Journal Name:	**Journal of Disease and Global Health**
Manuscript Number:	**Ms_JODAGH_12695**
Title of the Manuscript:	**A Comprehensive Review on "Therapeutic Potential in Diabetes and Diabetes Associated Problems".**
Type of the Article	

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PART 1: Comments

	Reviewer's comment	**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.	**The article is of importance to enable further research on a.i of botanicals and explore possible clinical studies.** **Article is well reviewed and helps reseachers with ready information.** **Artcle is of value as it is on DM induced metabolic disorders which is neglected in this direction.**	
Is the title of the article suitable? **(If not please suggest an alternative title)**	**Yes the title is suitable**	
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.	**Yes**	
Is the manuscript scientifically, correct? Please write here.	**Yes**	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Some more as suggested might strenghthen the article.	

Is the language/English quality of the article suitable for scholarly communications?	Yes	
Optional/General comments	1. Numerous herbal drugs are available for the treatment of obesity and diabetes.Therefore, identification of phytoconstituents for proper regulation and function of accumulated body fat and elevated blood sugar level phytoconis needed. Such supplements have some potential to enhance antioxidant activity, insulin secretion. 2. The MS needs encouragement as it is carefully done on important issue, metabolic syndrome. The article is of worth with valueable information and excellent review. **1. Certain points are mentioned to supplicate and strengthen the article in view of latest developments** 2. Synergistic hormone therapy is now the area of research interest to deliver next generation therapies for hyperglycemia and metabolic syndrome. Bariatric surgery has given us on knowledge on how surgery can better glycemic control. Bioactive components from botanicals are storehouse of multiple biological targets to impact various biochemical pathways. Taking the advantage of this phenomenon efforts are on finding suitable combination of natural bioactive components as therapy for many metabolic disorders. **Authors may provide any kind of information on phyotoconstituents on multiple targets/therapies if available.** 3. Authors may also, ps try to include information on these following. Though studies limited to animal models in some	

	cases, outcome is of sound information. 4. With its hypoglycemic and antidyslipidemic effects, fenugreek represents an attractive new candidate for treatment of type 2 diabetes, obesity, and dyslipidemia, the key components of metabolic syndrome. **Information on three plants mentioned below may strengthen your review (see to cover some information)** 1. *Moringa oleifera* Flavonoids quercetin and kaempferol, and the phenolic acids chlorogenic acid and caffeoylquinic acid from *Moringa oleifera* have drawn the attention as value compounds in DM management. Antihyperglycemic properties, of these compounds likely to be as competitive inhibitors of SGLT1 in the mucosa of small intestine (duodenum and jejunum) reducing the intestinal absorption of glucose (*Kwon et al.,2007).* Quercetin has also been shown to activate adenosine monophosphate-activated protein kinase (AMPK), to increase glucose uptake through stimulation of GLUT4 (*Eid et al.,2015;* Singh et al.,2009; Ndong et al.,2007). Reduction in post-prandial hyperglycemia and hemoglobin HbA_{1C} is also, reported (*Tadera et al.,2006).* **Ps refer: (References provided for convenience)** Vargas-Sánchez K, Garay-Jaramillo E, González-Reyes RE. Effects of *Moringa oleifera* on Glycaemia and Insulin Levels: A Review of Animal and Human Studies. Nutrients. 2019 Dec 2;11(12):2907. doi: 10.3390/nu11122907. PMID: 31810205; PMCID: PMC6950081. *Singh B.N., Singh B.R., Singh R.L., Prakash D., Dhakarey R., Upadhyay G., Singh H.B. Oxidative DNA damage protective activity, antioxidant and anti-quorum sensing potentials of Moringa oleifera. Food Chem. Toxicol. 2009;47:1109–1116. doi: 10.1016/j.fct.2009.01.034.* [DOI] [PubMed] [Google Scholar] *Kwon O., Eck P., Chen S., Corpe C.P., Lee J., Kruhlak M., Levine M. Inhibition of the intestinal glucose transporter GLUT2 by flavonoids. FASEB J. 2007;21:366–377. doi: 10.1096/fj.06-6620com.* [DOI] [PubMed] [Google Scholar] *Eid H.M., Nachar A., Thong F., Sweeney G., Haddad P.S. The molecular basis of the antidiabetic action of quercetin in cultured skeletal muscle cells and hepatocytes. Pharmacogn. Mag. 2015;11:74–81. doi: 10.4103/0973-1296.149708.* [DOI] [PMC	

