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Comparing Food Insecurity Among the U.S. Military and Civilian Adult Populations

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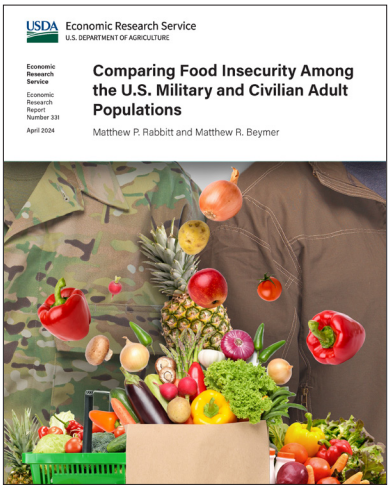
What Is the Issue?



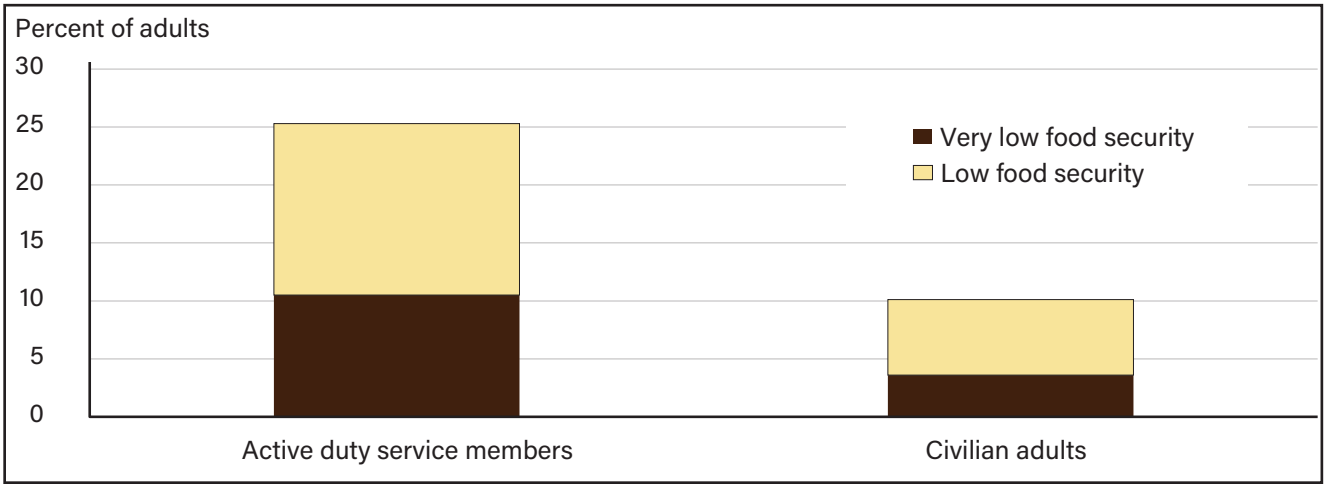
Military readiness can be defined as an individual having cognitive and physical abilities to train for and execute missions and administratively as the ability to retain trained personnel. Food security—defined as access at all times to enough food for an active, healthy life—is associated with cognitive function, body mass index, and intentions to stay in the military. Therefore, monitoring food security is paramount to maintaining military readiness. No analyses have been conducted to date on the prevalence of food insecurity for a representative sample of the active duty U.S. military. Studies of individual military installations, however, have demonstrated food insecurity rates between 15 percent and 33 percent. The primary objective of this analysis was to compare a representative sample of active duty U.S. military service members (military population) to civilian adults (civilian adult population), adjusted by demographic variables associated with food insecurity that are available in both datasets.

What Did the Study Find?

The prevalence of food insecurity was 25.3 percent in the military population and 10.1 percent in the demographically equivalent civilian adult population in 2018 and 2020. An estimated 10.5 percent of the military population had very low food security in 2018 and 2020, compared with 3.6 percent of the civilian adult population during this period.

ERS is a primary source of economic research and analysis from the U.S. Department of Agriculture, providing timely information on economic and policy issues related to agriculture, food, the environment, and rural America.

Prevalence of food insecurity was 2.5 times higher among the military population compared to the civilian adult population in 2018 and 2020



Source: USDA, Economic Research Service using data from U.S. Department of Defense, Office of People Analytics, Status of Forces-Active Duty Members and U.S. Department of Commerce, Bureau of the Census, Current Population Survey Food Security Supplement.

The prevalence of food insecurity and very low food security was generally higher among military subpopulations, when defined by demographics (e.g., gender, age, race and ethnicity, marital status, parental status (children or not), spouse's employment status, and region of residence) and compared with the corresponding demographically equivalent civilian adult subpopulations in 2018 and 2020.

In 2018 and 2020, military food insecurity was more prevalent among active duty service members who were between the ages of 17 and 25, with a high school diploma (or equivalent) or some college education, identifying as Hispanic or from other non-Hispanic races, and with an unemployed spouse.

Measurement error analyses demonstrate food insecurity among the military population is underestimated by 2.1 percentage points relative to the civilian adult population but that the prevalence of very low food security is overestimated by 1.4 percentage points in the military population compared with the civilian adult population. As a result, in 2018 and 2020, the prevalence of food insecurity among the military population may have been as high as 27.4 percent, and the prevalence of very low food security among the military population may have been as low as 9.1 percent after accounting for measurement error related to differences in the food security measurement process.

How Was the Study Conducted?

Military data were drawn from the 2018 and 2020 Status of Forces Survey of Active Duty Members. Civilian adult data were drawn from the 2018 and 2020 Current Population Survey Food Security Supplement. Because these populations are demographically different, the authors constructed a civilian comparison group of adults who are between the ages of 17 and 65, employed full time, have at least a high school education, and are not serving in the armed forces on active duty. This group is demographically equivalent to the active duty military population in terms of gender, age, race and ethnicity, marital status, parental status, educational attainment, spousal employment status if married, and geographic region of residence. The authors then constructed food security status measures based on adults' reports of the food insecurity they and their households experienced, if applicable, during the last 12 months. Measurement errors in food insecurity measures were assessed by separately estimating the Rasch model based on civilian adults' and active duty service members' responses to the food insecurity questions and estimating the bias in the military population relative to civilian adult food insecurity measures using the Nord (2012) methodology.