

PENGARUH PERBEDAAN TEMPERATUR DALAM PEMBUATAN TEPUNG DAGING HASIL IKUTAN PROSES *FLESHING* TERHADAP KECERNAAN PROTEIN *IN VITRO* DAN KOMPOSISI KIMIA

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh perbedaan temperatur pemanasan dalam pembuatan tepung daging hasil ikutan proses *fleshing* terhadap kecernaan protein *in vitro* dan komposisi kimianya. Tepung dibuat dari hasil ikutan proses *fleshing* penyamakan kulit domba yang telah dinetralkan lalu dicincang dan digiling dengan penggiling daging kemudian dipanaskan pada temperatur 70°C dengan panci terbuka, 100°C dengan panci tertutup dan 115,5°C dengan otoklaf. Kemudian jaringan dikeringkan dengan oven pada temperatur 60°C selama 12 jam lalu dihaluskan dengan penggiling daging terus dianalisis kecernaan protein *in vitro* dan komposisi kimianya. Rata-rata kecernaan protein *in vitro*, kadar air, kadar lemak, kadar protein dan kadar abu berturut-turut dari tepung yang dibuat tanpa pemanasan (temperatur 25°C), dengan temperatur pemanasan 70, 100 dan 115,5°C adalah sebagai berikut: Rata-rata kecernaan protein *in vitro* adalah 82,9, 88,9, 86,8 dan 93,5%. Rata-rata kadar air adalah 6,3, 5,4, 6,8 dan 6,8%. Rata-rata kadar lemak adalah 43,2, 31,8, 19,2 dan 27,6%. Rata-rata kadar protein adalah 35,7, 40,0, 48,7 dan 46,0%. Rata-rata kadar abu adalah 10,4, 12,9, 14,4 dan 12,6%. Kecernaan protein *in vitro* tertinggi diperoleh dengan temperatur pemanasan 115,5°C (93,5%), kadar air terendah diperoleh dengan temperatur pemanasan 70°C (5,4%), kadar lemak terendah diperoleh dengan temperatur pemanasan 100°C (19,2%), kadar protein tertinggi diperoleh dengan temperatur pemanasan 100°C (48,7%), kadar abu terendah diperoleh dengan tanpa pemanasan (temperatur 25°C) yaitu 10,4% ($P < 0,05$).

(Kata kunci: Penyamakan Kulit, Pemanasan, Tepung Daging Hasil Ikutan Proses *Fleshing*)

**THE EFFECT OF TEMPERATURE DIFFERENCE IN FLESH MEAL
MAKING ON IN VITRO DIGESTIBILITY OF PROTEIN AND
CHEMICAL COMPOSITION**

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ABSTRACT

This experiment was conducted to study effect of temperature difference in flesh meal making on its in vitro digestibility of protein and chemical composition. The meal was made of subcutaneous tissues of lamb's skin (flesh) which was produced by fleshing machine in tannery process. Flesh was cleaned, neutralized, ground then rendered at 70°C in opened basin, 100°C in closed one and 115,5°C in otoklaf. Futhermore, flesh was dried at 60°C for 12 hours then analyzed. The mean of in vitro digestibility of protein, moisture, content of fat, protein and ash for meal that wasn't rendered (25°C temperature), rendered with 70, 100 and 115°C respectively below: The means of in vitro digestibility of proteins were 82,9, 88,9, 86,8 and 93,5%; moisture were 6,3, 5,4, 6,8 and 6,8%; content of fats were 43,2, 31,8, 19,2 and 27,6%; content of proteins were 35,7, 40,0, 48,7 and 46,0%; content of ashes were 10,4, 12,9, 14,4 and 12,6%. The highest in vitro digestibility of protein was obtained at 115,5°C rendering (93,5%), the lowest moisture was obtained at 70°C rendering (5,4%), the lowest content of fat was obtained at 100°C rendering (19,2%), the highest content of protein was obtained at 100°C rendering (48,7%) and the lowest content of ash was obtained at meal that wasn't rendered (25°C temperature) at 10,4% ($P < 0,05$).

(Keywords: Tannery Process, Rendered, Flesh Meal)