Claims

1. A pharmaceutical composition comprising:

a pharmaceutically effective amount of peptide; wherein said peptide exhibits molecular weight of equal to or less than 60 kDa and

a pharmaceutically acceptable amount of a combination of:

(a) a metal salt or a metal complex; and

(b) a reducing agent,

wherein, said metal salt or metal complex is vanadium (V) oxide, sodium vanadate, vanadium sulfate, manganese gluconate, potassium permanganate, chromium picolinate or chromium chloride, and wherein said reducing agent is ascorbate sodium, benzohydroxamic acid, mannitol, uric acid or reduced glutathione;

wherein said combination of said metal salt or metal complex and said reducing agent affords protection, at least in part, to said peptide from proteolytic degradation upon ingestion thereof.

2. The pharmaceutical composition as claimed in claim 1, wherein said at least one peptide is selected from a group comprising: insulin, insulin lispro, insulin PEGlispro, insulin aspart, insulin glulisine, insulin glargine, insulin detemir, NPH insulin, insulin degludec, B29K(N(ε)hexadecanedioyl-γ-L-Glu) A14E B25H desB30 human insulin, B29K(N(ε)octadecanedioyl-γ-L-Glu-OEG-OEG) desB30 human insulin, B29K(N(ε)octadecanedioyl-γ-L-Glu) A14E B25H desB30 human insulin, B29K(N(ε)eicosanedioyl-γ-L-Glu) A14E B25H desB30 human insulin, B29K(N(ε)octadecanedioyl-γ-L-Glu-OEG-OEG) A14E B25H desB30 human insulin, B29K(N(ε)eicosanedioyl-γ-L-Glu-OEG-OEG) A14E B25H desB30 human insulin, B29K(N(ε)eicosanedioyl-γ-L-Glu-OEG-OEG) A14E B16H B25H desB30 human insulin, B29K(N(ε)hexadecanedioyl-γ-L-Glu) A14E B16H B25H desB30 human insulin, B29K(N(ε)eicosanedioyl-γ-L-Glu-OEG-OEG) A14E B16H B25H desB30 human insulin, B29K(N(ε)octadecanedioyl) A14E B25H desB30 human insulin, GLP-1, semaglutide, liraglutide, exenatide, lixizenatide, a dual agonist of the GLP-1 receptor and the glucagon receptor, amylin, pramlintide, octreotide, lanreotide, pasireotide, goserelin, buserelin, leptin, metreleptin, peptide YY, glatiramer, leuprolide, teriparatide, desmopressin, human growth hormone, a glycopeptide antibiotic, a glycosylated cyclic or polycyclic nonribosomal peptide antibiotic, vancomycin, teicoplanin, telavancin, bleomycin, ramoplanin, decaplanin, bortezomib, cosyntropin, chorionic gonadotropin, menotropin, sermorelin,

luteinizinghormone-releasing hormone, somatropin, calcitonin, calcitonin-salmon, pentagastrin, oxytocin, neseritide, anakinra, enfuvirtide, pegvisomant, dornase alfa, lepirudin, anidulafungin, eptifibatide, interferon alfacon-1, interferon alpha-2a, interferon alpha2b, interferon beta-1a, interferon beta-1 b, interferon gamma-1 b, peginterferon alfa2a, peginterferon alfa-2b, peginterferon beta-1a, fibrinolysin, vasopressin, aldesleukin, epoetin alfa, darbepoetin alfa, epoetin beta, epoetin delta, epoetin omega, epoetin zeta, filgrastim, interleukin-11, cyclosporine, glucagon, urokinase, viomycin, thyrotropinreleasing hormone, leucine-enkephalin, methionine-enkephalin, substance P, adrenocorticotropic hormone, parathyroid hormone, and pharmaceutically acceptable salts thereof.

3. The pharmaceutical composition as claimed in claim 1, wherein said peptide and said metal salt or metal complex are present in physically separated form in said pharmaceutical composition.

4. The pharmaceutical composition as claimed in claim 1, wherein said peptide and said metal salt or metal complex are present in separate compartments.

5. The pharmaceutical composition as claimed in claim 1, wherein said pharmaceutical composition is present in form of any of capsule-in-capsule and tablet-in-capsule.

6. The pharmaceutical composition as claimed in claim 1, wherein said pharmaceutical composition comprises the at least one reducing agent in an amount ranging from about 1 mg to 1000 mg per unit dose.

7. The pharmaceutical composition as claimed in claim 1, wherein said pharmaceutical composition further comprises at least one absorption enhancer and wherein the at least one absorption enhancer is present in an amount ranging from 10 mg to 1000 mg per unit dose.

8. The pharmaceutical composition as claimed in claim 1, wherein said pharmaceutical composition is formulated as any of a solid oral dosage form and a liquid oral dosage form, with proviso that when said pharmaceutical composition is formulated as the liquid oral dosage form, the pharmaceutical composition comprises water in an amount of less than about 5% v/v.