Thesis Title	Heat Transfer Model for Bread Fried Chicken
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Abstract

The objective of this research was to study the mechanism of heat transfer during frying of battered chicken by consideration the effect of crust formation on temperature and moisture distribution within the samples. The simplified mathematical model was set up and used to explain heat and moisture transfer of batter-fried chicken during deep fat frying process at the oil temperature of 150 °C, 170 °C and 190 °C respectively. The frying process was terminated when the temperature in the product reached to 80 °C. The equations were solved by explicit finite difference technique. As for the many parameters used in this model, some were directly measured by experiment in the laboratory and the others were selected from literature. The model was divided into two cases. The first one, for which constant thermal properties of batter was assumed, showed less agreement with experimental data. While the other, for which changing of thermal properties of batter into crust was considered, showed the better agreement with experimental data.