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**SENSORY EVALUATION AND COOKING PROPERTIES OF MACARONI AT
BASIS OF BRAZIL NUT (BERTHOLETIA EXCELSA) AND PEACH PALM FRUIT
(BACTRIS GASIPASES, KUNTH) FLOURS**

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Resumo:

The Brazil nut tree, *Bertholletia excelsa* HBK, is explored throughout the Amazon region and its main characteristic is high content of lipids and proteins, they consist of sulfur amino acids of high biological value.

The peach palm, *Bactris gasipases*, Kunth, is a native palm to the same region, that is grown for heart-of-palm extraction.

Their fruits are mostly protein, vitamin A and fiber. The way of adding commercial value from co-products to Brazil nut processing is flour production. That way the Brazil nut flour, for its high nutritional value and pleasant taste was used in macaroni production, along with peach palm fruit flour to improve the nutritional properties of final product.

The macaroni preparation was based on 52.09% of wheat flour, 13.89% Brazil nut flour and 3.48% of peach palm fruit flour.

We also used 1.73% of vegetable fat, 24.30% water and 4.51% of fresh eggs. The product was dried for six hours at 55 ° C, and within 30 minutes initial no heating promotion. We evaluated the cooking time, increased volume and weight of the macaroni. After two days were tested for cooking time and sensorial analysis of the macaroni at Embrapa Acre. The cooking time was monitored until al dente pasta present point, for tests of increased volume and weight the macaroni were weighed and measured before and after cooking.

The acceptance of the macaroni was performed with 30 untrained panelists, aged 18-60 years old. The macaroni were cooked with salt and water and served to panelists. To evaluate the acceptability of the final product was used chips with 9-point hedonic scale (1 = extremely dislike and 9 = like extremely).

The cooking time of macaroni mixed was sixteen minutes, being higher than the cooking time of macaroni business, which ranges 8-10 minutes.

The parameters of weight gain and volume are related to the absorption capacity of water macaroni and depend on the format of them.

The macaroni mixed obtained an increase of 123% satisfactory result because the value set for macaroni with wheat flour is 100% and ideal values are between 160% and 180%.

Regarding to volume indices between 200% and 300% are considered adequate, however the macaroni of the Brazil nut and peach palm fruit increased by 140%.

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For sensory analysis, the average scores assigned by panelists were divided by the maximum score (9) expressed as a percentage.

The macaroni mixed obtained acceptance of 79.22% and is considered an medium-high acceptable range by panelists.

Of these, only 3.33% said the product to be indifferent. The sensory evaluation of the macaroni after cooking shows that the product has good acceptance and can be set as an alternative product.

The macaroni mixed had technological characteristics, making it capable of industrialization and with good acceptability.