RESEARCH ARTICLE

"SOCIO DEMOGRAPHIC AND ANTHROPOMETRY OF BOARDING HOSTEL BOYS- A CASE STUDY".

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Manuscript Info	*Abstract*
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	Health and nutrition in early stages of human life determine, to a great extent, the physical and mental well being of a person. Childhood is a crucial period of physical and cognitive development. The consequences of ignoring the changing nutrition needs and burden of disease are grim. Nutrition refers to the appropriate intake of nutritionally adequate food in relation to the body's dietary needs. Over Nutrition is a state of nutrition in which one or more of the components of a healthy diet are consumed to excess such that adverse medical effects of that excessive intake are apparent and measurable. In India most of the school going children prefer indoor games and sedentary lifestyle. The present study was designed with main objectives, to assess the socio demographic and anthropometry of boarding hostel boys. Two hundred children (13-17years) were selected through the random sampling method from one children's home in Cuttack, Odisha.

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Introduction:-
Nutrition is the intake of food, considered in relation to the body's dietary needs. Good nutrition is an adequate, well balanced diet combined with regular physical activity which is a cornerstone of good health. Poor nutrition can lead to reduced immunity, increased susceptibility to disease, impaired physical and mental development, and reduced productivity. **(WHO, 2012)** The school age period is nutritionally significant because this is the prime time to build up body stores of nutrients in preparation for rapid growth of adolescence. Nutrition plays a vital role, as inadequate nutrition during childhood may lead to malnutrition, growth retardation, reduced work capacity and poor mental and social development. **(Awasthi, 2011)** India is facing a "twin epidemic" in the form of under- and over-nutrition in children and adolescents. Over-nutrition predisposes them to insulin resistance, metabolic syndrome, and type 2 diabetes mellitus (T2DM). Increasing prevalence of obesity and insulin resistance has been reported in Asian Indian adolescents**. (Guo, 2010)**

Methods And Materials:-
A cross sectional design was used in this study among School going children. The participants of the study were 200 school going children aged between 13-17 years selected through the random sampling method. Survey method was being adopted in order to find the respondents. **(Swaminathan, 2011)** The study was conducted in Cuttack district in odisha state. Jehovah Jireh children s home situated at Cuttack city was selected for the study. The Jehovah jireh children's home is a unit of Orissa Evangelistic Trust Association, Cuttack. The children s home has about 320

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boys' age group of 13-17 years belonging to different areas in odisha state. The school going children was selected based on their willingness to participate in the study. Socio-demographic factors refer to set of variable such as population's age, socio-economic status (education, occupation and income), marital status, culture, eating pattern, lifestyle- (urban/rural). All factors were assessed by schedule except socio-economic status. Socio-economic status was assessed by (**Kuppuswami, 2014**) Height and Weight were measured. (**Srilakshmi, 2012**) Gomez classification was adopted. (**Srilakshmi, 2012**)

Results and Discussion:-

Socio-Demographic Information Of The Selected Respondents:-

Socio demographic information of the selected respondents was found that among 200 respondents' 100 percent respondents were male sex. As in the Children's home only male respondents were available. The age group of the respondents was divided into two groups 13-15 years and 16-17 years. On analysing the data it was found that 85 children (42.5 percent) were between the age of 13-15 years, 115 children (57.5 percent) were between the ages of 16-17 years. Age and sex are the basic characteristics of any population, which affect the social, political and economic structure. Among the 200 respondents 100 percent children were studying in intermediate class group. Maximum respondents belonged to joint family with 99.0 percent and only 1.0 percent belonged to nuclear family. All the respondents were hostler as the study was conducted in a children's home. Most of the respondent's family occupation was others with a percentage of 52.50 percent. In case of government service it was 42.50 percent and 6.5 percent family occupation was business. All the Respondents belonged to the lower income group with 100 percent. Several demographic, biological, socio-economic and lifestyle factors have been shown to exhibit strong effects on excess adiposity. (**Subramanian, 2010**) As the population of the developing countries increase day after day, most of the people residing in the developing countries like India face economic and social unfairness which leads to poverty. (**Seo, 2010**)

Distribution Of The Respondents According To Their Anthropometric Measurements:-

S.no.	Particulars	Frequency	Percentage (%)
1.	**Weight(Kg)**		
	33-43	120	60
	43-52	80	40
2.	**Height(cm)**		
	110-135	115	57.5
	135-175	85	42.5

Nutritional anthropometry has been defined as "measurements of the variations of the physical dimensions and the gross composition of the human body at different age levels and degrees of nutrition. Anthropometric values are closely related to nutrition, genetic makeup, environmental characteristics, social and cultural conditions, lifestyle, functional status and health. Anthropometric evaluation is an essential feature of geriatric nutritional evaluation for determining malnutrition, being overweight, obesity, muscular mass loss, fat mass gain and adipose tissue redistribution.(**Villareal,2010**) Anthropometric measures are highly reliable for determining the nutritional status when compared with more sophisticated methodologies (hydrodensitometry, dilution techniques, measuring K-40 by whole body counting and electronic bioimpedance), the use of which is restricted by complexity and cost in population studies.(**Kyle,2012**) The normal weight of school going children aged between 15-17 years is 57kgs. The weight of the respondents was divided into two groups' 51-60kgs, 61-80kgs. Most of the respondents belonged to the weight group of 33-43kgs with 60 percent and 40 percent belonged to the weight group of 43-52 kgs. The height of the respondents was divided into two groups 110-135cm, 135-175cm. Respondents with 57.5 percent belonged to the group of 110-135cm where as respondents with 42.5 percent belonged to the group 135-175cm.

Distribution of the respondents according to their weight for age Grades:-

Gomez classification standard		Observed value standard	
GRADES	**Weight For Age**	**Frequency**	**Percentage**
Normal	>90%	85	42.5
Grade I	75-90%	90	45
Grade II	60-75%	25	12.5
Grade III	<60%	00	00

Source= (Srilakshmi, 2012).

Nearly three decades ago, an expert group convened by the World Health Organization (WHO) recommended that the National Center for Health Statistics (NCHS) reference data for height and weight be used to assess the nutritional status of children around the world. **(Water low, 2010)**For the frequency distribution of the respondents according to their weight for age grades Gomez Classification was being adopted. Most of the respondents belonged to Grade I (75-90) % obese group with 45 percent. The second highest group where the respondents belonged was normal group with 42.5 percent. 12.5 percent belonged to the group of Grade II.

Conclusion:-

It is concluded that School going children were in a children s home and all the respondents were boys. All the children were provided with proper amount of food. It is found that 45 percent belonged to Grade I category of obese group.

Acknowledgement:-

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