

Review of: "Does Sugar Control Arrest Complications in Type 2 Diabetes? Examining the Rigour in Statistical Methods and Causal Inference in Clinical Trials."

Joshua Minks¹

¹ University of Missouri - Saint Louis

Potential competing interests: No potential competing interests to declare.

The article met the mark in identifying the problems with causal inferences from clinical trials. Recognizing the factors that influence glucose regulation and insulin resistance, it is difficult to calculate the real benefit of medicinal management from studies with varying methodologies and disclosures such as treatment side effects. In addition, the positive psychosomatic effects of participating in trials may have considerable benefit for subjects seeking optimal health with type 2 diabetes.

The development of type 2 diabetes has considerable complexity and focusing simply on shifting glucose from extracellular to intracellular spaces, or preventing absorption of ingested glucose, does not account for the influence of psychoneurohormonal fluctuations or behavioral responses that influence glucose intake or promote insulin resistance. For example, understanding the mechanism by which semaglutide (Ozempic) works, it is arguable to say that if glucose ingestion decreases then other antidiabetic medications become obsolete. Would that individual need to stay on semaglutide the rest of his or her life? Certainly seems that helping individuals determine how to cope with stress and avoid maladaptive behaviors that can lead to metabolic issues and hyperglycemia could have more beneficial outcomes than just assuming more insulin is needed.

I appreciate the authors' perspectives and effort in creating revised odds ratios from the outcomes of the clinical trials.