

องศาเซลเซียส) พบว่า ลูกชิ้นหมูสูตรพื้นฐานมีอายุการเก็บรักษาได้ 2 วัน ส่วนลูกชิ้นหมูผสมน้ำมัน
มะพร้าวร้อยละ 4 มีอายุการเก็บรักษาได้ 4 วัน

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Title Effect of virgin coconut oil on qualities of pork meatball
Researcher Dr.Jirawan Oonmetta-aree
Institute Nakhon Ratchasima Rajabhat University
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Abstract

Objectives of this research were to study the contents of virgin coconut oil that suitable for pork meatball (PM) production, effects of virgin coconut oil (VCO) on pork meatball qualities, consumer acceptability on qualities of pork meatball with VCO and its shelf-life.

This research was to study the qualities of PM supplemented with 4%, 6% and 8% VCO to replacing back fat in developing low fat PM (LPM) compare to the control with 20% pork back fat. Four percent of VCO was suitable quantity for LPM production. It showed the best of emulsion stability: $7.52 \pm 0.20\%$ total expressible fluid and $5.36 \pm 0.31\%$ fat ($p \leq 0.05$). When compared its qualities to the control, showed that PM with 4% VCO had higher %moisture, %protein and %carbohydrates contents than control. Percent of fat, fiber, ash contents and %energy showed lower than control ($p \leq 0.05$). They had 65.7500% and 39.9595% saturated fatty acid, respectively by analyzing with Gas Liquid Chromatography: GC. Saturated fatty acid in PM with 4% VCO contained mainly 26.5718% lauric acid. Their unsaturated fatty acid contents were 34.2502% and 60.0406, respectively. Both PMs were detected less than 10 CFU/g of total viable count, less than 3 MPN/g of *Escherichia coli*. They were not detected *Salmonella* sp., *Staphylococcus aureus* and *Clostridium perfringens* in 0.1 gram of PMs. There were no significant difference in the texture profile and overall acceptability between LFM with 4%VCO and control ($p > 0.05$). At 4°C, LFM with 4%VCO could stored in vacuum Nylon/PE packaging for 4 days, which could kept longer than the control (2 days).