







The Warfighter Nutrition Guide

16 Returning to Home Base

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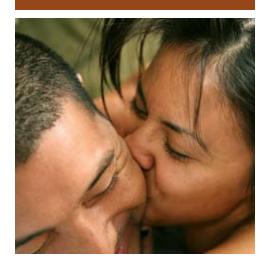
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Click here for more about operational rations. This site offers information such as menus, prices, and weight.



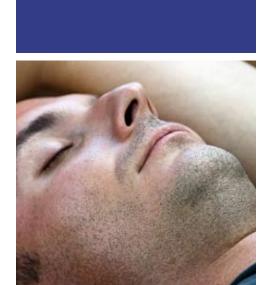
Key Points

- Rest and rejuvenation should be emphasized upon return from deployment to re-optimize mental and physical performance.
- A good night of sleep in a comfortable bed and dark room is essential for recovering from deployments.
- A balanced diet high in complex carbohydrates, such as vegetables, fruit and whole grains, can enhance stress resistance.
- Good nutrition and regular exercise are excellent antidotes to stress.
- Avoid binge eating and drinking upon returning from deployments.
 Excess food and alcohol intakes can lead to unwanted weight gain and is detrimental to overall health.

rofessional athletes have the luxury of going home soon after competition, so life can return to normal. In contrast, Warfighters may be away for extended periods of time and, during those times, can be depleted of essential nutrients needed for health. Choices in food and beverages may be limited in areas without military food service support and local foods may be unsuitable due to sanitation issues. Limited choices can result in significant weight loss. Upon returning home, many will "pig-out" and "drink-like-a-fish," which transforms the warrior athlete into a less than optimal machine. This chapter will provide information about how to regain health and become nutritionally replete upon returning to home base.

The Reality

Many military personnel have expressed concerns about their eating and drinking behaviors upon returning home after a deployment. Stress incurred over the preceding months can sometimes lead to unhealthy decisions that may add greater stress to an already stressful life. Weeks or months away from home can result in feelings of having been deprived of comforts, such as alcohol and favorite foods. This can promote binging on previously unavailable food and beverages. Significant problems, such as weight gain, alcohol dependency, driving under the influence, domestic problems, and even



More information on sleep.

work related conflicts may occur. Choosing good food and making positive lifestyle choices are essential for a smooth transition. Healthy food choices and limiting alcohol consumption will minimize weight increases and help avoid weight fluctuations (gains and losses). Repeated weight loss and/or gain can affect overall military performance and render a finely tuned human vehicle antiquated or useless before its time.

Down Time = Rejuvenation = Reset

Rest is one of the most important aspects of recovery. Mental and physical stressors are common during deployment and resetting the stress-response system is important. Lack of sleep, stress, and inadequate nutrition disrupt the body's finely regulated internal rhythms. Time off upon return from deployment is essential for reconnecting with family, normalizing routines within the household, and resetting internal rhythms.

Sleep

Sleep is vital for re-establishing normal daily rhythms, which are necessary for optimal mental and physical performance. Most hormones, such as the stress hormone, cortisol, and human growth hormone, have day and night cycles: they are greatly affected by loss of sleep. One third of a person's life should be spent sleeping. Most operations away from home allow for minimal sleep, so time at home should ensure high quality, restorative sleep. Sleep is important for:

- · Growth and development.
- Restoration of the nervous system.
- · Immune function.
- · Memory and learning.
- Mood improvement and human behavior.

Sleep is critical—for the brain and the body.

In contrast, chronic lack of sleep increases the risk of developing:

- Obesity.
- Diabetes.
- Cardiovascular disease.
- Opportunistic infections.
- Mood disturbances.

Lack of sleep affects two major body systems: the "master" hormone regulating gland and the autonomic (automatic or involuntary) nervous system. Many factors that control the release of important hormones are regulated during sleep. Also, the signals that usually allow us to be alert and vigilant when awake are maintained in an active state in the absence of sleep. Sleep allows this "sympathetic" nervous system to be reset and restored for the upcoming day. Returning home from deployment is an important time to make sleep a priority. This allows the body to reset biologic rhythms and prepare for repeated military training phases.

