MICROBIOLOGICAL QUALITY OF VEGETABLES AND SPROUTS SOLD IN BRAZIL

Ginani, V. C.¹
Maldonade, I. R.²
Machado, E.R.³
Santos, L.V.⁴
Vidigal, M.D.⁴
Paiva, J.F.F.⁴
Riquette, R.F.R.⁴
Barros, L.S.⁴
Leandro, E. S.¹

¹Faculdade de Ciências da Saúde - Departamento de Nutrição - Universidade de Brasília ²Hortaliças, Laboratório de Ciência e Tecnologia de Alimentos / EMBRAPA ³Parasitologia / UNB - Faculdade de Medicina - Universidade de Brasília ⁴Nutrição - Faculdade de Ciências da Saúde - Universidade de Brasília

Categoria de apresentação | Presentation type:

Pôster

Eixo temático | Track category:

Microbiologia de Alimentos (MI)

Palavras-chave | Keywords:

Fresh produce Ready-to-eat vegetables food microbiology

Resumo (Texto Científico) - Máximo 300 palavras | Abstract (Scientific Text) - (Maximum 300 words):

Food consumption "in nature" or fresh, as in the case of vegetables, has been valued and disseminated throughout the world for being recognized as an important source of nutrients. However, when not properly cleaned can cause major diseases. In order to evaluate the microbiological quality in vegetables and sprouts consumed in Brazil, microbiological tests were performed on 559 samples distributed in butterhead lettuce (9.3%), iceberg head lettuce (1.8%), red lettuce (13.0%), curly lettuce (13.6%), cabbage (6.6%), spinach (3.6 %), chicory (0.7%), watercress (0.4%), arugula (4.3%), green leafy spices such as basil, parsley, coriander, mint and chives (43.0%) and bean sprouts and alfalfa (3.6%). We analyzed both minimally processed vegetables (MPV) (38.5%) as marketed to be sanitized by the consumer (61.5%) coming from the Midwest (58.1%), Southeast (13.7%), North (10.9%), South (14.8 %) and Northeast (2.5%) of Brazil and marketed in retail and wholesale. The level of contamination by Total and Thermotolerant Coliforms was detected by the technique of the Most Probable Number (MPN) (APHA). The results showed 70.0% had unacceptable levels of Thermotolerant Coliforms in accordance with Brazilian law, with 30.2% of sample units MPV. Regarding to the Total Coliforms, 62.2% had levels equal to 1.1x103 MNP / g, with 30.2% of sample units MPV, possibly indicating lack of hygiene at some stage in the production chain. The results suggest the need for educational measures to ensure that effective techniques of vegetable hygiene are adopted by consumers, even for the MPV.

Órgão de fomento e número do processo | Funding agency and case number:

CNPq - 403368/2012-0