

Exploring the Landscape of Alertness-Enhancing Drugs: A Contemporary Review

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Abstract: *This review paper explores the multifaceted concept of alertness, encompassing its diverse meanings, connections with wakefulness, general mechanisms of action of alertness-producing drugs. Alertness spans a continuum from heightened vigilance to a state of overall readiness, and its nuanced interpretations are examined across various disciplines, neurobiology. The paper critically analyzes the existing literature on alertness-producing drugs, ranging from traditional stimulants like caffeine to modern pharmaceuticals like modafinil. The mechanisms of action, efficacy, and potential side effects associated with these drugs are scrutinized. Additionally, natural compounds and herbal remedies acknowledged for their impact on alertness are explored. The review delves into the interplay between alertness and wakefulness, shedding light on their connections and distinctions. By synthesizing knowledge from theoretical frameworks to practical applications, this review serves as a comprehensive resource for researcher and individuals interested in the multifaceted nature of alertness and the pharmacological tools available for its modulation*

Keywords: Alertness, Caffeine, Modafinil, Vigilance, Wakefulness

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