



# Affinity Biosensors for Detection of Mycotoxins in Food

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## Abstract

This chapter reviews recent achievements in methods of detection of mycotoxins in food. Special focus is on the biosensor technology that utilizes antibodies and nucleic acid aptamers as receptors. Development of biosensors is based on the immobilization of antibodies or aptamers onto various conventional supports like gold layer, but also on nanomaterials such as graphene oxide, carbon nanotubes, and quantum dots that provide an effective platform for achieving high sensitivity of detection using various physical methods, including electrochemical, mass sensitive, and optical. The biosensors developed so far demonstrate high sensitivity typically in subnanomolar limit of