

## Starch : Modification techniques and resistant starch on human wellness

■ NOUSHEEN NOORUL IYN.I, P. BANUMATHI, S. KANCHANA, S.P. SUNDARAM, S.M. IBRAHIM,  
M. ILAMARAN AND J.SELVI

Received: 29.04.2013; Accepted: 15.05.2013

See end of the paper for  
authors' affiliations

Correspondence to :

**NOUSHEEN NOORUL IYN. I.**  
Department of of Food Science  
and Nutrition, Home Science  
College and Research Institute,  
T.N.A.U., MADURAI (T.N.) INDIA  
Email:noush\_f\_007@yahoo.com

■ **ABSTRACT** : Starch modifications such as physical, chemical and enzymatic treatments are done to disrupt the granule structure and to induce the required functional properties of native starches. Resistant starch, a non-digestible polysaccharide and highly retrograded starch fraction used as a functional food ingredient which is formed upon modification of starch and food processing is a useful starch derivative. Resistant starch had evoked a considerable position in human society due to its reputed and positive impacts on health analogous to dietary fibre. The present review focuses on the starch modification techniques to improve the functional properties and resistant starch content in foods.

■ **KEY WORDS** : Starch modification, Starch derivative, Resistant Starch, Food ingredient, human health

■ **HOW TO CITE THIS PAPER** : Iyn.I, Nousheen Noorul, Banumathi, P., Kanchana, S., Sundaram, S.P., Ibrahim, S.M., Ilamaran, M. and Selvi, J. (2013). Starch : Modification techniques and resistant starch on human wellness. *Asian J. Home Sci.*, 8 (1): 305-315.