Original Research Paper

Volume - 11 | Issue - 08 | August - 2021 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

Statistics

NUTRITIONAL STATUS OF 1-3 YEAR CHILDREN BELONGING TO RURAL AREA OF SELECTED STATES OF INDIA

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ABSTRACT

Background: One-third out of 151 million children are found to reside in India; making the country an outlier even among the developing nations [1,2,3]. Studies suggested that socio-economic conditions of the household play a major role in determining child health status as higher financial capabilities are linked with better care, health services, quality of food resulting in positive health outcomes [1,4,5].

Methodology: The data for the study was taken from National Nutrition Monitoring Bureau, Technical Report, Rural survey 2001, India. The data was given in accordance with states Kerala(197), Tamil Nadu(408), Karnataka(286), Andhra Pradesh(338), Maharashtra(332), Gujarat(288), Madhya Pradesh(292), Odisha (261), West Bengal(271). The percent Recommended Dietary Allowances or Recommended Daily Allowances (RDA) for Protein, Total Fat, Energy, Calcium, Iron, Vitamin-A, Thiamin, Riboflavin, Niacin, Vitamin-C, Free Folic acid was given in the intervals less than 50 ,50-70,greater than equal to 70.The results and conclusions were made further.

Results: Results were revealed in accordance with the highest and lowest values of percentage of RDA.

Discussion: After observing the data discussion was made for future prospectus.

KEYWORDS : Nutrition, Rural area, India

INTRODUCTION

India is a country having a dense population. In the present study we are going to consider the data from National Nutrition Monitoring Bureau, Technical Report, Rural survey 2001, India.after observing the data we are discussing the results as follows.

RESULTS

Protein

The maximum percentage RDA was in Orissa (23.4%).After that in Andhra Pradesh (21.9%) and Tamil Nadu(21.1%) in the cadre less than 50.The lesser percentages were in Madhya Pradesh(9.6%),Gujarat (11.5%) and Kerala (13.2%).In the %RDA group 50-70, then top most values were 27.6%,23.4% and 23.2% in Orissa, Karnataka and West Bengal where the values against the ceiling values were 13.7%(MP),14.5%(Maharashtra) and 17.3% (Kerala).In case of greater than or equal to the highest values were in Madhya Pradesh(76.7%),Kerala (69.5%) and Maharashtra (67.8%).Then lower most percentages were in Orissa (49%),West Bengal(56.8%) and Andhra Pradesh(57.1%)

Total Fat

In case of total fat when concerning with less than 50 groups, Orissa(83.5%),West Bengal (74.5%) and Madhya Pradesh(71.6%) were sprinkling with the heighest percentages. Madhya Pradesh(29.8%),Karnataka(35%) and Kerala (35.5%) were the states having the blurred values.

While concerned with percentage RDA group 50-70, the uttermost values were Gujarat(24%),Kerala (18.3%) and Maharashtra (17.5%).In Orissa (3.8%) Andhra Pradesh (10.7%) and Karnataka (11.9%)percentage RDA were found reported. Beneath the head, greater than or equal to 70, Kerala (45.7%), Maharashtra(37.7%) and Tamil Nadu(25.5%) were on the top flour Orissa (12.6%),West Bengal (12.9%) and Madhya Pradesh(15.4%) were the states on bottom floor.

Energy

In case of the less than 50 group, Gujarat, Orissa and West Bengal were on the highest position with 45.1%,41.8% and 40.6% respectively. In this sequence, Madhya Pradesh , Karnataka and Kerala were at the least position i.e. 29.8%,35% and 35.5% respectively. For the percentage RDA50-70, the roof top values were Gujrat, Orissa, Karnataka and Kerala with the percentage values 36.1%, 36%(Orissa, Karnataka) and 35% respectively.

The Andhra Pradesh Madhya Pradesh and Maharashtra were at the least position with 26.3%,26.7% and 31.9% respectively.

While we have concerned with greater than or equal to 70, the maximum values were 43.5%, 37% and 31% with the respective states Madhya Pradesh, Andhra Pradesh and Maharashtra. In Gujarat (18.8%),Orissa (22.2%) and West Bengal (24.7%) were the values maintaining those states at minimum position.

Calcium

As far as the group 50-70 was considered, Kerala (19.3%), Gujarat (14.2%) and Tamil Nadu (13.7%) and Madhya Pradesh (7.2%), Maharashtra (9) and Andhra Pradesh (10.1%) were the states showing higher and lower values respectively. While concerning the position greater than or equal to 70, the values making the states at top position were Tamil Nadu (27.5%), Kerala (26.9%) and Maharashtra (26.2%) whereas in Madhya Pradesh (6.5%), Orissa (7.3%) and Karnataka (15%) were the states at bottom position.

Iron

Tamil Nadu (91.2%) Andhra Pradesh (90.2%) and West Bengal (80.1%) were the states , uplifted. The states Madhya Pradesh (49.3%),Maharashtra(57.2%) and Gujarat(57.3%) were the states with a pulling down position as we took into account less than 50.In concern with 50-70,Maharashtra (20.5%),Madhya Pradesh (20.2%) and Kerala (16.8%) were high rated states, whereas Tamil Nadu (4.7%),Andhra Pradesh(5.3%) and West Bengal (8.9%)were the states having a merciful conditions.

