

## Pengaruh penambahan ampas kedelai dan singkong terhadap kandungan nutrisi dan tekstur daging ayam sintetik = Outcome of soybean dregs and cassava addition towards synthetic chicken meat texture and nutrition

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### Abstrak

[Daging ayam merupakan salah satu sumber protein yang diminati oleh masyarakat. Namun, daging ayam dapat menyebabkan dampak yang kurang menyehatkan seperti kolesterol, diabetes, dan penambahan berat badan, bahkan patogenik seperti flu burung. Daging ayam sintetik yang terbuat dari bahan-bahan nabati dengan kandungan protein yang menyerupai daging ayam hewani dipilih sebagai alternatif. Protein dalam daging sintetik dapat diperoleh melalui bahan-bahan seperti gluten, ampas kedelai, dan singkong; yang mengandung juga nutrisi lain seperti serat, karbohidrat, lemak, dan mineral. Pada penelitian pembuatan daging ayam sintetik, konsentrasi ampas kedelai dan singkong divariasikan untuk melihat pengaruh kedua bahan tersebut terhadap kandungan nutrisi dan tekstur, serta dikukus pada suhu 100°C selama satu jam. Komposisi daging ayam sintetik yang terbaik menurut kandungan nutrisi dipilih berdasarkan kandungan proteinnya yaitu 60% gluten, 5% singkong, dan 20% ampas kedelai. Hasil analisis proksimat menunjukkan daging ayam sintetik dengan komposisi tersebut mengandung 20,35% protein; 6,39% lemak; 18,45% karbohidrat; 0,425% abu; dan 54,40% air. Sedangkan komposisi daging ayam sintetik terbaik menurut tekstur dengan parameter pemilihan berupa kekerasan yaitu 60% gluten, 15% singkong, dan 0% ampas kedelai. Hasil analisis tekstur menunjukkan daging ayam sintetik ini memiliki kekerasan 8829 gf; daya kohesi 0,567%; dan elastisitas 89,1. Analisis asam amino pada daging ayam sintetik mendeteksi 7 asam amino esensial dan 8 asam amino non-esensial.

<hr>Chicken is one of the main sources of protein that society enjoys consuming. However, meat may be unhealthy and cause excessive cholesterol, diabetes, and weight gain, also pathogenic such as avian influenza. Chicken meat alternative that is healthier is synthetic chicken meat that created from organic ingredients with protein content that resembles meat. Protein in synthetic meat is obtained from ingredients such as gluten, soybean dregs, and cassava that also contains fiber, carbohydrate, fats, and minerals. In manufacturing synthetic meat, the concentration of soybean dregs and cassava are varied in order to observe the effect from both ingredients towards nutrition and texture. Synthetic chicken meat is then steamed for one hour at 100°C. The best composition for synthetic chicken meat based on its nutrition content, which protein acts as the main parameter consists of 60% gluten, 5% cassava, and 20% soybean dregs. Proximate analysis yields that this composition of synthetic chicken meat contains 20,35% protein; 6,39% fat; 18,45% carbohydrate; 0,425% ash; and 54,40% water. Best synthetic chicken meat composition based on its texture which hardness becomes the main parameter is 60% gluten, 15% cassava, and 0% soybean dregs. Texture profile analysis results for this synthetic chicken meat composition yields a hardness of 8829 gf; 0,567% cohesiveness; dan 89,1 elasticity. Amino acid analysis detected 7 essential and 8 non-essential amino acids., Chicken is one of the main sources of protein that society enjoys consuming. However, meat may be unhealthy and cause excessive cholesterol, diabetes, and weight gain, also pathogenic such as avian influenza. Chicken meat alternative

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