

## Food Consumption Behavior during COVID-19 Pandemic in Saudi Arabia

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### ABSTRACT

The COVID-19 epidemic has had a tremendous influence on human health, creating abrupt lifestyle changes, social isolation and solitude at home, as well as societal and economic implications. Saudi Arabia's administration has also been working hard to guarantee that food is available to all inhabitants in order to mitigate the pandemic's impact. The main aim of the study is to explore and analyze the changes in frequency of nutritional supplements, frequency of eating snacks and frequency of consumption food items pre and during COVID-19 pandemic. The data were collected from 814 individuals. All of the participants were Saudis. An online questionnaire survey was used to collect data. Pre and during the COVID-19 pandemic, the north, middle, and south of Saudi Arabia had a population with a higher BMI than the west and east of the country. Participants from north Saudi tended to have the lowest food consumption, as compared to other Saudi regions pre and during COVID-19 pandemic. The percentage of people who did not use any nutritional supplements during the COVID-19 epidemic was lower than it was before the pandemic. The participants whom eat snacks have been increase from 56.8 to 74.9% pre and during COVID-19, respectively. It should be noted that, the percentage of participants whom consume often/sometimes snacks during pandemic were higher than pre pandemic. Cereal and bread consumption, as well as meat, poultry, egg, beans, and cooked vegetables, did not vary from before to after the curfew. During the curfew, the average food intake of dairy items, seafood, fresh vegetables, fruits, fast foods, packaged foods, and sweets and candies increased dramatically ( $p < 0.001$ ). Finally, during the COVID-19 pandemic, Saudis suggested a trend toward a better diet. Fast meals, unhealthy snacks, chocolates, and candies were among the foods consumed less frequently.

**Keywords:** Saudi Arabia, Nutritional supplements, Snacks, Food consumption, Anthropometrics, Eating habits

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