



## Effects of *Physalis peruviana* Fruit Extract on Stress Oxidative Parameters In Streptozotocin-Diabetic Rats

Ángela C. MORA, Diana M. ARAGÓN & Luis F. OSPINA \*

*Departamento de Farmacia, Universidad Nacional de Colombia-Bogotá.  
Carrera 30 No. 45-03, Bogotá, Colombia. AA 14490*

---

**SUMMARY.** Diabetes mellitus is a metabolic disease associated to oxidative stress. In this work, the hypoglycaemic and antioxidant effect of an extract of *Physalis peruviana* fruits in an experimental diabetes model was evaluated. The diabetes was induced in Wistar rats by a single administration of streptozotocin. The oxidative stress markers evaluated were lipid peroxidation, protein oxidation, ferric reducing ability of plasma (FRAP) and the superoxide dismutase and catalase activities in pancreas, liver and kidney. The oral administration of *Physalis peruviana* extract during 15 days reduced the blood glucose levels further than 30 %. The same way, the extract administration increased the FRAP levels and the superoxide dismutase and catalase activities. The lipid peroxidation and protein oxidation levels were reduced. The results suggest that the *Physalis peruviana* extract exhibit hypoglycaemic activity and improve the antioxidant status of the streptozotocin diabetic animals.

---

**KEY WORDS:** Experimental diabetes, Oxidative stress, *Physalis peruviana*, Streptozotocin.

\* Author to whom correspondence should be addressed. *E-mail:* lfospinag@bt.unal.edu.co