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| Book Name: | [**Medical Science: Trends and Innovations**](https://www.bookpi.org/bookstore/product/medical-science-trends-and-innovations-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4872** |
| Title of the Manuscript: | **Characteristics of gastric emptying on glycemic responses in the T2DM-SHR/Ntul//-cp (Corpulent) rat** |
| Type of the Article | **Book Chapter** |

**Special note:**

**A research paper already published in a journal can be published as a Book Chapter in an expanded form with proper copyright approval.**

**Source Article:**

**This chapter is an extended version of the article published by the same author(s) in the following journal.**

**Gastroenterology & Hepatology: Open access, 16(1): 28-33, 2025.**

**Available:** [**https://medcraveonline.com/GHOA/volume\_issues?issueId=4399&volumeId=1161**](https://medcraveonline.com/GHOA/volume_issues?issueId=4399&volumeId=1161)

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| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **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.** | This manuscript represents a significant contribution to the understanding of the underlying mechanisms of obesity and Type II diabetes, emphasizing the importance of gastric physiology in the regulation of glycemia. The research explores hormonal interactions, particularly the role of amylin and insulin, in genetically modified rats, providing a valuable model for investigating the nuances of insulin resistance and gastric emptying disturbances. Furthermore, the results presented may clarify the pathophysiology of these conditions and aid in the development of more effective therapeutic strategies. This integrated approach is crucial for advancing the field of diabetes and obesity, given the rising global incidence of these diseases. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | The title of the article, based on the content, appears to focus on the effects of gastric emptying on glycemic responses in a specific rat model related to obesity and Type II Diabetes Mellitus (T2DM). However, if it does not explicitly reflect these themes, it might not fully capture the breadth of the research presented.  A more suitable title could be: "Gastric Emptying Dynamics and Glycemic Responses in Obese and Diabetic SHR/N-cp Rat Models: Implications for Understanding Type II Diabetes"  This title emphasizes the focus on gastric emptying, glycemic responses, and the specific rat models used in the study, making the scope of research clearer. |  |
| 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. | To enhance the abstract of the article, I suggest starting with a brief contextualization of the study's significance, highlighting the relevance of obesity and Type II Diabetes (T2DM). It would be beneficial to include details about the methods, such as the number of rats used and the treatment conditions, specifying that they were maintained under controlled circumstances.  The results should present clear quantitative data, mentioning, for example, that the obese rats with T2DM had an area under the glucose curve (AUC\_glc) approximately two times greater than the non-diabetic obese rats, and the initial glycemic response was six times more pronounced in the young rats with T2DM. Additionally, including the clinical implications of these findings can enrich the abstract, suggesting that gastric motility should be investigated as a relevant factor in the progression of T2DM.  Finally, it is important to acknowledge the study's limitations by indicating that the results were obtained in animal models, which restricts direct application to humans. Including four to six keywords at the end of the abstract would also help with indexing and retrieval of the work. With these improvements, the abstract would become clearer and more informative. |  |
| **Is the manuscript scientifically, correct? Please write here.** | Based on the excerpts provided from the manuscript, there appears to be a solid scientific foundation. The study analyzes the characteristics of gastric emptying and glycemic responses in different rat strains, including those with obesity and Type II Diabetes (T2DM). The study's objectives are clearly defined, focusing on the comparison between lean, obese, and obese T2DM rats, which is essential for understanding the pathophysiology of T2DM.  The methodology used is adequately described, explaining how the experiments were conducted, such as oral glucose tolerance tests and fasting blood sample collection. This validates the experimental design and provides a clear understanding of how the data were obtained. Furthermore, the inclusion of quantitative data, such as body weights, fasting glucose levels, and insulin concentrations, supports the findings and allows for statistical comparisons between groups.  The discussion addresses the implications of the results in the context of obesity and T2DM, explaining the potential mechanisms of impaired gastric emptying and insulin resistance. It is important to highlight that the manuscript also demonstrates awareness of its limitations by acknowledging that the results were obtained from animal models, which underscores the limitations of directly applying these findings to humans.  However, for a complete assessment of scientific correctness, it would be necessary to examine aspects such as the rigor of the statistical analyses used, how the results align with or build upon existing literature, and the clarity of the methods to ensure other researchers can replicate the study.  In summary, based on the analyzed excerpts, the manuscript appears to be scientifically accurate and contributes valuable insights into the understanding of the impact of obesity and T2DM on gastric emptying and glycemic control. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.**  **-** | The references in the manuscript cover a range of relevant topics related to obesity, Type II Diabetes (T2DM), and the physiological mechanisms involved, including insulin resistance and gastric emptying. However, assessing whether they are sufficient and recent requires considering both the breadth of the topics covered and the publication dates of the cited works. |  |
| Is the language/English quality of the article suitable for scholarly communications? | Ok! |  |
| Optional/General comments |  |  |

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| **PART 2:** | | |
|  | Reviewer’s comment | Author’s comment *(if agreed with the 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?** |  |  |

**Reviewers:**

**Pedro Henrique Silva De Rossi, UNESP Campus De Botucatu, Brazil**