

ESTIMATION OF PRODUCTS OF THE ENZYMATIC GLYCEROLYSIS RAPESEED OIL AND PORK LARD MIXTURE

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The natural vegetable oils contain a small amount of diacylglycerols (DAG) depending on the type of oil and its origin. Diacylglycerols (sn-1,3 DAG and sn-1,2 (2,3) DAG) possess valuable properties for human health. They influence on metabolism and as consequence they regulate body weight, so they have find application in treatment of obesity. DAG may be prepared by enzymatic process, by esterifying of glycerol with fatty acids, by glycerolysis or hydrolysis of fats and oils.

The aim of this work was to obtain of DAG from rapeseed oil, pork lard mixtures and glycerol on enzymatic way.

1,3 position of TAG selective lipase Lipozyme® TL IM Novozymes Denmark was used. Enzymatic process in the periodic reactor with stirrer, under vacuum, without solution was carried out. The parameters of process and analytical indicators of obtained product were determined. The product of reaction contained about 60% of diacylglycerols.

Key words: diacylglycerols, triacylglycerols, enzyme, rapeseed oil, pork lard