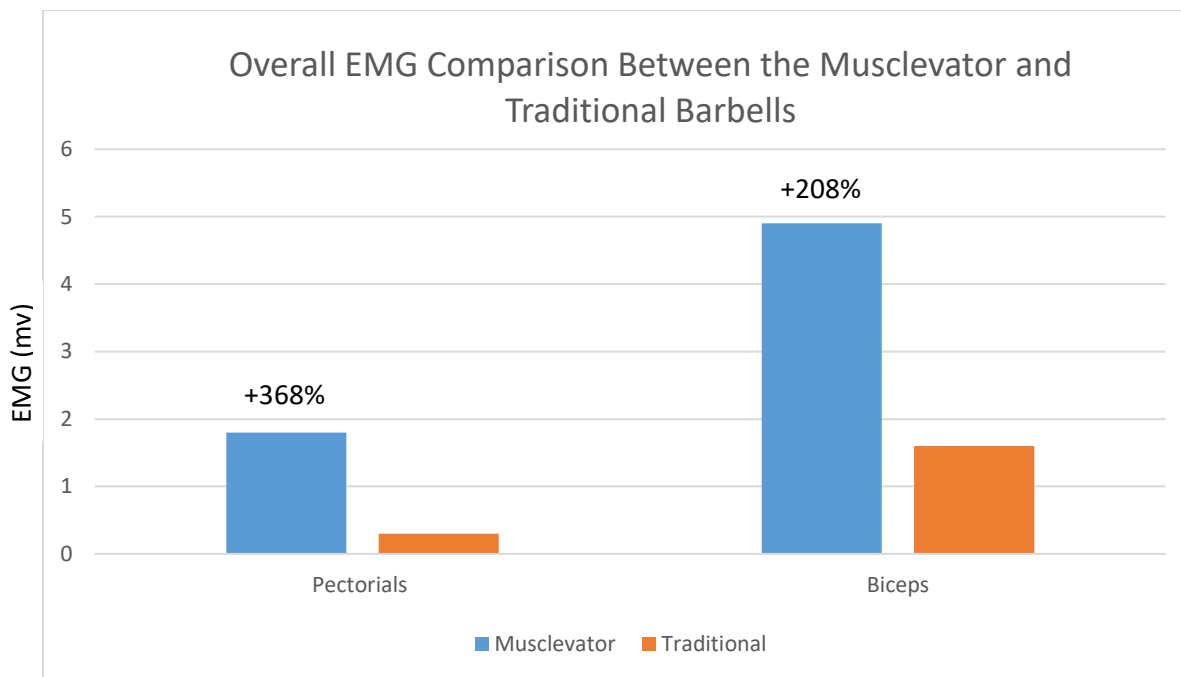


## Results from a University Study Performed on the MuscleVator Pec and Bi

The table and graph below indicates the percent change in EMG activity compared to the traditional barbell when utilizing the proprietary (MuscleVator) barbell with horizontal spring-loaded resistance. Values are reported as percentages. The proprietary barbell treatment resulted in an increased activation for the pectoralis major, deltoids, and biceps for all exercises.

|                   | Pectoralis Major | Deltoid | Biceps  |
|-------------------|------------------|---------|---------|
| Bench Press       | 248.32           | 8.40    | 927.99  |
| Biceps Curl       | 282.23           | 11.15   | 10.66   |
| Shoulder Raise    | 445.68           | 0.08    | 291.79  |
| Shoulder Press    | 947.11           | 48.00   | 774.53  |
| Triceps Extension | 354.47           | 14.37   | 1494.01 |
| Average Change    | 455.56           | 16.40   | 699.80  |

