Three groups of badminton, table tennis players and control group were taken into account in our study. Because both of the sport branches are actively applying the high-extremity, badminton and table tennis players were chosen. Our aim is to find and compare the possible morphological changes and isokinetic performances in the upper extremity of the players, especially in the wrist, due to its permanent using in both sport branches. 10 badminton players, 10 table tennis players and 10 subjects forming control group were included in this study. Anthropometrical evaluations of these subjects including age, length, weight, length of upper and lower extremity, arm and forearm surroundings were realized. In order to determine the rate of flexibility, we measured the degree of range of motion (ROM) of the upper extremity by means of Biodex system 3 dynamometer. We also measured flexion-extension of elbow, flexion-extension and ulnar-radial deviation evaluation of muscle strength of wrist by the same dynamometer. We statistically compared the measures that we had realized in three groups. Consequently, there was a difference in line with increase in the ROM rates of the tennis players in terms of peak torque, total work, peak torque/BW (P<0.05). However, ROM rates of tennis players were found lower than of the other groups (P>0.05). There was no statistically meaningful difference in terms of length of extremity (P>0.05). There was a meaningful increase in the measurements of environment of badminton players (P>0.05). It follows from this outcome that arm and forearm triceps of badminton players are more suffering from hypertrophy than tennis players.

Muscle strength of wrist joint of the table tennis players were found higher than of badminton players and control groups since they use their wrist more actively during the match, however ROM degree of wrist were found lower than of the other groups due to the overuse. Decline in the flexibility can pave the way for injuries and it can accelerate the formation of carpal tunnel syndrome. It is necessary to include stretching exercises for flexibility beside the strength exercises in the exercise programs to be prepared for these players.

Keywords: Anthropometric Data, Tabel Tennis, Badminton