

# Obesity and Overweight among School Going Children

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## Abstract

Obesity is one amongst today's most neglected public health issues. Childhood fleshiness is one amongst the foremost serious public health issues. fleshiness causes cluster of non-communicable diseases and making a vast socioeconomic and public health burden. Factors that may cause children to become overweight and obese include: Food choices, Spending a lot of time on sedentary pursuits, Overweight parents, Genetics etc. Predominance of The commonness of overweight and weight was high among school going girls, among younger students. Once considered a problem of affluence, obesity is fast growing in many developing countries also. Even in countries like India, which are typically known for high prevalence of under nutrition, a significant proportion of overweight and obese children now coexist with those who are under nourished. Youngsters turn out to be obese and overweight for a diffusion of motives. The maximum common reasons are genetic elements, lack of physical activity, unhealthy ingesting patterns, or a mixture of those elements. Most effective in rare instances is being obese as a result of a clinical situation inclusive of a hormonal trouble.

**Keywords:** Overweight, Children, School, Obesity, Prevalence, Non Communicable Disease.

## Introduction

Overweight and obesity are epidemic and a 'public health crisis' among school going children worldwide. The rising trends in among school going children obesity in girl are poorly documented in India. The potential public health problem that is emerging now a days is an increasing incidence of childhood obesity and overweight in developing countries. It lead to a number of health related problems among children.

Obesity is one of today's most neglected public health problems. Childhood obesity is one of the most serious public health problems. Obesity causes cluster of non-communicable diseases and creating an enormous socioeconomic and public health burden. Overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health. Body mass index (BMI) is a simple index used to classify overweight and obesity. Body mass index (BMI) is a measure of weight adjusted for height. It is calculated as weight in kilograms divided by the square of height in meters.

World Health Organization (WHO) identifies adolescence as a period of transition between childhood and adulthood, between 10 to 19 years of age that demands extra nutrients and energy-rich food for rapid growth and maturation. Recent studies have reported that globally, more than 1.9 billion adults are overweight and 650 million are obese. Approximately 2.8 million deaths are reported as a result of being overweight or obese. Due to the consumption of energy dense food (i.e. unhealthy food habits), sedentary life style, lack of health care services and financial support, the developing countries are facing high risk of obesity and their adverse consequences (i.e. diabetes, ischemic heart disease, etc). In India, more than 135 million individuals were affected by obesity.

The rising prevalence of fat in developing countries is basically thanks to reduction within the energy expenditure that has resulted from speedy urbanisation and mechanisation, increase in energy intake thanks to redoubled buying power and convenience of high fat/energy-dense victuals. Overweight and obesity are defined as "abnormal or excessive fat accumulation that presents a risk to health".

## Definition of Childhood Obesity

### (World Health Organization)

WHO Child Growth Standards (birth to age 5) (2)

**Obese**

Body mass index (BMI) > 3 standard deviations above the WHO growth standard median

**Overweight**

BMI > 2 standard deviations above the WHO growth standard median

**Underweight**

BMI < 2 standard deviations below the WHO growth standard median

**Objectives of the Study**

The objective of this paper is to know the prevalence of obesity among school going children.

**Review of Literature**

Prasad, V. et al. (2016) studies that overweight and obesity is predominant among adolescent students belonging to the private schools in urban Pondicherry.

Aggarwal, T. et al. (2008) indicated most of the high income population, the overweight and obesity track from childhood to adulthood. The Punjabi population may also experience a high prevalence of adulthood obesity similar to the developed countries. Therefore, appropriate measures to prevent further progression of the problem into an epidemic must be taken right at this stage; otherwise obesity could emerge as the single most important public health problem in adults.

Jagadesan S. et al. (2014) study showed that the overall prevalence of obesity is high in urban Chennai. This was predominantly dictated by the high prevalence of obesity in private schools as compared to government schools. The prevalence of obesity was higher in girls than boys, in adolescents than children, in private schools than government schools.

