risk of suffering from sarcopenia and/or chronic or acute cardiac damage, and/or to reduce chronic fatigue in subjects who are recovering or have recovered from a viral infection, such as COVID-19.

SUMMARY OF THE INVENTION

[0009] It is therefore an object of the invention to provide a method which enhances muscle performance in a subject in need of improved physical performance.

[0010] It is another object of the invention to provide a method which reduces chronic fatigue in a subject who is recovering or has recovered from a viral infection.

[0011] The present invention is directed to a method of enhancing muscle performance in a subject in need of improved physical performance, comprising administering an exosome-enriched product comprising intact bovine milk-derived exosomes to the subject in need thereof.

[0011a] The present invention is also directed to the use of an exosome-enriched product comprising intact bovine milk-derived exosomes in the manufacture of a medicament for enhancing muscle performance in a subject in need of improved physical performance, wherein the medicament is to be administered to the subject in need thereof.

[0012] The present invention is also directed to a method of reducing chronic fatigue in a subject who is recovering or has recovered from a viral infection, comprising administering an exosome-enriched product comprising intact bovine milk-derived exosomes to the subject.

[0012a] The present invention is also directed to the use of an exosome-enriched product comprising intact bovine milk-derived exosomes in the manufacture of a medicament for reducing chronic fatigue in a subject recovering or recovered from a viral infection, 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 improve mitochondrial function, and thereby improve muscle performance, in a subject in need of improved physical performance. The methods are useful in the prevention or treatment of conditions that are hallmarked by a reduction in spare respiratory capacity, including sarcopenia and chronic or acute cardiac damage.

[0014] The improved mitochondrial function afforded by the methods of the invention is also advantageous in that it reduces chronic fatigue during or following recovery from a viral illness

associated with mitochondrial dysfunction, for example COVID-19. These and additional advantages of the inventive methods will be more fully apparent in view of the detailed description.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] The drawings are illustrative of certain embodiments of the invention and exemplary in nature and are not intended to limit the invention defined by the claims, wherein: