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| Journal Name: | [**Current Journal of Applied Science and Technology**](https://journalcjast.com/index.php/CJAST) |
| Manuscript Number: | **Ms\_CJAST\_134464** |
| Title of the Manuscript: | **Application of Data Analytics in Food Quality Control: Enhancing Decision-Making for Contamination Prevention** |
| Type of the Article | **Original Article** |

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| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | This manuscript contributes to the scientific community by thoughtfully examining how data analytics can enhance food safety and quality control. It brings forward a timely intersection of data science and public health, showcasing how predictive modeling, machine learning, and blockchain traceability can be applied in practical settings to prevent contamination and foodborne illnesses. The study moves beyond theory by grounding the discussion in recent real-world outbreaks and offers actionable insights highly relevant to researchers, industry professionals, and regulatory bodies. Including advanced techniques like Monte Carlo simulation and principal component analysis, alongside empirical case studies, provides both depth and context. Importantly, the manuscript does not shy away from addressing systemic challenges, particularly in developing economies, where infrastructure and policy gaps hinder technology adoption. Its multidimensional perspective invites critical discourse and sets the stage for future innovation in data-driven food safety interventions. | This paper is very relevant for the scientific community; it includes important real-life case studies that emphasize the need for practical application of data analytics in food safety. |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | The title "Application of Data Analytics in Food Quality Control: Enhancing Decision-Making for Contamination Prevention" is generally suitable, but it could benefit from slight refinement for clarity and impact. The current title effectively conveys the central theme of the manuscript and signals its practical orientation toward decision-making and contamination prevention. However, it is somewhat lengthy and could be made more concise without losing meaning. A revised version like ***"Data Analytics in Food Safety: Improving Quality Control and Preventing Contamination."*** may offer a sharper and more engaging presentation while retaining the core focus. This would align the tone of the title with the paper's content, which is both technical and solution-oriented. Nonetheless, the existing title is accurate and informative, and it serves its purpose well in an academic context. | Yes, it is. I have, however, revised and made it concise and more focused |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. | The abstract of the article is generally comprehensive, as it captures the core elements of the study, including its objective, methodology, key findings, and conclusions. It introduces the reader to the relevance of data analytics in food quality control, mentions specific tools such as predictive modeling and blockchain systems, and highlights their role in reducing foodborne outbreaks. The qualitative methodology is clearly stated, and including sources such as WHO records and real-world case studies provides a meaningful context for the research approach. However, the abstract could be improved in a few areas. While it outlines the study’s aim, it does not clearly define the scope of the literature review or provide details about the nature or geographical spread of the case studies. The transition from findings to conclusions feels somewhat abrupt. Adding a sentence synthesizing the core insights or technologies discussed in the results would help improve the flow. Additionally, correcting typographical errors such as "applicaton" and tightening the language for clarity would enhance the overall quality and professionalism of the abstract. The abstract provides a solid paper overview but would benefit from minor revisions for precision, coherence, and style. | Yes, the Abstract is comprehensive, and reviewers comments have been taken into consideration. |
| Is the manuscript scientifically, correct? Please write here. | The manuscript is scientifically sound and demonstrates a solid understanding of how data analytics can be applied to enhance food quality control. It accurately references credible sources and incorporates relevant technologies such as predictive analytics, machine learning, Monte Carlo simulations, and blockchain traceability, all within appropriate food safety contexts. The use of recent outbreak case studies and interdisciplinary perspectives strengthens the validity of its claims. While the scientific content is largely correct, some technical explanations could benefit from slightly more detail for clarity, and a few typographical and citation inconsistencies should be corrected. Overall, the study presents accurate, well-supported scientific insights with minor areas for refinement. | Yes, it is |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | The references in the manuscript are both sufficient and primarily recent, aligning well with the stated review period of 2019 to 2025. The sources include peer-reviewed journal articles, authoritative reports from organizations such as the WHO, CDC, and FDA, and relevant academic studies covering a range of data-driven technologies in food safety. Most cited works fall within the last five to six years, ensuring the literature is up-to-date and reflects current trends and developments. Notably, the manuscript avoids citing sources published before 2015, focusing on contemporary research. This strengthens the relevance and credibility of the arguments presented, particularly in a fast-evolving field like data analytics and food safety. | Yes, References are relevant |
| Is the language/English quality of the article suitable for scholarly communications? | The language quality of the article is generally suitable for scholarly communication, but there is room for improvement in clarity, consistency, and formality. The manuscript demonstrates a good command of academic vocabulary and integrates technical terms appropriately across various disciplines. However, certain sections include informal phrasing, repetitive expressions, and minor grammatical issues that could detract from the professional tone expected in scholarly writing. For instance, terms like "easier, better, and safer" in the abstract could be revised for more precise academic expression, and typographical errors such as "application" should be corrected. Additionally, some transitions between paragraphs and ideas feel abrupt, and sentence structures in a few places could be more concise to improve readability. With careful copyediting to address these minor issues, especially consistency in tense, punctuation, and formal tone, the manuscript would meet the standards of scholarly communication more effectively. The English is serviceable but would benefit from a thorough language polish. | Yes, it is suitable, as I have made further corrections to the typographic and grammatical errors |
| Optional/General comments | This manuscript presents a timely and well-structured review of how data analytics can revolutionize food quality control and contamination prevention. Integrating case studies with advanced analytical tools provides theoretical insight and practical relevance. Drawing from food science, public health, and data technology, the interdisciplinary approach is commendable and enhances the study’s value to a broad academic audience. However, the manuscript would benefit from language refinement to improve clarity and consistency, particularly in the abstract and discussion sections. Strengthening transitions between ideas and correcting minor typographical errors will enhance overall readability. Additionally, while the references are current and comprehensive, ensuring consistent formatting throughout would improve the professional presentation. The paper addresses a critical issue with practical implications for global health and supply chain management. With some editorial refinement, it has strong potential to contribute meaningfully to scholarly discussions on the intersection of data science and food safety.  The manuscript offers a relevant and well-researched exploration of data analytics applications in food quality control and contamination prevention. It successfully combines recent literature, real-world outbreak case studies, and emerging technologies such as predictive modeling, machine learning, and blockchain traceability to present a compelling argument for data-driven food safety strategies. The interdisciplinary scope and methodological rigor are notable strengths. However, the manuscript would benefit from minor revisions to improve language precision, clarity, and consistency. Certain sections contain informal expressions and typographical errors that should be addressed to meet scholarly standards. Additionally, transitions between some paragraphs could be smoother to enhance the overall flow of ideas. The references are recent and appropriate, aligning with the scope and time frame of the review. With careful editing and attention to tone, the manuscript holds strong potential for publication and offers valuable insights to researchers and practitioners in food safety, public health, and data science. | This is well noted, and appropriate corrections have been done. |

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| **PART 2:** | | |
|  | Reviewer’s comment | Author’s comment *(if agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?** | *(If yes, Kindly please write down the ethical issues here in detail)* | No |