

Review Form 1.7

Journal Name:	Asian Journal of Food Research and Nutrition
Manuscript Number:	Ms_AJFRN_110707
Title of the Manuscript:	PHYSICO-CHEMICAL AND RHEOLOGICAL PROPERTIES OF TIGERNUT AND MORINGA SEEDS BASED AQUEOUS DRINKS AS INFLUENCED BY CHEMICAL HURDLES AND FORTIFICANTS
Type of the Article	Original Research Article

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PART 1: Review Comments

	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)
Compulsory REVISION comments 1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript) 2. Is the title of the article suitable? (If not please suggest an alternative title) 3. Is the abstract of the article comprehensive? 4. Are subsections and structure of the manuscript appropriate? 5. Do you think the manuscript is scientifically correct? 6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. (Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)	1. The present work deals with the development of new drinking snacks using raw affordable materials. This article, although presenting very good results, was written with great haste and requires a thorough revision by the authors. 2. The title reflect the work but need to be improve (comment below) 3. Abstract need improvement (conclusion part). 4. subsections and structure of the manuscript need improvement (see comments below) 5. The manuscript need some improvement in different part (see comments below) References need improvement (
Minor REVISION comments 1. Is language/English quality of the article suitable for scholarly communications?	Manuscript need English language editing. Example: adopt only one style (Brittish or American)	
Optional/General comments	First of all, why did yopu not use a mixture design (Minitab, R or statistics software) to perform your formulation? Why did it randomly? For me it's not repeatable or reproducible Title: change reheological by pasting and rewrite the title eg: formulation of aqueous drinks using tigernut and moringa seeds: effect of adding chemical hurdles and fortificants on physico-chemical and rheological properties Abstract: remove reference and be consistent "The pH and acidity values obtained in this study are capable of extending shelf life of the product" remove this sentence in abstract and add it in conclusion. Add conclusion part in abstract because the last sentence it's not conclson Introduction First paragraph: Add references Second paragraph: the percentage of protein (16%) is for which target age? Add the target age of your product in the Introduction Improve introduction, too brief Material and Methods Divide organic material to chemical reagents 2.4.3 Vitamins Analysis: how can you perform vitamin A analysis on plant? Correct Generally, improve this part to make it reproducible. You are too general Statistical analysis: Why Duncan test instead of Fisher? Why did you not add Principal Component Analysis? Add this statistical analysis in view to improve your work and make it more scientific Results and Discussion ($P=.05$) it's correct? If not, correct through the document	<ul style="list-style-type: none"> The title has been changed Abstract: reference removed, other comments noted and corrected. Introduction Reference added in the first paragraph Second paragraph corrected for target age. Material and Methods Action taken Statistical analysis: Principal Component analysis added. Results and Discussion Action taken for $P=.05$ Table 1: action taken Corrections noted and effected.

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	<p>Table 1: why the mean of the proximate chemical composition it's without SD? Add SD and ANOVA analysis</p> <p>“Although tigernut and moringa seeds drink is high in moisture content, the high moisture content improves nutrient transportation and other essential metabolic reactions.” Reference of this and explain how high moisture can improve nutritional composition? It's really ambiguous.</p> <p>Compare your values with those of norms and conclude on that each time. Do it for the rest of your results</p> <p>Eke <i>et al.</i> [24] who stated that application of citric acid greatly increased the protein quality of a food product and also boosted the shelf-stability due to the reduction of microorganism's activities. It's true? If yes how? Add it on your paper</p> <p>How can you compare ashes on tigernuts with those on yams, cassava and maize? Be consistent and compare with foods of the same group.</p> <p>Tigernuts and moringa seeds drinks are appropriate for diabetics, adolescents, the elderly, and athletes, and they are also highly nutritious [33]. This is a gratuitous and dangerous assertion, since you haven't assessed the starch or simple sugar content, or even performed a test to predict the glycemic index of your drink.</p> <p>Dink or drink? Correct</p> <p>“It is excellent milk for people who cannot tolerate gluten (celiacs) or are allergic to cow milk and its derivatives” You can say lactose intolerant people, that's fine.</p> <p>To conclude the macro-nutrient composition, I would like the authors to express the results more in %/100 mL because we are talking about juices ie a liquid product. In fact, consuming 100 mL of this juice will provide us with barely 33% of all that is described if I stick to the moisture content mentioned. In other words, you'd need to consume more than 300 mL to benefit from all these nutrients.</p> <p>In all your tables, harmonize the number of digits after the decimal point (2 for all) and set the letters of the differences to the standard deviation, not the mean.</p> <p>“Tigernut and moringa seeds drink contains high levels of calcium (what hurdles and fortification done to calcium) have done to which aids in the maintenance of healthy bones and teeth. It plays a part in the formulation of ATP (Adenosine Triphosphate) an energy compound indispensable for activating glucose fatty acids and improvement of intellectual performance”. Reference</p> <p>The high values of calcium found in the Chufa, are adequate for bone and teeth development in infants. Calcium is required for muscular contraction, nerve impulse transmission, heartbeat regulation, and fluid equilibrium within cells [40]. The requirements are higher during periods of growth, such as childhood, pregnancy, and breast feeding [41]. Put this sentence before or in the introduction of your interpretation</p> <p>120mcg correct this</p> <p>In general, the comments made above apply to the rest of the results. Be really consistent. why did you evaluate the thiobarbutiric acid content not peroxide, iodine or anisidine? it is an antinutrient. Same zith pH and TTA, the units of other antinutrients are not right in my opinion, it's mg/100 g (error in table).</p> <p>“Phytates are mostly present in seeds, grains, and legumes and they limit mineral absorption from a meal”. reference</p> <p>The acceptable levels of phytic acid ranged from 0.5- 5% [60]. False not more than 250 mg/100 g</p> <p>Where did you interpret your rheological part? Please add or delete the methodology. It's viscosity or viscosimetry?</p> <p>Conclusion</p> <p>Organoleptically acceptable tigernut and moringa seeds based aqueous drink can be produced using 90 tigernut milk and 10% moringa seeds. Have you evaluated this? structure your conclusion using standard flow chart of conclusion (state of the objective or aim, Main results and conclusion)</p> <p>significantly ($P=.05$). Remove this in conclusion</p> <p>References</p>	<p>Noted and corrected</p> <p>Noted and corrected</p> <p>Noted and corrected</p> <p>Noted and corrected</p> <p>Reference added</p> <p>Done</p> <p>TBA was analyse as a chemical index not as an antinutrient but they are merged with Antinutrients, pH and TTA to reduce the number of tables and flow with the guideline, and are tagged as chemical indices. Rheology is interpreted in table 5 with a title “Power law regression parameters for influence of shear rates.” Action taken</p> <p>Noted</p>
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	Adopt one style, see references guidelines of the journal. List all the authors of each references (eg ref 70)	
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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>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	