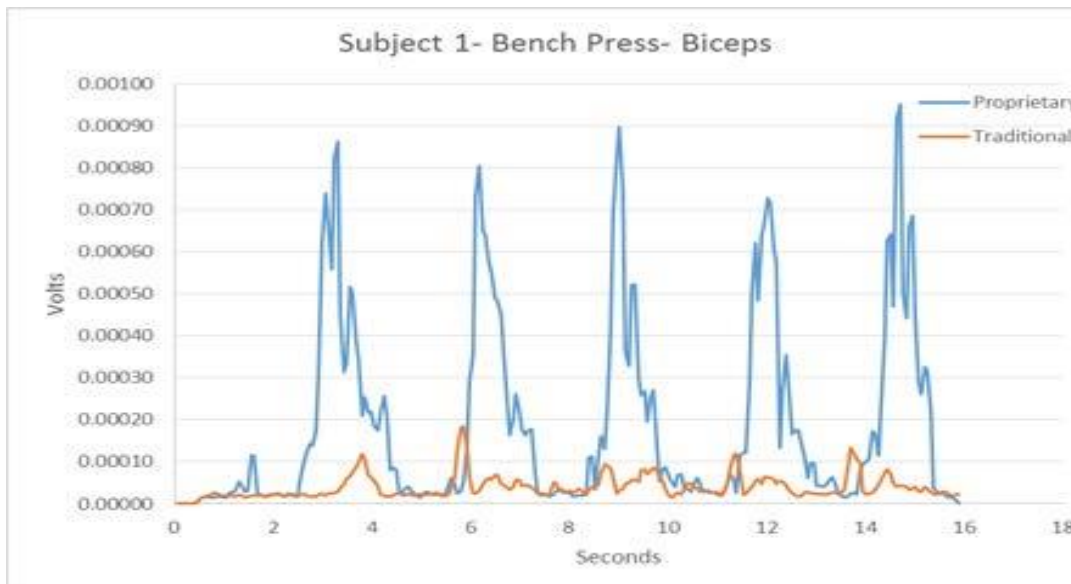
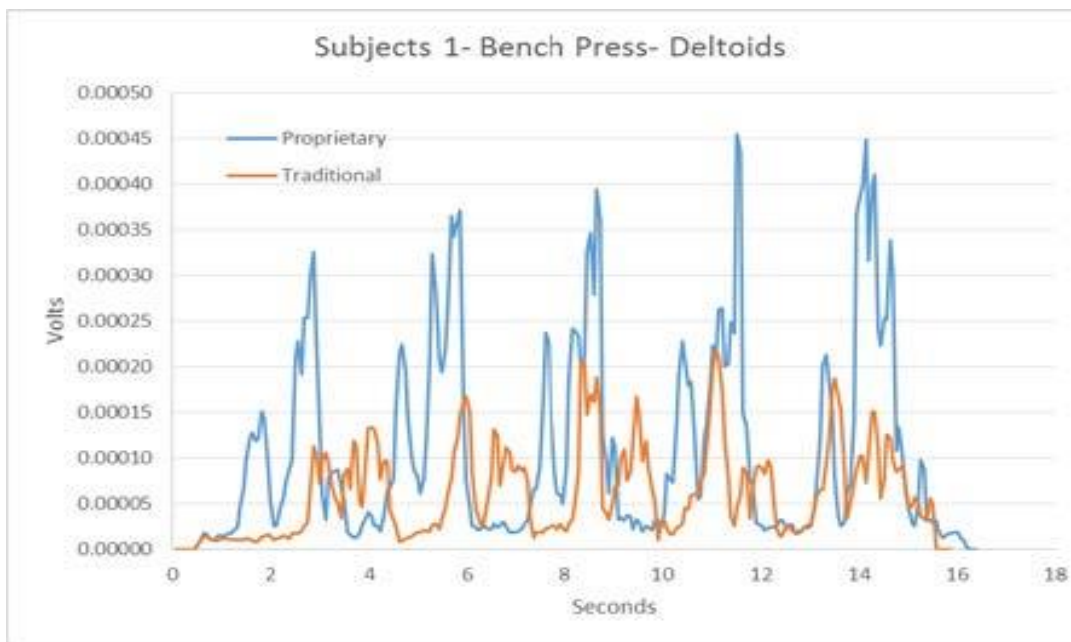
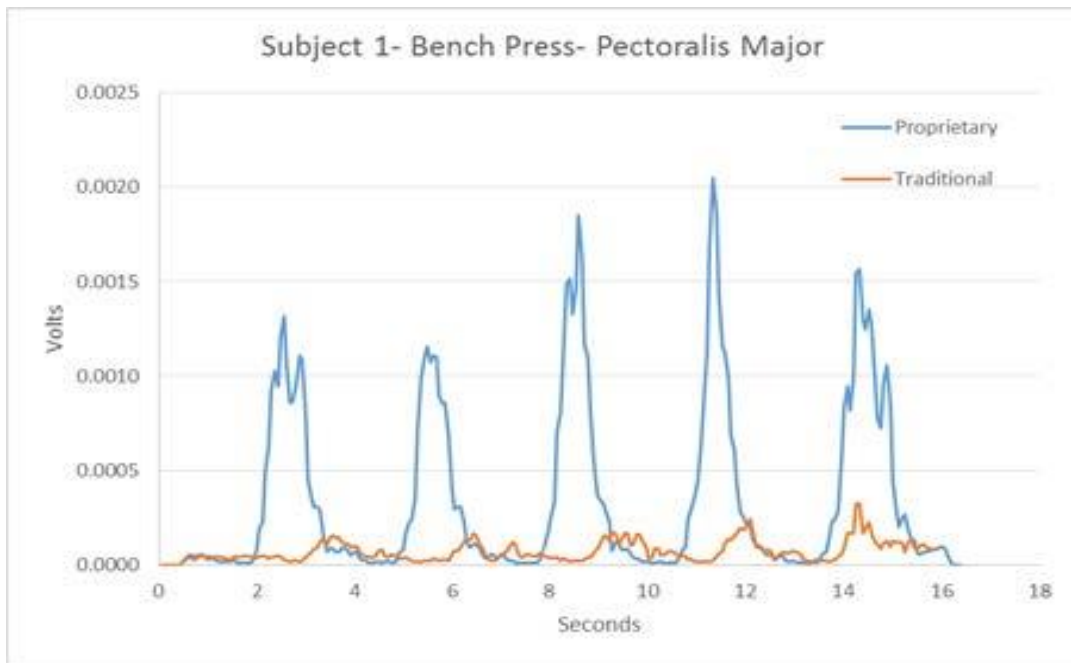


