

HYPOGLYCEMIC ACTIVITY OF CARBOHYDRATES OF PASSION FRUIT SKIN
(*Passiflora sp*)

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To find out the hypoglycemic activity and antilipidic effects of the polysaccharide fractions of the commercial product (Liv sugar) diabetic albino rats were tested. The aqueous extract of skin flour of passion fruit was precipitated with ethanol, dialysed and lyophilized. The water soluble one (SPPF) and the total extract (TPPF) were used in experimental model of diabetes mellitus induced by alloxan. Albino rats (200g) were divided into groups (n=5). TPPF and SPPF (50 or 100 mg/kg, (vo) 5 days long), 48 h after the intravenous injection of alloxan (50 mg/kg). Blood glucose (glucose oxidase method), total cholesterol (TC) and triglycerides levels (TG), Alanine aminotransferase (ALT) and Aspartate aminotransferase (AST) were estimated in alloxan induced diabetic rats before and 5 days after he administration of drugs, 1 h after the last drug administration. The fractions tested showed significant reduction of blood glucose level (%) at doses of 50 (TPPF = 284,5±30,92; SPPF =302,0±19,24 mg/dL , 52 and 54%) and 100 mg/kg, vo (TPPF = 236,0±35,33; SPPF=269,8±20,62 mg/dL, 34 and 37%) respectively, The pre-treatment values were TPPF = 588,6±44,57 and 511,7±49,76 mg/dL; SPPF =460,8±35,87 and 431,5±36,00 mg/dL. No significant alteration was observed in the control groups. All groups showed a significant decrease in the TG and C levels.

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