

**Título: MICROBIOLOGICAL QUALITY OF ORGANIC FRUITS AND VEGETABLES SOLD IN STREET MARKETS LOCATED IN METROPOLITAN REGION OF VITÓRIA-ES**

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**Resumo:**

Organic foods are defined as those foods raw or processed that are derived from an organic system of agricultural production. Due to differently cultivation, the organic product can be exposed to microbiological contamination, since the organic fertilizer usually consist manure, and this material may have pathogens such as *Salmonella* spp. The aim of this study was to evaluate the microbiological quality of organic fruits and vegetables sold in two fairs located in metropolitan region of Vitória-ES. The samples of fruits and vegetables were collected in street markets of organic products located in Serra-ES and Vitória-ES. The collection of fruits and vegetables was held at the time of marketing products and then were transported in cool boxes to the lab. The samples were kept at 7 ° C ± 1 ° C for maximum 24 h until the time of analysis. 16 samples were collected and these were submitted to the following analyzes: count of aerobic mesophilic, moulds and yeast, the determination of the Most Probable Number (MPN) of total and fecal coliforms and *Salmonella* spp. The procedures used were performed according to the method of the American Public Health Association described in the Compendium of Methods for the Microbiological Examination of Foods. The mesophilic aerobic bacteria count in the samples ranged from 4,1 to 7,7 log CFU/g, while foods with higher counts were cherry-tomatoes (7,7 log CFU/g) and watercress (7,4 log CFU/g). For yeasts and molds the count ranged 4,0 to 6,0 log CFU/g. In fruits, the coliform count at 35 ° C ranged from 23 to 9.3 x 10<sup>2</sup> MPN/g. Thus, attended the current legislation. For vegetables, the coliform at 35 °C count ranged from <3 to> 1.1 x 10<sup>3</sup> MPN/g. Coliforms at 45 °C were not found in samples of fruits. The coliforms at 45 ° C were found in chives (3,6 MPN/g), basil (6,1 MPN/g) and parsley (1,2 x 10<sup>2</sup> MPN/g), wherein the last mentioned is in disagreement with of current legislation and therefore unsuitable for consumption. *Salmonella* sp. was detected in the parsley sample, which is in disagreement with the required by current Brazilian law. Although 93.75 % of the samples in accordance with current microbiological standards, emphasizes the importance of controlling sources of contamination, from the field to the marketing of food.

**Palavras Chave:** food quality, organic food, *Salmonella*.

**Agência Fomento:** FAPES