## Participants Needed for a Military Nutrition Research Study

# Recovery protein nutrition as a countermeasure for anabolic resistance following sleep loss

#### Volunteering will involve:

- ~ 18 day time commitment, with ~ 18 lab visits
- 3 days following diet instructions at home
- Consuming controlled study diets that include foods from military rations and commercially available foods for 11 days
- Restricting sleep for 4 days (~4h sleep / night)
- Drinking a protein tracer beverage
- Body composition, diet, fitness, metabolism measurements
- Blood draws
- Saliva and urine collections
- Muscle biopsies
- Almost daily treadmill or stationary bike exercise
- Treadmill walking with a weighted pack

#### You may be eligible if the following apply to you:

- Men/Women aged 18-39 years
- Weight stable for the past 2 months (± ~7lbs)
- BMI < 30 kg/m<sup>2</sup>

For more information please contact.

- Healthy, without chronic illness, muscle or bone injury, diagnosed sleep disorder
- Performing aerobic and/or body weight/resistance exercise at least twice/week for the past 6 months
- During study willing to refrain from:
  - Alcohol, nicotine products, dietary supplements, caffeine, naps, and non study exercise, food and beverages
- Federal civilian employees and non-HRV Active-Duty military working within NSSC must have supervisor approval

Compensation: Participation in this study could earn up to \$1012.00

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Principal Investigator:

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### Military Nutrition Study Volunteers Needed

Healthy men and women ages 18 – 39 years are needed to participate in a research study examining how sleep loss affects the body's ability to build and maintain muscle and whether eating protein in a certain pattern can improve recovery from sleep loss.

Study participation will last approximately 18-24 days and will include: diet instruction at home for 3 days and eating <u>strictly controlled</u> study diets comprised of military rations and commercially available foods provided for 11 days. Participation also includes shortened sleep (~4 hours/night) for 4 days.

Study procedures include body composition assessments, blood draws, muscle biopsies, urine collection, saliva collection, treadmill walking with a weighted pack, and drinking non-radioactive stable isotope beverages.

Volunteers must have a BMI less than 30 kg/m<sup>2</sup> and have a stable body weight ( $\pm$  ~7 pounds) for the past 2 months. Volunteers must also be doing aerobic and/or body weight/resistance exercise at least twice per week for the past 6 months and not have a diagnosed sleep disorder. All testing will occur at the USARIEM laboratories in Natick, MA, but volunteers will sleep at their own residence.

Military personnel and civilians are eligible to participate. Federal civilian employees and non-HRV Active Duty military working within the US Army Natick Soldier Systems Center must have supervisor approval. Compensation of up to \$1012 is available for completing the study.

If interested, please contact the Military Nutrition Division at <u>USARMY.USARIEM-</u><u>MNDstudies@healthmil</u>.