TITLE: EVALUATION OF THE MICROBIOLOGICAL QUALITY OF FRUIT PULPES MARKETED IN THE MUNICIPALITY OF VÁRZEA GRANDE-MT

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ABSTRACT: In fact, there is a growing search for natural products or from fresh products, due to the health benefits. In view of a promising market, Brazil has been outstanding in the production of fruit, being considered the 3rd largest producer in the world, having as one of the purposes the production of fruit pulps. Thus, this study aimed to evaluate the microbiological quality of fruit pulps marketed in the city of Várzea Grande-MT. Samples were obtained from different commercial place from April to July 2016. Savings of 6 flavors (cashew, passion fruit, guava, acerola, strawberry and grape) from 4 different brands were analyzed. The samples were analyzed for the presence of total coliforms and Escherichia coli, using the chromogenic / fluorogenic substrate method and heterotrophic bacteria by the spraed plating method. The results were satisfactory for total coliforms and Escherichia coli, in contrast heterotrophic bacteria was evidenced in all samples analyzed, however, it is noteworthy that in some brands the growth was less than 1 log CFU. mL-1. The highest contamination index was detected in the C mark, corresponding to 83.33% of the analyzed pulps, with the highest concentration in passion fruit pulp (4.47 log CFU . mL<sup>-1</sup>) and lowest in the cashew pulp (2 log CFU . mL<sup>-1</sup>). In the acerola, grape and cashew pulps the growth was less than 1 log CFU. mL-1 in the A brand, in the other pulps the index was higher than 2.77 log CFU. mL<sup>-1</sup>. The presence of heterotrophic bacteria evidences failures in the handling, transport and conservation of these products, alerting to precarious sanitary hygienic conditions.

Keywords: natural products, food hygiene, public health