What is Shaggy mane?

_Coprinus comatus_ is a medicinal mushroom that stands out to contain many natural compounds of great therapeutic power.

What are the active constituents of shaggy mane?

Shaggy mane contains vitamins, minerals like vanadium, iron, zinc, Over 20 types of amino acids and a special amino acid called L-ergothioneine which the body cannot synthesize.

How does shaggy mane affect the body?

**Antidiabetes properties**

Vanadium is a peculiar component and is responsible for its anti diabetic effect by the following pathways

- At peripheral level, promotes awareness of the cell to the action of insulin.
- At the central level, provides protection and revitalization of the pancreatic β-cells.

The use of vanadium in the therapy of diabetes such as mineral itself has multiple side effects, such as blocking of numerous enzymes, and there are conflicts over use in therapy. The use of this mushroom rich in vanadium has shown no side effects so far. It is interesting to note that to counter the side effects of vanadium it must be supplied with iron. Coprinus comatus is rich in iron, thus optimizing the action of vanadium. The presence of vanadium in Coprinus comatus causes it to act as insulin-mimetic action by inhibition of intracellular tyrosine phosphatase act as negative regulators of the pathway of insulin signaling by preventing the
entry of glucose. The effect of vanadium on glucose metabolism is that there is a decrease in blood glucose levels and glycosylated hemoglobin concentrations.

- **ANTI OXIDANT PROPERTIES**

Shaggy mane contains a special amino acid called L-ergothioneine which the body cannot synthesize. The fact is that today it is known that ergothioneine is a cytoprotective amino acid that acts on the mitochondrial DNA, especially vulnerable to oxidative stress because; unlike nuclear DNA has no protective histones.

The following are the activities of ergothioneine

- Preserve and maintain levels of other antioxidants such as glutathione, vitamin E and C.
- Enhance fat metabolism (increase energy capacity of the organism).
- To protect the mitochondria from oxidative damage and especially that caused by UV radiation.