



DEPARTMENT OF THE ARMY

HEADQUARTERS, 10th MOUNTAIN DIVISION, (LIGHT INFANTRY) AND FORT DRUM

FORT DRUM, NEW YORK 13602-5000

INSTRUCTION FOR LEADER

During training, you will read the script directly and complete an AAR. The script includes learning activities to help Soldiers understand and retain information from the lesson.

PREPARATION

1. Print and review this leader guide to ensure subject familiarity.
2. Print enough handouts for number of Soldiers in training.

OBJECTIVE

1. Soldiers will be able to verbalize what a safe dose of caffeine is, identify the upper limit for caffeine in 24 hours, and list 1-2 sources of caffeine.

SCRIPT TO BE READ DIRECTLY

1. **Introduction to Caffeine for Performance:** The unique demands of military service, training, and missions require us to be both physically and mentally sharp to succeed. In moderate doses, caffeine can be used to boost mental and physical performance. Caffeine shows some positive affects for military tasks and training. It is important to be aware of how much caffeine you consume and what sources contain caffeine in your diet. Excess caffeine intake can cause harmful side effects. Can anyone name for me their favorite source of caffeine? (Pause, choose 1-3 Soldiers to answer) (Correct answers: on list of sources below)
2. **Sources of caffeine:** Caffeine is found in many foods, beverages, and dietary supplements. The following are sources of caffeine:
 - a. Coffee (brewed, instant)
 - b. Espresso
 - c. Tea (green or black tea)
 - d. Soda
 - e. Energy drinks
 - f. Dietary supplements

When it comes to dietary supplements, caffeine may be listed in the form of other ingredients, see handout for examples. Make sure to read the dietary supplement closely to find the amount of caffeine listed on the label.



DEPARTMENT OF THE ARMY

HEADQUARTERS, 10th MOUNTAIN DIVISION, (LIGHT INFANTRY) AND FORT DRUM

FORT DRUM, NEW YORK 13602-5000

3. **Functions of caffeine:** Can anyone tell me if caffeine gives you energy? (Pause, see if 1-2 Soldiers can answer) (correct answer: No. Caffeine does not provide us with energy). Caffeine is a stimulant. This means it can delay tiredness and help us to feel more alert. Caffeine can help improve mental performance if we are rested, tired, or without sleep. Caffeine cannot replace sleep or food, which give us rest and energy. Can you tell me some military situations when you may want to use caffeine to improve performance? (Pause and ask 1-2 Soldiers to answer) (Correct answers: night shift/shift work, long runs/rucking/endurance events, sustained operations, or field training, etc.)

BLUF: Caffeine is not an energy source and cannot replace sleep or food. Caffeine is a stimulant that can help us feel more alert or less tired.

4. **Caffeine dosing for performance:** Can anyone tell me how much caffeine the average energy drink contains? (Pause to allow 1-2 Soldiers to answer) (Correct answers: 150 – 300 mg or more) Many Service Members consume more than 300 mg of caffeine from one source. A moderate dose of caffeine, up to 200 milligrams (mg), has been proven to help boost mental and physical performance in several scenarios (see caffeine handout for details on scenarios).

Do not exceed 600 mg in 24 hours, or 800 mg caffeine for sustained military operations (no sleep in 24 hours).

BLUF: Caffeine up to 200 mg per dose can assist with mental and physical performance, but it is important to limit intake to no more than 600 mg per day unless during continuous operations.

5. **Risks of excessive caffeine use:** While caffeine may have benefits in moderate doses, it is important to consider ALL sources of caffeine in your diet and not exceed 600mg per day. It's also important to avoid consuming caffeine at least 4-6 hours before bedtime. Too much caffeine may lead to the following symptoms:
- Insomnia
 - Restlessness
 - Nausea
 - Irregular heartbeat
 - Anxiety
 - Upset stomach
 - Headaches



DEPARTMENT OF THE ARMY

HEADQUARTERS, 10th MOUNTAIN DIVISION, (LIGHT INFANTRY) AND FORT DRUM

FORT DRUM, NEW YORK 13602-5000

If you are consuming more than the recommended 600 mg per 24 hours, work with your dietitian to help reduce your intake gradually to prevent withdrawal symptoms.

