

# Impact of Physical Activity on Exercise Induced Asthma with a Focus on Possible Allergies in Young Athletes: An Overview

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## Abstract

This study explores the impact of physical activity on exercise-induced asthma (EIA) with a particular focus on potential allergens affecting young athletes. Physical activity is widely recognized for its health benefits; however, it can also exacerbate respiratory conditions, especially during endurance sports, as suggested in recent studies. Exercise-induced asthma, characterized by bronchial obstruction post-physical activity, affects the lungs by declining their function. In many cases, this type of asthma is associated with individuals who already suffer from the disease. Various theories explain the causes of EIA, including mediator

release from mast cells, osmotic theory, inflammatory responses, and neurogenic origins. It has been shown that endurance athletes are at an increased risk of developing asthma, emphasizing the need for effective diagnosis and management strategies. Exercise-induced asthma, representing an important problem for both recreational and competitive athletes, poses significant challenges for athletes, affecting their performance, health, and quality of life. However, there are studies supporting that when organized exercise, mainly on a recreational level, takes place, athletes and other individuals may experience many

health advantages.

Sensitization to environmental allergens further complicates the condition, making it crucial to understand and monitor these risk factors. This study aims to compile and present the main causes of EIA in young athletes to aid researchers in developing rapid diagnostic and treatment strategies. The findings underscore the importance of balancing physical activity's health benefits with the risks it poses to individuals with underlying respiratory conditions.

**Keywords:** Asthma, Athletes, Exercise-induced asthma, Allergies, Respiratory health