

Article

Changing Food Patterns during the Pandemic: Exploring the Role of Household Dynamics and Income Stabilization Strategies

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Abstract: COVID-19 still looms as the largest risk to the agriculture, energy, and health sectors, threatening sustainable global economic development. The literature shows that the COVID-19 pandemic can divert governments' attention away from climate change, renewable energy, and food security challenges that are necessary to address for sustainable economic growth. The COVID-19 pandemic has consistently influenced environmental behaviors, as it has primarily decreased income levels and disrupted food systems worldwide. This study examined the impacts of COVID-19 on food consumption patterns, food diversity, and income challenges and explored the factors affecting food consumption patterns during the pandemic. The data collected through an online survey from 1537 Chinese households were analyzed through a paired t-test, a mixed-design ANOVA, and a logistic regression analysis. The results revealed that the consumption of the majority of individual food commodities decreased during the COVID-19 pandemic. Among the individual food items, the consumption of pork witnessed the greatest decrease during the COVID-19 pandemic compared to the normal period. The decrease in food diversity was higher for the households whose income was affected compared to the households whose income was not affected during the COVID-19 pandemic. Furthermore, the consumption quantities of various food groups declined more for highly income-affected households than for medium and slightly affected households during the pandemic. Households that adopted a dissaving income-stabilizing strategy were 47% points more likely to maintain their food consumption patterns during the pandemic. Farmers were 17% points and 19% points less likely to suffer worsened food consumption compared to self-employed and wage workers, respectively, during the pandemic. Thus, self-production methods such as kitchen gardening can assist households to maintain and improve their consumption of food commodities during the COVID-19 pandemic.

Keywords: COVID-19; food consumption; sustainable agriculture; sustainable development; food diversity; food security



Citation: Lian, T.; Haq, S.u.; Shahbaz, P.; Zhao, L.; Nadeem, M.; Aziz, B. Changing Food Patterns during the Pandemic: Exploring the Role of Household Dynamics and Income Stabilization Strategies. *Sustainability* **2023**, *15*, 123. <https://doi.org/10.3390/su15010123>

Academic Editors: Husam Rjoub, Zahoor Ahmed and Mahmood Ahmad

Received: 2 November 2022

Revised: 15 December 2022

Accepted: 16 December 2022

Published: 21 December 2022



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1. Introduction

In the modern world, sustainable economic growth is essential for improving human lifestyles and healthy food patterns. Sustainable household practices support energy efficiency and human food consumption patterns. The COVID-19 emergency that started in late 2019 has had a significant impact on people's lives everywhere around the world [1]. According to the prior literature, pandemic situations can cause specialists to