

# **The Role of Supply Chain Management in Improving Food Quality, Drug Safety, and Public Health**

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## **Abstract**

Over the past decade, supply chains and logistics operations have been increasingly targeted by public health measures concerning food quality and drug safety. This study systematically reviewed the existing literature to identify gaps in the study of food quality and drug safety, proposed solutions to these issues, and potential future research directions. A content analysis was employed in this study. The objectives of the review were to (1) Identify the factors that affect food quality and possible solutions to improve results, (2) Identify how to mitigate drug safety threats by implementing appropriate measures; and (3) Establish integrated supply chains for food and drugs by implementing modern technologies, which are followed by one another to ensure a multilayered cross-verification cascade and resource management at different phases to guarantee public health quality, safety, and sustainability. An analysis of the most recent trends and technologies used for ensuring food quality and drug safety has been conducted in this review. Two hundred-five articles were selected for study from 298 articles identified using appropriate keywords. Based on the available literature, all analyses and conclusions were made. This paper identifies research directions in public health and supply chain management.

## **Keywords**

Food quality; drug safety; supply chain management; public health; health; safety

## **Biography / Biographies**

**Mona Haji** is currently a PhD graduate of the Logistics and Supply Chain Management Program within the Engineering Management and Decision Sciences Division at the College of Science of Engineering (CSE), Hamad Bin Khalifa University (HBKU) in Doha, Qatar. Her field of interest is Logistics and Supply Chain Management. She published several papers in international journals addressed public health and how to ensure food quality and drug safety. In addition to her experience in materials and store management, she has also established maintenance contracts. She has a MSc in Engineering Management from the Science and Engineering Department, University of Qatar, and BSc in Mechanical Engineering from the Science and Engineering Department, University of Colorado at Denver, USA