Sleeping and feeding are closely related because the hormones regulating appetite (leptin, ghrelin, and insulin) are strongly influenced by the amount of sleep. Sleep deprivation creates an imbalance in the signals for energy balance, and may lead to obesity. According to the Department of Health and Human Services, people who sleep on average, five hours a night are more likely to become obese over time compared to people who sleep seven to eight hours a night. One other potential effect of a continually active nervous system and lack of sleep is the development of glucose intolerance or predisposition to Type II diabetes. This is of utmost concern.

Sleep Disturbers

Factors that may prevent a good night's sleep include:

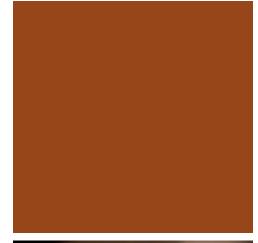
- Caffeine: Receptors that trigger sleep are blocked by caffeine.
- Nicotine: May act as a stimulant and decrease ones ability to fall asleep; nicotine withdrawal may cause early awakening.
- **Alcohol**: A sedative that prevents deep, restorative sleep (REM).
- · Pain Relievers: Most contain caffeine.
- Exercise: Daytime exercise may improve sleep, but exercising 1–4 hours before bedtime may cause insomnia.
- Medications: Decongestants, steroids and beta-blockers can decrease restorative sleep.

How Much Sleep is Enough?

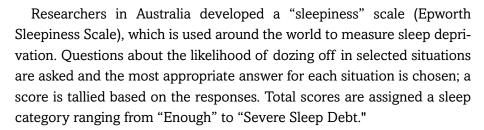
Every person requires a certain amount of sleep: anywhere from 5–10 hours nightly. Whether a person is getting enough sleep can be determined subjectively from various signs and symptoms. Selected signs of sleep deprivation include:

- · Difficulty waking up in the morning.
- · Difficulty concentrating.
- Falling asleep during work or class.
- Feelings of irritability, depression, anxiety, and/or moodiness.

Each menu provides about 1,540 kcals (15% protein, 35% fat, and 50% carbohydrate).







Click to complete the Epworth Sleepiness Scale and see if your sleep is adequate.

What is Good Sleep?

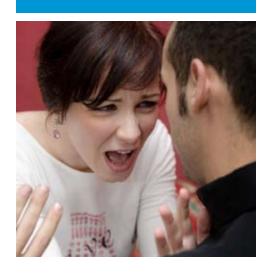
Individuals who are tired fall asleep within five minutes or less. Good sleep usually means sleeping in one's own bed, which should be comfortable and quiet. If your partner typically disturbs your sleep, switch to a queen- or king-size bed. Also, try different mattresses and pillows. Other considerations for good sleep include:

- Finding a therapeutic pillow that cradles the neck and allows for sleeping on one's side.
- Making the bedroom a place for sleeping so the body knows the bedroom is a place for rest.
- Making certain the room has adequate airflow and is neither too hot nor too cold.
- Using a fan to block out various noises.
- Hiding the clock so the time and the light can not be seen.
- Making sure the room does not "rise with the sun:" the room needs to be dark in the morning.

Stress

Stress in life is inevitable, and life is all about confronting challenges. The body's two main stress-response systems are the autonomic nervous system (discussed above) and the hypothalamic-pituitary adrenal (HPA) axis. Chronic stress can disrupt the regulation of these two systems. For example, lack of sleep can affect hormones like cortisol and growth hormone, among others.

Dealing with stress when returning home is not easy. Loved ones at home have not had the same experiences. Loved ones may feel stressed as well, and overly stressed people are not always attentive. Everyone perceives their particular stressors as very important, and there is no way to change this perception. What is clear is that the stress of war, which is considered an extreme stress, can lead to violent, abusive or threatening behaviors. Upon return from war, alcohol and other drugs are often used to reduce stress, but, in reality, they create more stress. It is also important



to realize that overly stressed people are more likely to smoke, have poor dietary habits, and be physically inactive.