BLUF: Excessive caffeine intake can lead to harmful symptoms and medical concerns. Reduce intake gradually to less than 600 mg per day to avoid long-term effects.

6. Summary

- a. Caffeine has many benefits to mental and physical performance.
- b. Caffeine is not an energy source; it is a stimulant.
- c. Caffeine up to 200 mg per dose can provide positive benefits.
- d. Limit caffeine to 600 mg in 24 hours or 800 mg in continuous operations.

AAR

1. What were the pros and cons of this training?
2. Did they like the interactive components of the training?
3. What, if any, barriers are there to limiting caffeine intake? How can they be overcome?

SUPPORTING RESOURCES

1. Warfighter Nutrition Guide, Chapter 11. [Warfighter Nutrition Guide | HPRC \(hprc-online.org\)](https://www.hprc.org/warfighter-nutrition-guide)
2. FM 7-22 Chapter 11, 11-59 to 11-61
3. Department of Defense Operation Supplement Safety (OPSS) website, www.opss.org. Caffeine & Performance handout.
4. 10th MTN dietitians

CAFFEINE & PERFORMANCE

If needed, you can use caffeine to boost your mental & physical performance in certain situations. If you're going to use it, here's how.

USE UP TO 200 MG AS FOLLOWS:



ENDURANCE PERFORMANCE

(more than 60 minutes of continuous activity)

- 30–60 minutes before activity.



MENTAL PERFORMANCE

- 15–30 minutes before task.



RESTRICTED SLEEP *(less than 6 hours of sleep in 24 hours)*

- 1 dose on waking.
- Re-dose every 3–4 hours only if needed.



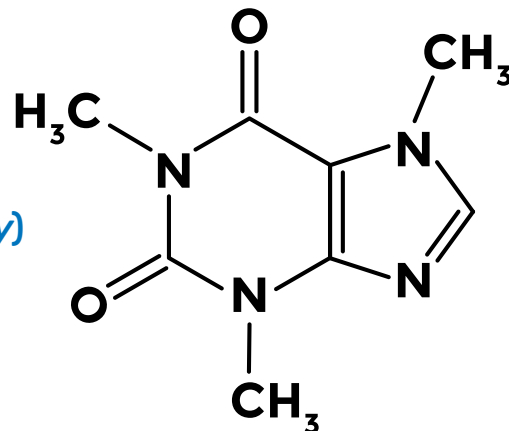
NIGHT SHIFTS WITH DAYTIME SLEEP

- 30–60 minutes before start of shift.
- Re-dose every 3–4 hours only if needed.



SUSTAINED OPERATIONS *(no sleep in 24 hours)*

- 1st dose at midnight. Re-dose every 3–4 hours only as needed.
- Use during daytime hours only if needed.



CAFFEINE TIPS:

- Avoid consuming caffeine 4–6 hours before bedtime.
- Do not exceed 600 mg caffeine per 24 hours (800 mg for sustained operations).
- Consider ALL sources of caffeine in your diet, including foods, beverages, and dietary supplements (not limited to the items listed on the next page).
- Caffeine can temporarily improve performance. It is not a substitute for sleep.

How much is 200 mg of caffeine?

(Serving size • Average amount of caffeine in one serving)

Brewed coffee

(8 fl oz/1 cup • 95 mg)



Instant coffee

(1 tsp • 31 mg)



Espresso

(1 fl oz/one “shot” • 63 mg)



Brewed green tea

(8 fl oz/1 cup • 28 mg)



Brewed black tea

(8 fl oz/1 cup • 47 mg)



Cola

(12 fl oz/1 can • 33 mg)



Citrus-flavored soda

(12 fl oz/1 can • 53 mg)



Energy drinks

(16 fl oz/1 can • 160 mg)



RATIONS

Coffee (freeze dried)

(1 package • 80–100 mg)



Mocha First Strike Bar (mini)

(1 bar • 110 mg)



Caffeinated chocolate pudding

(1 container • 200 mg)



Caffeinated gum or mints

(1 piece • 100 mg)



DIETARY

SUPPLEMENTS

Caffeine content varies. Check the product label for the amount of caffeine in each serving, ***if available***. Also look for other sources or names of caffeine, such as yerba maté, green tea, cacao, kola nut, guarana, caffeine anhydrous, and trimethylxanthine.