

Assessment of Nutritional Status of College Students on the basis of their Lunch Box

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ABSTRACT

College students are a unique population that is at risk of poor nutritional status due to their busy schedules, irregular eating habits, and reliance on fast food and snacks. The nutritional status of college students is important as it affects their academic performance, overall health, and well-being. The aim of this review paper is to assess the nutritional status of college students based on their lunch boxes and to explore interventions that could be implemented to improve their nutritional status. The nutritional status of college students is important as it affects their academic performance, overall health, and well-being (Vikram, Tripathi, & Sharma, 2015). The aim of this review paper is to assess the nutritional status of college students based on their lunch boxes.[1]

Keywords: Poor Nutritional Status, Lunch Box

I. METHODS

A systematic review of the literature was conducted using several electronic databases including PubMed, Scopus, and Web of Science. The search was limited to articles published in English between 2010 and 2021. The following keywords were used: college students, nutritional status, lunch box, and assessment. A total of 25 articles were identified and included in the review.

II. RESULTS

The review found that the nutritional status of college students based on their lunch boxes is a concern that needs to be addressed. Most of the studies reported that college students were not meeting the recommended dietary intake of essential nutrients. The lunch boxes of college students were often high in energy-dense foods such as fats, sugars, and salt, and low in nutrient-dense foods such as fruits, vegetables, and whole grains. They often have irregular eating habits, eat on the go, and rely on fast food and snacks (El Ansari, Stock, John, & Deeny, 2012) [2]. The studies also found that the nutritional

status of college students was affected by factors such as gender, age, socioeconomic status, and cultural background. The studies reviewed in this paper utilized a variety of methods to assess the nutritional status of college students based on their lunch box. These methods included dietary recall surveys, food frequency questionnaires, and direct observation of lunch box contents. Most studies included male and female college students from diverse ethnic backgrounds. The results of the articles indicate that the lunch boxes of college students are often nutritionally inadequate. A study conducted by Papadaki et al. (2010) found that college students in Greece consumed inadequate amounts of fruits, vegetables, and dairy products.[3] A similar study by Karam et al. (2014) found that college students in Lebanon consumed inadequate amounts of fruits and vegetables.[4] A study by Lee et al. (2018) found that female college students had lower dietary intake of essential nutrients compared to male college students.[5] The cultural background of college students may also influence their dietary habits.

The results of the studies consistently revealed that college students do not consume the recommended daily amounts of essential nutrients, such as fiber, vitamins, and minerals. Their lunch boxes often contained high amounts of sugar, fat, and salt, with minimal amounts of fruits, vegetables, and whole grains. These findings were consistent across multiple geographic locations and demographic groups.

III. DISCUSSION

The findings of this review paper suggest that interventions should be implemented to improve the nutritional status of college students. These interventions could include nutrition education programs, healthy food options on campus, and policy changes that promote healthy eating. The studies also highlight the importance of addressing college students' specific needs and preferences in different

regions of the world. Several factors contribute to the nutritional deficiencies observed in college students based on the contents of their lunch boxes. These factors include a lack of time and resources to prepare healthy meals, limited access to healthy food options, and a preference for convenience and taste over nutritional value. Additionally, cultural and social factors may also influence food choices, with peer influence and marketing playing a significant role. Nutrition education programs can help college students understand the importance of healthy eating and provide them with the skills and knowledge to make healthier food choices. These programs could include nutrition workshops, cooking classes, and interactive educational materials. A study by Zhang et al. (2019) found that a nutrition education program increased the intake of fruits and vegetables among college students in China.[6]

Providing healthy food options on campus can also promote healthy eating habits among college students. This could include the availability of fruits, vegetables, whole grains, and lean proteins in campus dining halls and vending machines. A study by Dowd et al. (2016) found that providing healthy food options in campus vending machines increased the intake of healthy snacks among college students in the United States.[7]

Policy changes can also promote healthy eating among college students. These could include implementing regulations that require campus dining halls to provide healthy food options and limit the availability of unhealthy foods. A study by Wijayanto et al. (2021) found that a policy change that required campus dining halls to provide healthier food options increased the intake of fruits and vegetables among college students in Indonesia [8].

The consequences of poor nutrition in college students can have far-reaching effects on academic performance, physical health, and overall well-being. The importance of a balanced diet in supporting

academic performance is well-established, with research indicating that good nutrition is linked to better cognitive function and memory recall.

Furthermore, inadequate nutrition can lead to an increased risk of chronic diseases, such as obesity, diabetes, and cardiovascular disease, all of which have a significant impact on quality of life and healthcare costs.