Based on verbal feedback of subjects, the proprietary barbell appeared to render a more “strenuous” workout compared to the traditional barbell. Subjects consistently indicated that the proprietary barbell added an increased level of difficulty to what is otherwise an accustomed exercise.

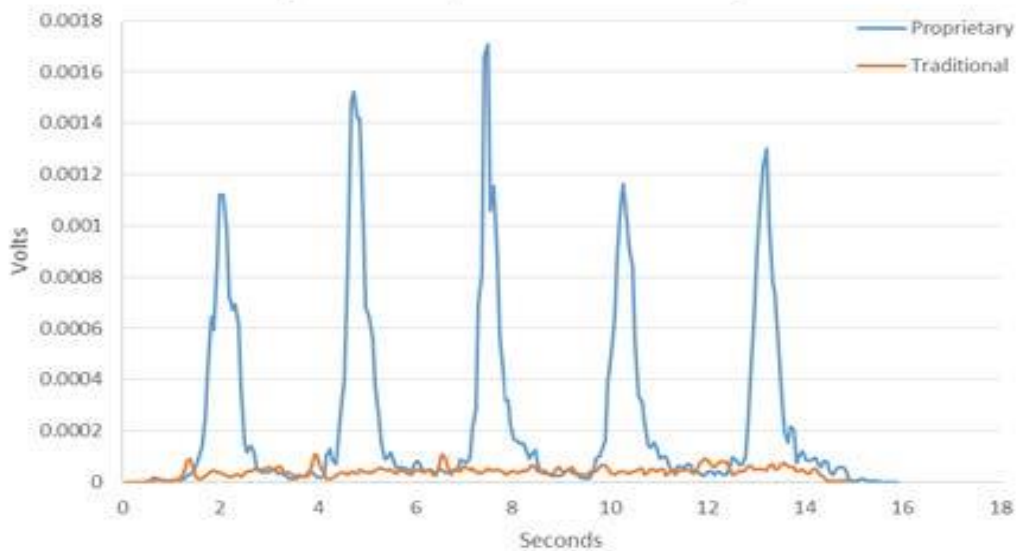
Overall, the proprietary barbell increases activation of muscle groups typically not stressed during a given exercise without significantly compromising the activation of primary muscles. For example, during the biceps curl, pectoralis major activation is typically minimal. However, the proprietary barbell increased pectoralis major activation by approximately 280% without compromising activation of the prime muscle (biceps).

This pool of pilot data suggests that the proprietary barbell may overall improve the exercise-specific muscle activation profile during resistance training which may be conducive to strength and lean mass development.

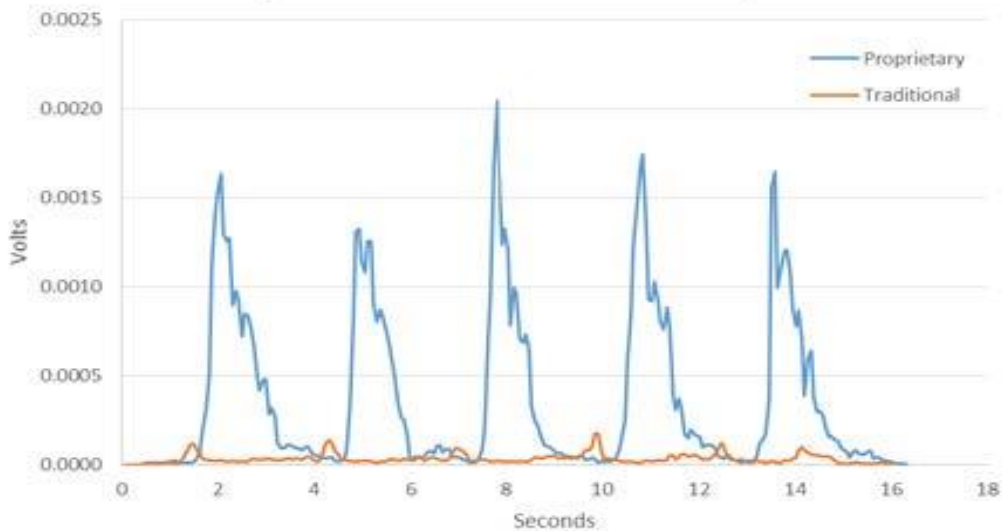
# EMG Records for Subjects Used in Study Subject 1



