

PENGARUH PENAMBAHAN UDANG VANNAME (*Litopenaeus vannamei*) TERHADAP KARAKTERISTIK FISIK DAN SENSORIS *TORTILLA* *CHIPS*

INTISARI

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Selama pandemi COVID-19, terjadi peningkatan konsumsi makanan ringan di beberapa negara, termasuk Indonesia. Kebiasaan ini diperkirakan akan tetap bertahan setelah pandemi COVID-19 berakhir sebagai bagian dari *new normal*. Salah satu jenis makanan ringan yang terdapat di Indonesia adalah *tortilla chips*. *Tortilla chips* terbuat dari jagung sehingga memiliki kandungan karbohidrat yang tinggi, protein yang rendah, serta rasa yang cenderung hambar. Oleh karena itu, perlu dilakukan penambahan udang vanname untuk meningkatkan kadar protein dan cita rasa *tortilla chips*.

Penelitian dimulai dengan pembuatan *tortilla chips* dengan konsentrasi udang vanname 0%, 5%, 10%, dan 15%. Selanjutnya, dilakukan pengujian fisik (pengembangan volume, tekstur, densitas, dan warna) serta pengujian sensoris (warna, aroma, kerenyahan, rasa, dan *overall*). Setelah itu, dilakukan pengujian karakteristik kimia untuk *tortilla chips* dengan perlakuan terbaik.

Penambahan udang vanname tidak berpengaruh signifikan terhadap karakteristik fisik, tetapi berpengaruh signifikan terhadap karakteristik sensoris *tortilla chips*. *Tortilla chips* dengan penambahan udang vanname 5% merupakan *tortilla chips* dengan perlakuan terbaik ditinjau dari karakteristik fisik dan sensoris yang diuji. Penambahan udang vanname 5% dapat meningkatkan protein *Tortilla chips* dari 4.76%bk menjadi 7.90%bk. *Tortilla chips* udang 5% juga mengandung kadar air 2.60%bb, kadar abu 1.23%bk, kadar lemak 25.26%bk, dan kadar karbohidrat *by difference* 62.94%bk.

Kata kunci : Tortilla chips, udang vanname, makanan ringan, pengembangan produk, formulasi produk pangan

EFFECT OF ADDITION VANNAME SHRIMP (*Litopenaeus vannamei*) ON PHYSICAL AND SENSORY CHARACTERISTICS OF *TORTILLA CHIPS*

ABSTRACT

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During the pandemic COVID-19, an increase in snacking occurred in some countries, including Indonesia. The Snacking habit was predicted would last, although the pandemic is over as part of the new normal. One of snacks sold in Indonesia was tortilla chips. Tortilla chips are made of corn, and the snack contains high carbohydrates and low protein. Its taste rather bland, so the snack needs to be implemented with savory ingredients, such as shrimp, to improve the protein content and the taste of the tortilla chips. Therefore, this study investigated the effect of adding various concentrations of vanname shrimp (0%, 5%, 10%, and 15%) to tortilla chips. Then, we examined the resultant product's physical (volume expansion, texture, density, color) and the sensory properties (color, aroma, crispness, taste, and overall). Then, we evaluated the product's chemical properties that showed the best physical and sensory properties.

The result showed the addition of vanname shrimp had no significant effect on physical properties, but there was significant effect on sensory properties (aroma, taste, and overall). Tortilla chips with the addition of 5% vanname shrimp showed the best score based on physical and sensory properties tested. The addition of 5% vanname shrimp can increase the protein content of tortilla chip from 4.76% to 7.90%. Overall, the resultant tortilla chips with addition of 5% vanname shrimp also has moisture content of 2.60% (wb), an ash content of 1.23% (db), a fat content of 25.26% (db), and a carbohydrate content (by difference) of 62.94% (db).

Keywords : Tortilla chips, vanname shrimp, snack foods, food product development, food product formulation