

Review Form 1.6

Journal Name:	Asian Journal of Food Research and Nutrition
Manuscript Number:	Ms_AJFRN_93350
Title of the Manuscript:	PROXIMATE COMPOSITION AND DPPH RADICAL SCAVENGING ACTIVITY OF METHANOL EXTRACTS OF FENUGREEK (<i>Trigonella foenum-graecum</i> L) POWDER AND OIL.
Type of the 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:

<https://journalajfrn.com/index.php/AJFRN/editorial-policy>

Review Form 1.6

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	<ol style="list-style-type: none"> 1. In the abstract (page 1), indicate the units "%" for each macronutrient (i.e., "moisture content 3.54±0.42%"). Please revise it for all the results stated in the abstract and along the manuscript. 2. In the abstract (page 1), the authors stated at the last sentence, "These results confirm the cardio-protective property of Fenugreek oil which could be due to its high radical scavenging and antioxidant activities." However, the authors cannot take this conclusion for cardio-protective properties with only the assays employed in this study. The assays employed in this study only allow to conclude that fenugreek powder and oil exhibited antioxidant effects through the scavenging of DPPH radicals which may potentially suggest preventive effects against oxidative stress-related diseases, including cardiovascular pathologies, and are excellent sources of macronutrients with pro-healthy effects. Please revise the sentence. 3. Consider revising the keywords to improve the visibility of the work. Please consider using "DPPH radical scavenger" (instead of "DPPH" and "radical scavenger") and replace "IC50" for "nutritional value" for example. 4. In the second paragraph of introduction (page 1), the authors stated, "Many wonderful functional and medicinal values of fenugreek...". If possible, please indicate some medicinal uses for this plant to enrich the introduction and demonstrate the interest in this plant. 5. In the third paragraph of introduction (page 2), the authors stated, "Regarding the composition of fenugreek seeds, husk and cotyledons,...". If the nutritional composition and DPPH scavenging activity were already studied for seeds, why the need to study it again in this study? Because this study uses a different extraction technique? Was it not explored in powder and oil separately? 6. In Tables 1, 2, 3 and 4, please provide the statistical analysis to compare the content of each macronutrient in fenugreek powder and oil. 7. In results and discussion section (page 6), it is stated, "This result reveals cardio-protective properties of fenugreek oil...". As commented above for the abstract, this conclusion cannot be taken for cardio-protective properties with only the assays employed in this study. The assays employed in this study only allow to conclude that fenugreek powder and oil exhibited antioxidant effects through the scavenging of DPPH radicals which may potentially suggest preventive effects against oxidative stress-related diseases, including cardiovascular pathologies, and are excellent sources of macronutrients with pro-healthy effects. Please revise the sentence. 8. A more detailed comparison with literature may be provided to improve the discussion of the results obtained. 9. The conclusion (page 7) may benefit from discussing future perspectives in the research field. 	
Minor REVISION comments	<ol style="list-style-type: none"> 1. In introduction (page 1), after indicating the full scientific name of the plant for the first time, the authors should only use the abbreviated name "<i>T. foenum-graecum</i>". Revise all the manuscript for this minor mistake. 2. In the introduction (page 2), the following sentence seems confusing: "It is observed that 200 microgram concentrations, extracts of husk, fenugreek seed, and endosperm showed 72%, 64%, and 54% antioxidant activity, respectively, by free radical scavenging method [5]." Please revise it. 3. In the third paragraph of introduction (page 2), the authors stated, "It has been shown that fenugreek has anti-diabetic, anticancer, hypocholesterolemic, anti-inflammatory, antioxidant, and chemo preventive activity due to its useful chemical constituents [5]." Please consider placing this sentence after "biological effects" in the end of the previous paragraph. 4. Please correct the symbol of Celsius degrees like this "°C" throughout the manuscript (i.e., "60 °C"). 5. In methods section (page 3), it is stated "finely ground powder". What was the pore size of the powder? Please include this information if possible. 6. In methods section, it seems that the name of the authors is missing after "of" and before the numbered reference cited. Please consider correcting to "the method of Aliyu et al. [6], ...". Revise all the manuscript for similar mistakes. 7. In methods section (page 3), it is stated "one ml of 0.3mMol of DPPH in methanol". Is it 0.3 mmol or 0.3 mM? Please revise it. 8. In methods section (page 4), please format "p" from probability value in italic letter as "<i>p</i><0.05". Revise it along the manuscript. 9. In results and discussion section, please consider organizing the findings in subsections for proximate composition and DPPH radical scavenging capacity. 10. Please mention the tables and figures in the manuscript text. Please indicate the Tables 2, 3 and 4 in the manuscript text. 11. Format the text of all manuscript using the same line spacing. 12. References: Please reformat the references following a similar reference style for all of them and following the journal guidelines. For example, some references use the journal name in full form, and other references, use the abbreviated name. 	
Optional/General comments	A word file with the manuscript is attached with some red marked revisions. Please consult it.	

Review Form 1.6

PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

Name:	Diana Andreia Tavares Pinto
Department, University & Country	Polytechnic of Porto, School of Engineering, Portugal