



ABS055

IMPROVED PHYSICAL ENDURANCE ACTIVITY OF FRUIT OF *BETA VULGARIS*

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Introduction: Beets are good sources of folate, potassium, vitamin C, fiber, and antioxidants, as well as nitrates. Beet juice may increase exercise endurance, improve blood flow, and help lower blood pressure. Beetroot contains **inorganic nitrate** (NO³⁻) as the main bioactive for cardiovascular and endurance exercise interactions; and the pigment class of betalains, predominately betanin and vulgaxanthin; and also phenolics. Endurance is the ability to withstand stress or exertion and remain active for a long period of time. Physical endurance is the time span between the initiation of physical activity by an individual and the termination because of exhaustion.

Aim: The aim of present study was to investigate the physical endurance activity of fruit extract of *Beta vulgaris* in experimental mice.

Materials and Methods: Dry extract of *Beta vulgaris* was obtained from Green Chem. Swiss Albino mice of either sex weighing between 25 to 30 gm were taken for the purpose. Approval from Animal Ethics Committee was taken before starting the experiment. The animals were maintained under standard conditions in an animal house approved by the Committee for the Purpose of Control and Supervision on Experiments on Animals (CPCSEA). The Swiss albino mice either sex were divided into five groups each composed of six animals-Control (normal saline), Standard (caffeine 30 mg/kg p.o), Low (100 mg/kg p.o.), Medium (200 mg/kg p.o.) and High dose (400 mg/kg p.o.). In Rota Rod Model, after administration of the drug, one hour later all the animals were placed on rotating rod and observed for fall off time.

Result and conclusion: The time spent on Rota rod in drug treated group was found to be increased as compared to control group. It shows increase in physical endurance power of the extract in mice.

Keywords: Beta vulgaris, Rota Rod, Physical endurance