

## Effect of Dietary Supplementation of *Allium hookeri* Root and Processed Sulfur on the Growth Performance of Guinea Pigs

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**Abstract :** This study investigated the effects of the dietary supplementation of the *Allium hookeri* root, and processed sulfur, on the growth performance of guinea pigs. The guinea pigs were fed a control diet (CON), as well as the control diet including 1% freeze-dried *Allium hookeri* root (AH), or 0.1% processed sulfur (S), or including both the freeze-dried *Allium hookeri* root and the processed sulfur (AHS). The weight of perirenal adipose tissue (PAT) and the epididymal adipose tissue (EAT) in the AH were significantly lower than CON ( $p < 0.05$ ). The serum cholesterol levels of the AH and the AHS were significantly lower than the S ( $p < 0.05$ ). While the total saturated fatty acid content in the serum of the AH and AHS groups showed a tendency to decrease, the total monounsaturated fatty acid increased. The results of this study suggested that dietary consumption of *Allium hookeri* root may help to decrease fat accumulation, lower serum cholesterol levels, and control serum free fatty acid contents in the guinea pigs.

**Keywords :** *Allium hookeri*, dietary supplementation, growth performance, processed sulfur, Guinea pig

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