

ABSTRACT

The current study was done to study the muscles properties such as mean fibre number, mean fibre diameter and cross sectional area in relation to the increase body weight and mass of muscles by the supplementation of antibiotic such as mannan oligosaccharide. Forelimb muscles were excised and processed for the study. The experiment was performed on albino mice; the female mice were fed with MOS after giving birth to check the postnatal developmental changes in mice muscles. Triceps and biceps muscles were selected to check the effect of MOS. The difference in muscle fiber number, muscle diameter and cross section area of MOS fed and control mice were significant. Mean muscle fibre number, muscle diameter and cross section area of the mice were similar to that of control. No change was observed by supplementation of MOS. While diameter of muscle increase with the age with no effect of MOS. The body weight and muscle weight was observed to decrease by MOS supplementation. The DNA and RNA content was also measured in MOS supplemented mice which were 3867ng. In biceps fiber number were lessen than that of triceps.

Key words:

Mannan oligosaccharides (MOS). Mean fibre number, mean fibre diameter, mean fibre area, muscle weight, body weight, muscle functions.