Evaluation of contamination to *Listeria monocytogenes* in raw milks by using impedance–splitting technique in comparing with reference method

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*Listeria monocytogenes* has been known one of the causes of food infections in recent decades around the world wild. As the listeriosis is given special attention due to the unique and changing concept of zoonoses, Investigation of raw milks was considered using impedance-splitting method and comparing the obtained results by conventional standard reference methods. Totally 200 samples of raw milk were collected from the Ahvaz area in Khouzestan province in south west of Iran and investigated for *listeria* spp. Samples were cultured on *listeria* selective agar, after primary enrichment in *listeria* enrichment broth according to conventional standard reference method. Also in the same time, the specific impedance tubes containing *listeria* selective impedance medium (Bimedia 403 A) were inoculated by enriched samples in Premedia 403 A. The Bactrac 4300 microbial analyzer device which used in this method was calibrated with electrode value (E-Value) and adjusted for 40 hours with 15 millivolts threshold limit. The prepared inoculated impedance tubes were evaluated and finally the positive results were confirmed by differential tests. According to the obtained results of reference and impedance methods, 9 (4.5%) and 8 (4%) of samples were contaminated to *Listeria* spp. respectively. The biochemical differential tests showed the *Listeria monocytogenes, Listeria innocua* and *Listeria ivanovi* in 5, 3 and 1 samples respectively. In statistical analysis, no significant difference was showed between two methods (P>0.05). The obtained results mean that the supplying raw milks could be a potential threat for consumers form the aspect of transmission and distribution of listeriosis