

TITLE: EVALUATION OF THE MICROBIOLOGICAL QUALITY OF AÇAÍ - GRANOLA MIXTURES

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ABSTRACT:

The açai with its main mix of granola has been commercialized by the majority of the Brazilian population. The productive chain of the açai is very deficient in hygienic aspects since the fruit harvest, ranging from its transport, storage and processing. The fruit has a high microbial load associated to it, which added to the enzymatic activity of vegetables and pH values around 5.0, leads it to be preserved frozen. The granola, resulting from the mixing of cereals, seeds, nuts and sugar, is also subject to the development of microorganisms. Among the most important parameters that determine food quality, there are those that define their microbiological characteristics. The objective of this study was to evaluate the microbiological quality of different samples of açai and granola pulp, and to compare the results with the current Brazilian legislation RDC No. 12 of January 2, 2001. For this purpose, it was determined Coliforms at 45 ° C / g, *Salmonella* sp / 25g, Staphylococcus Coagulase Positive / g, *Bacillus cereus* / g, molds and yeasts / g of 5 samples of açai pulp and 2 of granola combined. The results showed that the presence of Coliforms at 45 ° C / g was way below the allowed limit and that there was no *Salmonella* sp / 25g in the samples analyzed. Although there was the presence of *Staphylococcus aureus* in all the samples studied, these are not confirmed as pathogenic species. Regarding to the *Bacillus cereus*, the results were higher than the current legislation. In the quantification of molds and yeasts, these are shown in all samples, although the legislation does not refer to these microorganisms. The results for *Bacillus cereus* that are out of the standard level recommended by legislation and the presence of *Staphylococcus aureus*, mold and yeast in high levels may be an indicative of improper practices during the manufacture process of açai and granola. Thus, it is important to remind the need for more rigorous control in the production of these foods, since these microorganisms might be responsible for the deterioration of the products and a possible food poisoning.

Keywords: açai, granola, quality assessment, microbiological analysis.

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