[0009] Currently, there are several approaches for restoration of damaged articular cartilage, including physical therapy, pharmacological treatment and surgical interventions. The goal of any reconstructive or regenerative procedure is to relieve the symptoms of the cartilage defect and restore joint function. However, there is currently a need for strategies to stimulate cartilage repair and recovery through stimulation of anabolic processes.

[0010] Increasing proteoglycan synthesis may represent an efficient way to recover/repair articular cartilage in conditions that are linked to an abnormal homeostasis of cartilage extracellular matrix, including, but not limited to, osteoarthritis, cartilage damage after trauma, articular cartilage lesions, and diminished cartilage integrity caused by normal aging. It is thus desirable to find new treatments that may help stimulate proteoglycan synthesis and thereby improve joint health, particularly in those subjects suffering from one or more of the aforementioned conditions.

SUMMARY OF THE INVENTION

[0011] It is therefore an object of the invention to provide a method which improves joint health in a subject in need thereof.

[0012] The present invention is directed to a method of improving joint health in a subject in need thereof comprising administering an exosome-enriched product comprising intact bovine milk-derived exosomes to the subject in need thereof.

[0012a] The present invention is also directed to a use of an exosome-enriched product comprising intact bovine milk-derived exosomes in the manufacture of a medicament for improving joint health in a subject in need thereof, wherein the medicament is to be administered to the subject in need thereof.

[0013] The methods of the invention are advantageous in providing a convenient manner to stimulate the anabolic activity of chondrocytes. By increasing chondrocyte proteoglycan synthesis, the methods of the invention represent a novel way to enhance cartilage repair and recovery in conditions such as osteoarthritis, cartilage damage after trauma, or diminished cartilage integrity cause by normal aging. The methods are also useful in the treatment of such conditions. These and additional advantages of the inventive methods will be more fully apparent in view of the detailed description.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] The drawings are illustrative of certain embodiments of the invention and exemplary in nature and is not intended to limit the invention defined by the claims, wherein: