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IMPACT OF BREAD MAKING PROCESS ON QUALITY PARAMETERS, NUTRITION, PARAMETERS AND ENERGY DEMAND; KEY RESULTS FROM THE EU-FRESHBAKE PROJECT

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ABSTRACT: This presentation proposes an overview of bread making technologies applied to industrial bread production. A focus is proposed on the use of refrigeration to extend the shelf life of bread products; this concerns the BAKE-OFF-TECHNOLOGY which allows the production and marketing of freshly baked breads and specialities made from industrial frozen (and non frozen) bakery preparations. Selected results from the European funded project “EU-FRESHABKE” (Sept 2006 – Nov 2009 – 12 partners) will be presented: impact of post baking chilling conditions on product quality, impact of freezing on the thermomechanical behaviour of bread crumb and the impact of freezing on bread aroma, impact of baking process on the glycaemia index. A focus will be done on the impact of the processing conditions on the energy demand. Some innovations have been developed during this project among which several solutions to save energy during baking and refrigeration. These solutions will be briefly introduced. They highlight the importance of having knowledge on both products and processes and the interaction that might occur between product and process.

Keywords: baking, bread, nutrition, energy, quality

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