

Cardiac pharmacological preconditioning associated with omega 3 supplementation: Potential clinical applications

Castillo, Rodrigo L.

© 2017 Nova Science Publishers, Inc. Hypoxia is a pathophysiological condition associated with several responses at the cardiovascular, pulmonary and vascular levels, which may develop into chronic diseases. This is relevant in human populations exposed to high altitudes, in either chronic continuous (permanent inhabitants) or intermittent hypoxia (IH) (high-altitude workers, tourists and mountaineers). In Chile, it is estimated that 1,000,000 people live in highlands and more than 55,000 work in high-altitude shifts. IH is associated with the development of systemic hypertension and left ventricular dysfunction. At present, however, our understanding of the basic mechanisms linking IH and cardiovascular dysfunction is limited by the pathophysiological heterogeneity of hypoxic patients and the presence of multiple confounding and comorbid conditions, including obesity and previous cardiac impairments. Moreover, the great variety of responses ranges from nonclinical effects to severe pu