



INULIN AND LENTIL FLOUR AS FAT REPLACERS IN MEAT-VEGETABLE PÂTÉ – A MIXTURE DESIGN APPROACH

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ABSTRACT

In the present work, the possibilities of using inulin gel and/or lentil flour as fat replacers in recipes for canned meat products were investigated. Different inulin gel and/or lentil flour concentrations were applied in canned poultry meat pâté samples. The influence of functional replacers on the emulsion stability, texture, water content, and organoleptic parameters were studied. Significant differences were found as a result of the replacement or reduction of fat, the type and quantity of functional ingredients (inulin gel and/or lentil flour), ($P < 0.05$). A direct relationship was observed between the hardness and quantity of lentil flour and inulin gel. The hardest ($P < 0.05$) samples were obtained with the highest lentil flour concentration as fat content substitute. To sum up, the substitution of half of the fat with inulin and lentil flour in the formulations of the sterilized meat pâtés can be used to improve the texture and emulsification, nutrition value and health benefits of the product.
