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## INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI:10.21474/IJAR01/14320  
DOI URL: <http://dx.doi.org/10.21474/IJAR01/14320>



### RESEARCH ARTICLE

#### NUTRITION: A BOON TO HEALTHY EARLY CHILDHOOD

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#### Manuscript Info

##### Manuscript History

Received: 21 December 2021  
Final Accepted: 24 January 2022  
Published: February 2022

##### Key words: -

Nutrition, Childhood, Health, Mothers

#### Abstract

Food!! The word food itself holds a very important role in everyone's lives. The food we eat gives us the needed energy to pursue our daily activities and gives us the necessary strength to help boost our immunity. The importance of an adequate nutrition for children below three years cannot be ignored or cut short. The early nutrition practices in a child's life decides, the how; the latter years of life turn out. Therefore, it should be a fundamental right of a child to have good nutritional practices from day one. Exclusive breast feeding; since very long has been emphasized upon by Governments of various countries, medical practitioners and other involved in maternal and child health sector. If a child gets exclusive breast feed for six months, experts believe that it helps a child to grow healthy and also contributes to overall development of the child. Healthy Nutritional practices play a vital role in health of children especially in children below three years. Healthy nutritional practices are like the steps of a ladder, the stronger the steps the better is the climb for the child. Mothers or the primary care givers are like poles of the ladder which holds the steps together. Therefore, educating a mother or primary care giver about healthy nutritional practices becomes utmost necessity for any society.

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#### Introduction:-

Nutrition in early childhood days plays a significant role by balancing the holistic aspect of child i.e., physical, mental, social moral and spiritual area. A healthy child is not only a desire of every mother but is also an asset to the country. Inadequate amounts of nutritional intake for longer periods can lead to irreversible damage to child's growth.

During the early years of life children learn how, what and when to eat either through observation or by direct experiences. Thus, eating habits develop in the initial years of life.<sup>1</sup> Due to transition in the eating habits of children in all age groups it is very imperative to understand the factors contributing to this choosing behavior.<sup>2</sup> This will not only help to shape their eating habits in the early phase but will also make them healthy adults in future.

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Children's environment includes family and peers, offering them foods which are influenced by beliefs, society and media. This increases in complexity and variety throughout their life.<sup>3</sup> Though eating habits and behavior are difficult to change directly but intervention focusing on parental feeding practices can potentially prevent unhealthy eating habits in children.<sup>4</sup> Family plays a very significant role in maintaining healthy habits in the children from the beginning when the child learns to eat. Studies have shown that positive family system establishes and promotes beneficial healthy behavior in children through role modelling, providing healthy foods and involving children in healthy eating conduct.<sup>5</sup>

Thus, present review paper focuses on significance of nutrition in early years and methods to inculcate healthy eating habits in children.

### Significance of Nutrition:

Good nutrition is fundamental to child's physical and mental development.<sup>6</sup> A child entering into toddler phase (1-3 years) will steadily begin to have transition in eating habits as the demands of the body will increase due to growth and development.

During the early childhood years there is rapid development of the brain and it requires more than 20% of our daily energy intake. Thus, the food consumed by children has a direct impact on learning, memory and attentiveness. Hence, consuming right nutrients in adequate amount is essential for them as they explore the world around them. If the child skips the meals or doesn't take the right amounts of nutrients, it might affect their concentration and memory span in latter years of life.<sup>7</sup>

India stands highest with world's one-third population as Stunted [According to global nutrition report, 2018]. According to Global Hunger index, India has highest level of Wasting and as per Comprehensive Nutrition survey (CNNS) it is reported that 6.4% of children below 2 years have minimum acceptable diet (MAD).<sup>8</sup> According to WHO MAD is one of the eight measurements for assessing infant and young child feeding (ICYF) practices<sup>9</sup> and refers to Proportion of children 6–23 months of age who receive a minimum acceptable diet (apart from breast milk) and is calculated from following formula<sup>10</sup>.

$$\text{MAD} = \frac{\text{Breastfed children 6–23 months of age who had at least the minimum dietary diversity and the minimum meal frequency during the previous day}}{\text{Breastfed children 6–23 months of age}}$$

