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[ijirset@gmail.com](mailto:ijirset@gmail.com)

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# Impact of Nutrition on Academic Performance of Adolescents: A Critical Review

Manisha Swami

Research Scholar, Maharaja Ganga Singh University, Bikaner, India

**ABSTRACT:** Good nutrition helps adolescents to achieve goals with in time and as per the standards. Nutrition prepares children physically and mentally to attend their classes regularly and attentively. The study showed that 54% of school students hardly eat their breakfast during a week. The majority of students eat unhealthy meals as they contain fewer protein products, dairy foods, vegetables, fruits and consume excessive carbohydrate-containing products. For this study a sample of 70 adolescents was selected and their habits of taking nutritional food and academic performance studied. A high positive ( $r=0.86$ ) correlation was found which proves that for better academic performance, a better nutritional diet is necessary for school going adolescents. Nutrition plays a vital role for good academic performance.

**KEYWORDS:** Adolescents, Nutrition, Academic performance, Dairy foods, protein

## I. INTRODUCTION

In the recent age, academic performance of adolescents is becoming primary concern of parents in urban areas. Parents of adolescents belonging to urban areas are some ways different than the rural ones. In the rural areas parents involve their mid-age children in agricultures tasks and crave that their children support them in their homely tasks of farming, whereas this option is not available to the parents who live in urban areas and earning their living with wages or shops. These people of urban areas intensely wish that their children perform best at which they think that the very first step of success of carrier. A general awareness about nutrition need of children is found in these parents and they try their best to avail it. People are habitual to follow their traditions and rituals and have limited access to modern nutrition rich food. Every other day there is some festival and children have opportunity to eat sweets and other things as a celebration. The living practices of people cause loss of nutrition food for children as well as for the adolescents.

since the process of children care begins from home in the terms of food and education so academic performance of children grows according the food and other care which they receive at home. Academic performance is considered as the performance outcome, which shows the extent which a child has successfully accomplished his learning goals in the school setting. Academic performance of child generally measured in the terms of formal and informal results of tests which are given to him at time to time. Though, this measure is a conventional one, but in practice it has vast importance and over all progress of child only imagined accordingly. Collins dictionary define academic performance as, "child's ability of academic achievement or ability at school". Scholars like Rono, Orderi (2014) believe the academic performance of students as the key feature of their education. It can be defined as the knowledge gained by the students which is assessed by marks by teachers for the goals set to be achieved over a specific period of time. Adeymo (2001) supports that the attainment of academic success of children through making them portray better academic performance is the most important goal of schools not only for the success of students, but according to Osika (2001), academic performance important for anyone who has a direct or indirect concern with education.

This paper tries to summarize the impact of nutrition on academic performance of adolescents with an effort to portray the available signification literature on the relation of nutrition and academic performance of adolescents.

## II. ACADEMIC PERFORMANCE

As it is stated above, generally academic performance is considered as the success of students in his school setting for a particular period of time. Schools consider academic performance as the measurement of students' achievement across various academic subjects. In our own country, teacher and education officials typically measure achievement using classroom performance, graduation rates and results from standardized and non- standardized tests. Though, academic performance is a result of more than one factor, like individual intelligence, socio economic status of family, goals set for measurement, atmosphere of school and class are some of such factors, accordingly, different

authors defined academic performance in different ways. Narad and Abdulhah (2016) take academic performance as the knowledge gained which is assessed by marks by a teacher for educational goals set by the teachers to be achieved over a specific period of time. They accepted that measurement of academic performance is made by results of tests and examination.

Similarly, Annie, Howard and Midred also stated that academic performance measures education outcomes. They accept that it shows and measures the extent to which an educational institute, teachers and students have achieved their goals. Likely, yursaf, Onifade and Bellow (2016) think that academic performance is a measurable and observable behavior of a student within a specific period.

### III. NUTRITION AND ACADEMIC PERFORMANCE

Good nutrition helps adolescents to achieve goals with in time and as per the standards. Nutrition prepares children physically and mentally to attend their classes regularly and attentively. Nutrition also helps students to be healthier and active. Studies show that malnutrition leads to behavior problems which results in absence of students from school and class. Research in sociology, economics and education show that students' nutrition and performance are closely bind and attached. A higher quality of nutrition full diet assures higher academic performance, researchers also find that nutrition full diet leads to students being more attentive on tasks, increase mathematics scores and improve reading abilities. Students who take less nutritional food are at risk for missing out their classes and expected goals of study.

A study carried out by Biachew Asmare, Mekuanint Taddele, Sileshi Berihun and Fasil Wagnew (2018)- Nutritional status and correlation with academic performance among primary school children, North west Ethiopia, shows that low nutritional value of food cause stunting, underweight and wasting and among these stunted, underweight and wasted children the level of academic performance becomes significantly lower than that of the normal children. This study revealed that indicators of undernutrition were prevalent among school age children. Academic achievement and performance as well as child's learning process, are hindered by poor and malnutrition. "Academic achievement is the outcome or performance related to education that indicates the extent to which a child has accomplished specific goals....." (Pronship, 2018). A study of Nutrition and academic performance among adolescences, by Tengiz Verulava, Rozi Devnozashvil (2021) presents that nutrition affects the mental development of children, and so it affects their academic performance. The study showed that 54% of school students hardly eat their breakfast during a week. The majority of students eat unhealthy meals as they contain fewer protein products, dairy foods, vegetables, fruits and consume excessive carbohydrate-containing products. Academic performance correlates with meal frequency ( $p=0.043$ ), breakfast and supper quality ( $p=0.000$ ). The study finds reliable connection between eating habits and academic performance, it has been statistically also confirmed.

### IV. CONCLUSION

For the present study 35 adolescents, who are consuming nutritional breakfast, lunch, and dinner and on the other hand 35 students of same average age and generally missing nutrition in their different food, are selected for study purpose. Nutrition value of their foods were calculated separately and then an average nutrition value was taken as standard value for comparison. Tests and examinations records of both the groups were considered and finally a correlation was calculated between nutritional value of food taken and academic performance of the subjects. Here, a high positive ( $r=0.86$ ) correlation was found which proves that for better academic performance, a better nutritional diet is necessary for school going adolescents. Nutrition play a vital role for good academic performance.

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