

Review of: "Reduced Blood to Brain Glucose Transport as the Cause for Hyperglycemia: A Model That Resolves Multiple Anomalies in Type 2 Diabetes"

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Potential competing interests: No potential competing interests to declare.

The article is interesting and presents evidence of blood glucose regulation related to glucose and insulin levels in the brain. It is written understandably and has a clear common thread. Some comments that could improve the manuscript are presented as follows:

1. In Table 1, there is an "s" in the headline of the first column.
2. Write "Meaning" and "Units" with a capital M and U.
3. Typically, table titles are at the top of the table, and figure titles are at the bottom.
4. Parameters defined numerically as thresholds should not be defined as "Maximum": k2, k5,...
5. Eq. 1 has a comma before the symbol '+'. What does it mean?
6. Gt is not defined.
7. The procedure to obtain the steady state of PG and PI is not described, and it may be confusing for the reader to understand how the steady state of plasma glucose and plasma insulin can be obtained.
8. It is not clear what a positive ephemeral Gt means.
9. The meaning of the abbreviation BBB should be mentioned in the text.
10. In the Results, it is said that it is evident from equations 5, 6, and 8 that FG does not change by altering Is or FI. However, this cannot be seen in the equations explicitly. It seems that FG is assumed as the steady state of PG, but some more explanation is needed.
11. Figure 1B does not have the values on the x-axis, so it is not easy to follow what is explained in the text about it.
12. It is not easy to distinguish between FG and FI in Figure 1C.
13. When a figure is mentioned in the text, it must be specified which of the possible figures is being referred to (in some cases A, B, C...).
14. The resolution of Figure 3 is very poor.
15. There is a lack of validation of the model responses.
16. Sometimes the citations are numbers in square brackets, and other times they are with the author's last name and year. Lack of coherence.

