

## COMPARATIVE STUDY OF REACTION TIME AMONG DIFFERENT PHASES OF MENSTRUAL CYCLE IN NATIONAL LEVEL FEMALE PLAYERS

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### ABSTRACT

*Menstruation is ruled by tightly musical organisation changes within the levels of gonad sex hormone and progestin. Objectives of the study are to characterize the Reaction time during Menstrual Phase, follicular phase, ovulation phase, luteal Phase of Uterine changes during menstrual cycle in female players, and to find out whether there were any significant difference among Menstrual Phase, follicular phase, ovulation phase, luteal Phase during menstrual cycle in relation to Balance. Fifty (50) national levels female players were selected randomly who have regular menstrual cycle further they were selected from different sports i.e. Hockey, Badminton, Cricket, Football and Volleyball. Data was collected in different phases of menstrual cycle i.e. Menstrual Phase, Luteal phase, Ovulatory phase and Follicular phase. Age of female athletes ranged between 17 to 25 years. Reaction time was recorded with the help of Nelson hand reaction test. One Way Analysis of variance was employed to analyse data. Mean and SD value of Menstrual Phase, Follicular Phase, Ovulatory Phase and Luteal Phase were having  $0.06 \pm 0.09$ ,  $0.02 \pm 0.01$ ,  $0.02 \pm 0.01$ ,  $0.03 \pm 0.01$  respectively. Significant difference was found among menstrual Phase, follicular phase, ovulation phase and luteal Phase of Uterine changes because calculated F value 5.621 was greater than the tabulated value and P value found less than .05. It was concluded that the significant difference was found among four phases i.e. Menstrual Phase, Luteal phase, Ovulatory phase and Follicular in relation to Reaction time. And Reaction time of National female players in Follicular phase was greater than in comparison to luteal phase, ovulatory phase and menstrual phase.*