

PHYSICAL-CHEMICAL CHARACTERISTICS OF "MORTADELA" ELABORATED WITH "BABY BUFFALO" MEAT AND FINE HERBS

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ABSTRACT

This work aimed to determine the physical-chemical characteristics of the "mortadela" elaborated with secondary cut of "baby buffalo", in Para State, Brazil. The product was elaborated through the meat (95%) triturated in "cutter" with bacon (5%). After that, was added condiments and fine herbs, mixing in "cutter" and carried out its inlaying, in manual inlayer, using artificial gut. Samples for the physical-chemical analyses (protein, lipid, humidity, ashes and caloric value) were removed. The "mortadela" presented excellent physical-chemical characteristics and is appropriated to consume and is alternative of income for the producer.

Key words: Amazon, by products, food technology, meat protein

INTRODUCTION

The buffalo is a docile animal, of easy handling and with great action in the meat production in the Amazon region coming, as an excellent source of meat obtaining for elaboration of sausages with low amounts of fat and reduced cholesterol (6). In Brazil, the consumption of built-in products has increased, being considered an amount around 45%. This change, is in function of an amplification of the market, that now is formed by a consuming public even more demanding with respect the better quality of the product, tendency that has being observed in several sections, from the most popular to the most sophisticated (6) In Para State, there are reduced the studies on the physical-chemistry characterization, as well as the formulation viability, elaboration, conservation and life of shelf of the products processed from the buffalo meat, such as "mortadela", objectifying transfer of technologies, what would allow to esteem the meat industry in Amazon (2). With the objective to evaluate the physical-chemistries characteristics of "mortadela" elaborated with secondary cuts of "baby" buffalo meat, coming of buffaloes created in cultivated pasture, seeking information about the quality that product, with consequent contribution for its economic valorization.

MATERIALS AND METHODS

For preparation of the "mortadela" (5) with fine herbs was used 3 kg of "baby buffalo" meat, using a secondary cut. The meat (95%) was triturated in "cutter", for one minute, with bacon (5%). After that, in the preparation was added salt (1%), condiment for "mortadela" (1%), krakoline E (0.35%), other additives (1%) and water (2.5%). After the absorb of the water, was added carragene (0.6%) and more water (2.5%). Later, was mixing in "cutter" the rest of ingredients: hungarian power (0.35%), fixed A-80 (0.25%), garlic (0.3%), paprika (0.5%), white pepper (0.2%) and fine herbs (0,25%), until it reaches the aspect calls wanted, and carried out its inlaying, in manual inlayer, using artificial gut. After that, it was taken to cure in vertical refrigerator for one hour. The cooking of the product was made in oven beginning with 60°C for one hour and finishing with 90°C for approximately more one hour. The product was cold in water during approximately 30 minutes, until reaching an internal temperature of 27°C. After the cooling the product was vacuum packed and kept in refrigerator (5°C) (Figure 1). The physical-chemistry analyses took place in the Laboratory of Chemical Engineering of the Federal University of Para State - UFPA, in Belem, Para State, Brazil (1).

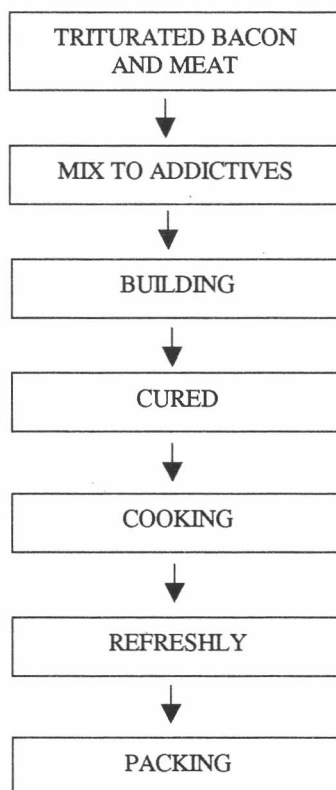


Figure 1. Flux for fabrication of “mortadella” with fine herbs.

RESULTS AND DISCUSSION

The results of the analysis of the humidity, lipid, protein, ash, carbohydrate and caloric value of the “mortadella” with fine herbs are in the Table 1.

Table 1 - Physical-chemistry composition and valuable calories of “mortadella” with fine herbs.

Parameter	Average	Marker A	Maker B	Maker C
Humidity (%)	66.00	54.69	61.39	52.49
Lipid (%)	4.61	23.56	16.34	25.24
Protein (%)	21.21	12.82	14.25	12.94
Ash (%)	4.0	-	-	-
Carbohydrate (%)	4.18	-	-	-
Caloric value (cal)	143.05	-	-	-

The results obtained were compared with the literature (4), whose the analyses were made in “mortadela”s of three different markers (A, B and C). It was observed that in the analyzed product the humidity and protein is 66% and 21,21%, respectively, therefore, it is higher than the one of B producer, and lower fat than A, B and C producer, that was 4,61% (4). In the literature (3), in agreement with the legislation of food of United States, the products can be labeled as "low fat" or "lean" when they contain in the maximum 10% of fat, and the "extra-lean", at the most 5% of fat, considered an extra-lean product, being therefore feasible for reduction of cardiovascular diseases of the population. The secondary cut of "baby buffalo" meat, is a great alternative in the elaboration of “mortadella” and others meat derived joining value to that cut, fact checked by its excellent physical-chemistries characteristics, turning capable this product to be industrialized, being constituted an alternative of generation of income for the producer.

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