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> ملخصات البحوث ABSTRACT

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## INDOOR ENVIRONMENT:HEALTH RISK FACTORS IN BRONCHIAL ASTHMA

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## ABSTRACT:

Apart from exposure to air pollutants such as NO, NO $_2$ , CO & CO $_2$ , tobacco smoke and Radon, indoor environment can be more complexed and complicated in relation to source, production and exposure to a variety of antigenic and allergenic particles, proteins and toxins. These bioaerosols and biopollutants may include microbial cells, their reproductive units and metabolites, that are small enough or volatile to achieve aerial dissemination. Amongst these the sensitizing or allergenic agents which are generally > 3-20 m in diameter may play an important role in bronchial asthma.

Concentrations of house dust mites,  $Dermatophagoides\ pteronyssinus$ , ( $Der\ p\ 1$ )  $D.\ farinae\ (Der\ f\ 1$  and  $Der\ f\ II$ ) and household pet origin materials such as cat saliva and dander ( $Fel\ d\ I$ ), cockroach faecal particles. ( $Per\ a\ I$ ), and a number of fungal spores particularly  $Alternaria\ (Alt\ a\ I)$   $Aspergillus\ (Asp\ f\ I)$  species, can contribute to development of bronchial asthma in both children and adults. The impact of indoor environment on human health constitute a serious health risk and need more attention as regards to both short term and long term health effect. A short review including detection of House dust mite and other pet origin allergen and their role in sensitization and development of bronchial asthma in Saudi Arabia is presented.