

**RESEARCH TITLE**

**THA NUTRITIONAL VALUE OF  
GERMINATED SORGHUM**

**Sheren Fadhal Abbas<sup>1\*</sup>, Faleeha Hasan Hussein<sup>1</sup>, Alia Zyara Hashim<sup>1</sup>**

<sup>1</sup> Department of Food Science, College of Agriculture, University of Basrah, Basrah, Iraq

\* Corresponding author. Email: [sheren.abbas@uobasrah.edu.iq](mailto:sheren.abbas@uobasrah.edu.iq)

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**Abstract**

Sorghum [*Sorghum bicolor* (L.) Moench] is an important cereal crop grown in diverse environments and belongs to the grass family. It is used as a staple food in developing countries, and its stalks and leaves are used for livestock feed. Sorghum grains also produce flour to prepare breads, 30%- and 70%-spelled pastries, porridges, and snacks, as well as cooking oil, alcohol, starch, and glucose. It contains a high percentage of protein, and Sorghum protein is characterized by its absence of colotinin, which is used by people with diabetes. Its grains are a rich source of the vitamin B group and phenolic compounds that are beneficial to health. Sorghum grains are also included in As a supplement in concentrated feed for poultry due to its high protein content, reaching 12%. Protein is an important component that reflects the quality of Sorghum grains. Applying the seed germination process is a valuable technique in improving the nutritional contents of these grains, which are widely used in the world. This technology has proven effective in enhancing the nutritional value of these grains, especially in countries that depend on grains in their diet, as they usually stimulate a group of enzymes upon germination. These include amylase, protease, lipoxigenase, polyphenol oxidase, and peroxidase. These enzymes convert complex compounds into simple parts, which initiate complex physiological and biochemical changes in the seeds. Many bioactive compounds are formed that have proven many positive effects on human health.

**Key Words:** Sorghum, Germination, Chemical composition, Nutritional value