10.4 Presence of Iodized Salt in Households

Iodine is an essential micronutrient, and iodized salt prevents goitre or any other thyroid-related health problems among children and adults. It is recommended that household salt should be fortified with iodine to at least 15 parts per million (ppm).

The 2019-21 NFHS tested for the presence or absence of potassium iodate or potassium iodide in household salt. Salt was tested in almost all households (**Table 10.15**). Among the households in which salt was tested, 94 percent had iodized salt. This is similar to NFHS-4, when 93 percent of households were using iodized salt. There is steady increase in the use of iodized salt by household wealth quintiles, from 91 percent in the lowest wealth quintile to 97 percent in the highest wealth quintile. Among the states, the use of iodized salt is lowest in Andhra Pradesh (83%), Dadra & Nagar Haveli and Daman & Diu (89%), and Meghalaya (91%) (**Table 10.16**).

10.5 Micronutrient Intake and Supplementation among Children

Micronutrient deficiency is a major contributor to childhood morbidity and mortality. Micronutrients are available in foods and can also be provided through direct supplementation. Breastfeeding children benefit from supplements given to the mother.

The information collected on food consumption among the youngest children under age two years is useful in assessing the extent to which children are consuming foods rich in two key micronutrients—vitamin A and iron—in their daily diet. Iron deficiency is one of the primary causes of anaemia, which has serious health consequences for both women and children. Vitamin A is an essential micronutrient for the immune system and plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency (VAD) can cause eye damage and is the leading cause of childhood blindness. VAD also increases the severity of infections such as measles and diarrhoeal disease in children and slows recovery from illness. VAD is common in dry environments where fresh fruits and vegetables are not readily available.

Forty-seven percent of children age 6-23 months consumed foods rich in vitamin A in the day or night before the interview, and 21 percent consumed iron-rich foods (**Table 10.17**). The intake of both vitamin A-rich and iron-rich foods increases as children are weaned.

Among children age 6-59 months, 27 percent were given iron supplements in the seven days prior to survey. In the six months before the survey, 37 percent of children age 6-59 months were given vitamin A supplements and 30 percent were given deworming medication. Ninety-four percent of children age 6-59 months are in households using iodized salt.

The percentage of children age 6-59 months given Vitamin A supplements in the last six months ranges from 20 percent in Lakshadweep and Manipur to 47 percent in Goa (**Table 10.18**).

10.6 Nutritional Status in Adults

The 2019-21 NFHS collected anthropometric data on the height and weight of women age 15-49 and men age 15-54 years. These data were used to calculate several measures of nutritional status such as women's height and body mass index (BMI).

Body mass index (BMI)

BMI is calculated by dividing weight in kilograms by height in metres squared (kg/m^2).

Status	BMI (kg/m^2)
Too thin for their height	<18.5
Normal	18.5-24.9
Overweight	25.0-29.9
Obese	≥30.0

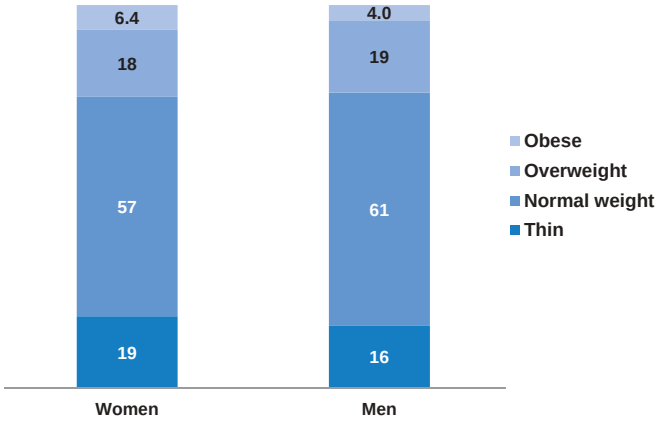
Sample: Women age 15-49 who are not pregnant and who have not had a birth in the two months before the survey and men age 15-49

Information on BMI of women is provided in **Table 10.19.1** and **Figure 10.6**. Nineteen percent of women age 15-49 are thin, 24 percent are overweight or obese, and 57 percent have a BMI in the normal range. Twelve percent of women age 15-49 years have a height below 145 cm.