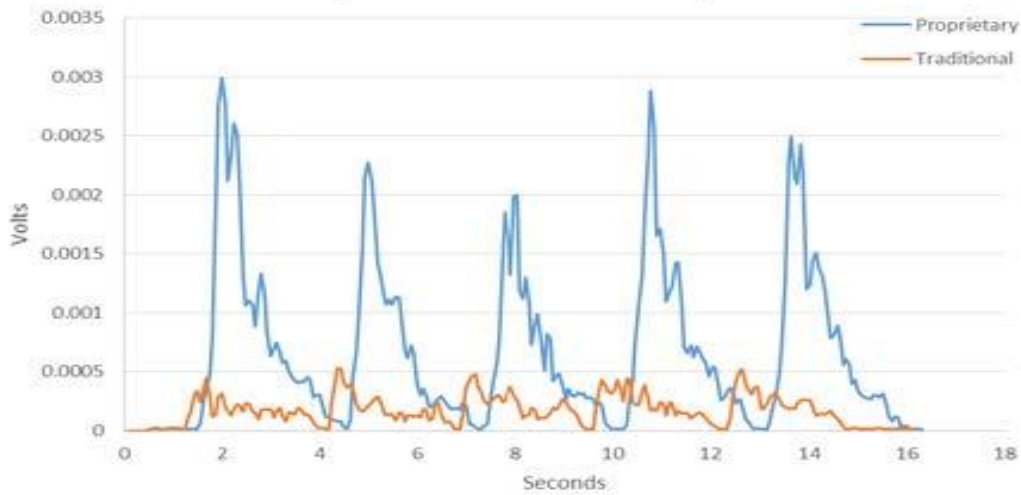
Subject 1- Bicep Curl- Pectoralis Major

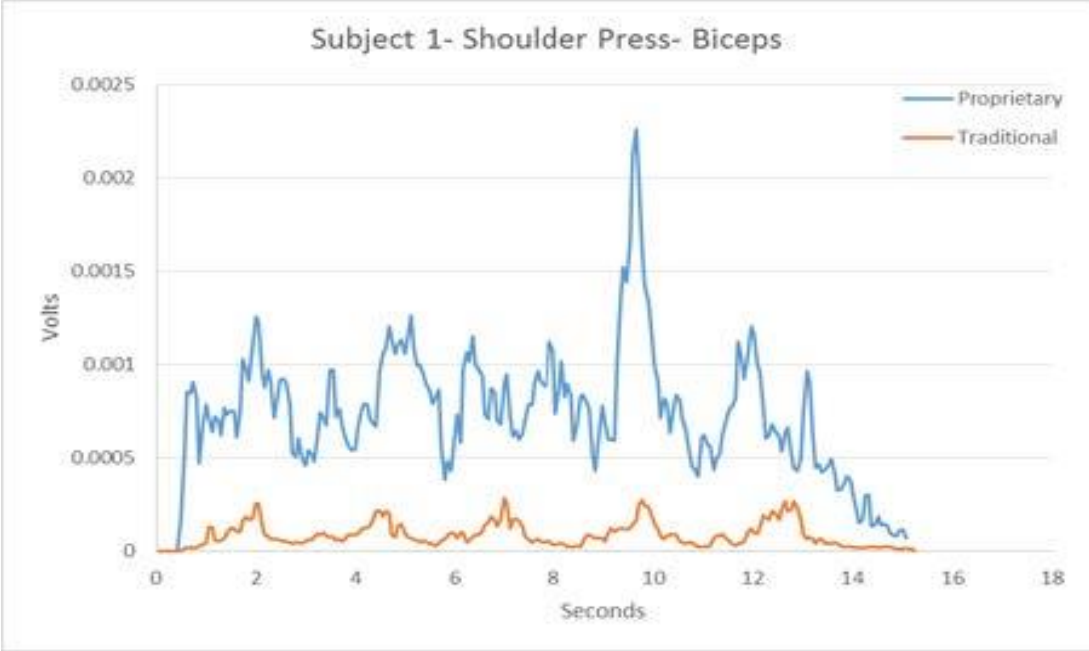
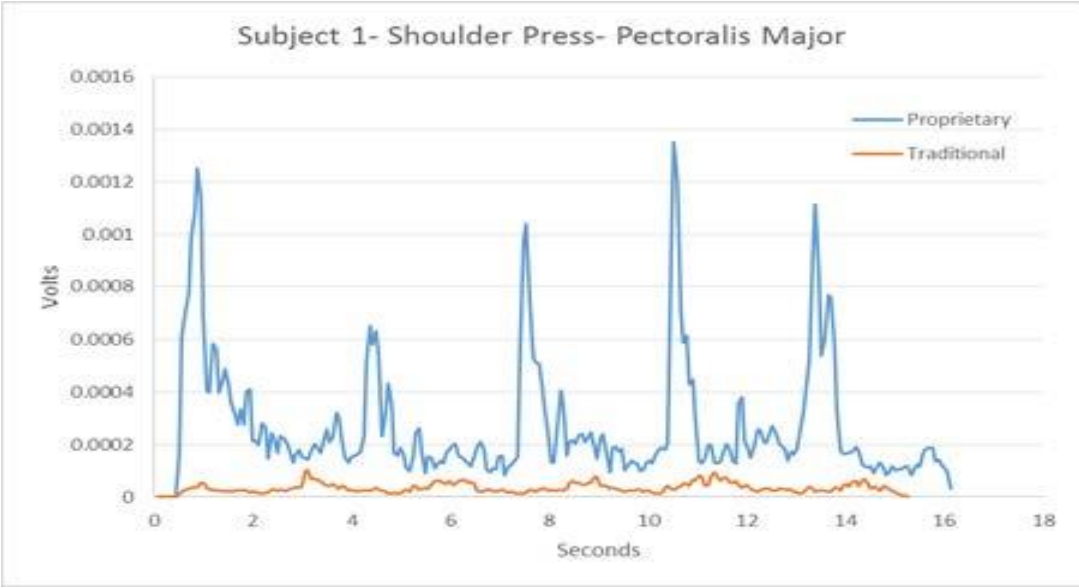


