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**Title:** Modification of Beef Tallow Stearin by Chemical and Enzymatic Interesterification with Rapeseed Oil

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**Abstract:** Beef tallow stearin was blended at various proportions with rapeseed oil and the blends were interesterified using sodium methoxide or immobilized lipases from *Rhizomucor miehei* (Lipozyme IM) and *Candida antarctica* (Novozym 435) as the catalysts. The starting blends and the products of interesterification were quantitatively separated into the triacylglycerols and non-triacylglycerol fractions containing free fatty acids and of mono-and diacylglycerols. It has been found that after interesterification the contents of free fatty acids and of mono-and diacylglycerols increased. For enzymatic interesterification these increases were strongly dependent on water content in enzymatic catalysts. On the other hand the slip melting temperatures and solid fat contents of triacylglycerols separated from interesterified samples were lower if compared with nonesterified blends. The total fatty acid composition of fats before and after interesterifications remained unchanged but their distributions were random after chemical interesterification and close to random when Novozym 435 was used. When Lipozyme IM was used the fatty acid composition at sn-2 position remained practically unchanged compared with the starting blend.

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