Effect of guar gum addition on the shelf life and quality of bread
Ashvini Kakde, Rodge A.B and Bobade H.P
Department of Food Chemistry and Nutrition, Marathwada Agriculture University, India

Bread is one of the staple foods especially of northern and western countries and is important bakery product prepared and consumed in high amount across the globe due to availability of ample raw ingredients, ease of processing, high in nutrition and dense energy product. However, storage stability and shelf life of bread is very low. Bread tends to lose its freshness, crumb and crust texture, changes in flavor and aroma and thus decreased overall acceptability, very quickly. The quality degradative changes in bread are supposed to be influenced by water holding capacity and Retrogradation of starch. In this context, the efforts are made to increase the shelf life and avoid the quality losses in bread by incorporating hydrocolloid i.e. guar gum. The anti staling properties of bread are determined as function of textural changes measured by Texturometer. The guar gum at a concentration of 0.75% was proved very effective as anti staling agent holding high amount of water and good texture after 5 days of storage. The control sample prepared without addition of guar gum showed degradation of quality within 3 days with respect to drying out and loss of texture. The guar gum prepared bread was also rated significantly higher in sensory characteristics.

ashwini.kakde33@gmail.com

Amaranth (Amaranthus hypochondriacus) an alternative crop for human nutrition and product development
Amruta Chitnis, Sukhcharan Singh and Ashvini Kakde
Department of Food Engineering and Technology, Sant Longowal Institute of Engineering and Technology, India

The real challenge today is the malnutrition due to deficiency of Proteins, and micronutrients (vitamins, minerals and essential amino acids) is one of the public health problems especially among preschool children worldwide. Present forms of food aid by various agencies focus on fighting hunger rather than treating malnutrition. Celiac disease is major problem among gluten intolerant people in developing and developed countries. Also anemic patients are increasing day by day in the world due to iron deficiency. Hence there is a need to have a better form of a food which can be easily available to overcome above major problems and also to add better nutrition to human diet.

The article reviews on utilization of amaranth seeds in possible product development so as to bring in focus underutilized, Protein rich, nutritionally superior, mineral rich, and gluten free amaranth seeds and also to overcome above mentioned problems to some extent. Also Amaranth is a good source of antioxidants, phytochemicals, phenolic compounds dietary fibers which is reasonably well balanced food with functional properties that have been shown to provide medicinal benefits. It will also help to add value to this crop and enable their commercialization and thereby provide additional livelihood opportunities to the farmers.

amruta.chitnis89@gmail.com