CLAIMS

1. Use of a CTP-modified polypeptide comprising a dual GLP-l/Glucagon receptor agonist and one to five chorionic gonadotrophin carboxy terminal peptide (CTP) attached to the amino terminus or carboxy terminus of said agonist in the manufacture of a medicament for inducing glucose tolerance in a subject, the prevention of undesired weight gain by a subject, preventing, reducing or suppressing food intake in a subject, the treatment of obesity in a subject, the treatment of type II diabetes in a subject, or the treatment of a metabolic disorder in a subject.

2. A method of preventing undesired weight gain by a subject, or preventing, reducing, or suppressing food intake in a subject, said method comprising administering a CTP-modified polypeptide comprising a dual GLP-l/Glucagon receptor agonist and one to five chorionic gonadotrophin carboxy terminal peptide (CTP) attached to the amino terminus or carboxy terminus of said agonist to said subject, wherein said method prevents undesired weight gain by a subject or prevents, reduces, or suppresses food intake in a subject.

~~2~~3. The use according to claim 1 or the method according to claim 2, wherein said GLP-l/Glucagon receptor agonist is oxyntomodulin.

~~3~~4. The use according to claim 1 or ~~2~~3 or the method according to claim 2 or 3, wherein the amino acid sequence of at least one CTP is selected from the group consisting of: SEQ ID NO: 1 and SEQ ID NO: 2.

~~4~~5. The use according to any one of claims 1 and ~~3~~3-4 or the method according to any one of claims 2-4, wherein at least one CTP is glycosylated.

~~5~~6. The use according to any one of claims 1 and 3-5 or the method according to any one of claims 2-5 ~~4~~, wherein at least one CTP is truncated.

~~6~~7. The use according to any one of claims 1 and 3-6 or the method according to any one of claims 2-6 ~~5~~, wherein at least one CTP is attached to said agonist polypeptide via a linker.

~~7~~8. The use or method according to claim ~~6~~7, wherein said linker is a peptide bond.

~~8~~9. The use according to any one of claims 1 and 3-8 or the method according to any one of claims 2-8 ~~7~~, wherein the amino acid sequence of said CTP- modified polypeptide comprises SEQ ID NO: 9, 15, 21, ~~23,~~ 25, 27, ~~or~~ 29, or amino acids 1-119 of SEQ ID NO: 23.

10. The use according to any one of claims 1 and 3-8 or the method of any one of claims 2-8,

wherein the amino acid sequence of said CTP-modified polypeptide comprises amino acids 27-119 of SEQ ID NO: 9, amino acids 27-147 of SEQ ID NO: 15, amino acids 30-122 of SEQ ID NO: 21, amino acids 27-119 of SEQ ID NO: 23, amino acids 27-147 of SEQ ID NO: 25, amino acids 27-175 of SEQ ID NO: 27, or amino acids 27-203 of SEQ ID NO: 29.

~~9~~11. The ~~use~~ method according to claim ~~1~~2, wherein said undesired weight gain results in obesity in the subject, or is due to a psychological condition, or is due to a genetic predisposition to weight gain by said subject.

~~10~~12. The ~~use~~ method according to claim ~~9~~11, wherein said psychological condition is depression, anxiety or post-traumatic stress disorder (PTSD).

~~11~~13. The ~~use~~ method according to claim ~~1~~2, wherein preventing, reducing or suppressing food intake by said subject reduces the chances of said subject developing undesired weight gain or obesity.

~~12~~14. The use according to any one of claim~~s~~ 1, or the method of claim 2, ~~9, or 11,~~ wherein said subject is genetically predisposed to being obese.

~~13~~15. The use according to ~~any one of~~ claim~~s~~ 1~~, 9, 11 or 12~~, wherein treating obesity results in a reduction of body weight or body fat in said subject.

16. The CTP-modified polypeptide for use according to claim 1 or the method according to claim 2, wherein said CTP-modified polypeptide is encoded by the nucleotide sequence set forth in SEQ ID NO: 8, 14, 20, 22, 24, 26, or 28.

~~14. The use according to claim 1, wherein said metabolic disorder is diabetic ketoacidosis, diabetes mellitus, or a combination thereof.~~

~~15. The use according to claim 1, wherein said metabolic disorder results from a lack of insulin and an overabundance of glucose in said subject.~~