

mercial products provide such dosing. We evaluated the effects of a commercially available BCAA-based product providing a specific blend of three parts leucine (900mg and 450mg/dose), one part isoleucine (300mg and 150mg/dose), and one part valine (300mg and 150mg/dose) on salivary cortisol levels. Thus, supplementation provided either 1,500mg or 750mg of total BCAAs, in a 3:1:1 ratio of leucine:isoleucine:valine, per dose. We recruited 32 endurance athletes to receive 4 doses of BCAAs over a 24-hour period at a low dose (L, 750mg/dose, N = 11), a high dose (H, 1,500mg/dose, N = 11), or a placebo (P, N = 10). Subjects were participants in a 24-hour mountain biking event and consumed the supplement following the completion of each of four laps (14.91 miles). Total BCAA dosing over the 24h period was 6g (H) or 3g (L). Saliva samples were collected before and after each lap for analysis of cortisol as an index of exercise stress and recovery. Both H and L showed reduced cortisol exposure ($0.509 \pm 0.627 \mu\text{g/dL}$ and $0.565 \pm 0.478 \mu\text{g/dL}$, respectively) versus P ($0.982 \pm 0.972 \mu\text{g/dL}$, both $P < 0.05$). Of interest, was the finding that while L reduced cortisol exposure by 42.5% compared to placebo, H was only slightly more effective (48.2%), and not statistically so ($P = 0.64$ L vs H). These results demonstrate that as little as 750mg/dose of BCAAs in a 3:1:1 ratio (total dose of 3g over 24h) can reduce cortisol exposure during intense endurance exercise.

Poster 34

Thomas JR, Faizullabohy A. **Quantified sport score associations from a dietary intake questionnaire in a group of New York City firefighters.** Long Island University, C.W. Post Campus, Department of Nutrition, Brookville, New York 11548, USA. jack.thomas1@liu.edu

This 2003 study examined a group of 44 New York City firefighters (all male). Participants completed a questionnaire designed to examine meals consumed at home, work, or eaten out (fast food/casual). Included in this questionnaire were a series of quantifying questions regarding firefighter

physical activity from sports. The Habitual Physical Activity Index Questionnaire, by Baeke et al, previously examined physical activity while at work, leisure, and sport. Our study used only the physical activity index of sport questions. These questions were tabulated, analyzed, and compared against all other study variables. The physical activity mean sport score was $1.92 \pm .58$ units. The sport scores ranged from 0.92 to 3.05 units. The most popular type of firefighter sport was softball. The dietary survey component reported differences in meals at home, work, or eaten out. However, Sport Pearson correlation coefficients were not associated with perceived health of meals at home, work, or eaten out. Additionally, sport was not related to meal size at home, work, or eaten out. Being married did not influence sport scores. Race showed no relationship with sport. And, the number of days per month on a diet did not relate to sport scores. The study's mean Body Mass Index (BMI) was 27.76 ± 2.43 . A significant Person correlation coefficient was recorded for firefighters with higher body fatness (high BMI) and lower sport scores ($r = -.636$, $p = .0001$). Age also influenced the amount of sport. The trend was for older firefighters to participate in less sport ($r = -.492$, $p = .001$). Similar to age was the significance between greater years in the department and less sport ($r = -.510$, $p = .0001$). Also, the relation of number of children to amount of sport showed that the greater the number of children, the lower the sport scores ($r = -.342$, $p = .023$). The survey contained a single question inquiring if the events of 9/11 changed current dietary practices. Interestingly, 51% of sample reported a dietary change nearly two years after the collapse of the World Trade Center. A significant relationship existed between 9/11 diet change and an increase in sport activity ($r = .317$, $p = .034$). Additionally, 9/11 diet change correlations were not in conjunction with the health of meals at home, work, or eaten out. Furthermore, 9/11 diet change was positively related to meal size at only one of the eating locations. Fast food or casual dining meal size signifi-