



SDI Review Form 1.6

Journal Name:	British Journal of Pharmaceutical Research
Manuscript Number:	2014_BJPR_13479
Title of the Manuscript:	Evaluation of Antidiabetic Activity of Combination of Trace Elements
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	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)
Compulsory REVISION comments	This is a very interesting research where the authors tried to evaluate the anti-diabetic effect of selenium in combination with three different trace elements (vanadium, magnesium, chromium). Overall, this is a good research and their findings are new. But there are some language imperfections through the writing that should be improved. I think that the manuscript could be accepted if the authors reply the following comment: In line 19, The strong antihyperglycemic and antihyperlipidemic effect observed in streptozotocin-induced diabetic rats justifies the use of these combined trace elements for the treatment of diabetes-related complications. It is not clear to me where the authors found that combination of their targeted trace element are used for the treatment of diabetes and diabetes-related complications which they intended to justify. I would request the authors at least they should provide me some references during their response. The authors mentioned that combination of trace elements such as vanadium and selenium, and magnesium and selenium showed significant decrease in fasting blood glucose levels. But they did not discuss how these combinations lower the blood glucose level. Moreover, I wonder what is the effect of single administration of each trace element in diabetes.	The language corrected where ever it was necessary. In line 19, we want to say that by results of our experiments we concluded that these combined trace elements shows strong antihyperglycemic and antihyperlipidemic effect which observed in streptozotocin-induced diabetic rats that justifies the use of these combined trace elements for the treatment of diabetes-related complications. Not combination but individual trace elements antidaibetic activity have been reported which is given in reference part. How these combinations of trace elements such as vanadium and selenium, and magnesium and selenium lower the blood glucose level is mentioned in discussion part. Their many article which shows single effect of each trace element in diabetes. Which I have mentioned in references.



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Minor REVISION comments	In line 12, anti-diabetic anti-diabetic In line 14, Streptozotocin induced Streptozotocin-induced In line 15, The results of the anti-diabetic activity of the combination of trace elements the aspects of Cholesterol, Triglycerides, Lipid Peroxidation, Glutathione, Catalase, Glycogen, Glucose -6- phosphates In line 25, patients with type -2 diabetes -The authors should express either type 2 diabetes or type-2 diabetes uniformly, not the mix of both expression. Again, antidiabetic or anti-diabetic? Check these terms throughout the manuscript. In line 51, Vanadium, zinc, chromium, magnesium, molybdenum and selenium have all been proposed as possible adjuncts in the treatment of diabetes mellitus. -Please provide appropriate reference for this statement. In line 51, Magnesium as a cofactor for enzymes that mediate carbohydrates metabolism, also takes part in glycemia homeostasis. Zinc and chromium have been well known to be important trace elements in diabetes as a cofactor for insulin although in glycemic homeostasis. -Please rewrite these sentences as their meanings are vague. In line 78, The aim for of the present work is to compare In line 112, Serum total and HDL cholesterol levels were estimated according to Wybenga and pileggi method. -Please use reference number. In line 131, Glutathione level was estimated according to the method of Beutler and Duron Method.	
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	-Please use reference number. In line 144, Catalase was estimated according to the method of huge Aebi Method. -Please use reference number.	
General comments	1. The authors should use a space between value and unit (eg. 0.46gm/kg 0.46 gm/kg) but should not use any space for percentage eg. 10.5% 2. There should also be a space between value and SEM (eg. 5.05 ± 0.02).	

PART 2:

Are there plagiarism issues in this manuscript?	It seems that the manuscript was written on the basis of copy and paste from different published articles. The following are some examples but it is the author's responsibility to find out any other plagiarism. ➤ The first paragraph of abstract (From line 10) was written from- Enhanced anti-diabetic activity of a combination of chromium(III) malate complex and propolis and its acute oral toxicity evaluation. Biological trace element research 2012; 148(1):91-101. ➤ The first paragraph of Introduction (From line 23) was written from-	
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	Ashok K. Tiwari and J. Madhusudana Rao. Diabetes mellitus and multiple therapeutic approaches of phytochemicals: Present status and future prospects. <i>Current Science</i> 2002;83(1):30-38. ➤ The information about trace element (From line 47) was written from- Role of Trace Elements for Health Promotion and Disease Prevention Annual Meeting of the European Academy of Nutritional Sciences, Copenhagen, August 1996: Proceedings Mertz W. The essential trace elements. <i>Science</i>. 1981 Sep 18; 213(4514):1332-8. ➤ The information about Streptozotocin (From line 63) was written from- Szkudelski T. The mechanism of alloxan and streptozotocin action in B cells of the rat pancreas. <i>Physiol Res</i>. 2001;50(6):537-46. ➤ The information about the mechanism of Streptozotocin-induced DNA damage (From line 67-73) was written from- Sharma et al. Experimental models of diabetes. <i>IJRAP</i> 2010; 1(2): 292-301.	
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