

## **ABSTRAK**

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### **KAJIAN PENGARUH VARIASI BAHAN BAKU DAN PERLAKUAN TERHADAP KARAKTERISTIK FISIKOKIMIA DAGING ANALOG**

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(xiii + 35 halaman; 4 gambar; 9 tabel; 1 lampiran)

Daging analog merupakan produk pangan berupa tiruan daging yang terbuat dari bahan protein nabati. Bahan baku protein nabati seperti kacang kedelai, kacang polong, dan kacang-kacangan lainnya ditemukan dalam industri pembuatan daging analog. Dalam proses pembuatan daging analog, kandungan protein bahan baku, suhu pemanasan, dan kecepatan *screw* memiliki peranan dalam membentuk karakteristik tekstur daging analog sehingga ketiga faktor ini perlu diperhatikan agar dapat menghasilkan karakteristik fisikokimia daging analog yang menyerupai daging hewani. Terdapat faktor lain yang dapat memengaruhi karakteristik daging analog yaitu penambahan zat aditif perlunya mengetahui jenis dan konsentrasi zat aditif yang ditambahkan dan pengolahan bahan baku menjadi isolat protein terhadap karakteristik fisikokimia daging analog. Kandungan protein yang tinggi dari ISP mencapai 90%, suhu pemanasan 130-150°C agar protein terdenaturasi, dan kecepatan screw 800 rpm dapat meningkatkan karakteristik tekstur daging analog. Meningkatnya konsentrasi penambahan zat aditif dalam bentuk cair dapat menurunkan karakteristik tekstur daging analog. Pengolahan bahan baku menjadi isolat protein dengan menggunakan pelarut kimia akan menghasilkan kadar protein lebih tinggi.

Kata kunci : bahan baku, daging analog, karakteristik, perlakuan

Referensi : 27 (2012-2021)

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### **REVIEW STUDY OF EFFECT RAW MATERIALS VARIATIONS AND TREATMENTS ON PHYSICOCHEMICAL CHARACTERISTICS OF MEAT ANALOGUE LITERATURE**

Thesis, Faculty of Science and Technology (2021)

(xiii + 35 pages; 4 figure; 9 tables; 1 appendices)

Meat analogue is a product that try to imitate animal meat made from plants proteins such as proteins from soybeans, peas, and other legumes. During the production of meat analogue, protein content, heating temperature, and screw speed determine the characteristics of the finished products, therefore these three factors must be controlled to such extent to produce meat analogue that has similar physicochemical properties as animal meat. There are other factors that affects the finished products such as addition of additives, concentration of the additive, and the process of making the isolate protein from raw materials. SPI high protein content at 90% is heated at 130-150°C so the protein is denaturized, and the screw speed is set to 800 rpm to increase the texture properties of the meat analogue. Adding additives in liquid form can reduce the quality of texture of the meat analogue. During the manufacturing of the protein isolate, chemical solvent can help increase the protein concentration of the isolate.

Keywords : raw material, meat analogue, characteristics, treatments

Reference : 27 (2012-2021)