

Hydrolysis of coconut oil (*Cocos nucifera* L.) by specificity and no positional specificity enzymes Hidrólisis del aceite de coco (*Cocos nucifera* L.) mediante enzimas estereoespecíficas y sin especificidad posicional

Rodríguez,

Sanhueza,

Valenzuela,

Nieto,

The characteristic fatty acid composition of coconut oil provides mainly short- and medium- chain fatty acids when incorporated to the diet. These fatty acids have nutritional advantages because their metabolic disposition allows the rapid obtention of energy, mainly at the hepatic level. The obtention of short- and medium- chain fatty acids from coconut oil as substrate, may be of importance because the different nutritional, pharmacological, and technological uses of these fatty acids. In the present work, the effect of two type of lipases on the hydrolysis of coconut oil was studied; a lipase obtained from *Candida cylindracea* showing no positional specificity, and a lipase from *Mucor miehei* with sn-1',3' specificity in its free and immobilized form (Lipozyme IM-20). The lipase from *Candida cylindracea* allows the hydrolysis of 85%-90% of the triacylglycerols after 47-50 hours, the fatty acid composition of the hydrolyzate being similar to the composition of the oil. The remaining mon