**Description**

**A COMPOSITION FOR THE TREATMENT OF OBESITY**

**Technical Field**

The invention relates to a composition formed for the treatment of obesity.

**State of the Art**

The methods currently employed in order to treat the obesity include the drug therapy, exercise and diet. Examples of the drug therapies may be listed as thyroid hormone derivatives, lipolytic fragments of the growth hormone and the growth hormone, sympathomimetic agents (adrenaline derivatives), beta-2 receptor agonists, appetite suppressant agents, amphetamine derivatives, ecogenin derivatives (only in controlled clinics), industrial chemicals of DNP and derivatives, dopamine receptor agonists.

Aerobic exercise derivatives and hybrid training programs are recommended as the exercise. For the diet option, the low calorie diets, diets with no fat or the diets rich in protein and similar alternative approaches are recommended. Since most of the drugs used for the purpose of weight loss are sympathomimetic, heart attacks and cardiac arrhythmias are encountered very frequently in case of even a slight overdose. The long term use of these drugs may cause irreversible endocrinal imbalances, problems necessitating psychiatric treatment and substance addiction even in the controlled clinics. Although exercise and diet are extremely effective methods of treating obesity, the time and discipline they require are found intolerable by most patients and these methods generally do no yield effective results.

The invention no. EP1307262B1 entitled "Method for locating compounds which are suitable for the treatment and/or prophylaxis of obesity" discloses a method for locating compounds which are suitable for the treatment and/or prophylaxis of obesity, whereby the ability of the examined compounds to inhibit de novo lipogenase in mammals and/or humans is determined. Also disclosed is the use of compounds which are capable of inhibiting de novo lipogenase in mammals in the production of medicaments for the treatment and/or prophylaxis of obesity.

Also, the invention no. EP1711184B1 entitled "(3-oxo-3,4-dihydro-quinoxalin-2-yl-amino)-benzamide derivatives and related compounds as glycogen phosphorylase inhibitors for the treatment of diabetes and obesity" discloses pharmaceutically active quinoxalinones of formula (I), compositions containing them, and methods of making and using them or a pharmaceutically acceptable salt, ester, amide, hydrate, or solvate thereof as well as their use as glycogen phosphorylase inhibitors for the treatment of diabetes and obesity. In said Formula (I): R1 is H, C1-6 alkyl or halo; R2 is H or halo; R3 is H, C1-6 alkyl; X is N or CH; Y is a covalent bond, -NHCO- or -CONH-; Z is phenyl or a 5 or 6-membered heterocyclyl with between 1 and 2 heteroatoms independently selected from N, O, and S; and n is 0, 1 or 2.

Also, the invention no. EP1924560B1 entitled "6-substituted- 2,3,4,5-tetrahydro-1h-benzo[d]azepines as 5-HT2c receptor agonists" provides 6-substituted 2,3,4,5-tetrahydro-1H-benzo[d]azepines of Formula (I) as selective 5-HT2c receptor agonists for the treatment of 5-HT2c associated disorders including obesity, obsessive/compulsive disorder, depression, and anxiety.

As a result, the presence of the need for a composition for treating the obesity and the inadequacy of the existing solutions have made it necessary to perform an improvement in the relevant art.

**Object of the Invention**

In order to eliminate the disadvantages of the state of the art, an object of the invention is to provide the treatment of obesity.

Another object of the invention is to support the thyroid function by increasing the expression of deiodinase D1 and D2.

Another object of the invention is to speed up the conversion of t4 to t3.

Another object of the invention is to suppress the corticosteroid production owing to the anti-glucocorticoid effect.

Another object of the invention is to provide AMPK activation.

Another object of the invention is to provide the inhibition of PPAR gamma.

In order to achieve the aforesaid advantages, the invention is a composition for treating the obesity, said composition being obtained by the components selected from the group comprising 7-beta-diosgenin, 7-alpha-diosgenin, 7-keto-diosgenin that are used individually or in combinations.

The structural and characteristic features and all the advantages of the invention will become more clearly understood from the detailed description provided below and therefore, the evaluation must be made taking this detailed description into consideration.

**Detailed Description of the Invention**

The invention is a composition for the treatment of obesity. The composition according to the invention contains 7-beta-diosgenin, 7-alpha-diosgenin, 7-keto-diosgenin.

7-beta-diosgenin, an ingredient of the composition according to the invention, supports the thyroid function by increasing the expression of deiodinase D1 and D2. 7-beta-diosgenin also speeds up the conversion of t4 to t3. Said 7-beta-diosgenin has anti-glucocorticoid effect and it suppresses the corticosteroid production. 7-beta-diosgenin also provides AMPK activation and the inhibition of PPAR gamma.

Said formulation is obtained by a mixture of the aforesaid components according to the following ratios by weight:

22-80% 7-beta-diosgenin,

11-7% 7-alpha-diosgenin,

67-13% 7-keto-diosgenin.

The composition is obtained from the aforesaid components selected from the aforesaid group and used according to the mentioned weight ratio ranges individually or in combinations.

Said invention also encompasses the use of said composition for treating the obesity and the manufacture thereof for this purpose.

**CLAIMS**

1. A composition for treating the obesity, said composition being obtained by the components selected from the group comprising 7-beta-diosgenin, 7-alpha-diosgenin, 7-keto-diosgenin that are used individually or in combinations.
2. A composition according to Claim 1 characterized in that it comprises 22-80% by weight 7-beta-diosgenin.
3. A composition according to Claim 1 characterized in that it comprises 11-7% by weight 7-alpha-diosgenin.
4. A composition according to Claim 1 characterized in that it comprises 67-13% by weight 7-keto-diosgenin.
5. Use of the components according to Claims 1 to 4 obtained individually or in combinations from the group consisting of 7-beta-diosgenin, 7-alpha-diosgenin, 7-keto-diosgenin for the manufacture of a composition for treating the obesity.

**ABSTRACT**

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No figure.