Subject 1- Frontal Raise- Pectoralis Major

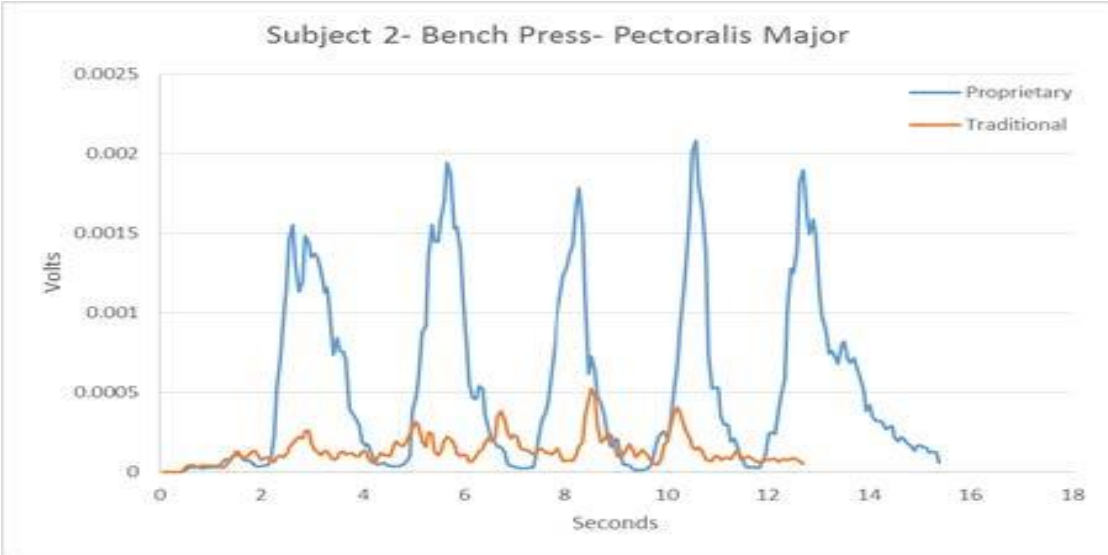


Subject 1- Frontal Raise- Biceps

