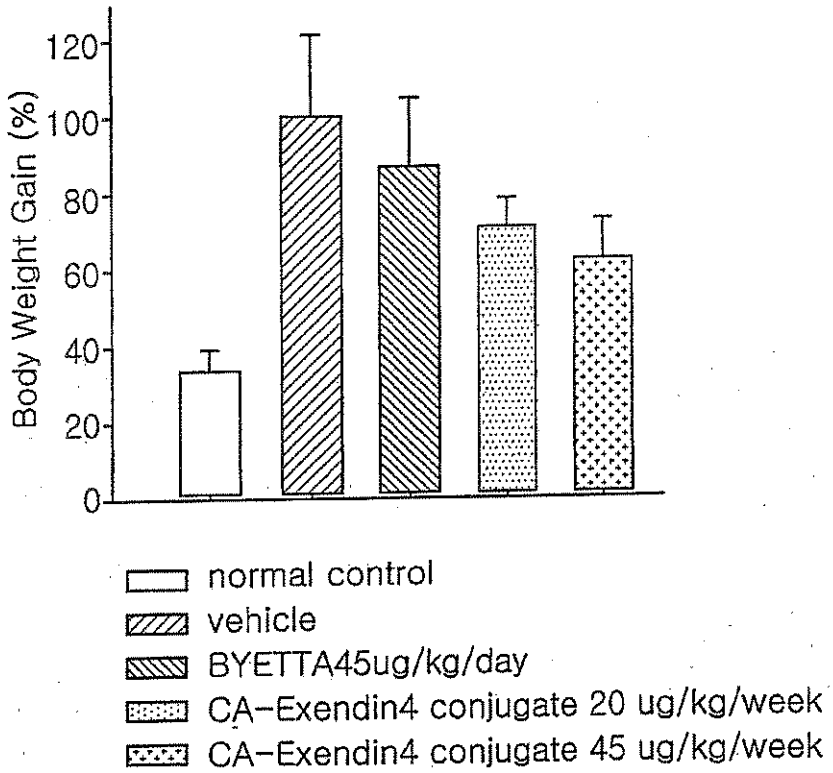
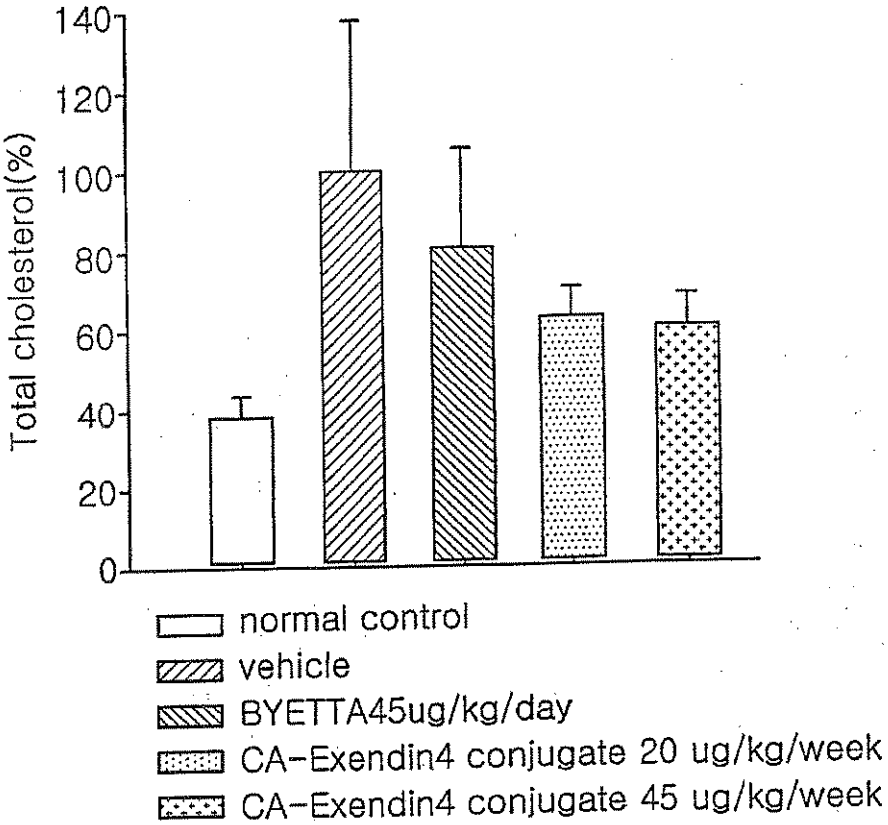
