WHAT IS CLAIMED IS:

1. An analog of a glucagon peptide, the analog comprising SEQ ID NO: 1 with up to 10 amino acid modifications, wherein the analog comprises:

(i) an amino acid comprising an imidazole ring at position 1

(ii) (a) an intramolecular bridge between the side chains of an amino acid at position i and an amino acid at position i+4 or between the side chains of amino acids at positions j and j+3, wherein i is 12, 13, 16, 17, 20 or 24 and j is 17,

(b) an α, α-disubstituted amino acid at one, two, three or more of positions 16, 20, 21 or 24 of the analog, or

(c) both (a) and (b).;

(iii) an extension of 1 to 21 amino acids C-terminal to the amino acid at position 29 comprising (a) the amino acid sequence of GPSSGAPPPS (SEQ ID NO: 26) or XGPSSGAPPPS (SEQ ID NO: 674), wherein X is any amino acid~~[[,]]~~ or (b) an amino acid sequence which has at least 80% sequence identity to SEQ ID NO: 26 or SEQ ID NO: 674, and

(iv) an acyl or alkyl group which is non-native to a naturally-occurring amino acid at

(a) position 10 or

(b) one of the amino acids of the extension located at any of positions 37-43 (according to the numbering of SEQ ID NO: 1) or

(c) both (a) and (b),

wherein, when the analog lacks a hydrophilic moiety, the analog exhibits at least ~~[[0.1]]~~10% activity of native GIP at the GIP receptor, and wherein the selectivity for the GLP-1 receptor of the analog is less than 100-fold (higher or lower) the selectivity for the GIP receptor and/or the glucagon receptor.

12. The analog of any of claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11, wherein the acyl or alkyl group is covalently attached to the side chain of the amino acid via a spacer.

13. The analog of claim 12, wherein the spacer is 3 to 10 atoms in length, optionally, wherein the spacer is an amino acid or dipeptide.

14. The analog of claim 13, wherein the spacer comprises an acidic residue.

15. A dimer comprising two glucagon peptides, wherein at least one of the glucagon analog is an analog of any of the preceding claims, bound to one another through a linker.

16. A conjugate comprising an analog of any one of the preceding claims linked to a conjugate moiety.

17. A pharmaceutical composition comprising an analog of any of the preceding claims, a dimer of claim 15, and a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

18. ~~Use of an~~An analog of any one of claims 1 , 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11-14, or a pharmaceutically acceptable salt thereof, or a dimer of claim 15, for use in the treatment of ~~treating~~ diabetes, reducing weight gain, inducing weight loss.