

**TITLE:** MICROBIOLOGICAL QUALITY ASSESSMENT OF FRESH SHRIMPS (MACROBRACHIUM AMAZONICUM - HELLER, 1862) MARKETED IN FREE FAIRS OF MACAPÁ, STATE OF AMAPÁ

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**ABSTRACT:**

The Amazon Shrimp (*Macrobrachium amazonicum* - Heller, 1862) is one of the most important species in the fish trade of the state of Amapá, being the main local protein source. However, their quality is impaired due to the conditions they undergo during the commercialization process, which favor the proliferation of bacteria since the high protein content of this type of food, potentializing bacterial growth. The objective of this study was to evaluate the quality of fresh shrimp with barks, marketed in five Macapá-AP fairs and their relevance in Public Health according to the microbiological parameters recommended in ANVISA's Ordinance No. 12/2001, which stipulates *Salmonella spp.*, *Escherichia coli* and *Staphylococcus* coagulase positive as indicators of quality. A total of 40 shrimp samples containing 100g were analyzed, with eight samples from each market. The analyzes were carried out in the Central Laboratory of Public Health of Amapá (LACEN-AP) and in the Special Laboratory of Applied Microbiology (LEMA) of UNIFAP. The shrimp were packed in ice-cold boxes in sterile polystyrene bags and transported to the laboratory for analysis. Cultures were performed according to the protocols described by the American Public Health Association in its Compendium of methods for the microbiological examination of foods. 4th ed. 2001 and its adaptations described in the standard operating procedures of the participating laboratories: LACEN-AP and LEMA - UNIFAP. The results revealed that no bacteria of the genus *Staphylococcus* were identified, but 22.5% of the samples contained *E. coli* and 15% *Salmonella spp.* In this way it has been shown that there are risks of acquiring foodborne diseases when consuming these products. This situation is probably due to hygienic and sanitary conditions such as: inadequate transport, handling without the use of gloves, direct exposure to the environment with high temperatures without conditioning in a refrigerated place, besides the presence of many insects in the place of Sale, which serve as vectors in bacterial propagations. This data contributes to the promotion of the exchange between epidemiological and sanitary surveillance, allowing the monitoring of clinical, environmental and food aspects, helping to defend against endemic and epidemic diseases carried by food, which are very frequent in the northern region of Brazil.

**Keywords:** Shrimp; hygienic and sanitary conditions; indicators of quality; Public Health.

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