Warfighters are mentally and physically resilient individuals, and most are likely to experience Post-Traumatic Stress Growth (PTSG), rather than PTSD. PTSG implies inner growth and increased determination—unlike PTSD. Nevertheless, conversations with team members and other Warfighters about deployment experiences are healthy and can be cathartic. Military commands have embedded operational, combat-focused psychologists who are familiar with unit missions, demands, and lifestyles; these persons are available to speak with military personnel at any time. They can inspire and promote PTSG. In addition, Family Services are available on Navy, Marine Corps, Army, and Air Force bases. These services provide resources for stress management, improving relationships, money management, and referrals to help resolve family and personal issues. Such resources are invaluable upon re-entry after deployment.

Diet, Exercise, and Stress Connections

Research continues to show a strong relationship between nutrition and stress, and exercise and stress. A high-fat, high-sugar diet in combination with chronic stress are major factors in the development of obesity. In contrast, selecting a diet rich in complex carbohydrates, such as colorful vegetables, fruits, and whole grains, can help enhance stress resistance. Upon returning home, if body weight is 10–15 pounds lower than predeployment, it is easy to feel comfortable selecting "comfort" foods (high-fat/high-sugar), but before long, weight creeps back up and exceeds what is optimal for missions. Making wise diet and exercise choices will promote a more rapid readjustment.

Anti-Stress Diet

An anti-stress diet will do wonders upon returning home. It is becoming clear that stress can lead to obesity because of the stress hormone cortisol. Eating an anti-stress diet means resisting an increase in body fat, which typically accumulates in a man's belly. Products and foods to avoid for minimizing stress on the body include:

- · Caffeine.
- · Hard liquor.
- Tobacco.
- Trans-fats from fried foods, red meats, and highly processed foods.

Essential nutrients are important in combating stress. These include the minerals, zinc and magnesium, and vitamins C, B, and E. The B vitamins and magnesium are involved in the production of serotonin, which helps

Good nutrition and regular exercise are excellent antidotes to stress.

Click here for more information on shopping, cooking, and meal planning.



regulate mood and relieve stress. Foods high in these nutrients are the foods of choice. If one had to develop a list of foods important for countering stress, many whole foods would be on the list. Table 16–1 provides a list of foods that will help alleviate or prevent some of the consequences of chronic stress. In addition, these foods will help minimize weight gain due to overeating and excess intake of high-fat, high-sugar foods. If 90% of the foods selected can be from the list of nutrient dense foods, the other 10% can be from "comfort foods."

Sudden weight gain due to overeating and excessive alcohol consumption will compromise performance and health.



Table 16 1. Top Foods for Combating Stress	
Almonds	Green tea, herb teas, lemon water
Sweet potatoes, beets	Broccoli, zucchini, green beans
Whole-grain rice or pasta	Sushi
Goat Cheese, whey	Carrots, tomatoes, peas
Cantaloupe, other melons	Salmon, other cold water fish
Blueberries, kiwi, grapes	Garlic

Exercise will also prevent belly bulge and deconditioning.

Exercise

Physical exercise is one of the most effective ways of relieving stress. The act of physical exertion causes the body to release chemical substances (endorphins) similar in nature to opiates. These natural substances make us feel good and have no adverse effects, unlike many other drugs. Regular exercise should be a scheduled part of any returning home plan—it may be in the form of enjoyable recreational activities, such as camping, hiking, basketball, surfing, cycling, or running and weight lifting. Making room for exercise will help keep life issues under control and promote relaxation.

