CHEMICAL COMPOSITION OF MEAT FROM SLOW GROWTH POULTRIES WITH DIFFERENT SLAUGHTER AGES

COMPOSIÇÃO QUÍMICA DA CARNE DE AVES DE LINHAGEM DE CRESCIMENTO LENTO COM DIFERENTES IDADES DE ABATE

RODRIGO ALVES DE SOUZA[1*], CARLA CACHONI PIZZOLANTE[1], GUSTAVO CAMACHO PASCHOALIN[1], SADALA TFAILE[1], JULIANA LOLLI MALAGOLI DE MELLO[2], HIRASILVA BORBA[2], PEDRO ALVES DE SOUZA[2]

[1]Instituto de Zootecnia (IZ), Nova Odessa, SP, Brazil.
[2]Universidade Estadual Paulista "Júlio de Mesquita Filho" (UNESP), Faculdade de Ciências Agrárias e Veterinárias, Jaboticabal, SP, Brazil.
*e-mail: rodrigo.zootecnista@gmail.com

Spent birds are usually used in the industry to make processed foods. This occurs due to the advanced age of these birds and the small price per kilogram of them. As well, the consumer is not used to buy meat of spent birds, thinking that this meat has a lower quality then the commercial one, found at the markets. Today, in Brazil, white spent males are sold for R$ 0.55/kg and red ones for R$ 0.65/kg. According to these, the aim of this study was to compare the chemical composition of birds with the ideal age to slaughter and birds in a spent age. It was used the *Pectoralis major* muscle from ten deboned carcasses of slow growth lineage at the ideal age to slaughter (85 days) and ten of spent birds (70 weeks) obtained from a commercial slaughterhouse. After the slaughter and rigor mortis process, they were carried to the Laboratory of Animal Products Technology. The breasts were crushed in a compact industrial mill and the meat was placed (100g of average weight) in an aluminum pot (or aluminum lunch box). These pots were carried to a forced ventilation heater with temperature of 65ºC and took off 72 hours later. The dried meat was crushed again in a ball mill, the dusted meat placed in porcelain crucibles and carried to a new dry at 105ºC in other heater to determine the humidity percentage. After this process, 0.1g of the sample dried was weighed in triplets to total nitrogen (protein) and 3.0g (approximately) to ether extract (weighing the recipient before and after) determinations. The rest of the dust was carried to a 600ºC muffle that resulted, after 24 hours, the total ashes. For statistical analysis a completely randomized with two lineages in ten replications and the data submitted to analysis of variance and the means compared by Tukey test ($P<0.05$). It was found, that the meat from the birds with ideal age to slaughter presented significantly greater values in the ashes and protein and ether extract percentages. But, the spent age birds showed significantly lower value for the ether extract. It is advisable the consumption of spent age birds meat due to their acceptable nutritional values of protein and ether extract, even this last one being lower than the ideal age.

Table 1. Values of Humidity, Ashes, Protein and Ether Extract expressed in percentage

Age	Composition			
	Humidity (%)	Ashes (%)	Protein (%)	Ether Extract(%)
Ideal age to slaughter (85 days)	71.47	1.76 a	21.85 a	0.87 a
Spent Age (70 weeks)	71.75	1.09 b	19.41 b	0.18 b
P	0.45	<0.0001	<0.0001	<0.0001
CV	1.11	7.21	4.1	16.92

a, b - Means within a column with different letters differ.

Keywords: ideal age birds, nutritional values, spent birds.