Shukla, N. K. et al. (2018) Conducted that the prevalence of overweight and obesity was found to be 5.9% and 2.7%, respectively. Furthermore, on multivariate analysis, those who belonged middle- and upper-socioeconomic status, urban residence, mode of travel to school via bus, absence of outdoor physical activity, non-intake of vegetables everyday, and non-vegetarian dietary habits were found to be the independent predictors of obesity and overweight among school going adolescent girls.

Kunwar, R. et al. (2018) showed the prevalence of overweight and obesity among girls was 9.76% and 1.22%; and among boys, it was 10.97% and 3.23%, respectively. Overweight and obesity were more common among boys as compared to girls under the age of 13 years but trend changed afterwards. Lower prevalence of overweight and obesity found in our study could be because of availability of healthful environment in schools.

Gandhi, A. et al. (2017) depicted Prevalence of obesity is 13.46% among 6-18 in Raipur city and Prevalence of overweight is 10.54% and factors that are significantly associated with obesity are less duration of physical activity, studying in private school, Increased intake of chocolates/drinks and fast food, going school in vehicles, female gender and small playground area in school.

Shanmugam, K. et al. (2016) resulted that the prevalence of overweight and obesity among school children is becoming high in rural area which is an

alarming signal and calls for an immediate action. Effective implementation of lifestyle modifications behaviours such as healthy diet intake, avoidance of high calorie foods, and promoting physical activity in early school life help in preventing future complications as a part of primordial preventive strategies. Age-adjusted prevalence of overweight was found to be 14.3% among boys and 9.2% among girls where as the prevalence of obesity was 2.9% in boys and 1.5% in girls. The prevalence of overweight among children was higher in middle socioeconomic status as compared to high socioeconomic status group in both boys and girls whereas the prevalence of obesity was higher in high socioeconomic status group as compared to middle socioeconomic status group.

Goyal, R.K. et al. (2010) showed prevalence of obesity as well as overweight in low socioeconomic status group was the lowest as compared to other group. Eating habit like junk food, chocolate, eating outside at weekend and physical activity like exercise, sports, sleeping habit in afternoon having remarkable effect on prevalence on overweight and obesity among middle to high socioeconomic status group. Family history of diabetes and obesity were also found to be positively associated.<sup>15</sup>

Mishra, A.K. et al. (2017) The prevalence of overweight and obesity was 6.3% and 3.3%, respectively. The prevalence of overweight and obesity among boys was 5.6% and 3.4%, respectively, and among girls, the prevalence was 7.4% and 3.3%, respectively. The outdoor activities, cycling, activities after school hours and mode of transportation to school, hours of television viewing, or computer use, all are significantly associated with body mass index status of schoolchildren.

**Causes of Obesity in Children**

Youngsters become overweight and large for an assortment of reasons. The most widely recognised causes are hereditary variables, absence of physical action, undesirable eating designs, or a blend of these components. Just in uncommon cases is being overweight brought about by an ailment, for example, a hormonal issue. A physical test and some blood tests can discount the likelihood of an ailment as the reason for corpulence.

In spite of the fact that weight issues keep running in families, not all kids with a family ancestry of corpulence will be overweight. Youngsters whose guardians or siblings or sisters are overweight might be at an expanded danger of getting to be overweight themselves, however this can be connected to shared family practices, for example, eating and movement propensities. Numerous components — generally working in blend — increment your tyke's danger of getting to be overweight:

**Diet**

Consistently eating unhealthy nourishments, for example, quick sustenances, prepared merchandise and candy machine snacks, can make your tyke put on weight. Sweet and treats additionally can cause weight increase, and increasingly more proof focuses to sugary beverages, including organic

product juices, as guilty parties in stoutness in certain individuals.

#### **Absence of Activity**

Youngsters who don't practice much are bound to put on weight since they don't consume the same number of calories. An excess of time spent in inactive exercises, for example, staring at the TV or playing computer games, likewise adds to the issue.

#### **Family Factors**

In the event that your tyke originates from a group of overweight individuals, the person in question might be bound to put on weight. This is particularly valid in a situation where unhealthy sustenances are constantly accessible and physical movement isn't empowered.

