

# COMPOUND FOR THE TREATMENT OF OBESITY AND HYPERLIPIDEMIA

## Technology for Licensing

### Keywords:

Silibinin, obesity, hyperlipidemia, pancreatic lipase, gastric lipase, fat digestion.

### Description:

Overweight and obesity are declared by the WHO as the most prevalent diseases worldwide. The problems of excess body fat associated with them stimulate a greater exposure to the development of other diseases such as type 2 diabetes or cardiovascular diseases, among others. Its therapeutic approach pursues, at first, a change of lifestyle habits that favor an energy expenditure higher than the caloric intake of the individual, reducing the accumulation of body fat. In cases where this is not effective, this conventional therapy is complemented with the administration of certain drugs.

These types of drugs act by reducing caloric intake and improving the performance of the dietary treatment. However, despite their effectiveness, the appearance of various adverse effects exposes the need to find new drugs with similar mechanisms of action, greater efficacy and fewer adverse effects.

Following this objective, the present invention discloses the use of silibinin for the prevention, improvement, alleviation and/or treatment of obesity. This compound is of natural origin whose use has demonstrated safety in terms of human administration.

Silibinin acts by inhibiting pancreatic lipase, one of the enzymes responsible for the digestion of dietary fats. Thus, the application of this compound partially prevents the cleavage of fats. Consequently, the reabsorption and utilization of such fats, which are excreted through the digestive tract, is prevented. That, together with the safety of its administration, leads to an improvement in the patient's health.

Actuación en el marco de los Proyectos R-PDTC-2018 y PAIDI AT17\_6096\_OTRI UGR

The present invention discloses the use of silibinin for pancreatic lipase inhibition, the enzyme responsible for the digestion of dietary fats. Such effect supports the use of this compound for the prevention, amelioration, alleviation and/or treatment of obesity and/or hyperlipidemia.

## Advantages and Benefits

### » Treatment of obesity and hyperlipidemia

Silibinin inhibits the pancreatic lipase so prevents the partial cleavage, reabsorption and utilization of dietary fats, so triglycerides are excreted.

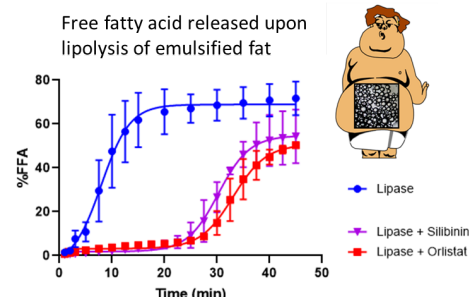
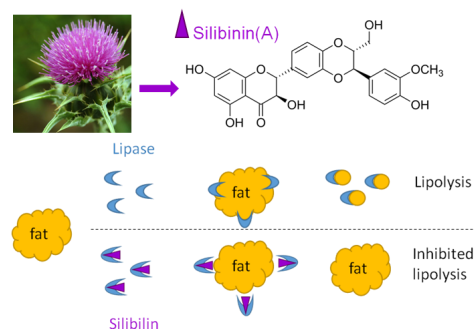
### » Safe for human administration

This compound is of natural origin.

### » Lower risk of side effects

### » Low raw material cost

It is the main active compound in the extract of milk thistle seeds.



## Silibinin and its effect on pancreatic lipase inhibition

### Patent status:

Spanish Patent application number: P202130278  
Priority date: 29/03/2021

### Contact:

Oficina de Transferencia de Resultados de Investigación (OTRI) - Universidad de Granada

Lucas Montes Pérez ([lumontes@ugr.es](mailto:lumontes@ugr.es))  
(+34) 958 249 390