

We sincerely thank the reviewers for their thoughtful and constructive feedback. We have carefully revised the manuscript to address each comment. Below, we outline how each point has been addressed:

### **Reviewer 1**

- 1.) Comment: Include type of study design in article title.  
Response: The title has been revised to explicitly include the study design, clarifying that this is a cross sectional ecological analysis.
- 2.) Comment: Introduction is detailed and could be more concise.  
Response: The Introduction has been substantially streamlined. Redundant CDC statistics and extended discussions of intersectionality and Maslow's Hierarchy of Needs have been condensed to focus more directly on the study rationale and objectives.
- 3.) Comment: Some information from Data Set and Hardship Index should be included in Methods. Methods should clearly state the type of study.  
Response: The Methods section now clearly identifies the study as a cross sectional ecological analysis. Information previously described under the dataset and hardship index sections has been reorganized into the Methods.
- 4.) Comment: Provide actual population size of Chicago communities.  
Response: The total population size represented across Chicago communities has been added to the Methods section.
- 5.) Comment: Author does not address confounding bias.  
Response: This was addressed in the limitation paragraph of the Discussion, explicitly acknowledging potential confounding variables (food access, healthcare access, neighborhood safety, chronic stress).
- 6.) Comment: Statement regarding physical inactivity may overstate findings.  
Response: The statement has been revised to avoid causal language. We now describe physical inactivity as a potential contributing factor rather than an explanatory mechanism and clarify that obesity is multifactorial.
- 7.) Comment: Discussion and conclusion could be more concise.  
Response: The Discussion and Conclusion sections have been condensed to remove repetition and improve clarity while preserving key implications.
- 8.) Comment: Some references are older.  
Response: Several older references have been updated with more recent studies where appropriate.

### **Reviewer 2**

- 1.) Comment: Title should be more specific.  
Response: The title has been revised to more clearly reflect the study population, geographic focus, and study design.
- 2.) Comment: Abstract should include clearer methodology and sample size.  
Response: The Abstract has been revised to specify the study design and include the sample size.
- 3.) Comment: Some sentences are redundant and could be streamlined.  
Response: Redundant phrasing has been removed and several sentences have been revised for clarity and conciseness (e.g., Study Design and Data Source, Hardship Index, Discussion)
- 4.) Comment: Introduction should be more focused.  
Response: The Introduction has been condensed to focus more directly on background relevant to the study objective.
- 5.) Comment: Implications section contains repetition.  
Response: The Implications section has been edited to reduce redundancy and improve flow.
- 6.) Comment: Consistency needed in decimal places.  
Response: Decimal formatting has been standardized across all tables (one decimal place for demographic percentages and descriptive statistics; two decimal places for correlations and mediation results)
- 7.) Comment: Table 1 percentages do not add to 100%.  
Response: Table note has been added to indicate percentages may not add to 100 due to rounding.
- 8.) Comment: Study design mentioned in Discussion should appear in Methods.  
Response: The study design is now clearly described in the Methods section.
- 9.) Comment: Some references outdated.  
Response: Outdated references, including Moll et al. (1991), have been replaced or supplemented with more recent literature.