Effect of processing on functional properties of mandarin juice for the development of functional foods

Ester Betoret, Pietro Rocculi and Marco Dalla Rosa
Universita di Bologna, Italy

During the last years, the food industry has been facing technical and economic changes both in society and in the food processing practices, paying high attention to food products that meet the consumer’s demands. In this direction, the study areas in food process and products have evolved mainly from safety to other topics such as quality, environment or health. Processing operations have a clear effect on functional compounds and structure of the raw materials in which are applied. This effect can be either detrimental or beneficial depending on the technology used and the process variables management. The product structure both in its raw form and after processing plays an important role maintaining, enhancing and delivering the bioactive compounds in the appropriate target within the organism. The aim of this work is to make an overview on some technologies that can constitute a technological process to develop functional foods, enhancing the technological and/or nutritional functionality of the food products in which they are applied. More concretely, the effect of homogenization, vacuum impregnation and drying on functional compounds from mandarin juice has been evaluated, focusing on the structure changes produced at each step of the process and its relationship on the product functionality.

Biography

Ester Betoret has completed her PhD in Science Technology and Food Management at the Institute of Food Engineering for Development at Polytechnic University of Valencia. Right now she has a Marie Curie Intra-European Fellowship for Career Development at the Department of Science and Food Technology at Bologna University. She has published 15 papers and book chapters in reputed journals and has received 5 research recognitions.

maria.betoretvalls@unibo.it