



## *Omega 3 fatty acid fortification: a novel approach by chia seeds in manufacturing of healthy products supporting the current trend of clean label*

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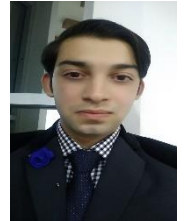
### **Abstract**

The current of developing food products with natural ingredients and avoiding synthetic ones, have led the commercial food processor to reformulate their products without adding synthetic substances to meet the specification of clean label. However, these natural substances in addition to their likely acceptance by consumer and healthy outcomes, have limited applicability because of their poor technological quality as compared to synthetic one which are normally available at least cost. Chia seeds an ancient plant of Mexico have been blessed with wide variety of technological quality as compared to other plants. The straightforwardness of its nature has allowed its successful incorporation in broad range of food products related to oil, baking, dairy, packaging, meat, extrusion and nutrition sector. The 35-41% of oil present in its seed is 69% ALA and 21% LA thus making it to be the richest source of PUFAs (90%). The oil can be successfully incorporated in food products and has significantly increased their content of PUFAs. Studies have found that increasing the concentration of chia seeds increases the ALA but such increase has detrimental effect on the technological quality of the products. However, 2.5% incorporation of intact chia seeds have shown balanced results regarding nutrition and technological quality.



### **Biography:**

Muhammad Abdullah Bin Masood has completed B.Sc (Hons) Degree in Agriculture with major Food Technology at the age of 24 years from Department of Food Technology, Pir Mehr Ali Shah Arid Agriculture University Rawalpindi, Pakistan. He has presented 2 conference abstracts one at Scotland (published in Journal of Food Technology and Preservation) while other at home institution (published in conference proceedings).



### **Speaker Publications:**

1. Masood, Muhammad Abdullah & AMIR, RAI & Ahmad, Asif & Ahmed, Dr Anwaar. (2019). CHIA SEEDS: A PROMISING SUPPLEMENTATION TO CURB MALNUTRITION IN PAKISTAN. 10.21065/AdvFooNutrSci.4.13.
2. Masood, Muhammad Abdullah & AMIR, RAI & Ahmad, Asif. (2019). Role of ICT in disaster risk management A way to forecast policies in achieving food security under current circumstances in Pakistan(Abtract).
3. Masood, Muhammad Abdullah. (2018). Curbing against dietary diseases through healthy eating: Enlightening the future advances in Food Safety and Hygiene practices. Journal of Food Technology and Preservation. 02. 10.4066/2591-796X-C1-003.

23<sup>rd</sup> Euro-Global Summit on Food and Beverages; Webinar - April 20-21, 2020

### **Abstract Citation:**

Muhammad Abdullah Bin Masood, Omega 3 fatty acid fortification: a novel approach by chia seeds in manufacturing of healthy products supporting the current trend of clean label, Euro Food 2020, 23<sup>rd</sup> Euro-Global Summit on Food and Beverages; Webinar - April 20-21, 2020.

(<https://europe.foodtechconferences.org/abstract/2020/omega-3-fatty-acid-fortification-a-novel-approach-by-chia-seeds-in-manufacturing-of-healthy-products-supporting-the-current-trend-of-clean-label>)