



Oil Content Response of Tumpi-tumpi toFrying Process Condition

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Abstract : Tumpi-tumpi is traditional foods from South and West Sulawesi (Bugis-Makassar ethnic) in raw material of fish. Frying condition process e.q. the percentage of coatingmaterial, temperature and time will affect the quality and quantity of tumpi-tumpi produced mainly in terms of oil content. The purpose of this study was to assess the oil content of the tumpi-tumpi, as the effect of frying process. This study used a software Design Expert 7.0® with Response Surface Methodology (RSM) Box-Behnken Design for select the frying conditions which produced an optimal response. The results based on the RSM Box-Behnken design approach, it was known that the main effect of percentage of coating materials, temperature and frying time were the most significant factors to the value of tumpi-tumpi response (especially: oil content). The optimization used software Design Expert 7.0® with RSM Box-Behnken that produced the optimal processing formula with 1,5 of percentage of coating materials, 150°C of temperature and 30 s of time that produced the tumpi-tumpi was: 4,84% of oil content showed a low level.

Keywords: Tumpi-tumpi, frying, oil content, response surface methodology.