And

$$\text{MAD} = \frac{\text{non-breastfed children 6–23 months of age who received at least 2 milk feedings and had at least the minimum dietary diversity not including milk feeds and the minimum meal frequency during the previous day}}{\text{Non-breastfed children 6–23 months of age}}$$

- Indicators for assessing infant and young child feeding practices – Part 1, WHO

The remaining seven measurements includes: Early initiation of breastfeeding, Exclusive breastfeeding, Continuation of breastfeeding for one year, Introduction of complementary feedings, Minimum dietary diversity, Minimum meal frequency and taking iron rich diets.<sup>9</sup> Inadequate intake of micro and macro nutrients during this phase will affect the growth and development leading to delay in mental and motor development further affecting the advance period of childhood alongwith recurrent phases of illness.<sup>10</sup> The first five years of child development is considered as most vital phase of growth and development. As in this phase the child is considered to be most vulnerable to various health issues. Therefore, monitoring nutritional status in this age is considered as an important segment to track the health of child.<sup>11</sup>

Moreover, in this age group i.e., from one to five years child is constantly in motion. The activities related to gross and fine motor area is high in toddler phase as they are experimenting their newly acquired physical strength. This in itself highlights the importance of energy giving and body building foods.

### Healthy habits Inception:

Due to slower growth during these years, the appetite also slows. A child develops decreased interest in food and develops food jags i.e., refusing previously accepted food or asking same food at each meal.<sup>12</sup> Though there are various factors which play significant role in child's nutritional status like: maternal demographical factors i.e., age

of the mother<sup>13</sup>, poor nutritional status, duration of pregnancy, improper spacing, no antenatal checkups, complicated pregnancy, maternal height and weight and low Body Mass Index<sup>14</sup> as these factors affect the fetus from the womb itself. Environmental factors<sup>15,16</sup> like illiteracy in mother and father, low socio-economic status, overcrowded living and family, unemployment, use of addictive substances, working mothers, kucha house, hand pump water drinking, open drainage and open defecation indirectly affects the nutritional status. Birth related factors<sup>17</sup> like Low Birth Weight (less than 2.5kg), certain cultural beliefs and dietary factors<sup>[18-23]</sup> also play a significant role in development of malnutrition. Also, hygienic factors which are usually neglected are indirectly responsible for affecting the nutritional status of children.<sup>[18,16,24,25]</sup>

Though, the afore mentioned factors affect a child's nutritional status indirectly or directly, the role of parents is still the most important factor responsible for developing healthy nutritional habits. Consequently, it is indeed the parents' fundamental responsibility to make a child eat healthy and nutritious food. And only if the parents remain persistent with a child regarding eating habits, the child will develop impeccable eating choices.

Once the children start developing taste, it becomes the responsibility of the parents to develop nutritionally conducive environment for them. This can be done by having same meal timing with children where the parents can manage child's behavior by interacting with them.<sup>26</sup> Studies have reported that this is directly linked to child's weight i.e., frequency of family meals and nutrient intake.<sup>27</sup> Diet quality is also linked with breakfast eating habits<sup>28</sup> and fast-food consumption<sup>29</sup> in children from early age. It is also known that children are good imitators, so it is important for adults also to have healthy eating habits. A study reports that children's intake of fruits, vegetables and milk increased after observing adults consuming the same foods.<sup>30</sup> Thus, positive social modeling also plays its own role in helping children develop healthy eating styles. Also, developing structure based or limit setting strategies such as limiting certain foods brought home or serving small portion without forbidding accessibility to these foods develop unhealthy eating habits.<sup>31</sup>

Other strategies include having: covert control i.e., buying only healthy foods and avoiding storing of unhealthy foods, avoiding use of food rewards specifically unhealthy food rewards, promoting self-regulation by recognizing fullness sense and serving moderate portion meals, adopting authoritative parenting style by encouraging them to try new foods and discouraging obesogenic environment (reducing intake of palatable snack foods), parents focused interventions (feeding related education and guidance to parents, social support) and family environment (Early-life experiences with healthy tastes and flavors may promote healthy eating, parental role in food shopping and preparation).<sup>32</sup>

