

# D-tagatose Formulations for Treatment of Dyslipidemias and Atherosclerosis - 1697

Published date: June 23, 2017

## Technology description

### Market Opportunities

The Centers for Disease Control (CDC) reports that about two-thirds of the adult population in the United States is classified as either overweight or obese (BMI of  $>25$  or  $>30$ ). Obesity has been reported to increase the likelihood of various diseases and health problems including heart disease, type 2 diabetes, and metabolic syndrome. These diseases are commonly associated with insulin deficiencies, high serum triglyceride levels, hypertension and atherogenic dyslipidemia, especially lower than normal levels of high-density lipoprotein (HDL) cholesterol. Previous studies have shown that D-tagatose, an isomer of fructose currently used as a low-calorie sweetener, is useful in reducing glycosylated hemoglobin in type 2 diabetes. Additionally, resveratrol has been reported to suppress the serum lipid peroxide levels *in vivo*. However, both compounds have minimal effects on the prevention of treatment of metabolic syndrome, atherosclerosis, obesity and type 2 diabetes.

### Technology Solution

Researchers at the University of Kentucky have developed pharmaceutical compounds and methods for the prevention or treatment of atherosclerosis, the metabolic syndrome, obesity and diabetes. The invention includes a pharmaceutically effective amount of D-tagatose in combination with a pharmaceutically acceptable amount of a stilbene or stilbenoid component, or a salt or derivative thereof; or a combination thereof. The pharmaceutical compositions have shown to be more effective than D-tagatose or resveratrol alone in control of serum lipoproteins; lowering triglycerides and LDL while simultaneously raising HDL. Other advantages include a natural, FDA approved composition that is readily formulated into stable oral doses.

### Application area

Pharmaceutical compositions

Prevention or treatment of atherosclerosis, the metabolic syndrome, obesity and diabetes

## Advantages

May encompass compositions, including D-tagatose, that improve the prevention or treatment, or both, of the metabolic syndrome, atherosclerosis, obesity and diabetes

May consist of a natural product and part of extracts that have been approved for use in foods by the US FDA

May provide for superior control of serum lipoproteins, especially in reducing triglycerides and LDL, and raising HDL

## Institution

[University of Kentucky](#)

## Inventors

[Lodder, Robert](#)

## 联系我们



叶先生

电话 : 021-65679356

手机 : 13414935137

邮箱 : yeyingsheng@zf-ym.com