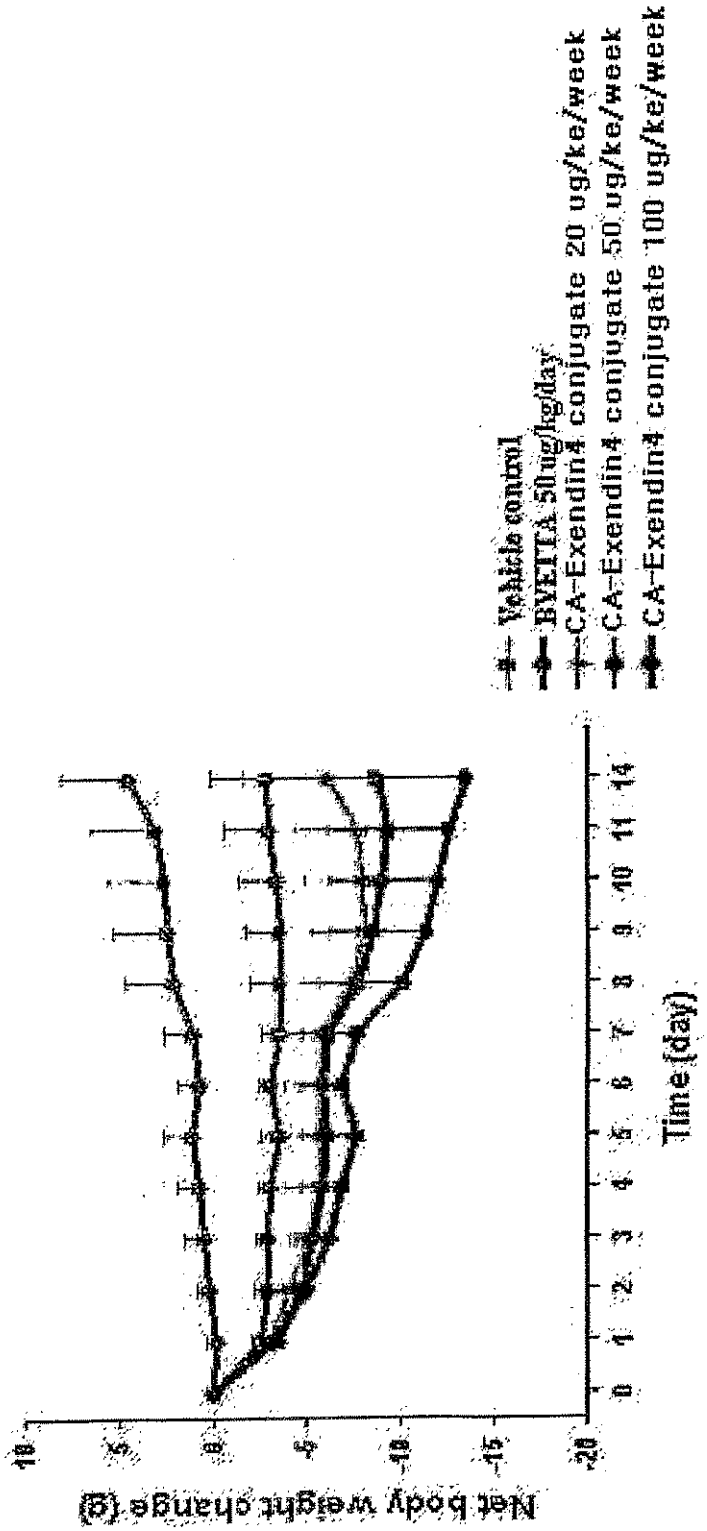
[Fig. 1]


