



SDI Review Form 1.6

Journal Name:	International Journal of Biochemistry Research & Review
Manuscript Number:	2015_IJBcRR_17862
Title of the Manuscript:	A comparative study of the effect of heating on antioxidant potential and lipid profile of two vegetable oils- sunflower oil and sesame oil- commonly used in culinary.
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:

(<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 <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>
<u>Compulsory</u> REVISION comments	The authors studied the effect of heat on two oils, while this is a worthwhile study however the experimental design requires adjustment. Commercial oils as the ones used by the authors normally consist of synthetic antioxidants, TBHQ, BHT, BHA etc. The difference the authors are getting may not be due to difference in properties of the oils but due to the different antioxidants used in the oils. There is a need to characterize the oils first in terms of, synthetic antioxidant nature and concentration, manufacturing date, metal content, saturated and unsaturated acid content. This would make it easy to discuss the results as it is it looks not much convincing. This study would have been convincing for virgin oils extracted on the same day. Properties of oils reduce with age of the oil, even for virgin oils as the natural	We fully agree on the composition of commercial oils –it may vary, in this study we were not characterising the components, we were trying to find out which of these is a better choice. We checked all the contents given by the manufacturer including the expiry dates. But it was not possible to get the virgin oils. The oils used were not rancid. So the oils were the same as the one used for human conception.



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	antioxidants in the oils will be used to delay racidification. Peroxidation cannot be stopped but it is just delayed. Oils were purchased from the local supermarkets (Spar, and Pick 'n Pay in South Africa), Local supermarkets only is ok leave (Spar, and Pick 'n Pay in South Africa), Line 268 In vitro, sesame seed oil has inhibited the growth of malignant melanoma so this is used as an anticancer agent. This sentence requires reference or its speculation This is not a conclusion, Line 279, Again instead of sticking to one type of oil, try to use different oils in moderate amounts. Was this deduced from the results?	In vitro, sesame seed oil has inhibited the growth of malignant melanoma (a skin cancer): PROSTAGLANDIN LEUKATRINES and ESSENTIAL FATTY ACIDS 46: 145-150, 1992. This was one of the findings in our lab which we used many other oils also.
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<u>Minor</u> REVISION comments	Line 38 The smoke point of oil depends primarily on its free fatty acid content.... Line 41....high temperature which may result in changes their chemical properties. Line 74/75 were to establish the toxic effect of two different cooking oils commonly used in culinary ~~which~~when were exposed to high temperature during cooking. Line 96 The oils were heated or fried <i>Include the temperature please.</i> separately; there were two groups of rats for each of the oil. Add of	Changed Corrected Changed Changed
<u>Optional/General</u> comments		