

**Title: SANITARY AND MICROBIAL EVALUATION OF CANS OF SODAS AND BEERS COMMERCIALIZED IN FORTALEZA/CE.**

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**Abstract:**

The access to food and drinks in versatile and easy to use package favoring immediate consumption, provides practicality and convenience to consumers. The consumption of beverages in aluminum cans might be a vehicle of many pathogenic microorganisms, by direct contact with the mouth of the packaging, leaving the consumer susceptible to viruses, bacteria and parasites, which constitutes a high health risk for the possibility of the occurrence of foodborne illness. Based on these considerations, this study aims to evaluate the microbiological and sanitary conditions of cans of soft drinks and beers commercialized in Fortaleza/CE. We evaluated aerobic mesophilic and psychrophile microorganisms in 21 (twenty one) samples of beers and soft drinks, sold and collected randomly at convenience stores of gas stations, restaurants and street vendors. The area used for the collection and analysis of microorganisms was the region that comes into contact with the consumer's mouth and the collection procedure took place before and after sanitization procedure (immersion in hypochlorite solution 100 ppm / 15 min). Before the sanitization, it was found the mesophilic growth of six samples with values ranging from  $1.0 \times 10^3$  to  $5.4 \times 10^3$  UFC/mL. Furthermore, the presence of psychrophilic microorganisms in samples tested was not detected, which does not rule out the risk of contamination of the consumer drinking directly from the can without prior sanitize it. After the sanitizing procedure, it was observed that there was no microbial growth for the studied microorganisms groups, which demonstrates the efficiency of the procedure and reducing the risk to health. In general, it is observed that microbial growth found was low, and one of the factors that may be associated with this fact can be the antimicrobial action presented by the type of material used in the manufacture of packaging, aluminum. Given the above, it is clear that the surfaces of the cans, which come into direct contact with the consumer's mouth, and that are not sanitized, have microorganisms, which, despite being in low amounts, can pose risks to consumer's health. However, it became clear efficacy of sanitizing procedure, since it was observed a significant reduction in microbial load, making cans capable of being used.

**Keywords:** psychrophile, mesophilic, cans, sanitizing.

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