### **Conclusion:-**

There are multiple factors which influence eating habits in children. It is the family that plays central figure in developing healthy habits of eating in children. Though, government has initiated various programs to combat undernutrition in children but this all will work for child only when there is collaboration. Parents need to educate and keep themselves update about the right foods for their children. As the times are changing and things are easily available, we need to teach our children to develop right selection of foods and right eating attitude. Intervention programs involving entire family should be focused upon and not just only teaching the mothers who are primary care givers.

### **Conflict of Interest:**

None declared.

### **References:-**

1. Ogden CL, Carroll MD, Curtin LR, McDowell MA, Tabak CJ, Flegal KM. Prevalence of overweight and obesity in the United States, 1999-2004. *Jama*. 2006;295(13):1549-1555
2. Nielsen SJ, Siega-Riz AM, Popkin BM. Trends in energy intake in U.S. between 1977 and 1996: similar shifts seen across age groups. *Obes Res*. 2002;10(5):370-378.
3. Cuellar J., Jones D.J., Sterrett E. Examining Parenting in the Neighbourhood Context: A Review. *J. Child Fam. Stud.* 2015; 24:195-219. doi: 10.1007/s10826-013-9826-y.
4. Finnane J.M., Jansen E., Mallan K.M., Daniels L.A. Mealtime structure and responsive feeding practices are associated with less food fussiness and more food enjoyment in children. *J. Nutr. Educ. Behav.* 2017; 49:11-18. doi: 10.1016/j.jneb.2016.08.007

