Assessment of Nutritional status of Average intake of Iron of Rural Children in Latur District: A Geographical Analysis

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Abstract

For the present research work in the latur district of maharashtra state is a selected as a study region. It lies between 17° 32’ and 18° 50’ north latitudes and 76° 12’ and 77° 18’ east longirudes. The study region area as 7372 sq km. which contribute (2.40 % of states area) sith 10 Tahsils, 923 villages Surbam centres. According to census 2011 Latur district has population 2455543 in 2011. The population Density of Latur District is 343 per sq.km. the present paper tries to study to understand the average intake of Iron in Latur district.

Key word : RDA (Recommended Dietary intake) Iron.

Introduction :

Iron is an essential in the human body, it is found in hemoglobin which transports oxygen from one tissue to another in the blood. When the iron level is low, the amount of available oxygen declines, thus limiting energy production. Tiredness arid fatigue, therefore, are common symptoms of iron deficiency,

Aims and objects:

1. To study the food and nutritional status of rural centers in the study region.
2. To find out per head daily average intake of iron of the rural children in the study area.

Data Base :

The above objectives are to be tested by collecting primary data and appiring quantitative techniques. District health officers of the district were approached for the required secondary information to supplement first hand information.

Methodology :

The primary data are intended to unveil the physilological 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 staff. Later on every constituent obtained from all food consumed was summed up and total perhead intake of constituent was found out for each PHC. The actual intake o constituent consumed by a person was compared with the standard unit requirement from this comparison the level of adequacy and deficiency of particular constituent were determined the data thus obtained were presented with the help of maps.

Food Sources of Iron:

Dietary iron exists in two different forms. Home iron only exists in animal tissues, whilst in plant foods iron is present as non-haem iron. In a mixed omnivore diet around 25% of dietary iron is non-haem iron, Non-haem iron is less easily absorbed by the body than is haem iron. The amount of iron absorbed from various foods ranges from around 1 to 10 percent from plant foods and 10 to 20 percent from animal foods.

The absorption of iron is influence by other constituents of a meal. Phytates, oxalates and phosphates present in plant foods can inhibit absorption, as can tannin in tea. Fibre may also inhibit absorption. Vitamin C greatly increases the absorption of non-haem iron. Food, rich in vitamin C include citrus Fruits, green peppers, and Fresh leafy green vegetables. Citric acid, sugars, amino acids and alcohol can also promote iron absorption. Iron absorption can also be influenced by the amount of iron in the diet lowered levels of iron in the diet result in improved absorption.

Good sources of iron for vegetarians include wholegrain cereals and flours, leafy green vegetables, blackstrap molasses, pulses, such as lentils and kidney beans and some dried fruits.

Healthy MI term infants are born with a supply of iron that lasts for 4 to 6 months.

Iron in human breast milk is well absorbed by infants. It is estimated that infants can use greater
than 50 percent of the iron in breast milk as compared to less than 12 percent of the iron is infant formula. The amount of iron in cow's milk is low, and infants poorly absorb it. Feeding cow's milk to infants also may result in gastrointestinal Weeding. For these reasons, cow's milk they are at least year old.

Total dietary iron intake in vegetarian diets may meet commended level; however that iron is less available for absorption than in diets that include meat. Vegetarians who exclude all animals' products from their diet may need almost twice as much dietary iron each day as non-vegetarians because of the lower intestinal absorption of non haem iron in plant foods. Vegetarians should consider consuming nonheme iron sources together with a good source of vitamin C, such as citrus fruits, to improve the absorption of nonheme iron.

**Function of Iron**

- The formation of hemoglobin and certain enzymes
- Many proteins and enzymes that maintain good health
- Transporting oxygen in the blood to all parts of the body
- Many metabolic reaction and the regulation of cell growth and differentiation
- Immune activity
- Proper functioning of the liver and protection against the action of free radical.

Table No. 1.1 shows PHC wise per head daily average consumption of Iron of rural children in the study area in 2013. The table reveals that 13 mg. of Iron is a RDA but the situation is worst in the study area as every tahsils has registered a negative intake, and condition are really pathetic. Tahsils like Ahmadpur, Deoni and Udgir have more than minus 90 percent intake. Fig. No. 1.1 shows the Iron intake of rural children in Latur District in 2013.

**Latur District**

P.H.C. Wise per Head Daily Average Intake of Iron of the Rural Children 2013

(Based on Sample)

**Table 1.1**

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Tahsils</th>
<th>PHC</th>
<th>Iron (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Averag e Intake</td>
<td>RD A</td>
</tr>
<tr>
<td>1</td>
<td>Latur</td>
<td>Batangali</td>
<td>3.04</td>
</tr>
<tr>
<td>2</td>
<td>Renapur</td>
<td>Pangaon</td>
<td>4.68</td>
</tr>
<tr>
<td>3</td>
<td>Ahmad pur</td>
<td>Hadoliti</td>
<td>0.98</td>
</tr>
<tr>
<td>4</td>
<td>Chakur</td>
<td>Chapoli</td>
<td>1.83</td>
</tr>
<tr>
<td>5</td>
<td>Jalkot</td>
<td>Annoor</td>
<td>1.71</td>
</tr>
<tr>
<td>6</td>
<td>Shirur (A)</td>
<td>Shirur (A)</td>
<td>1.62</td>
</tr>
<tr>
<td>7</td>
<td>Ausa</td>
<td>Lamjana</td>
<td>2.99</td>
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<tr>
<td>8</td>
<td>Nilanga (S)</td>
<td>Kasar (S)</td>
<td>1.85</td>
</tr>
<tr>
<td>9</td>
<td>Deoni</td>
<td>Walandi</td>
<td>1.19</td>
</tr>
<tr>
<td>10</td>
<td>Udgir</td>
<td>Nalgir</td>
<td>1.24</td>
</tr>
</tbody>
</table>

**Fig.1.1**

Conclusion:

To nutritional consumption pattern of children in rural areas of Latur district is very pathetic. To assess nutritional states and consumption vital nutrients which are essential for healthy growth of children were taken into consideration. Besides these social causes like low standard of living poverty, lack of balanced diet unhygienic in rivers, dams near the drinking water, illiteraly and health ignorance etc are responsible for the prevalence of iron change amadpur, Deoni and udgir tahsils in the study area.

Source : Computed by the researcher
Reference:
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