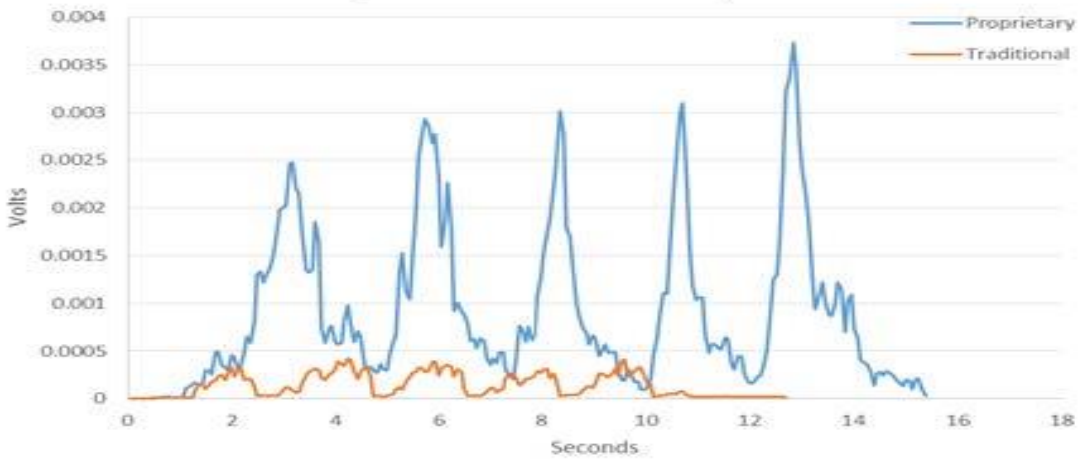




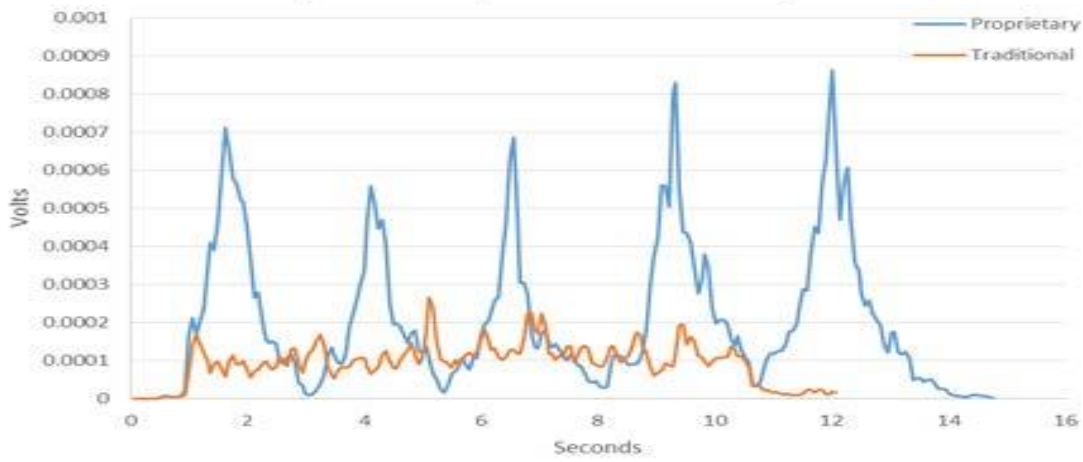
### Subject 2



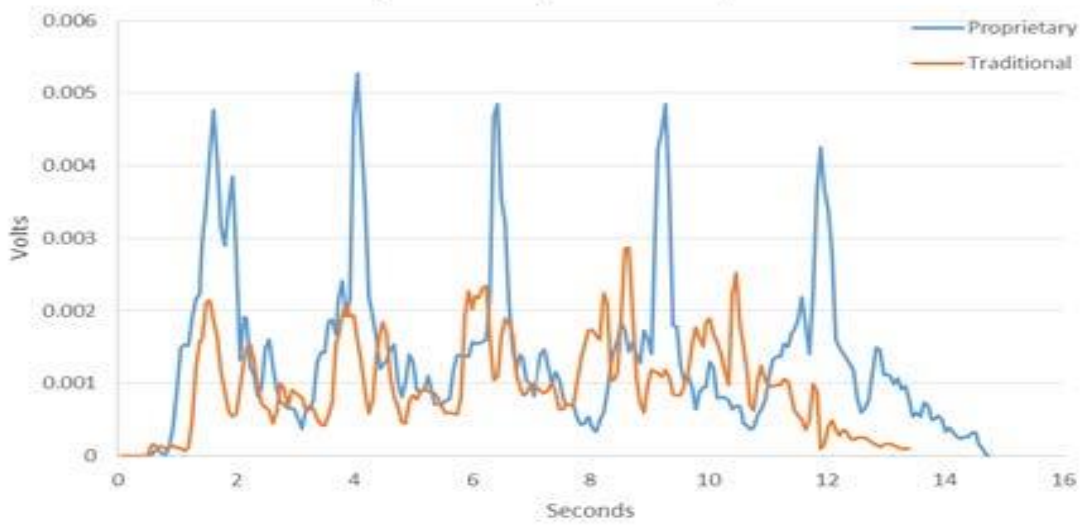
Subject 2- Bench Press- Biceps

