Phenotypic and Genotypic characterization of Staphylococcus aureus isolated from food industry workers

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S.aureus is one of the most important species concerning food safety, being considered for long time a public health hazard. It can colonise the skin and the nasal cavity of the normal population; up to 20% carry S. aureus in their nose, with no symptoms and are considered to be colonized (1,2,3). The presence of S. aureus in foods is often due to cross-contamination from food handlers. Moreover, S. aureus food poisoning outbreaks caused by the consumption of processed foods are in many situations caused by post-processing contamination by foods handlers who carry enterotoxigenic staphylococci in their nares or in their skin.

In the last decades, the percentage of infections caused by methicillinresistant *S. aureus* (MRSA) has increased worldwide (3). Moreover, MRSA isolates that are resistant to other antibiotics i.e. vancomycin are emerging(4).

The main objective of the present work was to evaluate the presence of *Staphylococcus aureus* in the nose and in the hands of 162 food industry workers. Isolates of *S. aureus* were characterized according to i) the presence of some virulence factors and ii) the susceptibility to antibiotics.