

## **Influence of Lifestyle on Child Health : A Study of School Children in Kerala**

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### **Abstract**

Health of children is an important factor determining the destiny of our future. Recognition of this basic fact inspires the public as well as private mechanisms to focus more on the investment in health sector. However, in spite of such great efforts, children are facing a lot of health issues today. The present study focuses on the influence of lifestyle on child health in Thiruvananthapuram district in Kerala. The study is based on primary data collected at random from school children. The study concludes that life style influence the healthy life of children. Gender wise and region wise evaluation support this. Absence of manual works, exercise, frequent eating out habits, junk food habits etc leads to high rate of BMI and health issues. Hence the study suggests giving more priority to child health in school curriculum. Frequent and free medical checkup can be conducted at schools by bringing lab to schools.

**KEYWORDS:** Health, BMI, Vitamin D, Obesity WHO

### **INTRODUCTION**

Child health plays significant role in building a healthy nation. Recognition of this basic fact inspires states to focus more on the investment in health sector. Internationally child health has approved as the most important indicator for the development of the world. In every country the governments take efforts to ensure good health condition. However, children are facing a lot of health issues today. According to the World Health Organization (WHO), 43 percent of Indian children are underweight. Statistics sourced from the Indian Journal of Endocrinology and Metabolism (February issue, 2018) revealed that between 5.74 percent and 8.82 percent of school children in India are obese. In rural south India, 21.4 percent boys and 18.5 percent girls aged 13-18 are either overweight or obese

According to World Health Organization, malnutrition, unhealthy diet, smoking, alcohol consuming, drug abuse, stress and so on, are the presentations of unhealthy life style that they are used as dominant form of lifestyle. Asgary S and others (2009) showed that diet with high sugar, salt, saturated fat and calorie is responsible for disabilities like obesity, hypertension, dyslipidemia and impaired glucose tolerance. Goon S, Bipasha MS, Md. Islam MS revealed that there is positive correlation between frequency of consumption of fast food and body mass index. A study report of WHO (2016) revealed, an estimated 41 million children under the age of 5 years were overweight or obese. Once considered a high-income country problem, overweight and obesity are now on the rise in low- and middle-income countries, particularly in urban settings. Nearly half of the children under 5 who were overweight or obese in 2016 lived in Asia. Over 340 million children and adolescents aged 5-19 were overweight or obese.

In Kerala also school children are falling prey to lifestyle diseases in increasing numbers. Obesity is a complex condition among school children in Kerala. Changing life style, busy school schedule and fast food habits can lead to obesity, vitamin deficiency etc. In Kerala, junk foods are widely available by the sides of schools. School canteens are also providing such bakery and junk foods for children. Junk foods, bakery foods, and life style of today's children deeply influence their health condition. Hence the present study focuses on the impact of lifestyle and food habits on child health in Thiruvananthapuram district in Kerala. The study is based on primary data. Data has been collected at random. A sample of 300 students is taken for the study.

### **DATA ANALYSIS AND DISCUSSION**

Data collected by sung questionnaire has been analyzed and included in three headings. Therefore our discussion can be arranged in sub headings such as life style of children, health condition of students and BMI distribution.

#### **Life style of children**

Life style is the typical way of life of an individual, group, or culture. In other words its a particular way of living : the way a person lives or a group of people live.<sup>1</sup> In this section we analyse the life style of children with respect to different activities.

**Table 1 - Life style of children**

Activities	Rural		Urban		Total	
	Number	%	Number	%	Number	%
Engage in manual works outside	58	39	32	21	90	30
Habit of washing own clothes	64	43	42	28	106	35
Jogging / walking to school	118	79	96	64	214	71
Involved in physically active play and sports	88	59	66	44	154	51
Brushing twice	124	83	142	95	266	89

Source: Primary data

Various activities of school children are given in table 1. It can be seen that only 30 % student engage in manual works outside. In rural areas, it is 39% but in urban areas it is only 21%. Habit of washing own clothes is also less. It is more among rural children than among urban children. 71 % children have a practice of jogging or walking to school. This rate is very high in rural areas 96 %. Nearly half of the children are involved in physically active play and sports. Large number of children has good habit of brushing twice a day.

