
Title : Exploring Market Potential for Quality Protein Maize Based Commercial Products**Author(s) :** Preeti Bajpai, Dr. Nikita Wadhawan, Dr. G. K. Mathur, Dr. Mani G. Singh,**Institution :** Centre of Excellence on Processing & Value Addition of Maize
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Udaipur , Rajasthan, India**Keywords :** *Maize, QPM, Nutritional, Commercialization*

Maize (*Zea mays* L.) is the world's third most important food crop next to rice and wheat and plays a very important role in human and animal nutrition. Several million people, particularly in the developing countries, derive their protein and calorie requirements from maize. The maize grain accounts for about 15 to 56% of the total daily calories in diets of people in about 25 developing countries. The carbohydrate of maize ranges from 61.5-77.4% with an average of 73.4% and provides the major requirement of energy. Protein comprises 6.3-10.9% with an average of 8.3%, crude fibre ranges from 1.4-3.8% with an average of 2.2% and ash content ranges from 0.6- 1.7% with an average of 1.3% but has low levels of essential amino acids such as lysine, tryptophan and threonine. To deal with low level of amino acids two eminent scientist Surinder Vasal and Evangelina Villegas developed Quality Protein Maize (QPM) genotypes at the International Maize and Wheat Improvement Center (CIMMYT) in the late 1990s. The QPM varieties contain nearly twice the amount of lysine and tryptophan, amino acids. QPM offers 90% the nutritional value of skim milk, the standard for adequate nutrition value. Babies and adults consuming QPM are healthier and at lower risk for malnutrition disorders such as marasmus and kwashi-orkor. At a time when UNICEF reports that 1,000,000 infants and small children are starving each month, the inclusion of QPM in daily rations improves health and saves lives.

Much has to be done to improve the industrial use of maize as a raw material for the production of other consumable items like oil, starch and other food products. QPM can be utilized in its flour form to prepare variety of bakery products like: cake, biscuit etc.; traditional products: namkeen, Papad, laddoo, shakkarpara etc.; Extruded products; pasta, vermicelli etc and other commercial Ready to Eat products.. Products made from QPM can serve the best to entrepreneurs and small level enterprises as these products will yield a very good market potential.

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