Reviewer #1:
Scientific Quality: Grade C (Good)
Language Quality: Grade B (Minor language polishing)
Conclusion: Minor revision
Specific Comments to Authors: Type 2 Diabetes Mellitus (T2DM) is one of the most common metabolic disorders, which is influenced by complex interrelationships between genetic, metabolic and lifestyle factors. This literature review covers potential interactions between genetic polymorphisms and dietary factors concerning T2DM susceptibility and disease progression, and novel genotype-based dietary strategies have been developed for improving T2DM control in comparison to general lifestyle recommendations. This is an interesting and clinically relevant topic. The paper is well written with clear logic and cites a large number of relevant literatures. However, there are some issues must be addressed.

The review is a little long, and it is best to reduce it slightly.

Response: Some literature was now removed from the manuscript, especially older studies.

Some references are best updated.

Response: Thank you for your comment. Some references were now updated, including only those from 2010 to date.

Some writing and grammar mistakes need to be corrected, for example "some studies ha analyzed" in page 7, "a higher reductions" in page 11, and "current evidence suggest a role" in page 12.

Response: Thank you for your observation. The mentioned grammar mistakes were now corrected. Moreover, English grammar of the total manuscript was now verified by a Native English Speaker.

Reviewer #2:
Scientific Quality: Grade C (Good)
Language Quality: Grade B (Minor language polishing)
Conclusion: Minor revision
Specific Comments to Authors: This review covers the potential interactions between genetic polymorphisms and dietary factors concerning T2DM susceptibility and disease progression. These insights may help to explain heterogeneity in predisposition to T2DM and the development of related systemic complications, with relevance in disease stratification and precision nutrition through the study of the human genome.

1. The section of introduction overlaps too much with the section of abstract, is logically consistent, and does not provide an elaborate introduction to the relevant content, thus defeating the purpose of the introductory section. The logic of the section of introduction needs to be reorganized.

Response: Thank you for your comment. Introduction was now reorganized according to your suggestion.

2. Where important points are made, they should be supported by multiple pieces of literature, as in reference 5.

Response: I agree with the reviewer. Additional references were now incorporated to support important points, as the contribution of genetics to T2DM pathogenesis.

3. T2DM being a widely familiar term, it is not necessary to present its full name several times in the text.

Response: I agree with the reviewer. Accordingly, T2DM was only abbreviated once (in the abstract).

4. Predictive models predicting the relationship between T2DM and diet or genes should ideally be given in the review.

Response: Thank you for your comment. Models predicting T2DM using genetic and dietary information were now included: *"In this context, it has been illustrated that the combination of genetic (52 SNPs in 37 genes) and dietary data (food with high sugar content) using machine learning approaches may improve the prediction of T2DM incidence [Sorgini C, 2019]. Likewise, high genetic (48 SNPs) and dietary risk scores (based on sugar-sweetened beverages, processed meat, whole grains and coffee) were associated with increased incidence of T2DM [Ericson U, 2018]".*