

THE INFLUENCE OF CHICKEN LIVER FLOUR MIXTURE VARIATION IN PRODUCING KEHAYA (CHICKEN LIVER CRACKERS) AS AN ALTERNATIVE HIGH IRON SNACK : A STUDY ON PHYSICAL PROPERTIES, ORGANOLEPTIC CHARACTERISTIC, AND IRON CONTENT

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ABSTRACT

Background: Anemia is still one of the nutritional problems in Indonesia, the results of the 2018 Riskesdas recorded 23.7% of Indonesians suffering from anemia. Chicken liver is a food ingredient that is often considered waste, even though chicken liver is a source of heme iron which is very beneficial for the body. Crackers are a typical Indonesian food that is favored by all circles, the largest component of crackers is starch so that it has a relatively low nutritional content. Mixing chicken liver flour in KEHAYA (Chicken Liver Crackers) is expected to increase the iron content, quality and acceptability of crackers.

Objectives: To determine the effect of variations in the mixture of chicken liver flour on the manufacture of KEHAYA (Chicken Liver Crackers) as an alternative snack source of iron in terms of physical properties, organoleptic properties and iron content.

Methods: This research is a pseudo-experimental study with a simple randomized design research design with 2 experimental units, 2 replications, and 4 variations of mixing tapioca flour and chicken liver flour (100%: 0%, 90%: 10%, 85%: 15%, 80%: 20%). Then the physical properties were subjectively tested. organoleptic properties were tested with hedonic test by 20 moderately trained panelists. Testing iron content by spectrophotometric method.

Results :Subjective physical properties show that mixing chicken liver flour affects the color, aroma, and taste of kehaya. kehaya is getting brown in color, distinctive aroma of chicken liver, savory taste (+), and crunchy texture. Based on the organoleptic test, the most preferred variation by the panelists was variation B (90%:10%). In the iron content test, there was an increase in the kehaya variation by mixing chicken liver flour, the highest iron content in variation D was 16.88 mg/100 gr.

Conclusion: the best mixture variation that can be accepted by panelists is variation B with a mixture of 90% tapioca flour: 10% chicken liver flour, and iron content of 3.79 mg. But it is necessary to make improvements to the color of the kehaya, one of which is by adding coloring to the kehaya.

Key Words: Chicken liver flour, Crackers, KEHAYA, Iron content.

PENGARUH VARIASI CAMPURAN TEPUNG HATI AYAM PADA
PEMBUATAN KEHAYA (KERUPUK HATI AYAM) SEBAGAI
ALTERNATIF KUDAPAN SUMBER ZAT BESI DITINJAU DARI SIFAT
FISIK, SIFAT ORGANOLEPTIK, DAN KADAR ZAT BESI

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ABSTRAK

Latar Belakang : Anemia masih menjadi salah satu masalah gizi yang ada di Indonesia, hasil Riskesdas 2018 tercatat sebesar 23,7% rakyat Indonesia menderita anemia. Hati ayam merupakan bahan makanan yang sering di anggap limbah, padahal hati ayam merupakan sumber zat besi heme yang sangat menguntungkan bagi tubuh. Kerupuk merupakan makanan khas Indonesia yang digemari semua kalangan, komponen terbesar kerupuk adalah pati sehingga relatif mempunyai kandungan gizi yang rendah. Pencampuran tepung hati ayam pada KEHAYA (Kerupuk Hati Ayam) diharapkan dapat meningkatkan kandungan zat besi, mutu dan daya terima pada kerupuk.

Tujuan : Diketahui pengaruh variasi campuran tepung hati ayam pada pembuatan KEHAYA (Kerupuk Hati Ayam) sebagai alternatif kudapan sumber zat besi ditinjau dari sifat fisik, sifat organoleptik dan kadar zat besi

Metode : Penelitian ini merupakan penelitian eksperimen semu dengan desain penelitian rancangan acak sederhana dengan 2 unit percobaan, 2 kali ulangan, dan 4 variasi pencampuran tepung tapioka dan tepung hati ayam (100%:0%, 90%:10%, 85%:15%, 80%:20%). Kemudian dilakukan uji sifat fisik secara subjektif. uji sifat organoleptik dengan *uji hedonic* oleh 20 panelis agak terlatih. Pengujian kadar zat besi dengan metode spektrofotometri.

Hasil : Sifat fisik secara subjektif menunjukkan pencampuran tepung hati ayam berpengaruh pada warna, aroma, dan rasa kehaya. kehaya semakin berwarna coklat, aroma khas hati ayam, rasa gurih (+), dan tekstur renyah. Berdasarkan uji organoleptik, variasi yang paling disukai panelis yaitu pada variasi B (90%:10%). Pada uji kadar zat besi terdapat peningkatan pada variasi kehaya dengan pencampuran tepung hati ayam, kadar zat besi tertinggi pada variasi D 16,88 mg/100 gr.

Kesimpulan : variasi campuran terbaik yang dapat diterima panelis adalah variasi B dengan variasi campuran tepung tapioka 90% : tepung hati ayam 10%, dan kadar zat besi 3,79 mg. Tetapi perlu dilakukan perbaikan terhadap warna kehaya, salah satunya dengan penambahan pewarna pada kehaya.

Kata Kunci: Tepung hati ayam, Kerupuk, Kehaya, Kadar zat besi.