TITLE: EVALUATION OF THE PROBIOTIC POTENTIAL OF THE PEQUI

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ABSTRACT:

The Cerrado is the second largest biome in Brazil and presents a great diversity of vegetable species that produce fruits that are regularly consumed by local populations. Several researches have been done to identify the bioactive compounds and to prove the functional properties, which includes the fruits of the cerrado. Pequi (Caryocar brasiliense) is a typical species of this biome and has great economic interest, mainly due to its use in cooking. Considering that the fruits are substrates that are favorable for the development of microorganisms due to the high content of simple sugars and the low pH, the objective was to evaluate the Lactobacillus probiotic potential of Pequi in natura. The Pequi samples were collected in the city of Hidrolândia / GO in November 2018 and sent to the Laboratory of Hygiene Sanitary Control of Food of the Faculty of Nutrition of the Federal University of Goiás to perform hygiene, separation (exocarp, external mesocarp and internal mesocarp) and microbiological analyzes. The microbiological protocol included the identification of *Lactobacillus*, and the satisfactory standard adopted in the study was the presence of these microorganisms, since they are considered beneficial to health. Although the three parts of the fruit have potentially probiotic activity, it was identified that the presentation of the morphological characteristics of the bacteria under study was more present in the internal mesocarp. This demonstrates that Pequi can be considered as an alternative source of probiotic bacteria, which are responsible for conferring benefits to the population, since they modulate the intestinal microbiota, strengthen the immune system, reduce lactose intolerance, and, the regional culture. It is very important future analysis for the identification of the genome, the tolerances conditions to the gastrointestinal tract and to determine the recommended portion for consumption.

Keywords: Lactobacillus, microbiota, fruits of the cerrado

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