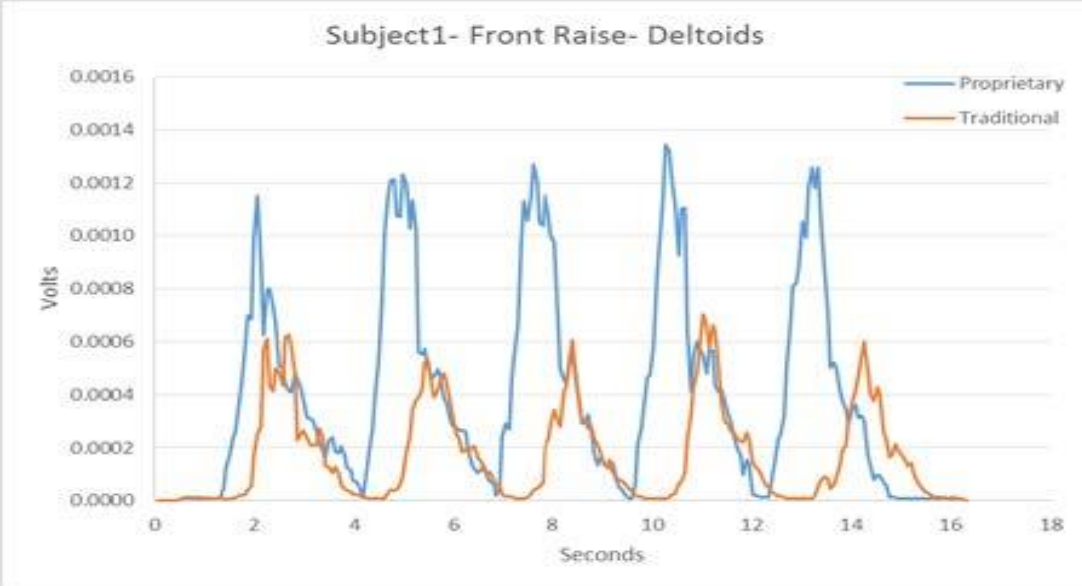
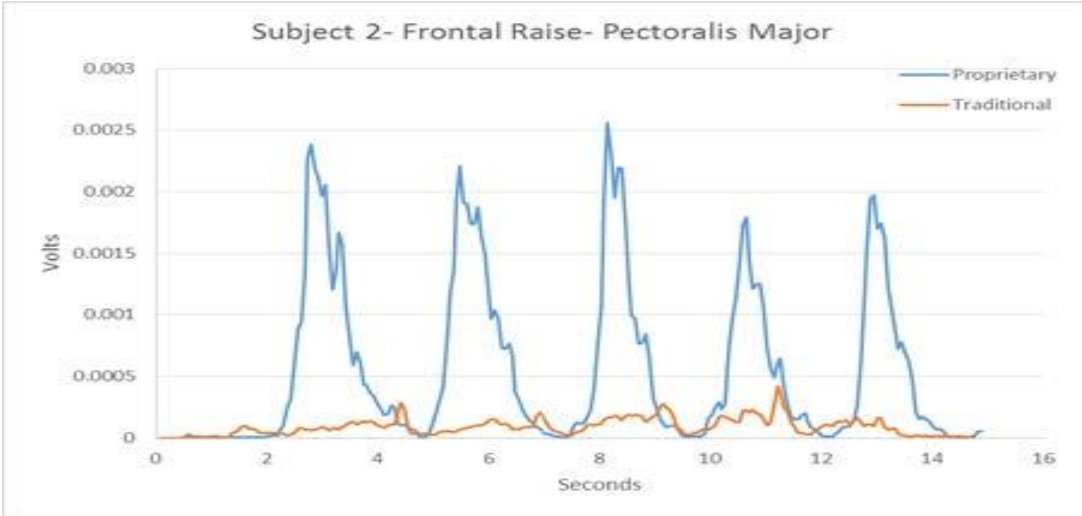
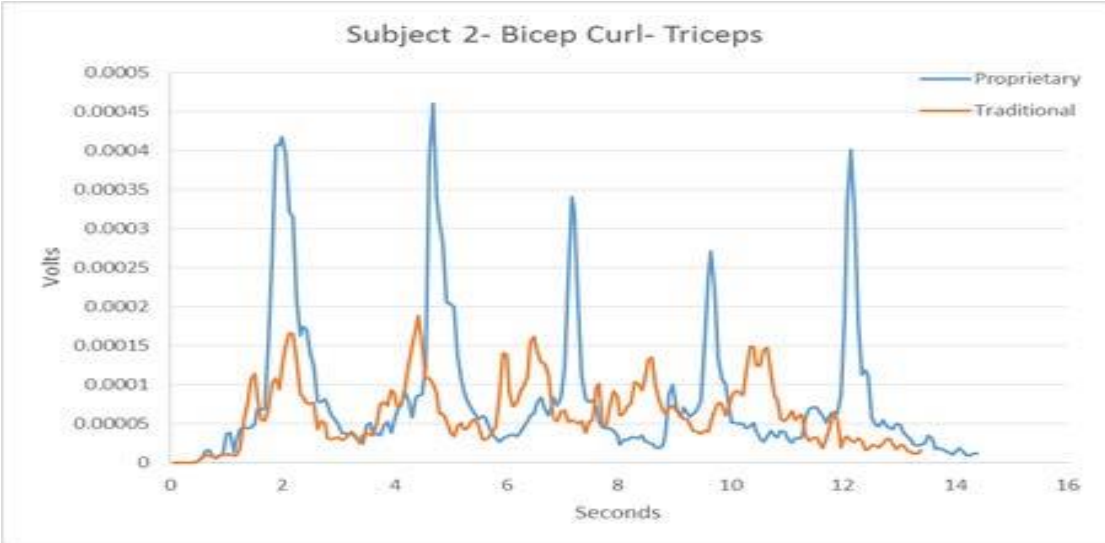


