



# Military Seeks to Deliver Caffeine Jolts Without Java

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ORLANDO, Fla. (Dec. 1) -- Imagine you're a soldier out in the field in [Afghanistan](#), you need a caffeine fix and a cup of hot coffee is nowhere to be found. How about trying a beef jerky stick with caffeine? Or caffeinated sunflower seeds? Or maybe a cranberry-mocha energy bar with added caffeine?

All of these are food items the Army has looked at as alternative ways to give soldiers the caffeine they crave -- and may even need -- in a palatable form. In fact, Army researchers are conducting surveys of soldiers to determine what type of caffeinated beverages and foods they prefer.

"It's about keeping up with trends," said Kathy-Lynn Evangelos, a team leader with the Defense Department's Combat Feeding Directorate, which presented its latest research -- and food experiments -- at an Army [science](#) conference here. The directorate's booth offered visitors samples of the latest foods developed for military rations, from caffeinated meat to sandwiches with a years-long shelf life.

The Combat Feeding Directorate, a part of the Army's Natick Soldier Research, Development and Engineering Center, is responsible for developing the meals ready to eat that soldiers take with them to war. The calorie-rich, nutrient-packed MREs are designed to sustain soldiers when they may not have access to regular dining facilities.

But the work done at Natick is more than just about cooking: It's a complicated science that involves creating and selecting food that contains the necessary nutrients for soldiers in the field, while maintaining a shelf life of several years. And it has to taste good, or at least good enough that troops will want to eat it. The idea of providing caffeine to soldiers in MREs is hardly new. The Army already includes Stay Alert, a caffeinated gum, in some military rations. But as with other food trends, the current survey is about looking at whether there are other, newer forms of caffeinated foods and beverages that soldiers might prefer.

Indeed, caffeine habits have undoubtedly changed among many young adults, who are often more accustomed to energy drinks than hot java. The Food and Drug Administration's recent warning on drinks that combine alcohol and caffeine, like the popular [Four Loko](#), has focused attention on the changing consumption habits of young adults.

But for the military, which doesn't provide alcohol in rations, the question in this case is not whether to restrict caffeine, but how best to get caffeine to troops, and food scientists at the Combat Feeding Directorate have experimented with adding caffeine to everything from meat to energy bars.

Of course, not all caffeine choices work out. At one point, the Army tried putting chocolate-covered coffee beans into rations, but the caffeinated candy treats didn't have a good shelf life, an important requirement for MREs. More recently, food technologists have been experimenting with a mocha-cranberry-raspberry energy bar that includes caffeine and quercetin, a plant-derived flavonoid. The quercetin was added because the military is looking at its possible beneficial [health](#) effects.

"We already know the benefits of caffeine," said Gerald Darsch, head of the Combat Feeding Directorate, citing research on caffeine and enhanced cognition conducted by the Walter Reed Army Institute of Research. Army researchers demonstrated through scientific testing what many have suspected: Coffee helps you stay alert and battles fatigue, which on the battlefield can be a matter of life and death.

In the meantime, the survey of caffeine preferences, which is being conducted by the Army Research Institute of Environmental Medicine, is still ongoing, and 1,000 troops have been polled so far.

The most popular caffeine option? The 5-Hour Energy shots, a widely sold energy drink that comes in 2-ounce servings and that the company says contains caffeine "comparable to a cup of the leading premium coffee." That doesn't mean soldiers should expect to see those energy drinks in their food rations anytime soon. As Evangelos points out, the packaging, a bulky can and price of the drink -- about \$2 -- make it a poor choice for MREs, but its popularity could point the way for new options. The attention to preference, whether for caffeine or anything else, is more than just trying to satisfy people's personal preferences, Evangelos explained. Ultimately, it's about health.

But, she added: "No matter what good science you do, if the war fighter won't consume it, you've lost control of their nutrition."