

## ABSTRAK

**Fauziah Ramadhani: “Analisis Kandungan Gizi Pada Kerupuk Berbahan Dasar Limbah Biji Durian (*Durio Zibethinus Murr*)”. Skripsi. Prodi Gizi. Jurusan Pendidikan Kesejahteraan Keluarga. Fakultas Teknik. Universitas Negeri Medan. 2023.**

Penelitian ini bertujuan untuk; 1) Pembuatan kerupuk dengan substitusi biji durian sebesar 30%, 45%, dan 60%. 2) Hasil uji hedonik dan uji mutu hedonik terhadap warna, rasa, aroma, dan tekstur pada kerupuk biji durian. 3) Formula terbaik kerupuk biji durian. 4) Kandungan zat gizi pada kerupuk biji durian formula terbaik (kadar lemak, kadar protein, kadar karbohidrat, kadar air, kadar abu). Desain penelitian yang digunakan yaitu penelitian eksperimen. Terdapat empat perlakuan pada kerupuk biji durian yaitu F0 (kontrol), F1 (30% pasta limbah biji durian), F2 (45% pasta limbah biji durian), F3 (60% pasta limbah biji durian). Uji organoleptik dilakukan di Laboratorium Gizi Universitas Negeri Medan. Uji analisis kandungan gizi dilakukan di Laboratorium BSPJIM (Balai Standardisasi dan Pelayanan Jasa Industri Medan). Teknik analisis data dilakukan secara deskriptif dan uji *Kruskal Wallis* serta uji lanjutan *Mann-Whitney*. Penentuan kerupuk terbaik dipilih berdasarkan dari perhitungan jumlah tertinggi dari uji hedonik.

Hasil penelitian menunjukkan bahwa perlakuan dengan penambahan pasta biji durian 45% dan tepung terigu 55% menghasilkan kerupuk biji durian yang terbaik. Berdasarkan hasil uji hedonik kerupuk biji durian yaitu warna 60% panelis menyatakan suka, rasa 68% panelis menyatakan sangat suka, aroma 52% panelis menyatakan sangat suka, dan tekstur 60% panelis menyatakan suka. Hasil uji mutu hedonik diperoleh warna 100% panelis menyatakan kuning cerah, rasa 60% panelis menyatakan gurih, aroma 100% panelis menyatakan aroma tidak terasa biji durian, dan tekstur 52% panelis menyatakan amat sangat renyah. Formula terbaik berdasarkan hasil penelitian yaitu kerupuk (45% pasta biji durian dan 55% tepung tapioka) warna rerata 4,00, rasa rerata 4,68, aroma rerata 4,48, dan tekstur rerata 4,32. Hasil uji mutu hedonik diperoleh warna putih kekuningan rerata 4,00, rasa gurih rerata 4,00, aroma tidak terasa biji durian rerata 5,00, dan tekstur sangat renyah rerata 4,48. Hasil kandungan zat gizi pada 100gr kerupuk formula F2 dengan penambahan 45% pasta limbah biji durian yakni kadar abu (2,26gr), kadar air (3,92gr), karbohidrat (64gr), lemak total (8,90gr), protein (4,12gr), dan serat kasar (16,8gr).

## ABSTRACT

**Fauziah Ramadhani: "Analysis Of The Nutritional Content Of Durian Seed Waste Based Crackers (Durio Zibethinus Murr)". Thesis. Nutrition Study Program. Family Welfare Education Department. Faculty of Engineering, Medan State University. 2023.**

This research aims to; 1) Making crackers with durian seed substitution of 30%, 45% and 60%. 2) The hedonic test results and hedonic quality tests on color, taste, aroma and texture of durian seed crackers. 3) The best formula for durian seed crackers. 4) Nutrient content in the best formula durian seed crackers (fat content, protein content, carbohydrate content, moisture content, ash content). The research design used is experimental research. There were four treatments for durian seed crackers namely F0 (control), F1 (30% durian seed waste paste), F2 (45% durian seed waste paste), F3 (60% durian seed waste paste). Organoleptic tests were carried out at the Nutrition Laboratory, Medan State University. The nutritional content analysis test was carried out at the BSPJIM Laboratory (Medan Center for Standardization and Industrial Services). The data analysis technique was carried out descriptively using the Kruskal Wallis test and the Mann-Whitney follow-up test. Determination of the best crackers is chosen based on the calculation of the highest number of hedonic tests.

The results showed that treatment with the addition of 45% durian seed paste and 55% wheat flour produced the best durian seed crackers. Based on the hedonic test results of durian seed crackers, namely the color of 60% of the panelists stated they liked it, the taste of 68% of the panelists said they really liked it, the aroma of 52% of the panelists said they really liked it, and the texture of 60% of the panelists said they liked it. The results of the hedonic quality test showed that the color of 100% of the panelists stated that it was bright yellow, the taste of 60% of the panelists stated that it was savory, the aroma of 100% of the panelists stated that the aroma did not taste like durian seeds, and the texture of 52% of the panelists stated that it was very, very crunchy. The best formula based on the results of the study were crackers (45% durian seed paste and 55% tapioca flour) average color 4.00, average taste 4.68, average aroma 4.48, and average texture 4.32. The results of the hedonic quality test obtained an average yellowish white color of 4.00, an average of savory taste of 4.00, an average of 5.00 in the aroma of durian seeds, and a very crunchy texture of 4.48 on average. The results of the nutrient content in 100gr F2 formula crackers with the addition of 45% durian seed waste paste were ash content (2.26gr), moisture content (3.92gr), carbohydrates (64gr), total fat (8.90gr), protein (4.12gr), and crude fiber (16.8gr).