

Review Form 3

Journal Name:	Asian Journal of Biochemistry, Genetics and Molecular Biology
Manuscript Number:	Ms_AJBGMB_129899
Title of the Manuscript:	Effect of Vitamin A on Glucose Tolerance in Female Undergraduates of Ambrose Alli University, Ekpoma
Type of the Article	Original Research Article

General guidelines for the Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: 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>
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.	Vitamin A is not a part of standard diabetic management, hence a study that it is not effective has limited significance	While Vitamin A is not part of standard diabetic management, this study contributes valuable insights into nutrient-metabolism interactions. Recent research has shown that retinoids and their receptors play crucial roles in glucose homeostasis and pancreatic β -cell function. Understanding these relationships in young female populations is particularly important given the rising prevalence of glucose metabolism disorders in younger demographics. This study provides novel data specific to undergraduate females, a population often underrepresented in metabolic research.
Is the title of the article suitable? (If not please suggest an alternative title)	Title is suitable	Title is suitable

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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.	Abstract and the article describes the role of vitamin A in health and wellness but why would you consider it to be involved in glucose metabolism or why would it influence blood glucose levels is not justified	We acknowledge this feedback and have revise the abstract to include clear justification of Vitamin A's relationship to glucose metabolism through these key mechanisms: (1) modulation of pancreatic β -cell function, (2) influence on insulin sensitivity through RXR/PPAR signaling pathways, and (3) impact on hepatic glucose metabolism. These established molecular pathways provide the theoretical framework for investigating Vitamin A's effects on glucose tolerance.
Is the manuscript scientifically, correct? Please write here.	Abstract and the article describes the role of vitamin A in health and wellness but why would you consider it to be involved in glucose metabolism or why would it influence blood glucose levels is not justified	We have strengthen the manuscript by incorporating recent molecular evidence linking Vitamin A to glucose metabolism, including: <ul style="list-style-type: none">● Retinoid X Receptor (RXR) involvement in insulin sensitivity● Vitamin A's role in pancreatic development and β-cell function● Effects on hepatic glucose metabolism and insulin signaling pathways After incorporating necessary information, i have added recent publications focusing on Vitamin A's metabolic roles.
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	References are for general benefits and role of vitamin A rather than its contribution to glucose metabolism	
Is the language/English quality of the article suitable for scholarly communications?	Language is suitable	Yes, Laguage is suitable
<u>Optional/General</u> comments	A well planned study but not directed to a cause of practical or theoretical concern	The investigation of Vitamin A's role in glucose metabolism is supported by recent molecular research demonstrating the involvement of retinoid signaling pathways in metabolic regulation. Retinoid X Receptors (RXRs) form heterodimeric complexes with other nuclear receptors, including Peroxisome Proliferator-Activated Receptors (PPARs), which play crucial roles in glucose homeostasis and insulin sensitivity. Additionally, retinoic acid has been shown to influence pancreatic β -cell function and insulin secretion through direct genomic and non-genomic mechanisms. These molecular pathways provide a strong theoretical framework for investigating the potential effects of Vitamin A supplementation on glucose metabolism.

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?	<u>(If yes, Kindly please write down the ethical issues here in details)</u>	Written informed consent was obtained from all participants prior to enrollment. Participants were provided detailed information about the study procedures, potential risks and benefits, and their right to withdraw at any time without consequence. All documentation was provided in English and local languages as needed. This study was approved by the Institutional Review Board of Ambrose Alli University All procedures were conducted in accordance with the institution's guidelines. Participants were screened for contraindications to vitamin A supplementation. Medical personnel were available during testing periods. Adverse events were monitored and documented
		according to standardized protocols. Follow-up assessments were conducted to ensure participant safety. All participant data were anonymized using unique identifier codes. Physical records were stored in

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		<p>locked facilities, and electronic data were</p> <p>password-protected with restricted access. Personal identifying information was stored separately from research data.</p> <p>Participants were selected based on predefined criteria. Screening included medical history review and baseline health assessments. Participation was voluntary, and no coercion was used in recruitment.</p> <p>The authors declare no conflicts of interest. This research was self-funded by the corresponding author</p>
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