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(54) Title: COMPOSITIONS AND METHODS USING A COMBINATION OF OLEUROPEIN AND MAGNESIUM

(57) Abstract: Compositions and methods using a combination of oleuropein and Magnesium. Composition comprising a combination of oleuropein or metabolite thereof and Magnesium thereof are provided. The composition may be an oral nutritional composition, for example a nutritional supplement, an oral nutritional supplement, a food product, a food for special medical purpose (FSMP). The composition can be administered to an individual in need thereof for improving a physiological state linked to metabolic fatigue in one or more cells, (ii) increasing mitochondrial energy and mitochondrial calcium uptake in one or more cells, and (iii) increasing antioxidant capacity, reducing oxidative stress and/or enhancing mitochondrial function, (iv) treating or preventing a calcium deficiency / depletion disorder in an individual. Additionally, or alternatively, the method can treat or prevent a mitochondria-related disease or a condition associated with altered mitochondrial function in an individual in need thereof or at risk thereof.



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