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Moisture Migration in Deep-Fried Food during Frozen Storage

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Moisture migration in deep-fried food was investigated during frozen storage with regular temperature cycling for defrosting. The increase in moisture content of the coating and the change in water vapor weight in the package suggest that moisture from the filling migrated directly to the coating during frozen storage. Classification of the water in the filling by differential scanning calorimetry revealed that free water formed by the temperature cycling was transferred mainly from the filling to the coating. It was found that this decrease in the free water of the filling helped maintain the quality of frozen deep-fried food.

Keywords: <u>frozen food, deep-fried, temperature cycling, moisture, differential scanning calorimetry</u>

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