Reviewer's report

Title: In search of quality evidence for lifestyle management and glycemic control in pediatric type 2 diabetes: A systematic review

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Reviewer: Laura Hayman

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Manuscript Title: Lifestyle Management and Pediatric Type 2 Diabetes

The purpose of this review was to evaluate the impact of lifestyle behavior modification on glycemic control among children and youth with clinically diagnosed Type 2 diabetes (T2D).

The increasing prevalence of T2D in children and youth (globally) and the short and longterm implications of this chronic condition for the health and quality of life of children and youth is noted in this manuscript and prompted this systematic review of literature. Specifically, the authors appropriately note that strong evidence supports lifestyle modification in the prevention/delay of T2D in adults. Accumulated evidence in adult populations has resulted in the inclusion/emphasis on lifestyle modification for treatment of T2D in adults. Lacking however, are data on the impact of lifestyle behavioral modification on glycemic control in children and youth with T2D.

The manuscript, as presented, has several strengths. The process used to systematically review the relevant literature is well described including the inclusion and exclusion criteria, the data bases searched, and the criteria used to assess the methodologic quality of studies included (Down and Black criteria). The flow diagram (figure 1) of the systematic search adds positively to the manuscript. While it is recognized that only one study met the authors’ criteria, and is summarized in table format, the addition of another table summarizing the key components of selected studies (methods and results and limitations as well as sample characteristics) would add positively to the manuscript. Since a major goal is to support the need for future research in this important area of inquiry, the inclusion of the table would add helpful detail for researchers. In addition, the authors acknowledge that the one study that met their criteria has limitations and that the results need to be interpreted with caution. Thus, the addition of other studies reviewed in table format seems warranted. These could be selected by designs used and/or stratified by QI score. The discussion section (and conclusion) add positively to the manuscript including outlining specific needs for future research. The limitations of the review are appropriately acknowledged. References cited are viewed a a strength; the authors should consider including the most recent (2010) ADA guidelines published in Diabetes Care.
Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.