#### **Health condition of children**

Health condition of children in rural and urban areas is also studied. Questions related to major possible diseases are included in the questionnaire. Response to questions like skin diseases, allergy and dental problems have very clear response from the children. They have already checked these diseases. However, only 168 students gave answer to enquiry to asthma, and only 48 responded to Vitamin D deficiency. Among those who responded or having checked the cases, 33 percent student have some kind of allergy, 16.6 % students have asthma, 19.2 % have dental problems, 22.6 % have visual problems, 27 % have vitamin D deficiency and 12 % have skin diseases. It can be seen

<sup>1</sup> Merriam Webster dictionary of English.

that asthma, visual problems and vitamin D deficiency cases are very high among urban students compared to rural students.

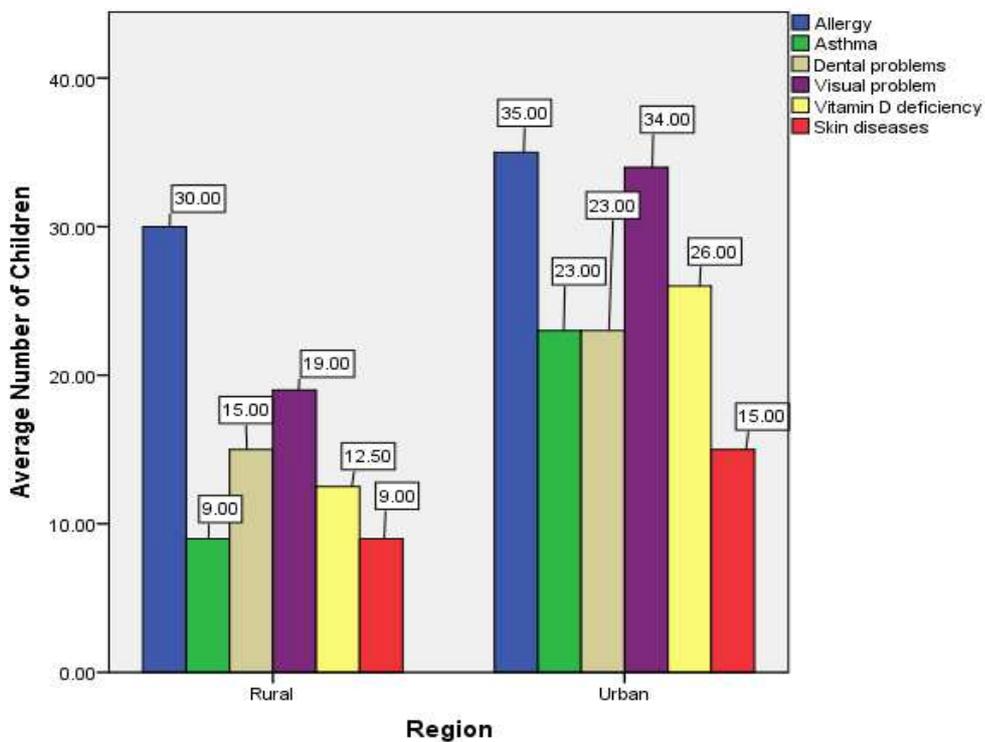
**Table 2 - Health condition of students**

Disease/ Health issues	Rural (150 children)*		Urban (150 children)		Total (300 children)	
	Diseased Number	%	Diseased Number	%	Diseased Number	%
Allergy	37 (120)	30	48 (138)	35	85 (258)	33
Asthma	7 (78)	9	21 (90)	23	28 (168)	16.6
Dental problems	18 (120)	15	32 (140)	23	50 (260)	19.2
Visual problem	21 (112)	19	32 (122)	34	53 (234)	22.6
Vitamin D deficiency	2 (16)	12. 5	11 (32)	26	13 (48)	27
Skin diseases	13 (150)	9	23 (150)	15	36 (300)	12

Source: Primary data,

\*Figures in bracket denote number of responded students

**Figure 1**  
**Health condition of students**



**BMI Distribution**

BMI is a number calculated by dividing a person’s weight in kilograms by his or her height. BMI is used in determining obesity. BMI is not used to determine a person’s actual percentage of body fat, but it is a good indicator to categorize weight in terms of what is healthy and unhealthy. As per the standard calculation, if BMI value is below 18.5, it person is having underweight. If BMI value is between 18.5 and 25, it indicates healthy condition. If BMI value is between 25 and 30, it shows a person is having overweight. If BMI value is between 30 and 35 it shows obesity and above 35 is severely obese.

