The compounds described herein find use, *inter alia*, in preventing weight gain or promoting weight loss. By "preventing" is meant inhibiting or reducing when compared to the absence of treatment, and is not necessarily meant to imply complete cessation of weight gain. The peptides may cause a decrease in food intake and/or increased energy expenditure, resulting in the observed effect on body weight. Independently of their effect on body weight, the compounds of the present disclosure may have a beneficial effect on glucose control and/or on circulating cholesterol levels, being capable of lowering circulating LDL levels and increasing HDL/LDL ratio. Thus the compounds of the present disclosure can be used for direct or indirect therapy of any condition caused or characterised by excess body weight, such as the treatment and/or prevention of obesity, morbid obesity, obesity linked inflammation, obesity linked gallbladder disease, obesity induced sleep apnea. They may also be used for the prevention of conditions caused or characterised by inadequate glucose control or dyslipidaemia (e.g. elevated LDL levels or reduced HDL/LDL ratio), diabetes (especially Type 2 diabetes), metabolic syndrome, hypertension, atherogenic dyslipidemia, atherosclerosis, arteriosclerosis, coronary heart disease, peripheral artery disease, stroke or microvascular disease. Their effects in these conditions may be as a result of or associated with their effect on body weight, or may be independent thereof.

In an aspect, the present disclosure also provides a compound as disclosed in the first aspect for use in a method of medical treatment, particularly for use in a method of treatment of a condition as described above.

The present disclosure also provides the use of a compound of the present disclosure in the preparation of a medicament for the treatment of a condition as described above. In an exampleaspect, the present disclosure provides use of a compound as disclosed in the first aspect in the manufacture of a medicament for preventing weight gain or promoting weight loss. In another exampleaspect, the present disclosure provides use of a compound as disclosed in the first aspect in the manufacture of a medicament for lowering circulating LDL levels, and/or increasing HDL/LDL ratio. In one aspect, the present invention provides use of a compound as disclosed in the first aspect in the manufacture of a medicament for the treatment or prevention of conditions caused or characterised by elevated LDL levels and/or reduced HDL/LDL ratio when compared to normal. In another aspect, the present disclosure provides use of a compound as disclosed in the first aspect in the manufacture of a medicament for treatment of a condition caused or characterised by excess body weight. In another aspect, the present disclosure provides use of a compound as disclosed in the first aspect in the manufacture of a medicament for prevention or treatment of obesity, morbid obesity, morbid obesity prior to surgery, obesity linked inflammation, obesity linked gallbladder disease, obesity induced sleep apnea, diabetes, metabolic syndrome, hypertension, atherogenic dyslipidimia, atherosclerois, arteriosclerosis, coronary heart disease, peripheral artery disease, stroke or microvascular disease.

The compound of the present disclosure may be administered as part of a combination therapy with an agent for treatment of diabetes, obesity, dyslipidaemia or hypertension.

In such cases, the two active agents may be given together or separately, and as part of the same pharmaceutical formulation or as separate formulations.

Thus the compound of the present disclosure can be used in combination with an anti-diabetic agent including but not limited to a biguanide (e.g. metformin), a sulfonylurea, a meglitinide or glinide (e.g. nateglinide), a DPP-IV inhibitor, a glitazone, an insulin, or an insulin analogue. Examples of insulin analogues include but are not limited to Lantus™, Novorapid™, Humalog™, Novomix™, Actraphane HM™, Levemir™ and Apidra™.

The compound can further be used in combination with an anti-obesity agent including but not limited to a glucagon-like peptide receptor 1 agonist, peptide YY or analogue thereof,

CLAIMS

1. A compound having the formula:
H-HSQGTFTSDYSKYLDS-K(Hexadecanoyl-isoGlu)-AAEDFVEWLLRA-NH_2 (Compound 7)
or a pharmaceutically acceptable salt or solvate thereof.

2. A composition comprising a compound according to claim 1 in admixture with a carrier.

3. A composition according to claim 2 wherein the composition is a pharmaceutical composition, and the carrier is a pharmaceutically acceptable carrier.

4. A compound according to any one of claims 1 to 3 for use in medical treatment.

~~5. Use of a compound according to any one of claims 1 to 3 in the manufacture of a medicament for preventing weight gain or promoting weight loss.~~

56. Use of a compound according to any one of claims 1 to 3 in the manufacture of a medicament for the treatment or prevention of conditions caused or characterised by elevated ~~lowering circulating~~ LDL levels~~,~~ and/or reduced ~~increasing~~ HDL/LDL ratio when compared to normal.

67. Use of a compound according to any one of claims 1 to 3 in the manufacture of a medicament for treatment of a condition caused or characterised by excess body weight.

78. Use of a compound according to any one of claims 1 to 3 in the manufacture of a medicament for prevention or treatment of obesity, morbid obesity, morbid obesity prior to surgery, obesity linked inflammation, obesity linked gallbladder disease, obesity induced sleep apnea, diabetes, metabolic syndrome, hypertension, atherogenic dyslipidimia, atherosclerois, arteriosclerosis, coronary heart disease, peripheral artery disease, stroke or microvascular disease.

89. Use according to any one of claims 5 to 78 wherein the compound is to be administered as part of a combination therapy together with an agent for treatment of diabetes, obesity, dyslipidemia or hypertension.

910. Use according to claim 89 wherein the agent for treatment of diabetes is a biguanide (e.g. metformin), a sulfonylurea, a meglitinide or glinide (e.g. nateglinide), a DPP-IV inhibitor, a glitazone, a different GLP-1 agonist, an insulin or an insulin analogue.

1011. Use according to claim 89, wherein the agent for treatment of obesity is a glucagon-like peptide receptor 1 agonist, peptide YY receptor agonist or analogue thereof, cannabinoid receptor 1 antagonist, lipase inhibitor, melanocortin receptor 4 agonist, or melanin concentrating hormone receptor 1 antagonist.

1112. Use according to claim 89 wherein the agent for treatment of hypertension is an angiotensin-converting enzyme inhibitor, angiotensin II receptor blocker, diuretic, beta-blocker, or calcium channel blocker.

1213. Use according to claim 89 wherein the agent for treatment of dyslipidaemia is a statin, a fibrate, a niacin and/or a cholesterol absorbtion inhibitor.

1314. A nucleic acid encoding the amino acid sequence of a compound according to claim 1.

1415. An expression vector comprising the nucleic acid sequence of claim 1314.

1516. A host cell comprising the nucleic acid of claim 1314 or the expression vector of claim 1415 and capable of expressing and optionally secreting a compound having the amino acid sequence according to claim 1.

1617. A therapeutic kit comprising a compound according to claim 1 or a composition according to claim 2 or claim 3.

1718. A method of synthesis of a compound according to claim 1.

1819. A method of producing a compound according to claim 1, the method comprising culturing a host cell according to claim 1516 under conditions suitable for expressing the peptide sequence according to claim 1 and purifying the compound thus produced.

1920. A method of producing a compound according to claim 1, the method comprising expressing a peptide sequence containing one or more differences from the sequence according to claim 1 in a host cell, optionally purifying the compound thus produced, and adding or modifying one or more amino acids to produce the compound.

2021. A method according to claim 1819 or claim 1920 comprising modifying the sequence according to claim 1 to introduce one or more lipophilic moieties.