

Recent Trend in Gluten-Free Bakery Products

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Abstract : In the context of bakery products, the gluten component of wheat has a crucial role in stabilizing the gas-cell and crumb structures, appearance, mouth feel and maintaining the rheological properties, thus the acceptability of these products. However, because of coeliac disease, some individuals cannot tolerate the protein gliadin present in the gluten fraction of wheat flour. Also termed as gluten-sensitive enteropathy, it is a common chronic disorder in populations throughout the world with average prevalence of 0.37%. The safest way for celiac sufferers is to stay away from gluten-containing foods such as wheat, rye, barley as well as durum wheat, spelt wheat, and triticale. Thus, in view of the current increasing incidence of gluten intolerant sufferers (due to improved diagnostic procedures), the development of gluten-free cereal-based bakery products suitable for celiac patients represents a challenging and serious task, but also very demanding call for food technologists as well as for the bakers. The use of alternative cereal starches (like rice, soy, maize, potato and so on), gums, hydrocolloids, dietary fibres, alternative protein sources, prebiotics and combinations of them represent the most widespread approach used as replacement to mimic gluten in the manufacture of industrial processable gluten-free bakery products due to their structure-building and water binding properties.

Keywords : gluten-free, coeliac disease, alternative flour, hydrocolloid, crumb structure

Conference Title : ICABBBE 2014 : International Conference on Agricultural, Biotechnology, Biological and Biosystems Engineering

Conference Location : Montreal, Canada

Conference Dates : May 12-13, 2014