#### **Mental Variables**

Individual, parental and family stress can expand a kid's danger of stoutness. A few kids indulge to adapt to issues or to manage feelings, for example, stress, or to battle fatigue. Their folks may have comparable propensities.

#### **Financial Elements**

Individuals in certain networks have restricted assets and constrained access to stores. Accordingly, they may purchase accommodation nourishments that don't ruin rapidly, for example, solidified suppers, wafers and treats. Likewise, individuals who live in lower pay neighbourhoods probably won't approach a protected spot to work out. Intricacies

Youth weight can have confusions for your tyke's physical, social and enthusiastic prosperity.

#### **Physical Difficulties**

##### **Type 2 Diabetes**

This incessant condition influences the manner in which your youngster's body uses sugar (glucose). Stoutness and an inactive way of life increment the danger of sort 2 diabetes.

##### **Metabolic Disorder**

This bunch of conditions can put your youngster in danger of coronary illness, diabetes or other medical issues. Conditions incorporate hypertension, high glucose, high triglycerides, low HDL ("great") cholesterol and overabundance stomach fat.

##### **Elevated Cholesterol and Hypertension**

A less than stellar eating routine can make your tyke create either of these conditions. These variables can add to the development of plaques in the courses, which can make supply routes thin and solidify, conceivably prompting a heart assault or stroke sometime down the road.

##### **Asthma**

Kids who are overweight or fat may be bound to have asthma.

##### **Rest issue**

Obstructive rest apnea is a possibly genuine issue wherein a kid's breathing over and again stops and begins during rest.

##### **Nonalcoholic greasy liver ailment (NAFLD)**

This issue, which for the most part causes no manifestations, makes greasy stores develop in the liver. NAFLD can prompt scarring and liver harm.

Bone cracks. Fat kids are bound to break bones than are offspring of typical weight.

#### **Social and passionate complexities**

##### **Low Confidence and Being Harassed**

Kids regularly bother or menace their overweight companions, who endure lost confidence and an expanded danger of despondency subsequently.

1. Psychological problems such as anxiety and depression.
2. Low self-esteem and lower self-reported quality of life.
3. Social problems such as bullying and stigma.
4. Overweight youngsters will in general have more nervousness and less fortunate social aptitudes than typical weight kids do. These issues may lead youngsters who are overweight either to carry on and upset their homerooms or to pull back socially.

##### **Wretchedness**

Low confidence can make overpowering sentiments of misery, which can prompt gloom in certain youngsters who are overweight.

##### **Encourage healthy eating habits**

There's no great secret to healthy eating. To help your children and family develop healthy eating habits:

1. Provide plenty of vegetables, fruits, and whole-grain products.
2. Include low-fat or non-fat milk or dairy products.
3. Choose lean meats, poultry, fish, lentils, and beans for protein.
4. Serve reasonably-sized portions.
5. Encourage your family to drink lots of water.
6. Limit sugar-sweetened beverages.
7. Limit consumption of sugar and saturated fat.
8. Regardless of whether your youngster is in danger of getting to be overweight or is presently at a solid weight, you can take measures to get or keep things in good shape.
9. Breaking point your tyke's utilisation of sugar-improved drinks or evade them
10. Give a lot of products of the soil
11. Eat dinners as a family as regularly as would be prudent
12. Point of confinement eating out, particularly at drive-through eateries, and when you do eat out, show your kid how to settle on more beneficial decisions
13. Change bit measures properly for age
14. Farthest point TV and other "screen time" to under 2 hours per day for kids more seasoned than 2, and don't permit TV for kids more youthful than 2
15. Make sure your tyke gets enough rest

##### **Conclusion**

One of the best strategies to reduce childhood obesity is to improve the eating and exercise habits of your entire family. Treating and preventing childhood obesity helps protect your child's health now and in the future. There is need for comprehensive school-based awareness interventions with health education packages to focus importance of healthy nutrition and lifestyle for

preventing obesity. Children become overweight and weighty for a range of reasons. the foremost common causes square measure genetic factors, lack of physical activity, unhealthy feeding patterns, or a mix of those factors. Solely in rare cases is being overweight caused by a medical condition like a secretion downside.

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