## **ReviewForm3**

JournalName:	SouthAsianResearchJournalofNaturalProducts
ManuscriptNumber:	Ms_SARJNP_130661
TitleoftheManuscript:	EFFECTSOFTHE ADMINISTRATIONOF VARIOUSFORMULATIONSOF COCOYAM-BAMBARAGROUNDNUT-SOYABEANI INFLAMMATORY BIOMARKERS OF STREPTOZOTOCIN-INDUCED DIABETIC RATS.
TypeoftheArticle	OriginalResearchArticle

## PART1: Comments

Reviewer'scomment	Author's Feedback
	part inthemanuscript writehis/herfeedback
This manuscript provides valuable insights into the potential of a readily available and affordable dietary intervention for diabetes management. The findings demonstrate that a specific formulation of the cocoyam- bambara groundnut-soya bean flour blend can effectively modulate key metabolic parameters in diabetic rats, including inflammatory biomarkers, serum lipids, and bilirubin levels. These results contribute significantly to the growing body of evidence supporting the use of plant-based diets to prevent and manage chronic diseases like diabetes. Furthermore, this research encourages further investigation into these plant-based interventions' underlying mechanisms of action and their potential for translation into human clinical trials. The study emphasizes the importance of exploring and utilizing readily available and affordable natural resources for addressing global health challenges like diabetes. This research has the potential to inform the development of novel and sustainable dietary strategies for diabetes management, particularly in resource- limited settings.	
Thecurrenttitle,whileinformative,couldbemoreconciseandimpactful- "HypoglycemicandAnti-inflammatoryEffectsofa Cocoyam-BambaraGroundnut- SoyaBeanFlourBlendin Streptozotocin-Induced Diabetic Rats"	
	<ul> <li>Reviewer'scomment</li> <li>This manuscript provides valuable insights into the potential of a readily available and affordable dietary intervention for diabetes management. The findings demonstrate that a specific formulation of the cocoyam- bambara groundnut-soya bean flour blend can effectively modulate key metabolic parameters in diabetic rats, including inflammatory biomarkers, serum lipids, and bilirubin levels. These results contribute significantly to the growing body of evidence supporting the use of plant-based diets to prevent and manage chronic diseases like diabetes. Furthermore, this research encourages further investigation into these plant-based interventions' underlying mechanisms of action and their potential for translation into human clinical trials.</li> <li>The study emphasizes the importance of exploring and utilizing readily available and affordable natural resources for addressing global health challenges like diabetes. This research has the potential to inform the development of novel and sustainable dietary strategies for diabetes management, particularly in resource-limited settings.</li> <li>Thecurrenttitle,whileinformative,couldbemoreconciseandimpactful- "HypoglycemicandAnti-inflammatoryEffectsofa Cocoyam-BambaraGroundnut-SoyaBeanFlourBlendin Streptozotocin-Induced Diabetic Rats"</li> </ul>

#### FLOUR BLENDSONTHE SERUM LIPIDS &

(Please correct the manuscript and highlight that t.Itismandatorythatauthorsshould k here)

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Is the abstract of the article comprehensive? Do you suggesttheaddition(ordeletion)ofsomepointsinthi s section? Please write your suggestions here.	Thecurrentabstractisgenerallycomprehensive, butitcouldbeimprovedwithafewadditions: 1. Briefly mention the hypoglycemic effects: While the abstract focuses on serum lipids, inflammatory markers, andbilirubin, it doesn'texplicitlymention the hypoglycemiceffects of the flourblend, which is acrucial aspect of diabetes management. 2. Quantify the effects of the most effective formulation: Instead of just stating that "Formulation 1 showed more potent hypercholesterolaemic and anti-inflammatory activities," it would be beneficial to quantify the observed effects. For example, "Formulation 1 significantly reduced total cholesterol by X% compared to the diabetic control group." 3. Briefly mention the potential clinical implications: The abstract could end with a concise statement about the potential clinical implications of the findings. For example, "These findings suggest that a cocoyam-bambara groundnut-soya bean flour blend may be a promising dietary adjunct for the management of diabetes mellitus, warranting further investigation in human clinical trials."	
Isthemanuscriptscientifically,correct?Pleasewrit e here.	Explores a potentially valuable area of research- the use of locally available and affordable plant- based foodsfor diabetes management. This aligns with the growing interest in natural and integrative approaches tohealthcare. If the findings are replicated in humans, this research could have significant implications for developing cost-effective and accessible dietary interventions for diabetes management, particularly in resource- limited settings. The study investigates multiple parameters related to diabetes, including inflammatory markers, serum lipids, and bilirubin, providing a more comprehensive understanding of the flour blend's effects.	
	<b>LimitedScope:</b> The study utilizes an animal model (streptozotocin-induced diabetic rats), which may not fully reflect thecomplex pathophysiology of human diabetes. The 28-dayintervention periodmaynot be sufficient to fullyassess the long-term effects of the flour blend. Only a limited number of flour blend formulations were tested.	
	The study primarily focuses on the outcomes without delving deeply into the underlying mechanisms of action. Understanding the specific biochemical pathways involved in the observed effects would strengthen the findings. direct translationofthesefindingstohumanpopulations requires further investigation through human clinical trials.	
	<ul> <li>Overall,themanuscriptpresentsinterestingpreliminaryfindingssuggestingthepotentialbenefitsofa specific flour blend in managing diabetes in an animal model. However, further research is needed to: <ul> <li>Confirmthesefindingsinhumansubjects.</li> <li>Investigatetheunderlyingmechanismsofaction.</li> <li>Explorethelong-termeffectsandsafetyoftheflourblend.</li> <li>Optimizetheformulationanddosageforoptimalefficacyinhumans.</li> <li>Thisresearch servesasavaluable startingpointforfurtherinvestigationintothe potentialofplantbased dietary interventions for diabetes management.</li> </ul> </li> </ul>	
Arethereferencessufficientandrecent?Ifyouhave suggestions of additional references, please mention them in the review form.	Toomanyreferencesareincluded. Please addonlyrecent references. Arrangereferencesaschronologicallyeither in year wise or alphabetically	
Isthelanguage/Englishqualityofthearticlesuitable for scholarly communications?	The language quality of the provided manuscript has some areas that could be improved to meet the standards of scholarly communication. Some sentences are overly long and complex, making them difficult to read and understand. Consider breaking down long sentences into shorter, more concise ones. Minor grammatical errors (e.g., subject-verb agreement, punctuation) and typographical errors may be present. Maintain a formal and objective tone throughout the manuscript	
Optional/General comments		



# <u>PART 2:</u>

	Reviewer's comment	Author's comment(if highlight that part in th write his/her feedback
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	

#### **Reviewer Details:**

Name:	Sanyogita Shahi
Department, University & Country	Kalinga University, India

if agreed with reviewer, correct the manuscript and the manuscript. It is mandatory that authors should k here)