

Review Form 3

Journal Name:	Annual Research & Review in Biology
Manuscript Number:	Ms_ARRB_125584
Title of the Manuscript:	Quantitative Risk Assessment of Aflatoxin M1 Related to the Consumption of Raw Cow's Milk in Daloa (Côte d'Ivoire)
Type of the Article	Original Research Article

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</p>	<p>The manuscript provides a well-articulated description of the detection method for aflatoxin M1, along with clear results. These aspects demonstrate a solid understanding of the analytical techniques involved and contribute valuable insights into the topic. However, the implications of the results are not sufficiently discussed. Moreover, the author appears to lack a background in food microbiology, leading to the incorrect use of technical terms such as "sanitary quality, microbial safety, infection, and intoxication"</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>Yes, it is suitable.</p>	
<p>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.</p>	<p>I would add one sentences at the beginning to explain the problem statement</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>More or less appropriate. I would like to add 'study design'</p>	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>The manuscript provides a well-articulated description of the detection method for aflatoxin M1, along with clear results and thoughtful discussion. These aspects demonstrate a solid understanding of the analytical techniques involved and contribute valuable insights into the topic. However, the manuscript has notable shortcomings.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :</p>	<p>Considering the massive literature on the topic, one would expect the authors to include recent studies (last five years) in their citations. However, the most recent work cited by the authors in the manuscript is six year old (Koko et al. 2018. Asian Food Sci J 2018; 1: 1–13.). I would suggest the authors include the following articles in their review.</p> <p>1. The study investigates the health risks associated with Aflatoxin M1 (AFM1), a toxic Zebib, H., Abate, D., & Woldegiorgis, A. Z. (2022). Exposure and Health Risk Assessment of Aflatoxin M1 in Raw Milk and Cottage Cheese in Adults in Ethiopia. Foods, 12(4), 817. https://doi.org/10.3390/foods12040817</p> <p>compound formed from Aflatoxin B1 (AFB1) found in raw milk and cheese in Ethiopia. The study assessed risk through multiple metrics, including margin of exposure (MOE), estimated daily intake (EDI), hazard index (HI), and cancer risk. Results indicated mean EDIs of 0.70 ng/kg bw/day for raw milk. The cancer risk estimates were low, at 1.29×10^{-6} cases per 100,000 persons per year for milk.</p> <p>2. Mokhtari, S.A., Nemat, A., Fazlzadeh, M. et al. Aflatoxin M1 in distributed milks in northwestern Iran: occurrence, seasonal variation, and risk assessment. Environ Sci Pollut Res 29, 41429–41438 (2022). https://doi.org/10.1007/s11356-021-18212-9</p> <p>This study assesses Aflatoxin M1 (AFM) levels in raw, pasteurized, and sterilized milk within a specific</p>	

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	<p>region and evaluates associated health risks. A total of 60 milk samples were analyzed using enzyme-linked immunosorbent assay (ELISA) over two sampling seasons (cold and hot). AFM was detected in all samples, with concentrations ranging from 57.5 to 270.6 ng/L. Pasteurized and sterilized milk had higher AFM levels than raw milk. Risk metrics, including estimated daily intake (EDI), liver cancer risk (LCR), margin of exposure (MoE), and hazard index (HI), indicated health concerns, particularly regarding liver cancer. The EDI ranged from 0.145 to 0.3 ng/kg body weight, suggesting a slight increase in cancer risk. Despite AFM levels being within WHO recommendations, they pose significant health threats. The study calls for enhanced monitoring and educational initiatives to effectively manage and reduce AFM contamination in dairy products.</p>	
<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The author need to improve academic written language a lot</p>	
<p>Optional/General comments</p>	<p>There is a significant gap in addressing the ecology of mycotoxigenic fungi, as essential factors influencing the growth and toxin production of aflatoxin are not mentioned. The author doesn't seem well acquainted with the literature. Additionally, the manuscript fails to detail the contamination pathways of raw milk with aflatoxin, and the methodology lacks clarity regarding the study design, sample collection procedures, and timing. Overall, while the detection method and results are commendable, the manuscript requires substantial improvement in its foundational knowledge and methodological transparency to enhance its credibility and utility in risk assessment.</p>	

PART 2:

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

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