

Dietary Habits of Soldiers of 101st Airborne Division Air Assault

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Proper nutrition plays an important role in maximizing a Soldier's ability to meet the demands of physical and tactical training. **PURPOSE:** To evaluate dietary habits of 101st Airborne Division (Air Assault) (101st ABN DIV (AA)) Soldiers.

METHODS: A total of 367 101st ABN DIV (AA) Soldiers (female 57=; male n= 310; Age 27.9±6.5 years) completed a detailed diet history including eating habits, food and fluid intake before during and after physical training, and dietary supplement use. A 24 hour recall was collected (n=293; female=52, male =241) and analyzed using Food Processor SQL 10.6 (ESHA) to assess macro- and micronutrient content of the diet. **RESULTS:** Soldiers consumed 3.4±1.0 meals per day with 25% of Soldiers skipping at least one meal per day. Soldiers reported eating out 4.4±5.6 meals per week (range, 0-31 meals). Carbohydrate intake was 304±145 g/day (3.8 g/kg body weight), protein 111±57 g/day (1.4 g/kg body weight), and fat 91±53 g/day with 60% of Soldiers consumed greater than 30% of calories from fat. Fluids were consumed by 76% of Soldiers before physical training (PT), 70% during PT, and 98% following PT. Food was consumed by 30% of Soldiers before PT, whereas 93% consume food following PT (35% within 1 hour, 64% 1-2h, 1% > 3 h) with 77% eating a snack or meal with both carbohydrate and protein. Use of at least one dietary supplement was reported by 41% of the Soldiers (43% vitamin/mineral, 22% protein-energy drinks, 8% joint health, 7% nitric oxide, 5% each amino acids, antioxidants, weight loss). **CONCLUSION:** Our findings suggest that Soldiers of the 101st practice adequate hydration before, during and after exercise. It is recommended that Soldiers increase daily carbohydrate and protein intake and reduce total fat intake, eat at least 3 meals per day, including either a meal or snack prior to PT to optimize performance. Although the majority of Soldiers consume a sufficient post training snack to aid in recovery, low daily carbohydrate intake does not promote maximal fuel restoration. Future research should focus both on evaluating the macronutrient content of the diet that optimizes Soldier performance and on approaches to educate Soldiers on how to incorporate these nutrition guidelines into their daily eating.

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