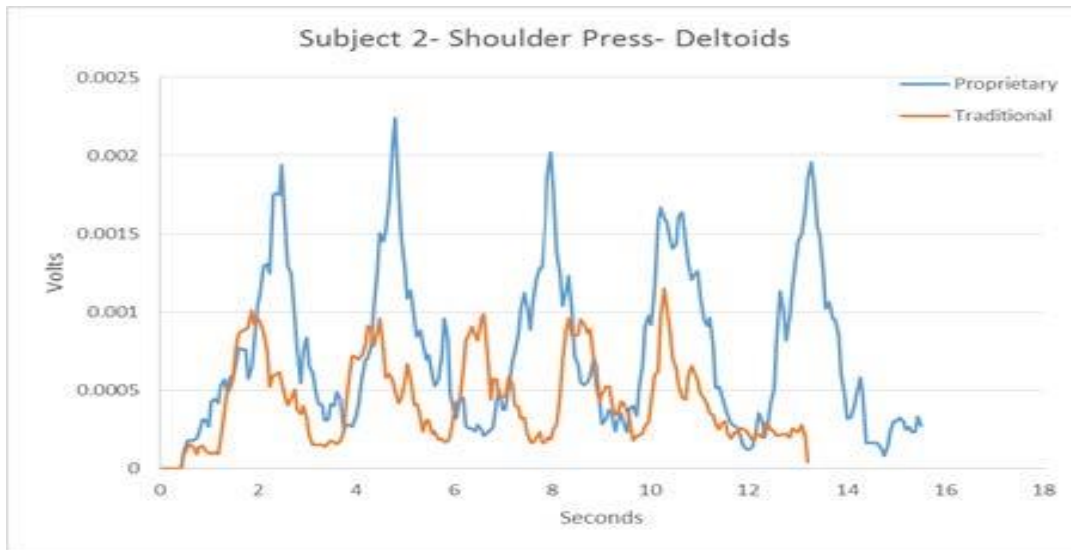
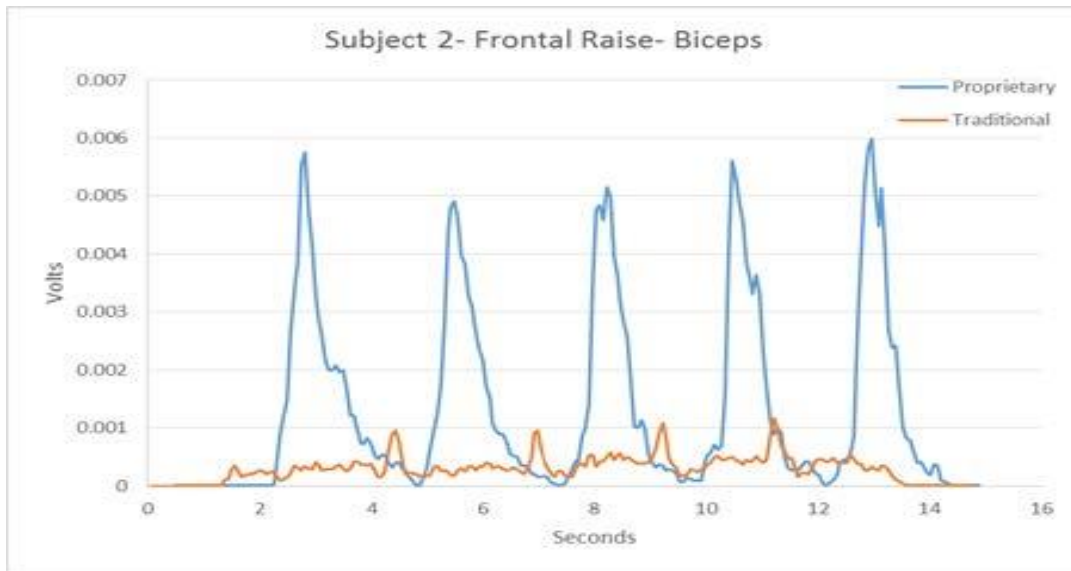
Subject 2- Bicep Curl- Pectoralis Major



Subject 2- Bicep Curl- Biceps







Subject 2- Shoulder Press- Pectoralis Major