Trends: The proportion of thin women age 15-49 declined from 23 percent in 2015-16 to 19 percent in 2019-21; at the same time, the proportion of overweight or obese women increased from 21 percent to 24 percent. Overall, there has been a slight increase in the mean BMI from 21.9 in 2015-16 to 22.4 in 2019-21. The proportion of women whose height was below 145 cm was the almost the same in 2015-16 (11.1) and 2019-21 (11.5) (**Figure 10.7**).

Figure 10.6 **Nutritional Status of Women and Men**

Percent distribution of women and men age 15-49

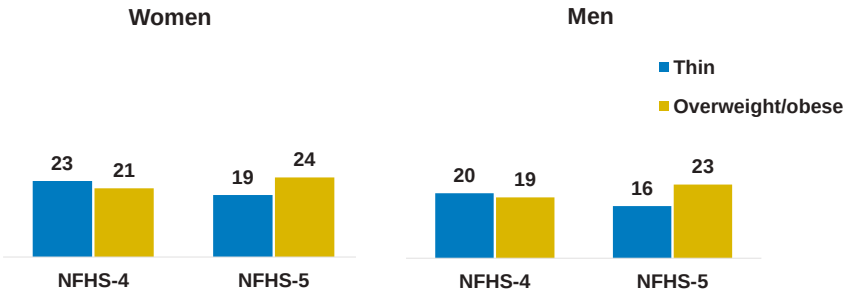


Patterns by background characteristics

- The proportion of thin women decreases with age, from 40 percent for women age 15-19 to 9 percent for women age 40-49, whereas the proportion of overweight or obese women increases steadily, from 5 percent of women age 15-49 to 37 percent of women age 40-49.
- The proportion of thin women is higher in rural areas (21%) than in urban areas (13%) and the reverse is observed for the prevalence of overweight or obesity (33% in urban areas and 20% in rural areas).
- There is a steady decrease in the proportion of thin women as household wealth increases (from 28% in the lowest wealth quintile to 10% in the highest wealth quintile), which is accompanied by a steady increase in the proportion of overweight or obese women (from 10% in the lowest wealth quintile to 39% in the highest wealth quintile).
- The highest proportion of thin women is observed in Jharkhand and Bihar (26% each), followed by Gujarat and Dadra & Nagar Haveli and Daman & Diu (25% each). The highest proportion of overweight or obese women is found in Puducherry (46%), Chandigarh (44%), Delhi, Tamil Nadu, and Punjab (41% each), and Kerala and Andaman & Nicobar Islands (38% each) (**Table 10.20.1**).

Figure 10.7 Trends in Nutritional Status

Percentage of women and men age 15-49



Sixteen percent of men age 15-49 are thin, 23 percent are overweight or obese, and 61 percent have a BMI in the normal range. The mean body mass index for men (22.4) is the same as that of women (22.4) (**Table 10.19.2**).

Patterns by background characteristics

- The patterns of nutritional status by background characteristics among men are similar to those among women.
- The proportion of thin men decreases with age, from 41 percent of men age 15-19 to 8 percent of men age 40-49, whereas the proportion of overweight or obese men increases from 7 percent of men age 15-19 to 32 percent of men age 40-49.
- The proportion of thin men is higher in rural areas (18%) than in urban areas (13%), whereas 30 percent of men are overweight or obese in urban areas, compared with 19 percent in rural areas.
- There is steady decrease in the proportion of thin men with increasing household wealth (from 24% in the lowest wealth quintile to 9% in the highest wealth quintile), and a steady increase in the proportion of overweight or obese men (from 10% in the lowest wealth quintile to 37% in the highest wealth quintile).
- The proportion of thin men is highest in Bihar (22%), followed by Madhya Pradesh and Gujarat (21% each). The highest proportion of overweight or obese men is observed in Andaman & Nicobar Island (45%), followed by Puducherry (43%) and Lakshadweep (41%) (**Table 10.20.2**).

