

TITLE: MICROBIOLOGICAL QUALITY OF INFANT FORMULAS FROM HOSPITAL LACTARIES IN THE CITY OF SALVADOR-BA

AUTHORS: NASCIMENTO, J.C.N.; VILAS BOAS, D.M.; LEITE, C.C.; GUIMARÃES, A.G.; SCHMIDT, C.A.

INSTITUTION: UNIVERSIDADE FEDERAL DA BAHIA – FACULDADE DE FARMÁCIA – LABORATÓRIO DE MICROBIOLOGIA DE ALIMENTOS, SALVADOR- BA (RUA BARÃO DE JEREMOABO, S/N, CAMPUS UNIVERSITÁRIO DE ONDINA, SALA 317, CEP: 40170-115 – BA, BRASIL)

ABSTRACT:

Food in sufficient quantity to cover the basic nutritional needs, and with hygienic-sanitary quality, it is indispensable for the promotion of the human healthy. In hospitals, the supply of nutrients is part of the recovery and treatment of hospitalized patients, especially premature newborns. Due to the importance of dairy food as a coadjuvant or as a basic therapeutic measure for infant feeding in hospitals, it is fundamental to offer safe products, since foodborne diseases can also occur in hospital environments. In this study were evaluated the microbiological contaminants in 130 samples of infant formulas offered in pediatric units of two public and two private hospitals in the city of Salvador, Bahia. The samples, analysed in the Laboratory of Food Microbiology of the Faculty of Pharmacy, UFBA, were submitted to the most probable number (NMP) test for coliforms at 35°C and 45°C; coagulase positive *Staphylococcus* and *Bacillus cereus* counting, as well as, tested for *Salmonella*, according the methodologies described in the American Public Health Association (APHA 2001). The quality parameters recommended by the RDC No. 12/2001, from the National Ministry of Health were used as reference. The results showed that three samples (2.3%) presented results above the limits allowed by the current legislation, being not suitable for human consumption because they presented coliforms at 35°C, coliforms at 45°C and coagulase positive *Staphylococcus*. Two of these samples came from hospitals of the public network and one came from the private hospital. No counts were observed for *Bacillus cereus*, and the presence of *Salmonella* was negative in all samples evaluated. Therefore, it can be concluded that the microbiological quality of infant formulas offered in the hospital lactaries evaluated was unsatisfactory, since these patients have low immunity and consequently high susceptibility to foodborne diseases. These results indicate the possible occurrence of contamination during preparation of the formulations and/or their exposure to inadequate temperature conditions of storage for a prolonged period, showing the need for more efficient control procedures to guarantee the quality of the final product, in order to provide safe food for these patients.

Keywords: Food diary, hospital lactaries, microbiological quality.