Abstract

Leprosy is a chronic infectious disease caused by Mycobacterium leprae, an intracellular bacillus of airborne transmission. The disease affects the skin and peripheral nerves and can cause neurological sequelae. The bacillus multiplies slowly in the host and the disease probably occurs due to malfunctioning in host immune response. This review addresses the role of some specific micronutrients in the immune response, such as Vitamins A, D, E, C, Zinc and Selenium, detailing their mechanisms of actions in infectious diseases, and in leprosy. The immune response to pathogens releases harmful substances, which lead to tissue damage. This review discusses how a decreased level of antioxidants may contribute to an increased oxidative stress and complications of infectious diseases and leprosy. As the nutrients have a regulatory effect in the innate and adaptive immune responses, a perfect balance in their concentrations is important to improve the immune response against the pathogens.

Keywords

Nutrition, Leprosy, Oxidative stress and antioxidants.