Rapid checks on sanitized surfaces ensure microbial-free food processing in industry

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Abstract. An effective monitoring of microbial contamination on surfaces and plant components is of fundamental importance in food industry, refectories and work canteens to ensure products quality and safety. The classic microbiological tests inform about the sanitization procedures effectiveness at least after 1-2 days, the rapid luminescent ATP assay after about 5 minutes, on site. In this study the presence of microorganisms at High Quality production line and worker's canteen of a dairy industry has been investigated. Plates count and the ATP assay have been performed in parallel. The data obtained from the two methods resulted in good agreement, indicating the rapid ATP test as a simple but reliable tool to verify immediately the effectiveness of the sanitization treatment, directly by the personnel involved in the cleaning activities. The final results showed that a good sanitation treatment allows the maintenance of satisfying hygiene conditions all weekend long.

Keywords: Microclimatic parameters, microbial contamination, ATP luminescent assay, food industry.

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