

## IS 1155 : 2022- ATTA SPECIFICATION

Atta is a finely milled, pale-brown, gritty whole wheat flour derived from whole wheat grains, ie) all parts of the grain, including the bran, germ, and endosperm.

Atta is a staple ingredient in Indian cooking. It is ideal for traditional Indian bread and flatbreads, like chapati, paratha, and poori. The quality of atta is a critical factor that affects the taste, texture, and nutritional value of these staple foods. It is rich in protein, vitamins, minerals, and dietary fiber, and low in fat. Also understanding the protein content, gluten formation, ash content, and their impact on the final product is essential for achieving desired results.

There are several critical parameters determining the quality of Atta which are covered in the Indian Standard Specification. Moisture is an indicator of grain storability and hence limits for moisture content is required to be specified to determine optimum shelf life and for a reliable cooking experience. Atta with high moisture content attracts mould, bacteria and insects, all of which cause deterioration during storage. Also, the content of Gluten which is the natural protein in wheat, is specified so that it is chosen for the right end application. Gluten provides the dough with elasticity, strength, and gas retaining properties for different applications. The mineral material of atta is known by analysing the ash content. The limits of ash content ensure the safety of foods, making sure there are no toxic minerals present. Acid-insoluble ash indicates the presence of sand, dirt and dust ensuring that the atta is manufactured in a hygienic facility and the raw materials used are free from contaminants. Crude fiber is basically the measure of the quantity of indigestible lignin, cellulose, pentosans, and other types of components present in the food and is required to ensure consistent nutrient quality. Higher alcoholic acidity is an indicator of higher acidity of the germ oil in atta. Alcoholic Acidity content indicates the degree of deterioration during storage. Uric Acid content is addressed in the standard as higher uric acid in atta may be due to severe insect infestation of wheat and maintaining a low uric acid level in the human body helps guard against kidney stones.