

Active Meditation : Integrating Physical Activity and Mindfulness for Cardiovascular and Mental Health

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Abstract

Active meditation, defined as the practice of mindfulness during walking or light running, represents a promising integrative strategy for promoting both cardiovascular and mental health. While physical activity and mindfulness meditation have robust individual evidence bases, their combination remains underexplored. Recent findings including a systematic review identifying improvements in blood pressure, functional capacity and inflammatory markers in addition to anxiety reduction support the potential of mindfulness and physical activity. Experimental studies have shown that walking or running with attentional focus enhances exercise enjoyment, reduces perceived effort, and fosters adherence. Although randomized controlled trials are still limited, preliminary data indicate benefits on autonomic regulation and psychophysiological balance, particularly for populations with high stress or cardiovascular risk. This opinion piece argues for increased recognition of active meditation as a complementary approach in preventive and clinical health strategies. A structured protocol is under development, aimed at expanding its application. The time has come to integrate body and mind in movement and presence.

Keywords: Active meditation; mindful walking; cardiovascular health; mental health; autonomic regulation; health promotion; physical activity; mindfulness; treadmill; adherence.

The pursuit of effective strategies to promote mental and cardiovascular health has led to growing interest in integrative approaches. Among these, regular physical activity and mindfulness meditation stand out, both supported by robust evidence across clinical and preventive contexts. However, these two approaches are generally applied separately: the former mobilizes the body, the latter stills the mind. In this context emerges the concept of active meditation, a practice in which body and mind are simultaneously engaged through mindfulness during walking or light running.

Although still underexplored in a structured form in the literature, active meditation has been the subject of recent investigations. A systematic review published in 2022 (Gainey et al., 2022) identified 14 studies involving mindful walking interventions, of which 13 reported positive effects on at least one mental or cardiovascular outcome such as improved blood pressure, reduced anxiety, increased walking distance in functional tests, and decreased inflammatory markers. These findings reinforce the potential of active meditation as an accessible and low-cost tool for comprehensive health promotion.

Experimental studies involving treadmill walking with mindful focus have shown greater pleasure, reduced perceived

exertion, and higher adherence to exercise (Kekäläinen, 2022). Short-duration interventions comparing seated meditation and mindful walking also indicate that both can significantly improve mood and reduce fatigue (Edwards, 2018). Additionally, runners who incorporated mindfulness reported improved running economy and a greater experience of ‘flow’ during exercise (de Bruin, 2020).

From a physiological standpoint, active meditation may enhance the cardiorespiratory benefits of light-to-moderate physical activity while regulating the autonomic nervous system and promoting psychophysical balance. Although few studies have systematically measured heart rate variability (HRV), there is preliminary evidence suggesting that the practice may favor autonomic regulation, particularly in individuals with high stress or cardiovascular risk (Pascoe et al., 2017; Lehrer et al., 2020).

Despite these advances, it is important to acknowledge that active meditation still lacks methodological standardization and validation through randomized clinical trials. Few protocols are described in the literature, and there is considerable heterogeneity in the outcomes evaluated. This does not diminish its relevance; on the contrary, it highlights the need for conceptual organization and proposals that move toward practical application.

In this sense, we propose a call to the scientific and clinical community to recognize the potential of active meditation as a complementary approach in cardiovascular health programs, mental health, rehabilitation, and well-being. This type of intervention, by integrating body and mind in an accessible way, may be especially beneficial in settings with low adherence to traditional exercise, high psychosocial stress, or environmental constraints.

A progressive active meditation protocol is currently under development and will be presented in a didactic format in due course. Based on emerging literature and practical experience, we believe this approach can significantly enrich evidence-based health promotion strategies.

The time has come to bring the mind into motion alongside the body. May science walk with us.

Declarations

Conflict of Interest

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AI Use

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