

Rapid Detection of Allergens – ELISA - LFD – PCR

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Several analytical methods have been developed for rapid detection of allergens and gluten analysis. Many methods are antibody based - Enzyme Linked Immunosorbent assay (ELISA), which are rapid, sensitive and selective, generally cost-effective and suitable as field-portable, semi-quantitative methods or as quantitative laboratory methods. Many methods are capable for automation. Several lateral flow devices (LFD) for rapid, quantitative detection of allergens have been introduced recently. The LFDs are simple, easy to use and do not require equipment and allow qualitative detection of traces of allergens in raw material, processed foods or food contact surfaces. Also, the Polymerase Chain (PCR) based assays are becoming increasingly available for food industry applications. This presentation will focus on the principles and applications as well as advantages and limitations of these tests.

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