

**TITLE:** MICROBIOLOGY OF HIGH-RISK FOOD TREATED THERMICALLY SOLD AT THE CITY OF CORONEL OVIEDO, CAAGUAZU, PARAGUAY (2015 - 2106).

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**ABSTRACT:**

Microbiological analyzes of food constitute an essential component for assessing the safety of food. The objective is to describe the microbiological contamination of heat-treated high-risk foods sold in the city of Coronel Oviedo, Caaguazú, Paraguay (2015-2016). It is a descriptive, prospective and cross-sectional study. The gastronomic services of the City of Cnel. Oviedo were registered, and they were classified in high, medium and low epidemiological risk. A simple random sampling was performed and food was taken for microbiological analysis. Counts were made for Aerobes Mesofilos (APC) and *S. aureus* by the PETRIFILM technique. Total coliforms, fecal coliforms and *E. coli* by the Most Probable Number (NMP) technique. The pathogen analyzed was *Salmonella* spp. The microbiological limit was given by the Sanitary Standard of the Ministry of Health of Peru "*Sanitary Standard that establishes the microbiological criteria of sanitary quality and safety for foods and drinks of human consumption*" RM N ° 615 - 2003 SA / DM). 177 establishments were registered and georeferenced and 77 sites were sampled. 48 samples with thermal treatment were analyzed. 72.9% (35) met the APC and 37.5% (18) met the *S. aureus* count. The 27.1% (20) complied with the Sanitary Standard for Total Coliforms, 33.3% (16) for *E. coli*. *Salmonella* spp. was not isolated. The foods with the highest risk were empanadas and hamburgers, which presented values as established in the legislation for APC, *S. aureus*, C. Totales, and *E. coli*. The analyzed samples presented high values for the indicator of microorganisms, so it is necessary to insist on improving the food handling practices.

**Keywords:** food, risk, pollution, Caaguazu, Paraguay

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