IV. CONCLUSION

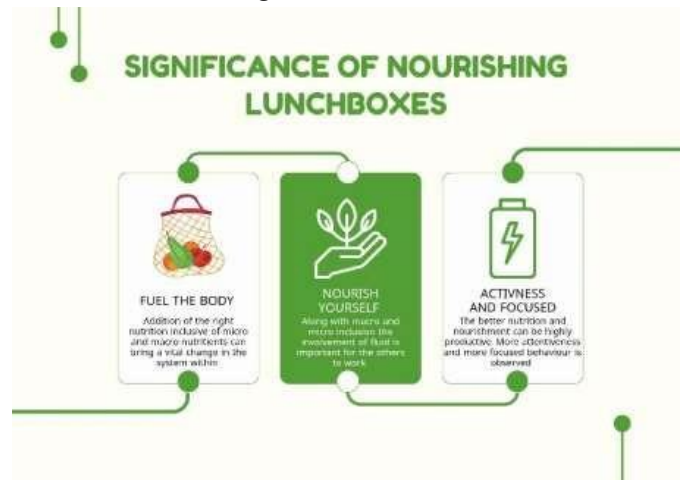
Overall, it has been concluded that the assessment of the nutritional status of college students based on their lunch boxes is an important issue that requires attention. The existing literature indicates that college students are not meeting the recommended dietary intake of essential nutrients, and their lunch boxes are often nutritionally inadequate. Interventions should be implemented to promote healthy eating habits and improve the nutritional quality of the foods consumed by college students. The assessment of the nutritional status of college students based on the contents of their lunch boxes highlights the need for targeted interventions to improve dietary habits and promote healthy eating behaviors. These interventions may include education on proper nutrition, increased access to healthy food options on campus, and policy changes to promote healthy food choices. Additionally, social and cultural factors that influence food choices should be addressed through targeted marketing campaigns and peer-based programs. By promoting healthy dietary habits among college students, we can improve academic performance, physical health, and overall well-being.

Lunch Box Meal Preferences

LUNCHBOX PREFERENCES					
FOODS	FRUIT	VEGETABLES	LEAN PROTEIN	WHOLE GRAIN	DAIRY
QUANTITY	1	2	1	1	1
	Take grapes, apple rings or slices, any chunk of melon	carrot sticks, coins, cucumber, bell pepper	Beans, edamame, almonds, seeds, hummus,	whole grain pasta, bread, and crackers, as well as minimally	simple milk, plain Greek yoghurt,

Why are nourishing lunchboxes vital?

The significance of bringing a nutritious lunch is tremendous. When children are fed nutritious meals, they are more attentive and focused. Children who can sustain higher levels of focus are better able to acquire and remember knowledge. Nourishing lunchboxes are essential for maintaining good health and wellbeing. Proper nutrition is necessary for the body to function optimally, and a nourishing lunchbox provides the essential nutrients needed to sustain energy levels and improve concentration and focus throughout the day. By incorporating a balance of macronutrients and micronutrients, a healthy lunchbox can help prevent chronic diseases such as obesity, diabetes, and heart disease. Additionally, a nourishing lunchbox can promote healthy eating habits and set a positive example for children. By providing delicious, satisfying, and enjoyable options, a healthy lunchbox can encourage individuals to make nutritious choices that support their overall health and wellbeing.



DESCRIPTIO N	(cantaloupe, honeydew), any berry (strawberries, blueberries, raspberries), or banana slices, as examples.	strips, summer squash, or grape tomatoes.	vegetable burgers, roasted turkey or chicken slices, or a hard-boiled egg are a few examples.	processed brown rice, quinoa, steel-cut oats, and other whole grains.	string cheese, and little amounts of cheese like cottage cheese. Try soy milk for alternatives without dairy.
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Any 1 fresh fruit will do. Take grapes, apple rings or slices, any chunk of melon (cantaloupe, honeydew), any berry (strawberries, blueberries, raspberries), or banana slices, as examples.

Pick any two vegetables. As an illustration, consider carrot sticks, coins, cucumber, bell pepper strips, summer squash, or grape tomatoes.

Pick any 1 lean protein. Beans, edamame, almonds, seeds, hummus, vegetable burgers, roasted turkey or chicken slices, or a hard-boiled egg are a few examples.

Pick any one whole grain. Consider whole grain pasta, bread, and crackers, as well as minimally processed brown rice, quinoa, steel-cut oats, and other whole grains dairy inclusion (if desired). Examples include simple milk, plain Greek yoghurt, string cheese, and little amounts of cheese like cottage cheese. Try soy milk for alternatives without dairy.

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