Body Weight Gain (%)
120
100
80
60
40
20
0
normal control
vehicle
BYETTA45ug/kg/day
CA-Exendin4 conjugate 20 ug/kg/week
CA-Exendin4 conjugate 45 ug/kg/week

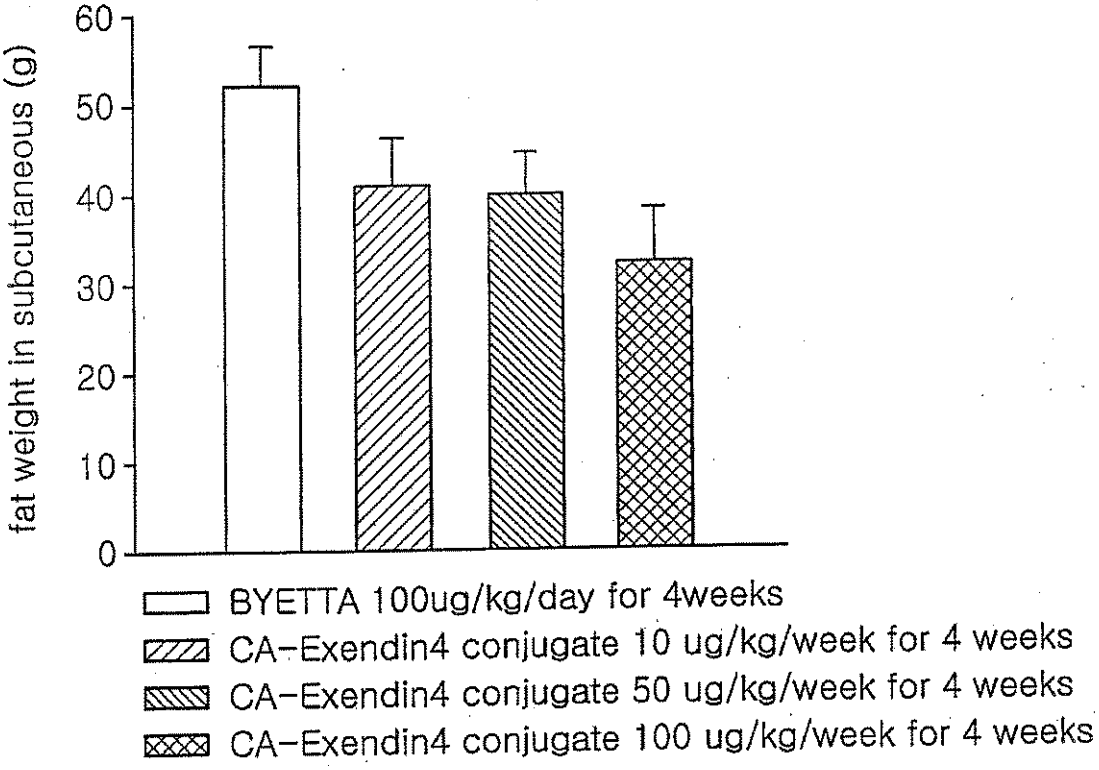
[Fig. 2]


Total cholesterol(%)
140
120
100
80
60
40
20
0
normal control
vehicle
BYETTA45ug/kg/day
CA-Exendin4 conjugate 20 ug/kg/week
CA-Exendin4 conjugate 45 ug/kg/week

