



Why whey? Camel whey protein as a new dietary approach to the management of free radicals and for the treatment of different health disorders

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Abstract:

The balance between free radicals and antioxidants is an important factor for maintaining health and slowing disease progression. The use of antioxidants, particularly natural antioxidants, has become an important strategy for dealing with this cause of widespread diseases. Natural antioxidants have been used as therapeutic tools against many diseases because they are safe, effective, and inexpensive and are among the most commonly used adjuvants in the treatment of several diseases. Camel whey protein (CWP) is considered a strong natural antioxidant because it decreases oxidative stress, enhances immune system function, and increases glutathione levels. The structure of CWP is very similar to that of other types of whey protein from different types of milk. CWP contains many components, such as lactoferrin (LF), lactalbumin, lactoglobulins, lactoperoxidase, and lysozyme, and is rich in immunoglobulins. However, in contrast to other WPs, CWP lacks β -lactoglobulin, the main cause of milk allergies in children. The components of CWP have many beneficial effects, including stimulation of both innate and adaptive immunity and anti-inflammatory, anticancer, antibacterial, and antiviral activities. Recently, it has been shown that CWP and its unique components can facilitate the treatment of impaired diabetic wound healing. However, the molecular mechanisms underlying the protective effects of CWP in human and other animal disorders are not fully understood. Therefore, the current review presents a concise summary of the scientific evidence of the beneficial effects of CWP to support its therapeutic use in disease treatment and nutritional intervention.

Published In:

Iranian Journal of Basic and Medical Sciences , 20 (4) , 338-349.