

TITLE: TOTAL COLIFORMS AND THERMOTOLERANTS IN SALMON BASED SUSHI AND SASHIMI COMMERCIALIZED IN THE CITY OF RIO DE JANEIRO, BRAZIL.

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ABSTRACT

The Japanese gastronomy has expanded worldwide, having in Brazil great ease of acceptance, being found in specialized, unskilled and street markets establishments. However, the hygienic-sanitary conditions of these establishments can be decisive for the quality of these foods, since they are subjected to constant manipulation and are consumed raw, characterizing a risk to the health of the consumer, from the microbiological point of view. The present study aimed to analyze the microbiological quality of sushi and salmon sashimi, commercialized in a restaurant specialized in oriental cuisine and in a street market in the city of Rio de Janeiro. Was considered the preparation of raw fish, marketed at two collection sites, one is an establishment specializing in Japanese cuisine and another a public street fair. For analysis, samples of sushi (7 units) and samples of sashimi (20 units), both based on raw salmon, were collected. The group of total coliforms and the group of thermotolerant coliforms (coliforms at 45°C) were investigated. The analysis of total and thermotolerant coliforms was performed according to the APHA, NMP method, as described by Silva et al (2010). The results obtained from the analysis of sashimi and sushi from both the establishment and the street fair were contaminated with total coliforms (in the establishment it was not possible to count for the large number of colonies and in the fair was found the contamination 1.1×10^3 NMP.g⁻¹ and thermotolerant (in the establishment indicated $1,26 \times 10^3$ NMP.g⁻¹ and at the fair 7×10^6 NMP.g⁻¹ above that recommended by the RDC legislation nº 12/2001, which recommends as standard for coliforms at 45°C / g (thermotolerant) to 10^2 NMP.g⁻¹ as a tolerable limit according to Sato (2013), the presence of these microorganisms in food is indicative of fecal contamination. Only 6 were unfit for consumption. The analyzed samples were considered under unsatisfactory sanitary conditions according to the prevailing legislation. More studies should be done in order to evaluate the conditions of manipulation of these raw fish preparations in order to monitor the contamination caused during the handling of these foods.

Keywords: sushi, sashimi, fecal coliforms, thermotolerant coliforms