



## Effectiveness of yoga on arterial stiffness: A systematic review

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### ABSTRACT

**Objectives:** Arterial stiffness is a major cardiovascular (CV) risk and an independent strong predictor of CV morbidity and mortality. The aim of this systematic review is to evaluate the clinical or interventional studies that assessed the effectiveness of yoga on arterial stiffness in participants of any age or sex, healthy or with any conditions.

**Design:** Systematic review of clinical trials or interventional studies.

**Data sources:** Cochrane Library, Medline/PubMed, Scopus, and Google Scholar databases.

**Review methods:** Databases were searched till July 2019 for clinical trials or interventional studies whether controlled or uncontrolled, randomized or non-randomized studies assessing the effects of yoga on arterial stiffness. Quality of the studies was assessed by using Physiotherapy Evidence Database (PEDro) Scale.

**Results:** Seven full-text articles (total number of participants = 362) that evaluated the effect of yoga on arterial stiffness were included in this review. There were three randomized controlled studies and four were non-controlled studies (single group studies). Four studies have shown significant reduction in arterial stiffness, while three studies did not find any significant change in arterial stiffness. The beneficial effects of yoga intervention on arterial stiffness in young adults and elderly hypertensive patients are encouraging. Methodological quality was good for one study, moderate for two studies and poor for four studies.

**Conclusions:** This review shows that yoga practice is effective in preventing or reducing the arterial stiffness in young healthy and obese, and elderly hypertensive patients. As the methodology of many studies is of low quality and safety measures were not reported, there is a need of quality randomized controlled trials of yoga effects on arterial stiffness among high risk individuals.

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