



**SDI Review Form 1.6**

Journal Name:	<a href="#">Journal of Advances in Biology &amp; Biotechnology</a>
Manuscript Number:	<b>Ms_JABB_27899</b>
Title of the Manuscript:	<b>Total Phenols Content and Antioxidant Power of Manuka Honey Is Related to 24hr Cytotoxicity Towards MCF-7 Breast Cancer Cells</b>
Type of the Article	<b>Original Research Article</b>

**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:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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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)
<b>Compulsory</b> REVISION comments	<p><b>Page 1, Lines 3-5</b>  <b>It is essential</b> for the authors to revise the title of their manuscript along the lines of "Manuka honey-induced cytotoxicity against MCF7 breast cancer cells is correlated to total phenol content and antioxidant power."</p>	<ol style="list-style-type: none"> <li>1. The suggested title modification is agreeable. The new title is: <b>Manuka honey-induced cytotoxicity against MCF7 breast cancer cells is correlated to total phenol content and antioxidant power</b></li> <li>2. The original title statement now appears as a conclusion in the abstract.</li> </ol>
	<p><b>Page 2, Lines 42-50; Page 6, Line 216</b>  It is essential for the authors to disclose the composition/ major constituents (e.g. sugar etc; in percentage or other relevant unit) of Manuka honey (varying UMF) used in the present study</p>	<ol style="list-style-type: none"> <li>3. The composition of honeys in general have been reviewed [1-3] and with focus on manuka honey [2]. The possible significance of UMF rating to composition are discussed in relation to total phenols content and antioxidant power which the indices measured in this study; all other pronouncement would (we think) be speculation in the context of this paper. (no changes to the MS)</li> </ol>
	<p><b>Page 2, Lines 42-50</b>  (i) <b>It is essential</b> of the authors to justify the basis of selecting Thyme honey as the control of the present study.  (ii) The current findings of Thyme honey need to be compared to previous reports.</p>	<ol style="list-style-type: none"> <li>4. Thyme honey was selected as a non-UMF rated honey which was of interest to one of us. The thyme comparison appears in Table 2 (ref 33). A more explicit comparison for thyme is now made in the text. A new ref. 38 has been added.</li> <li>5. see line 203). <b>Compared to current results some thyme honey samples from Portugal and Morocco had 800-924 mg GAE/kg [33, 38] whilst heather honey had 1150-1398</b></li> </ol>



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	<p>Page 6, Line 216 The authors acknowledged that other honey constituents might also contribute to the antioxidant power of Manuka honey. As such, it is essential for the authors to justify the basis of selecting only one antioxidant parameter (FRAP in particular) to demonstrate the antioxidant properties of Manuka honey.</p> <p>Page 4, Lines 142-143 It is unclear as to why 24 h was eventually chosen. It is essential for the authors to clarify it further in the text.</p> <p>Plagiarism issue: Turnitin originality report indicates 17% similarity (excluding bibliography). Nevertheless, it is essentially the authors' responsibility in ensuring the originality of the content.</p>	<p>mg GAE/kg [38].</p> <p>6. We used two antioxidant assays in this study; the FRAP assay and also total phenols assay. -Our own previous research has shown analysis by DPPH, ABTS, FRAP, total phenols, for manuka are correlated (paper in preparation).</p> <p>7. Anticancer screening can be done using 24hrs to 6-days incubation. 24 days was chosen for convenience.</p> <p>8. Thank you for raising the possible plagiarism issues. There is plagiarism issue. My turn it in analysis (05-07-2016) confirms a 17% match with <u>the thesis submitted to Ulster University – which is the originating institution for the MS</u>. We confirm that the material forming a major part of this paper derives from thesis and is this material which is flagged by turnit in. Other Matches (1%) are shown for stock phrases such as</p> <ul style="list-style-type: none"> <li>• -MCF-7 breast cancer cells</li> <li>• -2,4,6-tris (2-pyridyl)-S-triazine (TPTZ)</li> </ul> <p>Please note that all submitted to Ulster University has been screened by turn it in.</p>
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<b><u>Minor</u></b> REVISION comments	<b>Figure 1</b> The authors are encouraged to add the following at the end of the captions: "Results are presented as mean values of eight samples of two different days/datasets."	Figure 1 caption has been amended
<b><u>Optional/General</u></b> comments	The manuscript is generally well-written with their findings on the correlation of Manuka honey-induced cytotoxicity, total phenol content and antioxidant power clearly illustrated and discussed. The majority (74%) of the references are up to date. Grammatical and editorial errors are kept minimal.	We are grateful for these comments.