In the span greater than equal to 70,Madhya Pradesh (30.5%), Gujarat(27.1%) and Maharashtra(22.3%) were the states showing extreme percent values under the same concern Tamil Nadu(4.2%), Andhra Pradesh(4.4%) and Karnataka (9.8%) were showing deemed places.

Vitamin A

In the group less than 50, the highest values were 96.2%, 94.4% and 91.9% in Gujarat, Andhra Pradesh and Kerala respectively.78.9%, 80.5% and 80.8% were the values showing the least percentages in Tamil Nadu, Orissa, and West Bengal.

Under the head 50-70, Tamil Nadu (9.8%), Maharashtra (6.3%) and West Bengal (5.9%) were the apex values whereas Gujarat (1%), Orissa (2.3%) and Andhra Pradesh (2.4%) were the states having least values. When undergone with greater than or equal to 70, Orissa (17.2%), West Bengal (13.3%) and Tamil Nadu (11.3%) and Gujarat (2.8%), Andhra Pradesh(3.3%) and Kerala (4.1%) were the states showing tiniest values.

Thiamin

In Andhra Pradesh, Karnataka and Kerala,77.8%,55.2% and 52.8% were the respective values showing a peaked position in respective states in case of less than 50 species. In Madhya Pradesh (30.5%), Gujarat (32.3%) and Orissa (33.7%) showed lesser values.

In the category 50-70, the most states were Orissa, Kerala and West Bengal with respective values 23.4%,22.8% and 19.6% while Madhya Pradesh, Andhra Pradesh and Maharashtra 9.6%,13.6% and 14.5% respectively. In case of greater than or equal to 70,Madhya Pradesh(59.9%),Gujarat(49.3%) and Maharashtra (48.2%) were the states at top and Andhra Pradesh (8.6%),Kerala (24.4%) and

Karnataka (28%) manifested worst orientation.

Riboflavin

While concern with less than 50 Orissa (91.2%) , Andhra Pradesh (79.9%) and West Bengal (74.5%) were the states showing a increased record of percent RDA, Tamil Nadu (60%),Kerala (61.4%) and Gujarat (63.9%) were showing decreased values.

In the group 50-70, Gujarat (21.2%),Karnataka (5%) and Maharashtra (12.7%) were conveying good record. Orissa (3.8%),West Bengal (6.6%) and Tamil Nadu (8.3%) were the states at their least. In the group greater than equal to 70,Tamil Nadu (31.6%),Kerala (27.4%) and Madhya Pradesh (21.6%) were recorded having a grasping high rate of percentage RDA.In the same concern the states havibg minimum percent values were Orissa (5%),Andhra Pradesh(8.3%) and Gujrat (14.9%) respectively.

Niacin

In the category less than 50 the utmost percentages were 66.3%,55% and 54.2% in the Gujrat, Andhra Pradesh and Karnataka respectively. In case of minimal percentages, Orissa West Bengal and Madhya Pradesh were showing 21.1%, 22.5% and 26.7% respectively. In the group 50-70,Kerala (32%),Karnataka(25.2%) and Andhra Pradesh (24%) were garnished values whereas West Bengal (15.9%),Orissa (18.4%) and Gujarat (19.4%) were the downward values. In the spices, greater than or equal to 70, the roof top values were 61.6%, 60.5% and 51% have an influence with West Bengal, Orissa and Madhya Pradesh respectively. In Gujarat, Karnataka and Madhya Pradesh the scenario was 14.2%, 20.6% and 21% respectively.

Vitamin C

In the interval less than 50, Maharashtra, Karnataka, and Gujarat were reflecting 88%, 78.3% and 77.1% respectively. In values against the values discussed above were 44.8%, 45.4% and 57.8% in the states Orissa, West Bengal and Tamil Nadu.

The group 50-70 showed the results in the form of higher values having the states Orissa (16.5%), Tamil Nadu (15.4%) and Madhya Pradesh (12%),under the same the least values were 5.1%,6.8% and 9.2% in the respective states, Maharashtra, Gujarat and Andhra Pradesh.

As far as greater than or equal to 70, was concerned, West Bengal Orissa and Madhya Pradesh were concerned having the values 43.9%,38.7% and 29.1%.In case of Maharashtra, Karnataka and Gujarat the values reflected were 6.9%,12.2% and 14.9%.

Free Folic Acid

The group less than 50 showed higher values 52.1%, 43.1% and 41.6% in the states Andhra Pradesh, Maharashtra and Karnataka. Whereas in Tamil Nadu, Gujrat and Madhya Pradesh, the respective values were 26.2%, 27.1% and 32.2%.

The cadre 50-70, reflected increased values in Karnataka (30.1%), Gujarat (29.9%) and Kerala (27.4%) whereas, in Tamil Nadu (17.6%),Madhya Pradesh(18.5%) and Maharashtra (19.3%) values were slighter.

In case of greater than or equal to 70 the the topmost values were 56.1% (Tamil Nadu), 49.3%(Madhya Pradesh)and 43.1% (Gujarat) and the lesser values were 26.6%,28.3% and 33.5% in the respective states.

DISCUSSION

On the basis of the data concerned, the lowest value of percent RDA was 1% in case of less than 50 group of vitamin A. The uppermost value in the same concern discussed above was 96.2% in same group and same nutritional component. Case should be taken for the children 1-3 year old so that we can get fruitful results.

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