

Flavonoid Content and Antioxidant Potential of White and Brown Sesame Seed Oils

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Abstract : Medicinal plants are the most important sources of life saving drugs for the majority of world's population. People of all continents have used hundreds to thousands of indigenous plants in curing and management of many diseases. Sesame (*Sesamum indicum* L.) is one of the most widely cultivated species for its nutritious and medicinal seeds and oil. This research was carried out to determine the flavonoid content and antioxidant potential of two varieties of sesame seeds oil. Oil extraction was done using Soxhlet apparatus. The percentage oil yield for white and brown seeds were 47.85% and 20.72%, respectively. Flavonoid was present in both seeds with concentration of 480 mg/g and 360 mg/g in white and brown sesame seeds, respectively. The antioxidant potential was determined at different oil volume; 1.00, 0.75, 0.50 and 0.25ml. The results for the white and brown sesame seed oils were 96.8 and 70.7, 91.0 and 65.2, 83.1 and 55.4, 77.9 and 50.2, respectively. The white seed oil has higher oil yield than the brown seed oil. Likewise, the white seed oil has more flavonoid content than the brown seed oil and also better reducing power than the brown seed oil.

Keywords : antioxidant potential, brown sesame seeds, flavonoid content, sesame seed oil, *Sesamum indicum* L., white sesame seeds

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