	free article] [PubMed] [Google Scholar] Singh B.N., Singh B.R., Singh R.L., Prakash D., Dhakarey R., Upadhyay G., Singh H.B. Oxidative DNA damage protective activity, antioxidant and anti-quorum sensing potentials of Moringa oleifera. Food Chem. Toxicol. 2009;47:1109–1116. doi: 10.1016/j.fct.2009.01.034. [DOI] [PubMed] [Google Scholar] Ndong M., Uehara M., Katsumata S., Suzuki K. Effects of oral administration of Moringa oleifera Lam on glucose tolerance in Goto-Kakizaki and Wistar rats. J. Clin. Biochem. Nutr. 2007;40:229–233. doi: 10.3164/jcbn.40.229. [DOI] [PMC free article] [PubMed] [Google Scholar] *Tadera K., Minami Y., Takamatsu K., Matsuoka T. Inhibition of alpha-glucosidase and alpha-amylase by flavonoids. J. Nutr. Sci. Vitaminol. 2006;52:149–153. doi: 10.3177/jnsv.52.149.* [DOI] [PubMed] [Google Scholar] 2. Fenugreek on the microbiome, restoration and distribution of microbial taxa associated with a good metabolic profile. Haxhiraj M, White K, Terry C. The Role of Fenugreek in the Management of Type 2 Diabetes. Int J Mol Sci. 2024 Jun 26;25(13):6987. doi: 10.3390/ijms25136987. PMID: 39000103; PMCID: PMC11240913. *Jones K.A., Richard A.J., Salbaum J.M., Newman S., Carmouche R., Webb S., Bruce-Keller A.J., Stephens J.M., Campagna S.R. Cross-Omics Analysis of Fenugreek Supplementation Reveals Beneficial Effects Are Caused by Gut Microbiome Changes Not Mammalian Host Physiology. Int. J. Mol. Sci. 2022;23:3654. doi: 10.3390/ijms23073654.* [DOI] [PMC free article] [PubMed] [Google Scholar] *Zhou K. Strategies to promote abundance of Akkermansia muciniphila, an emerging probiotics in the gut, evidence from dietary intervention studies. J. Funct. Foods. 2017;33:194–201. doi: 10.1016/j.jff.2017.03.045.* [DOI] [PMC free article] [PubMed] [Google Scholar] Gaddam A, Galla C, Thummisetti S, Marikanty RK, Palanisamy UD, Rao PV. Role of Fenugreek in the prevention of type 2 diabetes mellitus in prediabetes. J Diabetes Metab Disord. 2015 Oct 2;14:74. doi: 10.1186/s40200-015-0208-4. PMID: 26436069; PMCID: PMC4591578.	

	Abelmoschus *esculentus* also an interesting plant of Nutraceutical value may ps be included G. Shui and L.L. Peng, Journal of Chromatography A, 1048, 17(2004), DOI: 10.1016/j.chroma.2004.07.032 S.E. Atawodi, J.C. Atawodi, G.A. Idakwo, B. Pfundstein, R. Haubner, G. Wurtel, Spiegelhalder and R.W. Owen, J. Med. Food, 12(6), 1316(2009), DOI: 10.1089/jmf.2008.0211	

PART 2:

	Reviewer's comment	**Author's comment** *(if agreed with 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?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

Name:	**S S Sreenivas**
Department, University & Country	**ICAR- CTRI, India**