

**PENGARUH PERBEDAAN METODE *MOIST HEAT COOKING* TERHADAP
KUALITAS DAGING AYAM LOKAL HASIL SILANGAN, BROILER
DAN LAYER AFKIR**

INTISARI

Nabila Yuwita Sari
21/475824/PPT/01158

Daging sebelum dikonsumsi perlu diolah dengan metode yang tepat untuk meminimalisir kandungan nutrisi yang hilang. Penelitian ini bertujuan untuk mengetahui pengaruh metode *moist heat cooking* yang berbeda terhadap kualitas daging ayam hasil silangan, broiler dan layer afkir. Penelitian ini menggunakan tiga jenis ayam yaitu ayam hasil silangan Murung Panggang dan KUB umur 10 minggu dengan bobot hidup rata-rata 1,2 kg sejumlah 15 ekor. Ayam ini berasal dari kandang Semanu Gunungkidul sebagai salah satu bangsa dari ayam Bulaksumur. Ayam broiler umur 35 minggu dengan berat 2,1 kg dari Saliman Farm, Yogyakarta sebanyak 15 ekor dan ayam layer afkir umur 96 minggu berat 1,9 kg yang diperoleh dari Berkat Karya Gemilang Farm Karanganyar Solo sebanyak 15 ekor. Ayam dipotong dengan metode halal, kemudian *diparting* dan *dideboning*. Sampel yang digunakan berupa daging dada sebesar 300 g tiap jenis ayam untuk uji kimia proksimat dan kolesterol sedangkan daging paha untuk uji fisik dan sensoris sebesar 300 g. Daging dikemas dengan plastik *vacuum embost* kemudian dimasak dengan metode perebusan (suhu 100°C ; 30 menit), pengukusan (suhu 90°C ; 30 menit) dan *pressure cooking* (suhu 110°C ; 30 menit). Sampel kemudian dihaluskan dan diuji sesuai kebutuhan. Variabel yang diamati berupa kualitas kimia meliputi kadar air, protein, lemak, abu, karbohidrat dan kolesterol daging. Kualitas fisik meliputi pH, daya ikat, susut masak dan keempukan. Nilai sensoris meliputi warna, aroma, tekstur, keempukan, rasa dan daya terima. Setiap metode pemasakan diulang sebanyak 5x ulangan. Data pengujian dianalisis menggunakan Rancangan Acak Lengkap pola faktorial 3x3 dan diolah menggunakan software *Statistical Package for Social Science* (SPSS) versi 26. Hasil analisis menunjukkan bahwa metode pemasakan berpengaruh nyata ($P < 0,05$) terhadap kadar protein, lemak, total kolesterol, susut masak, keempukan dan daya terima daging. Selain itu, jenis ayam juga berpengaruh nyata ($P < 0,05$) terhadap kadar protein, lemak, kolesterol, keempukan dan daya terima daging. Interaksi antara metode pemasakan dan jenis ayam berpengaruh nyata ($P < 0,05$) terhadap kadar protein, lemak, kolesterol, keempukan dan aroma daging. Hasil penelitian menunjukkan daging yang dimasak dengan metode presto memiliki keempukan yang rendah $1,90 \pm 0,72 \text{ kg/cm}^2$, rasa yang disukai panelis dengan skor $3,58 \pm 0,89$ dan kadar lemak rendah dengan nilai $1,82 \pm 0,75\%$. Jenis ayam silangan memiliki kadar protein cukup tinggi yakni $28,51 \pm 0,86\%$ dan keempukan rendah $2,16 \pm 0,89 \text{ kg/cm}^2$. Berdasarkan penelitian di atas maka ayam silangan yang dipresto memiliki kadar protein tinggi, lemak rendah serta keempukan dan rasa yang disukai panelis.

Kata kunci : Ayam silangan, Broiler, Layer afkir, Metode pemasakan, Kualitas daging

THE EFFECT OF VARIOUS MOIST HEAT COOKING ON QUALITY OF CROSS CHICKEN, BROILER AND LAYER CHICKEN MEAT

ABSTRACT

Nabila Yuwita Sari
21/475824/PPT/01158

Meat needs to be processed with the appropriate methods before consumption to minimize the loss of nutrients. This study aims to determine the effect of different moist heat cooking methods on the quality of crossbred chicken meat, including broilers and culled layers. The study involved three types of chickens: Murung Panggang and KUB crossbred chickens at 10 weeks old with an average slaughter weight of 1.2 kg, totaling 15 individuals. These chickens originated from Semanu Gunungkidul as one of the breeds of Bulaksumur chickens. There were also 15 broiler chickens at 35 weeks old, weighing 2.1 kg, obtained from Saliman Farm, Yogyakarta, and 15 culled layer chickens at 96 weeks old, weighing 1.9 kg, obtained from Berkas Karya Gemilang Farm in Karanganyar Solo. The chickens were slaughtered using halal methods, then divided and deboned. The samples used were 300 g of chicken breast meat for proximate chemical analysis and cholesterol, while 300 g of thigh meat was used for physical and sensory testing. The meat was vacuum-sealed in embossed plastic and cooked using boiling method (100°C; 30 minutes), steaming method (90°C; 30 minutes), and pressure cooking method (110°C; 30 minutes). The samples were then ground and tested as needed. The observed variables included the chemical quality, such as water content, protein, fat, ash, carbohydrates, and cholesterol of the meat. The physical quality included pH, water holding capacity, cooking loss, and tenderness. The sensory evaluation included color, aroma, texture, tenderness, taste, and overall acceptability. Each cooking method was repeated five times. The testing data were analyzed using a completely randomized design in a 3x3 factorial pattern and processed using the Statistical Package for Social Science (SPSS) software version 26. The analysis results showed that the cooking methods significantly influenced ($P < 0.05$) the protein content, fat content, total cholesterol, cooking loss, tenderness, and overall acceptability of the meat. Additionally, the chicken types also had a significant effect ($P < 0.05$) on the protein content, fat content, cholesterol, tenderness, and overall acceptability of the meat. The interaction between cooking methods and chicken types had a significant effect ($P < 0.05$) on the protein content, fat content, cholesterol, tenderness, and aroma of the meat. The research findings indicated that meat cooked using the pressure cooking method had low tenderness (1.90 ± 0.72 kg/cm²), was favored by the panelists with a score of 3.58 ± 0.89 for taste, and had low fat content ($1.82 \pm 0.75\%$). The crossbred chicken type had a relatively high protein content ($28.51 \pm 0.86\%$) and low tenderness (2.16 ± 0.89 kg/cm²). It could be concluded that, crossbred chickens cooked using the pressure cooking method had high protein content, low fat content, and both tenderness and taste preferred by the panelists.

Keywords: Cross chicken, Broiler, Layer, Cooking method, Meat quality