EFFECT OF SOME PROCESSING TECHNIQUES ON THE PROXIMATE AND ANTINUTRIENTS COMPOSITION OF *HELIANTHUS ANNUS* SEED

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ABSTRACT

The effects of some processing technique on the proximate and antinutritional factors in *Helianthus annus* seeds were evaluated. The crude protein, ash content, fiber, folate and carbohydrate were estimated on raw, toasted and cooked samples of *Helianthus annus* milled seed. The antinutritional factors such as tannin, phytate and saponins were also determined in the raw and processed samples of the seed. The protein content of the raw and processed samples showed a significant increase ($p<0.05$).The processing treatments namely toasting at 180º C for 5, 10 and 15 minutes and boiling at 100ºC for 15, 25 and 35 minutes resulted in significant decrease ($p<0.05$) in fat content in both the raw and processed samples. A significant reduction ($p<0.05$) trend was observed in the level of antinutrients in various samples with processing time. The study revealed that there was improvement in the nutritional quality of the processed seed with the reduction in the antinutritional factors.

KEYWORDS: *Helianthus annus*, Proximate Composition, Antinutrional Factors, Boiled, Toasted