The purpose of this study was to compare and find the difference in body composition between pitchers and position players in Division-1 baseball. The body fat percentages, using the seven site skinfold test were (P: 13.45 ± 1.64%; PP: 14.79 ± 1.53%) and the underwater weighing method (P: .863 ± 0.5 yrs.) were also not significantly different (p=0.67). The body fat percentages, using the seven site skinfold test (P: 13.45 ± 1.75%; PP: 13.85 ± 1.53%) and the underwater weighing method (P: 14.69 ± 1.68%; PP: 14.78 ± 1.53%) were also not significantly different (p=0.54 and p=0.67, respectively). The results of this study indicated that there was no significant difference between all body composition measurements taken between position players and pitchers at the University of Texas at Arlington.

Methods (cont’d)

The skinfold sites are as follows: Triceps: Vertical fold, on the posterior midline of the upper arm, halfway between the acromion and olecranon processes, with the arm held freely at the side. Subscapular: Diagonal fold (45°), 1 to 2 cm below the inferior angle of the scapula. Chest/Pectoral: Diagonal fold; one half the distance between the anterior axillary line and the nipple (men). Midaxillary: Vertical fold; on the midaxillary line at the level of the xiphoid process of the sternum. Suprailiac: Diagonal fold; in line with the natural angle of the iliac crest taken in the anterior axillary line immediately superior to the iliac crest. Abdominal: Vertical fold; 2 cm to the right of the umbilicus. Thigh: Vertical fold; on the anterior midline of the thigh, midway between the proximal border of the patella and the inguinal fold. Hydrostatic or Underwater weighing was taken last. The hydrostatic underwater weighing procedure involves being completely submerged in a tank or tub for 3-5 seconds while the subject’s underwater weight is measured. This procedure was repeated 3-5 times to find a consistently low weight. The subjects were asked to sit on the swing that was suspended in the water, take several deep breaths, then exhale as much as possible while they completely submerged themselves by bending forward beneath the water. Continuing to exhale as much air as possible and holding very still a reading is taken. A tap on the chain alerted the subject that the reading was recorded. The subjects were told that if uncomfortable at anytime, they could raise above the water or quit the testing all together with no penalty. The pool was less than 4 feet deep and the subjects could stand up at any time. Percent body fat was found using the Siri equation. t-tests were used to find significant difference between the two groups pertaining to each set of measurements.

Results (cont’d)

The body mass indexes (P: 25.5 ± 1.38; PP: 25.925 ± 1.61) showed no significant difference (p=0.62). Waist and hip ratio values also resulted in (P: .844 ± 0.02; PP: .863 ± 0.01) no significant difference (p=0.14). The body fat percentages using the seven site skinfold test (P: 13.45 ± 1.75%; PP: 13.95 ± 1.53%) showed no significant difference (p=0.74). The body fat percentages using the underwater weighing method (P: 14.19 ± 1.64%; PP: 14.79 ± 1.53%) were also not significantly different (p=0.67).