Meal Planning Strategies for Special Gatherings

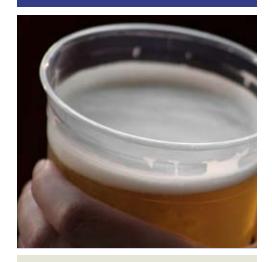
The key to avoid gaining excess pounds is to make smart selections at parties. The rule "it is not a good idea to shop at the commissary while hungry" applies to parties; do not attend a party on an empty stomach. The following strategies can help maintain nutritional balance, while still having a good time:

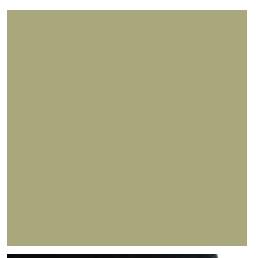
- · Eat a regular meal before the event to avoid overeating.
- Eat breakfast to control hunger and avoid the tendency to overeat.
- Drink water to avoid dehydration, and minimize hangover symptoms, from alcoholic beverages: one glass of water should be drunk for every glass of alcohol consumed.
- Focus on appetizers: variety in selection and appropriate portion size are key.
- Resist deep-fried appetizers: stock the plate with shrimp and vegetables.
- Resist cream based soup, cheese-filled dishes, pies, pastries, and many baked goods.
- Choose fruits and vegetables, as well as whole grain breads and crackers, that are high in dietary fiber. They will curb appetite, taste great and add vitamins and minerals.
- Choose sweets made with dark chocolate. A small amount of dark chocolate can be healthy and satisfying.
- Drink sparkling apple juice or cider, seltzer mixed with fruit juices, flavored calorie-free water and/or low-sodium vegetable juice to maintain hydration and avoid a hangover.

Alcohol

At least 23% of service members admit to drinking heavily—a statistic that hasn't been lowered in over 25 years. Alcohol-related incidents (DUI, drunk and disorderly, alcohol related reckless driving, sexual assaults, suicidal attempts) continue to rise at alarming rates, and teams have been formed to assess what is being done and what should be done to address the problem. A 2007 report from the Department of Defense Task Force on Mental Health noted a three-fold increase in alcohol-related incidents from the third quarter of FY 2005 to the third quarter of FY2006. Unfortunately, no noticeable increases in persons entering the alcohol program accompanied the rise in incidents. In fact, only 41% of Warfighters involved in alcohol-related incidents were referred to the alcohol program.

More information on energy balance and binge eating.







Binge drinking is a sign of being overstressed.

In addition to alcohol-related incidents, alcohol contributes to obesity and belly fat. Alcohol provides 7 kcal per gram of empty calories—its nutrient density is low. The liver processes alcohol, which is why many alcoholics and heavy drinkers experience liver damage.

Alcohol abuse is a problem and returning home from deployment is a critical time for abuse to surface.

How Much Alcohol is Enough?

Two servings are considered moderate. One serving consists of:

- A 12-oz bottle or can of beer.
- · A 5-oz glass of wine.
- A shot of liquor or spirits (either straight or in a mixed drink).

Click for a list of calories in various alcohol beverages.

Calories from alcohol tend to be stored in the abdomen as belly fat.

"For many people, moderate drinking is probably safe. It may even have health benefits, including reducing your risk of certain heart problems. Anything more than moderate drinking can be risky. Binge drinking—drinking more than five drinks at a time—can damage your health and increase your risk for accidents, injuries, or assault."

—National Institute on Alcohol Abuse and Alcoholism

It is recognized that alcohol (wine) in moderation (two drinks a day for men) increases good cholesterol (HDL). However, beyond these amounts, alcohol has many harmful effects, and moderation requires forethought and discipline.

Binge Drinking

Binge drinking is drinking until intoxicated over a period of at least two days. Being repeatedly intoxicated overrides participation in usual activities and fulfillment of other obligations. According to results from the Army's "Self Reported Health Risk Appraisal" of 404,966 soldiers, "those consuming more than 21 drinks per week were at six times the risk for subsequent alcohol-related hospitalizations."

Relationships and internal rhythms will be seriously compromised if alcohol is substituted for good food, performance, and health.