2</sup> ) ( <b>Overweight</b> )	29.8	19.3	<b>22.9</b>

Source: National Family Health Survey – 5 (2019-21)

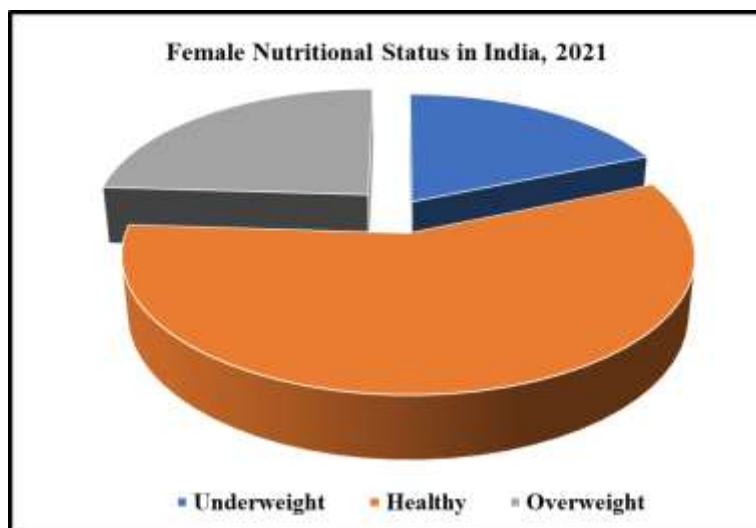


Fig. 2

The similar trend has also been observed in the healthy population. The men are high in percentage of healthy population as compared to women. Overall, 57.3 per cent of the women population belongs to the healthy category whereas 60.9 per cent of the men population comes under the healthy category. Men have higher proportion of population in the healthy category in rural and urban areas as compared to men. The reason of low proportion of healthy population of women as compared to men may be attributed to the low socio-economic conditions of women and lack of access to the quality food and treatment.

### 5.3: Anaemia Among Women and Men in India:

According to WHO, Anaemia is a condition in which the number of red blood cells or the haemoglobin concentration within them is lower than normal. Haemoglobin is needed to carry oxygen and if any individual has too few or abnormal red blood cells, or not enough haemoglobin, there will be a decreased capacity of the blood to carry oxygen to the body's tissues. This results in symptoms such as fatigue, weakness, dizziness and shortness of breath, among others. The optimal haemoglobin concentration needed to meet physiologic needs varies by age, sex, elevation of residence, smoking habits and pregnancy status. The basic reason of anaemia includes nutritional deficiencies, particularly iron deficiency, though deficiencies in folate, vitamins B12 and A are also important causes; haemoglobinopathies; and infectious diseases, such as malaria, tuberculosis, HIV and parasitic infections. (WHO, 2022, <https://www.who.int/health-topics/anaemia>).

Table: 3 Anaemia among women and men in India

(Adult 15-49 years) 2021 (in Percentage)

S. No.	Indicators	Urban	Rural	Total
1.	All women age 15-49 years who are anaemic (%)	53.8	58.5	<b>57.0</b>
2.	All women age 15-19 years who are anaemic (%)	56.5	60.2	<b>59.1</b>
3.	Men age 15-49 years who are anaemic (<13.0 g/dl) (%)	20.4	27.4	<b>25.0</b>
4.	Men age 15-19 years who are anaemic (<13.0 g/dl) (%)	25.0	33.9	<b>31.1</b>

Source: National Family Health Survey – 5 (2019-21)

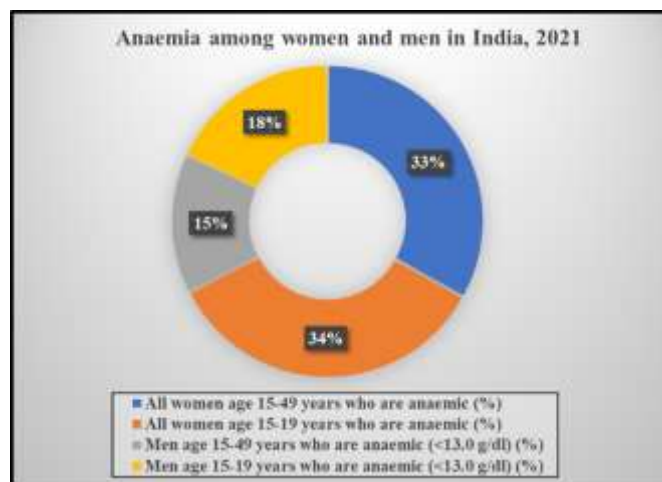


Fig. 3

Table 3 and Figure 3 reveal the percentage of anaemic men and women. It is quite clear that the percentage of anaemia among the women is abnormally high as compared to men. Nearly 60 per cent of the women among the adult age group (15 - 49). In the age group of (15- 19) the proportion of anaemia is proportionately higher than the overall adult age group. From the above table, it can be ascertained that the percentage of anaemia in the rural areas among the men and women is slightly high. The reason of higher percentage of anaemia in the rural areas was basically the poor socio-economic condition of the people and lack of proper health care system. Although the proportion of anaemia conditions among the men is lower than the women but still nearly 30 per cent of the men are anaemic, this is huge when we compare to some of the developed and developing countries of the world. Urban areas recorded low rate of anaemic men because of the availability of the adequate and qualitative health care system.

## 6. Suggestion and Policy Implication:

1. Every family should pay equal attention towards the female food and nutrition. Many a time female are undernourished because they don't get equal access to qualitative foods and timely treatment and care when they face any diseases.
2. Government should launch special programme and policies for the female nutrition. Monitoring and proper implementation should be given adequate attention. For these programmes awareness programme should also be launched.
3. There should be empowerment of women by providing them education, jobs and political representation.
3. Government should work on improving access to basic nutrition and health services for females.
4. There is a need to increase the participation of Self Help Groups in rural areas.
5. Preventing micronutrient deficiencies and anaemia among the females by providing the Iron rich capsules and treatment, Universal access to iodized salt and many other provisions.

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