

TRIPLE L - LIVING LONG & LEAN: A NOVEL THERAPEUTIC APPROACH TO OVERWEIGHT AND OBESITY

Technology for Licensing

Keywords:

β -resorcylic acid, obesity, metabolic syndrome, longevity, fatty liver, white adipose tissue, overweight, 2,4-dihydroxybenzoic acid, non-alcoholic hepatic steatosis.

Description:

Overweight and obesity define as an abnormal or excessive accumulation of white adipose tissue (WAT), can be harmful to health. Consequently, both factors associate with an increased risk of some diseases (type II diabetes, metabolic syndrome, cardiovascular diseases, some cancer types, musculoskeletal disorders...).

The main strategies used to contain them can reduce the body weight, but it is not possible to ensure that this loss always links to a WAT reduction only. Besides, drugs usually used against type II diabetes, metabolic syndrome or obesity generate different results among the population and sometimes cause harmful side effects, as muscle mass loss. Then, alternatives that reduce this fat tissue without losing muscle mass or other side effects are needed.

In this sense, the administration of β -resorcylic acid is proposed to prevent the accumulation of WAT or to reduce its content, preserving the skeletal muscle mass at the same time. The technology bases on a novel mechanism of action in which β -RA exerts its effect, affecting the WAT hypertrophy and hyperplasia.

Its use offers a strategy, therapeutic and non-therapeutic, to combat and/or prevent overweight and/or obesity, and associated conditions (accumulation of lipid drops in the liver, hepatic steatosis...). Likewise, a pharmaceutical composition and a nutraceutical composition, which contains β -RA, useful to prevent and/or treat these factors and other diseases linked to their development.

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This technology focuses on using β -resorcylic acid (β -RA) to cause a selective reduction of white adipose tissue without affecting skeletal muscle mass. This effect favors its use in overweight or obesity treatment, and these factors may be associated with metabolic syndrome or hepatic steatosis.

Advantages and Benefits

» Reduction or prevention of WAT accumulation without affecting the muscle mass content

» Effect against overweight and/or obese

Its use raises a strategy (therapeutic and non-therapeutic) aimed to prevent overweight and/or obesity and, also, to treat these factors and other related diseases.

» Preventive effect on hepatic steatosis and appearance of characteristics of non-alcoholic fatty liver

» Effective agent throughout the population

The effect is exerted regardless of the nutritional condition of the individual.

» Low cost of raw material

Natural compound present in various plants.

» Production of pharmaceutical and nutraceutical compositions

With β -RA in its content, they allow its application for therapeutic and non-therapeutic use, respectively.

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