

# PROBING THE SUPER GRAINS FOR THEIR NUTRITIONAL RICHNESS

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**Abstract**—The human body is a complex system which can sustain when it is provided with myriad nutrients responsible for carrying out different bodily functions. The current Indian diet includes incessant use of the conventional cereals like rice, wheat and maize which can't deliver the optimum amount of high quality protein, lipids and micronutrients. For a more holistic and sustainable future, the nutrition industry needs to focus on the grains which can overcome the problems of micronutrient deficiency and gluten sensitivity. Thus, the super grain era is gradually arriving as nutritionists are now focussing beyond calories. They include grains like sorghum, barley, chia, kamut and teff and pseudocereals like quinoa, amaranth and buckwheat. Super grains are rich in good quality proteins, polyunsaturated fatty acids (PUFAs), minerals and therapeutic compounds like polyphenols, flavonoids and phytosterols. Their prebiotic potential is also being highly explored. A variety of low-glycaemic index and gluten-free foods can be prepared from such grains which are highly palatable. The grains inhabit certain anti-nutritional factors such as phytic acid, saponins, tannins and protease inhibitors which can hinder the bioavailability of the nutrients. This problem can be overcome using processing treatments like washing, baking, cooking, frying, roasting and fermentation which can reduce them to unobjectionable levels or even eliminate them. The processed grains can be used for preparation of established products such as bread, pasta, cookies, wafers, wine and noodles. Recommending the continuous consumption of super grains can reduce the risk of certain physiological disorders like diabetes, cancer, obesity and cardiovascular diseases. The augmentation of the super grains should become a mandate which shall facilitate the evolution of a trailblazing market.