10.7 Waist-to-hip Ratio in Adults

- For the first time, the 2019-21 NFHS measured the waist circumference and hip circumference of women and men age 15-49 years.
- This information was used to calculate the waist-to-hip ratio (WHR). WHR helps to identify the distribution of body fat and predicts abdominal obesity. Abdominal obesity is associated with an increased risk of type 2 diabetes mellitus, myocardial infarction, stroke, and premature death.

Waist-to-hip ratio (WHR)

WHR is calculated by dividing the waist measurement by the hip measurement. The formula is WHR=waist circumference/hip circumference. According to WHO, a healthy WHR is:

- 0.90 or less in men
- 0.85 or less in women

Sample: Women age 15-49 who are not pregnant and who have not had a birth in the two months before the survey and men age 15-49

- More than half (57%) of women and 48 percent of men have a waist-to-hip ratio (WHR) that puts them at a substantially increased risk of metabolic complications.

- The proportion of adults with an increased risk WHR increases with age, from 46 percent for women age 15-19 to 65 percent for women age 40-49, and from 28 percent for men age 15-19 to 60 percent for men age 40-49.
- The proportion of women having a substantially increased risk WHR is higher in urban areas than rural areas for both women (60% in urban area than 55% in rural area) and men (50% in urban area than 46% in rural area).
- The proportion of women having a substantially increased risk WHR is highest in Jammu & Kashmir (88%) and lowest in Madhya Pradesh (40%). For men it is highest in Chandigarh (67%) and lowest in Meghalaya (25%).

10.8 Anaemia Prevalence in Adults

Haemoglobin levels below which women and men are considered anaemic

Respondents	Haemoglobin level in grams/decilitre*
Non-pregnant women age 15-49	<11.0
Pregnant women age 15-49	<12.0
Men age 15-49	<13.0
*Haemoglobin levels are adjusted for smoking, and for altitude in enumeration areas that are above 1,000 metres	

The same equipment and procedures used to measure anaemia in children were used to measure anaemia in women and men, except that capillary blood was collected exclusively from a finger prick.

Fifty-seven percent of women and 25 percent of men age 15-49 in India are anaemic (**Table 10.23.1** and **Table 10.23.2**). Twenty-six percent of women are mildly anaemic, 29 percent are moderately anaemic, and 3 percent are severely anaemic. Twenty percent of men are classified as mildly anaemic, 5 percent as moderately anaemic, and 0.4 percent as severely anaemic.

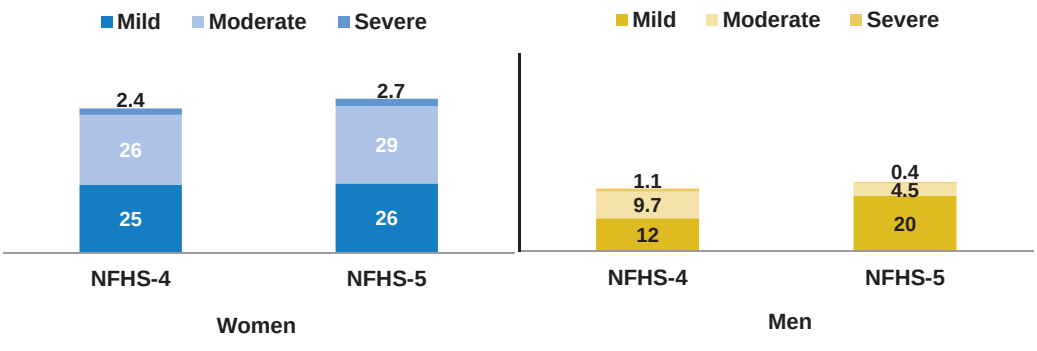
Trends: Anaemia prevalence has increased between NFHS-4 and NFHS-5, from 53 percent in 2015-16 to 57 percent in 2019-21 among women and from 23 percent in 2015-16 to 25 percent in 2019-21 among men (**Figure 10.8**).