5. Vandeweghe L., Moens E., Braet C., Van Lippevelde W., Vervoort L., Verbeken S. Perceived effective and feasible strategies to promote healthy eating in young children: Focus groups with parents, family child care providers and daycare assistants. *BMC Public Health*. 2016; 16:1045
6. UNICEF. Early childhood nutrition: Preventing malnutrition in infants and young children. Accessed on 28<sup>th</sup> Feb 2022. Available from: <https://www.unicef.org/nutrition/early-childhood-nutrition>
7. Kids club early childhood: development of mind, body, spirit. *Healthy Nutrition*. 2020. Available from: <https://www.kidsclubchildcare.com.au/the-importance-of-nutrition-in-early-childhood/>
8. Singh A. Malnutrition, Swasth India [Internet]. How Nutrition During First 1000 Days and Anaemia in Mothers Is Linked to Malnutrition in Children. 2020 Jan 10th [accessed on 6th May 2020]. Available from: <https://swachhindia.ndtv.com/how-nutrition-during-first-1000-days-and-anaemia-in-mothers-is-linked-to-malnutrition-in-children-40625/>
9. INDDEx Project (2018), Data for Diets: Building Blocks for Diet-related Food Security Analysis. Tufts University, Boston, MA. Accessed on 6 May 2020. Available from: <https://inddex.nutrition.tufts.edu/data4diets>.
10. Indicators for assessing infant and young child feeding practices: conclusions of a consensus meeting held 6–8 November 2007 [Internet]. USA: WHO; 2008, P. 1-26. Part – 1
11. WHO. Early child development – Nutrition and the early years [Internet]. Accessed on 6 May 2020. Available from: <https://www.who.int/topics/early-child-development/child-nutrition/en/>
12. L. Kathleen Mahan, Sylvia Escott Stump. *Food Nutrition and Diet Therapy*. Philadelphia. 2004
13. Sarkar S. Cross-sectional study of child malnutrition and associated risk factors among children aged under five in West Bengal, India. *International Journal of Population Studies*. 2016; vol.2(1): 89–102
14. Kaushal P, Chaudhary A, Girdhar S, Bansal P, Sharma S, Satija M. Prevalence and risk factors of under nutrition among under three children in an urban community in Ludhiana city. *Int J Community Med Public Health* 2019; 6:113-8
15. Dabar D, Yadav V, Goel AD, Mangal A, Prasad P, Singh M. Risk factors for undernutrition in under-five children living in a migrant populated area of South Delhi. *Journal of Family Medicine and Primary Care*. 2020;9:2022-7.
16. Ambadekar NN, Zodepy SP. Risk factors for severe acute malnutrition in under five children: a case control study in rural part of India. *Public health*. 2017; 142:136-143
17. Baranwal K, Gupta VM, Mishra RN, Prakash S. *Indian Journal of Community health*. July 2009-June 2010;21(2), 22(1): p 13-17
18. Prashanth MR, Savitha MR, Prashantha B. Risk factors for severe acute malnutrition in under-five children attending nutritional rehabilitation centre of tertiary teaching hospital in Karnataka: a case control study. *International Journal Contemporary Pediatrics* .2017; 4:1721-6
19. Stalin P, Bazroy J, Dimri D, Singh Z, Senthilvel V, Sathyanarayanan. Prevalence of Underweight and its Risk Factors among Under Five Children in a Rural Area of Kancheepuram District in Tamil Nadu, India. *Journal of Dental and Medical Sciences*. 2013;3(6):71-74.
20. Ambadekar NN, Zodepy SP. Risk factors for severe acute malnutrition in under five children: a case control study in rural part of India. *Public health*. 2017; 142:136-143
21. Akhade KS, Sankhe LR, Akarte SV. Magnitude of malnutrition among under five children in urban slums of commercial capital of India and its multifactorial causation: A community-based study. *Journal of Family Medicine Primary Care*. 2019;8:3865-70
22. John JM, John JS. Prevalence and risk factors associated with underweight among under-five children in a rural area of Puducherry. *Muller J Med Sci Res* 2018; 9:7-11.
23. Senthilkumar SK, Chacko TV, Suvetha K. Nutritional status assessment of children aged 0-5 years and its determinants in a tribal community of Coimbatore district. *International Journal of Community Medicine and Public Health*. 2018;5:2835-45
24. Meshram II, Mallikharjun Rao K, Ch Gal Reddy et al. Prevalence of Under Nutrition and its Predictors among Under 5 Year Children in Surat Region, Gujarat, *Indian Journal of Clinical Nutrition and Diet*. 2016 2:1
25. Sethy G, Jena D, Jena P, Pradhan S, Biswas T. Prevalence of malnutrition among under five children of urban slums of Berhampur, Odisha, India: a community based cross-sectional study. *Int J Contemp Pediatr* 2017; 4:2180-6
26. Le Heuzey M.F., Turberg-Romain C. Nutri-Bébé Survey 2013: Behaviour of mothers and young children during feeding. *Arch. Pediatr*. 2015; 22:20–29
27. Fayet-Moore F., Kim J., Sritharan N., Petocz P. Impact of breakfast skipping and breakfast choice on the nutrient intake and body mass index of Australian children. *Nutrients*. 2016; 8:487. doi: 10.3390/nu8080487

28. Fink S.K., Racine E.F., Mueffelman R.E., Petocz P. Family meals and diet quality among children and adolescents in North Carolina. *J. Nutr. Educ. Behav.* 2014; 46:418–422. doi: 10.1016/j.jneb.2014.05.004
29. Suglia S.F., Shelton R.C., Hsiao A., Wang Y.C., Rundle A., Link B.G. Why the Neighborhood Social Environment is Critical in Obesity Prevention. *J. Urban Health.* 2016; 93:206–212. doi: 10.1007/s11524-015-0017-6
30. Birch LL. Effects of peer models' food choices and eating behaviors on preschoolers' food preference. *Child Development.* 1980; 51:489–496
31. Stifter C.A., Anzman-Frasca S., Birch L.L., Voegtline K. Parent use of food to soothe infant/toddler distress and child weight status. An exploratory study. *Appetite.* 2011; 57:693–699. doi: 10.1016/j.appet.2011.08.013
32. Scaglioni S, De Cosmi V, Ciappolino V, Parazzini F, Brambilla P, Agostoni C. Factors Influencing Children's Eating Behaviours. *Nutrients.* 2018;10(6):706.