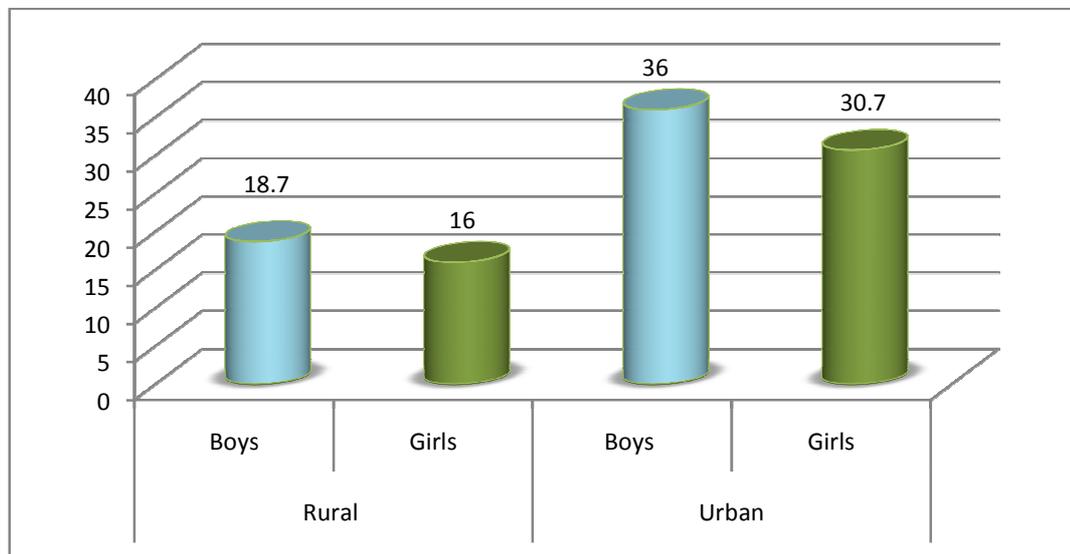
In this study, BMI is calculated because a high Body Mass Index can lead to weight-related diseases, while being underweight can also put a child at risk of health issues. After the BMI is calculated, it is expressed as boys and girls in rural and urban areas.

**Table 3 - BMI distribution**

BMI level	Rural		Urban		Total		
	Boys	Girls	Boys	Girls	Boys	Girls	Total
Underweight Below 18.5	8	12	4	5	12	17	29
BMI 18.5 – 25 Healthy range	53	51	44	47	97	98	195
BMI 25 -30 Overweight range	12	9	21	18	33	27	60
BMI above 30 Obese range	2	3	6	5	8	8	16
Total	75	75	75	75	150	150	300

Source: Primary Data

**Figure 2 - Distribution of overweight and obesity**



Source: Primary Data

It can be seen that 29 children of our 300 sample are having BMI below 18.5. These underweight children are 20 in rural area and 9 in urban area. Girls are more in case of underweight. A total of 60 children have BMI between 25 and 30. In this 60, 21 are rural children and 39 are urban children. Boys are more in this category. Obese range

includes 16 children. Boys and girls are same in number but urban children are more obese compared to rural children. Altogether 76 children have BMI above 25. Distribution of overweight and obesity can be shown as in the diagram. All together there are 76 children having overweight and obesity. Out of this 36 % are urban boys, 30 % urban girls, 18 % rural boys and 14 % rural girls.

### **CONCLUSION**

The present study has been conducted to identify the impact of life style and food habits on child health. On the basis of 300 sample collected and analyzed, it can be understood that food habits and life style seriously affect the health of school children. Hence the study reveals that life style seriously influences the healthy life of children. Gender wise and region wise evaluation support this. Health issues are more common among urban students. Absence of manual works, exercise, frequent eating out habits, junk food habits etc leads to high rate of BMI and health issues. Hence the study suggests giving more priority to child health in school curriculum. Frequent and free medical check can be conducted at schools by bringing lab to schools. Keeping medical record for each child and frequent monitoring of health status will be useful.

### **REFERENCES**

- Asgary S, Nazari B, Sarrafzadegan N, Parkhideh S, Saberi S, Esmailzadeh A, et al. (2009) Evaluation of fatty acid content of some Iranian fast foods with emphasis on trans fatty acids. *Asia Pac J Clin Nutr.* pp- 87-92.
- World Health Organization, 2016, 2018
- Goon S, Bipasha MS, Md. Islam MS. (2014) Fast food consumption and obesity risk among university students of Bangladesh. *European Journal of Preventive Medicine*; 2(6): 99-104
- WHO (2001). Services for prevention and management of genetic disorders and birth defect in developing countries (Farhud DD. As committee member) (WHO/HGN/WAOPB-D/99.1).