The Eagle Tactical Athlete Program (ETAP) was scientifically developed specifically for the U.S Army’s 101st Airborne Division (Air Assault) to counter the significant number of sustained unintentional musculoskeletal injuries. ETAP was previously demonstrated to improve human performance characteristics, but the capability of ETAP to reduce injuries had not been studied.

**PURPOSE:** To determine if ETAP would reduce unintentional musculoskeletal injuries in garrison in a group of 101st Airborne Division (Air Assault) Soldiers.

**METHODS:** Non-commissioned officers led their respective units during physical training following certification in the training components of ETAP as taught during an ETAP Instructor Certification School. A total of 1641 Soldiers were enrolled (N = 1106 experimental group, N = 540 control group) to evaluate changes in injury data. Injuries were tracked for 5 months prior to and after ETAP participation during a pre-deployment workup phase. ICD-9CM codes were used to categorize preventable musculoskeletal injuries (total, regional distribution, acute or overuse). A McNemar analysis was conducted to evaluate the effect of ETAP on the overall injury rate within each group.

**RESULTS:** There was a significant reduction in overall injury rates (pre-ETAP: 209/1106 (18.9%), post-ETAP: 177/1106 (16.0%), p = 0.045) in the experimental group while no differences in the control group were found. A reduction in injury rates were also observed in overuse injuries and specific injuries to the lower extremity, knee, and lumbopelvic region in the experimental group.

**CONCLUSION:** The Eagle Tactical Athlete Program was scientifically designed to optimize performance and reduce injuries. The current analysis demonstrated that ETAP reduces preventable musculoskeletal injuries in garrison. The capability of ETAP to reduce injuries confirms the vital role of a scientifically designed training program on force readiness and health.

Supported by USAMRMC #W81XWH-11-2-0097