

**Review Form 3**

Journal Name:	<a href="#">International Research Journal of Pure and Applied Chemistry</a>
Manuscript Number:	Ms_IRJPAC_126106
Title of the Manuscript:	EVALUATING THE EFFECTS OF PROCESSING TECHNIQUES ON THE CHEMICAL COMPOSITION OF LOCAL RAW MATERIALS FOR COMPLEMENTARY FOOD FORMULATION
Type of the Article	Original Research Article

### [Review Form 3](#)

#### **PART 1: Review Comments**

<b>Compulsory</b> 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>
<b>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.</b>	This manuscript is of significant importance to the scientific community as it addresses the growing need for cost-effective and nutrient-dense complementary foods, particularly in regions where malnutrition is prevalent. By exploring the effects of processing techniques on the chemical composition of locally available raw materials, the study provides valuable insights into how simple processing methods can enhance the nutritional quality of staple foods. The findings contribute to the ongoing discourse on improving food security and nutritional outcomes, particularly for vulnerable populations such as infants and children. Overall, this manuscript is a valuable addition to the body of knowledge on food science and nutrition, offering practical applications for both researchers and policymakers.	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	<b>BE SPECIFIC ABOUT PROCESSING TECHNIQUES</b>  IF THE STUDY FOCUSES ON PARTICULAR PROCESSING METHODS (E.G., FERMENTATION, ROASTING, BOILING), CONSIDER SPECIFYING THEM IN THE TITLE.  <b>EXAMPLE:</b>  "EVALUATING THE EFFECTS OF <b>FERMENTATION AND ROASTING</b> ON THE CHEMICAL COMPOSITION OF LOCAL RAW MATERIALS FOR COMPLEMENTARY FOOD FORMULATION"	

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<p><b>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.</b></p>	<p><b>Suggestions for Improvement:</b></p> <p><b>1. Clarify Objectives:</b> The objective could be stated more explicitly in a single sentence at the beginning. For example: "This study evaluates the effects of processing techniques (fermentation, sprouting, and toasting) on the chemical composition of local raw materials (yellow maize, sorghum, millet, and soybeans) for complementary food formulation."</p> <p><b>2. Simplify Methodology:</b> The description of processing methods is quite detailed. Consider summarizing it into a concise statement: "The raw materials underwent fermentation, sprouting, and toasting processes before analysis. Both processed and unprocessed samples were assessed for their proximate, mineral, and vitamin composition using standardized analytical methods." Detailed descriptions of the processing steps can be reserved for the methods section.</p> <p><b>3. Focus on Key Results:</b> While the results are detailed and informative, not all figures are necessary in the abstract. Highlight the most impactful findings:  "Fermentation, sprouting, and toasting significantly (<math>p &lt; 0.05</math>) enhanced protein and mineral content while reducing carbohydrates." "For instance, crude protein in millet increased from 7.90% to 8.23%, and iron in yellow maize rose from 15.76 mg/100g to 19.43 mg/100g post-processing."  Include only one example of vitamin C improvement for simplicity.</p> <p><b>4. Reframe Conclusion:</b> The conclusion should emphasize the potential applications and importance of the findings more directly: "These results demonstrate that processing methods can significantly enhance the nutritional profile of local raw materials, making them suitable for cost-effective, nutrient-dense complementary food formulations."</p> <p><b>5. Avoid Repetition:</b> The information about proximate composition, mineral content, and vitamin C can be streamlined to avoid redundancy.</p>	
<p><b>Are subsections and structure of the manuscript appropriate?</b></p>	<p><b>YES</b></p>	
<p><b>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.</b></p>	<p>This manuscript demonstrates scientific robustness and technical soundness by employing standardized and widely accepted analytical methods to evaluate the chemical composition of raw and processed local materials. The inclusion of both proximate, mineral, and vitamin analyses provides a comprehensive understanding of the nutritional changes resulting from different processing techniques. The statistical evaluation (<math>p &lt; 0.05</math>) ensures that the observed changes in composition are significant and reliable. Furthermore, the study's focus on widely consumed local raw materials and their optimization for complementary food formulation highlights its practical relevance and potential impact on addressing nutritional deficiencies in vulnerable populations.</p>	
<p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p>	<p>Please Mention The Latest Year References</p>	

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Minor REVISION comments <b>Is the language/English quality of the article suitable for scholarly communications?</b>	The language and English quality of the article are generally suitable for scholarly communication, as it effectively conveys the research objectives, methods, and findings in a clear and logical manner. However, minor grammatical refinements and consistency in style could further enhance readability and professionalism. For example, ensuring consistent verb tenses and improving sentence flow in some areas (e.g., "Soybeans was toasted" should be "Soybeans were toasted") would make the text more polished. Overall, the manuscript is comprehensible and well-structured, making it appropriate for academic dissemination with minimal editing.	
Optional/General comments	-	

### **PART 2:**

	Reviewer's comment	Author's comment (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)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

### **Reviewer Details:**

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