Pengolahan dan peluang pengembangan produk pangan berbasis minyak sawit di Indonesia

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Abstrak

Palm oil is produced from the mesocarp part of the oil palm fruit (Elaeis guineensis Jacq.), contains balanced saturated fatty acids (47.8-55.2%) and unsaturated fatty acids (43.1-53.8%), and is semi-solid at room temperature with a melting point of 33.0-39.0 °C. About 80%, palm oil is applied to food products. In food products, palm oil needs to be purified through a refining process to remove free fatty acids, water, and impurities. Palm oil can be fractionated based on differences in melting points to produce palm olein fraction and palm stearin fraction with yields of about 70- 80% and 20-30%, respectively. Food products produced from palm oil and its fractions include cooking oil, vanaspati, shortening, margarine, cocoa butter equivalent, and human milk fat substitute. These food products are produced by modifying the physicochemical characteristics of palm oil and its fractions through blending, hydrogenation, and interesterification processes. The challenge for the palm oil industry in the future is to produce products that are low in contaminants such as 3- monochloropropane-1,2-diol and glycidyl esters, trans-fat free, and products that have high functional and nutritional value, such as structured lipids. Improving the quality and developing diversification of palm oil-based food products will encourage the sustainability of the palm oil industry in Indonesia