Dietetic interns are taught how to “feed an army” when learning how to plan and oversee large scale operations in industrial kitchens - my time at University of Maryland’s Dining Facilities is enough proof that dietitians can feed a large village for better part of a year - but who are the dietitians that, quite literally, feed an army?

My name is Addison and I am the dietetic intern for University of Maryland at College Park. I have the opportunity to ride solo on the voyage that is the dietetic internship, at least for the time being. Today, I’d like to broach the topic of military nutrition and what it means to adapt nutrition for different professions. But first, a little story to break the ice:

Recently, my brother told me about his most recent backpacking trip to get away from work. As a young Army sergeant, he doesn’t have much expendable income to spend on fancy hiking equipment or foods. Instead, he slung his rucksack (or, for us civilians, a giant backpack with many, *many* attachments) over his shoulders and survived off of nothing but dehydrated pizza, beans, and a few other unidentifiable meals he field stripped from his company’s MREs, or meals-ready-to-eat. The wheels started turning in my head as I remembered my own backpacking trips a few years ago - the ratios I had to calculate to make sure I had enough calories to last me eleven days without taking up too much weight.

It got me wondering - what are the ratios that the military uses for their MREs?

The nutrition guidelines for the military are somewhat similar to the general public, though some individual changes may be necessary. Not every service member sees combat or high stress situations, so their needs reflect that of the general population. But for highly active service members in highly stressful situations, caloric and fluid intake needs to be adapted to their needs. MREs are specifically designed for this, and are designed so service members can survive off of them for 21 days. Each one is just shy of 1300 calories, with 40g protein, 176g carbohydrates, and 47g fat on average. These meals are not meant to be the only sustaining food for service members in the field, but a significant source of energy at a moment’s notice. This one meal is equivalent, if not more, to what I need on a daily basis. The macronutrient

composition changes based on the weather or intensity of the situation - for example, FSRs (or First-Strike-Rations) are 2900 calories, 91g protein, 227g carbohydrates, and 98g fat.

These dense meals are essential for providing the energy necessary to take on large, strenuous tasks, and are much more effective when consumed with enough water. Service members should consume approximately half their body weight (pounds, of course) in fluid ounces of water or electrolytes to account for regular fluid loss. More may be necessary for strenuous activities and events. In certain situations, accessing this much water is not possible and can lead to decreased performance and eventually inability to perform once dehydration sets in. Fluids are just as important as energy for a service member.

While not every soldier may think of their food and water as fuel for their mission, my brother's simple backpacking trip was a reminder that tactical nutrition is a highly specified and necessary field. Without the science of MREs, modern soldiers may not be ready for their next assignments.