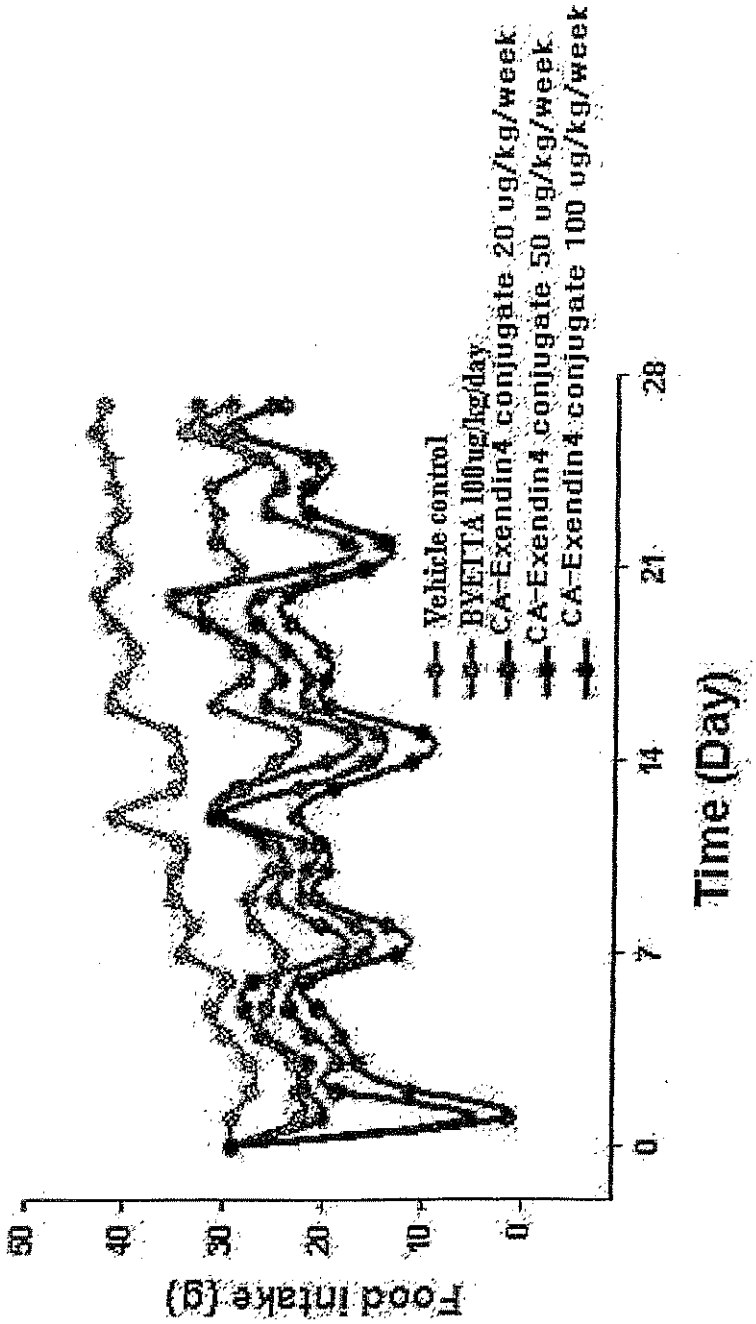
[Fig. 3]


Vehicle control
BYETTA 50ug/kg/day
CA-Exendin4 conjugate 20 ug/kg/week
CA-Exendin4 conjugate 50 ug/kg/week
CA-Exendin4 conjugate 100 ug/kg/week
Net body weight change (g)
Time (day)

[Fig. 4]


fat weight in subcutaneous (g)
60
50
40
30
20
10
0
BYETTA 100ug/kg/day for 4weeks
CA-Exendin4 conjugate 10 ug/kg/week for 4 weeks
CA-Exendin4 conjugate 50 ug/kg/week for 4 weeks
CA-Exendin4 conjugate 100 ug/kg/week for 4 weeks

[Fig. 5]


Food intake (g)
0
10
20
30
40
50
0
7
14
21
28
Time (Day)
Vehicle control
BYETTA 100ug/kg/day
CA-Exendin4 conjugate 20 ug/kg/week
CA-Exendin4 conjugate 50 ug/kg/week
CA-Exendin4 conjugate 100 ug/kg/week

<110> HANMI PHARMACEUTICAL CO., LTD.

<120> A pharmaceutical composition for treating obesity-related disease comprising insulinotropic peptide conjugate

<130> CPA08097

<140> PCT/KR2008/007074
<141> 2008-11-28

<150> US11/947,697
<151> 2007-11-29

<150> KR10-2008-0083194
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<213> Artificial Sequence

<220>
<223> A part X of insulinotropic peptide conjugate (Formula 1)

<220>
<221> PEPTIDE
<222> (1)..(38)
<223> Xaa in amino acid position 11 and Xaa in amino acid position 26, which may be identical or different, are each independently Lys, Ser or Arg.

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Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Xaa Gln Met Glu Glu Glu
1 5 10 15

Ala Val Arg Leu Phe Ile Glu Trp Leu Xaa Asn Gly Gly Pro Ser Ser
20 25 30

Gly Ala Pro Pro Pro Ser
35

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Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Xaa Gln Met Glu Glu Glu
1 5 10 15

Ala Val Arg Leu Phe Ile Glu Trp Leu Xaa Asn Gly Gly
20 25

<210> 3
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<220>
<221> PEPTIDE
<222> (1)..(38)
<223> Xaa in amino acid position 11 and Xaa in amino acid position 26, which may be identical or different, are each independently Lys, Ser or Arg.

<400> 3
Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Xaa Gln Met Glu Glu Glu
1 5 10 15

Ala Val Arg Leu Phe Ile Glu Trp Leu Xaa Asn Gly Gly Pro Ser Ser
20 25 30

Gly Ala Pro Pro Pro Ser
35