Patterns by background characteristics

- The overall prevalence of anaemia is consistently high, at more than 50 percent, in almost all of the subgroups of women. For men, the prevalence is above 20 percent in almost all of the subgroups.
- Anaemia varies by maternity status—61 percent of women who are breastfeeding are anaemic, compared with 52 percent of women who are pregnant and 57 percent of women who are neither pregnant nor breastfeeding.

***Figure 10.8* Trends in Anaemia Status**

Percentage of women and men age 15-49



- The prevalence of anaemia generally decreases with schooling, from 59 percent among women with no schooling to 52 percent among women with 12 or more years of schooling. Across the same schooling groups, the prevalence of anaemia among men decreases from 32 percent to 19 percent.

- The proportion of anaemic women and men declines steadily as the wealth of the household increases (from 64% in the lowest wealth quintile to 51% in the highest wealth quintile among women and from 36% in the lowest wealth quintile to 18% in the highest wealth quintile among men).

- Women in urban areas are slightly less likely to be anaemic (54%) than those in rural areas (59%). The difference is larger for the prevalence of anaemia in men (27% in rural areas versus 20% in urban areas).

The prevalence of anaemia among women is 60 percent or more in Chhattisgarh, Bihar, Odisha, Gujarat, Jharkhand, Assam, Tripura, West Bengal, and the prevalence is less than one-third in Lakshadweep (26%), and Nagaland and Manipur (29% each). The prevalence of anaemia is also very high in the union territories of Ladakh (93%), Jammu & Kashmir (66%), Dadra & Nagar Haveli and Daman & Diu (63%), and Chandigarh (60%).

Anaemia prevalence in men is highest in Ladakh (76%), West Bengal (39%), Jammu & Kashmir (27%), and Assam (36%), and it is lowest in Lakshadweep and Manipur (6% each) and Chandigarh (9%).

10.8 Food Consumption of Women and Men

The consumption of a wide variety of nutritious foods is important for women's and men's health. A well-balanced diet is required for adequate amounts of protein, fat, carbohydrates, vitamins, and minerals. The 2019-21 NFHS asked women and men how often they consume various types of food (daily, weekly, occasionally, or never).

Among these food groups, women consume pulses and beans and dark green, leafy vegetables most often (**Table 10.26.1**). More than half (52%) of women consume dark green, leafy vegetables daily and an additional 39 percent consume them weekly. Almost half (50%) of women consume pulses or beans daily and 43 percent of women consume them weekly. Milk or curd is consumed daily by 49 percent of women daily and weekly by 24 percent of women, but 6 percent never consume milk or curd and 22 percent consume milk or curd only occasionally. Consumption of fruits is less common. Forty-nine percent of women consume fruits occasionally. Very few women consume chicken, meat, fish, or eggs daily, although about one-third of women consume these types of food weekly. Seven percent of women consume fried foods daily and 36 percent weekly. Aerated drinks are consumed daily by 3 percent of women and weekly by 13 percent of women (**Table 10.25**).

Men are less likely than women to completely abstain from eating chicken, meat, and fish. Overall, 29 percent of women and 17 percent of men are vegetarians according to this measure.

Trends: The pattern of daily food consumption has remained more or less the same since 2019-21 except there has been a decrease in the daily consumption of fried food and aerated drinks among both women and men.

Patterns by background characteristics

- Deficiencies in the diet of both women and men are observed among those with little or no schooling, those in rural areas, those in poorer households, and those belonging to scheduled tribes. The most prominent deficiency in their diet is in fruits and milk or curd (**Table 10.26.1** and **Table 10.26.2**).

- The regular consumption of pulses and beans, as well as dark green, leafy vegetables, is common in every state (**Table 10.27.1** and **Table 10.27.2**).

- At least four-fifths of women eat dark green, leafy vegetables at least once a week in every state except Kerala (62%). The consumption of dark green, leafy vegetables among women at least once a week is also relatively low in the union territories of Lakshadweep (45%).

- The consumption of other types of food at least once a week among women varies widely across the states, particularly milk or curd (from 30% in Odisha and 36% in Mizoram to 92% in Ladakh, and 94% in Karnataka) and the women's consumption of fruits at least once a week ranges from 25% in Odisha to 93% in Goa.