Special Issue

AI Applications for Sustainable Fruit and Vegetable Distribution: Strategies for Waste Reduction

Message from the Guest Editor

This Special Issue delves into the pivotal role of artificial intelligence (AI) in bolstering the sustainability of fruit and vegetable distribution networks. It emphasizes minimizing waste by leveraging AI to optimize the supply chain, from farm to table. The issue underscores AI's forecasting prowess in aligning production with market demand to cut down surplus. Machine learning is lauded for pinpointing ideal harvest times, thus extending shelf life and curbing spoilage. Furthermore, AI's contribution to logistics is scrutinized, with intelligent algorithms creating efficient routes to reduce emissions and transit waste. The issue also evaluates AI-driven sorting and grading systems for their efficiency and precision in handling produce, ensuring only market-ready goods reach consumers. This automation is vital for preserving perishable items' quality, streamlining processes, and averting waste. The collection insists that AI systems must be engineered with sustainability at their core, aiming to decrease resource consumption and waste across the distribution chain.

Guest Editor

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Deadline for manuscript submissions

15 December 2025

Foods

an Open Access Journal by MDPI

Impact Factor 5.1
CiteScore 8.7
Indexed in PubMed

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Message from the Editor-in-Chief

Foods (ISSN 2304-8158) is an open access and peer reviewed scientific journal that publishes original articles, critical reviews, case reports, and short communications on food science. Articles are released monthly online, with unlimited free access. Currently, Foods has been indexed by the Science Citation Index Expanded (SCIE - Web of Science), PubMed, and Scopus. Our aim is to encourage scientists, researchers, and other food professionals to publish their experimental and theoretical results as much detail as possible. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global food science community.

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